

IBM DB2 Universal Database Messages Reference Version 5

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IBM DB2 Universal Database



Messages Reference

Version 5

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Before using this information and the product it supports, be sure to read the general information under Appendix C, "Notices" on page 523.

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About This Guide

The purpose of this book is to list all the messages returned by various components of DB2.

Who Should Use This Guide

The *Messages Reference* is designed to be used by anyone using DB2 and requiring more detailed information about returned messages.

How This Guide Is Structured

This guide lists all the possible error messages returned by the various components of DB2.

Organization

The guide is divided into the following sections:

- Chapter 1, "Introduction to Messages," describes how to access and interpret error messages.
- Chapter 2, "Replication Messages," describes the error messages generated by DB2 Replication.
- Chapter 3, "CCA Messages," describes the error messages generated by the DB2 Client Configuration Assistant.
- Chapter 4, "CLI Messages," describes the error messages generated by the DB2 Command Line Interface.
- Chapter 5, "DBA Messages," describes the error messages generated by the Database Administration Utility.
- Chapter 6, "DBI Messages," describes error messages generated through the installation and configuration of DB2.
- Chapter 7, "DB2 Messages," describes error messages generated by the command line processor.
- Chapter 8, "SPM Messages," describes messages issued by the LU 6.2 Sync Point Manager (SPM).
- Chapter 9, "SQL Messages," describes the error messages (SQLCODES) generated by Database Services when an error condition is detected.
- Chapter 10, "SQLSTATE Messages," describes the meaning of each SQLSTATE value.
- Appendix A, "Communications Errors," describes communications error codes associated with sqlcode -30081.
- Appendix B, "SPM Protocol Violation Records," lists C language definitions of records that may be written to DB2's first failure service log by the SPM.

- “Index”

Conventions

The format for date and time, and the characters used as separators for date and time, are intended for a system configured to use the United States national language format. These may be different on your display, depending on the national language format used by your system.

Chapter 1. Introduction to Messages

It is assumed that you are familiar with the functions of the operating system where DB2 is installed. You can use the information contained in the following chapters to identify an error or problem and resolve the problem by using the appropriate recovery action. This information can also be used to understand where messages are generated and logged.

Information Available Online

The following DB2 messages are accessible from the operating system command line:

Prefix	Description
ASN	DB2 Replication
CCA	Client Configuration Assistant
CLI	Call Level Interface messages
DBA	error messages generated by the Database Director and the Database Administration Utility
DBI	error messages generated by installation and configuration
DB2	error messages generated by the command line processor
SPM	messages generated by the LU 6.2 Sync Point Manager
SQL	error messages generated by the database manager when an error condition has been detected.

As well, the message text associated with SQLSTATE values is available on-line.

Message identifiers consist of a three character message prefix (ASN, CCA, CLI, DBA, DBI, DB2, SPM, or SQL), followed by a four or five digit message number. The single digit letter at the end which describes the severity of the error message is optional.

To access help on these error messages, enter the following at the operating system command prompt:

```
db2 ? XXXnnnnn
```

where XXX represents the message prefix
and where nnnnn represents the message number.

Note: The message identifier accepted as a parameter of the **db2** command is not case sensitive, and the terminating letter is not required.

Therefore, the following commands will produce the same result:

- db2 ? SQL0000N
- db2 ? sql0000

- db2 ? SQL0000n

If the message text is too long for your screen, use the following command (on unix-based systems and others which support 'more'):

```
db2 ? XXXnnnnn | more
```

Help can also be invoked in the interactive input mode. To enter the interactive input mode, enter the following at the operating system command prompt:

```
db2
```

Once in the interactive input mode, you can enter commands at the following command prompt:

```
db2 =>
```

To get DB2 message help in this mode, type the following at the command prompt:

```
? XXXnnnnn
```

Note: If the message text exceeds the length of the screen, users with non-graphical workstations can pipe the output to the 'more' (on unix-based systems) program or redirect the output to a file which can then be browsed.

The message text associated with SQLSTATEs can be retrieved by issuing:

```
db2 ? nnnnn
```

or

```
db2 ? nn
```

where nnnnn is a five digit SQLSTATE (alphanumeric) and nn is the two digit SQLSTATE class code (first two digits of the SQLSTATE value).

Other Message Sources

When running other programs on the system, you may receive messages with prefixes other than those mentioned in this reference.

For information on these messages, see the publications that you received for that program product.

Chapter 2. Replication Messages

This section contains the replication messages for the Capture and Apply programs and migration from previous releases.

ASN0001E

The Capture program encountered an SQL error.

- Routine name is "<name>"
- SQL request is "<request>"
- table name is "<table_name>"
- SQLCODE is "<sqlcode>"
- SQLERRML is "<sqlerrml>"
- SQLERRMC is "<sqlerrmc>"

Cause: A nonzero SQLCODE was returned when the Capture program issued an EXEC SQL statement.

Action: See the messages and codes publication of the DB2 database manager on your platform for information about SQL return codes that use SQLERRML and SQLERRMC as substitution fields. Contact your DBA for more information.

ASN0002E

The Capture program could not connect to DB2.

- Routine name is "<routine>"
- SQLCODE is "<sqlcode>"

Cause: An error occurred when the Capture program issued either

- a CONNECT function to DB2 for VSE and VM
- a CONNECT function to DB2 Call Attachment Facility (CAF)
- an implicit connect to DB2 for common services

Action: See DB2 codes in the messages and codes publication of the DB2 database manager on your platform for the appropriate reason code. For DB2 for MVS errors, see the section in the administration guide that

describes the Call Attachment Facility. Contact your DBA for questions and diagnosis.

ASN0003E

The Capture program could not open the plan.

- Routine name is "<routine>"
- Return code is "<return_code>"
- Reason code is "<reason_code>"
- Subsystem is "<subsystem>"
- Plan name is "<ASNLPLAN>"

Cause: An error occurred when the Capture program tried to open the plan, ASNLPLAN.

Action: See the DB2 Codes section in the messages and codes publication of the DB2 database manager on your platform to find the appropriate reason code. See the appropriate section in the administration guide publication of the DB2 database manager on your platform: "Call Attachment Facility."

ASN0004E

The Capture program could not start the trace.

- Routine name is "<routine>"
- Return code is "<return_code>"
- Reason code is "<reason_code>"

Cause: An error occurred when the START TRACE DB2 command was issued, or when the Capture program read the DB2 log.

Action: This message only applies to the MVS platform. See the DB2 Codes section of in the messages and codes publication of the DB2 database manager to find the appropriate reason code. For more information, see either of the following sections in the administration guide publication of the DB2 database manager: "Call Attachment Facility" (CAF) for START TRACE DB2 errors, or the Instrumentation Facility Interface (IFI) for DB2 log read errors, or contact your DBA. If CAF or the IFI returned a message, it is also printed on the system display console.

ASN0005E • ASN0009E

ASN0005E

The Capture program encountered an error while reading the DB2 log.

- Routine name is "<routine>"
- LSN is "<log_sequence_number>"
- Return code is "<return_code>"
- Reason code is "<reason_code>"

Cause: An error occurred when the Capture program read the DB2 log. There might be an SQL error.

For Capture for MVS, a dump has been generated for this message. The output appears in the data set whose name is specified by the CEEDUMP DDNAME on your Capture for MVS invocation JCL.

For IBM DPROPR Capture of the Universal Database, the "<return_code>" value is for the Asynchronous Read Log. For UNIX, the log file might not be in the path.

For Capture for VSE, the "<return code>" is for the VSE/VSAM GET macro.

For Capture for VM, the "<return code>" is for Diagnose X'A4'.

Action: See the DB2 Codes section in the messages and codes publication of the DB2 database manager on your platform for the appropriate reason code.

For Capture for MVS, see the Instrumentation Facility Interface (IFI) section in the administration guide publication of the DB2 database manager on your platform or contact your DBA.

For Capture for VSE, see the "VSE/VSAM Return and Error Codes" manual for more information.

For VM/ESA, see the VM/ESA Programming Services for more information.

For the IBM DPROPR Capture of the Universal Database, see the active and archived database logs section in the administration guide for common servers or contact your IBM Service Representative.

ASN0006E

The Capture program encountered an unexpected log error of unknown log variation. The routine name is "<routine>".

Cause: An unexpected log error not reported by either:

- the Instrumentation Facility Interface (IFI) for Capture for MVS, or
- the Asynchronous Read Log API for IBM DPROPR Capture of the Universal Database

occurred while the Capture program was processing the DB2 log records. The Capture program could not determine the type of SQL update associated with the log record.

For Capture for MVS, a dump has been generated for this message. The output appears in the dataset whose name is specified by the CEEDUMP DDNAME on your Capture for MVS invocation JCL.

Action: Contact your IBM Service Representative.

ASN0007E

The Capture program encountered an unexpected log error of unimplemented data type. The routine name is "<routine>".

Cause: An unexpected log error not reported by either:

- the Instrumentation Facility Interface (IFI) for Capture for MVS, or
- the Asynchronous Read Log API for IBM DPROPR Capture of the Universal Database

occurred while the Capture program was processing the DB2 log records. The Capture program could not determine the type of SQL update associated with the log record.

For Capture for MVS, a dump has been generated for this message. The output appears in the dataset whose name is specified by the CEEDUMP DDNAME on your Capture for MVS invocation JCL.

Action: Contact your IBM Service representative.

ASN0008I

The Capture program was stopped.

Cause: The IBM Replication administrator stopped the Capture program using one of the valid methods.

Cause: This message is for your information only.

Action: No action is required.

ASN0009E

The table was created without the DATA CAPTURE CHANGES (DCC) attribute.

- Routine name is "<routine>"
- Table name is "<table_name>"

Cause: The source table was defined without the DCC attribute and the Capture program tried to capture changes for the replication source.

Action:

1. Stop the Capture program.
2. Delete the replication source.
3. Define the replication source again; if you do not have the **Data capture is full-refresh only** check box selected, the Control Center will alter the source table with the DCC attribute.
4. Start the Capture program.

ASN0010E

The Capture program cannot obtain enough storage.

- Routine name is "<routine>"
- Storage required is "<amount>"

Cause: The Capture program cannot continue processing because not enough free storage is available.

Action: For Capture for MVS, ensure that the REGION parameter has enough storage allocated to run your job. If necessary, contact your MVS system programmer to determine the method for requesting sufficient storage.

For Capture for VM, a request to obtain virtual storage could not be satisfied. You might need to increase the size of the virtual machine in which Capture program runs.

For Capture for VSE, all available GETVIS storage has been exhausted. You might need to restart the Capture program after allocating a larger partition.

ASN0011E

The DB2 compression dictionary is not available or the IFCID 306 buffer is invalid.

- Routine code is "<routine_code>"
- Reason code is "<reason_code>"

Cause: In the case of DB2 compression dictionary is not available error, the Capture program attempted to read log records for an old compression dictionary. DB2 for MVS only retains one version of the compression dictionary in memory. DB2 can only decompress log records for a compressed table if the compression dictionary used to compress the log records is still the current compression dictionary.

In the case of the IFCID 306 buffer being invalid, the control information is missing from the buffer.

For both cases, a dump has been generated for this message. The output appears in the dataset whose

name is specified by the CEEDUMP DDNAME on your Capture for MVS invocation JCL.

Action: For the DB2 compression dictionary error, to avoid an unwanted cold start of the Capture program, you must capture all log records for a compressed table before creating a new version of the compression dictionary. Use the KEEPDICTIONARY option to retain the current version of the compression dictionary during routine REORG processing.

When you want a new compression dictionary for the table, you must synchronize running the REORG utility with running your updated applications and the Capture program as follows:

1. Quiesce your updated applications.
2. Let the Capture program capture all logged updates for the compressed table.
3. Use the REORG utility on the compressed table, creating a new compression dictionary.
4. Release your updated applications.

For the IFCID 306 buffer error, ensure all DB2 maintenance is current.

ASN0013E

The Capture program required a column that was not defined in the change data (CD) table.

- Routine name is "<routine>"
- Table name is "<table_name>"

Cause: The user did not define an IBMSNAP required column in the change data table.

Action: Ensure that the change data table definition is correct. Refer to "Table Structures" for more information.

ASN0014E

The processing of the Capture program has fallen below a minimum level. The log record lags current time by "<number>" seconds. The routine name is "<routine>"

Cause: The Capture program terminated because a high DB2 transaction rate caused the Capture program to run slower than the defined minimum level.

Action: Refer to the Capture and Apply chapter for your platform for more information on the lag limit. Perform a cold start.

ASN0015E • ASN0019E

ASN0015E

The Capture program encountered a storage allocation error.

- Routine name is "<routine>"
- Storage required is "<amount>"

Cause: A storage allocation error was detected; sufficient storage is not available. The Capture program might have been installed improperly.

For the Capture program on AIX, you might not have set the soft links for the component files to the shared directory.

Action: Determine why memory could not be allocated by looking at the operating system and application task status. Contact your system programmer to determine the method of requesting the storage listed in the error message.

For Capture for AIX, determine whether you have set the soft links for the component files.

For Capture for VM, a request to obtain virtual storage could not be satisfied. You might need to increase the size of the virtual machine in which Capture program runs.

For Capture for VSE, all available GETVIS storage has been exhausted. You might need to restart the Capture program after allocating a larger partition.

ASN0016E

The Capture program could not begin capturing changes because there was no eligible replication source.

- Routine name is "<routine>"
- Table name is "<table_name>"

Cause: The replication source information in the register table has not been defined.

The Capture program started but could not find source tables that were:

- Enabled with the DATA CAPTURE CHANGES option of the CREATE or ALTER TABLE statement.
- Defined as replication sources with the **Data capture is full-refresh only** check box cleared on the Define as Source window.

Action: Ensure that the register table is defined properly. For more information about the register table, see

"Table Structures". Verify that replication sources have been defined.

ASN0017E

The Capture program encountered a severe internal error and could not issue the correct error message. The routine name is "<routine>"; the return code is "<return_code>"; the error message number is "<error_message_num>".

Cause: The Capture program could not retrieve the message from the Capture program messages file.

Action: Edit the Capture program error message file. Locate the ASNnnnn error message number to determine which error message should have been issued. See the information about the error message in this listing to determine how to resolve the error.

ASN0018W

The Capture program did not process updates made to the register table rows. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The user changed a replication source definition while the Capture program was running and then issued a REINIT command. The register table, which contains a row for each replication source, might not match the other replication source control tables.

Action:

1. Stop Capture.
2. Delete the replication source.
3. Redefine the replication source.
4. Start Capture.

ASN0019E

The Capture program program libraries are not authorized for the Authorized Program Facility (APF).

Cause: The Capture program cannot process the STOP, SUSPEND, RESUME, or REINIT commands because the STEPLIB libraries are not authorized for APF.

Action: Authorize the Capture link library for APF.

ASN0020I

Netview Generic Alerts Interface failure. The Netview return code is "<return_code>".

Cause: The Network Major Vector Transport (NMVT) could not be sent to Netview by the program because the program interface failed. This is a secondary informational message.

Action: See the Netview programming documentation for a description of the return code to determine the interface error. The Capture program alerts will not be received by the System Services Control Point (SSCP) until the error is corrected.

ASN0021I

Netview Program to Program Interface unavailable. The Netview return code is "<return_code>".

Cause: Netview is unavailable. This is a secondary informational message.

Action: See the Netview programming documentation for a description of the return code to determine the Netview problem. For example, the subsystem might not have been started.

ASN0022E

DB2 release "<release>" is not supported. The routine name is "<routine>".

Cause: The Capture program does not support this release of DB2.

Action: Run the Capture program with the appropriate release of DB2.

ASN0023I

The Capture program successfully reinitialized the register table. The table name is "<table_name>". The routine name is "<routine_name>".

Cause: A REINIT command was issued and the updates were successfully made to the Capture program internal control information. This message is for your information only.

Action: No action is required.

ASN0024I

The Capture program did not need to reinitialize the register table. Table "<table_name>" did not change.

Cause: The REINIT command was issued. No updates were made to the register table since initialization or the last REINIT. This message is for your information only.

Action: No action is required.

ASN0025I

The Capture program reinitialized the register table. Table "<table_name>" has "<number>" potentially bad row(s).

Cause: This message accompanies ASN0018W. Reinitialization was performed as requested despite potential problems reported in ASN0018W.

Action: See ASN0018W.

ASN0026W

The Capture program could not allocate the trace buffer. The routine name is "<routine>"; the storage required is "<required_storage>".

Cause: A storage allocation error was detected; not enough storage is allocated for the trace buffer. The trace buffer is an information-only feature of the Capture program and the allocated storage is not required for the Capture program to run.

Action: Contact your system programmer to determine the method of requesting the storage listed in the error message.

For Capture for VM, a request to obtain virtual storage could not be satisfied. You might need to increase the size of the virtual machine in which the Capture program runs.

For Capture for VSE, all available GETVIS storage has been exhausted. You might need to restart the Capture program after allocating a larger partition.

ASN0027W

The Capture program is already active.

Cause: You tried to start more than one the Capture program per DB2 subsystem or database.

For VSE/ESA, Capture for VSE generates a unique lock name for each database. This lock name is already in use, indicating that Capture for VSE is already active for the database.

For VM/ESA, Capture for VM has determined that the resource ID used as a lock is already in use. The resource ID is specified on the ENQ_NAME parameter of the CAPTURE ASNPARMs file.

Action: For DB2 for MVS/ESA subsystems, either run only one instance of the Capture program for all subsystems that are members of a data-sharing group, or run only one instance of the Capture program on any stand-alone system.

For other DB2 database platforms, run only one Capture program per database.

For Capture for VM, you can change the ENQ_NAME parameter in the CAPTURE ASNPARMs to ensure unique values for each Capture program if you want to run Capture for VM for more than one DB2 database on a system.

ASN0028I

The Capture program is suspended by operator command.

Cause: The IBM Replication administrator suspended the Capture program and has entered a wait state. This message is for your information only.

Action: No action is required.

ASN0029I

The Capture program is resumed by operator command.

Cause: The IBM Replication administrator resumed the Capture program from a suspended state and the Capture program has continued running. This message is for your information only.

Action: No action is required.

ASN0030I

The Capture program command entered by the operator was unrecognized.

Cause: The IBM Replication administrator entered a command not recognized by the Capture program. The only valid commands are:

- STOP (*Ctrl+C* for IBM DPROPR Capture of the Universal Database)
- SUSPEND
- RESUME
- REINIT
- PRUNE
- GETLSEQ

There are no parameters allowed for these commands.

Action: Use only valid Capture program commands.

ASN0031E

The Capture program tuning parameter table can have only one row. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The tuning parameter table was not defined correctly or has been updated with invalid rows.

Action: Refer to "Table Structures" to determine the correct format of this table. Remove any invalid rows.

ASN0033E

The Capture program could not reinitialize the register table. The table name is "<table_name>".

Cause: The IBM Replication administrator tried to reinitialize the Capture program, but there was an error in the register table. A user might have tried to update a replication source while the Capture program was running or suspended, and the register table might not match the other control tables.

Action: This is a secondary message. See any preceding messages for more information about the error. See the Capture and Apply section for your platform for more information about reinitializing the Capture program and "Table Structures" for information about the register table.

ASN0034E

An incorrect value was supplied for column "<column>" of the Capture program tuning parameter table. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The tuning parameters table does not have the correct values. Values might be out of range.

Action: Refer to the Capture and Apply section for your platform for more information. Check the lag limit, retention period and commit frequency.

ASN0035W

Some rows were found in register table with an unsupported architectural level. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The register table version does not match the current version of the Capture program. The current version of the Control Center is not compatible with the version of the Capture program that you are running.

Action: Refer to "Table Structures" to check the required value for the ARCH_LEVEL column in the register table. Verify that the value in the register table at the source server is correct. If not, use compatible versions of the Control Center and the Capture program.

ASN0036E

DB2 was terminated abnormally. The routine name is "<routine>".

Cause: DB2 was terminated while the Capture program was still active.

For MVS/ESA, VSE/ESA or VM/ESA, DB2 was terminated while Capture program was active and the user did not specify the NOTERM start up operand.

Action: Start DB2 and start the Capture program.

ASN0037W

DB2 was terminated in QUIESCE mode. The routine name is "<routine>".

Cause: DB2 was terminated while the Capture program was still active.

Action: Start DB2 and start the Capture program.

ASN0038E

The disconnect to DB2 failed. The routine name is "<routine>"; the return code is "<return_code>"; the reason code is "<reason_code>".

Cause: DB2 was stopped in QUIESCE mode, but user wanted to leave the Capture program running. While terminating the connection to DB2, Capture program received an error returned code from the Call Attachment Facility (CAF).

Action: Restart Capture program.

ASN0040E

An error was returned from the FORK function of "<platform>". The error is "<error_text>".

Cause: An AIX FORK function returned a negative value. "<error_text>" describes the error.

Action: See *AIX Calls and Subroutines Reference* for information about FORK functions, use the provided error text to determine the error, or contact your IBM Service Representative.

ASN0041E

An error was returned while getting the instance name. The reason code is "<reason_code>".

Cause: The SQLEGINs API of DB2 Universal Database returned an error.

Action: See the *DB2 for common servers API Reference* for information about the SQLEGINs API to determine the error or contact your IBM Service Representative.

ASN0042E

An error was returned from the EXECLP function. The error is "<error_text>".

Cause: The AIX EXECLP function returned a negative value. "<error_text>" describes the error.

Action: See the *AIX Calls and Subroutines Reference* for information about the EXECLP function or contact your IBM Service Representative.

ASN0043E • ASN0053E

ASN0043E

A child process of ASNLMAIN died.

Cause: The child process created by ASNLMAIN terminated. Possible causes include:

- A user stopped the child process.
- There is an AIX system problem.

Action: Check the system processes for conflicts or contact your AIX system programmer.

ASN0044E

The child process has not called the dummy process after an extended wait.

Cause: The child process was unable to call the dummy routine ASNLPVRF. The installation softlinks might not have been set.

Action: Verify whether the installation softlinks have been set, check the system for problems, or contact your IBM Service Representative.

ASN0045E

An error was returned from the MSGRCV function. The error is "<error_text>".

Cause: The function msgRCV returned an error. "<error_text>" describes the error.

Action: Use the provided error text to determine the error, or contact your IBM Service Representative.

ASN0046E

An error was returned from the MSGGET function. The error is "error_text".

Cause: The function MSGGET returned an error. "<error_text>" describes the error. This error occurs during message handling.

Action: Use the provided error text to determine the error, or contact your IBM Service Representative.

ASN0047E

An error was returned from the FTOK function of "<platform>". The error is "<error_text>".

Cause: The AIX function FTOK returned an error. "<error_text>" describes the error.

Action: See *AIX Calls and Subroutines Reference* for information about the FTOK function, use the provided error text to determine the error, or contact your IBM Service Representative.

ASN0048E

The Capture program could not open the log file. The error is "<error_text>". The error code is "<error_code>".

Cause: The Capture program could not open the log file. Some possible reasons are:

- The Capture program log file was deleted.
- The user does not have the correct authorization for the Capture program directory.

Action: Contact your system programmer to determine the error or contact your IBM Service Representative.

ASN0050E

The Capture program encountered an error while writing to the error message file.

Cause: An I/O error occurred while writing to the Capture program log file

Action: Check the ASN.IBMSNAP_TRACE table for error messages.

ASN0053E

An error was returned by the Asynchronous Read Log API (SQLURLOG).

Initial LSN is
 "<log_sequence_number>"
FIRSTRead LSN is
 "<first_read_LSN>"
lastRead LSN is
 "<last_read_LSN>"
CurActive LSN is
 "<currently_active_LSN>"
log Recswritten is
 "<log_records_written>"
log Byteswritten is
 "<log_bytes_written>"

Cause: The Asynchronous Read Log API returned an SQLCODE in the SQL error message that preceded this message. The information in this message provides additional information about the SQL error.

Action: See ASN0001E for information about SQLCODEs.

ASN0054E

The Capture program did not recognize the invocation parameter.

Cause: An invalid invocation parameter was entered with the ASNCCP command.

Action: Enter a valid invocation parameter.

See the Capture and Apply section for your platform for information about valid parameters.

ASN0055E

The Capture program encountered an SQLTYPE that is not supported in the origin table.

- Routine Name is "<routine>"
- Column Number is "<column_num>"

Cause: The Capture program encountered an invalid SQL type. A table might have been defined as a replication source outside the Control Center and contains unsupported SQL types (e.g. LONG or large object types).

Action: Delete the replication source and use the Control Center to define replication sources to ensure only valid types are defined. Or, when manually defining the replication source, ensure that the table has supported SQL types. See the messages and codes publication of the DB2 database manager on your platform to determine the invalid SQLTYPE.

ASN0056E

ASN.IBMSNAP_UOW table does not exist.

Cause: The unit-of-work (UOW) table might have been dropped, or the source server database might have been dropped.

Action: Contact your IBM Service representative.

ASN0100I

The Capture program initialization is successful.

Cause: This message is for your information only.

Action: No action is required.

ASN0101W

The Capture program warm start failed because existing data is too old; a cold start will be attempted.

Cause: The data in the change data tables is older than the value "<current_timestamp_lag_limit>". A cold start will be performed.

Action: See "Table Structures" for more information about warm and cold starts to determine why Capture program could not warm start.

ASN0102W

The Capture program will switch to cold start because the warm start information is insufficient.

Cause: A problem occurred during the retrieval of the warm start information. The warm start table data was invalid. A cold start will be performed.

For DB2 Universal Database, an Asynchronous Read Log API error occurred while reading the log during warm start. For MVS/ESA, an Instrumentation Facility Information (IFI) error occurred while reading the log during warm start.

Action: See "Table Structures" for more information about warm and cold starts to determine why Capture program could not warm start.

ASN0103I

**The Capture program started with:
"<server_name>".**

- SERVER_NAME is "<server_name>"
- ENQ_NAME is "<enq_name>"
- START_TYPE is "<start_type>"
- TERM_TYPE is "<term_type>"
- PRUNE_TYPE is "<prune_type>"

Cause: This is an informational message that displays the DB2 server name and the Capture program start up option.

ASN0104I •ASN0117W

For Capture for VSE and VM, the ENQ_NAME shows the name on which Capture program locks to make sure that there is only one Capture program running for any DB2 database. The lock name can be specified for VM/ESA by changing the ENQ_NAME parameter value in the CAPTURE ASNPARMs file.

Action: No action is required.

ASN0104I

Change capture started for owner "<owner>", the table name is "<copy_table>" at log_sequence_number (LSN) "<log_sequence_number>".

Cause: The Capture program was started for the table owner and table name at the specified log sequence number (LSN). This message is issued for each origin table for which the Capture program captures changes. This message is for your information only.

Action: No action is required.

ASN0105I

Data that has been copied was pruned from the change data table and the unit-of-work table.

Cause: This message is for your information only.

Action: No action is required.

ASN0106I

The Capture program is waiting for DB2 to come up.

Cause: When the Capture program is initially brought up, if DB2 is not up at that time, the Capture program waits until DB2 is up. After DB2 is up, the Capture program makes the connection and begins to capture changes.

If the NOTERM option is specified in the Capture invocation parameters, and DB2 comes down smoothly, the Capture program waits for it to come back up.

Action: No action is required.

ASN0110E

Capture for MVS Storage Dump. The Control Address is "<address>".

Cause: This is an informational message printed at the top of storage dumps for severe errors. When a dump is generated for a message, the dump output appears in the dataset whose name is specified by the CEEDUMP DDNAME on your Capture for MVS invocation JCL.

Action: No action is required.

ASN0115I

The warm start control information was not supplied. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The warm start table is missing or corrupted. This table provides a faster warm start. The Capture program will warm start.

Action: No action is required.

ASN0116I

The Capture program did not reinitialize the tuning parameters table. The routine name is "<routine>"; the table name is "<table_name>".

Cause: The REINIT command was issued, but tuning parameter information from the tuning parameters table was not available. The previous tuning parameter values were retained.

Action: No action is required.

ASN0117W

Warm start control information was not saved. The routine name is "<routine>"; the table name is "<table_name>".

Cause: An error occurred that prevented warm start information from being saved in the IBMSNAP_WARM_START table. Warm start can be attempted and can take longer because backup sources will be used.

Action: No action is required.

ASN0121E

The Capture program warm start failed because existing data is too old. The Capture program will terminate.

Cause: The time of the warm start information exceeded LAG_LIMIT.

Action: No response required; the Capture program will terminate because WARMNS was specified.

ASN0122E

An error occurred while reading the warm start information or DB2 log. The Capture program will terminate.

Cause: A problem occurred while retrieving the warm start information. The warm start table data was invalid or for MVS, an Instrumentation Facility Interface (IFI) error occurred while reading the log during warm start.

Action: No response required; the Capture program is terminating because WARMNS was specified.

ASN0123I

The highest log sequence number of a successfully captured log record is "<log_sequence_number>".

Cause: The Capture program saved the highest log sequence number (LSN) in the warm start table. This is the point at which the Capture program finished successfully processing the log data.

Action: No response required; this message accompanies termination.

ASN0124I

The prune command was accepted; the pruning action is queued.

Cause: The IBM Replication administrator entered the prune command and the Capture program has queued the request. The Capture program will prune the change data (CD) table and the unit-of-work (UOW) table.

Action: No response required.

ASN0125I

The current log sequence number of successfully processed log records is "<log_sequence_number>". The log timestamp is "<timestamp>".

Cause: Capture program is processing the DB2 log at the log sequence number provided.

Action: No action is required.

ASN0126E

The Capture program encountered a syntax error. The Capture program will terminate.

Cause: The Capture program encountered the wrong combination of invocation parameters.

Action: Check the Capture and Apply section for your platform for more information about the START command syntax.

ASN0130I

The user requested that the Capture program start reading from the end of the DB2 log.

Cause: The user specified the WRMSKPM parameter when invoking the Capture program.

Action: No action is required.

ASN0132I

The Capture program was invoked by asncopy with the mobile option.

Cause: This message is for your information only.

Action: No action is required.

ASN0133I

The Capture program reached the end of the mobile transactions.

Cause: This message is for your information only.

Action: No action is required.

ASN0134 • ASN0201E

ASN0134

The Capture program could not obtain the start of log information when it was invoked by asncopy with the mobile option.

Cause: The Capture program was unable to locate the point in the log where it needed to start reading information.

Action: Wait for subsequent messages which will provide more detailed information.

ASN0200E

An incorrect parameter "<parameter>" was passed to the Capture program.

Cause: For VM/ESA, one of the following situations caused an error:

- An incorrect parameter was specified on the ASNCCP invocation command.
- The CAPTURE ASNPARMs file contained an invalid parameter.
- An invalid parameter was specified on the :RESID tag in the RESID NAMES file for the :DBNAME. For example, the RESID could be too long.

For VSE/ESA, an invalid parameter was specified on the ASNCCP invocation command.

Action: Verify that the parameters supplied are valid. See the Capture and Apply section for your platform for more information about the ASNCCP command.

ASN0201E

The Capture program encountered a "<platform>" error. The routine name is "<routine>"; the function name is "<function>"; the return code is "<return_code>".

Cause: On VM:

- For the LINK function, Capture program encountered an error while attempting to LINK the minidisks identified in the *database* SQLFDEF file.
database is the database identified with the SQLINIT or SQLGLOB commands, the default of SQLDBA.

- For the FSREAD, FSPOINT, or FSTATE function errors, the Capture program encountered an error while trying to read CAPTURE ASNPARMs or the *database* SQLFDEF file.
- For the XCIDRM function, Capture program was unable to obtain the resource ID it uses as a lock to ensure that only one Capture program is active for a DB2 database. The error may have occurred for the following reasons:
 - The virtual machine in which the application is running does not have authority to connect to *IDENT.
 - The virtual machine in which the application is running does not have the authority to declare the resource.

On VSE:

- For the GENCB, MODCB, OPEN, GET, CLOSE, or ENDREQ function errors, Capture program encountered an error while trying to set up or read the database log or directory.
- For the GETVIS, FREEVIS, or XPCC function errors, Capture program encountered an error while trying to perform one of these functions.

Action: Correct the error as described in the platform documentation. On VM:

- For the LINK function, see *VM/ESA CP Command and Utility Reference* for more information about the return code.
- For the FSREAD, FSPOINT, or FSTATE function errors, see *VM/ESA CMS Application Reference - Assembler*.
- For the XCIDRM function, see *VM/ESA CPI Communications User Guide* for more information the return code.
- For other functions, refer to the platform product application development and command documentation.

On VSE:

- For the GENCB, MODCB, OPEN, GET, CLOSE, or ENDREQ function errors, see *VSE/ESA Messages and Codes Reference*, for more information about the IBM VSE/VSAM macros.
- For the GETVIS, FREEVIS, or XPCC function errors, see *VSE/ESA Systems Macro Reference*.

ASN0202E

The USERID parameter was not specified.

Cause: The USERID parameter is required in the PARM= field on the EXEC job control statement that is passed to the Capture program.

Action: Add the USERID= parameter, specifying the user ID and password, in the PARM= field and resubmit the job.

ASN0203I

Linking to "<diskname>
minidisk"<diskowner>"as "<vdev>".

Cause: The Capture program is about to issue an internal CP link command to the specified database minidisk.

Action: If prompted, enter the minidisk password.

ASN1000S

An internal error occurred for message number "<number>". Its substitution fields are "<substitution_field_1>", "<substitution_field_2>", "<substitution_field_3>", "<substitution_field_4>", "<substitution_field_5>", "<substitution_field_6>", and "<substitution_field_7>". The error code is "<error_code>". The return code is "<return_code>".

Cause: The message file for the Apply program was installed incorrectly.

Action: Refer to the installation and configuration information in this book pertaining to your platform. Make sure the message file is installed in the correct directory. If it is, contact your IBM Service representative.

ASN1001E

The Apply program encountered an SQL error.

- ERRCODE is "<error_code>"
- SQLSTATE is "<sqlstate>"
- SQLCODE is "<sqlcode>"
- SQLERRM is "<sqlerrm>"
- SQLERRP is "<sqlerrp>"
- server name is "<server_name>"
- table name is "<table_name>"

Cause: An error occurred during the execution of an SQL statement.

Action: Refer to your database messages reference for SQL.

ASN1002E

The critical section table could not be locked.

- ERRCODE is "<error_code>"
- SQLSTATE is "<sqlstate>"
- SQLCODE is "<sqlcode>"
- SQLERRM is "<sqlerrm>"
- SQLERRP is "<sqlerrp>"
- server name is "<server_name>"
- table name is "<table_name>"

Cause: The Apply program could not lock the critical table, probably because of simultaneous activity on the table.

Action: None required. The Apply program will attempt to get a lock on the critical section table during the next interval or event on the next cycle. If this condition persists, check data base activity for the critical section table.

ASN1003E

The Apply program could not connect to the server "<server>".

- error code is "<error_code>"
- SQLSTATE is "<sqlstate>"
- SQLCODE is "<sqlcode>"
- SQLERRM is "<sqlerrm>"
- SQLERRP is "<sqlerrp>"

Cause: The Apply program attempted to connect to the database and received a failing return code because either the database was not up or too many users were accessing it.

Action: Refer to your database messages reference for SQL.

ASN1010E • ASN1017E

ASN1010E

The Apply program could not insert row "<row>" into the audit trail table due to the following error: "<error_code>".

Cause: This is an SQL return code indicating that the audit trail table was not set up with the same structure as the table in "Table Structures".

Action: Refer to "Table Structures" and your database SQL manual.

ASN1011E

The copy request has incompatible source and target attributes. The error code is "<error_code>".

Cause: This is an SQL error code indicating that the attributes of the target table must be compatible with the attributes of the source table.

Action: Refer to the BASE_STRUCTURE column in the register table for the compatibility of the source and target attributes.

ASN1012E

The source table structure is invalid. The error code is "<error_code>".

Cause: This is an SQL return code indicating that the source table structure in the register table was not set up according to the BASE_STRUCTURE column in the register table.

Action: Refer to "Table Structures", the BASE_STRUCTURE column in the register table for valid source table structures.

ASN1013E

The target table structure is invalid. The error code is "<error_code>".

Cause: The target table structure in the subscriptions target member table (ASN.IBMSNAP_SUBS_MEMBR) was not valid.

Action: Refer to "Table Structures" for valid target table structures.

ASN1014E

The Apply program could not find a source for the copy request because it could not find the change data table. The error code is "<error_code>".

Cause: The change data table was not defined in the register table because either the Apply program did not find the change data table name in the register table or the source table was not registered correctly.

Action: Refer to "Table Structures" and verify that the change data table is correctly defined in the register table (ASN.IBMSNAP_REGISTER CD_OWNER, CD_TABLE).

ASN1015I

The Apply program is waiting for the Capture program at server "<server>" to advance the global SYNCHTIME. Verify the Capture program is running.

Cause: The Apply program is waiting for the Capture program at the target server to advance the global SYNCHTIME.

Action: Verify that the Capture program is running at the target server.

ASN1016I

Refresh copying has been disabled. The error code is "<error_code>".

Cause: While attempting to perform a full refresh, the Apply program encountered a DISABLE_REFRESH column in the register table which was set on.

Action: Either turn off the DISABLE_REFRESH column or bypass the Apply program and perform a manual refresh.

ASN1017E

Apply could not find any target column names. The error code is "<error_code>".

Cause: The Apply program could not find any columns in the ASN.IBMSNAP_SUBS_COLS subscription columns table.

Action: Refer to "<Defining Replication Subscriptions>" to redefine the replication subscription.

ASN1019E

The target table does not have any key columns.
The error code is "<error_code>".

Cause: The Apply program could not find key column names in one of the columns requiring a primary key.

Action: Refer to "<Defining Replication Descriptions>" to redefine the replication description.

ASN1020S

The Apply program could not reserve a storage block. The error code is "<error_code>".

Cause: The Apply program could not obtain the required (memory) storage.

Action: Contact your IBM Service representative.

ASN1021S

The Apply program could not read the work file.
The error code is "<error_code>".

Cause: Either the user does not have the proper access authority for one or all of the files or not enough space is left after writing to the target file.

Action: Determine whether the problem is caused by lack of access authority or lack of space and contact your system administrator to obtain what is needed.

ASN1022S

The Apply program could not write into the work file. The error code is "<error_code>".

Cause: Either the user does not have the proper access authority for one or all of the files or not enough space is left after writing to the target file.

Action: Determine whether the problem is caused by a lack of access authority or a lack of space and contact your system administrator to obtain what is needed.

ASN1023S

The Apply program could not open the work file.
The error code is "<error_code>".

Cause: The Apply program could not open the work file.

Action: Contact your IBM Service representative.

ASN1024S

The Apply program could not close the work file.
The error code is "<error_code>".

Cause: The Apply program could not close the work file.

Action: Contact your IBM Service representative.

ASN1029E

The SQL statement could not execute. The error code is "<error_code>".

Cause: The execution of the SQL statement specified by the user was not successful.

Action: Refer to the SQLSTATE, SQLCODE, SQLERR0, and SQLERRM in the audit trail table and your database SQL manual for detailed information.

ASN1030S

The Apply program encountered an OS/2 error.
The error code is "<error_code>"; the return code is "<return_code>".

Cause: The execution of an OS/2 API failed.

Action: For more information on the return code, refer to the *OS/2 WARP Control Program Programming Reference*.

ASN1031E

The SQL statement is empty. The error code is "<error_code>".

Cause: The SQL statement is an empty string.

Action: Specify the SQL statement to be executed.

ASN1032S

The Apply program log file could not be opened.
The error code is "<error_code>"; the return code is "<return_code>".

Cause: The Apply program could not open the log file.

Action: For more information on the return code, refer to the system library information for your particular platform.

ASN1033E • ASN1040S

ASN1033E

The Apply program could not write to the Apply log file. The error code is "<error_code>"; the return code is "<return_code>".

Cause: The Apply program could not write to the log file.

Action: For more information on the return code, refer to the system library information for your particular platform.

ASN1034E

Stored procedures are not supported in DB2 for MVS/ESA V3. The error code is "<error_code>".

Cause: DB2 does not support a procedure contained in your subscription.

Action: Remove the stored procedure CALL statement from the statement table (ASN.IBMSNAP_SUBS_STMT).

ASN1035E

The Apply program could not access the subscription columns table.

- error code is "<error_code>"
- SQLSTATE is "<sqlstate>"
- SQLCODE is "<sqlcode>"
- SQLERRM is "<sqlerrm>"
- SQLERRP is "<sqlerrp>"
- server name is "<server_name>"
- table name is "<table_name>"

Cause: An error occurred during the execution of an SQL statement.

Action: Refer to your database messages reference for SQL.

ASN1036E

The column type "<col_type>" for expression "<expression>" is invalid. The error code is "<error_code>".

Cause: The value for the COL_TYPE column in the subscription columns table is invalid.

Action: Change the value to A, B, C, F, or R.

ASN1037E

The Apply program could not obtain the date and time. The error code is "<error_code>"; the return code is "<return_code>".

Cause: The OS/2 API DosGetDateTime failed.

Action: For more information on the return code, refer to the *OS/2 WARP Control Program Programming Reference*.

ASN1038E

No column names or expressions were specified in the subscription columns table.

Cause: Column names or expressions for a copy statement must be specified.

Action: Refer to the "Defining Replication Sources" section of the "Administering Your Replication System" chapter for more information about requirements for subscription definitions.

ASN1039S

The Apply program plan, "<plan_name>", could not be opened.

- error code is "<error_code>"
- return code is "<return_code>"
- reason code is "<reason_code>"

Cause: The Apply program plan could not be opened.

Action: Refer to the "Apply for MVS Program Directory".

ASN1040S

The Apply program encountered an MVS error. The error code is "<error_code>"; the return code is "<return_code>".

Cause: Execution of an MVS system operation failed.

Action: Refer to your MVS system library information.

ASN1041I

The Apply program was started using subsystem name: "<subsystem>".

Cause: This is not an error message, however, you should make sure that the displayed subsystem name is valid.

Action: Verify that the subsystem name is valid.

ASN1042W

There are too many invocation parameters.

Cause: The number of parameters you specified when you invoked the Apply program exceeds the maximum allowed.

Action: Refer to the Capture and Apply section for your platform for information on the appropriate number of invocation parameters.

ASN1043E

There is already one Apply instance running with this Apply program qualifier "<qualifier>". The error code is "<error_code>"; the reason code is "<reason_code>".

Cause: Verification attempt failed.

Action: Make sure that only one instance of the Apply program is running under this user ID on this subsystem or database.

ASN1044I

The Apply program will become inactive for "<number>" minutes and "<number>" seconds.

Cause: This message is for your information only.

Action: No action is required.

ASN1045I

The Apply program was started using database "<database>".

Cause: This message is for your information only.

Action: No action is required unless this is not the intended database.

ASN1046S

The Apply program libraries are not authorized for the Authorized Program Facility (APF).

Cause: The Apply program libraries must be APF authorized.

Action: Authorize the Apply program libraries.

ASN1048E

The execution of a copy statement failed. See the apply trail table for full details: "<text>".

Cause: A copy statement could not execute. In the message, "<text>" identifies the "<copy_server>", "<copy_owner, copy_table, stmt_number>", and "<cntl_server>".

Action: Check the APPERRM fields in the audit trail table to determine why the copy statement failed.

ASN1049S

The Apply program encountered a system error. The error code is "<error_code>". The return code is "<return_code>".

Cause: Execution of a system operation failed.

Action: For more information on the return code, refer to the system library information for your particular platform.

ASN1050E

The Apply program encountered an invalid operation while updating the target table. The error code is "<error_code>". The invalid operation to be applied is "<operation>".

Cause: The operation field of a row fetched from the source table is not valid.

Action: Contact your IBM Service Representative.

ASN1051E • ASN1060E

ASN1051E

The Apply program detected a gap between the source "<source>" table and the target table. The error code is "<error_code>".

Cause: The Apply program has detected that the Capture program had lost change data before the Apply program could copy it. For example, the Capture program may have been cold started.

Action: Check the control tables to determine why the gap is present. Take proper action to preserve data integrity before you reset the control table information to execute the definition again.

ASN1052E

The Apply program could not find the ASNLOAD program.

Cause: The Apply program cannot find the ASNLOAD program in the current directory.

Action: Make sure that ASNLOAD is in the directory from which you are invoking the Apply program.

ASN1053E

The execution of the ASNLOAD program failed. The return code is "<return_code>".

Cause: The ASNLOAD program detected an error.

Action: Refer to the messages files generated by the EXPORT and IMPORT utilities. Note that these files names are different for Apply for OS/2 and Apply for AIX.

ASN1056E

The Apply program password file could not be opened. The error code is "<error_code>".

Cause: The user-created password file does not exist.

Action: If you want to use the AUTHENTICATION=SERVER scheme, you must provide a password file as described in the Apply program section in the Capture and Apply chapter for your platform.

ASN1057E

The Apply program could not read the password in the Apply password file. The error code is "<error_code>".

Cause: The Apply program found no password.

Action: If you want to use the AUTHENTICATION=SERVER scheme, you must provide a password as described in the Apply program section in the Capture and Apply chapter for your platform.

ASN1058E

The Apply program could not close the password file. The error code is "<error_code>".

Cause: The Apply program could not close the password file.

Action: Contact your IBM Service representative.

ASN1059E

The Apply program detected invalid syntax for line "<line>" in the password file. The error code is "<error_code>".

Cause: The Apply program could not recognize a line in the password file.

Action: Correct the syntax error in the password file. See the Apply program section in the Capture and Apply chapter for your platform.

ASN1060E

The dynamic allocation for the temporary work file failed. The error code is "<error_code>".

Cause: A system error was encountered during dynamic allocation.

Action: Contact your IBM Service representative.

ASN1061E

An invalid keyword parameter was specified. The error code is "<error_code>".

Cause: An invalid invocation parameter was specified and ignored by the Apply program.

Action: Correct the invocation parameter. See the Apply program section in the Capture and Apply program chapter for your platform.

ASN1063E

A subscription set cannot have more than 200 members. The error code is "<error_code>".

Cause: The number of members in the subscription set has exceeded the maximum number allowed of 200.

Action: Remove excess members from the subscription set.

ASN1066S

An internal Apply program error occurred. The error code is "<error_code>".

Cause: An internal Apply program error occurred.

Action: Contact your IBM Service representative.

ASN1067E

The Apply program has detected update conflicts and compensated rejected transactions. See the unit-of-work table for details. The error code is "<error_code>".

Cause: More than one application updated the same row in a table from different locations. Some transactions have been rejected and compensated.

Action: See the ASN.IBMSNAP_UOW table for details.

ASN1068E

The Apply program has deactivated the subscription set due to a RI violation. The error code is "<error_code>".

Cause: A referential integrity violation was detected when copying data from the source table to a replica. The Apply program has terminated and the subscription set has been deactivated.

Action: Correct the referential integrity error and reactivate the subscription set.

ASN1069E

The Apply program has detected referential integrity violation and compensated the rejected transactions. See the unit-of-work table for details. The error code is "<error_code>".

Cause: A referential integrity violation was detected when propagating data from the replica to the user table. See the unit-of-work table for the affected unit-of-work.

Action: Correct the referential integrity error if necessary.

ASN1070E

The Apply program could not lock the target table.

- **ERRCODE** is "<error_code>"
- **SQLSTATE** is "<sqlstate>"
- **SQLCODE** is "<sqlcode>"
- **SQLERRM** is "<sqlerrm>"
- **SQLERRP** is "<sqlerrp>"
- **server name** is "<server_name>"
- **table name** is "<table_name>"

Cause: The Apply program could not lock the target tables before it was to check update conflicts.

Action: Verify that all the target tables are available before rerunning Apply.

ASN1071E

The Apply program could not reposition the work file. The error code is "<error_code>".

Cause: This message is for your information only.

Action: No action is required.

ASN1072E

The Apply program could not find the ASNDONE program.

Cause: The Apply program could not find the user exit program, ASNDONE.

Action: Verify that the ASNDONE program is located in the correct directory.

ASN1073E • ASN1206E

ASN1073E

The execution of the ASNDONE program failed.
The return code is "<return_code>".

Cause: An error occurred while calling the user exit, ASNDONE.

Action: Contact your IBM Service representative.

ASN1097I

The Apply program stopped due to the above error.

Cause: The error reported previously caused the Apply program to stop.

Action: Fix the error reported before this message.

ASN1100I

A user has stopped the Apply program.

Cause: A user issued the STOP command to stop the Apply program.

Action: No action is required.

ASN1200I

The asncopy program completed.

Cause: This message is for your information only.

Action: No action is required.

ASN1201S

Place holder for generic message - internal error

Cause: The asncopy program encountered an SQL error.

- ERRCODE is "<error_code>"
- SQLSTATE is "<sqlstate>"
- SQLCODE is "<sqlcode>"
- SQLERRM is "<sqlerrm>"
- SQLERRP is "<sqlerrp>"
- server name is "<server_name>"
- table name is "<table_name>"

Action: Refer to your database messages reference for SQL.

ASN1202E

The asncopy program encountered an SQL error. ERRCODE is "<error code>", SQLSTATE is "<sqlstate>", SQLCODE is "<sqlcode>", SQLERRM is "<sqlerrm>", SQLERRP is "<sqlerrp>", table name is "<table name>".

Cause: This message is for your information only.

Action: No action is required.

ASN1203I

The asncopy program was stopped by the user.

Cause: This message is for your information only.

Action: No action is required.

ASN1204E

The asncopy program encountered an incorrect keyword. The keyword is "<keyword>".

Cause: A keyword was entered incorrectly.

Action: Execute the command again, using the correct keyword.

ASN1205E

The asncopy program terminated due to a Capture program error.

Cause: An inconsistency in Capture program executions has caused the asncopy program to end.

Action: Refer to the trace produced by the Capture program (ASN.IBMSNAP_TRACE) or the asncopy program error log to determine the cause of the error.

ASN1206E

The asncopy program terminated due to an Apply program error.

Cause: An inconsistency in Apply program executions has caused the asncopy program to end.

Action: Refer to the apply trail table or the asncopy program error log to determine the cause of the error.

ASN1207E

The subscription for "<subscription>" was not activated.

Cause: The subscription for "<subscription>" was not activated.

Action: Either activate the subscription or select another one.

ASN1208E

The asncopy program could not find the subscription definition for "<set>".

Cause: The selected subscription does not exist.

Action: Enter the correct subscription.

ASN1209E

The asncopy program could not find any eligible subscription.

Cause: Either no subscription name was specified or the names specified are invalid.

Action: Check the subscription names and be sure to enter the correct ones.

ASN1210E

An apply qualifier must be specified following the keyword q.

Cause: You must specify an Apply qualifier following the keyword q.

Action: Specify an Apply qualifier following the keyword q.

ASN1211E

Set names must be specified following the keyword "<keyword>".

Cause: You must specify the set names following the keyword (O, U, D, or S).

Action: Reinitiate the asncopy program, specifying the keyword and then the set names.

ASN1212E

A read-only set name "<set name>" is found following the keyword "<keyword>".

Cause: A read-only set name was specified following the keyword U or D.

Action: Specify only replica for the keywords U and D.

ASN1214E

The set name "<set name>" is specified more than once.

Cause: The same set name cannot be specified in more than one list.

Action: Reinitiate the asncopy program, being sure to specify each set name only once for each list.

ASN1221I

Set "<set name>" has been successfully refreshed with "<number of rows>" rows at "<time>".

Cause: This message is for your information only.

Action: No action is required.

ASN1222S

Set "<set name>" has successfully inserted "<number of rows>" rows, deleted "<number of rows>" rows, updated "<number of rows>" rows at "<time>".

Cause: This message is for your information only.

Action: No action is required.

ASN1223E

The Apply program could not copy for set "<file_name>". The error code was "<error code>".

Cause: The Apply program encountered a problem while copying.

Action: Refer to the apply trail table or the asncopy program error log to determine the cause of the error.

ASN1230S • ASN2703E

ASN1230S

The asncopy program encountered a system error. The error code is "<error_code>" and the return code is "<return_code>".

Cause: The asncopy program encountered an error in the database.

Action: Trace the error and call your IBM Service representative.

ASN1240E

A system error has been detected. The error code is "<error_code>" and the return code is "<return_code>".

Cause: Execution of a system operation failed.

Action: For more information on the return code, refer to the system library information for your particular platform.

ASN1242E

A SQL error occurred.

- **ERRCODE** is "<error_code>"
- **SQLSTATE** is "<sqlstate>"
- **SQLCODE** is "<sqlcode>"
- **SQLERRM** is "<sqlerrm>"
- **SQLERRP** is "<sqlerrp>"
- **table name** is "<table_name>"

Cause: An error occurred during the execution of an SQL statement.

Action: Refer to your database messages reference for SQL.

ASN1243E

There is no eligible subscription in the ASN.IBMSNAP_SUBS_SET table.

Cause: The IBMSNAP_SUBS_SET table is empty or the name specified is invalid.

Action: Check the subscription names and be sure to enter the correct ones. The IBMSNAP_SUBS_SET table must have at least one subscription defined.

ASN1244E

User has not selected any set.

Cause: A set name must be selected.

Action: Select at least one set name from the list.

ASN2700E

The server name "<server_name>" is invalid.

Cause: The first character of the database server name is invalid.

Action: Refer to the section on naming conventions for information on valid server names. Then provide the correct server name.

ASN2701E

The database "<database_name>" or subsystem "<subsystem_name>" must be an 8-bytes-or-less alias name.

Cause: The server name consists of more than eight characters.

Action: Enter the correct alias name. It must consist of eight characters or less.

ASN2702I

SQL CONNECT to "<server_type>" "<server_name>" succeeded.

Cause: This message is for your information only.

Action: No action is required.

ASN2703E

SQL CONNECT to "<server_type>" "<server_name>" failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>" sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The migration tool cannot connect to the server.

Action: Refer to the SQLSTATE values section of your database messages and codes manual.

ASN2704I

Action "<action>" for "<table_name>" table starts.

Cause: This message is for your information only.

Action: No action is required.

ASN2705I

Action "<action>" for "<view_name>" view starts.

Cause: This message is for your information only.

Action: No action is required.

ASN2706I

Action "<action>" for "<table_name>" table succeeded.

Cause: This message is for your information only.

Action: No action is required.

ASN2707I

Action "<action>" for "<view_name>" view succeeded.

Cause: This message is for your information only.

Action: No action is required.

ASN2708E

Action "<action>" for "<table_name>" table failed.

Cause: The migration fallback or the cleanup for the table failed.

Action: Refer to the previous SQL statement execution to find the SQLSTATE value for the error message.

ASN2709E

Action "<action>" for "<view_name>" view failed.

Cause: The action for the view, MIGRATE, FALLBACK or CLEANUP, failed.

Action: Refer to the previous SQL statement execution for the SQLSTATE value for the error message.

ASN2710E

The BUILDDB action was not done for subscriber "<subscriber_userid>" at "<server_type>" "<server_name>".

Cause: The BUILDDB step was not executed for the subscriber.

Action: Perform the BUILDDB and the PREPARE step for the subscriber.

ASN2711E

The BUILDDB action was not done for "<server_type>" "<server_name>".

Cause: The BUILDDB step was not executed for the server.

Action: Perform the BUILDDB and PREPARE steps for the server.

ASN2712E

The requested version "<version>" is invalid.

Cause: The control table version value entered is not valid.

Action: Correct the value and reenter it or enter L to run the latest version.

ASN2713E

The PREPARE action must be executed before the MIGRATE or FALLBACK action.

Cause: The PREPARE step was not executed before the MIGRATE step.

Action: Perform the PREPARE step before performing the MIGRATE step.

ASN2714I

Action "<action>" for "<server_type>" "<server_name>" started.

Cause: This message is for your information only.

Action: No action is required.

ASN2715I • ASN2727I

ASN2715I

Action "<action>" for "<server_type>" "<server_name>" succeeded.

Cause: This message is for your information only.

Action: No response is required.

ASN2716E

Action "<action>" for "<server_type>" "<server_name>" failed.

Cause: The migration, fallback, or cleanup for the server failed.

Action: Refer to the previous SQL statement execution for the SQLSTATE value and then refer to the listing of that value in the message information for your platform to determine the cause of the error.

ASN2717E

Data server "<data_server_name>" has not been migrated yet.

Cause: The data server with dependent subscriptions has not been migrated yet.

Action: Migrate the data server.

ASN2718I

Data server "<data_server_name>" has been migrated.

Cause: This message is for your information only.

Action: No action is required.

ASN2719E

Action "<action>" for table "<table_name>" was not performed.

Cause: The action for the table was not executed.

Action: Repeat the action.

ASN2720E

Action "<action>" for view "<view_name>" was not performed.

Cause: The action for the view was not executed.

Action: Repeat the action.

ASN2721I

Current userid is "<userid>" and "<server_type>" alias is "<alias_name>".

Cause: This message is for your information only.

Action: No action is required.

ASN2722I

No registration information was collected at version "<version>".

Cause: This message is for your information only.

Action: No action is required.

ASN2723I

No subscription information was collected at version "<version>".

Cause: This message is for your information only.

Action: No action is required.

ASN2724I

Table "<table_name>" already exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2725I

View "<view_name>" already exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2726I

Table "<table_name>" does not exist.

Cause: This message is for your information only.

Action: No action is required.

ASN2727I

View "<view_name>" does not exist.

Cause: This message is for your information only.

Action: No action is required.

ASN2728I

More than one table "<table_name>" exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2729E

SQL message is "<sqlmsg>", sqlcode is "<sqlcode>" sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2730E

No alias name was found for the server "<server_type>" "<server_name>".

Cause: No alias name was found for "<server_type>" "<server_name>" was not provided at the BUILDDB step.

Action: Provide the complete list of server alias names to the BUILDDB program and run the program again.

ASN2733I

The global control information of version "<version>" has been prepared at "<timestamp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQLSTATE values section of your database messages and codes manual.

ASN2734E

The file "<file_name>" cannot be opened.

Cause: This file is either in error or does not exist.

Action: Verify that the file has been installed correctly. If it has but it still cannot be opened, contact your IBM Service representative. If it has not been installed correctly, reinstall it.

ASN2735E

The requested version "<version>" was not found.

Cause: The information for the requested version cannot be found.

Action: See the ASN.VERSION_CONTROL table for the available version number specified.

ASN2736E

The action parameter was not provided, or was not specified before the keyword parameters.

Cause: The value for one of the actions (MIGRATE, FALLBACK, or CLEANUP) was not entered before the keyword parameters.

Action: Enter the action parameter before the keyword parameters.

ASN2737E

Too many parameters were entered.

Cause: The number of parameters entered exceeded the number allowed for the action.

Action: Verify the necessary parameters and reenter the command.

ASN2738E

This parameter is not a keyword parameter: "<parameter_name>".

Cause: The parameter entered is not a keyword parameter.

Action: Enter ASNMIG to see the help for the command syntax. Then enter the correct keyword parameter.

ASN2739E

Invalid action parameter. Valid actions are BUILDDB, PREPARE, MIGRATE, FALLBACK, and CLEANUP.

Cause: The action parameter entered is not a valid value.

Action: Enter ASNMIG to see a listing of the valid action parameters. Then enter the correct action parameter.

ASN2740E • ASN2750E

ASN2740E

Invalid parameter: "<keyword_parameter>".

Cause: The parameter segment entered was not one of the following: D=, S=, C=, T=, U=, or V=.

Action: Enter the correct parameter.

ASN2741E

Invalid combination of keyword parameters.

Cause: The keyword parameters specified for the action were incorrectly entered.

Action: See "Migrating DPROPR from Version 1 to Version 5" for the keywords needed for migration.

ASN2742E

SQL SELECT failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2743I

The column being added already exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2744I

The row being inserted already exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2745I

The row being updated already exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2746I

The V5 registrations defined after the last migration were lost.

Cause: The V5 registrations defined after the last migration from Version 1 to Version 5 were lost because of fallback.

Action: Register Version 5 after the next migration.

ASN2747I

The "<action>" ended unsuccessfully.

Cause: This message is for your information only.

Action: No action is required.

ASN2748E

The action "<action>" ended unsuccessfully.

Cause: An error occurred during the BUILDDB or PREPARE action.

Action: Find the error in the action trace file and rerun the action.

ASN2749E

The "<action>" partially succeeded because it could not connect to some servers.

Cause: A wrong server name was provided.

Action: Rerun the action using the correct server name.

ASN2750E

No V1 control server name exists in "<userid>" ROUTING1 table. Fallback from V5 to V1 cannot be performed.

Cause: The subscriber's routing table contains no rows so fallback cannot be performed.

Action: Determine why the ROUTING1 table is empty and rebuild it.

ASN2751E

SQL PREPARE failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The subscriber's routing table contains no rows so fallback cannot be performed.

Action: Determine why the routing table is empty and rebuild it.

ASN2752E

SQL OPEN CURSOR failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2753E

SQL FETCH CURSOR failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2754E

SQL CLOSE CURSOR failed. Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2755I

This PREPARE run is for validation only.

Cause: This message is for your information only.

Action: No action is required.

ASN2756I

Action "<action>" trace file is "<action>".TRC file.

Cause: The program trace containing records of the action is in the "<action>".TRC file (BUILDDDB, PREPARE, MIGRATE, FALLBACK, or CLEANUP).

Action: Check the trace file to see if there were any errors.

ASN2757I

Action "<action>" report file is "<action>".RPT file.

Cause: This file is created during the migration (PREPARE, MIGRATE, FALLBACK, or CLEANUP).

Action: Check the report file to see the summary of migration activity and resolve any errors before continuing with migration.

ASN2758E

The migration tool cannot execute on this platform "<platform_name>".

Cause: Migration could not be performed because of incompatibility between the migration tool and the database it is running on. The problem is probably caused by an error in the installation of the program.

Action: Refer to the installation section and reinstall the program. Then run the migration tool.

ASN2759E

Invalid validation parameter "<parameter_value>". Accepted parameters are "V" for Validate and "O" for Override.

Cause: The only acceptable validation parameter is V.

Action: Specify V for the validation parameter and reenter it.

ASN2760I

Checking if auto-registration for subscriber "<userid>" exists.

Cause: This message is for your information only.

Action: No action is required.

ASN2761W • ASN2768W

ASN2761W

Auto-registration has been detected at the copy server "<server_name>". The ASN.IBMSNAP_CD_CNTL and pruning control tables need to be migrated first.

Cause: The ASN.IBMSNAP_CD_CNTL and pruning control tables may not have been migrated at the copy server.

Action: Migrate the ASN.IBMSNAP_CD_CNTL and pruning control tables at the copy server.

ASN2762I

Please issue the following command: ASNMIG "<action>" D="<migration db>" S="<V1 data server>" V="<version>".

Cause: This message follows ASN2761W. The ASN.IBMSNAP_CD_CNTL and pruning control tables may not have been migrated at the copy server.

Action: Issue the command recommended in the message.

ASN2763I

No auto-registration for subscriber "<userid>" has been detected.

Cause: This message is for your information only.

Action: No action is required.

ASN2764I

All ASN.IBMSNAP_CD_CNTL and pruning control tables created from auto-registration task for subscriber"<userid>"'s subscription have been migrated.

Cause: This message is for your information only.

Action: No action is required.

ASN2765I

The action "<action>" SQL file is "<action>".SQL file.

Cause: The SQL statement generated by the BUILDDDB action is written to the"<action>".SQL file (a DB2 statement file).

Action: Use the DB2 command DB2 SVTF.SQL to execute the SQL statement in the file. Use the DB2 Command Line Processing (CLP) facility to execute the .SQL file.

ASN2766W

Auto-registration has been detected at the target server "<server_name>". The ASN.IBMSNAP_REGISTER and the ASN.IBMSNAP_PRUNCNTL tables can be fallen back, but not necessary.

Cause: The ASN.IBMSNAP_REGISTER and the ASN.IBMSNAP_PRUNCNTL tables may not have fallen back at the copy server.

Action: Fall back the ASN.IBMSNAP_REGISTER and the pruning control tables at the copy server, if desired.

ASN2767E

The list of servers must include at least one valid database alias preceding the wildcard character (*).

Cause: Either all the server aliases entered were invalid or no alias was entered with the wildcard character (*). The wildcard character alone is not sufficient for the program to run.

Action: Reenter the wildcard character with the proper server alias.

ASN2768W

The wildcard character (*) was not specified, so ensure that you did include the complete list of servers for collection.

Cause: No wildcard character (*) was entered during the BUILDDDB action.

Action: You can continue with the provided server list if this is your intention. Make sure you enter the complete list. not, reenter the server list with the wildcard character.

ASN2769E

SQL EXECUTE/EXECUTE IMMEDIATE failed.
Sqlstate is "<sqlstate>", sqlcode is "<sqlcode>",
sqlerrm is "<sqlerrm>", sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2772E

SQL COMMIT failed. Sqlstate is "<sqlstate>",
sqlcode is "<sqlcode>", sqlerrm is "<sqlerrm>",
sqlerrp is "<sqlerrp>".

Cause: The SQL statement execution failed.

Action: Refer to the SQL message and the SQLCODE values section of your database messages and codes manual.

ASN2770E

All Applies having subscriptions from data
server "<server_name>" must fall back first.

Cause: At least one Apply subscribed from this data server has not fallen back yet.

Action: Perform the FALLBACK for all Applies before the Capture.

ASN2773I

To change to override option, reissue the
command with the additional parameter: "O".

Cause: The PREPARE action has been performed at the specified version.

Action: To restart the program, specify the additional "O" to override the values in the DPROP V1 global control table in the migration database.

ASN2771I

Subscriber "<userid>" does not have rows in the
subscription tables.

Cause: The IBM Replication V5 tables contain no information that would allow a fallback to DPROPR V1 for that subscriber.

Action: Verify that the subscriber userid is correct. If it is, review the executed actions.

Chapter 3. CCA Messages

CCA2001W

No files were found matching the file pattern specified.

Cause: A request was made to read from files matching the specified file pattern. No files were found matching the pattern.

Action: Correct the file pattern specified and retry the operation.

CCA2002W

An error was encountered updating the TCP/IP services file.

Cause: An attempt to add a service name and port number to the TCP/IP services file failed or Network Information Services is being used and only the local services file was updated. The port number was used to catalog the node instead of the service name.

Action: If you wish to use the service name instead of the port number in the node directory entry, the node must be manually uncataloged and then recataloged using the service name. The services file must also be updated manually. If Network Information Services (NIS) is being used, the local services file may have been updated but the NIS server must be updated manually. In this case, the node was also cataloged using the port number.

CCA2003W

The Discover request did not return data for one or more DB2 systems.

Cause: The discover request did not return data for one or more of the requested DB2 systems. One of the following may have occurred:

- The Administration Server to which the discover request was sent has not been started.
- An error occurred attempting to perform the discover request.
- The DB2 system to which the discover request was sent is not configured for discovery.

Action: Verify that the DB2 system to which the discover request was sent is enabled for discovery. If enabled for discovery, ensure that the Administration Server on the DB2 system is running.

CCA2004W

The nname value specified is not unique.

Cause: The nname value specified is already being used by another NetBIOS application on the network.

Action: Select 'YES' to use the specified nname or 'NO' to cancel the request. If 'YES' is selected, any application using the existing nname will be affected.

CCA2005W

The socket number specified is not unique.

Cause: The socket number specified is being used by another DB2 instance on the workstation.

Action: Select 'YES' to use the specified socket or 'NO' to cancel the request. If 'YES' is selected, any application using the existing socket number will be affected.

CCA2006W

An entry already exists in the TCP/IP services file for the service name and port number specified.

Cause: An entry already exists in the TCP/IP services file for the service name and port number specified. Another application may be using the entry.

Action: Select 'YES' to use the existing entry or 'NO' to cancel the request. If 'YES' is selected, any application using the existing entry will be affected.

CCA2007W

The port number specified is being used with a different service name.

Cause: The TCP/IP services file contains an entry that uses the port number specified but the associated service name does not match the service name specified.

Action: Select 'YES' to use the specified service name and port number or 'NO' to cancel the request. If 'YES' is selected, a new entry will be added to the services file. Any applications using the entry with the existing port number may be affected.

CCA2008W

The service name specified is being used with a different port number.

Cause: The TCP/IP services file contains an entry that uses the service name specified but the associated port number does not match the port number specified.

Action: Select 'YES' to use the specified service name and port number or 'NO' to cancel the request. If 'YES' is selected, the existing entry in the services file, using the service name, will be updated to use the port number specified. This may affect any applications using the existing entry.

CCA2009W

The request was cancelled by the user.

Cause: The request was cancelled by the user.

Action: None.

CCA2010W

An attempt to update the APPC stack failed.

Cause: An attempt to add the Transaction Program name to the APPC stack failed.

Action: The APPC stack must be manually updated. If the Transaction Program name is not added to the stack, remote connections to the server will not be possible.

CCA2011W

An attempt to add the service name and port number to the TCP/IP services file failed.

Cause: An attempt to add the service name and port number to the TCP/IP services file failed. The database manager configuration file has been updated with the service name specified.

Action: The service name and port number must be manually added to the TCP/IP service file. If the entry is not added to the services file, remote connections to the server will not be possible.

CCA2012W

The Discover request did not find any DB2 systems.

Cause: A request to search the network for DB2 systems completed successfully but no DB2 systems were found. Following is a list of possible reasons why no DB2 systems were found:

- Search discovery was not enabled on any DB2 systems (that is, in the DBM configuration file of the administration server on the DB2 system, DISCOVER = SEARCH was not specified).
- The DB2 system was not set up with the appropriate discovery protocol for the client to find it (that is, DISCOVER_COMM on the administration server does not contain a protocol that matches one specified for DISCOVER_COMM on the client).
- The DB2 system is on the other side of a router or bridge, and the routers and bridges on the network were configured such that the discovery packet was filtered out and not passed on.

Action: Following is a list of possible actions to take in order for discovery to find DB2 systems:

- Set DISCOVER = SEARCH in the DBM configuration file of the administration server on all DB2 systems that you wish to be found.
- Set DISCOVER_COMM for the administration server to include the protocol that the client will use to issue a discover request (that is, set DISCOVER_COMM to include at least one of the protocols specified in DISCOVER_COMM on the client).
- Have the network administrator reconfigure the router or bridge to allow discovery packets (for the specified protocol) to be passed through.

CCA2013W

Remote database cataloged using APPC but the stack was not configured.

Cause: A request to catalog a database resulted in a node being cataloged that uses the APPC protocol. The node was cataloged using the symbolic destination name which was retrieved from the profile specified. The APPC stack was not configured because there was insufficient information in the profile to configure the stack or APPC was not detected on the DB2 system. It was not possible to use a different protocol because no other matching protocol was detected on the client.

Action: If APPC is not installed on the client, uncatalog the database and recatalog the database manually using a protocol that is available on both the client and server. If APPC is installed, configure the stack if it has not already been configured.

CCA2014W

The transaction program name specified is not unique or has already been configured.

Cause: The transaction program name specified is already being used by another DB2 instance or a non DB2 application on this server.

Action: Select 'YES' to use the specified transaction program name or 'NO' to cancel the request. If "YES" is selected, for all applications using the transaction program name concurrently, APPC will only be operational for the first one started. If any new APPC parameter values have been specified, the APPC stack will be updated with these values.

CCA2015W

The service name and port number specified are being used in different entries in the services file.

Cause: The TCP/IP services file contains entries that use the service name and port number specified but they are not being used in the same entry.

Action: Select 'YES' to use the specified service name and port number or 'NO' to cancel the request. If 'YES' is selected, the existing entry in the services file, using the service name, will be updated to use the port number specified. This may affect any applications using the existing entries.

CCA3000C

An internal error has occurred. Reason code "<reason code>".

Cause: An unexpected internal error has occurred.

Action: Turn trace on and retry the steps that caused the error. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Reason code

- Trace file

CCA3001N

The specified service name and port number conflicts with existing values in the TCP/IP services file.

Cause: The service name and port number entered by the user conflicts with existing values in the TCP/IP services file. The service name may already be used with a different port number, the port number may already be used with a different service name or both.

Action: Specify a service name and port number that does not conflict with existing entries in the services file.

CCA3002N

An I/O error occurred.

Cause: An error was encountered attempting to open, read, change the file position or close a file.

Action: If a file name was specified, verify that the file name is valid and that the user has permission to access the file. Also check for any disk and operating system errors.

CCA3003N

The format of the file is not valid.

Cause: An error was encountered reading from a file. The format of the file is not valid. Possible errors include:

- The file contains invalid data.
- The file does not contain expected data.
- The order of the data in the file is incorrect.

Action: If a file name was specified, and the file has been modified by the user, regenerate the file and retry the operation. If the problem persists, and the file was not modified by the user, or the problem occurred during a Discover request, turn trace on and retry the steps that caused the error. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Trace file
- File which is causing the error if a file name was specified

CCA3004N • CCA3012N

CCA3004N

An attempt to allocate memory failed.

Cause: An error was detected attempting to allocate memory.

Action: Terminate other applications running on the system that may be using large amounts of memory. If the problem persists, turn trace on and retry the operation. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Trace file

CCA3005N

An error was encountered writing to a file.

Cause: An error was detected while writing to a profile. The error could also be encountered when updating a host system password and errors are being recorded in the file db2pem.log.

Action: Verify that the file system on which the file resides is not full and is not damaged. Also check for any operating system errors.

CCA3006N

No matching communication protocol was detected.

Cause: The database cannot be cataloged because none of the protocols available on the client match any of the protocols available at the server.

Action: Ensure that the client and server has at least one matching communication protocol that can be detected on both the client and the server. If a matching protocol is installed on both the client and the server, the protocol could not be detected. In this case, catalog the database and node manually.

CCA3007N

The database alias name specified is not valid.

Cause: The length of the database alias specified is not a valid or the alias contains invalid characters.

Action: Correct the alias name and resubmit the request.

CCA3009N

The application requestor name specified is not valid.

Cause: The length of the application requestor name specified is not valid or the name contains invalid characters.

Action: Correct the application requestor and resubmit the request.

CCA3010N

The length of the parameter value specified is not valid.

Cause: The length of the parameter value specified for the application requestor is not valid.

Action: Correct the parameter value and resubmit the request.

CCA3011N

The target database name specified is not valid.

Cause: The length of the target database name specified is not valid or the name contains invalid characters.

Action: Correct the target database name and resubmit the request.

CCA3012N

Add ODBC data source failed.

Cause: A request to add an ODBC data source failed. The error could be caused by an out of memory error, a disk full condition or a disk failure.

Action: Verify that the disk on which the ODBC.INI and DB2CLI.INI files reside is not full and that the disk is not damaged. In addition, if other applications are using large amounts of memory, terminate the applications and retry the operation.

CCA3013N

Remove ODBC data source failed.

Cause: A request to remove an ODBC data source failed. The error could be caused by an out of memory condition or a disk failure.

Action: If other applications are using large amounts of memory, terminate the applications and retry the operation. Also verify that the disk on which the ODBC.INI and DB2CLI.INI files reside is not damaged.

CCA3014N

The bind request cannot be processed.

Cause: The bind request cannot be processed because another bind operation is already in progress.

Action: Complete or terminate the bind in progress and resubmit the bind request.

CCA3015N

The adapter specified is not valid.

Cause: The adapter specified was not detected on the DB2 system.

Action: Specify an adapter that is available and resubmit the request.

CCA3016N

The nname value specified is not unique.

Cause: The nname value specified is already being used by another NetBIOS application on the network.

Action: Specify a unique nname and retry the operation.

CCA3017N

The path specified for the file is not valid.

Cause: An attempt was made to open the specified file but the path specified is invalid or does not exist.

Action: Ensure that the path specified is valid and the path for the file exists.

CCA3018N

The user does not have sufficient authority to access the file.

Cause: An attempt was made to access the requested file but the user does not have the required authority to access the file.

Action: Ensure that the user has the required authority to access the file.

CCA3019N

The file name specified is a directory.

Cause: An attempt to access the file specified failed because the name specified is a directory and not a file.

Action: Specify a valid file name and retry the operation.

CCA3020N

An attempt to access the specified file failed because of a share violation.

Cause: An attempt to access the file specified failed because of a share violation. Another process may have the file opened in exclusive mode.

Action: The file is currently being accessed by another process in exclusive mode. Ensure that no other process is accessing the file and retry the operation or specify another file name.

CCA3021N

An attempt to retrieve, add or remove variable "<variable name>" from the DB2 Profile Registry failed. Reason code "<reason code>".

Cause: An attempt to retrieve, add or remove the indicated variable from the DB2 Profile Registry failed. The reason code indicates the cause of the problem. The possible reason codes are as follows:

- -3 Insufficient memory to process the request
- -4 Variable not found in the registry
- -7 DB2 Profile Registry is not found on this DB2 system
- -8 Profile not found for the given instance
- -9 Profile not found for the given node
- -10 UNIX registry file lock time-out

CCA3022C • CCA3025N

Action: For reason code -3, terminate other applications using large amounts of memory and retry the operation. For reason code -4, ensure that the variable is set in the DB2 Profile Registry. For reason code -7, ensure that the DB2 Profile Registry has been created. For reason codes -8 and -9, ensure that the specified profile has been created. For reason code -10, ensure that the registry file is not locked by another process.

CCA3022C

An attempt to retrieve the address of a function from library "<library name>" failed. Reason code "<reason code >".

Cause: An attempt to retrieve the address of a function from the indicated library failed.

Action: Verify that the correct version of the library is being used. If the incorrect version is being used, install the correct version. If the problem persists, turn trace on and retry the steps that caused the error. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Reason code
- Trace file

CCA3023C

An attempt to load library "<library name>" failed. Reason code "<reason code>".

Cause: An attempt to load the indicated library failed.

Action: Verify that the path in which the library resides is included in the library path. Also ensure that there is enough memory available to load the library. If the problem persists, turn trace on and retry the steps that caused the error. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Reason code
- Trace file

CCA3024C

An attempt to unload library "<library name>" failed. Reason code "<reason code>".

Cause: An attempt to unload the indicated library failed.

Action: Turn trace on and retry the steps that caused the internal error. If the problem reoccurs, save the trace information to a file and contact IBM Support with the following information:

- Problem description
- Message number
- Reason code
- Trace file

CCA3025N

One or more of the IPX/SPX parameters specified is not valid.

Cause: One or more of the input parameters is not valid. Following is a list of possible errors:

- One or more of the fileserver, objectname and ipx_socket parameters is NULL.
- Only the fileserver parameter or objectname parameter is set to "".
- The fileserver and/or objectname parameters are not set to "" for Windows NT and Solaris.
- The objectname value specified is not unique.
- The ipx_socket value specified is not unique.
- The ipx_socket value specified is not in the valid range.
- The DB2 system failed to attach to the fileserver specified.

Action: Verify the following:

- The fileserver, objectname and ipx_socket parameters are not NULL.
- If the value specified for fileserver is "", the value for objectname must also be "".
- On Windows NT and Solaris, both fileserver and objectname must be "".
- The value specified for objectname, if not "", is unique for all DB2 instances and IPX/SPX applications registered at the fileserver.
- The value specified for ipx_socket is unique across all DB2 instances on the DB2 system.

- The value specified for ipx_socket is within the valid range.
- The fileserver specified exists and that it is up and running.

Correct all errors and retry the operation.

CCA3026N

No available NetBIOS adapters detected.

Cause: A NetBIOS adapter was not detected on the DB2 system. The database cannot be cataloged.

Action: Catalog the database and node manually if an adapter is available on the DB2 system.

CCA3027N

The port number specified is out of range.

Cause: The TCP/IP port number specified is out of range. The maximum value that can be specified for the port number is 65534.

Action: Specify a port number that does not exceed the maximum value and retry the operation.

CCA3028N

The DB2INSTANCE variable is not valid.

Cause: The DB2INSTANCE environment variable is not set or is set to the Administration Server instance. The Client Configuration Assistant cannot run under the Administration Server Instance.

Action: Set the DB2INSTANCE variable to an instance other than the Administration Server instance.

CCA3029N

Updating of the ODBC data source settings failed.

Cause: A request to update the settings of an ODBC data source failed. The error could be caused by an out of memory error, a disk full condition or a disk failure.

Action: Verify that the disk on which the DB2CLI.INI file resides is not full and that the disk is not damaged. In addition, if other applications are using large amounts of memory, terminate the applications and retry the operation.

CCA3030N

Values missing for configuring APPC.

Cause: A request was made to catalog a database using APPC or to configure a server instance for APPC. The request could not be completed because one or more parameters were not specified.

Action: Ensure that all required parameters have been specified and retry the operation.

CCA3031N

The APPC stack has not been configured for the database selected.

Cause: The database selected is using APPC for the database connection. However, the APPC stack has not been configured for the connection.

Action: Configure the APPC stack for the database selected.

CCA5000N

The user ID specified is not valid.

Cause: The user ID specified does not exist.

Action: Enter the correct user ID and resubmit the request.

CCA5001N

The password specified is incorrect.

Cause: The password specified for the user ID is incorrect.

Action: Enter the correct password for the user ID and resubmit the request.

CCA5002N

The password for the user ID has expired.

Cause: The password for the user ID has expired and cannot be updated.

Action: Contact your system administrator to have the password reset.

CCA5003N • CCA5004N

CCA5003N

The new password specified is not valid.

Cause: The new password specified is not valid.

Action: Enter a valid password and resubmit the request.

CCA5004N

An unexpected error occurred.

Cause: An unexpected error occurred while attempting to update the password for the user ID specified. Additional information may have been written to the file db2pem.log in the instance directory.

Action: Contact your system administrator for further assistance and provide the information from the file db2pem.log.

Chapter 4. CLI Messages

CLI0001W

Disconnect error.

Cause: An error occurred during the disconnect. However, the disconnect succeeded.

Action: Validate that the communication between the client and the server are still active.

CLI0002W

Data truncated.

Cause: An output buffer specified is not large enough to contain the data.

Action: Increase the size of the output buffer.

CLI0003W

Privilege not revoked.

Cause: The statement was a REVOKE statement and the user did not have the specified privilege.

Action: No action needed.

CLI0004W

Invalid connection string attribute.

Cause: An invalid or unsupported connection string attribute was specified in the connection string but the driver was able to connect to the data source anyway.

Action: No action needed.

CLI0005W

Option value changed.

Cause: The driver did not support the specified option value and substituted a similar value.

Action: No action needed.

CLI0006W

SQLCancel treated like a close.

Cause: The SQLCancel call was treated like a SQLFreeStmt call with the SQL_CLOSE option.

Action: No action needed.

CLI0100E

Wrong number of parameters.

Cause: The number of parameters specified in SQLSetParam or SQLBindParameter was less than number of parameters in the SQL statement.

Action: Respecify the SQL statement or provide more input parameters through SQLSetParam or SQLBindParameter.

CLI0101E

The statement did not return a result set.

Cause: The previous statement does not result in a result set.

Action: Respecify the SQL statement.

CLI0102E

Invalid conversion.

Cause: The conversion between the application data type and SQL data type is not supported by the driver.

Action: Respecify a data conversion which is supported by the driver.

CLI0103E

Too many columns.

Cause: The number of columns specified in SQLBindCol is greater than the number of columns in the current result set.

Action: Respecify the SQL statement or reset the bound column information in SQLBindCol.

CLI0104E

Unable to connect to data source.

Cause: The driver was unable to establish a connection with the data source.

Action: Ensure the server is started and that the communications between the client and server are correct.

CLI0105E • CLI0114E

CLI0105E

Connection in use.

Cause: The specified connection handle is already being used and the connection is still opened.

Action: Allocate a new connection using SQLAllocConnect and retry the connection or terminate the existing connection.

CLI0106E

Connection is closed.

Cause: The connection specified by the connection handle is no longer active.

Action: Establish a new connection.

CLI0107E

Connection failure during transaction.

Cause: The connection failed during the execution of the function and it cannot be determined whether the COMMIT or ROLLBACK occurred before the failure.

Action: Establish a new connection.

CLI0108E

Communication link failure.

Cause: The connection between the driver and the data source failed during execution of this function.

Action: Establish a new connection.

CLI0109E

String data right truncation.

Cause: The data specified through SQLSetParam or SQLBindParameter is larger than the maximum size allowed for the corresponding use of a parameter marker.

Action: Respecify the parameter using SQLSetParam or SQLBindParameter.

CLI0110E

Invalid output or indicator buffer specified.

Cause: The returned data was NULL but the output or indicator buffer specified was a NULL buffer.

Action: Respecify the output or indicator buffer supplying a non-NULL buffer and retry the operation.

CLI0111E

Numeric value out of range.

Cause: Returning the numeric data would have caused the whole part of the number to be truncated.

SQLPutData was called more than once for a parameter and the input data was not of type character or binary.

Action: Respecify the output bindings either through SQLBindCol or SQLGetData to avoid creating a numeric data truncation.

Do not call SQLPutData for a parameter if the application data type specified for that parameter through SQLSetParam or SQLBindParameter is not SQL_C_CHAR or SQL_C_BINARY.

CLI0112E

Error in assignment.

Cause: The data sent for a parameter or column was incompatible with the data type of the associated table column.

Action: Respecify the output binding through SQLBindCol or SQLGetData or the input binding through SQLSetParam or SQLBindParameter.

CLI0113E

Invalid date format.

Cause: The data sent for a date field was invalid.

Action: Respecify the date data.

CLI0114E

Datetime field overflow.

Cause: The data sent for a date, time, or timestamp parameter, or column, was invalid.

Action: Respecify the date, time, or timestamp data.

CLI0115E

Invalid cursor state.

Cause: The statement is not positioned on a row.
Action: Position the statement on a row by calling SQLFetch or SQLExtendedFetch and retry the operation.

CLI0116E

Invalid transaction state.

Cause: There was a transaction in progress when SQLDisconnect was called.
Action: Call SQLTransact before calling SQLDisconnect.

CLI0117E

Invalid cursor name.

Cause: An invalid or duplicate cursor name was specified in SQLSetCursorName.
Action: Respecify a valid cursor name through SQLSetCursorName.

CLI0118E

Invalid SQL syntax.

Cause: An invalid or incorrect SQL statement was specified.
Action: Respecify a valid SQL statement.

CLI0119E

Unexpected system failure.

Cause: An unexpected system failure occurred while processing the function.
Action: Restart the application and try again.

CLI0120E

Memory allocation failure.

Cause: The driver was unable to allocate memory required to support execution or completion of the function.
Action: Verify that your system has enough memory to complete the desired operation.

CLI0121E

Invalid column number.

Cause: The value specified in iCol is less than zero, greater than the number of columns in the result set, or greater than the maximum number of columns allowed in a result set.
Action: Respecify a valid value for iCol.

CLI0122E

Program type out of range.

Cause: The value specified for fCType is not valid.
Action: Respecify a valid value for fCType.

CLI0123E

SQL data type out of range.

Cause: The value specified for fSQLType is not valid.
Action: Respecify a valid value for fSQLType.

CLI0124E

Invalid argument value.

Cause: The value specified for an argument was invalid. Possible reasons may be a null pointer, invalid length, invalid option, etc.
Action: Re-examine the argument passed in to the function and determine which argument is invalid.

CLI0125E

Function sequence error.

Cause: This function was called in an invalid sequence.
Action: Correct the sequence in your application and retry the operation.

CLI0126E

Operation invalid at this time.

Cause: The operation the system is trying to perform is invalid at this time.
Action: Correct the sequence of operation and retry the operation.

CLI0127E • CLI0139E

CLI0127E

Invalid transaction code.

Cause: The transaction option specified in SQLTransact was not SQL_COMMIT or SQL_ROLLBACK.

Action: Specify either SQL_COMMIT or SQL_ROLLBACK and retry the operation.

CLI0128E

Unexpected memory handling error.

Cause: Memory handling error.

Action: An unexpected error occurred in the driver while handling some internal memory buffer. Restart your application.

CLI0129E

No more handles.

Cause: A call was made to SQLAllocEnv, SQLAllocConnect, or SQLAllocStmt but no more handles are available in the driver.

Action: Call SQLFreeEnv, SQLFreeConnect, or SQLFreeStmt to free up some handles which are no longer being used in the application.

CLI0130E

No cursor name available.

Cause: There was no open cursor on the statement and no cursor had been set with SQLSetCursorName.

Action: Specify a cursor name through SQLSetCursorName.

CLI0131E

Invalid string or buffer length.

Cause: The length of the buffer specified is invalid.

Action: Specify a valid buffer length.

CLI0132E

Descriptor type out of range.

Cause: The description type specified is not valid.

Action: Specify a valid descriptor type.

CLI0133E

Option type out of range.

Cause: The option type specified is not valid.

Action: Specify a valid option type.

CLI0134E

Invalid parameter number.

Cause: The number specified for the parameter number is less than zero or greater than the maximum parameter supported by the data source.

Action: Specify a valid parameter number.

CLI0135E

Invalid scale value.

Cause: The scale value specified is invalid.

Action: Specify a valid scale value.

CLI0136E

Function type out of range.

Cause: The function type is invalid.

Action: Specify a valid function type value.

CLI0137E

Information type out of range.

Cause: The information type is invalid.

Action: Specify a valid information type value.

CLI0138E

Column type out of range.

Cause: The column type is invalid.

Action: Specify a valid column type value.

CLI0139E

Scope type out of range.

Cause: The scope type is invalid.

Action: Specify a valid scope type value.

CLI0140E

Uniqueness option type out of range.

Cause: The uniqueness option type is invalid.
Action: Specify a valid uniqueness option type value.

CLI0141E

Accuracy option type out of range.

Cause: The accuracy option type is invalid.
Action: Specify a valid accuracy option type value.

CLI0142E

Direction option out of range.

Cause: The direction option is invalid.
Action: Specify a valid direction option value.

CLI0143E

Invalid precision value.

Cause: The precision value is invalid.
Action: Specify a valid precision value.

CLI0144E

Invalid parameter type.

Cause: The parameter type is invalid.
Action: Specify a valid parameter type value.

CLI0145E

Fetch type out of range.

Cause: The fetch type is invalid.
Action: Specify a valid fetch type value.

CLI0146E

Row value out of range.

Cause: The row value is invalid.
Action: Specify a valid row value.

CLI0147E

Concurrency option out of range.

Cause: The concurrency option is invalid.
Action: Specify a valid concurrency option value.

CLI0148E

Invalid cursor position.

Cause: The cursor position is invalid.
Action: Specify a valid cursor position value.

CLI0149E

Invalid driver completion.

Cause: The driver completion is invalid.
Action: Specify a valid driver completion value.

CLI0150E

Driver not capable.

Cause: The operation is valid but not supported by either the driver or the data source.
Action: Specify a valid operation.

CLI0151E

No data pending.

Cause: SQLParamData or SQLPutData was called but there is no data at execute pending on this statement.
Action: Respecify the parameters through SQLSetParam or SQLBindParameter.

CLI0152E

Not a string value.

Cause: The function expected a string argument to be supplied.
Action: Respecify the argument to the function.

CLI0153E

Invalid file name length.

Cause: The length specified for the file name is invalid.
Action: Specify a valid file name length.

CLI0154E • CLI0172E

CLI0154E

Invalid connection state.

Cause: An attempt to change the connection type was made but the connection or another connection (in the case of Distributed Unit of Work) is already opened.

Action: Do not attempt to change the connection type once the connection is opened.

CLI0155E

File name length is too long.

Cause: The length supplied for the file name is greater than supported.

Action: Specify a valid file name length.

CLI0156E

Error closing a file.

Cause: An unexpected condition occurred while closing a file.

Action: Retry the operation.

CLI0157E

Error opening a file.

Cause: An unexpected condition occurred while opening a file.

Action: Retry the operation.

CLI0158E

Error writing to a file.

Cause: An unexpected condition occurred while writing to a file.

Action: Retry the operation.

CLI0159E

Error deleting a file.

Cause: An unexpected condition occurred while deleting a file.

Action: Retry the operation.

CLI0164E

Nullable type out of range.

Cause: An invalid nullable value was specified.

Action: Respecify the nullable value.

CLI0165E

Error in row.

Cause: An error occurred while fetching one or more rows. (Function returns SQL_SUCCESS_WITH_INFO.)

Action: Retry the operation.

CLI0166E

PARMLIST syntax error.

Cause: The PARMLIST value in the stored procedures catalog table contains a syntax error.

Action: Respecify the row for this stored procedure.

CLI0167E

Operation was cancelled.

Cause: SQLCancel was called on the statement.

Action: Resubmit the operation.

CLI0171E

The database was unable to connect. Reason:

Cause: The database connection failed. The 'Reason:' will explain why the database was unable to connect.

Action: Fix the problem, and try the connect again.

CLI0172E

The database was unable to connect. Would you like to continue with the configuration? Reason:

Cause: The database connection failed. The 'Reason:' will explain why the database was unable to connect.

Action: Fix the problem, and try the connect again or continue with the configuration.

CLI0175E

No ODBC Driver Manager has been found. ODBCINST.INI file cannot be opened.

Cause: Neither one of the Visigenic or the Intersolv ODBC Driver Managers have been installed. An ODBC Driver Manager must be present before the DB2 ODBC Driver can be registered into the associated ODBCINST.INI file.

Action: Install an ODBC Driver Manager, and try running this command again.

CLI0176E

Unable to write to the ODBCINST.INI file.

Cause: An error has occurred while writing to an ODBCINST.INI file to be used with an ODBC Driver Manager. This may be due to invalid format of the original ODBCINST.INI file.

Action: Rename the existing ODBCINST.INI file to something else and try running this command again. If this error persists, contact your technical support.

CLI0177E

Cannot determine where the DB2 OS/2 Client is installed.

Cause: An error has occurred while trying to locate where the DB2 OS/2 client is installed.

Action: Check that the DB2 OS/2 Client has been correctly installed.

CLI0178I

The DB2 ODBC Driver has been successfully registered.

Cause: The DB2 ODBC Driver has been registered with the installed ODBC Driver Manager(s).

Action: The user can now use the appropriate ODBC Administrator tool from the ODBC Driver Manager vendor to configure the ODBC data sources.

CLI0179E

Unable to display dialog box.

Cause: The DB2 ODBC Driver cannot open a dialog box with the window handle provided by the application.

Action: The application must pass a valid window handle.

CLI0180E

Invalid bookmark value.

Cause: The argument fFetchOrientation was SQL_FETCH_BOOKMARK and the bookmark pointed to by the value SQL_ATTR_FETCH_BOOKMARK_PTR statement attribute was not valid.

Action: Re-specify a valid bookmark value.

CLI0181E

Invalid descriptor index.

Cause: The value specified for the column number argument is invalid.

Action: Re-specify a valid column number.

CLI0182W

Fractional truncation.

Cause: The data for one of the columns was truncated.

Action: None needed.

CLI0183E

Associated statement is not prepared.

Cause: The descriptor handle was associated with an IRD, and the associated statement handle was not in a prepared state.

Action: Prepare the statement associated with the descriptor.

CLI0184E

Cannot modify an implementation row descriptor.

Cause: The descriptor handle was associated with an IRD, and IRD record fields cannot be updated.

Action: Specify a valid descriptor and field.

CLI0185E • CLI0602E

CLI0185E

Invalid use of an automatically allocated descriptor handle.

Cause: Only explicit descriptors allocated using the SQLAllocHandle function can be used in this manner.

Action: Use an explicitly allocated descriptor.

CLI0186E

Server declined cancel request.

Cause: Communication errors caused the server to decline the cancel request.

Action: None needed.

CLI0187E

Non-character and non-binary data sent in pieces.

Cause: SQLPutData was called more than once for a column that was not a character or binary column.

Action: Only call SQLPutData once for non-character and non-binary data.

CLI0188E

Attempt to concatenate a null value.

Cause: A previous call to SQLPutData for this parameter specified an input buffer length of SQL_NULL_DATA

Action: Call SQLPutData with a valid input buffer length or ensure SQLPutData is called the correct number of times.

CLI0189E

Inconsistent descriptor information.

Cause: The associated descriptor failed a consistency check.

Action: Ensure that descriptor fields are valid, and all interdependent fields are set correctly.

CLI0190E

Descriptor invalid on indirect reference.

Cause: The descriptor handle was invalid, or the TYPE, OCTECT_LENGTH, DATA_PTR, INDICATOR_PTR, or OCTECT_LENGTH_PTR field of the ARD contained an invalid value.

Action: Ensure the indirect descriptor handle is valid and that the deferred fields are set correctly.

CLI0191E

Invalid attribute value.

Cause: The value given was not correct for the specified attribute.

Action: Use a correct value for the specified attribute.

CLI0600E

Invalid connection handle or connection is closed.

Cause: Connection had been closed prior to the operation.

Action: Ensure connection close is not called prior to the operation.

CLI0601E

Invalid statement handle or statement is closed.

Cause: Statement had been closed prior to the operation.

Action: Ensure statement close and statement connection close are not called prior to the operation.

CLI0602E

Memory allocation error on server.

Cause: Cannot allocate memory on server.

Action: Ask your database administrator to check the DB2 JDBC log file for details. Rerun your program.

CLI0603E

CallableStatement get* method was called without registerOutParameter.**

Cause: Get*** method was called on a parameter that was not registered using registerOutParameter.

Action: Add registerOutParameter call for the parameter.

CLI0604E

CallableStatement get* method was called without calling execute.**

Cause: The CallableStatement get*** method was called prior to calling CallableStatement execute.

Action: Make sure that CallableStatement execute is called prior to any CallableStatement get*** method.

CLI0605E

CallableStatement get* method did not match the type used in registerOutParameter.**

Cause: The CallableStatement get*** method was not the one that corresponds to the type used in registerOutParameter for this parameter.

Action: Change to the get*** method that matches to the type used in registerOutParameter for this parameter. (Refer to JDBC specification)

CLI0606E

The returned value from a column is incompatible with the data type corresponding to the get* method.**

Cause: The value in a CHAR/VARCHAR/LONGVARCHAR column is not a valid numeric value.

Action: Use the appropriate get methods other than the ones that return numeric values.

CLI0607E

Invalid datetime format.

Cause: The value in CHAR/VARCHAR/LONGVARCHAR column is invalid date/time/ timestamp value.

Action: Use appropriate get*** method other than getDate/getTime/ getTimestamp.

CLI0608E

Invalid conversion.

Cause: The get*** method is invalid on this column type.

Action: Use the valid get*** method (see JDBC specification) to retrieve data from this column.

CLI0609E

Numeric value out of range.

Cause: The value of this column is too large/small for a short or int value, conversion will cause data loss.

Action: Use the get method that can accommodate the value.

CLI0610E

Invalid column number.

Cause: The column number is less than 1 or greater than the total number of columns in the ResultSet.

Action: Make sure the column number is no less than 1 and no greater than the total number of columns.

CLI0611E

Invalid column name.

Cause: The given column name cannot be found in the ResultSet.

Action: Ensure the column name is correct.

CLI0612E • CLI0620E

CLI0612E

Invalid parameter number.

Cause: The given parameter number is less than 1 or greater than the total number of parameters.

Action: Ensure the parameter number is no less than 1 and no greater than the total number of parameters.

CLI0613E

Program type out of range.

Cause: The object given in the PreparedStatement/CallableStatement setObject is not a valid object type.

Action: Make sure the object to be set is one of the object types allowed in setObject (see JDBC specification).

CLI0614E

Error sending to the socket, server is not responding.

Cause: Error happened while sending data to server, server may be down.

Action: Ensure the server is up, and rerun your program.

CLI0615E

Error receiving from socket, server is not responding.

Cause: Error happened while receiving from server, server may be down.

Action: Ensure JDBC server is up, and rerun your program.

CLI0616E

Error opening socket.

Cause: Cannot open the socket to server, server may be down.

Action: Ensure JDBC server is up, and rerun your program.

CLI0617E

Error closing socket.

Cause: Cannot close the socket to server. Server may be down.

Action: Ensure JDBC server is up, and rerun your program.

CLI0618E

Userid and/or password invalid.

Cause: The given userid/password is not valid.

Action: Make sure the userid/password is correct, and rerun your program.

CLI0619E

Invalid UTF8 data format.

Cause: When getUnicodeStream is called on columns that are not DBCS columns, the decoding from UTF8 format is done, but the data cannot be decoded properly.

Action: Use getString/getBytes/getAsiiStream/getBinaryStream instead.

CLI0620E

IOException, error reading from input stream.

Cause: Error happened when reading data to be put from input stream.

Action: Make sure the file exists, and file length is correctly given.

Chapter 5. DBA Messages

Each message has a message identifier that consists of a prefix (DBA) and the message number. Messages are listed in numeric sequence based upon the message number. These messages are generated by the Control Centre and the DBA Utility to alert you when a warning or error condition occurs.

DBA0001E

An internal error occurred when allocating memory.

Cause: An internal error occurred when allocating memory. The application is terminated.

Action: Try closing some applications to release memory. If the problem persists, contact IBM Service.

DBA0002E

An internal error occurred. Unexpected input was received from the request.

Cause: An unexpected input value was received from the request. The application is terminated.

Action: Contact IBM Service.

DBA0003E

An inconsistency in the table definition was detected when processing the alter request.

Cause: When processing an alter table request, an inconsistency was detected between the last known table definition and the table definition fetched from the database. The table definition might have changed outside of the context of the administration tool. The table cannot be altered. The request is terminated.

Action: Select the "Refresh" action on the "Tables" pop-up menu to get an updated list of tables from the database. Try altering the table again.

DBA0004E

An internal error occurred when validating a connection to a database.

Cause: An invalid connection was detected. A problem can occur if the server is brought down, the currently held connections are no longer valid, and a new connection cannot be obtained. The request is terminated.

Action: Ensure that the server is started. Select the "Connect" action in the pop-up menu of the database that you want to connect to. Try the action again.

If the action fails again, ensure that your network is operating for the target system and that the database is up and running on that system.

If the network is operational, a system internal error might have occurred. Contact IBM Service.

DBA0005E

An internal error occurred when validating an attach to an instance.

Cause: An invalid connection was detected. The database might have stopped or the connection might no longer exist. The request is terminated.

Action: Ensure that the server is started. Select the "Connect" action in the pop-up menu of the database that you want to connect to. Try the action again.

If the action fails again, ensure that your network is operating for the target system and that the database is up and running on that system.

If the network is operational, a system internal error might have occurred. Contact IBM Service.

DBA0006E

An internal error occurred when validating a handle for a persistent database connection or instance attach.

Cause: An invalid connection was detected. The database might have stopped or the connection might no longer exist. The request is terminated.

Action: Ensure that the server is started. Select the "Connect" action in the pop-up menu of the database that you want to connect to. Try the action again.

DBA0007E • DBA0014E

If the action fails again, ensure your network is operating for the target system and that the database is up and running on that system.

If the network is operational, a system internal error might have occurred. Contact IBM Service.

DBA0007E

An internal error occurred when setting the context type for connections.

Cause: An error occurred when setting the context type for connections established by the application. The application is terminated.

Action: Contact IBM Service.

DBA0008E

An internal error occurred. An unexpected list type was requested.

Cause: The type of object to be listed was not recognized as a valid type by the application. The application is terminated.

Action: Contact IBM Service.

DBA0009E

An internal error occurred. An unexpected request type was received.

Cause: The type of request to be performed was not recognized as a valid type by the application. The application is terminated.

Action: Contact IBM Service.

DBA0010E

An internal error occurred. An unexpected object type was detected.

Cause: The type of object to be processed was not recognized as a valid type by the application. The application is terminated.

Action: Contact IBM Service.

DBA0011E

There are too many open connections.

Cause: The maximum number of open database connections was reached. The request is terminated.

Action: Either:

- Disconnect from other databases and connect to the database you want. Select the "Disconnect" action in the pop-up menu of the databases from which you want to disconnect. Select the "Connect" action in the pop-up menu of the database to which you want to connect.
- Update the configuration parameter to increase the number of connections allowed.

DBA0012E

Unable to allocate a connection handle.

Cause: An error occurred when attempting to allocate a connection handle. The application is terminated.

Action: Contact IBM Service.

DBA0013W

The maximum number of objects that can be listed was reached.

Cause: The maximum number of objects that can be listed by the application was reached. The maximum number is 20,000.

Action: None

DBA0014E

An internal error occurred. An unexpected drop type was requested.

Cause: The type of object to be dropped was not recognized as a valid type by the application. The application is terminated.

Action: Contact IBM Service.

DBA0015E

An internal error occurred. A latch request failed.

Cause: A latch request failed. The application is terminated.

Action: Contact IBM Service.

DBA0016E

An internal error occurred. An unlatch request failed.

Cause: An unlatch request failed. The application is terminated.

Action: Contact IBM Service.

DBA0017E

No error information is available. See the administration tools log.

Cause: No error information can be displayed.

Action: See the administration tools log for error information.

DBA0018E

The Administration Server is not started. Start the Administration Server and try the action again.

Cause: The Administration Server is not started.

Action: Start the Administration Server using the DB2ADMIN START command on the target system and try the action again.

DBA0019E

The object “<object_name>” or a related object is in use. Try the action again at a later time.

Cause: The object on which the action was requested or a related object is already being used in another action. Modifications to the object or a related object might be in progress.

The requested action cannot be performed at the same time as the current action.

Examples:

- If a table is being altered, a request to rename the same table will not be allowed until the interaction with the Alter window is complete. However, a request to sample the contents of that table is allowed.
- A request to drop an object (such as a table) will not be allowed if any other actions are pending on related objects (such as the database, views, or triggers).

The action is not performed.

Action: Try the action again at a later time when the object is available.

DBA0020E

An error occurred opening the administration tools trace file.

Cause: An error occurred opening the administration tools trace file.

Action: Contact IBM Service.

DBA0021E

An error occurred writing to the administration tools trace file.

Cause: An error occurred writing to the administration tools trace file.

Action: Contact IBM Service.

DBA0022W

An error occurred closing the administration tools trace file.

Cause: An error occurred when attempting to close the administration tools trace file. Processing continues.

Action: Ensure that the administration tools log file was specified correctly.

DBA0023W

An error occurred opening the administration tools log file.

Cause: An error occurred when attempting to open the administration tools log file. Processing continues.

Action: Ensure that the administration tools log file was specified correctly.

DBA0024W • DBA0031

DBA0024W

An error occurred writing to the administration tools log file.

Cause: An error occurred when attempting to write to the administration tools log file. Processing continues.

Action: Ensure that the administration tools log file was specified correctly and can be written to.

DBA0025W

An error occurred closing the administration tools log file.

Cause: An error occurred when attempting to close the administration tools log file. Processing continues.

Action: Ensure that the administration tools log file was specified correctly.

DBA0026E

An internal administration tools error occurred.

Cause: An unrecoverable error occurred.

Action: Contact IBM Service.

DBA0027E

An internal error occurred. Lock contention in the administration tools was detected.

Cause: Lock contention in the administration tools was detected.

Action: Contact IBM Service.

DBA0028I

The current administration tools session will be terminated due to an unrecoverable error.

Cause: A severe internal error occurred.

Action: Contact IBM Service.

DBA0029

The application programming interface “<program>” did not complete successfully for object “<name>” with reason code “<name>”. Try again or contact your local support.

Cause: An application programming interface call did not complete.

Action: Try the operation again or contact your system administrator.

DBA0030

An error occurred while attempting to connect to database “<name>”.

Cause: The requested operation could not complete because it requires a connection to database “<name>”. The connection was not successful.

Action: Make sure the database is accessible. Try explicitly connecting to the database using the connect action on the database pop-up menu. A common error on connection is an invalid userid and password. Make sure you have supplied the proper userid and password. Try the operation again or contact your system administrator.

DBA0031

An error occurred while attempting to attach to instance “<name>”.

Cause: The requested operation could not complete because it requires an attachment to the instance “<name>”. The attachment was not successful.

Action: Make sure the instance is accessible. Try explicitly connecting to the instance using the connect action on the instance pop-up menu. A common error on connection is an invalid userid and password. Make sure you have supplied the proper userid and password. Try the operation again or contact your system administrator.

DBA0032

An error occurred while attempting to load DLL “<name>”.

Cause: Either the dynamic link library “<name>” was not found or an error occurred while reading the file.

Action: Verify that the DLL is installed and undamaged, and its location is part of the LIBPATH parameter in the CONFIG.SYS file.

DBA0033

“<name>” cannot be dropped because it is currently in use by the administration tools. Close some windows and retry the command.

Cause: Either the object “<name>” you selected to drop, or an item that is owned by the object you selected to drop, is still being used by another administration tool. For example, you might have an ALTER table window open for a database that you are trying to drop. In this case, you cannot drop the database until you close its ALTER table window.

Action: Close all the windows using the object you selected, or close all the windows using items owned by that object, and then retry the command.

DBA0034

“<name>” cannot be removed because it is currently in use by the administration tools. Close some windows and retry the command.

Cause: Either the object “<name>” you selected to remove, or an item that is owned by the object you selected to remove, is still being used by another administration tool. For example, you might have an ALTER table window open for a database that you are trying to remove. In this case, you cannot remove the database until you close its ALTER table window.

Action: Close all the windows using the object you selected, or close all the windows using items owned by that object, and then retry the command.

DBA0035

The “<operation>” operation cannot be performed because the object “<name>” you are issuing the operation against is not in the correct state for this operation. Close some windows and retry the command.

Cause: This operation “<operation>” requires “<name>” to be in a “<name>” state.

Action: Make sure all other pending operations on the selected object are complete, and then retry the command.

DBA0036

The database configuration was successfully updated. All applications must disconnect from database “<name>” before the changes take effect. If a backup has already been taken it is recommended to take another backup of the database in order to pick up the new configuration values.

Cause: The database configuration was successfully updated, but the active database configuration cannot be changed until all applications are disconnected from the database. Once all applications are disconnected, the changes will come into effect with the first connection to the database.

Action: Ensure that all applications are disconnected from the database, and then reconnect to the database.

DBA0037

The instance configuration was successfully updated. The instance “<name>” must be stopped before most changes take effect.

Cause: The instance configuration was successfully updated.

Changes to the configuration parameter "dftdbpath" take effect immediately.

For the remaining configuration parameters, the changes do not take effect until all applications have disconnected from the database, and the instance is successfully stopped and started again.

Action: To make all changes take effect, ensure that all applications have disconnected from the database, stop the instance, and then start it again.

You can stop the instance by selecting the stop action on the instance pop-up menu in the Control Center. You

DBA0039 • DBA0102W

can then start the instance by selecting the start action on the instance pop-up menu in the Control Center.

DBA0039

There are currently database objects locked or database connections in use. Continue shutdown?

Cause: The database objects in the Control Center are locked when actions, such as Alter Table, are taken against them. Other actions will maintain connections to the database that are required to complete the task.

Action: If you choose to continue with the shutdown, then all locks and connections are forced and the tools will shut down. It can be dangerous to do so, however, because forcing some actions (like Restore Database) halfway through the task can leave the database in a corrupted state.

It is safest to first go back to the DB2 tools and make sure there are no database operations outstanding.

DBA0040

Shutting down will stop the Snapshot monitor. Continue shutdown?

Cause: Snapshot monitoring has been started on one or more database objects and to continue the monitoring, you must have the DB2 tools running.

Action: Choose to continue the shutdown only if you no longer require the Snapshot monitor.

DBA0100I

Control Center is updating node directory information for instance - "<instance>". Incorrect information is being corrected. The current request cannot be performed.

Cause: The Control Center detected that the nodetype changed at the instance and is recataloging the instance based on the new information. Depending on the nodetype value for the instance, actions from the Control Center may be different.

Action: If available, try the request again.

DBA0101W

Entries specified in the exception list will not be used. Do you want to continue?

Cause: The Nodes Contain Exceptions check box is deselected, but exception containers are specified in the List Exception dialog.

Action: Click on Yes to clear the exception containers list, or click on No or Cancel to reselect the Nodes Contain Exceptions check box.

DBA0102W

Unable to detect nodetype for instance - "<instance>". Reason Code "<reason-code>".

Cause: Nodetype is a database manager configuration parameter that identifies whether the instance is a single-partition or partitioned environment.

Discovery tries to resolve the nodetype value for you. This distinction between instances is required because actions in the Control Center can be different between single-partition and partitioned environments.

If the reason code is -1, discovery could not map the catalogued instance to a valid DB2 instance.

All other reason codes map to a valid SQL message. Check the help for the corresponding SQL message.

Action: Discovery has the following requirements:

1. DB2 Administration Server must be set up and running at the remote instance you want to catalog or access.
2. Ensure the instance is listed in the registry. Issue `db2set -l` from the host you are cataloging.
3. The following global DB2 Registry values must be set:
 - DB2SYSTEM
 - DB2ADMINSERVER
4. The following instance DB2 Registry values must be set:
 - DB2COMM
5. The following administration server configuration parameters must be set:
 - DISCOVER = KNOWN and DISCOVER_COMM = nullor
 - DISCOVER = SEARCH and DISCOVER_COMM = protocol (for example, TCPIP)

Verify the setting of these registry values by entering `db2set -all`.

DBA0103W

Changes made to the configuration parameter values will not be used. Do you want to continue?

Cause: Another database partition was selected, but the changes to the configuration parameters apply to the previously selected database partition.

Action: Click on Yes to obtain the configuration parameter values for the next database partition and discard the changes that were specified for the previously selected database partition.

DBA0113E

Exception containers are specified, but not all nodes in the nodegroup are included. No containers are specified for the following nodes: "node-list".

Cause: The specified exception containers have no common container. Because no common container is specified, the exception container must be defined at every node in the nodegroup.

Action: Click on OK to add containers to the specified nodes.

DBA0114W

Control Centre detected incorrect node directory information for instance - "%1". Incorrect information is being corrected. Please exit and restart the Control Center. The current request cannot be performed.

Cause: The Control Center detected that the nodetype changed at the instance.

Action: Exit the Control Center and restart it.

DBA0115I

Node directory information has been corrected for this instance. Instance "%1" should be refreshed.

Cause: Because the cataloged information for the instance is updated, the displayed objects and actions may not be correct.

Action: Select the "Refresh" action from the instance pop-up menu to update the Control Center, then try the request again.

DBA1100

Less than "<number>." MB of memory is dedicated to your server. No recommendation has been made. The current values on the Results Page match the suggested values.

Cause: Because the amount of memory dedicated to the server is so small, the Performance Configuration SmartGuide cannot make a recommendation.

The suggested values in the "Results Page" are the same as the current values.

Action: If you can dedicate more memory to the server, turn to the "Server Page", increase the amount of memory, and try again. Otherwise, click on Cancel to close the Performance Configuration SmartGuide.

DBA1102

An error occurred when the Performance Configuration SmartGuide tried to save the suggested values in a system file.

Cause: Either the Performance Configuration SmartGuide could not create a CFG subdirectory under your instance directory or it could not save a system file containing recommendations into the CFG subdirectory of your instance directory.

Action: Make sure the disk containing the instance directory is not full and you have write access to this disk. Afterwards, click on Done to try again.

DBA1104

The instance and database configuration parameters were successfully updated. The instance "<name>" must be stopped before most changes come into effect.

You may want to rebind your packages after the new configuration parameters take effect so that the new values will be used during the bind.

Cause: The Performance Configuration SmartGuide has updated the database manager configuration parameters, database configuration parameters, and buffer pool sizes in the SYSBUFFERPOOLS catalog.

The changes will not take effect until the instance is stopped on the server.

Packages were bound with the old configuration parameters. They need to be rebound, after the new parameters take effect, to exploit these new parameters.

DBA1107 • DBA1113

Action: When you are ready to use the new configuration parameters, stop the instance, and then start the instance.

Rebind your packages if necessary.

DBA1107

An error occurred when the Performance Configuration SmartGuide tried to get system information from your server.

Cause: An unexpected error occurred. The Performance Configuration SmartGuide cannot continue.

Action: Contact your system administrator.

DBA1108

The Performance Configuration SmartGuide was unable to increase the sizes of the buffer pools due to other memory requirements determined from your responses. The buffer pool sizes are left unchanged. The use of the suggested set of configuration values may cause paging on the server.

Cause: This is a warning that there may not be enough memory dedicated to your server to run the workload that you specified.

Action: Review your selections on previous pages of the Performance Configuration SmartGuide to check that the workload description is appropriate or add more memory to your server.

DBA1109

The transactions rate you entered is more than ten times the average number of connected applications. If you are using a transaction manager, ignore this message. If not, consider changing the rate.

Cause: The Performance Configuration SmartGuide verifies that the transactions rate is reasonable. The transaction rate may be too high if you are not using a transaction manager.

Action: If you are using a transaction manager, ignore this message. Otherwise, use a lower number of transactions per minute, or increase the average number of connected applications.

DBA1110

The system database directory has no entries.

Cause: There are currently no entries found in this database directory.

Action: No action is required.

DBA1111

The database alias "<name>" already exists for another database.

Cause: You requested that a backup be recovered into a new database, but the database name you specified is already used as an alias for an existing database.

When a database is created, the database is cataloged in the system database directory using the database name as the alias, and this alias must be unique.

Action: Specify a database name that is not being used as an alias, or request that the backup be recovered into the existing database.

DBA1112

The database alias "<name>" was not found in the system database directory.

Cause: You requested that a backup be recovered into an existing database, but a database no longer exists with this alias.

Action: Select an existing database, or request that the backup be recovered into a new database.

DBA1113

Restart failed because indoubt transactions exist against the database and the connection to the database was dropped.

Cause: The restart operation encountered indoubt transactions. This left the database in an inconsistent state. The DBA Utility dropped the connection to the database.

Action: Resolve the indoubt transactions. If they are not resolved, applications must restart the database whenever it is required.

If you are in an XA/DTP environment, and the transaction manager that was using the database is available, instruct it to resolve the indoubt transactions.

Otherwise, use the Command Line Processor to manually complete each indoubt transaction.

DBA1114

Database “<name>” is now in backup pending state.

Cause: This state will prevent the database from being updated. The database must be backed up before any updates can happen.

Action: Back up the database.

DBA1115

Enter a value for “<name>”.

Cause: A value is required.

Action: Provide the value and retry the request.

DBA1116

The value for “<parameter>” must be between “<minimum>” and “<maximum>”.

Cause: The value must be within the specified range.

Action: Enter a value in the specified range and retry the request.

DBA1117

The value for “<name>” is not valid.

Cause: The value entered is not valid.

Action: Correct the value and retry the request.

DBA1118

The value for “<name>” must not exceed “<maximum>”.

Cause: The value entered is not valid.

Action: Correct the value and retry the request.

DBA1119

The value for “<name>” must not be smaller than “<minimum>”.

Cause: The value entered is not valid.

Action: Correct the value and retry the request.

DBA1121

A job was created for the request “<description>” on system “<system>”. Its job number is “<number>”. To view the status and output of the job, use the Jobs page on the Journal.

Cause: The job was successfully started.

Action: To view the status and output of the job, use the Jobs page on the Journal.

DBA1122

The job has completed for the request “<description>” on system “<system>”. For the status and output of the job, view job “<number>” in the Jobs page on the Journal.

Cause: The job has completed.

Action: To view the status and output of the job, use the Jobs page on the Journal.

DBA1123

The job “<description>” has been canceled.

Cause: The job was canceled in response to a user request.

Action: No action is required.

DBA1126

The database has no table spaces.

Cause: The database has no table spaces.

Action: No action is required.

DBA1127

The table space has no containers.

Cause: The table space has no containers.

Action: No action is required.

DBA1128 • DBA1136

DBA1128

No containers have been specified. Select "Add" in order to create containers.

Cause: The current list does not contain any new containers.

Action: Select "Add" and fill in the necessary fields to add a container to the list.

DBA1129

Enter a value for "<name>".

Cause: The operation you requested can be performed only if you enter a value for "<name>".

Action: Enter a value, and then click on OK.

DBA1130

The value for "<name>" must not exceed "<maximum>" characters.

Cause: You entered a value that exceeded the maximum number of characters.

Action: Enter a valid value, and then click on OK.

DBA1131

"<device>" is not a valid tape device.

Cause: The operating system did not accept the specified tape device. Local tape devices are of the form "\\.\TAPEn", where n represents the drive number (0 is the first).

Action: Enter a valid name for the tape device, and then click on OK.

DBA1132

Tape device "<device>" does not support a tape mark blocksize of "<blocksize>".

Cause: The Control center uses a tape mark blocksize that is not supported by the specified tape device.

Action: Use the Command Line Processor to submit the request. Specify a supported blocksize in the DB2 INITIALIZE TAPE command.

DBA1133

An error occurred operating tape device "<device>".

Cause: An unexpected error occurred while operating the specified tape device.

Action: Resubmit the request. If the problem persists, contact your system administrator.

DBA1134

A job was created for the request "<description>". However, no job-related entries can be created in the Journal because the database administrative server (DAS) instance could not be accessed.

Cause: The job started successfully, but the status and output of the job will not be logged in the Journal. This can happen if the DAS instance is not started.

Action: To have the status and output of the job logged in the Journal, start the DAS instance first before starting a backup operation.

DBA1135

The job has completed for the request "<description>".

Cause: The job has completed.

Action: No action is required.

DBA1136

A backup at the table space level cannot be performed because the database "<db>" is not enabled for forward recovery.

Cause: You can only back up a database at the table space level if you have first enabled that database for forward recovery.

Action: To enable the database for forward recovery, set the database configuration parameters LOGREATIN or USEREXIT to ON, disconnect all existing applications from the database, and perform an offline backup of the database.

DBA1137

The value for “<name>” must not be smaller than “<minimum>” “<units>”.

Cause: The value entered is smaller than the minimum “<minimum>” “<units>”.

Action: Enter a valid value and retry the request.

DBA1138

The value for “<name>” must not exceed “<maximum>” “<units>”.

Cause: The value entered exceeded the maximum of “<maximum>” of “<units>”.

Action: Enter a valid value and retry the request.

DBA1139

You must allocate at least “<pages>” for the system catalog.

Cause: There cannot be more than “<pages>” in each table space container. Each page of data requires 4 KB. So 1 MB of storage is equal to 256 of these 4 KB pages.

Action: Enter a valid value and retry the request.

DBA1140

You cannot allocate more than “<pages>” pages in a single container. There cannot be more than “<pages>” in a table space.

Cause: Each page of data requires 4 KB. So 1 MB of storage is equal to 256 of these 4 KB pages.

Action: Enter a valid value and retry the request.

DBA1141

You must allocate a least “<pages>” pages in each container.

Cause: The minimum number of pages in a table space container is related to the extent size of the table space. It is 5 times the extent size plus one page. So for a table space with an extent size of 32 pages (the default value), the minimum size of a single container is 161 pages.

Action: Enter a valid value and retry the request.

DBA1142

The LOGARCHIVE database configuration parameter is currently set to ON for database “<name>”. As soon as all applications have disconnected from the database, the database will be in backup pending state. This state prevents the database from being updated. The database must be backed up before any additional updates can occur.

Cause: Before the database manager can start logging each transaction in your database, it must have a full offline database backup to use as a starting point.

Action: Make a full offline database backup as soon as possible. If this is not possible, set the LOGARCHIVE parameter to OFF.

DBA1143

You cannot perform an offline backup right now because at least one application is still connected to the database. You can either try again later, or disconnect all applications connected to the database immediately by selecting force from the instance object's pop-up menu.

Cause: An offline backup cannot be performed until all applications connected to the selected database have stopped. You can either wait for the applications to disconnect themselves, or you can force the connected applications right now.

Action: Either try the action later, or, to force all applications connected to the selected database immediately, select "Force" from the instance object's pop-up menu.

DBA1144

The container you specified already exists on system you are working with.

Cause: Each table space container must be unique.

Action: Specify a file name or directory that does not currently exists on the system.

DBA1145

You have specified a container more than once.

Cause: Each table space container must be unique.

Action: Specify a file name or directory that is not currently in your list of new containers.

DBA1146 • DBA1155E

DBA1146

You have specified the same container in both the user and temporary table spaces.

Cause: Each table space container must be unique.

Action: Change the file name or directory of the container in either the user or temporary tablespace.

DBA1147

You have specified the same container in both the catalog and temporary table spaces.

Cause: Each table space container must be unique.

Action: Change the file name or directory of the container in either the catalog or temporary tablespace.

DBA1148

You have specified the same container in both the user and catalog table spaces.

Cause: Each table space container must be unique.

Action: Change the file name or directory of the container in either the user or catalog tablespace.

DBA1149

There is not enough free space for the containers you specified.

Cause: When a DMS container is created it consumes the full amount of space you allocated to it.

Action: Change the location of the container to an area that has more storage, or increase the available storage in the current location of the container.

DBA1150E

A column with the same name already exists.

Cause: The column was not added because a column with the same name is already specified or exists in the table being created or altered.

Action: Specify a different column name.

DBA1151E

The column participates in a primary key or foreign key.

Cause: The column was not removed because it participates in a primary key or foreign key.

Action: Ensure that the specified column is the correct column to remove. To remove the specified column in a table, modify the primary key or foreign key definitions so that the specified column is no longer referenced.

DBA1152E

A constraint with the same name already exists.

Cause: The constraint was not added because a constraint with the same name is already specified or exists in the table being created or altered.

Action: Specify a different constraint name.

DBA1153E

The object is already in the list.

Cause: The specified object already exists in the list. The action is not performed.

Action: Specify another object or close the window.

DBA1154E

The specified system, instance, and database do not identify a recognized database.

Cause: The system, instance, and database specifications do not identify a database that is known to the application. The action is not performed.

Action: Either ensure that the system, instance, and database names are correct; or add the system, instance, and database that you want to access to the application.

DBA1155E

The object "<object_name>" no longer exists in the database. The request cannot be performed.

Cause: The specified object no longer exists in the database and cannot be operated on. The request is terminated.

Action: Select the "Refresh" action in the pop-up menu of the object folder to get an updated list of objects.

DBA1156W

The request completed with warnings. See the administration tools log for details.

Cause: The requested action completed, but one or more warning messages were issued.

Action: See the administration tools log for more information.

DBA1157I

No authorities or privileges were granted or revoked on "<object_name>" for "<user_name>". See the administration log for details.

Cause: The requested action completed. No action was taken against the authorities or privileges on the specified object for the specified user or group.

Action: None

DBA1158I

Number of records read during the load = "<count>". Number of records skipped before the load begins = "<count>". Number of rows loaded into the target table = "<count>". Number of records that could not be loaded = "<count>". Number of duplicate rows deleted = "<count>". Number of records loaded successfully and committed to the database = "<count>".

Cause: The action completed with the specified results.

Action: None

DBA1159I

Export completed. "<item_description>" = "<count>"

Cause: The export action completed successfully with the specified results.

Action: None

DBA1160I

Import completed. Number of records read during the import = "<count>". Number of records skipped before the import begins = "<count>". Number of rows imported into the target table = "<count>". Number of records that could not be imported = "<count>". Number of duplicate rows deleted = "<count>". Number of records imported successfully and committed to the database = "<count>".

Cause: The import action completed successfully with the specified results.

Action: None

DBA1161I

"<item_description>" = "<count>"

Cause: The import or export completed with the specified results.

Action: None

DBA1162I

Load completed. Number of records read during the load = "<count>". Number of records skipped before the load begins = "<count>". Number of rows loaded into the target table = "<count>". Number of records that could not be loaded = "<count>". Number of duplicate rows deleted = "<count>". Number of records loaded successfully and committed to the database = "<count>".

Cause: The load action completed successfully with the specified results.

Action: None

DBA1163E

The table was not copied. See the administration tools log for details.

Cause: One or more warnings or errors occurred when copying the table. The table was not copied.

Action: See the administration tools log for more information.

DBA1164E • DBA1500

DBA1164E

The specified target table already exists. The source table was not copied.

Cause: The copy table action failed because the target table exists.

Action: Either specify a new target table or delete the existing target table and try the action again.

DBA1165E

No privileges were granted or revoked for “<user_name>”. See the administration tools log for details.

Cause: Privileges were not granted or revoked for the specified user or group.

Action: See the administration tools log for more information.

DBA1166E

The identifier “<identifier_name>” contains unbalanced quotes. Correct the identifier and try the action again.

Cause: The specified identifier contains unbalanced single or double quotes. The naming rules require balanced quotes. The action is not performed.

Action: Correct the identifier and try the action again.

DBA1167E

The identifier “<identifier_name>” contains embedded blanks. Correct the identifier and try the action again.

Cause: The specified identifier contains blank characters, which violates the naming rules for ordinary identifiers. The action is not performed.

Action: Remove the blanks or delimit the identifier with double quotes and try the action again.

DBA1168E

The first character in the identifier “<identifier_name>” is invalid. Correct the identifier and try the action again.

Cause: The first character of the specified identifier is invalid. It must follow the naming rules for ordinary identifiers. The action is not performed.

Action: Replace the first character with a valid one or delimit the identifier with double quotes then try the action again.

DBA1169

The command script that can update the instance and database configuration parameters was created successfully. Use the Script Center to run or schedule the script.

Cause: A new script was saved successfully in the Script Center. You may open the Script Center to view, run or schedule the new command script.

After the script is run, the changes will not take effect until the instance is stopped on the server.

Packages were bound with the old configuration parameters. They need to be rebound, after the new parameters take effect, to exploit these new parameters.

Action: To view, run or schedule the newly saved script, open the Script Center by selecting the Script Center icon from the icon bar.

After you have run the script and when you are ready to use the new configuration parameters, stop the instance, and then start the instance.

Rebind your packages if necessary.

DBA1500

The local system object is not allowed to be removed.

Cause: The local system object appears in the tree if this is a server installation, and does not appear if this is a client installation. You have no direct control over the removal of this object because it has special properties that are required by the server installation type.

Action: No action is required.

DBA1501

The local system object is not allowed to be changed.

Cause: The local system object appears in the tree if this is a server installation, and does not appear if this is a client installation. You have no direct control over the changing of this object because it has special properties that are required by the server installation type.

Action: No action is required.

DBA1502

The unknown system object is not allowed to be removed.

Cause: The unknown system object appears in the tree only if orphaned instances that are not recognized as belonging to any existing system are found. You have no direct control over the removal of this object because it is shown automatically only when needed.

Action: No action is required. However, if you want to remove the need to show this object in the tree, then do the following steps:

- Expand the unknown system object to show all orphaned instances.
- If necessary, add new system objects to the control center to contain the orphaned instances.
- If necessary, use the change action to alter the system name on any remaining orphaned instances.
- If the unknown instance object also appears, then you also have orphaned databases that are not recognized as belonging to any existing instance. Remove the need to show these objects by doing steps similar to these, adding instances or altering databases until no orphans are left to be shown.

DBA1503

The unknown system object is not allowed to be changed.

Cause: The unknown system object appears in the tree only if orphaned instances that are not recognized as belonging to any existing system are found. You have no direct control over the changing of this object because it is shown automatically only when needed and has only special properties that cannot be changed.

Action: No action is required.

DBA1510

Specify a system name.

Cause: You must specify a system name before you can add this new system object.

Action: Specify a system name in the appropriate entry field, and then try the action again.

DBA1511

The specified system name is already in use.

Cause: You specified a system name that matches the name used for another system object in the tree.

System names must be unique within the control center, and are case-sensitive. You cannot use the names 'Local' or 'Unknown' because these are system names reserved for use by the local and unknown system objects. To avoid confusion, you should also try not to use the names of existing instances or databases as system names, although the tool does not prevent you from doing this.

Action: Specify a unique system name, and then try the action again.

DBA1520

The operating system type for this system object has been detected to be "<newos>", but the local information shows it to be "<oldos>". Do you want to update the local information now to reflect the correct operating system type?

Cause: When you add a new system object, you specify an operating system type, which is stored locally for that remote system. Later, when actual connections are made to the remote system, the true operating system type is reported back. It is possible for the original operating system type information to have been set incorrectly so that it does not match the true settings on the remote system. In this case, it is best to update the local information to match what settings truly exist on the remote system.

Action: Select Yes to update the local information now, or select No to leave the local information as it is.

DBA1521 • DBA1550

DBA1521

The server version type for this system object has been detected to be “<newtyp>”, but the local information shows it to be “<oldtyp>”. Do you want to update the local information now to reflect the correct server version type?

Cause: When you add a new system object, the server version type is automatically set to be either DB2 V5 or DRDA, depending on the operating system type you choose. Later, when actual connections are made to the remote system, the true server version type, which may be a previous release such as DB2 V2, is reported back. In this case, it is best to update the local information to match what settings truly exist on the remote system.

Action: Select Yes to update the local information now, or select No to leave the local information as it is.

DBA1522

The operating system type and server version type for this system object have been detected to be “<newos>” and “<newtyp>” respectively, but the local information shows these to be “<oldos>” and “<oldtyp>” respectively. Do you want to update the local information now to reflect the correct settings for these values?

Cause: When you add a new system object, you specify an operating system type, which is stored locally for that remote system. Also, the server version type is automatically set to be either DB2 V5 or DRDA, depending on the operating system type you choose. Later, when actual connections are made to the remote system, the true operating system type and server version type are reported back. The original settings for this information may have been incorrect so that they do not match the true settings on the remote system. In this case, it is best to update the local information to match what settings truly exist on the remote system.

Action: Select Yes to update the local information now, or select No to leave the local information as it is.

DBA1540

The active local instance object is not allowed to be removed.

Cause: The active local instance object appears in the tree always as the first instance under the local system object. This is a special instance object used to represent the current DB2INSTANCE environment variable setting. You have no direct control over the removal of this object because it has special properties that are required by the local system.

Action: No action is required.

DBA1541

The active local instance object is not allowed to be changed.

Cause: The active local instance object appears in the tree always as the first instance under the local system object. This is a special instance object used to represent the current DB2INSTANCE environment variable setting. You have no direct control over the changing of this object because it has special properties that are required by the local system.

Action: No action is required.

DBA1542

New instance objects are not allowed to be added to the unknown system.

Cause: The unknown system object appears in the tree only if orphaned instances that are not recognized as belonging to any existing system are found. The tool tries to prevent you from creating new orphans whenever possible, so you are not allowed to add new ones to the unknown system.

Action: No action is required.

DBA1550

Specify an instance name.

Cause: You must specify an instance name before you can add this new instance object.

Action: Specify an instance name in the appropriate entry field, and then try the action again.

DBA1551

The specified instance name is already in use.

Cause: You specified an instance name that either matches the name used for another instance object in the tree, or is being used by a system object in the tree. Instance names must be unique within the control center, and are always capitalized. System objects also use an automatically generated instance name to store their own protocol information, with the instance name usually being a short form of the chosen system name. You cannot use the name 'LOCAL' or the current DB2INSTANCE environment variable setting for the instance name.

Action: Specify a different instance name, and then try the action again.

DBA1552

Specify a remote instance.

Cause: You must specify a remote instance before you can add this new instance object.

Action: Specify a remote instance in the appropriate entry field, and then try the action again.

DBA1560

Specify a destination name.

Cause: You must specify a destination name for the selected protocol before you can correctly add this new object.

Action: Specify a destination name in the appropriate entry field, and then try the action again.

DBA1561

Specify a file server.

Cause: You must specify a file server for the selected protocol before you can correctly add this new object.

Action: Specify a file server in the appropriate entry field, and then try the action again.

DBA1562

Specify a workstation name.

Cause: You must specify a workstation name for the selected protocol before you can correctly add this new object.

Action: Specify a workstation name in the appropriate entry field, and then try the action again.

DBA1563

Specify a host name.

Cause: You must specify a host name for the selected protocol before you can correctly add this new object.

Action: Specify a host name in the appropriate entry field, and then try the action again.

DBA1564

Specify a service name.

Cause: You must specify a service name for the selected protocol before you can correctly add this new object.

Action: Specify a service name in the appropriate entry field, and then try the action again.

DBA1565

Specify a computer name.

Cause: You must specify a computer name for the selected protocol before you can correctly add this new object.

Action: Specify a computer name in the appropriate entry field, and then try the action again.

DBA1566

Specify an instance name.

Cause: You must specify an instance name for the selected protocol before you can correctly add this new object.

Action: Specify an instance name in the appropriate entry field, and then try the action again.

DBA1580 • DBA2003E

DBA1580

New database objects are not allowed to be added to the unknown instance.

Cause: The unknown instance object appears in the tree only if orphaned databases that are not recognized as belonging to any existing instance are found. The tool tries to prevent you from creating new orphans whenever possible, so you are not allowed to add new ones to the unknown instance.

Action: No action is required.

DBA1581

Specify a database name.

Cause: You must specify a database name before you can add this new database object.

Action: Specify a database name in the appropriate entry field, and then try the action again.

DBA1582

Specify an alias.

Cause: You must specify an alias before you can add this new database object.

Action: Specify an alias in the appropriate entry field, and then try the action again.

DBA1583

The specified alias is already in use.

Cause: You specified an alias that matches the alias used for another database object in the tree. Database aliases must be unique within the control center, and are always capitalized.

Action: Specify a unique alias, and then try the action again.

DBA1590

The "<dbname>" database was created using an earlier version of DB2 than DB2 V5. Only limited function will be allowed for this database until it is migrated.

Cause: All databases that are found under DB2 V5 type system objects are first assumed to be DB2 V5 databases. This database has now been detected to actually be a back-level database that has not yet been

migrated to the DB2 V5 level. You can still access this database, but only limited function is available for back-level databases until you actually migrate them.

Action: No action is required.

DBA2000E

You have not specified a job description.

Cause: A description for the job is required information.

Action: Enter a job description in the entry field, and then click on OK.

DBA2001E

You have not specified the number of hours for your selection.

Cause: The number of hours for your selection is required information.

Action: Enter a number in the hours entry field.

DBA2002E

You must select at least 1 day of the week for your selection.

Cause: To schedule a recurring job, you must specify at least one day of the week for the job.

Action: Select at least one day of the week when scheduling a recurring job.

DBA2003E

You specified a date that is not valid.

Cause: The date you specified is not valid. Perhaps the date you have specified is in the past.

Action: Enter a valid date.

DBA2004E

You specified a date or time or combination of date and time that is not valid.

Cause: The next execution date and time cannot be calculated, so no jobs can be scheduled. One possible error is when the time specified for a job to be run once is in the past. Remember that the date and time combination must be valid on the managed host where the schedule job is to be run.

Action: Enter a valid date and time combination.

DBA2005E

You have not specified a script name.

Cause: A name for the script is required information.

Action: Enter a name for the script file, and then click on OK.

DBA2006E

You have not specified a comment.

Cause: You indicated that you want to record a comment when the job is completed, but the comment entry field is empty.

Action: Enter a comment, or clear the 'Record a comment' check box.

DBA2007E

You specified a script name that is not valid.

Cause: The command script is saved as a file in the file system. The script path is at most 255 bytes long. The file name part of the script name can be at most 8 bytes long. If an extension is specified, it cannot be longer than 3 bytes. The script name must not contain any blanks. For example, valid script names can be:
j:\script\new.cmd
c:\data\test\crtdb.bat

Action: Enter a valid script name, and then click on OK.

DBA2008I

Job "<job id>" was created successfully.

Cause: A new job was scheduled successfully. You may turn to the journal job summary to view the newly created job.

Action: To view the newly created job, turn to the journal job summary by selecting the Journal icon from the icon bar.

DBA2009E

**A system error occurred. A Scheduler InfoBase call was unsuccessful. RC = "<return code>"
Restart the Admin. Server, and then retry the command..**

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2010E

**The Scheduler service is not up and running.
Restart the Admin. Server, and then retry the command.**

Cause: To perform any action involving the Job Scheduler or the Script Center, the Scheduler service must be up and running.

Action: Restart the Admin. Server, and then retry the command.

DBA2011E

A system error occurred. Scheduling type (DBA or PGM) is not valid. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2012E • DBA2019E

DBA2012E

A system error occurred. OS error was detected. RC = "<return code>". Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2013E

The job id key was not found. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2014E

A system error occurred. Unable to change the status of the job. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2015E

A system error occurred. Memory allocation was unsuccessful in client. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2016E

A system error occurred. Scan handle is not valid. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2017I

Are you sure you want to remove the selected jobs?

Cause: You specified to remove the selected jobs. You have the chance now to double-check the jobs that you selected to remove, and either to continue or to cancel the request.

Action: Select YES to remove the selected jobs. Select NO to cancel the remove request.

DBA2018I

Are you sure you want to remove the selected saved scripts?

Cause: You specified to remove the selected scripts that are currently saved. You have the chance now to double-check the scripts that you selected to remove, and either to continue or to cancel the request.

Action: Select YES to remove the selected scripts. Select NO to cancel the remove request.

DBA2019E

You have not specified the number of days for your selection.

Cause: The number of days for your selection is required information.

Action: Enter a number in the days entry field.

DBA2020E

A system error occurred. Unable to determine script type. Command script was not executed.

Cause:

Action:

DBA2021I

Are you sure you want to discard your changes?

Cause: You specified to have your changes not saved in the Script Center. You have the chance now either to continue discarding your changes, or to cancel the request and resume editing.

Action: Select YES to discard the changes. Select NO to resume editing the command script.

DBA2022I

Command script "<script id>" was created successfully.

Cause: A new script was saved successfully in the Script Center. You may turn to the Script Center to view the new command script.

Action: To view the newly saved script, turn to the Script Center by selecting the Script Center icon from the icon bar.

DBA2023E

Instance "<instance name>" does not exist. Command script was not executed.

Cause: The instance name associated with the script file does not exist.

Action: You may select "Edit" from the Script Center to update the instance name to an existing instance.

DBA2024E

Command script "<script id>" does not exist.

Cause: The scheduled job cannot be executed because the script file associated with the job does not exist.

Action:

DBA2025E

A system error occurred. This problem may also be related to memory allocation on the client. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2026I

Are you sure you want to remove the selected job?

Cause: You specified to remove the selected job. You have the chance now to double-check the job that you selected to remove, and either to continue or to cancel the request.

Action: Select YES to remove the selected job. Select NO to cancel the remove request.

DBA2027I

Are you sure you want to remove the selected saved script?

Cause: You specified to remove the selected script that is currently saved. You have the chance now to double-check the script that you selected to remove, and either to continue or to cancel the request.

Action: Select YES to remove the selected script. Select NO to cancel the remove request.

DBA2028E • DBA2036E

DBA2028E

You have not specified the number of weeks for your selection.

Cause: The number of weeks for your selection is required information.

Action: Enter a number in the weeks entry field.

DBA2029E

A system error occurred. Scheduler key was not found. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2030E

You did not specify a system name. Select one from the list.

Cause: The system name is required information to process the action.

Action: Select a system name from the drop-down list.

DBA2031I

Job “<job id>” was rescheduled successfully.

Cause: A job that you requested to be rescheduled was rescheduled successfully.

Action:

DBA2032E

You have not specified a script name.

Cause: A name for the script is required information.

Action: Enter the script name in the entry field, and then click on OK.

DBA2033E

You have not entered the command script.

Cause: The command script is empty.

Action: Enter the command script content, and then click on OK.

DBA2034I

Command script “<script id>” was updated successfully.

Cause:

Action:

DBA2035E

A system error occurred. Unable to retrieve the command script “<script id>”. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2036E

A system error occurred. Unable to create the command script. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2037E

A system error occurred. Unable to replace the command script "<script id>". Restart the Admin. Server, and then retry the command..

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2041E

A system error occurred. Unable to remove the command script "<script id>". Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2038E

A system error occurred. Unable to copy the command script "<script id>". Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2042E

A system error occurred. Unable to run the command script "<script id>". Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2039E

You have not specified the number of months for your selection.

Cause: The number of months for your selection is required information.

Action: Enter a number in the months entry field.

DBA2043I

Job "<job id>" was created successfully for running command script "<script id>".

Cause:

Action:

DBA2040E

You must select at least 1 day of the month for your selection.

Cause: To schedule a recurring job, you must specify at least one date per month for the job.

Action: Select at least one date per month when scheduling a recurring job.

DBA2044E

You have not specified a script description.

Cause: A description for the script file is required information.

Action: Enter a description for the script file, and then click on OK.

DBA2045E • DBA2052E

DBA2045E

Command script associated with job “<job id>” is system-generated. Content cannot be shown.

Cause: The script associated with a backup or reorganize table action is not in readable format.

Action: Select a different command script (file?) to view the content of.

DBA2046E

Command script “<script id>” is system-generated. Content cannot be edited.

Cause: The script associated with a backup or reorganize table action is not in readable format.

Action: Select a different command script file to edit.

DBA2047E

A system error occurred. The script type is unknown. Restart the Admin. Server., and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2048E

The file name you specified already exists. Specify a different script file name.

Cause: The name of each script file must be unique. You specified a file name that already exists.

Action: Specify an unique script file name.

DBA2049E

A system error occurred. File access was denied.

Cause: The application was unable to access the file in the file system.

Action: Retry the command. If the problem persists, contact your system administrator.

DBA2050E

A system error occurred. The disk is full.

Cause: There is no more room on the disk. Processing cannot continue.

Action: Delete unwanted files from the file system. If the problem persists, contact your system administrator.

DBA2051E

A system error occurred. A hard disk error occurred.

Cause: An internal error relating to the hard disk occurred. The application was unable to access a file.

Action: Retry the command. If the problem persists, contact your system administrator.

DBA2052E

Unable to execute the job due to logon failure. Userid = “<user id>”.

Cause: The password was invalid for the given userid or the userid is invalid.

Action: Enter a valid userid and password when prompted.

DBA2053E

A system error occurred. Unable to remove job history entry.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2058E

A line in the file is greater than “<number>” bytes.

Cause: The maximum number of bytes in a line is exceeded.

Action: Rewrite the long line into separate lines without exceeding the limit.

DBA2054E

A system error occurred. Unable to run job “<job id>”.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2059E

A system error occurred. There was a sharing violation.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2055E

Command script “<script id>” has been removed from the Script Center.

Cause:

Action:

DBA2060E

A system error occurred. Unable to copy script “<script id>”.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2056I

Command script “<script id>” was not changed.

Cause:

Action:

DBA2061I

Script “<script name>” was created successfully.

Cause: A new script file with the name “<script name>” was created successfully.

Action: To view the newly created script, turn to the Script Center by selecting the Script Center icon from the icon bar.

DBA2057E

A system error has occurred. The path was not valid.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2062E • DBA2070W

DBA2062E

A system error occurred. Unable to create a new script. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2063E

A system error occurred. Unable to retrieve the results of job “<job id>”. Restart the Admin. Server, and then retry the command.

Cause: An internal error occurred.

Action: Restart the Admin. Server, and then retry the command. If the problem persists, contact your system administrator.

DBA2064E

A Script Center record already exists for this script file name. Specify a different script file name.

Cause: The name of each script file must be unique within the Script Center. You specified a file name that already exists.

Action: Specify an unique script file name.

DBA2065E

A system error occurred. The script file does not exist in the file system.

Cause: The script file was not found in the file system. The file may have been erased.

Action: Remove the script entry and recreate it.

DBA2066E

The db2job executable is not in the expected directory. Unable to run the script.

Cause: db2job executable should be copied to sqllib bin as part of the installation.

Action: Contact your system administrator.

DBA2067I

The REORG TABLE command completed successfully.

Cause:

Action:

DBA2068E

You have not entered the instance name.

Cause: The name of the instance is required information.

Action: Enter the instance name in the entry field, and then click on OK.

DBA2069W

The maximum number of “<number>” jobs has been created. Please remove obsolete jobs.

Cause:

Action: Remove jobs that are no longer needed before creating another new job.

DBA2070W

The maximum number of “<number>” scripts has been created. Please remove obsolete scripts.

Cause:

Action: Remove scripts that are no longer needed before creating another new script.

DBA2071W

The maximum number of “<number>” bytes has been reached. Data shown is truncated. The complete file “<file name>” can be found at the server.

Cause: The editor cannot handle a file as large as the current one. Data shown had to be truncated.

Action: The entire file can be viewed at the server in the indicated location.

DBA2072E

The script associated with job “<job id>” has been removed from the Script Center.

Cause: The script file does not exist anymore.

Action:

DBA2073E

You have not specified a userid and password.

Cause: A userid and password for running the job are required.

Action: Enter a valid userid and password for running the job, and then click on OK.

DBA2074E

A system error has occurred. The working directory path was not valid.

Cause: The specified working directory does not exist so it cannot be used to run the script.

Action: Use the Browse... button to select a valid working directory path.

DBA2075I

Job “<job id>” has been submitted. Use the Jobs page on the Journal to view the results.

Cause:

Action:

DBA2076E

The job terminated abnormally.

Cause:

Action:

DBA2077E

File name “<file name>” already exists in the file system.

Cause: File name must be unique.

Action: Specify another file name.

DBA2078E

An unexpected error occurred. There is no job output.

Cause: There is no job output from running the job.

Action: A possible error could be an invalid file extension is used on the operating system. Recreate the script with a valid extension.

DBA2151E

The script cannot be scheduled because it was not saved.

Cause: The script cannot be scheduled because you canceled the save action and therefore, the script was not saved in the Script Center.

Action: Save the script and then try scheduling again.

DBA2152I

The script has to be saved to the Script Center before it can be scheduled.

Cause: Only scripts that are saved in the Script Center can be scheduled and run.

Action: Select OK to save the script to the Script Center, or Cancel if you do not want to schedule the script.

DBA2153I • DBA2173I

DBA2153I

File "<file name>" was opened successfully.

Cause:

Action:

DBA2154I

Script "<script name>" was opened successfully.

Cause:

Action:

DBA2155I

Do you want to overwrite file "<file name>"?

Cause: The file "<file name>" currently exists in the file system and the save operation will overwrite its contents.

Action: Select OK if you want to overwrite the contents of the file, or Cancel if you do not want to alter its contents.

DBA2156I

Do you want to overwrite script "<script name>"?

Cause: The script "<script name>" currently exists in the Script Center and the save operation will overwrite its contents.

Action: Select OK if you want to overwrite the contents of the script, or Cancel if you do not want to alter its contents.

DBA2157I

File "<file name>" was updated successfully.

Cause:

Action:

DBA2158I

File "<file name>" was created successfully.

Cause: A new file with the name "<file name>" was created successfully in the file system.

Action:

DBA2171I

Do you want to discard all your changes to the script, and exit from the Command Center?

Cause: You specified to exit from the Command Center, but the changes to the current script have not yet been saved. Your changes will be lost unless you cancel your exit request.

Action: Select Yes to discard your changes and exit from the Command Center, or select No to cancel the exit request.

DBA2172I

Do you want to discard your changes to the current script, and create a new script?

Action: Select Yes to discard your changes and to create a new script, or select No to cancel the request.

DBA2173I

The Command Center is still processing a command. Try again later.

Cause: You tried to run a script or issue a set of commands, but the Command Center cannot process your command until it has finished processing the current one.

Action: Please wait a few moments and try the command again. To stop the current command, click on the turning gears icon on the tool bar or select "Terminate" from the Results menu on the Results page.

DBA2174E

The file "<file name>" specified on the command line could not be opened. Make sure that the file exists and that you have read access to the file, and then try again.

Cause: You specified the name of a file containing a script that you want to import, but the Command Center could not access that file.

Action: Make sure that you have entered the file name correctly on the command line, that the file exists, and that your user ID has read access to that file.

DBA2175E

There is not enough memory to create the Command Center window. The application cannot continue.

Cause: The system encountered a memory allocation problem when trying to create the Command Center window.

Action: Make sure there is enough memory on your system to run the Command Center, and then try again.

DBA2176E

The system environment did not initialize. The application cannot continue. Restart the database manager and try again, or contact your local support personnel.

Cause: The command processor environment did not initialize properly.

Action: Make sure you have enough disk space and then try again.

DBA2177E

The system could not create an access plan because a problem relating to Visual Explain has occurred.

Cause: Command Center has encountered a problem when trying to create an access plan.

Action: Please refer to the help from the previous messages.

DBA2178E

You need a database connection in order to create an access plan. Use the "Connect" statement to connect to a database, and then try the command again.

Action: Establish a database connection first using the "Connect" statement, and then create an access plan for that database. To see a list of available databases, issue the command "list database directory".

DBA2179E

An access plan cannot be created because the statement you used is not in the correct format or is not a query.

Cause: The statement you used to try to create an access plan is either not in the correct format for a query or is not a query.

Action: Check your statement for errors in query format, make necessary changes, and retry the statement. Refer to Visual Explain documentation for guidance on forming valid queries.

DBA2180I

The program name "db2" before the statement will be ignored because it is not required.

Cause: You don't need to type "db2" before a statement in the Command Center. It is only required at the operating system command prompt.

Action: No action is required.

DBA3007

Are you sure you want to delete the explained statement?

Cause: You are about to delete the explained statement. This will delete the rows in the explain tables.

Action: Ensure that you want to delete the explained statement.

DBA3008 • DBA3017

DBA3008

Are you sure you want to delete the explained statements?

Cause: You are about to delete the explained statements. This will delete the rows in the explain tables.

Action: Ensure that you want to delete the explained statements.

DBA3009

A system error occurred. The Visual Explain tool could not continue processing.

Cause: An unexpected error occurred causing the operation to stop.

Action: Possible solutions include:

- Verify that your system has sufficient memory.
- Where appropriate, stop other programs using the system.

If the problem persists, contact your system administrator.

DBA3010

The explain snapshot has been deleted. Your request cannot be completed.

Cause: The explain snapshot that is requested has been deleted from the explain tables.

Action: Regenerate the snapshot.

DBA3011

This explain snapshot was created using a different version of the database manager from the Visual Explain Tool. Your request cannot be completed.

Cause: The explain snapshot was created using a newer version or an older version of the database manager from the Visual Explain Tool. The access plan graph cannot be constructed by the Tool.

Action: Use the same version of the database manager as the Visual Explain Tool to graph the explain snapshot.

DBA3012

String not found.

Cause: The search string is not found in the text being displayed.

Action: None.

DBA3013

Text is missing. You must specify the text string to be found.

Cause: You did not specify a search string.

Action: Specify a search string.

DBA3014

No selection is made in the list. You must select at least one entry in the list.

Cause: You did not make a selection in the list.

Action: Select at least one entry in the list.

DBA3015

There are no referenced columns associated with this access plan.

Cause: There were no columns referenced in the query for the referenced table.

Action: None.

DBA3016

There are no page fetch pairs statistics associated with this index.

Cause: There are no page fetch pairs statistics stored in the catalog table for this index. Refer to the System Catalog Statistics section in the *Administration Guide* for more details.

Action: None.

DBA3017

There are no referenced functions associated with this access plan.

Cause: This access plan did not require the use of any functions.

Action: None.

DBA3018

There are no column distribution statistics associated with this column.

Cause: There are no column distribution statistics stored in the catalog table for this column. Refer to the System Catalog Statistics section in the *Administration Guide* for more details.

Action: None.

DBA3019

There are no indexes associated with this table.

Cause: There were no indexes defined on the referenced table at the time of explain and there are no indexes currently defined in the table.

Action: None.

DBA3020

An error occurred while a COMMIT against the database was being attempted and no SQLCODE can be returned.

Cause: An unexpected error occurred.

Action: Contact your system administrator.

DBA3021

An error occurred while a ROLLBACK against the database was being attempted and no SQLCODE can be returned.

Cause: An unexpected error occurred.

Action: Contact your system administrator.

DBA3022

The Get Database Manager Configuration api passed back a non-zero return code.

Cause: An unexpected error occurred causing the operation to stop.

Action: Contact your system administrator.

DBA3023

The Get Database Configuration api passed back a non-zero return code.

Cause: An unexpected error occurred causing the operation to stop.

Action: Contact your system administrator.

DBA3024

An error occurred while saving to the file "<file>".

Cause: Possible problems include:

- The file cannot be opened for write.
- The file name does not conform to the file system convention.

Action: Possible solutions include:

- Change the file attribute to read write.
- Specify the correct file name.

DBA3025

An error occurred while retrieving from the file "<file>".

Cause: Possible problems include:

- The file is not readable.
- The file does not exist.

Action: Specify the correct file name.

DBA3026

No printers are installed.

Cause: There are no printers installed on your machine.

Action: Install a printer on your machine.

DBA3033

There are no referenced table spaces associated with this access plan.

Cause: This access plan did not reference any database objects contained in a table space.

Action: None.

DBA3034 • DBA3039

DBA3034

The snapshot was created using code page “<codepage>” but is not converted to the code page of the window running the Visual Explain Tool.

Cause: The snapshot of the access plan graph displayed was created on a code page different from the code page of the window running the Visual Explain Tool. Code page conversion is not successful because the snapshot is too large. The access plan graph is displayed without code page conversion. You may not be able to display the current statistics when you open the statistics windows.

Action: Change the code page of the window running the Visual Explain Tool to the same one used to create the snapshot and display the access plan graph again.

DBA3035

The snapshot was created using code page “<codepage>” but is not converted to the code page of the window running the Visual Explain Tool. The value of the database manager configuration parameter `UDF_MEM_SZ` is too small.

Cause: The snapshot of the access plan graph displayed was created on a code page different from the code page of the window running the Visual Explain Tool. Code page conversion is not successful because the user defined function used to convert between the code pages do not have enough memory to run. The access plan graph is displayed without code page conversion. You may not be able to display the current statistics when you open the statistics windows.

Action: Possible solutions include:

- Change the database manager configuration parameter `UDF_MEM_SZ` of your server to 512 and display the access plan graph again. Note that the configuration parameter may not take effect until the next time you do a **db2start** on your server.
- Change the code page of the window running the Visual Explain Tool to the same one used to create the snapshot and display the access plan graph again.

DBA3036

Explain tables have been created to process your dynamic explain request.

Cause: One or more explain tables have been created under the current user ID. These tables will be used to store the information needed by your dynamic explain request.

Action: None.

DBA3037

The explain snapshot has been corrupted. Your request cannot be completed.

Cause: The explain snapshot that is requested has been corrupted in the explain tables.

Action: Regenerate the snapshot.

DBA3038

There are no referenced buffer pools associated with this access plan.

Cause: This access plan did not reference any database objects contained in a buffer pool.

Action: None.

DBA3039

Explain tables cannot be found.

Cause: Explain tables do not exist.

Action: Create explain tables using one of the following methods:

- Use the sample command file that is provided in the `EXPLAIN.DDL` file. This file is located in the `sqlib/misc` directory. To run the command file, go to this directory and issue the **db2 -tf EXPLAIN.DDL** command.
- From the Control Center or from the Explained Statements History window, select **Explain SQL** from the menu selections. Use the Explain SQL Statement window to dynamically explain an SQL statement and automatically create the explain tables.

DBA3040

The command is specified incorrectly.

Cause: The command has invalid syntax.

Action: Issue the command with the -h option to see the correct syntax.

DBA3041

The name of the database must be between 1 and "<maximum>" characters long.

Cause: The specified database name is either empty or too long.

Action: Reissue the command with a valid database name.

DBA3042

The explainable statement text must be between 1 and "<maximum>" characters long.

Cause: The specified explainable statement text is either empty or too long.

Action: Reissue the command with valid explainable statement text.

DBA3043

The query tag cannot have more than "<maximum>" characters.

Cause: The specified query tag is too long.

Action: Reissue the command with a valid query tag.

DBA3044

The user ID cannot have more than "<maximum>" characters.

Cause: The specified userid is too long.

Action: Reissue the command with a valid userid.

DBA3045

The valid range for query number is from 0 to "<maximum>".

Cause: The specified query number is either too small or too large.

Action: Reissue the command with a valid query number.

DBA3046

The valid values for optimization class are 0, 1, 2, 3, 5, 7 and 9.

Cause: The specified optimization class is not one of the valid values.

Action: Reissue the command with a valid optimization class.

DBA3047

The database "<name>" cannot be found.

Cause: The database name specified in the command does not exist in the system database directory.

Action: Reissue the command with an existing database name or catalog the database in the system database directory.

DBA3048

db2vexp explains a dynamic SQL statement to produce an access plan graph.

The syntax is:

```
db2vexp -db <database name>
        -sql <explainable statement text>
        fff-queryno <query number>"
        fff-querytag <query tag>"
        fff-opt <optimization class>"
        fff-user <user ID>"
        fff-password <password>"
        fff-withsnapshot"
Use -h option to get help information.
```

Cause: This is the syntax of the db2vexp command.

Action: None.

DBA4000 • DBA4070

DBA4000

Are you sure you want to stop monitoring and exit the Snapshot Monitor.

Cause: You have requested to stop monitoring all database objects that are currently monitored and to exit the Snapshot Monitor.

Action: Click on "Yes" to process the request or "No" to ignore it.

DBA4003

You have selected too many performance variables to be shown in this view. The limit for both performance variable and information element columns is "<number>".

Cause: This occurs when:

- The number of performance variables in the current performance variable profile that have the DISPLAY(SUMMARY) keyword exceeds the limit for this view, or
- When you select too many performance variables using the "Include performance variables" action when the view is open

If the number of performance variables to be displayed in this view exceeds the limit, some performance variables are ignored and are not shown in the view.

Action: If a performance variable that you have selected for viewing is not in the view, use the "Include performance variables" action to remove a performance variable already displayed and select the desired performance variable.

DBA4004

An unexpected error occurred while trying to get a snapshot. The Snapshot Monitor is paused. The message from the failing component is: "<message>".

Cause: The Snapshot Monitor has paused the collection of snapshots due to the unexpected error returned by the database manager that is being monitored. This usually occurs when the database manager is stopped or communication with the database manager is interrupted.

Action: Determine the cause of the error from the referenced message.

If you do not wish to continue monitoring, select the "Stop all monitoring" choice from the "Snapshot monitor" menu on any of the Snapshot Monitor windows for the database manager in question.

If you wish to continue monitoring, first correct the error and then select the "Resume monitoring" choice from the "Snapshot monitor" menu on any of the Snapshot Monitor windows for the database manager in question.

DBA4005

An unexpected error occurred while displaying the performance graph view. Presentation Manager returned the following error identifier: "<number>".

Cause: An unexpected error occurred while using Presentation Manager services.

Action: Write down the error identifier returned by Presentation Manager and contact support.

DBA4012

A fatal error has occurred in the database system monitor. It has returned invalid data.

Cause: The database system monitor returned data that is not recognized by the Snapshot Monitor. This can occur due to network problems or internal problems with the database manager system.

Action: Try your action again, and if the error persists please contact support.

DBA4070

The IBM-supplied performance variable profile "<name>" cannot be found.

Cause: The IBM-supplied performance variable profile is not found in the installation directory.

Action: Either reinstall the Snapshot Monitor, or specify a new performance variable profile to be used. To specify a new profile use the "Open as settings" action from the "Snapshot monitor" menu in any of the views.

DBA4071

The Snapshot Monitor tried to write to the performance variable profile “<name>”, but it failed due to file access permissions.

Cause: The Snapshot Monitor encountered problems while writing to the specified performance variable profile.

Action: Examine file permissions for the file or the directory where the file resides, and make sure that they allow writing to the file.

DBA4072

The Snapshot Monitor detected “<number>” syntax errors while parsing the specified performance variable profile. “<number>” performance variable definitions were parsed correctly. For errors look in file “<name>”.

Cause: Some of the performance variable definitions in the specified profile are invalid and are not recognized by the Snapshot Monitor.

Action: Examine the errors listed in the error file, fix them, and retry the operation.

DBA4080

You have specified a capture interval that is not between 00:00:01 and 99:59:59. Please specify a valid value.

Cause: The value entered for the capture interval cannot be used by the Snapshot Monitor, because it does not fall into the specified range.

Action: Type a valid value.

DBA4091

The specified performance database does not exist.

Cause: The performance database has been dropped or uncataloged since the last time the Snapshot Monitor was used.

Action:

Do one of the following actions:

- Create a database with the same name as the old performance database.
- Select a new performance database for saving alerts. Use the "Open as settings" action from the

"Snapshot monitor" menu in any view to display the Settings window. Type the database name in the "Write alerts in performance database" field.

DBA4094

The performance variable profile “<name>” was not found. You must specify a valid performance variable profile in order to use the Snapshot Monitor.

Cause: The performance variable profile last used with the Snapshot Monitor was either deleted or moved to a different location.

Action: Specify a new profile name. Use the "Open as settings" action from the "Snapshot monitor" menu in any view to display the Settings window, and type the profile name in the "Performance variable profile" field.

DBA4100

The X axis size must be between 1 and 999 snapshots.

Cause: You have entered a number that is outside this range.

Action: Enter a value that falls within the range.

DBA4110

There is already a performance variable profile with the same name in your default profile directory. Do you want to replace it with the IBM-supplied profile?

Cause: You have selected to copy the IBM-supplied performance variable profile. However, a profile with the identical name already exists in that directory.

Action: Select "OK" to copy the file and to overwrite the existing one, or "Cancel" to ignore the request.

DBA4115

An invalid combination of alarm and warning values has been entered.

Cause: Upper warning values must always be less than upper alarm values. Lower warning values must always be greater than lower alarm values. Upper warning values must always be greater than lower warning values.

Action: Re-enter your values, and make sure they meet the above conditions.

DBA4200 • DBA4208

DBA4200

The performance variable profile “<name>” has been changed. Would you like to save the changes?

Cause: At least one of the performance variable definition or global definitions (such as sampling interval) of the currently active profile has been changed.

Action: Select "Yes" to save the changes or "No" to discard the changes.

DBA4201

Cannot open the performance variable profile “<name>” due to a system error.

Cause: The performance variable profile selected to be used is not valid or is corrupted due to a system error.

Action: Contact your system administrator.

DBA4202

The new performance variable profile name “<name>” already exist. Click on "Yes" to overwrite the existing file, or "No" to cancel the operation.

Cause: The performance variable profile name entered already exists in the file system.

Action: Click on "Yes" to overwrite the existing file, or "No" to cancel the operation.

DBA4203

The “<name>” is missing.

Cause: A valid data is required in the entry field in order to complete the operation.

Action: Enter a valid data in the corresponding entry field.

DBA4204

“<name>” is an invalid DB2 Version 2 performance variable profile.

Cause: You have specified an invalid DB2 version 2 performance variable profile for migration.

Action: Make sure that the file selected contains a DB2 Version 2 performance variable profile. If the problem persists, contact your system administrator.

DBA4205

The performance variable with the ID “<name>” already exists. Click on "Yes" to overwrite the existing performance variable, or "No" to cancel the operation.

Cause: The performance variable ID used already exists in the currently active profile.

Action: Click on "Yes" to overwrite the existing performance variable, or "No" to cancel the operation.

DBA4206

"IBM" is a predefined creator keyword. Use another creator name.

Cause: "IBM" can not be used as a creator name for a user-defined performance variable.

Action: Use a different creator name.

DBA4207

An invalid combination of alarm and warning values or alert actions has been entered for “<performance variable name>”. Correct the error before choosing another category or performance variable.

Cause: Upper warning values must always be less than upper alarm values. Lower warning values must always be greater than lower alarm values. Upper warning values must always be greater than lower warning values. If the start script checkbox is on, you must provide a script file name in the entry field. If the show message checkbox is on, you must provide a message in the multiline edit field.

Action: Re-enter your values, and make sure they meet the above conditions.

DBA4208

An invalid performance variable equation has been entered.

Cause: The performance variable equation is invalid. The error can be caused by the use of invalid performance data elements or variables, syntax errors in the equation, or by not using a 7-bit ASCII character set alphabet.

Action: Refer to the online help for the correct syntax of a performance variable equation and correct the error.

DBA4209

Profile changes may not be effective until the performance monitor is restarted.

Cause: Depending on the operating system, the profile changes will not be saved if the profile is still in used by the performance monitor.

Action: Stop all monitoring activities and restart to use the profile changes.

DBA4210

The source and target profile names cannot be the same.

Cause: Different source and target profile names are required for the selected operation.

Action: Enter different profile names in the source and target entry fields.

DBA4211

"db2smpv" is the default profile name and cannot be used as the target profile name.

Cause: "db2smpv" is the IBM default performance variable profile and cannot be used as the target profile.

Action: Enter a different profile name in the target entry field.

DBA4212

"<Performance variable profile name>" is the current active profile and cannot be used as the target profile.

Cause: The active performance variable profile cannot be used as the target profile in any operation.

Action: Enter a different profile name in the target entry field.

DBA4213

The requested profile operation is terminated due to the disk being full.

Cause: The disk is full.

Action: Free up some disk space and retry the operation.

DBA4214

"<Performance variable ID>" is an IBM supplied performance variable ID. Specify another ID.

Cause: The IBM supplied performance variable ID cannot be used.

Action: Enter a different performance variable ID and retry the operation.

DBA4215

The new scale value must be greater than zero.

Cause: The performance graph will not work with a scale value of zero.

Action: Enter a valid scale value.

DBA4701

The database manager "<name>" where the performance database "<name>" resides is not started, or is not cataloged, or cannot be accessed due to a communication problem. No alerts will be recorded.

Cause: An ATTACH command to the database manager that manages the performance database failed, or the database manager is not cataloged.

No alerts will be recorded. The Snapshot Monitor setting to write alerts has been disabled.

Action: Make sure the database manager that manages the performance database is started and/or cataloged. To re-enable the writing of alerts to the performance database, use the "Open as settings" action from the "Snapshot monitor" menu in any view to display the Settings window. Then select the "Write alerts in performance database" check box.

DBA4702

The performance database "<name>" for recording alerts does not exist in the system database directory. No alerts will be recorded.

Cause: The performance database specified in the Snapshot Monitor Settings window does not exist in the system database directory.

No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: Specify a new performance database. Use the "Open as settings" action from the "Snapshot monitor"

DBA4703 • DBA4708

menu in any view to display the Settings window, select the "Write alerts in performance database" check box, and specify the new performance database name.

DBA4703

The table SSMON_ALERT does not have the definition expected by the Snapshot Monitor. No alerts will be recorded.

Cause: The table SSMON_ALERT in the performance database does not have the definition expected by the Snapshot Monitor.

No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: Drop the table SSMON_ALERT. Use the "Open as settings" action from the "Snapshot monitor" menu in any view to access the Settings window, select the "Write alerts in performance database" check box. The SSMON_ALERT table will be created for you by the Snapshot Monitor.

DBA4704

The table SSMON_ALERT used for recording alerts was created in the performance database by the Snapshot Monitor.

Cause: The table SSMON_ALERT was created in the performance database by the Snapshot Monitor, as specified in the Snapshot Monitor Settings window. For details on the format of the SSMON_ALERT table, see the file CALRTTBL.DDL in the samples directory.

Action:

DBA4705

An error occurred while a COMMIT for inserts made to the alert table in the performance database was being attempted, and no SQLCODE can be returned. No alerts will be recorded.

Cause: An unexpected error occurred.

No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: Contact your system administrator.

DBA4706

An error occurred while updates to the alert table were being attempted. A ROLLBACK against the performance database failed, and no SQLCODE can be returned. No alerts will be recorded.

Cause: An unexpected error occurred.

No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: Contact your system administrator.

DBA4707

The table SSMON_ALERT does not exist. It may have been deleted. No alerts will be recorded.

Cause: The table SSMON_ALERT does not exist in the performance database. It may have been deleted.

No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: To re-enable the writing of alerts to the performance database, use the "Open as settings" action from the "Snapshot monitor" menu in any view to display the Settings window. Then select the "Write alerts in performance database" check box. The SSMON_ALERT table will be created for you by the Snapshot Monitor.

DBA4708

A performance variable exceeded its upper threshold value.

Cause: You have defined an upper threshold for the specified performance variable, and it was exceeded.

Action: Examine the definition of the performance variable. If the threshold value is not valid, change it to avoid further alerting.

If this is an IBM-supplied performance variable, use the "Performance variable" action from the "Help" menu to display the online help, and examine the description of the performance variable and suggested actions when an alert is generated.

Otherwise, you may want to contact your system administrator for further explanation and investigation.

DBA4709

The following performance variable fell below its lower threshold value “<name>”.

Cause: You have defined a lower threshold for the specified performance variable, and the performance variable fell below it.

Action: Examine the definition of the performance variable. If the threshold value is not valid, change it to avoid further alerting.

If this is an IBM-supplied performance variable, use the "Performance variable" action from the "Help" menu to display the online help, and examine the description of the performance variable and suggested actions when an alert is generated.

Otherwise, you may want to contact your system administrator for further explanation and investigation.

DBA4710

You have canceled the “<name>” command on the performance database. No alerts will be recorded.

Cause: The "Cancel" push button in the Logon Window was pressed while working with the performance database. No alerts will be recorded. The Snapshot Monitor setting for writing alerts has been disabled.

Action: To re-enable the writing of alerts to the performance database, use the "Open as settings" action from the "Snapshot monitor" menu in any view to display the Settings window. Then select the "Write alerts in performance database" check box.

DBA4730

An error occurred accessing the server. Monitoring will be terminated. smcode: “<Error code>”

Cause: See the server error logs for more information.

Action: Contact your technical service representative with the smcode.

DBA4731

A resource problem occurred on the server. Monitoring history data will be lost. Do you want to retry the operation? smcode: “<Error code>”

Cause: See the server error logs for more information.

Action: Free up some server resource and retry the operation. If the problem persists, contact your technical service representative with the smcode.

DBA4732

A failure occurred when trying to attach to the database instance. Monitoring history data will be lost. Do you want to retry the operation? smcode: “<Error code>”

Cause: See the server error logs for more information.

Action: Retry the operation. If the problem persists, contact your technical service representative with the smcode.

DBA4733

The monitored database instance is stopped. Restart the instance. smcode: “<Error code>”

Cause: See the server error logs for more information.

Action: Restart the instance. If the problem persists, contact your technical service representative with the smcode.

DBA4734

An error occurred accessing the server. Monitoring history will be lost. Do you want to retry the operation? smcode: “<Error code>”

Cause: See the server error logs for more information.

Action: Retry the operation. If the problem persists, contact your technical service representative with the smcode.

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DBA4735

A failure occurred when trying to attach to the database instance. Monitoring history data will be lost. smcode: "<Error code>"

Cause: See the server error logs for more information.

Action: Contact your technical service representative with the smcode.

DBA4736

Unable to determine the current country code or current code page in use on the client. smcode: "<Error code>"

Cause: The client's country code and code page must be sent to the server so that the data is returned in the correct code page. The snapshot monitor subsystem was unable to determine the active country code or code page.

Action: Refer to your operating system documentation to determine how to set the country code and active code page for your system. Retry the operation after setting the country code and code page.

DBA4737

Unable to set the current client country code or current code page on the server. smcode: "<Error code>"

Cause: The client's country code and code page must be sent to the server so that the data is returned in the correct code page. The snapshot monitor subsystem was unable to set the client's active country code or code page on the server.

Action: Refer to your operating system documentation to determine how to activate the client's country code and active code page on your server's system. Retry the operation after activating the country code and code page.

DBA4738

The Administration Server on system "<name>" is not started. smcode: "<Error code>"

Cause: The listed Administration Server on system "<name>" is not started.

Action: Start the Administration Server and retry the operation.

DBA4739

An error occurred while attempting to determine the client codepage. smcode: "<Error code>"

Cause: This is a client system setup problem.

Action: Contact IBM Service.

DBA4740

The client codepage "<name>" is not available on instance "<name>". smcode: "<Error code>"

Cause: The listed codepage has not been installed on instance "<name>".

Action: Contact your system administrator. Your administrator should install codepage "<name>" on instance "<name>".

DBA4741

The client codepage "<name>" is not available on instance "<name>", at node "<name>". smcode: "<Error code>"

Cause: The listed codepage has not been installed on instance "<name>", at node "<name>".

Action: Contact your system administrator. Your administrator should install codepage "<name>" on instance "<name>" at node "<name>".

DBA4742

The Administration Server "<name>" cannot be found. smcode: "<Error code>"

Cause: Possible reasons for this problem include: 1) Remote instance name is invalid. 2) Hostname is invalid.

Action: Contact your system administrator.

DBA4743

The Administration Server "<name>" detected an error. sqlcode: "<Error code>". smcode: "<Error code>"

Cause: The Administration Server "<name>" had an internal error.

Action: Contact your system administrator.

DBA4744

A communications failure occurred when the Control Center attempted to communicate with the parallel tools on instance “<name>” at node “<name>”. smcode: “<Error code>”

Cause: Communications may not have been started.

Action: Contact your system administrator.

DBA4745

The TCP/IP port configuration between the Control Center and the parallel tools on instance “<name>” at node “<name>” is not correct. smcode: “<Error code>”

Cause: The /etc/services file at node “<name>” might contain incorrect information.

Action: Contact your system administrator. Your administrator should check that the port name of db2ccmsrv is entered correctly in the /etc/services file on node “<name>”.

DBA4746

Instance node host name “<name>” is not valid on instance “<name>”. smcode: “<Error code>”

Cause: The db2nodes.cfg file for instance “<name>” might contain incorrect information.

Action: Contact your system administrator. Your administrator should validate the host name found in the db2nodes.cfg file for instance “<name>”.

DBA4747

The snapshot monitor did not receive a response from node “<name>” within the snapshot capture interval. smcode: “<Error code>”

Cause: A performance or communications problem on the listed node is preventing a response from being sent, or the snapshot capture interval is not long enough to allow each node time to respond to the request.

Action: Contact your system administrator. Your administrator can 1) Validate the performance on the listed node. 2) Increase the snapshot capture interval to allow more time for the node to respond to the snapshot request.

DBA4748

Logical node “<name>” on instance “<name>” is not valid. smcode: “<Error code>”

Cause: The db2nodes.cfg file for instance “<name>” might contain incorrect information.

Action: Contact your system administrator.

DBA4749

The parallel tools on instance “<name>” is unable to establish communications with node “<name>”. smcode: “<Error code>”

Cause: The communications subsystem may not have been started.

Action: Contact your system administrator.

DBA5006E

PIPE Event Monitors are not supported.

Cause: The Event Analyzer only handles traces produced by FILE Event Monitors.

Action: Use a FILE Event Monitor.

DBA5007E

The specified Event Monitor does not exist.

Cause: The Event Monitor names specified with the -evm option could not be found in the catalogs for the database specified with the -db option. The Event Monitor may have been dropped or you may be trying to connect to the wrong database.

Action: Make sure that the Database alias specified with the -db is properly cataloged and that the Event Monitor has not been dropped. If the latter is the case, re-create the event monitor.

DBA5250I

The number of objects retrieved exceeds the limit of what can fit in the window. A partial list is displayed.

Cause: The window height required to display the retrieved objects exceeds a system limit.

Action: You can reduce the number of objects displayed in the window by doing the following:

- If the “Include” choice is available on the “View” menu, you can specify a subset of the objects to

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display in the window. When you select "Include", a window appears and prompts you for subsetting criteria.

DBA5300E

Event Analyzer invocation error.

Usage:

```
db2eva -path evmon-target |
      ffl-conn | ffl-db database-alias" |
      -db database-alias |
      -evm evmon-name ffl-conn"
```

Where:

-path evmon-target	specifies the directory containing the Event Monitor trace files.
-db database-alias	specifies the database for which the Event Monitor is defined, as cataloged on the machine where the trace is analyzed. database-alias overrides the database name specified in the trace.
-evm evmon-name	the Event Monitor producing the trace files to analyze. If specified, db2eva locates the trace files for the user by reading the Event Monitor target from the database system catalog.
-conn	requests db2eva to maintain a connection to the database specified by the -db option, or if -db is not supplied, to the database specified in the trace file header. Keeping a connection allows the Event Analyzer to obtain information that is not contained in the trace files, such as the text for static SQL statements. (The Statement Text Events for static SQL only

contain package creator, package number, and section number. When the -conn option is specified, db2eva connects to the database and retrieves the text from the Database system catalog, 'sysibm.sysstmt'.) The default is not to keep a connection.

Window Manager Options can be intermixed with the db2eva arguments.

Cause: Two modes of operation are provided for reading Event Monitor trace files:

1. User specifies the directory where the trace files reside (using -path)
This mode allow users to move trace files from a server and analyze them locally, even if the Event Monitor has been dropped.
2. User specifies the database and event monitor names; db2eva automatically locates the trace files.

When this mode is used, db2eva connects to the database, and issues a 'select target from sysibm.syseventmonitors' to locate the directory where the Event Monitor writes its trace files. The connection is then released, unless -conn is specified. The Event Monitor must not have been dropped when using this mode.

NOTE: Both the -conn and -db options require that the Database with which the trace was recorded still exists, and that the user has sufficient access privileges to connect and select from the system catalogs.

Action: Re-issue the command with valid arguments.

DBA5350E

The specified file cannot be opened.

Cause: The specified file could not be opened in read-only mode for an unknown cause.

Action: Check the spelling of the directory specified by the -path option, its access authority, and that it contains a non-empty, readable trace file called 00000000.evt.

NOTE: The first trace file for an Event Monitor is always named 00000000.evt and cannot be renamed.

DBA5351E**The specified file cannot be found.**

Cause: There is no 00000000.evt file in the directory specified by -path.

Action: Check the spelling of the directory specified by the -path option, its access authority, and that it contains the trace file 00000000.evt.

NOTE: The first trace file for an Event Monitor is always named 00000000.evt and cannot be renamed.

DBA5352E**The path specified was not found.**

Cause: The -path option specifies a directory that does not exist.

Action: Check the spelling of the directory specified by the -path option, its access authority, and that it contains the trace file 00000000.evt.

NOTE: The first trace file for an Event Monitor is always named 00000000.evt and cannot be renamed.

DBA5353E**Access to the specified file was denied.**

Cause: The specified file could not be opened in read-only mode. The -path option may be specifying a directory to which you do not have sufficient access authority.

Action:

- Check the access authority to the directory specified by the -path option.
- Verify that no one has locked the specified file in exclusive mode.

DBA5354E**The data cannot be read from the specified file.**

Cause: The Event Monitor trace file contains unexpected data, or cannot be accessed.

The trace file was likely corrupted during transmission or has been removed.

Action: Transmit your trace files from your server again. When transmitting trace files from a remote

server, ensure that the transmission is done in binary mode.

DBA5355E**An Event Monitor log header could not be found in the specified file.**

Cause: The first file written to by an Event Monitor is named 00000000.evt and contains a data structure that identifies the trace characteristics. This data structure could not be read. Possible causes:

- The trace file was corrupted.
- The trace file is empty. This can happen if the Event Monitor is active but, has not flushed its buffers yet.

Action:

- If the trace was transmitted from a remote server, retransmit, ensuring that the transmission is done in binary mode.
- If the trace file is empty, turn off the Event Monitor to force it to flush its buffer.

DBA5356E**The byte order is not valid in the specified file.**

Cause: The Event Monitor log header (the first record written to a new trace) specifies whether the trace contains little-endian (e.g., OS/2) or big-endian (e.g., AIX) data. The value found in the trace file specified neither of these two supported types of data.

The trace file was likely corrupted during transmission.

Action: Transmit your trace files from your server again. When transmitting trace files from a remote server, ensure that the transmission is done in binary mode.

DBA5357E**Unexpected data was found at the specified offset in the specified file.**

Cause: The Event Monitor trace file contains unexpected data.

The trace file was likely corrupted during transmission.

Action: Retransmit your trace files from the server, ensuring that the transmission is done in binary mode.

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DBA5500E

A system error has occurred. The Event Analyzer tool could not continue processing.

Cause: For an unknown reason a system error has occurred when trying to initialize the application environment.

Action: Re-issue the command.

DBA5501W

Do you want to delete the event files associated with the event monitor “<evname>” that you are removing?

Cause:

Action: To delete the event files for the selected event monitor, click on OK. If you do not want to delete the event files, but still want the event monitor removed, click on NO. If you do not want to remove the event monitor, or delete the event files click on CANCEL.

DBA5502E

No selection was made from the list of Event types. You must select one or more types from the list.

Cause: When creating an event monitor, at least one Event type must be selected.

Action: Select one or more of the Event type check boxes from the Create Event Monitor window.

DBA5503I

An event monitor “<evname>” has been successfully created.

Cause: The event monitor has been successfully created and has been added to the database list of event monitors.

Action: Click on OK to remove the message.

DBA5504W

Some event monitors were not removed because their event files could not be deleted. See the messages page from the journal notebook for the list of event monitors not removed.

Cause: Some of the selected event monitors may have been successfully removed, but others were not, because their associated event trace files could not be deleted.

This occurs when either event files are read-only, or they are being used by another active process.

Action: See the message page of the journal notebook for the list of event monitors that were not removed. To delete the files, end the process using them and check the access authority for the files. Then select the event monitor from the list of event monitors and choose remove from the menu.

DBA5505E

Maximum file size was not specified.

Cause: If maximum file size in 4K pages is selected on the create event monitor Options window, then the maximum size of the event files must be specified.

Action: Enter a maximum file size of between 1 and 2,147,483,647 4K pages, or you can select the No Maximum option. If the No Maximum option is selected, the maximum number of event files is 1.

DBA5506E

Maximum number of files was not specified.

Cause: If Maximum number of files is selected on the create event monitor Options window, then the maximum number of event files must be specified.

Action: Enter a maximum number of event files of between 1 and 2,147,483,647, or you can select No Maximum option.

DBA5507E

Buffer size was not specified.

Cause: An event monitor Buffer size in 4K pages must be specified.

Action: You must enter an event monitor buffer size of between 1 and 2,147,483,647 4K pages.

DBA5508W

Do you want to delete the event files associated with the event monitors that you are removing?

Action: To delete the event files for the selected event monitors, click on OK. If you do not want to delete the event files, but still want the event monitors removed, click on NO. If you do not want to remove the selected event monitors, or delete the event files click on CANCEL.

DBA5509E

The name entered for the event monitor is not valid.

Cause: The name entered in the event monitor Name field contains one or more characters that are not allowed. An event monitor can contain alphanumeric and must begin with a letter.

Action: Remove from the name any characters that are not alphanumeric and make sure the name begins with a letter.

DBA5510E

When trying to activate the monitor, the directory for its data files was not found.

Cause: When activating an event monitor, the directory that was specified when the event monitor was created must exist. In order to flush its buffers, an event monitor needs an existing file and path.

Action: Create the directory that was specified when creating the event monitor. Try to activate the event monitor again.

DBA5511E

Entry "<name>" is not valid because the value is out of the acceptable range.

Cause: The values for an event monitor's Maximum file size, Maximum number of files, and Buffer size must be between 1 and 2,147,483,647.

Action: Enter a value in the entry fields that is within the given range.

DBA5512E

The character "<character>" entered for the event monitor name is not allowed.

Cause: A character entered in the event monitor name entry field is not a valid character for an event monitor name.

Action: Remove from the event monitor name any characters that are not alphanumeric and make sure the name begins with a letter.

DBA5513W

The dynamic link library "<dllname>" could not be loaded successfully.

Cause: During the initialization of the event analyzer the dll could not be loaded because the dll has been deleted or removed.

Action: Reinstall the event analyzer by selecting the performance monitor during the installation process.

DBA5514I

The event files for event monitor "<evname>" could not be deleted.

Cause: The event files for the event monitor could not be deleted because the files are being used by an active process or are read-only.

Action: To delete the files, end the process that is using them and check the access authority for the files. Select the event monitor again and choose remove from the menu.

DBA5515W

The database alias name or database name "<dbname>" could not be found.

Cause: The alias name that was entered on the command line has not been cataloged on this machine.

Action: Either catalog the alias on this machine and reenter the command or re-issue the command with a valid alias name.

DBA5516W • DBA6005I

DBA5516W

Viewing the trace for this event monitor may take some time. Do you wish to continue processing?

Cause: The user has requested to view a large trace for an event monitor. Reading the files could take some time to complete.

Action: If you want to continue processing the trace click on OK. If you do not wish to continue processing the trace file then click on NO.

DBA5517E

The event monitor could not be started due to a reason code of "<reason-code>".

Cause: The event monitor could not be started for the reason specified by &odq<reason-code>":

1. The event monitor path is invalid.
2. The device, where the event monitor is to be started, is not ready.
3. Attachment to the admin server failed.

Action: To start the event monitor, make sure that the event monitor path is valid, the admin server started, and the proper authorities exist on the device. Click on OK.

If the problem persists, manually create the event monitor directory on the device and click on OK.

To create the event monitor without starting it, deselect the Start now check box and click on OK.

DBA5518E

The event monitor could not be started because its output directory could not be created.

Cause: The directory could not be created for one of the following reasons.

1. Proper authorities do not exist for creating directories on the requested file system.
2. Create event monitor does not support directory creation on non-Intel platforms.
3. Cannot create a directory of greater than 8 characters on a FAT file system.

Action: Make sure the proper authorities exist for directory creation.

On non-Intel platforms create the event monitor output directory manually.

DBA6001I

The replication subscription set, "<subscription_set>", is in use. Please try again later.

Cause: The Apply program is currently processing the replication subscription and this action cannot be deactivated. Wait until the Apply program has completed its processing and retry your command.

Action: No action is required.

DBA6002I

The replication source, "<source_name>", was defined successfully. To begin capturing changes to the replication source, start the Capture program from the command line.

Cause: The Capture program requires a defined replication source in order to run.

Action: Make sure the Capture program is running.

DBA6003I

The replication subscription was defined successfully. To begin replicating the subscription set, ensure that the Apply program has been started from the command line.

Cause: The Apply program requires a defined replication source in order to run.

Action: Make sure the Apply program is running.

DBA6004I

The replication subscription was successfully changed.

Cause: This is for your information only.

Action: No action is required.

DBA6005I

The replication sources were successfully removed.

Cause: This is for your information only.

Action: No action is required.

DBA6006I

The replication source, “<source_name>”, could not be removed.

Cause: This is for your information only.

Action: No action is required.

DBA6007I

The replication subscription, “<subscription_name>”, could not be removed.

Cause: This is for your information only.

Action: No action is required.

DBA6008I

The replication subscriptions were successfully removed.

Cause: This is for your information only.

Action: No action is required.

DBA6009E

“<file_name>” is locked by another action.

Cause: The file is currently being used by another action.

Action: Wait until the action is completed and retry your command.

DBA6010I

The join was successfully defined.

Cause: This message is for your information only.

Action: No action is required.

DBA6012I

The replication source was defined successfully. To begin capturing changes to the replication source, ensure that the Capture program has been started from the command line.

Cause: The Capture program requires a defined replication source in order to run.

Action: Make sure the Capture program is running.

DBA6013I

The replication subscription was successfully updated.

Cause: This message is for your information only.

Action: No action is required.

DBA6014I

The replication subscription was successfully cloned.

Cause: This message is for your information only.

Action: No action is required.

DBA6015I

The SQL statements for this action have been saved in a file for future editing and execution.

Cause: This message is for your information only.

Action: No action is required.

DBA6016I

The SQL script file has been run successfully.

Cause: This message is for your information only.

Action: No action is required.

DBA6100I

The Apply program will only perform full refresh copies to this set.

Cause: This message is for your information only.

Action: No action is required.

DBA6101E

The table, “<table_name>”, cannot be found.

Cause: The control table specified could not be located in the database or was accidentally dropped.

Action: Create the control table. See the Tables Chapter for more details.

DBA6102I • DBA6111E

DBA6102I

This action may take some time to complete.
Please wait...

Cause: This message is for your information only.

Action: No action is required.

DBA6103E

The SQL file, "<file_name>", cannot be run.

Cause: The user may have edited the SQL statement file for a replication action, such as defining a replication source, and there is an error in the SQL statement file.

Action: Correct the error in the SQL statement file and run the file again.

DBA6104W

No unique prefix character was found. The prefix character will be set to NULL.

Cause: A prefix character is an alphabetical or numerical character used to distinguish before-image columns in the source table. If a prefix character cannot be assigned because all possible prefix characters are already in use, you will receive this warning. The change data table cannot be created.

Action: Uncheck the before-image columns and rerun the action.

DBA6105E

The field, "<field_name>", requires your input.

Cause: The user has not filled in a required field.

Action: Specify a parameter and select **OK**.

DBA6106E

The replication action does not currently support this database system.

Cause: The replication action must support your database system in order to run.

Action: Contact your IBM Service representative.

DBA6107E

Please enter a different value for the field, "<field_name>".

Cause: When cloning a replication subscription, the **target server** and **Apply qualifier** fields must be different from the original **target server** and **Apply qualifier** fields.

Action: Enter a different target server name or Apply qualifier and select **OK**.

DBA6108E

The action cannot be completed due to a syntax error.

Cause: The SQL statement contains a syntax error.

Action: Check the SQL reference for the proper syntax. For subscription actions, check the where clause, the rows page, or the CREATE column. For define-join actions, check the CREATE VIEW statement.

DBA6109E

SHOW COLUMNS action cannot be completed.

Cause: The SHOW COLUMNS action requires that a table be selected.

Action: Select a table from the Selected Table list box and then press the SHOW COLUMNS key.

DBA6110E

The SQL file, "<file_name>", cannot be opened.

Cause: The SQL file either does not exist, is in the wrong subdirectory, or is engaged in another process.

Action: Make sure you enter the correct file name and that the file is in the correct subdirectory. If the file is engaged in another process, terminate the process and reenter the file name.

DBA6111E

The file, "<file_name>", cannot be opened.

Cause: The file either does not exist or is in the wrong subdirectory.

Action: Make sure you enter the correct file name on the Replication page of the Tool Settings notebook.

DBA6112I

You have chosen to substitute user-defined values to define replication objects in the Tool Settings notebook. Please supply these values in the file "<file_name>".

Cause: This message is for your information only.

Action: No action is required if you have already supplied user-defined values in the file.

DBA6113E

"<keyword>" is an invalid keyword in file "<file_name>".

Cause: The specified keyword is invalid and may be a typographical error.

Action: Use the keywords as given in the default file "DPREPL.DFT".

DBA6114E

The value for keyword "<keyword>" cannot be found in file "<file_name>".

Cause: The value of this keyword is required for this action to complete.

Action: Specify a value for this keyword in the file.

DBA6115E

None of the items in the column list were selected. This action cannot be completed.

Cause: At least one item in the column list must be selected for this action to complete.

Action: Select one or more items from the column list and press **OK**.

DBA6116E

The value for keyword "<keyword>" is invalid in file "<file_name>".

Cause: The value of this keyword is either too long, an incorrect data type, or in an incorrect format.

Action: Correct the value and invoke the action again.

Chapter 6. DBI Messages

This chapter contains the error messages which may be generated during installation and configuration of DB2 products.

DBI1001I

Usage:

```
db2icrt [-a AuthType] -u FencedID InstName
```

Cause: An invalid argument was entered for the db2icrt command. Valid arguments for this command are:

```
-h|-?      display the usage information.
-d         turn debug mode on.
-a AuthType is the authentication type
           (SERVER, CLIENT, or DCS) for
           the instance.
-u FencedID is the name of the user under
           which fenced UDFs and fenced
           Stored Procedures will be run.
           This flag is not required if only
           DB2 CAE product is installed.
InstName   is the name of the instance.
```

Action: For more information about this command, please refer to the manual "Quick Beginnings for UNIX". Enter the command again as follows:

```
db2icrt [-a AuthType] -u FencedID InstName
```

DBI1005I

Usage:

```
db2idrop InstName
```

Cause: An incorrect argument was entered for the db2idrop command. Valid arguments for this command are:

```
-h|-?      display the usage information
-d         turn debug mode on.
InstName   is the name of the instance
```

Action: Enter the command again as follows:

```
db2idrop InstName
```

DBI1006I

Usage:

```
db2idrop [-f] InstName
```

Cause: An incorrect argument was entered for the db2idrop command. Valid arguments for this command are:

```
-h|-?      display the usage information.
-d         turn debug mode on.
-f         is the force applications flag.
           If this flag is specified then
           all applications using the
           instance will be forced to
           terminate.
InstName   is the name of the instance.
```

Action: Enter the command again as follows:

```
db2idrop [-f] InstName
```

DBI1011I

Usage:

```
db2iupdt -u FencedID InstName
```

Cause: An incorrect argument was entered for the db2iupdt command. Valid arguments for this command are:

```
-h|-?      display the usage information
-d         turn debug mode on.
-u FencedID is the name of the user under
           which fenced UDFs and fenced
           Stored Procedures will be run.
           This flag is not required if only
           DB2 CAE product is installed.
InstName   is the name of the instance.
```

Action: Enter the command again as follows:

```
db2iupdt -u FencedID InstName
```

DBI1012I

Usage:

```
db2iupdt [-f] -u FencedID InstName
```

Cause: An incorrect argument was entered for the db2iupdt command. Valid arguments for this command are:

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-h|-? display the usage information
-d turn debug mode on.
-f is the force applications flag.
If this flag is specified then all applications using the instance will be forced to terminate.
-u FencedID is the name of the user under which fenced UDFs and fenced Stored Procedures will be run. This flag is not required if only DB2 CAE product is installed.
InstName is the name of the instance.

Action: Enter the command again as follows:

```
db2iupdt [-f] -u FencedID InstName
```

DBI1015I

Usage:

```
db2imigr [-a AuthType] -u FencedID InstName
```

Cause: An incorrect argument was entered. Valid arguments for this command are:

-h|-? display the usage information
-d turn debug mode on.
-a AuthType is the authentication type (SERVER, CLIENT, or DCS) for the instance.
-u FencedID is the name of the user under which fenced UDFs and fenced Stored Procedures will be run. This flag is not required if only DB2 CAE product is installed.
InstName is the name of the instance.

Action: For more information about this command, please refer to the manual "Quick Beginnings for UNIX". Enter the command again as follows:

```
db2imigr [-a AuthType] -u FencedID InstName
```

DBI1016I

Usage:

```
db2imigr [-f] [-a AuthType] -u FencedID InstName
```

Cause: An incorrect argument was entered. Valid arguments for this command are:

-h|-? display the usage information
-d turn debug mode on.
-f is the force applications flag. If this flag is specified then all applications using the instance will be forced to terminate.
-a AuthType is the authentication type (SERVER, CLIENT, or DCS) for the instance.
-u FencedID is the name of the user under which fenced UDFs and fenced Stored Procedures will be run. This flag is not required if only DB2 CAE product is installed.
InstName is the name of the instance.

Action: For more information about this command, please refer to the manual "Quick Beginnings for UNIX". Enter the command again as follows:

```
db2imigr [-f] [-a AuthType]  
-u FencedID InstName
```

DBI1018I

Usage:

```
db2istop [-h|-?] [-d] [-f] InstName
```

Cause: An incorrect argument was entered. Valid arguments for this command are:

-h|-? display the usage information
-d turn debug mode on.
-f is the force applications flag. If this flag is specified then all applications using the instance will be forced to terminate.
InstName is the name of the instance.

Action: Enter the command again as follows:

```
db2istop [-h|-?] [-d] [-f] InstName
```

DBI1021I

Usage:

```
db2imigrev [-h|-?] InstName
```

Cause: An incorrect argument was entered. Valid arguments for this command are:

-h|-? display the usage information.
-d turn debug mode on.
InstName is the name of the instance which will be migrated backward from version 5 to the previous version of DB2.

Action: Enter the command again as follows:

```
db2imigrev [-h|-?] InstName
```

DBI1022I

Usage:

```
db2imigrev [-h|-?] [-f] InstName
```

Cause: An incorrect argument was entered. Valid arguments for this command are:

```
-h|-?    display the usage information
-d       turn debug mode on.
-f       is the force applications flag.
         If this flag is specified then
         all applications using the
         instance will be forced to
         terminate.
InstName is the name of the instance
         which will be migrated backward
         from version 5 to a previous
         version of DB2.
```

Action: Enter the command again as follows:

```
db2imigrev [-h|-?] [-f] InstName
```

DBI1025I

Usage:

```
dasicrt DASName
```

Cause: An invalid argument was entered for the dasicrt command. Valid arguments for this command are:

```
-h|-?    display the usage information.
DASName  is the name of the DB2
         Administration Server.
```

Action: Enter the command again as follows:

```
dasicrt DASName
```

DBI1027I

Usage:

```
dasidrop DASName
```

Cause: An invalid argument was entered for the dasidrop command. Valid arguments for this command are:

```
-h|-?    display the usage information.
DASName  is the name of the DB2
         Administration Server.
```

Action: Enter the command again as follows:

```
dasidrop DASName
```

DBI1030E

Kernel parameter “<name>” must be set to “<value>”.

Cause: DB2 requires certain kernel parameters to be updated.

Action:

- Update all necessary kernel parameters as documented in the book “Quick Beginnings for UNIX”.
- Reboot the system
- Try this command again

DBI1040I

The translated version of following message is not available on this system.

Action: The translated version of following message is not available on this system. Please refer to the “Installation.Notes” file in the PRODDIR/Readme/LOCALE directory, where PRODDIR is the product directory and LOCALE is the locale name. For example, the product directory is:

```
    /usr/lpp/db2_05_00 on AIX
and  /opt/IBMd2/V5.0  on Solaris, HP-UX.
```

DBI1050E

Unsupported operating system - “<OS-name>”, version “<OS-ver>”.

Cause: Your current operating system is not supported or this version of the operating system is not supported. Refer to the “Quick Beginnings for UNIX”.

DBI1051E

You cannot execute this program as root.

Cause: This program can only be run under a non-root user ID.

Action: Login as a user ID other than root, and issue the command again.

DBI1052E • DBI1065E

DBI1052E

You must be root to execute this program.

Cause: This program can only be run under the root user ID. Special privileges are required to execute this program.

Action: Login as root and issue the command again.

DBI1053E

File system of type “<fsys-type>” is not supported.

Cause: Creating the instance's home directory on this type of file system is not supported. Instance's home directory must exist either on a local file system or on a NFS mounted filesystem.

Action: Change the home directory to a supported file system and recreate the instance.

DBI1055E

The message file “<file-name>” cannot be found.

Cause: The message file required by the instance commands is missing from the system; it may have been deleted or the database products may not be installed properly.

Action: Verify that the product option containing the message file is installed correctly. If there are verification errors, reinstall the product option.

DBI1057E

Required locale “<locale>” is not available.

Cause: The required locale directory, /usr/lib/locale/LANG/LC_MESSAGES, does not exist, where LANG is the name of your current locale.

Action: Verify that the specified locale has been installed correctly. Also check for the read and execute permissions are set correctly on that directory.

DBI1060E

Invalid package name “<pkg-name>”.

Cause: An incorrect name has been entered. The package either does not exist or the name has been entered incorrectly.

Action: Check to see if the name of the given package exists on the distribution media. If so, examine the name to see if it has been misspelled. All package names should be in lower case.

DBI1061E

A fileset or package name “<pkg-name>” is missing.

Cause: An error occurred when verifying software prerequisites. The above fileset or package must be installed before using this command.

Action: Check to see if the name of the given package has been installed on your system.

DBI1062E

A fileset or package name “<pkg-name>” is missing.

Cause: The above fileset or package must be installed before using this command.

Action: Install the fileset or package and then reissue this command.

DBI1063E

PTF or patch “<patch-name>” is missing.

Cause: The above PTF or patch must be installed before using this command. This PTF or patch is required to complete this command successfully.

Action: Install the required PTF or patch and enter this command again.

DBI1065E

Program “<program-name>” terminated prematurely.

Cause: An error has occurred during the execution and that has caused this program to terminate prematurely.

Action: Correct the problem and try the command again.

DBI1066E

Program “<program-name>” terminated by request.

Cause: This program has been terminated by the user.

Action: Issue the same command to restart the program.

DBI1067E

DB2 Product Library for locale “<locale-name>” is not installed.

Cause: No compressed-tar HTML files can be found in the DB2DIR/doc/<locale-name>/html directory, where

```
DB2DIR = /usr/lpp/db2_05_00 on AIX
        = /opt/IBMd2/V5.0 on HP-UX, Solaris
```

Action: Install the DB2 Product Library for the required locale and issue this command again.

DBI1068E

There is not enough space to uncompress and un-tar all the HTML file in the directory “<dir-name>”.

Cause: After uncompress and un-tar, all the HTML files cannot be saved in the above directory because the filesystem is full.

Action: Increase the size of the filesystem or free up sufficient disk space in the filesystem. Issue the command again.

DBI1069E

Unexpected error. Function = “<fname>”, Return code = “<return-code>”.

Cause: An unexpected error occurred during the execution of this program.

Action: If the problem persists, contact IBM Support with the following information:

- Message number
- Function name
- Return code
- Problem description

DBI1070I

Program “<program-name>” completed successfully.

DBI1079I

Output is saved in the log file “<log-name>”.

Cause: All processed and failed operations have been saved into this log file.

Action: Do not modify this file in any way. This file is for IBM Technical Support reference.

DBI1080E

Disk full. Minimum space required in “<dir-name>” is “<KB>” KB, whereas only “<KB>” KB space is available.

Cause: There is not enough free space available in the file system or directory.

Action: Free more disk space and retry the command.

DBI1081E

The file or directory “<file-name>” is missing.

Cause: A file or directory that is required to process this command is missing.

Action: If the file belongs to one of the database products then verify that the product is installed correctly and reinstall the product if necessary. If the file belongs to an instance then the instance may have already been removed or it may be corrupted.

Check to see if the name of the given directory exists on your file system. If so, examine the name to see if it has been misspelled. Note that all file and directory names are case-sensitive on Unix.

DBI1082E

The file or directory “<file-name>” already exists.

Cause: A file or directory that the command needs to create already exists.

Action: Examine the specified file or directory. If the file or directory exists as a result of a previous successful completion of the command then no action is required. Otherwise, you will need to either rename or remove the specified file or directory before trying the command again.

DBI1083E • DBI1089E

DBI1083E

An attempt to remove "<file-name>" failed.

Cause: An error occurred when removing the given file or directory. This may be due to an inappropriate ownership on this given file or directory.

Action: Adjust the file permissions or ownership of the specified file or directory and then issue the command again.

DBI1084E

An attempt to create "<file-name>" failed.

Cause: An error occurred when creating the given file or directory.

Action: Check that there is enough space in the file system and that you have write permission for the required directory. Suggested directory permissions are u=rwx,go=rx.

DBI1085E

An attempt to move the file or directory "<file-name>" to "<file-name>" failed.

Cause: An error occurred when attempting to relocate the given file or directory. The command could not be processed successfully.

Action: Determine why the specified file or directory could not be moved and then try the command again.

DBI1086E

An attempt to copy the file or directory "<file-name>" to "<file-name>" failed.

Cause: An error occurred when attempting to duplicate the given file or directory. The command could not be processed successfully.

Action: Determine why the specified file or directory could not be copied and then try the command again.

DBI1087E

An attempt to create the link "<filename>" failed.

Cause: The given link cannot be created. It could be that the write permission on its parent directory has been turned off, or that a file or directory with the same name already exists.

Action: Check permissions for the parent directory and restart the install process. Suggested directory permissions are u=rwx,go=rx.

DBI1088E

Invalid access permission detected for directory "<directory>".

Cause: There may be several reasons for this error. It is likely that one of the following situations has occurred:

- Either the given name is not a directory, or it does not have read and execute permission.
- The given directory can be created but cannot be accessed. It could be that the permissions on any of its parent directories in its path have been set incorrectly.

Action: Check permissions for the given directory and restart the install process. Suggested directory permissions are u=rwx,go=rx.

DBI1089E

Error in saving current instance related information in the "<backup-dir>" directory.

Cause: There may be several reasons for this error. It is likely that one of the following situations has occurred:

- The given directory does not have sufficient permissions or does not have the write permission.
- There is no space left on the filesystem.

Action: Take an appropriate corrective action and issue the command again.

DBI1091E

An attempt to change permissions for “<directory>” failed.

Cause: An error occurred when changing permissions on the given file or directory. This may be due to an inappropriate ownership on this file or directory.

Action: Check permissions and ownership for the given directory and restart the install process. Suggested directory permissions are u=rwx,go=rx.

DBI1092E

An attempt to change ownership for “<directory>” failed.

Cause: An error occurred when changing ownership on the given file or directory. This may be due to an inappropriate ownership on this given file or directory.

Action: Check ownership for the given directory and restart the install process.

DBI1093E

An attempt to change group ownership for “<directory>” failed.

Cause: An error occurred when changing group ownership on the given file or directory. This may be due to an inappropriate ownership on this file or directory.

Action: Check ownership for the given directory and restart the install process.

DBI1095W

The file or directory “<name>” not found.

DBI1100E

An instance lock is found. Another instance management command is running.

Cause: The command failed because another instance management command (eg. db2icrt, db2idrop, db2iupdt, or db2imigr) is running. The instance management commands acquire an exclusive lock to avoid conflicting simultaneous commands against the same instance.

Action: Wait for all other occurrences of the instance commands to finish executing before trying the command again. If no other instance commands are running then delete the file “instance.lock” in one of the following directories:

```

/var/db2/v5
or
/var/opt/db2/v5

```

DBI1101E

The instance name “<instance-name>” is invalid.

Cause: Instance name must be the login name of an existing user and cannot:

1. be more than 8 characters long.
2. start with “sql”, “ibm” or “sys”.
3. start with a numeral or contain characters other than a-z, \$, #, @, _, or 0-9.

Action: Try the command again with a valid instance name.

DBI1103E

The Administration Server already exists.

Cause: The system detects that the Administration Server has already been created on your system. You can only create one Administration Server on each system.

Action: If you want to re-create the Administration Server, you have to drop the Administration Server first before re-creating it.

DBI1104E

The Administration Server cannot be dropped.

Cause: An attempt to drop the Administration Server failed. The system detects that the Administration Server does not exist or has been created under a different user ID.

Action: Verify that the name of the Administration Server as reported by the “db2iset -g DB2ADMINSERVER” command is correct and try again.

DBI1109E

The kernel parameters must be updated before using this command.

Cause: Some of the kernel parameters are not configured properly.

Action:

- Update all necessary kernel parameters as documented in the book “Quick Beginnings for UNIX”.
- Reboot the system
- Try this command again

DBI1111E • DBI1124E

DBI1111E

The FencedID parameter must be specified using -u flag with this command.

Cause: The FencedID parameter must be specified with this command. The FencedID parameter is set to the name of the user under which fenced User Defined Functions (UDFs) and fenced Stored Procedures will be run.

Action: Enter the command again adding the arguments “-u FencedID” where FencedID is the name of the user that you want your fenced UDFs or fenced Stored Procedures to run under.

For security reasons it is recommended that you do not use the instance name as the FencedID. However, if you are not planning to use fenced User Defined Functions (UDFs) or fenced Stored Procedures then setting the FencedID to the instance name may save you the step of having to create another user for the FencedID.

DBI1112E

The FencedID parameter “<fenced-id>” is not valid.

Cause: The FencedID parameter which specifies the user name under which fenced User Defined Functions and fenced Stored Procedures will be run:

- Must be the login name of an existing user.
- Cannot be set to the root or the bin user.

Action: Try the command again with a valid FencedID parameter.

DBI1113W

Previous value of FencedID parameter “<old-value>” is different. New value “<new-value>” is ignored.

Cause: The FencedID parameter entered on the command line is different from the one used before for this userid. New value for this parameter is ignored.

DBI1115E

Invalid AuthType parameter “<auth-type>” specified with -a flag.

Cause: The AuthType parameter which specifies the authentication type used for the instance is not valid. Valid authentication types are:

- SERVER
- CLIENT
- DCS

Action: Try the command again with a valid AuthType parameter.

DBI1120E

Instance “<inst-name>” cannot be dropped.

Cause: An attempt was made to drop an instance which may still be active.

DBI1122E

Instance “<inst-name>” cannot be updated.

Cause: An attempt was made to update an instance. This instance cannot be updated because:

- This “db2iupdt” command cannot be used to update this instance.
- The instance is still active.

Action: Ensure that you are using the correct version of the “db2iupdt” command and the instance is inactive. Retry the command.

DBI1124E

Instance “<inst-name>” cannot be migrated.

Cause: An attempt was made to migrate an instance. This instance cannot be migrated because:

- The instance is still active.
- Migration of this instance is not supported
- This version of the “db2imigr” command cannot be used to migrate this instance.

Action: Ensure that instance is ready for migration and you are using the correct version of the “db2imigr” command. For more information on instance migration, please refer to the book “Quick Beginnings for UNIX”.

DBI1131E

The user ID “<user-id>” is invalid.

Cause: An attempt to access the given user ID failed. One of the following situations has occurred:

- This user ID does not exist on the system.
- The home directory of this user is not set up properly.

Action: Make sure a valid user ID has been used. Create a new user if necessary.

DBI1135E

The primary group “<group-name>” of user ID “<user-id>” is invalid.

Cause: The primary group name of the instance user ID cannot:

1. be one of “guests”, “admins”, “users” or “local”.
2. start with “sql” or “ibm”.
3. start with a numeral or contain characters other than a-z, \$, #, @, or 0-9.

Action: Change the primary group of the instance user ID to a group with a valid name and then try the command again.

DBI1200E

The directory “<directory-name>” is not a version “<version-number>” instance.

Cause: The command cannot proceed because the specified directory does not point to the required version of the database products.

Action: The command cannot be run with the specified instance.

DBI1202E

Migration of instance “<inst-name>” is not supported.

Cause: The instance cannot be migrated because:

1. Migration from this version of the instance is not supported.
2. The instance is already using the current version of the product and no migration is required.

Action: Make sure that the instance is valid for migration and then try the command again with a valid instance name.

DBI1205E

One or more local databases have been detected that cannot be migrated to the newest version. Check the logfile “<logfile-name>” for the list of errors.

Cause: Possible errors on the database are:

- Backup pending
- Roll-forward pending
- Database inconsistent
- One or more tablespaces is not in normal state
- Database contains database objects that have a schema name of SYSCAT, SYSSTAT or SYSFUN
- Database contains database objects that have a dependency on the SYSFUN.DIFFERENCES function. Possible violated objects are:
 - constraint
 - function
 - trigger
 - view

Action: Take the following corrective action for each database from the file “<logfile-name>”:

- Backup pending - Perform backup of the database.
- Roll-forward pending - Perform a roll-forward database to end of logs and stop.
- database inconsistent - Restart database to return it to a consistent state.
- Tablespace not in normal state - Perform a roll-forward database.
- Invalid schema - Drop the object and re-create the object with a correct schema name (qualifier). If the object is a table you should first export its data, drop the table, re-create the table with a correct schema name, and then import or load the data to the new table.
- Object having SYSFUN.DIFFERENCES dependency -
 - Constraint - alter table to drop the constraint
 - Function - drop the function
 - Trigger - drop the trigger

DBI1211E • DBI1225W

- View - drop the view

DBI1211E

Migration of the “<directory-name>” failed.

Cause: A system error such as running out of disk space or memory has been encountered during the migration of the directory. Instance migration failed.

Action: Make sure there is sufficient disk space and memory before trying the command again.

DBI1212W

Migration of the local database directory on “<path>” failed.

Cause: The process of migrating local database directory is not complete because of an unexpected error occurred.

Action: An error file “db2mgdbd.err” and a local database directory backup “sqldbdir/sqldddir.bak” are created in the directory path mentioned above.

Keep these two files and contact IBM service for instruction of possible ways to repair your directory. Without the local database directory, databases that are catalogued in the local database directory will no longer be accessible.

DBI1220W

Migration of the node directory on “<path>” failed.

Cause: The process of migrating node directory is not complete because of an unexpected error occurred.

Action: Two options to recover:

1. Remove node directory and re-catalog node entry.
2. An error file “db2mgndd.err” and a node directory backup “sqlnmdir/sqlnddir.bak” are created in the directory path mentioned above.

Keep these two files and contact IBM service for instruction of possible ways to repair your directory. Contact IBM services to recover your node directory.

DBI1221W

The node directory is corrupted and cannot be migrated.

Cause: Either the node directory files are not the same or the node directory file is corrupted.

Action: Remove node directory and re-catalog node entry.

DBI1222W

The system database directory is corrupted and cannot be migrated.

Cause: Either the primary and backup system database directory files are not the same or system database directory is corrupted.

Action: Remove system database directory and re-catalog all database entry.

DBI1223W

The local database directory is corrupted and cannot be migrated.

Cause: Either the primary and backup database directory files are not the same or the local database directory file is corrupted.

Action: An error file “db2mgdbd.err” and a local database directory backup “sqldbdir/sqldddir.bak” are created in the directory path mentioned above.

Keep these two files and contact IBM service for instruction of possible ways to repair your directory. Without the local database directory, databases that are catalogued in the local database directory will no longer be accessible.

DBI1225W

The authentication type of a catalogued local database has been changed.

Cause: One or more catalogued database entries were detected that have an authentication type that is different from the authentication type that was specified for the instance. If no action is taken then all catalogued local database entries will assume the authentication type of the instance they belong to.

Action: Check the file migration.log in the home directory of the instance for a list of the catalogued local database entries that are not the same as the authentication specified for the instance. If you want the

database to maintain its previous authentication type then you can either change the authentication type of the instance or you can move the database to another instance that has the desired authentication type. Before changing the authentication type of the instance, however, you should make sure that you want all the catalogued local database entries to have the new authentication type.

DBI1240E

The database manager could not be started.

Cause: The database manager could not be started when attempting to check if catalogued local databases can be migrated.

Action: Resolve why the database manager could not be started and then try the command again.

DBI1250E

Applications are still using instance “<instance-name>”.

Cause: There are applications that are still running that are using the specified instance. All applications using this instance must be terminated before the command can be completed successfully. You can get a list of the applications that are currently using the instance by issuing the command:

```
db2 list applications
```

Action: You can either wait for the applications to end by themselves, or you can explicitly force the applications to end. You can logon as the instance owner and run the command

```
db2 force application all
```

Note that some applications may have unexpected behaviour when terminated using the above command. After all the applications have stopped, stop the database manager using “db2stop” command.

DBI1281E

The database manager configuration file could not be initialized.

Cause: An error occurred when attempting to initialize the database manager configuration file. A DB2 Version 5 instance could not be created or migrated.

Action: Refer to the log file for problem determination. Resolve the problem and try the command again. If the problem persists, please contact IBM Support.

DBI1282E

The database manager configuration files could not be merged.

Cause: An error was detected when attempting to merge two database manager configuration files. The previous database manager configuration file could not be merged with the new database manager configuration file.

Action: Check the values in the new database manager configuration file and update the parameters as required.

DBI1290E

An attempt to create the profile registry “<profile-name>” failed.

Cause: An error occurred when creating the profile registry. One of the following situations occurred:

- Incorrect access permission on the file containing the profile registry.
- Profile registry is not set up properly.
- There is not enough space on your file system.

Action: Check the file permissions on the instance list profile in one of the following directories:

```
    /var/db2/v5
or   /var/opt/db2/v5
```

DBI1291E

The instance “<instance-name>” was not found in the instance list.

Cause: The specified instance was not found in the instance list.

Action: Verify that the list of instances as reported by the “db2ilist” command is correct. Retry the command with a valid instance name.

DBI1292E

The instance “<instance-name>” is already in the instance list.

Cause: The instance that is being created or migrated is already in the instance list.

Action: Use a different instance name that is not part of the instance list as reported by the “db2iset -l” command.

DBI1295E • DBI1302E

DBI1295E

The instance list could not be updated.

Cause: The instance could not be added to or removed from the instance list. An error has occurred when adding or removing the instance from the instance list. One of the following situations occurred:

- Incorrect access permission on the registry profile.
- Profile registry is not set up properly.
- There is not enough space on your file system.

Action: Check the file permissions on the instance list profile in one of the following directories:

```
    /var/db2/v5  
or   /var/opt/db2/v5
```

DBI1297E

The instance profile “<profile-name>” could not be updated.

Cause: An error occurred when updating the instance profile registry. One of the following situations occurred:

- Incorrect access permissions on the instance profile registry.
- Profile registry is not set up properly.
- There is not enough space on your file system.

Action: Check the file permissions on the instance list profile in one of the following directories:

```
    /var/db2/v5  
or   /var/opt/db2/v5
```

DBI1300N

db2set displays, sets, or removes DB2 profile variables.

```
db2set [[[[variable=[value]]  
        [-g|-i instance[node-number]]]  
        [-all] [-null]  
        [-r instance[node-number]]  
        [-n DAS node[-u user[-p password]]]  
        [-l|-lr] [-v] [-?|-h]
```

Cause: The command options are:

- g Access the global profile variables.
 - i Specifies the instance profile to use instead of the current or default.
 - n Specifies the remote DB2 Administration Server node name.
 - u Specifies the user ID to use for the Administration Server attachment.
 - p Specifies the password to use for the admin server attachment.
 - r Resets the profile registry for the given instance
 - l Lists all instance profiles.
 - lr Lists all supported registry variables.
 - v Verbose mode.
 - ? Displays the command help message.
 - h Same as -? option.
- all Displays all occurrences of the local environment variables as defined in:
The environment, denoted by [e]
The node level registry,
denoted by [n]
The instance level registry,
denoted by [i] and
The global level registry,
denoted by [g]
- null Sets the variables value to null at the specified registry level to prevent looking up the value in the next registry level as defined in the variable value search order.

Notes:

- db2set with no variable name displays all defined variables.
- db2set <variable> displays <variable>'s value.
- db2set <variable>= (nothing) deletes the <variable>.
- db2set <variable>=<value> modifies the <variable>'s value.
- db2set <variable> -null sets <variable>'s value to NULL.
- db2set <variable> -all displays all defined <variable>'s values.
- db2set -all displays all defined variables in all registry levels

DBI1302E

Invalid parameter detected.

Cause: An invalid parameter was used.

Action: Use the -? option for the usage help message.

DBI1303W

Variable not set.

Cause: The variable was not set in the profile registry.
Action: No further action is required.

DBI1304E

Unexpected error.

Cause: The tool encountered an unexpected system error.
Action: Contact your DB2 service representative.

DBI1305E

The profile registry was not found.

Cause: The target machine does not have a profile registry setup.
Action: Create the registry on the target machine by installing DB2.

DBI1306N

The instance profile is not defined.

Cause: The instance is not defined in the target machine registry.
Action: Specify an existing instance name or create the required instance.

DBI1307N

The instance node profile is not defined.

Cause: The instance node is not defined in the target machine registry.
Action: Create the registry by installing the required DB2 product parts.

DBI1308E

Out of memory condition encountered.

Cause: The tool encountered an “out of memory resource” error.
Action: System is low on memory resources. Terminate non-essential applications or try again later.

DBI1309E

System error.

Cause: The tool encountered an operating system error.
Action: A system error was encountered during registry access. Ensure that there is enough space on the file system where the registry is located, and that there is a valid LAN connection if the registry is remote.

DBI1310E

Remote registry access is not supported.

Cause: The tool does not support the remote registry option.
Action: Consult the Command Reference on how to access the registry remotely.

DBI1311I

Listing registry instance profiles...

DBI1312I

Listing defined global variables...

DBI1313I

Listing defined instance variables...

DBI1314I

Listing all supported registry variables...

DBI1315W

Unknown message!

DBI1316E

Instance is not MPP.

Cause: The target instance is not a DB2 MPP instance.
Action: Choose an MPP instance.

DBI1317E

Instance node already exists.

Cause: A duplicate instance node already exists.
Action: Choose a different instance node.

DBI1500I • DBI1505E

DBI1500I

Usage:

```
db2inst [-f <response-file>]
```

Cause: An incorrect argument was entered. The command accepts an optional flag -f which is followed by the path of the “DB2 Installer” response file.

Action: Re-enter the command with a valid argument.

DBI1501E

An internal error was encountered.

Cause: An error was detected while performing an internal operation.

Action: Verify that the file system on which the file resides is not damaged. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Internal error message description
3. Problem description

DBI1502E

An error was encountered when opening or reading from file, “<file-name>”.

Cause: An error was encountered when opening or reading from a file. One of the following errors occurred:

- An I/O error occurred opening or reading from the file.
- An expected value was not found in the file.
- The order of the data in the file is incorrect.

Action: If the file was modified by the user, verify that the data in the file is valid. If the file was not modified by the user, contact IBM Support with the following information:

1. Message number
2. Message description
3. Problem description

DBI1503E

An error was encountered when opening or writing to file, “<file-name>”.

Cause: An error was encountered when writing data to a file. One of the following errors occurred:

- Incorrect access permissions on a given directory.
- There is not enough space on your file system.

Action: Check to see if the permissions on the file's parent directory have been set correctly. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Message description
3. Problem description

DBI1504E

An error occurred opening message files.

Cause: An attempt to open and read from “DB2 Installer” message catalog files failed. Before DB2 Installer starts up, it looks for two resource files -- db2inst.rcx and db2inst.cat in the following locations:

- DB2 product directory, or
- on the distribution media, or
- environment variables DB2IRCX and DB2ICAT.

Action: Set the environment variables DB2IRCX and DB2ICAT to the absolute location of db2inst.rcx and db2inst.cat respectively.

DBI1505E

An attempt to allocate memory failed.

Cause: An error was detected when attempting to allocate memory.

Action: Terminate other applications running on the system that may be using large amounts of memory. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Message description
3. Problem description

DBI1507E

An instance of the DB2 Installer is already started.

Cause: An error was detected when attempting to start up the DB2 Installer. Another instance of the DB2 Installer is still running.

Action: Terminate all instances of the DB2 Installer and restart the install process. If the problem persists, remove the lock file /tmp/.db2inst.lck and restart the DB2 Installer.

DBI1515E

An attempt to allocate resource for a subprocess failed.

Cause: An error was detected when attempting to startup a subprocess.

Action: Terminate other applications running on the system that may be using large amounts of resources. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Problem description

DBI1516E

An attempt to terminate a subprocess failed.

Cause: An error was detected when attempting to terminate a subprocess.

Action: Terminate other applications running on the system that may be using large amounts of resources. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Problem description

DBI1517E

An attempt to execute a command in a subprocess failed.

Cause: An error was detected when attempting to execute a command in a subprocess. One of the following problems occurred:

- The command does not exist.
- Incomplete command search path.
- Incorrect access permissions on the command.

- System resource problem.

Action: Correct the problem and try again. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Problem description

DBI1520E

Minimum terminal display size is 24 x 80.

Cause: Your current terminal or window size is not large enough. This program requires a minimum terminal display size of 24 lines by 80 columns.

Action: Check your terminal or window size and try again.

DBI1521E

An attempt to read in the terminal capability information failed.

Cause: An error was detected when attempting to initialize your terminal display. There are two conditions where this type of error would occur:

- The function cannot find the environment variable TERM or it is unable to find the correct terminfo database entry for the terminal.
- There is not enough memory space available when initializing your terminal display.

Action: Set your environment variable TERM to a correct terminal type. If the problem persists, try to terminate other applications running on the system that may be using large amounts of memory. If the problem still occurs, contact IBM Support with the following information:

1. Message number
2. Problem description

DBI1522E

An attempt to restore the terminal capability information failed.

Cause: An error was detected when attempting to restore your terminal display to the original state.

Action: Set your environment variable TERM to a correct terminal type. If the problem persists, try to terminate other applications running on the system that may be using large amounts of memory. If the problem still

DBI1530E • DBI1632E

occurs, contact IBM Support with the following information:

1. Message number
2. Problem description

DBI1530E

Cannot unpack image file.

Cause: An error has occurred while unpacking the tar image from the distribution media. One of the following situations has occurred:

- The given path name is a non-existing directory.
- The file system does not have enough space.
- The access permission on the given path is incorrect.
- The tar command was not found in your current search path.

Action: Restart the install process and retry with a correct path name.

DBI1540E

An invalid distribution media path is specified.

Cause: An error was detected when attempting to locate the installable images on the distribution media. One of the following errors occurred:

- The file system associated with the given path is not properly mounted.
- An incorrect access permission has been assigned to the given path.

Action: Check the path and try the command again. Note that all file and directory names in Unix are case sensitive.

DBI1541E

An attempt to open or read from the given status file failed.

Cause: An error was detected when attempting to open or read from the status file. If the status file has not been modified manually, then one of the following errors occurred:

- An incorrect file path has been specified.
- An incorrect access permission has been assigned to the status file.

- The file system associated with the given path is not properly mounted.

Action: Check the path and try the command again. Note that all file and directory names in Unix are case sensitive. If the problem persists, contact IBM Support with the following information:

1. Message number
2. Problem description
3. Status file

DBI1550E

There is not enough disk space on the file system.

Cause: An error was encountered when trying to allocate more disk space on the file system.

Action: Retry the command after enough space has been freed up for the specified operation.

DBI1631E

An error was encountered while creating a sample database.

Cause: One of the following situations has occurred:

- There is not enough disk space on the file system.
- The DB2 product has not been installed properly, or some of the component files are missing.

Action: If this is not a disk space problem, try to re-install the product. If the problem persists, turn trace on and retry the steps to create a database through the CLP. Then, save the trace information to a file and contact IBM Support with the following information:

- Message number
- Problem description
- Trace file

DBI1632E

An error was encountered while configuring to "auto-start" instance.

Cause: One of the following situations has occurred:

- The feature to "auto-start" the instance is already enabled.
- An error was encountered while adding an entry to "/etc/inittab" file. This could be a file permission problem.

- There is not enough room on the /etc filesystem to accommodate a new resource file rc.db2.

Action: If any of the above three situations apply, then correct the problem and retry the command. If the problem persists, contact IBM Support with the following information:

- Message number
- Problem description

DBI1633E

An error was encountered while removing the configuration to “auto-start” instance.

Cause: One of the following situations has occurred:

- The feature to “auto-start” the instance is not enabled.
- An error was encountered while removing an entry to “/etc/inittab” file. This could be a file permission problem.
- The file “/etc/rc.db2” is missing.

Action: If any of the above three situations apply, then correct the problem and retry the command. If the problem persists, contact IBM Support with the following information:

- Message number
- Problem description

DBI1635E

An error was encountered while adding to the Administration Server group list.

Cause: An error was detected when attempting to add a DB2 instance to the Administration Server group list.

Action: If you are running this command on an NIS client, try to append the group name of the DB2 instance to the secondary group of the Administration Server on your NIS server.

DBI1651E

The specified UID is invalid.

Cause: An invalid UID has been entered. One of the following situations has occurred:

- The given UID is already assigned to an existing user on the system.
- The given UID either is too long or consists of invalid characters.

- The given UID less than or equal to 100.

Action: Retry with a different user ID.

DBI1652E

The specified user name is invalid.

Cause: An invalid user name has been entered. One of the following situations has occurred:

- The given user name already exists on the system.
- The given user name already exists on the system but under a different group name.
- The given user name either is too long or consists of invalid characters.

Action: Retry with a different user name.

DBI1653E

The specified group is invalid.

Cause: An invalid group ID or group name has been entered. One of the following situations has occurred:

- The given group ID already exists but under a different group name on the system, or the given group name already exists but under a different group ID.
- The given group ID or group name either is too long or consists of invalid characters.
- The given group ID is less than or equal to 100.

Action: Retry with a different group ID or group name.

DBI1655E

The specified password is invalid.

Cause: An invalid password has been entered. One of the following situations has occurred:

- The given password has a length of zero.
- The given password does not match with the verify password.
- The given password contains invalid characters.

Action: Retry with a different password.

DBI1657E • DBI1715E

DBI1657E

Instance name already in use.

Cause: An instance with the same name already exists on your system.

Action: Verify with the list of instances as reported by the “db2ilist” command. Retry with a different user name.

DBI1701E

One or more of the TCP/IP parameters specified is invalid.

Cause: One of the following situations has occurred:

- The length of service name exceeds 14 characters.
- The port number specified is out of range. This number must be between 1024 and 65535.

Action: Correct the problem and try again.

DBI1702E

The specified service name or port number conflicts with existing values in the TCP/IP services file.

Cause: The service name or port number entered by the user conflicts with existing values in the TCP/IP services file. The service name may already be used with a different port number, or the port number may already be used with a different service name.

Action: Specify a service name and port number that does not conflict with existing entries in the services file.

DBI1703E

No valid service name or port number found.

Cause: No valid service name or port number for this instance can be found in the TCP/IP services file. This information is either missing or is invalid.

If you installed “DB2 Extended Enterprise Edition” product, a service name must be specified for the instance before using this command.

Action: For more information, refer to the “DB2 Extended Enterprise Edition for AIX Quick Beginnings”.

Specify valid service name and port number for this instance and enter this command again.

DBI1709E

An error was encountered when updating the TCP/IP services file.

Cause: An attempt to add a service name and port number to the TCP/IP services file failed.

Action: If the user wishes to use the service name instead of the port number in the node directory entry, the node must be manually uncatalogued and then recatalogued using the service name. The services file must also be updated manually. If Network Information Services (NIS) is being used, the local services file may have been updated but the NIS server must be updated manually. In this case, the node was also catalogued using the port number.

DBI1711E

One or more of the IPX/SPX parameters specified is invalid.

Cause: One of the following situations has occurred:

- the fileserver, objectname, or ipx_socket parameter is null.
- the fileserver parameter is set to * but objectname is not *.
- the objectname or ipx_socket value specified is not unique.
- the ipx_socket value specified is not in the valid range.

Action: Correct the problem and try again.

DBI1715E

NetWare User ID or NetWare Password is invalid.

Cause: The NetWare User ID and NetWare Password that you specify must already exist and is used to register the DB2 Object Name at a NetWare file server and must have supervisory or equivalent authority.

Action: Correct the problem and try again.

DBI1750W

Security Risk.

Cause: Using the default instance user ID here allows this instance to have full access permission to other instances on your system. It is highly recommended to use a different user ID for security reasons.

Action:

- Press OK to continue, or
- Press Cancel to enter a different user ID.

DBI1751W

Protocol not detected.

Cause: You have selected a protocol that is not detected. DB2 Installer cannot update all of the protocol's required settings. However, you can provide values for this protocol's settings.

Action:

- Press OK to provide protocol settings, or
- Press Cancel to abort.

DBI1755W

The Administration Server is not created.

Cause: You have not created a Administration Server. Without the Administration Server, you cannot provide services to support client tools that automate the configuration of connections to DB2 databases, and cannot administer DB2 from your server system or a remote client using the Control Center.

Action:

- Press OK to continue, or
- Press Cancel to abort.

DBI1756W

DB2 Instance is not created.

Cause: You have not created a DB2 Instance. A DB2 Instance is an environment where you store data and run applications.

Action:

- Press OK to continue, or
- Press Cancel to abort.

DBI1758W

DB2 Instance or Administration Server detected.

Cause: You have selected to removed the entire DB2 product. However, a DB2 Instance or Administration Server has been detected on your system. If you remove the DB2 product without dropping these instances first, your DB2 Instances may not be able to function properly later on.

Action:

- Press OK to continue, or
- Press Cancel to abort.

DBI1759W

DB2 Instance or Administration Server configurations detected.

Cause: You do not have the Administration Server selected. This will cause all of your Administration Server and DB2 Instance configurations to be discarded.

Action:

- Press OK to continue, or
- Press Cancel to abort.

DBI1761W

Software pre-requisites violated on fileset or package "<pkg-name>".

Cause: An error occurred when verifying software pre-requisites on the above fileset or package. Continuing may result in the product not functioning properly. Do you want to continue without installing its pre-requisites?

Action:

- Press OK to continue without installing its pre-requisites, or
- Press Cancel to abort installation.

DBI1762W

Software dependencies violated on fileset or package "<pkg-name>".

Cause: An error occurred when verifying software dependencies on the above fileset or package. Continuing may result in removing all of its software dependencies. Do you want to remove its software dependencies?

Action:

DBI1900N • DBI1907N

- Press OK to continue, or
- Press Cancel to abort.

DBI1900N

The Windows NT Cluster support is not accessible.

Cause: DB2 is unable to access the Windows NT Cluster.

Action: Ensure the Windows NT Cluster support has been correctly installed and the Cluster Service has been started.

DBI1901N

An error occurred when attempting to update the user rights for the DB2/NT cluster service.

Cause: DB2 encountered an error when attempting to grant the necessary user rights to the account specified for use with the DB2 service.

Action: Ensure a valid account has been specified and that you have the necessary privilege to grant user rights.

DBI1902N

An error occurred when attempting to update the DB2/NT cluster service configuration.

Cause: DB2 encountered an error when attempting to update the DB2/NT cluster service configuration.

Action: Ensure the Service Database has not been locked and is accessible. Also ensure the DB2/NT Cluster Service has been created.

DBI1903N

An error occurred when attempting to update the Cluster registry.

Cause: DB2 encountered an error when attempting to update the Windows NT Cluster registry.

Action: Ensure the Windows NT Cluster support has been correctly installed and the Cluster Service has been started. Use the Registry Editor to verify that the DB2 Key in the Resource Parameters Key has not been deleted.

DBI1904N

The DB2 instance is not Clustered.

Cause: DB2 attempted to access an instance to perform cluster operations but the instance was not identified as a DB2 Cluster instance.

Action: Verify the instance was created with the Cluster options. The instance may be dropped and re-created using the Cluster option but the Node directory, Database Directory, and Database Manager Configuration file will be lost.

DBI1905N

A System Error occurred during a DB2 Cluster operation.

Cause: A system error was detected while DB2 was performing a Cluster operation.

Action: Check to make sure the Windows NT operating system is at the correct level for Cluster Support.

Also ensure the Windows NT Cluster support has been correctly installed and the Cluster Service has been started.

DBI1906N

A error occurred while attempting to add a node to a DB2 Cluster instance.

Cause: An error was encountered while attempting to update a node to support a DB2 Cluster instance.

Action: Ensure the remote system is on-line and accessible over the LAN. Also ensure you have the necessary privilege to update the Registry on the remote system.

DBI1907N

A error occurred while attempting to delete a node from a DB2 Cluster instance.

Cause: An error was encountered while attempting to delete a node from a DB2 Cluster instance.

Action: Ensure the remote system is on-line and accessible over the LAN. Also ensure you have the necessary privilege to update the Registry on the remote system.

A workstation cannot drop cluster support from itself. The instance must be dropped to perform this task.

DBI1908N

A error occurred while attempting create the instance profile on a remote system.

Cause: A error was detected while attempting to create the instance profile on a remote system to enable Cluster Support.

Action: Ensure the remote system is on-line and accessible over the LAN. Also ensure you have the necessary privilege to update the Registry on the remote system.

DBI1909N

A error occurred while attempting delete the instance profile on a remote system.

Cause: A error was detected while attempting to delete the instance profile on a remote system to disable Cluster Support.

Action: Ensure the remote system is on-line and accessible over the LAN. Also ensure you have the necessary privilege to update the Registry on the remote system.

DBI1910N

**Usage : DB2NCRN -I:<Instance Name>
-C:<cluster node>**

Cause: The user specified incorrect arguments to the DB2NCRN command.

Action: Re-issue the command specifying a clustered instance and a valid workstation name for the cluster node.

DBI1911N

Usage : DB2NLIST -I:<Instance Name>

Cause: The user specified incorrect arguments to the DB2NLIST command.

Action: Re-issue the command specifying a clustered instance.

DBI1912I

The DB2 Cluster command was successful.

Cause: The user request was successfully processed.

Action: No action required.

DBI1950W

The instance "<instance-name>" is already in the instance list.

Cause: The instance that is being created or migrated is already in the instance list.

Action: Verify that the list of instances as reported by the db2ilist command is correct.

DBI1951W

The instance "<instance-name>" was not found in the instance list.

Cause: The specified instance was not found in the instance list.

Action: Verify that the list of instances as reported by the db2ilist command is correct.

DBI1952E

The instance name "<instance-name>" is invalid.

Cause: The instance name is invalid. It cannot:

1. be more than 8 characters long.
2. start with "sql", "ibm" or "sys".
3. start with a numeral or contain characters other than a-z, \$, #, @, _, or 0-9.

Action: Try the command again with a valid instance name.

DBI1953E

The instance is active.

Cause: An attempt was made to drop an instance which is active.

Action: Make sure all applications that are using the instance have finished executing before stopping the instance by issuing a db2stop (from that instance's user ID.)

DBI1954E

The instance name is currently used by the DB2 Admin Server.

Cause: The instance cannot be created because it is currently used by the DB2 Admin Server.

Action: Try the command again with a different instance name.

DBI1955E • DBI1963N

DBI1955E

Usage: db2idrop [-h] [-f] InstName

Cause: An incorrect argument was entered for the db2idrop command. Valid arguments for this command are:

-h display the usage information
-f is the force applications flag.
 If this flag is specified then
 all applications using the
 instance will be forced to
 terminate.
InstName is the name of the instance

Action: Enter the command again as follows:

db2idrop [-h] [-f] InstName

DBI1956E

Usage: db2ilist

Cause: An incorrect argument was entered for the db2ilist command. The db2ilist command does not require any arguments.

Action: Enter the command again as follows:

db2ilist

DBI1957E

Incorrect number of arguments for the db2icrt command.

Cause: The db2icrt command accepts the argument InstName.

Action: Enter the command again as follows:

db2icrt InstName

DBI1958N

The instance profile cannot be added to the registry.

Cause: An error occurred when adding the instance profile to the registry. The instance was not created.

Action: Contact your IBM service representative.

DBI1959N

The instance directory cannot be created.

Cause: An error occurred when creating the required files or directories for the new instance. The instance was not created.

Action: Ensure that you have write access to the location where the instance directory is created. The instance directory is created under the path where the product is installed. You may use the DB2INSTPROF Profile Variable to specify a different location for the instance directory.

DBI1960N

The DB2 service cannot be created.

Cause: An error occurred when registering a DB2 service.

Action: Ensure you have sufficient authority to create an NT service and the Service Database is not locked, then retry the operation.

DBI1961N

The node key for the new instance cannot be added to the registry.

Cause: An error occurred when adding a node key for the new instance in the instance profile registry.

Action: Contact your IBM service representative.

DBI1962N

The new node can not be added to the registry.

Cause: An error occurred when adding the new node to the instance profile registry.

Action: Contact your IBM service representative.

DBI1963N

An error occurred when granting the user rights to the account for the instance.

Cause: When configuring the account for the DB2 Service, the account must be granted the user rights :

1. Act as part of the operating system
2. Create a token object
3. Increase quota
4. Logon as a service

5. Replace a process level token

An error occurred when granting the user rights to the account for the instance.

Action: If the machine belongs to an NT domain, ensure that the primary domain controller is active and accessible over the network. Otherwise, contact your IBM service representative.

DBI1964N

The logon account cannot be assigned to the DB2 service.

Cause: An error occurred when assigning a logon account to the DB2 service.

Action: Ensure user that the user name and the password for the logon account is valid.

DBI1965N

The node "<node-number>" was not found in the node list.

Cause: The specified node was not found in the node list.

Action: Verify that the node exists by displaying the list of nodes using the DB2NLIST command.

DBI1966N

The node cannot be deleted from the registry.

Cause: An error occurred when removing the specified node from the instance profile registry.

Action: Contact your IBM service representative.

DBI1967N

The DB2 service cannot be de-registered.

Cause: An error occurred when de-registering a DB2 service.

Action: Ensure that you have sufficient authority to delete an NT service.

DBI1968N

An error occurred when changing the node configuration in the profile registry.

Cause: An error occurred when changing the node configuration in the profile registry.

Action: Contact your IBM service representative.

DBI1969N

An error occurred when creating a new file in the instance directory.

Cause: An internal error occurred when creating a new file in the instance directory.

Action: Ensure that you have write access to the instance directory.

DBI1970N

An error occurred when reading from or writing to a file in the instance directory.

Cause: An internal error occurred when reading from or writing to a file in the instance directory.

Action: Contact your IBM service representative.

DBI1971N

The instance profile cannot be removed from the registry.

Cause: An error occurred when removing the instance profile from the registry.

Action: Contact your IBM service representative.

DBI1972N

The instance directory cannot be removed.

Cause: An error occurred when removing the required files or directories belonging to the specified instance.

Action: Ensure that you have write access to the location where the instance directory is located.

DBI1973N • DBI1980W

DBI1973N

An attempt to configure the DB2 service to start automatically failed.

Cause: An error occurred when setting the DB2 service to start automatically.

Action: Reboot the machine and try the command again. If the problem persists, contact your IBM service representative.

DBI1974N

The profile variable DB2ADMINSERVER cannot be set in the profile registry.

Cause: An error occurred when setting the profile variable DB2ADMINSERVER in the profile registry.

Action: Contact your IBM service representative.

DBI1975N

The environment variable DB2ADMINSERVER cannot be removed from the profile registry.

Cause: An error occurred when removing the environment variable DB2ADMINSERVER in the profile registry.

Action: Contact your IBM service representative.

DBI1980W

Unable to create user ID "<userID>" in UPM.

Cause: The user ID that you provided during product installation could not be created in User Profile Management (UPM). This user ID is required to start the DB2 Administration Server.

Action: Manually create a user ID and password using UPM and then manually start the DB2 Administration Server. You may need to set the DB2 Administration Server to use this user ID and password combination using the "db2admin" command.

Chapter 7. DB2 Messages

Each message has a message identifier that consists of a prefix (DB2) and a message number. Messages are listed in numeric sequence based on the message number. These messages are generated by the command line processor to alert you when a warning or error condition occurs. Messages are displayed directly on the screen interface. The command line processor returns DB2 and SQL messages.

For more information about SQL messages, see Chapter 9, "SQL Messages" in this guide.

DB20000I

The "<command>" command completed successfully.

Cause: The command identified in the message executed successfully.

Command line processor has successfully completed the command and is ready for the next command.

Action: Continue to the next command.

DB21001E

The option "<option-letter>" specified after the 'db2' command or in the DB2OPTIONS variable is incorrect.

Cause: The option specified is not supported. The supported options are:

Option	Description
-a	Display SQLCA
-c	Auto-commit
-e	Display SQLCODE/SQLSTATE
-f	Read from input file
-l	Log commands in history file
-o	Display output
-p	Display db2 interactive prompt
-r	Save output report to file
-s	Stop execution on command error
-t	Set statement termination character
-v	Echo current command

-w	Display FETCH/SELECT warning messages
-z	Save all output to file

The command cannot be processed.

Action: Resubmit the command with a valid option.

DB21002E

The parameter for option "<option-letter>" specified after the 'db2' command or in the DB2OPTIONS variable is missing or incorrect.

Cause: The following lists the options with parameters:

Option	Description
-ec	Display SQLCODE
-es	Display SQLSTATE
-f<filename>	Read from input file <filename>
-l<filename>	Log commands in history file <filename>
-r<filename>	Save output report to file <filename>
-td<x>	Set termination character to 'x'
-z<filename>	Save all output to file <filename>

Action: Resubmit the command with the valid option and parameter.

DB21003E

The value "<value>" in "<environment-variable>" is not valid.

Cause: The value for DB2BQTRY must be between 0 and 4294967295. The value for DB2BQTIME, DB2RQTIME or DB2IQTIME must be between 1 and 4294967295.

Action: Set the environment variable with the correct value and resubmit the command.

DB21004E

You cannot specify both an input file and a command when invoking the command line processor.

Cause: You cannot specify both the -f option and a command line command when invoking the command line processor.

Action: Correct the error and issue the command again.

DB21005E •DB21017E

DB21005E

An error occurred while accessing the file "<filename>".

Cause: The following could have caused the error:

- file permissions do not allow file access
- the file does not exist

Action: Correct the error and try again.

DB21006E

The input command is too long. The maximum length is "<length>".

Cause: The input command cannot exceed the length specified.

Action: Correct the error and resubmit the command.

DB21007E

End of file reached while reading the command.

Cause: The last command was not executed because end of file was reached. Terminate the last command with a ';' (or your defined termination character) if the -t option was used. Remove the '\ from the last line in the command if the +t option was used.

Action: Correct the error and resubmit the command.

DB21008E

Commands can only be entered from the command line processor interactive mode or file input mode.

Cause: The user attempted to enter a command line processor command from the DOS prompt.

Action: Use command line processor interactive mode or file input mode.

DB21010I

Help given for "<help-command-phrase>".

Cause: This message only appears in the history file specified with the -I option.

Action: No action required.

DB21011I

In a partitioned database server environment, only the table spaces on the current node are listed.

Cause: Only the table spaces on the current node are visible to the LIST TABLESPACES command.

Action: To list the table spaces on another node, you must issue the LIST TABLESPACES command on that node.

DB21015E

The command line processor back-end process request queue or input queue was not created within the timeout period.

Cause: Either the values for the DB2BQTRY and DB2BQTIME environment variables need to be increased or the command line processor back-end program "db2bp" cannot be started. The "db2bp" program must reside in the correct database manager install path and users must have execute permission on the file.

Action: Correct the error and resubmit the command.

DB21016E

The command line processor encountered a system error while sending the command to the back-end process.

Cause: One of the following could have happened:

- The backend process was abnormally terminated.
- A system error occurred when reading from or writing to the back-end process queues.
- A system error occurred when reading from the front-end process output queue.

Action: Resubmit the command. If the error occurs again, get help from your system administrator.

DB21017E

The command line processor encountered a system error with the front-end process output queue. Reason code = <reason code>.

Cause: A system error occurred while creating or reading from the front-end process output queue.

If the reason code is -2499, the command line processor output queue conflicts with an existing queue.

Action: Resubmit the command. If the error occurs again, record the message number and reason code, and get help from your system administrator.

DB21018E

A system error occurred. The command line processor could not continue processing.

Cause: One of the following caused the system error:

- Command line processor did not successfully install its interrupt signal handler.
- Command line processor did not successfully open the back-end process queues.
- Command line processor did not successfully start up the back-end process.
- The back-end process was abnormally terminated.
- The front-end process did not successfully allocate or free memory.
- Command line processor received one of the following program termination signals:
 - SIGILL
 - SIGTRAP
 - SIGEMT
 - SIGBUS
 - SIGSEGV
 - SIGSYS

Action: Retry the command. If the problem persists, record the DB2 message number. If the trace was active, save the trace information and contact your technical support with the following information:

- Problem description
- DB2 message number
- SQLCA if possible
- Trace file if possible

DB21019E

An error occurred while accessing the directory “<directory>”.

Cause: The following could have caused the error:

- directory permissions do not allow access
- the directory does not exist

Action: Correct the error and resubmit the command.

DB21020E

Unable to create the default message file “<file>”.

Cause: To properly process this command, CLP needs a file where the messages issued during processing are saved before they are displayed on the console. It attempted to create such a file in a directory normally used for that purpose (such as /tmp on UNIX platforms or ...TMP on OS/2), but the attempt failed because the directory does not exist.

Action: Correct the error and resubmit the command.

DB21021E

No Administration Server instance is defined. The command failed.

Cause: You issued a command that needs to use an Administration Server instance, but no such instance is defined.

Action: Define an Administration Server instance and resubmit the command.

DB21022E

Unable to switch to Administration Server instance “<instance-name>”.

Cause: You issued a command that needs to use an Administration Server instance. Command line processor tried to switch to Administration Server instance “<instance-name>” but failed. The possible reasons may be:

- The Administration Server instance is not set correctly.
- Command line processor was already attached to a DB2 instance.
- Command line processor was connected to a database.

Action: Check that a valid Administration Server instance is set up before using this command. Also, you may need to issue the DETACH, or CONNECT RESET, or TERMINATE command before trying your request again.

DB21023E •DB21030E

DB21023E

The command is not valid when executed from Administration Server.

Cause: You issued one of the following commands: GET DBM CONFIGURATION, RESET DBM CONFIGURATION, or UPDATE DBM CONFIGURATION, but these commands cannot be executed from Administration Server.

Action: Issue one of the following commands that are valid on Administration Server: GET ADMIN CONFIGURATION, RESET ADMIN CONFIGURATION, or UPDATE ADMIN CONFIGURATION.

DB21024I

This command is asynchronous and may not be effective immediately.

Cause: This message is displayed after a FORCE command with the ASYNC clause.

Action: No action required.

DB21025I

Client changes will not be effective until the next time the application is started. Server changes will not be effective until the next db2start command.

Cause: Changes to the database manager configuration parameters become effective only after they are loaded into memory. This typically occurs after a **db2start** on a server and after the application restarts on a client.

Action: If necessary, ensure that all applications disconnect from the database. If this is not a client change, issue DB2STOP and DB2START.

DB21026I

All applications must disconnect from this database before the changes become effective.

Cause: The database configuration command successfully processed but the active database configuration cannot be changed until all applications have disconnected from the database. After the applications disconnect from the database, the first connection to the database will cause the changes to become effective.

Action: Ensure that all applications disconnect from the database and issue a db2 connect to command. Also, you may want to rebind your packages after the new configuration parameters take effect so that the new values will be used during the bind.

DB21027E

Isolation level may not be changed while connected to a database.

Cause: The user attempted to change the isolation level while connected to a database. The command is ignored.

Action: If a change in isolation level is necessary, disconnect from the current database, then set the isolation level and re-connect to the database.

DB21028E

The cursor "<cursor-name>" has not been declared.

Cause: The specified cursor needs to be declared before issuing an OPEN, FETCH, or CLOSE SQL statement.

Action: Declare the cursor and resubmit the command.

DB21029E

The cursor "<cursor-name>" has already been declared and opened.

Cause: The user attempted to declare a cursor that is open.

Action: Close the cursor and resubmit the open command.

DB21030E

The cursor "<cursor-name>" has not been opened.

Cause: The specified cursor needs to be opened.

Action: Open the cursor and resubmit the command.

DB21031E

The SQL statement using the cursor “<cursor-name>” (“<internal-cursor>”) returned:

Cause: This message shows the internal cursor name for the user defined cursor. Some SQL error messages may show the internal cursor name. This message is displayed before the SQL message.

Action: Correct the SQL error and resubmit the command.

DB21032E

You have already declared the maximum number of cursors.

Cause: Command line processor supports 100 cursors declared with the WITH HOLD attribute and 100 cursors declared without the WITH HOLD attribute.

Action: Re-declare one of the existing cursors and resubmit the command.

DB21033E

The command is not valid for databases that reside on DRDA hosts.

Cause: The following commands are not supported for databases that reside on DRDA host servers:

- LIST TABLES
- LIST PACKAGES
- REORGCHK

Action: Do not issue the command for this database.

DB21034E

The command was processed as an SQL statement because it was not a valid Command Line Processor command. During SQL processing it returned:

Cause: This message is displayed before the SQL error message. The error may be caused by a syntax error in a non-SQL command.

Action: Correct the error and resubmit the command.

DB21035E

The maximum number of items in the “<list-name>” list has been exceeded. The maximum number is “<number>”.

Cause: The number of items in the list cannot exceed the maximum specified. This error may be caused by an invalid range specification.

Action: Correct the error and resubmit the command.

DB21036E

The “<command>” command failed.

Action: Retry the command with the trace active. If the problem persists, save the trace information and contact your technical support with the following information:

- Problem description
- DB2 message number
- Trace file

DB21037W

No data sources found.

Action: There were no ODBC data sources found of the type (USER or SYSTEM) that you specified. Retry the command by specifying the other type (SYSTEM or USER).

DB21040E

“<number>” is not a valid in-doubt transaction number.

Cause: “<number>” is not one of the listed in-doubt transaction numbers.

Action: Select one of the listed transaction numbers and resubmit the command.

DB21041W

<number> indoubt transaction(s) not shown.

Cause: Command line processor could not display all the in-doubt transactions. The number of transactions not displayed is “<number>”.

Action: Finish processing the current list of indoubt transactions in order to reduce the total number of indoubt transactions in the system. Next, reissue the list indoubt transactions command.

DB21042E •DB21053W

DB21042E

You must specify a transaction number.

Cause: A transaction number must be specified with the commit (c), rollback (r), or forget (f) in-doubt transaction subcommands.

Action: Reissue the command with the appropriate transaction number.

DB21043E

"<subcommand>" is not a valid request.

Cause: The in-doubt transaction subcommand specified is not valid. Valid subcommands are:

Subcommand	Description
c <number>	Heuristically commit the in-doubt transaction <number>.
r <number>	Heuristically rollback the in-doubt transaction <number>.
f <number>	Heuristically forget the in-doubt transaction <number>.
l <number>	List all in-doubt transactions or the in-doubt transaction <number>.
q	Exit LIST INDOUBT TRANSACTION prompting.

NOTE: The "f <number>" command is not available in DB2 Extended Enterprise Edition.

Action: Correct the error and resubmit the command.

DB21044E

Cannot COMMIT transaction number "<number>".

Cause: The transaction must be in a prepared state (i) when you issue the commit (c) subcommand.

Action: Issue another command.

DB21045E

Cannot ROLLBACK transaction number "<number>".

Cause: The transaction must be in a prepared (i) or idle (e) state. when you issue the rollback (r) subcommand.

Action: Issue another command.

DB21046E

Cannot FORGET transaction number "<number>".

Cause: The transaction must be in a heuristically committed (c) or heuristically rolled-back (r) state when you issue the forget (f) command.

Action: Issue another command.

DB21050E

"<state>" is not a valid SQLSTATE.

Cause: The sqlstate specified is not valid or could not be found. Valid states are numerical and two or five digits in length.

Action: Resubmit the command using a different state.

DB21051E

The command is not supported for this environment.

Cause: The command requested is currently not supported by the command line processor in the environment being used.

Action: Resubmit the command on a different platform or within a different environment.

DB21052I

"<command>" has been submitted for execution.

Cause: The command line processor is attempting to execute the indicated command. It will be unable to determine whether the command has completed successfully.

Action: If the command appears unsuccessful, submit it from outside the command line processor.

DB21053W

Automatic escalation will occur when you connect to a database that does not support <isolation-level>.

Cause: Isolation levels are database dependent. Some, like NC, are only supported by specific databases. If you select an isolation level that is not supported by the database you are connecting to, it will automatically escalate to a supported level.

Action: Connect to a database that supports the isolation level you have selected, or select a different isolation level.

DB21054E

The command line processor encountered a system error with the <command> command. Reason code = <reason code>.

Cause: The command line processor was unable to get enough memory to process your command. A system error occurred while processing it.

Reason

code	Description	Syntax
1	Data file	LOAD FROM file/pipe/dev ...
2	Lob data	LOBS FROM lob-path ...
3	Directory	USING directory ...
4	Source	FROM dir/dev ...
5	Target	TO dir/dev ...
6	Tablespace	TABLESPACE tblspace-name ...
7	Tblspace-def	MANAGED BY ...
8	Container data	USING (PATH ..., PATH ...) or USING ({FILE DEVICE} ..., {FILE DEVICE}...)
9	Log path	log-directory ..., log-directory ...
10	Node list	node-number ..., node-number ...

Action: Correct the error and resubmit the command.

DB21055W

Command not valid for type 2 connections.

Cause: The information returned by the GET CONNECTION STATE command does not apply to type 2 connections.

Action: Issue QUERY CLIENT to verify CONNECT = 1.

DB21056W

Directory changes may not be effective until the directory cache is refreshed.

Cause: If directory caching (DBM CFG dir_cache) is enabled, database, node, and DCS directory files are cached in memory. Directory changes may not become effective until the directory cache is refreshed. Refer to the dir_cache configuration parameter in the ADMIN guide for a description on directory caching.

Action: To refresh CLP's directory cache, issue a db2 TERMINATE. To refresh the directory information for another application, stop and restart that application. To refresh the directory information for the database, stop (db2stop) and restart (db2start) the database.

DB21057E

Invalid tape device specified.

Cause: The tape device passed to the operating system was not accepted. On Windows NT it must be of the form "\\.\TAPEx" where x represents the drive number (0 is the first).

Action: Reissue the command specifying a valid tape device.

DB21058E

Invalid tape position specified.

Cause: The tape mark position specified is not valid. On Windows NT the first tape position to which a backup is record is 1. Subsequent backup images begin at tape mark 2 and so on.

Action: Reissue the command specifying a valid tape position.

DB21059E

Invalid tape blocksize specified.

Cause: The tape mark blocksize specified is not in the range supported by the tape device. In addition, for backup/restore to work it must also be a factor of or multiple of 4096.

Action: Reissue the command specifying a valid tape size.

DB21060E

General tape failure.

Cause: An unexpected return code was returned from the tape operation.

Action: Resubmit the command. If the error occurs again, get help from your system administrator.

DB21061E •DB21083E

DB21061E

Command line environment not initialized.

Cause: You have tried to invoke the command line processor from a command window that was not started by db2cmd.exe.

Action: Issue DB2CMD to start a command window that has the command line processor environment initialized.

DB21080E

No previous RESTORE DATABASE command with REDIRECT option was issued for this database alias, or the information about that command is lost.

Cause: You have tried to run the RESTORE DATABASE command with the CONTINUE or ABORT option. However, either you didn't previously issue a RESTORE DATABASE command with the REDIRECT option, or you did issue such a command but for a different database alias than the one specified on the failing command. Another possible cause for this message could be that the information about a correctly issued previous RESTORE DATABASE ... REDIRECT command was lost. This can happen if the CLP back-end process terminates abnormally, or if you issue the TERMINATE command.

Action: Restart the whole redirected restore process by issuing the RESTORE DATABASE ... REDIRECT command and SET TABLESPACE CONTAINERS com-

mands again. Then issue the RESTORE DATABASE ... CONTINUE command.

DB21081E

No sections were found in the db2cli.ini file.

Cause: You have tried to list CLI parameters in the db2cli.ini file by using the GET CLI CONFIGURATION command, but the file is empty. There are no sections in that file.

Action: To update the db2cli.ini file, use the UPDATE CLI CONFIGURATION command.

DB21082E

You don't have enough authority to run the UPDATE CLI CONFIGURATION command.

Cause: You need to have SYSADM authority to run this command.

Action: Obtain the necessary authority from your database administrator, then issue the command again.

DB21083E

Section <section> not found.

Cause: Section <section> was not found in the db2cli.ini file.

Action: Specify an existing section and issue the command again.

Chapter 8. SPM Messages

SPM0400

Indoubt transaction resolution with DBALIAS="<dbalias>" shows heuristic damage - the database rolled back the UOW and the coordinator with LUNAME="<luname>" committed. The transaction is identified by LUWID="<luwid>".

Cause: DB2 was the DRDA2 AS for the transaction identified by "<luwid>". Resolution with the DB2 database shows heuristic damage occurred. The database identified by "<dbalias>" manually resolved the indoubt transaction. The DB2 database at "<luname>" rolled back the transaction. This is inconsistent with the commit decision of the DRDA2 coordinator at "<luname>".

- The application was told that the transaction was committed.
- Any resources updated at the participant were rolled back.

dbalias The alias name of the DB2 database.

luname The LU name of the coordinator.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Indoubt resolution with the participant completes.

Action: Call the database administrator.

Database Administrator Action: Inform the database administrators at both the COORDINATOR "<luname>" and at the DATABASE "<dbalias>" that heuristic damage occurred for the transaction with "<luwid>". DB2 was a DRDA2 AS for the transaction. The DRDA2 AR at COORDINATOR "<luname>" made the decision to COMMIT the database updates made by "<luwid>". The "<dbalias>" PARTICIPANT made a heuristic decision to ROLL BACK the updates made by "<luwid>".

SPM0401

Indoubt transaction resolution with DBALIAS="<dbalias>" shows heuristic damage - the database committed and the coordinator with LUNAME="<luname>" rolled back. The transaction is identified by LUWID="<luwid>".

Cause: DB2 was the DRDA2 AS for the transaction identified by "<luwid>". Resolution with the DB2 DATABASE shows heuristic damage occurred. The database identified by "<dbalias>" manually resolved the indoubt transaction. The "<dbalias>" committed the transaction. This is inconsistent with the roll back decision of the DRDA2 COORDINATOR at "<luname>".

- The application was told that the transaction was rolled back.
- Any resources updated at the participant were committed.

dbalias The alias name of the DB2 database.

luname The LU name of the coordinator.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Indoubt resolution with the participant completes.

Action: Call the database administrator.

SPM0402 • SPM0403

Database Administrator Action: Inform the database administrators at both the COORDINATOR "<luname>" and at the DATABASE "<dbalias>" that heuristic damage occurred for the transaction with "<luwid>". DB2 was a DRDA2 AS for the transaction. The DRDA2 AR at COORDINATOR "<luname>" made the decision to roll back the database updates made by "<luwid>". At the PARTICIPANT "<dbalias>" a heuristic decision was made to COMMIT the updates made by "<luwid>".

SPM0402

Indoubt transaction resolution with participant with LUNAME="<luname>" and DBALIAS="<dbalias>" shows heuristic damage - the participant committed and DB2 rolled back. The transaction is identified by LUWID="<luwid>".

Cause: DB2 has coordinator responsibility for the transaction identified by "<luwid>". Resolution with the participant shows heuristic damage occurred. The participant identified by "<luname>" and "<dbalias>" manually resolved the indoubt transaction. The action taken was to commit the transaction. This is inconsistent with the roll back decision of the coordinator.

- The application was told that the unit of work was rolled back.
- Any resources updated at the participant were committed.

dbalias The database alias of the participant.

luname The LU name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Indoubt resolution with the participant completes.

Action: Call the database administrator.

Database Administrator Action: Inform the local database administrator and the database administrator at "<luname>" that heuristic damage occurred for the transaction with "<luwid>". DB2 was the coordinator for the transaction and made the decision to roll back the database updates made by "<luwid>". At "<luname>" a heuristic decision was made to COMMIT the updates made by "<luwid>".

SPM0403

Indoubt transaction resolution with participant with LUNAME="<luname>" and DBALIAS="<dbalias>", shows heuristic damage - the participant rolled back and DB2 committed. The transaction is identified by LUWID="<luwid>".

Cause: DB2 has coordinator responsibility for the transaction identified by "<luwid>". Resolution with the participant shows heuristic damage occurred. The participant identified by "<luname>" and "<dbalias>" manually resolved the indoubt transaction. The action taken was to roll back the UOW. This is inconsistent with the commit decision of the coordinator.

- The application was told that the transaction committed.
- Any resources updated at the participant were rolled back.

luname The LU name of the participant.

dbalias The data base alias of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Indoubt resolution with the participant completes.

Action: Call the database administrator.

Database Administrator Action: Inform the local database administrator and the database administrator at "<luname>" that heuristic damage occurred for the transaction with "<luwid>". DB2 was the coordinator for the transaction and made the decision to COMMIT the database updates made by "<luwid>". At "<luname>" a heuristic decision was made to ROLL BACK the updates made by "<luwid>".

SPM0404

Protocol error during indoubt transaction resolution with coordinator with LUNAME="<luname1>" - the DB2 database with LUNAME="<luname2>" has an indoubt transaction which is identified by LUWID="<luwid>".

Cause: DB2 was the DRDA2 AS for the transaction identified by "<luwid>". The DB2 transaction associated at the database with LUNAME="<luname2>" is indoubt. A protocol error occurred during indoubt resolution with the coordinator identified by "<luname1>".

luname1 The LU name of the partner acting as the coordinator.

luname2 The LU name of the database where the transaction is indoubt.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

The indoubt transaction remains indoubt. A Resync Protocol Violation trace record is written.

Action: Call the database administrator.

Database Administrator Action: DB2 does not attempt to automatically resolve the indoubt transaction. The transaction must be manually resolved. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at this participant DB2.

Contact the database administrator at the coordinator with "<luname>" and "<dbalias>", to determine whether the transaction committed or aborted.

Use the LIST INDOUBT TRANSACTIONS command at this (the participant) dbalias to resolve the indoubt transaction.

SPM0405

A transaction with LUWID="<luwid>" at the DB2 database with LUNAME="<luname1>" is indoubt because of a communication failure with the coordinator with LUNAME="<luname2>".

Cause: During execution of the two phase commit protocol with the coordinator at "<luname2>", a communication failure occurred. Phase 1 of the protocol completed and the transaction at the database with "<luname1>" is indoubt.

The transaction is placed in the indoubt state and appears in the LIST DRDA INDOUBTS TRANSACTIONS report. Periodic attempts are made to reestablish communication with the coordinator for automatic resolution.

luname1 The LU name of the database where the transaction is indoubt.

luname2 The LU name of the coordinator.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the indoubt unit of work is printed following this message.

Periodic attempts will be made to automatically resolve the indoubt transaction.

SPM0406 •SPM0407

Action: Determine the cause of the communication failure and have the problem corrected. DB2 periodically attempts to establish communication for automatic resolution. If automatic resolution does not occur in a reasonable amount of time, call the database administrator. Manual resolution of the indoubt transaction might be necessary to release locked resources.

Database Administrator Action: If manual resolution is necessary:

- Determine the commit or abort decision made at the coordinator so that the same decision can be made at the DB2 database. Contact the database administrator at the coordinator with "<luname>" to determine whether the transaction committed or aborted.
- Use the LIST INDOUBTS TRANSACTION command at this (the participant) dbalias to resolve the indoubt transaction.

SPM0406

A transaction with LUWID="<luwid>" at the participant with LUNAME="<luname>" and DBALIAS="<dbalias>" may be indoubt because of a communication failure. DB2 committed.

Cause: During execution of the two phase commit protocol with the participant at "<luname>", a communication failure occurred. Phase 1 of the protocol completed and the transaction is prepared for either commit or abort. The decision to commit the transaction was made, but cannot be communicated to the participant at this time. The participant is indoubt.

DB2 becomes responsible for indoubt resolution with the participant. This responsibility appears in the LIST DRDA INDOUBTS TRANSACTION report. Periodic attempts are made to reestablish communication with the participant for automatic resolution.

luname The LU unit name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Periodic attempts will be made to automatically resolve the indoubt transaction at the participant.

Action: Determine the cause of the communication failure and have the problem corrected. DB2 periodically attempts to reestablish communication for automatic resolution. If automatic resolution does not occur in a reasonable amount of time, call the database administrator. Manual resolution of the transaction might be necessary at the participant to release locked resources.

Database Administrator Action: If manual resolution is necessary, inform the database administrator at the participant that the decision is commit.

SPM0407

Automatic resolution of the transaction with LUWID="<luwid>" with the coordinator at LUNAME="<luname>" resulted in commit. The DB2 Universal Database is = "<dbname>".

Cause: The indoubt transaction at the database identified by "<dbname>" was automatically resolved by communication with the coordinator identified by "<luname>". The transaction was committed.

luname1 The LU name of the coordinator.

luwid The SNA logical unit of work id of the transaction.

luname2 The LU name of the database where the changes were made.

The XID associated with the unit of work is printed following this message.

Processing continues normally.

SPM0408

A communication failure occurred during automatic resolution with LUNAME=<luname>. Communication protocol being used=<protocol>. Communication API being used=<api>. Communication function detecting the error=<function>. Protocol specific error codes=<rc1>,<rc2>,<rc3>.

Cause: One or more indoubt transactions exist with "<luname>". DB2 attempted to automatically resolve the indoubt transaction but a communication error occurred.

protocol The communication protocol being used. Only "APPC" is supported.

api The communication api being used. Either "CM2 APPC" or "SNA/6000 OS Subroutines" may be specified.

codes For "CM2 APPC" api, the rc1, rc2, and rc3 contain the primary return code, secondary return code and possibly an SNA sense code. For "SNA/6000 OS Subroutines" api, rc1 contains the errno global variable.

Action: Determine the cause of the communication failure and have the problem corrected. DB2 periodically attempts to reestablish communication for automatic resolution. If automatic resolution does not occur in a reasonable amount of time, call the database administrator. Manual resolution of the transaction might be necessary at the participant to release locked resources.

Database Administrator Action: If manual resolution is necessary, inform the database administrator at the participant that the decision is commit.

SPM0409

A transaction with LUWID=<luwid> cannot be resolved due to cold start with LUNAME=<luname>. DB2 transaction status=<status>. DB2 responsibility=<responsibility>.

Cause: An indoubt transaction exists with the partner at "<luname>". DB2 is unable to resolve the indoubt transaction because the partner has lost all knowledge of indoubt transactions due to a previous cold start.

luwid The SNA logical unit of work id of the transaction.

status The commit status of the transaction as known by DB2. The commit status may be indoubt, committed, or rolled back.

responsibility DB2 transaction responsibility. DB2 may be the coordinator or may be the participant.

Action: There is probably inconsistent data at the coordinator and participant. Inform database administrator of the status of the transaction.

Database Administrator Action: Manual resolution is necessary. The heuristic decision (that is, to commit or roll back the transaction) should be coordinated with any other participants and/or the coordinator. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start.

The commit or abort decision provided using the LIST INDOUBT TRANSACTIONS command for the transaction are propagated to all downstream participants, if any.

SPM0410 •SPM0410

SPM0410

Warm start connection by partner with LUNAME="`<luname>`" rejected. Partner changed at least 1 of - our log name "`<oldourname>`" "`<(newourname)>`", their log name "`<oldtheirname>`" "`<(newtheirname)>`", syncpoint protocol "`<oldpa(newpa)>`", flag byte sent "`<oldfb(newfb)>`", cclluname sent "`<oldccls(newccls)>`", and indoubt transactions require resolution.

Cause: An attempt to make a warm start connection with a partner was rejected because the partner specified a different set of sync point parameters than the ones that were in use when communications were lost. DB2 has knowledge of indoubt transactions that involve the partner as either the coordinator or a participant. This error might be a recoverable error if the partner can restart with the original sync point parameters. If this is not possible, then the partner must perform a cold start connection with DB2.

luname The LU name of the partner.

oldourname The log name for this DB2 subsystem. This value is null if the partner did not initiate the log name exchange.

newourname The log name for this DB2 subsystem, as remembered by our partner and sent to us in the attempted warm start connection. This value is null if the partner did not initiate the log name exchange.

oldtheirname The log name used by the partner during the last connection, as remembered by DB2.

newtheirname The log name used by the partner in the attempted warm start connection.

oldpa The sync point protocol used during the last connection, as remembered by the DB2 (PA - Presumed Abort, PN - Presumed Nothing).

newpa The sync point protocol used during the last connection, as remembered by the partner (PA - Presumed Abort, PN - Presumed Nothing).

oldfb The use of the PS header byte 2 during the last connection, as remembered by DB2 (F - used as flag byte, N - not used as flag byte).

newfb The use of the PS header byte 2 during the last connection, as remembered by the partner (F - used as flag byte, N - not used as flag byte).

oldccls Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by DB2. (E - was exchanged, N - was not exchanged).

newccls Whether the luname of the conversation correlator was exchanged as part of the sync point protocol during the last connection, as remembered by the partner (E - was exchanged, N - was not exchanged).

The connection with the partner is rejected. DB2 retains indoubt knowledge.

Action: Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner "`<luname>`" and determine if it is possible for the partner to perform a warm start with same sync point parameters as ours ('oldourname', 'oldtheirname', 'oldpa', 'oldfb', 'oldccls'). If this is possible, the next attempt to connect will succeed.

If this cannot be done, then there are two other possible solutions:

- Have the partner "`<luname>`" perform a cold start connection with this DB2 subsystem.
- Force the next connection with the partner to be a cold start connection.

SPM0411

Cold start connection by coordinator with LUNAME="<luname>" accepted. Indoubt transactions need manual resolution.

Cause: DB2 was the DRDA2 AS and has participant responsibility for indoubt transactions. The coordinator informed DB2 that it performed a cold start operation and lost all knowledge of indoubt transactions. The indoubt transactions at this DB2 must be manually resolved with the LIST INDOUBT TRANSACTIONS command.

dbalias The database alias name of the coordinator.

The connection with the partner is accepted. A trace record is written.

Action: Call the database administrator.

Database Administrator Action: DB2 is a participant with one or more indoubt transactions where the coordinator is "<luname>". The DBMS at "<luname>" performed a cold start. The DB2 participant assumes that the coordinator recovery log was lost or damaged and indoubt transaction resolution cannot be achieved. There is probably inconsistent data at the coordinator.

The heuristic decision (that is, to commit or abort the transaction should be coordinated with any other participants. The existence of other participants might not be easy to determine. The information might be available in the coordinators recovery log even though the coordinator performed a cold start.

The commit or abort decision provided using the LIST INDOUBT TRANSACTIONS command for the transaction are propagated to all downstream participants, if any.

SPM0412

Protocol error detected in syncpoint communications with coordinator with LUNAME="<luname1>". The transaction with LUWID="<luwid>" at the DB2 database with LUNAME="<luname2>" may be indoubt.

Cause: DB2 is a participant in the transaction. A protocol error occurred during the SNA sync point exchange with the coordinator identified by "<luname>". The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the coordinator, indicating that the coordinator detected a protocol violation in the PS headers transmitted by DB2.

luname1 The LU name of the coordinator.

luname2 The LU name of the database where the transaction is indoubt.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

If the protocol error was detected before the commit decision, the transaction at the database with LU name="<luname2>" may be indoubt. DB2 does not automatically resolve such an indoubt transaction because of the protocol error.

If the protocol error was detected after the commit decision, the transaction either completed commit or abort processing.

A Syncpoint Protocol Violation trace is written.

SPM0413 •SPM0414

Action: The database administrator might need to manually resolve the indoubt transaction.

Database Administrator Action: Determine if the transaction is indoubt. If it is indoubt, it must be manually resolved using the LIST INDOUBT TRANSACTIONS command. The commit or abort decision made at the coordinator must be determined so that the same decision can be made at DB2.

Contact the database administrator at the coordinator dbalias to determine whether the transaction with LUWID="<luwid>" committed or aborted.

If the coordinator system is another DB2, then the following steps can be taken at the DB2 coordinator to determine the commit or abort decision.

SPM0413

Protocol error detected in syncpoint communications with participant with LUNAME="<luname>" and DBALIAS="<dbalias>". The transaction with LUWID="<luwid>" may be indoubt at the participant. DB2 committed.

Cause: DB2 is the coordinator of the transaction. A protocol error occurred during the SNA sync point exchange with the participant identified by "<luname>" and "<dbalias>". The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the participant, indicating that the participant detected a protocol violation in the PS headers transmitted by DB2.

luname The LU name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

If application was told that the transaction committed.

There may be an indoubt transaction at the participant and if so, the indoubt transaction must be manually resolved. DB2 does not automatically resolve the indoubt transaction because of the protocol error.

A Syncpoint Protocol Violation trace record is written.

Action: Call the database administrator. The participant might need to manually resolve the indoubt transaction.

SPM0414

Protocol error during indoubt transaction resolution with participant with LUNAME="<luname>" and DBALIAS="<dbalias>". The transaction with LUWID="<luwid>" may be indoubt at the participant. DB2 rolled back.

Cause: DB2 has coordinator responsibility for the transaction which was rolled back. A protocol error occurred during indoubt resolution with the participant identified by "<luname>" and "<dbalias>".

The transaction at the participant remains indoubt. DB2 will not attempt to automatically resolve the indoubt transaction because of the protocol violation.

luname The LU name of the participant.
 dbalias The database alias name of the participant.
 luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

A Resync Protocol Violation trace record is written.

Action: Call the database administrator. The participant might need to manually resolve the indoubt transaction.

Database Administrator Action: If the transaction is indoubt at the participant, it must be manually (heuristically) resolved.

SPM0415

Automatic resolution of the transaction with LUWID="<luwid>" with the coordinator at LUNAME="<luname>" resulted in roll back. The DB2 Universal Database is = "<dbname>".

Cause: The indoubt transaction at the database identified by "<dbname>" was automatically resolved by communication with the coordinator identified by "<luname>". The transaction was rolled back.

luname1 The LU name of the coordinator.
 luwid The SNA logical unit of work id of the transaction.
 luname2 The LU name of the database where the changes were made.

The XID associated with the unit of work is printed following this message.

Processing continues normally.

SPM0416

Cold start connection rejected by partner with LUNAME "<luname>".

Cause: DB2 attempted to make a cold-start connection with a partner dbalias. The partner rejected this attempted connection.

luname The LU name of the coordinator.

The connection was not made.

Action: Call the database administrator.

Database Administrator Action: DB2 is not able to connect the partner "<luname>" until the partner "<luname>" allows a cold-start connection with DB2. Contact the database administrator at the partner "<luname>".

Contact your IBM Support Center for further assistance.

SPM0417 •SPM0420

SPM0417

Protocol error detected in syncpoint communications with participant with LUNAME="<luname>" and DBALIAS="<dbalias>". The transaction with LUWID="<luwid>" may be indoubt at the participant. DB2 rolled back.

Cause: DB2 is the coordinator of the transaction. A protocol error occurred during the SNA sync point exchange with the participant identified by "<luname>" and "<dbalias>". The protocol error fits into one of the following categories:

- An unknown SNA PS header was received.
- An SNA PS header was received in the wrong sequence.
- An invalid LU6.2 verb sequence was used to deliver the SNA PS header.
- A DEALLOCATE TYPE(ABEND_SVC) was received from the participant, indicating that the participant detected a protocol violation in the PS headers transmitted by DB2.

luname The LU name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

If application was told that the transaction rolled back.

There may be an indoubt transaction at the participant and if so, the indoubt transaction must be manually resolved. DB2 does not automatically resolve the indoubt transaction because of the protocol error.

A Syncpoint Protocol Violation trace record is written.

Action: Call the database administrator. The participant might need to manually resolve the indoubt transaction.

SPM0420

Cold start connection by participant LUNAME="<luname>" accepted. Possible damage.

Cause: DB2 has coordinator responsibility for indoubt transactions at a participant and just connected with the participant, which lost all knowledge of indoubt transactions because of a previous cold start. There might be damage at the participant.

luname The LU name of the participant where there might be damage.

The connection with the partner is accepted.

Action: Call the database administrator.

Database Administrator Action: DB2 is the coordinator with indoubt transaction resolution responsibility for one or more indoubt units of work at "<luname>". The DBMS at "<luname>" performed a cold start. DB2 assumes that the participant recovery log was lost or damaged and indoubt transaction resolution cannot be achieved. There is probably inconsistent data at the participant. Minimally, the participant might not completely reflect the final outcome of the transactions that were indoubt at the time the failure occurred.

SPM0421**SNA XLN protocol violation by partner with LUNAME="<luname>"**

Cause: DB2 detected a protocol violation in the SNA Exchange Log Names (XLN) exchange with the partner at the specified "<luname>".

luname The LU name of the partner that sent the invalid XLN message.

The attempt to connect with the remote site fails. An XLN Protocol Violation trace record is written.

Action: Contact the system programmer for the remote site. The invalid XLN message is recorded in the trace record. The system logic error that causes the invalid XLN message must be corrected at the remote site.

SPM0422**Warm start connection by partner LUNAME="<luname>" rejected because the partner remembers our log name incorrectly. Our log name is "<name1>" and the partner remembers is as "<name2>"**

Cause: An attempt to make a warm start connection with a partner was rejected because the partner specified our log name as name2. Our log name is name1, which is the luname of the local DB2. This error might be a recoverable error if the partner can restart with our log name as name1. If this is not possible, then the partner must perform a cold start connection with DB2.

luname The LU name of the partner with which the connection failed.

name1 Our log name, as remembered by us.

name2 Our log name, as remembered by our partner and sent to us in the attempted warm start connection.

The connection with the partner is rejected.

Action: Call the database administrator.

Database Administrator Action: Contact the database administrator at the partner "<luname>" and determine if it is possible for the partner to perform a warm start with our log name specified as the luname of this DB2. If this is possible, the next attempt to connect will succeed. Or have the partner "<luname>" perform a cold start connection with DB2.

SPM0423**Automatic resolution of the transaction with LUWID="<luwid>" with the partner at LUNAME="<luname>" and DBALIAS="<dbalias>" resulted in commit.**

Cause: The indoubt unit of work was automatically resolved by communication with the participant. The participant has been notified of the commit decision.

luname The LU name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Processing continues normally.

SPM0424

Automatic resolution of the transaction with LUWID="<luwid>" with the participant at LUNAME="<luname>" and DBALIAS="<dbalias>" resulted in roll back.

Cause: The indoubt unit of work was automatically resolved by communication with the participant. The participant has been notified of the roll back decision.

luname The LU name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Processing continues normally.

SPM0425

A transaction with LUWID="<luwid>" at the participant with LUNAME="<luname>" and DBALIAS="<dbalias>" may be indoubt because of a communication failure. DB2 rolled back.

Cause: During execution of the two phase commit protocol with the participant at "<luname>", a communication failure occurred. Phase 1 of the protocol completed and the transaction is prepared for either commit or abort. The decision to roll back the transaction was made, but cannot be communicated to the participant at this time. The participant is indoubt.

DB2 becomes responsible for indoubt resolution with the participant. This responsibility appears in the LIST DRDA INDOUBTS TRANSACTION report. Periodic attempts are made to reestablish communication with the participant for automatic resolution.

luname The LU unit name of the participant.

dbalias The database alias name of the participant.

luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

Periodic attempts will be made to automatically resolve the indoubt transaction at the participant.

Action: Determine the cause of the communication failure and have the problem corrected. DB2 periodically attempts to reestablish communication for automatic resolution. If automatic resolution does not occur in a reasonable amount of time, call the database administrator. Manual resolution of the transaction might be necessary at the participant to release locked resources.

Database Administrator Action: If manual resolution is necessary, inform the database administrator at the participant that the decision is roll back.

SPM0426

Protocol error detected during indoubt transaction resolution with participant at LUNAME="<luname>" and DBALIAS="<dbalias>". The transaction with LUWID="<luwid>" may be indoubt at the participant. DB2 committed.

Cause: DB2 has coordinator responsibility for the transaction which was committed. A protocol error occurred during indoubt resolution with the participant identified by "<luname>" and "<dbalias>".

The transaction at the participant remains indoubt. DB2 will not attempt to automatically resolve the indoubt transaction because of the protocol violation.

luname The LU name of the participant.
 dbalias The database alias name of the participant.
 luwid The SNA logical unit of work id of the transaction.

The XID associated with the unit of work is printed following this message.

A Resync Protocol Violation trace record is written.

Action: Call the database administrator. The participant might need to manually resolve the indoubt transaction.

Database Administrator Action: If the transaction is indoubt at the participant, it must be manually (heuristically) resolved.

SPM0434

DB2 syncpoint manager not available - incorrect communications level.

Cause: The local communications release level is older than the minimum release level or the communication manager is incorrectly configured to support APPC SYNCLEVEL(SYNC) conversations.

The attempt to create a protected conversation fails.

Action: Install and configure the correct communications level required to support SYNCLEVEL(SYNC) conversations.

SPM0438

DB2 Syncpoint Manager recovery log is bad.

Cause: The DB2 Syncpoint Manager recovery log is inconsistent and cannot be used to perform recovery during DB2 start up processing.

Action: Indoubt transactions may exist at DRDA2 application servers. These indoubt transactions must be recovered manually.

Call the database administrator.

Database Administrator Action: To start the Syncpoint Manager, erase the spmlog directory and start DB2. This will cause DB2 to create new syncpoint log files and to establish cold start connections with all DRDA2 application servers.

SPM0439

DB2 Syncpoint Manager unrecoverable error while attempting to write to the SPM recovery log.

Cause: The DB2 Syncpoint Manager log is inconsistent and cannot be used. An unrecoverable error has been detected while attempting to write to the SPM log during DB2 processing.

Action: The DB2 Syncpoint Manager will not allow any new synclevel(twophase) connections. Issue the LIST DRDA INDOUBT TRANSACTIONS command to determine the status of any indoubt transactions.

Call the database administrator.

Database Administrator Action: To start the Syncpoint Manager, erase the spmlog directory and start DB2. This will cause DB2 to create new syncpoint log files and to establish cold start connections with all DRDA2 application servers.

SPM0440E

Error encountered while trying to start "<protocol>" protocol support. Return code from "<function>" was "<rc>". The most probable cause for this error is that SNA has not been started. Please stop DB2, start SNA, and restart DB2.

SPM0441

DB2 syncpoint manager not available for the SPM LU. Ensure your the SNA product level is sufficient for syncpoint support and/or ensure the Recovery Resource Manager has been enabled. See the Messages Reference for additional details or enter db2 "? SPM0441" from a command prompt. The SPM LU is "<lu-name>" and the LU profile is "<lu-profile>".

Cause: The syncpoint support could not be enabled by DB2. The most likely causes of this are:

1. The AIX SNA communications level is invalid. For syncpoint support AIX SNA V2 or greater is required.
2. For AIX SNA V2, the Recovery Resource Manager (RRM) is not enabled. This parameter can be found in SNA System Defaults. Enable this this parameter, verify the SNA profile, then stop and restart both AIX SNA and DB2.
3. For AIX SNA V3, the Recovery Resource Manager (RRM) is not enabled for the SPM LU "<lu-name>". This parameter can be found in the LU definition for LU "<lu-name>". Enable this parameter, verify the SNA profile, then stop and restart both AIX SNA and DB2.

Action: Determine the reason based on the provided possibilites. Correct and retry.

SPM0442

DB2 syncpoint manager not available. The most probable cause for the failure is that there does not exist a CPIC Side information profile with the name "<name>". Update AIX SNA with the correct CPIC Side Info profile name reverify the SNA profile, stop and restart both SNA and DB2.

Cause: The DB2 Syncpoint Manager requires a CPIC Side Information Profile of the name provided in order to initialise. This profile cannot be found or contains incorrect information.

Action: Please correct the profile, verify the SNA profile, stop and restart both DB2 and SNA. Please see the DB2 Connect Quick Beginnings for information on how to configure for SPM support.

SPM0443

DB2 syncpoint manager not available. The most probable cause for the failure is that the instance which is starting the SPM does not belong to one of the Trusted Group Names for AIX SNA. This parameter can be found in SNA System Defaults. Add the the instance to one of the defined groups or add a new group to the Trusted Group Names, then stop and restart SNA. Stop DB2, logoff the instance id then log back on to the instance id. Restart DB2. If this does not work please apply the latest available PTF for AIX SNA and retry the above instructions.

Cause: In order for the DB2 Syncpoint Manager to initialise itself the instance in which DB2 is started needs certain authorities in order to interact with the SNA support. AIX SNA requires that the Trusted Group Names be updated to include any userids which will be issuing these commands.

Action: Update trusted group name as described, stop and restart AIX SNA. Logoff of the AIX Term, log back on and retart DB2.

SPM0444

DB2 syncpoint manager not available. The most probable cause for the failure is that there does not exist a Transaction Program profile with the name "<name>". Update AIX SNA with the correct Transaction Program profile, reverify the SNA profile, stop and restart both SNA and DB2.

Cause: The DB2 Syncpoint Manager requires a Transaction Program Profile of the name provided in order to initialise. This profile cannot be found or contains incorrect information.

Action: Please correct the profile, verify the SNA profile, stop and restart both DB2 and SNA. Please see the DB2 Connect Quick Beginnings for information on how to configure for SPM support.

SPM0445

The Transaction Program "<tp-name>" will not be listened for by DB2. This is not a severe error but if you require this Transaction Program then you must ensure it is NOT defined in the Transaction Profile of the AIX SNA configuration.

Cause: When the DB2 Syncpoint Manager initialises itself it registers Transaction Programs for which it will listen. In order for the SPM to listen for the named TP, it is necessary that no other Transaction Program Profile have this TP defined else there will be a conflict between the DB2 SPM and AIX SNA. If such a conflict exists then AIX SNA will listen and the SPM will not.

Action: If you require the DB2 SPM to listen for the named TP then you must ensure that no other TP Profile references this transaction program. The SPM has started successfully regardless of this error.

SPM0446E

The Transaction Program "<tp-name>" will not be listened for by DB2. This is severe error. The DB2 SPM has failed to start. Most probable cause is that the Encina Peer to Peer Gateway exists on this same machine and the Transaction Program named is defined in a AIX SNA Transaction Profile.

Cause: The DB2 SPM tried to register this TP but could not.

Action: Remove the TP Profile from AIX SNA. Stop and restart both DB2 and AIX SNA.

SPM0447E

Error encountered while trying to start "<protocol>" protocol support. Return code from "<function>" was "<rc>". The most probable cause for this error is that the LU "<lu-name>" is already in use for syncpoint management. Ensure the Encina Peer to Peer Gateway or another DB2 SPM is not using this LU.

Cause: An LU can be registered with AIX SNA as supporting syncpoint by at most one application. In this case, the requested SPM LU is already registered. The most likely cause is that the Encina Peer to Peer Gateway is using this LU as an SPM or another DB2 instance is using this as an SPM.

Action: Change the spm_name in the database manager configuration such that a unique LU is used. Stop and restart DB2.

Chapter 9. SQL Messages

Each message has a message identifier that consists of a prefix (SQL) and a message number. Messages are listed in numeric sequence based upon the message number. There are three message types: notification, warning, and critical. Message identifiers ending with an *N* are error messages. Those ending with a *W* indicate warning or informational messages. Message identifiers ending with a *C* indicate critical system errors.

The message number is also referred to as the *SQLCODE*. The *SQLCODE* is passed to the application as a positive or negative number, depending on its message type (N, W, or C). N and C yield negative values whereas W yields a positive value. DB2 returns the *SQLCODE* to the application and the application can get the message associated with the *SQLCODE*. DB2 also returns an *SQLSTATE* value for conditions that could be the result of an SQL statement. *SQLSTATE* values are listed in Chapter 10, "SQLSTATE Messages." Some *SQLCODE* values have associated *SQLSTATE* values. *SQLSTATES* associated with a given *SQLCODE* (if applicable) have been documented with each message in this chapter.

Variable parameters for SQL messages are shown as descriptive names.

SQL0000 - SQL0099

SQL0000W

Statement processing was successful.

Cause: The SQL statement executed successfully, unless a warning condition occurred.

Action: Check *SQLWARN0* to ensure that it is blank. If it is blank, the statement executed successfully. If it is not blank, a warning condition exists. Check the other warning indicators to determine the particular warning condition. For example, if *SQLWARN1* is not blank, a string was truncated.

Refer to the *API Reference*.

sqlcode: 0

sqlstate: 00000, 01003, 01004, 01503, 01504, 01506, 1509, 01517

SQL0001N

Binding or precompilation did not complete successfully.

Cause: For reasons specified in the previous messages, the bind or precompile request was unsuccessful.

No package is created.

Action: Refer to the messages in the message file. Resubmit the command.

If installing the sample database, drop it and install the sample database again.

SQL0002N

The bind file name is not valid.

Cause: For reasons specified in the previous messages, the bind file name cannot be used as specified.

No package is created.

Action: Refer to the messages in the message file. Resubmit the command.

If installing the sample database, drop it and install the sample database again.

SQL0003N

The database name is not valid.

Cause: For reasons specified in the previous messages, the database name cannot be used as specified.

No package is created.

Action: Refer to the messages in the message file. Resubmit the command.

SQL0004N •SQL0011N

SQL0004N

The password is not valid.

Cause: The password contains characters that are not valid or the password is too long.

No package is created.

Action: Resubmit the command with a valid password.

SQL0005N

The message file name is not valid.

Cause: For reasons specified in the previous messages, the message file name cannot be used as specified.

No package is created.

Action: Refer to the messages in the message file. Check the name of the message file. Check the attributes of the message file if it exists. Resubmit the command.

SQL0006N

The datetime format parameter is not valid.

Cause: The value of the datetime format parameter is not in the valid range of 0 through 3.

No package is created.

Action: Resubmit the command with a valid format parameter.

SQL0007N

The character "<character>" following "<text>" is not valid.

Cause: The specified "<character>" is not a valid character in SQL statements. The "<text>" field indicates the 20 characters of the SQL statement that preceded the character that is not valid.

DataJoiner users: some DataJoiner data sources do not provide the appropriate values for the "<character>" and "<text>" message tokens. In these cases, "<character>" and "<text>" will have the following format: "<data source>:UNKNOWN", indicating that the actual values for the specified data source are unknown.

The statement cannot be processed.

Action: Remove or replace the character that is not valid.

sqlcode: -7

sqlstate: 42601

SQL0008N

The token "<token>" found in a host variable declaration is not valid.

Cause: A host variable declaration has invalid syntax. The precompiler cannot identify the host variable.

The statement cannot be processed. None of the host variables declared in the statement (up to the semicolon) are accepted.

Action: Examine the syntax of the host variable declaration.

SQL0009W

An attempt to override a precompiler option was ignored.

Cause: An attempt was made to override a precompiler option.

The option is ignored.

Action: Ensure that all precompiler options are specified correctly.

SQL0010N

The string constant beginning with "<string>" does not have an ending string delimiter.

Cause: The statement contains a string constant, beginning with "<string>", that is not terminated properly.

The statement cannot be processed.

Action: Examine the statement for missing apostrophes in the indicated string constant.

sqlcode: -10

sqlstate: 42603

SQL0011N

The comment is not terminated.

Cause: The comment is not terminated properly.

The statement cannot be processed.

Action: Examine the statement for a missing or extra comment delimiter in the indicated comment.

SQL0012W

Correlation without qualification has occurred for the column "<column>".

Cause: The named column occurs in a SELECT statement, is not explicitly qualified, and occurs in a table specified in the FROM clause of an outer select. Consequently, the reference to the column in the SELECT statement has been taken to be an outer reference and correlation will occur.

The statement was processed under the assumption that correlation was intended.

Action: Ensure that correlation was intended. It is a good practice to explicitly qualify intended outer references.

sqlcode: +12

sqlstate: 01545

SQL0013N

An empty delimited identifier is not valid.

Cause: During precompilation, either a cursor name, statement name, database name, or authorization ID, specified as an empty string, was found. This is not valid. The statement cannot be processed.

Action: Provide a valid cursor name, statement name, database name, or authorization ID.

SQL0014N

The source file name is not valid.

Cause: The source file name specified in the call to the precompiler contains invalid characters or the pointer to the source file name is invalid.

No package was created.

Action: Ensure that the source file name is correct.

SQL0015N

The host variable data type "<token_1>" is not valid. Use "<token_2>" instead.

Cause: If the WCHARTYPE CONVERT precompile option is in effect then the graphic host variable must be declared with the data type 'wchar_t', not 'sqlbchar'.

If the WCHARTYPE NOCONVERT precompile option is in effect (the default) and 'wchar_t' is defined as a 4-byte integer on this platform, then the graphic host variable

must be declared with the data type 'sqlbchar', not 'wchar_t'.

Action: Replace the current data type of the host variable with the data type specified in the message.

SQL0020W

Bind or precompile option(s) "<option-name(s)/option-number(s)>" are not supported by the target database and will be ignored.

Cause: One or more options that were specified at precompile/bind time are not supported by the target DBMS. The unsupported options will be ignored. The most probable cause is that an option which is only supported while connected to a DRDA application server has been specified while connected to a non-DRDA server.

Enter "db2 ? bind" or "db2 ? prep" for a list of which options are supported only by a DRDA application server.

Possible option numbers and their corresponding option names include:

- 1 DATETIME
- 2 LANGLEVEL
- 4 ISOLATION
- 5 BLOCKING
- 6 GRANT
- 8 SQLFLAG
- 16 CONNECT
- 17 SQLRULES
- 18 DISCONNECT
- 19 SYNCPOINT
- 20 ISOLATION
- 21 BINDFILE
- 22 SQLCA
- 23 PACKAGE
- 24 OPTLEVEL
- 25 SYNTAX or SQLERROR
- 26 NOLINEMACRO
- 30 LEVEL
- 31 COLLECTION
- 32 VERSION
- 33 OWNER
- 34 QUALIFIER
- 35 TEXT
- 40 VALIDATE
- 41 EXPLAIN
- 42 ACTION
- 44 REPLVER
- 45 RETAIN
- 46 RELEASE
- 47 DEGREE

SQL0021W • SQL0028C

50 STRDEL
51 DECDEL
55 CHARSUB
56 CCSIDS
57 CCSIDM
58 CCSIDG
59 DEC
60 WCHARTYPE
61 DYNAMICRULES
62 INSERT
63 EXPLSNAP
64 FUNCPATH
65 SQLWARN
66 QUERYOPT

Action: Ensure the specification of bind or precompile “<option-name(s)/option-number(s)>” was intended while connected to this DBMS.

SQL0021W

Invalid precompiler option “<option>” is ignored.

Cause: The option specified in the message is not a valid precompiler option.

The option is ignored.

Action: Ensure that all precompiler options are specified correctly.

SQL0022W

Duplicate precompiler option “<option>” is ignored.

Cause: The precompiler option “<option>” is a duplicate.

The option is ignored.

Action: Ensure that all precompiler options are specified only once.

SQL0023N

The database name is not valid.

Cause: The specified database name is not a valid name.

Precompilation is terminated.

Action: Ensure that the database name is spelled correctly and follows the rules for short identifiers.

SQL0024N

A database name was not specified.

Cause: No database name was provided to proceed with precompilation.

Precompilation is terminated.

Action: Provide a database name.

SQL0025W

Binding or precompilation completed with warnings.

Cause: Binding or precompilation succeeded, but warnings were issued. A package and/or bindfile was created as requested in the command.

Action: Refer to the messages in the message file. If necessary, correct the problems and resubmit the command.

SQL0026N

The password is not valid.

Cause: The specified password is not a valid password.

Precompilation is terminated.

Action: Ensure that the password provided follows the rules for valid passwords.

SQL0028C

The release number of the bind file is not valid.

Cause: The release number of the bind file is not compatible with the release number of the installed version of the database manager.

The bind file cannot be used with the current version of the database manager. The command cannot be processed.

Action: If possible, repeat the precompile process with the current database manager. Otherwise, use only bind files created with a compatible release level of the database manager.

SQL0029N**INTO clause required.**

Cause: Non-cursor SELECT or VALUES statements embedded in an application program must have an INTO clause to denote where the results of the statement are to be placed. Dynamic SELECT statements do not permit the INTO clause.

Action: Add the INTO clause to the SELECT or VALUES statement and precompile the application program again.

sqlcode: -29

sqlstate: 42601

SQL0030N**A source file name was not specified.**

Cause: A source file name was not provided to proceed with precompilation.

Precompilation is terminated.

Action: Specify a source file name.

SQL0031C**File "<name>" could not be opened.**

Cause: The file "<name>" is required but could not be opened.

Precompilation is terminated.

Action: Ensure that the file name specified is correct and exists in the file system, and that the file permissions are correct.

If installing the sample database, drop it and install the sample database again. If the error continues, reinstall the database manager and then install the sample database.

SQL0032C**Unable to use file "<name>".**

Cause: While reading or writing file "<name>", an error was encountered.

Precompilation is terminated.

Action: Retry the precompilation.

SQL0033N**"<name>" is not a valid bind file.**

Cause: The bind file "<name>" specified is not a bind file.

Binding is terminated.

Action: Ensure that the correct file name was specified.

SQL0034N**A bind file name was not specified.**

Cause: No bind file name was specified to proceed with binding.

Binding is terminated.

Action: Provide a bind file name.

SQL0035N**The file "<name>" cannot be opened.**

Cause: The message file "<name>" could not be opened.

Binding or precompilation has been terminated.

Action: Ensure that the system can access the file.

SQL0036N**The syntax of the file name "<name>" is not valid.**

Cause: If the file is input to the precompiler, it must have an extension with the correct extension for the language being used. If the file is input to the binder, it must have an extension of *.bnd*. Also, a fully resolved file name which is over the platform maximum length will cause this error.

Precompilation or binding is terminated.

Action: Ensure that the specified file name is correct.

SQL0037W • SQL0051N

SQL0037W

The syntax of the message file "<name>" is not valid.

Cause: The message file name "<name>" is not syntactically correct for this function.

The system redirects the output to the standard output device.

Action: Ensure that the specified file name is correct.

SQL0038W

The bind option **SQLERROR CONTINUE** has been activated since it is required when binding this DB2-supplied list file to DB2/MVS, SQL/DS, or OS/400.

Cause: The SQLERROR CONTINUE bind option is required when binding the following DB2-supplied list files:

- ddcsmvs.lst
- ddcsvm.lst
- ddcsvse.lst
- ddcs400.lst

This option instructs a DRDA server to create a package even if there are SQL statements in a bind file which it considers invalid. Since not all of the DRDA servers support all of the SQL statements contained in the DB2-supplied bind files, the SQLERROR CONTINUE bind option must be used to guarantee that packages are created for all of the bind files in the list file.

Action: No response is necessary. The required bind option, SQLERROR CONTINUE, has been specified for you. To avoid receiving this warning in the future specify the SQLERROR CONTINUE bind option.

SQL0039N

The binder did not finish processing because the bind file is not valid.

Cause: The binder could not process the bind file. The bind file may not be valid because the bind file contents were altered accidentally.

The bind file is not processed.

Action: If possible, repeat the precompile process to create a new bind file. Otherwise, obtain a new copy of the bind file.

SQL0040N

An error occurred on one or more bind files in the list "<name>". The following files were not bound: "<list>".

Cause: For reasons specified in the previous messages in the message file, one or more bind files were not bound. The list of files that were not bound is composed of digits, starting from 1, that indicate the relative position of the unbound files in the list file. "<name>" does not include the path specification of the list file.

Only the first 20 bind files in error are listed in the message. If there were more than 20 bind files in error, ellipses (...) are inserted after the last bind file name in the list.

One or more packages were not created.

Action: Refer to the messages in the message file. Check the list file to verify that it contains valid names. Resubmit the command.

SQL0041N

No attempt was made to bind the files following file number "<number>" in list "<name>" because a fatal error occurred which terminated processing.

Cause: Some errors encountered during the binding process are considered fatal (i.e. system errors, memory errors). If one of these errors occurs while processing a file in a list file, processing terminates. No attempt is made to bind the remaining files in the list file.

Such an error occurred while binding the specified bind file in the list. Note that the digit used to identify the bind file indicates the relative position of the file in the list file.

Action: Refer to the other messages which accompanied this one to resolve the errors which occurred. Resubmit the command.

SQL0051N

The maximum number of SQL statements was exceeded in the program.

Cause: Too many SQL statements are in the program to fit into one package in the database.

Precompilation is terminated.

Action: Either simplify the program, or split the program into smaller, separate programs, or do both.

SQL0053W

No SQL statements were found in the program.

Cause: The specified source file contains no SQL statements.

If binding, an empty package is created.

Action: Ensure that you are precompiling or binding the correct program.

SQL0055N

Source input file is empty.

Cause: The program source input file contained no data.

Precompilation is terminated.

Action: Ensure that the correct input file was specified.

SQL0060W

The "<name>" precompiler is in progress.

Cause: This message is written to the standard output device when the precompiler begins processing. The token "<name>" refers to the particular language precompiler which was invoked.

Processing continues.

Action: No action is required.

SQL0061W

The binder is in progress.

Cause: This message is written to the standard output device when the binder begins processing.

Processing continues.

Action: No action is required.

SQL0062W

Starting INCLUDE of file "<name>".

Cause: An INCLUDE statement has been encountered. The precompiler is now processing the INCLUDE file.

Action: No action is required.

SQL0063W

Completed INCLUDE of file "<name>".

Cause: The precompiler has completed processing the INCLUDE file. It will resume processing the file which contained the INCLUDE statement.

Action: No action is required.

SQL0064N

File "<name>" directly or indirectly INCLUDEs itself.

Cause: A cyclic INCLUDE has been encountered. A precompiler input file cannot INCLUDE itself, nor be INCLUDEd by a file it INCLUDEs.

The specified file is not INCLUDEd.

Action: Check the nesting of the INCLUDE files, and remove any cycles.

SQL0065N

An unexpected end-of-line was encountered in a host variable declaration.

Cause: A host variable declaration has an invalid syntax. An end-of-line was encountered before the declaration was complete.

The statement cannot be processed.

Action: Examine the syntax of the host variable declaration.

SQL0081N

SQLCODE "<sqlcode>" returned during precompilation/bind.

Cause: While precompiling or binding the program, an unexpected SQLCODE "<sqlcode>" was returned from the database manager.

The statement cannot be processed.

Action: Inspect the SQLCODE to determine the problem and take the appropriate action.

SQL0082C •SQL0089N

SQL0082C

An error has occurred which has terminated processing.

Cause: A previous, non-SQL error has caused processing to terminate.

Precompile/bind/rebind is terminated. No package was created.

Action: Correct the situation that caused the previous error and retry the operation.

SQL0083C

A memory allocation error has occurred.

Cause: During processing, there was not enough memory to continue processing.

Action: Possible solutions include:

- Ensure that your system has sufficient real and virtual memory.
- Remove background processes.

SQL0084N

An EXECUTE IMMEDIATE statement contains a SELECT or VALUES statement.

Cause: A SELECT or VALUES statement was used in an EXECUTE IMMEDIATE statement.

The statement cannot be processed.

Action: The implied function is not supported. Prepare the SELECT or VALUES statement. Then use OPEN, FETCH, and CLOSE.

sqlcode: -84

sqlstate: 42612

SQL0085N

The statement name "<name>" is already defined.

Cause: A previous DECLARE statement already used the statement name specified in the current DECLARE statement.

The current DECLARE statement is not processed. The previous DECLARE statement retains use of the statement name.

Action: Use a different name for the statement.

SQL0086C

A memory allocation error has occurred.

Cause: During processing, there was not enough memory to continue processing.

Action: Possible solutions include:

- Verify that your system has the required memory.
- Remove background processes.

SQL0087N

Host variable "<name>" is a structure used where structure references are not permitted.

Cause: When a structure reference is used in an SQL statement, it is treated as if a comma-separated list of its component fields had been used instead. Since a list of host variables is not permitted in SQL statements such as PREPARE, neither is a reference to a structure with multiple fields.

Action: Replace the structure reference with an atomic host variable, or with a fully qualified structure field name.

SQL0088N

Host variable "<name>" is ambiguous.

Cause: A field which occurs in multiple host structures has been used in an SQL statement without qualification. The reference is ambiguous.

Action: Qualify the field reference.

SQL0089N

Processing ended after 100 errors were found.

Cause: The precompiler or binder quits processing after 100 errors were found.

Action: Fix the errors indicated in the message log and resubmit the command.

SQL0091W

Precompilation or binding was ended with “<number-1>” errors and “<number-2>” warnings.

Cause: The precompilation or binding has terminated with the stated number of warnings and errors.

Precompilation or binding is terminated.

Action: If warnings or errors occurred, correct the program, if necessary, and retry the precompilation or binding.

SQL0092N

No package was created because of previous errors.

Cause: Because of previous errors, no package was created.

Action: Correct the errors and retry the precompilation or bind.

SQL0093N

The end-of-input was encountered before the statement terminator for EXEC SQL.

Cause: While processing an SQL statement, the end of source was encountered before the statement terminated.

Precompilation is terminated.

Action: Ensure that the SQL statement terminates properly.

SQL0094N

Binding was ended because of user interrupt request.

Cause: Binding was terminated because the user may have pressed the interrupt key sequence.

Processing is terminated. No package is created.

Action: Resubmit the bind, if needed.

If installing the sample database, drop it and install the sample database again.

SQL0095N

No bind file was created because of previous errors.

Cause: Because of previous errors, no bind file was created.

No bind file is created.

Action: Correct the errors and retry the precompilation.

SQL0100 - SQL0199**SQL0100W**

No row was found for FETCH, UPDATE or DELETE; or the result of a query is an empty table.

Cause: One of the following conditions is true:

- No row was found that meets the search conditions specified in an UPDATE or DELETE statement.
- The result of a SELECT statement was an empty table.
- A FETCH statement was executed when the cursor was positioned after the last row of the result table.
- The result of the SELECT used in an INSERT statement is empty.

No data was retrieved, updated, or deleted.

Action: No action is required. Processing can continue.

sqlcode: +100

sqlstate: 02000

SQL0101N

The statement is too long or too complex.

Cause: The statement could not be processed because it exceeds a system limit for either length or complexity, or because too many constraints or triggers are involved.

If the statement is one that creates or modifies a packed description, the new packed description may be too large for its corresponding column in the system catalogs.

DataJoiner users should also check to see if the statement:

- Exceeds either a DataJoiner system limit or a data source system limit for length or complexity.

SQL0102N •SQL0103N

- Violates some other data source specific limit.

The statement cannot be processed.

Note: Where character data conversions are performed for applications and databases running under different codepages, the result of the conversion is exceeding the length limit.

Action: Either:

- Break the statement up into shorter or less complex SQL statements.
- Increase the size of the statement heap (stmtheap) in the database configuration file.
- Reduce the number of check or referential constraints involved in the statement or reduce the number of indexes on foreign keys.
- Reduce the number of triggers involved in the statement.
- DataJoiner users: determine which data source is failing the statement (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and determine the cause of the rejection. If the rejection is coming from DataJoiner, increase the size of the statement heap (stmtheap) in the database configuration file.

sqlcode: -101

sqlstate: 54001

SQL0102N

The string constant beginning with "<string>" is too long.

Cause: One of the following has occurred:

- The comment in the COMMENT ON statement is greater than 254 bytes.
- The application server name specified in the SQL CONNECT statement is greater than 18 characters.
- The string constant beginning with "<string>" has a length greater than 4000 bytes. Character strings with lengths greater than 4000 bytes or graphic strings with lengths greater than 2000 characters can be specified only through assignment from host variables.
- DataJoiner users: the data source-specific limits must not be exceeded in a pass-through session. For example, a character literal larger than 254 bytes included in a statement sent to DB2 for MVS in a pass-through session would cause this error.

It may be that data conversion is occurring and the resultant string is too long. For connections between applications and databases running under different codepages, string constants are converted from the application codepage to the database codepage. In certain situations, graphic string constants may be further converted from the database codepage to a UCS-2 (UNICODE) encoding, for example when the database has been created with an EUC codepage. This means that it is possible to have a resultant string which is longer than the input string.

The statement cannot be processed.

Action: For Comment on Table or Comment on Column, reduce the size of the comment. For the SQL CONNECT statement, reduce the length of the application server name. For other string constants, the requested function is not available interactively. For an error occurring in the context of a non-CONNECT SQL statement embedded in an application program, assign the long string to a host variable and substitute that variable for the string literal in the SQL statement.

DataJoiner users: for a pass-through session, determine what data source is causing the error (see the *Problem Determination Guide* for the failing data sources). Examine the SQL dialect for that data source to determine which specific limit has been exceeded, and adjust the failing statement as needed.

sqlcode: -102

sqlstate: 54002

SQL0103N

The numeric literal "<literal>" is not valid.

Cause: The indicated "<literal>" begins with a digit but is not a valid integer, decimal, or floating point literal.

DataJoiner users: a data source-specific literal representation error has occurred in a pass-through session.

The statement cannot be processed.

Action: Correct the invalid numeric literal. DataJoiner users, if the error occurred in a pass-through session, determine what data source is causing the error (see the *Problem Determination Guide* for the failing data sources). Examine the SQL dialect for that data source to determine which literal representation rule has been violated, and adjust the failing statement as needed.

sqlcode: -103

sqlstate: 42604

SQL0104N

An unexpected token "<token>" was found following "<text>". Expected tokens may include: "<token-list>".

Cause: A syntax error in the SQL statement was detected at the specified token following the text "<text>". The "<text>" field indicates the 20 characters of the SQL statement that preceded the token that is not valid.

As an aid to the programmer, a partial list of valid tokens is provided in the SQLERRM field of the SQLCA as "<token-list>". This list assumes the statement is correct to that point.

The statement cannot be processed.

Action: Examine and correct the statement in the area of the specified token.

sqlcode: -104

sqlstate: 42601

SQL0105N

The string constant beginning with "<string>" is not valid.

Cause: The statement contains a string constant beginning with "<string>" that is not valid.

The statement cannot be processed.

Action: Specify the correct format of the string constant. Check for graphic string, paired delimiters, and an even number of bytes within the string.

DataJoiner users, see the *Problem Determination Guide* to determine which data source is causing the error.

sqlcode: -105

sqlstate: 42604

SQL0107N

The name "<name>" is too long. The maximum length is "<length>".

Cause: The name returned as "<name>" is too long. The maximum length permitted for names of that type is indicated by "<length>".

The names for columns, tables, views, indexes, aliases, and constraints can be a maximum length of 18 bytes. (This does not include any escape characters, if present.)

A maximum of 8 bytes is permitted for a schema name (object qualifier).

Host variable names must not exceed 30 bytes in length.

For the SQL CONNECT statement, an application server name of up to 18 characters in length will be accepted at pre-compilation time. However, at runtime, an application server name which is greater than 8 characters in length will cause an error.

Also, a password of up to 18 characters in length and an authorization ID of up to 8 characters in length will be accepted in the SQL CONNECT statement.

DataJoiner users: if in a pass-through session, a data source-specific limit might have been exceeded.

The statement cannot be processed.

Note: Where character data conversions are performed for applications and databases running under different codepages, the result of the conversion is exceeding the length limit.

Action: Choose a shorter name or correct the spelling of the object name.

DataJoiner users: for a pass-through session, determine what data source is causing the error (see the *Problem Determination Guide* for the failing data sources). Examine the SQL dialect for that data source to determine which specific limit has been exceeded, and adjust the failing statement as needed.

sqlcode: -107

sqlstate: 42622

SQL0108N

The name "<name>" has the wrong number of qualifiers.

Cause: The name "<name>" is improperly qualified.

The object given the name "<name>" can only have one qualifier.

A column name is qualified with a table name, which is either qualified or unqualified, or a correlation name. In some contexts, a column name requires a table name qualifier.

The statement cannot be processed.

Action: Ensure that the name for the object is qualified correctly.

sqlcode: -108

sqlstate: 42601

SQL0109N •SQL0117N

SQL0109N

The "<clause>" clause is not allowed.

Cause: The indicated clause is not allowed in the context where it appears in the SQL statement.

A subquery, an INSERT statement, or a CREATE VIEW statement cannot have INTO, ORDER BY, or FOR UPDATE clauses. An embedded SELECT statement cannot have ORDER BY or FOR UPDATE clauses. An embedded SELECT statement cannot contain a set operator except in a subquery. SELECT or VALUES statements used in cursor declarations cannot have an INTO clause. A RAISE_ERROR function can only be used as a select list item if it is cast to some data type using the CAST specification.

DataJoiner users: the indicated clause may be missing and may be required. In a pass-through session, a data source-specific restriction might have been violated.

The statement cannot be processed.

Action: Correct the SQL statement by removing the clause.

DataJoiner users: correct the SQL statement by removing or adding the clause. For a pass-through session, determine what data source is causing the error (see the *Problem Determination Guide* for the failing data sources.) Examine the SQL dialect for that data source to determine which specific restriction has been violated, and adjust the failing statement as needed.

sqlcode: -109

sqlstate: 42601

SQL0110N

"<string>" is an invalid hexadecimal constant.

Cause: The hexadecimal constant "<string>" is invalid. The problem is one of the following:

- An invalid hexadecimal digit was specified. Only '0 to 9', 'A to F', and 'a to f' are allowed.
- An uneven number of hexadecimal digits was specified.
- More than 8000 hexadecimal digits were specified.

Action: Correct the constant and resubmit the statement.

sqlcode: -110

sqlstate: 42606

SQL0111N

The column function "<name>" does not include a column name.

Cause: The specification of the column function "<name>" (AVG, MIN, MAX, SUM, or COUNT(DISTINCT)) was not specified correctly because such functions must include a column name in the operand.

The statement cannot be processed.

Action: Specify a column name in the expression that is the operand to the column function.

NOTE: This error is only applicable to releases of DB2 prior to Version 2.

sqlcode: -111

sqlstate: 42901

SQL0112N

The operand of the column function "<name>" is another column function or a scalar fullselect, or includes a subquery.

Cause: Only expressions without column functions or scalar fullselects or that do not include a subquery are permitted as operands of a column function.

In a SELECT list, the operand of an arithmetic operator cannot be a column function that includes the DISTINCT keyword.

The statement cannot be processed.

Action: Correct the use of the column function to eliminate the invalid expression and try again.

sqlcode: -112

sqlstate: 42607

SQL0117N

The number of values assigned is not the same as the number of specified or implied columns.

Cause:

- The number of insert values in the value list of the INSERT statement is not the same as the number of columns specified or implied. If no column list is specified, a column list that includes all columns of the table or view is implied.
- The number of values on the right hand side of an assignment in a SET transition-variable statement or

SET clause of an UPDATE statement does not match the number of columns on the left hand side.

The statement cannot be processed.

Action: Correct the statement to specify one value for each of the specified or implied columns.

sqlcode: -117

sqlstate: 42802

SQL0118N

The table or view that is the target of the INSERT, DELETE, or UPDATE statement is also specified in a FROM clause.

Cause: The table or view specified as the target of an INSERT, DELETE, or UPDATE statement also appears in the FROM clause of a subquery within the statement.

The table or view that is the target of an INSERT, UPDATE, or DELETE cannot also be used to supply the values to be inserted or to qualify the rows to be inserted, updated, or deleted.

The statement cannot be processed.

This message is only applicable to Version 1.2 servers and earlier, and hosts accessed through DDCS.

Action: The implied function is not supported. To attempt to obtain the desired result, create a temporary copy of the object table or view and address the subselect to that copy.

sqlcode: -118

sqlstate: 42902

SQL0119N

An expression starting with "<expression-start>" specified in a SELECT clause, HAVING clause, or ORDER BY clause is not specified in the GROUP BY clause or it is in a SELECT clause, HAVING clause, or ORDER BY clause with a column function and no GROUP BY clause is specified.

Cause: The SELECT statement has one of the following errors:

- The identified expression and a column function are contained in the SELECT clause, HAVING clause, or ORDER BY clause but there is no GROUP BY clause
- The identified expression is contained in the SELECT clause, HAVING CLAUSE, or ORDER BY clause but is not in the GROUP BY clause.

The identified expression is an expression that starts with "<expression-start>". The expression may be a single column name.

If the NODENUMBER or PARTITION functions are specified in the HAVING clause, then all partitioning key columns of the underlying table are considered to be in the HAVING clause.

The statement cannot be processed.

Action: Correct the statement by including the expression in the GROUP BY clause that are in the SELECT clause, HAVING clause, or ORDER BY clause or by removing the column function from the SELECT statement.

sqlcode: -119

sqlstate: 42803

SQL0120N

A WHERE clause, GROUP BY clause, SET clause, or SET transition-variable statement contains a column function.

Cause: A WHERE clause can contain a column function only if that clause appears within a subquery of a HAVING clause and the argument of the column function is a correlated reference to a group. A GROUP BY clause can contain a column function only if the argument of the column function is a correlated reference to a column in a different subselect than the one containing the GROUP BY clause. A SET clause of an UPDATE statement or a SET transition-variable statement can only include a column function within a fullselect on the right hand side of an assignment.

The statement cannot be processed.

Action: Change the statement so that the column function is not used or used only where it is supported.

sqlcode: -120

sqlstate: 42903

SQL0121N

The column "<name>" is specified more than once in the INSERT, UPDATE or SET transition-variable statement.

Cause: The same column "<name>" is specified more than once in the list of columns of an INSERT statement, the left hand side of assignments in the SET clause of an UPDATE statement, or the left hand side of assignments in the SET transition-variable statement. Note that this error may occur when updating or

SQL0122N •SQL0129N

inserting into a view where more than one column of the view is based on the same column of a base table.

The statement cannot be processed.

Action: Correct the syntax of the statement so each column name is specified only once.

sqlcode: -121

sqlstate: 42701

SQL0122N

A SELECT statement with no GROUP BY clause contains a column name and a column function in the SELECT clause, or a column name is contained in the SELECT clause but not in the GROUP BY clause.

Cause: The SELECT statement has one of the following errors:

- A column name and a column function are contained in the SELECT clause but there is no GROUP BY clause.
- A column name is contained in the SELECT clause but not in the GROUP BY clause.

The column may be contained in a scalar function.

If the NODENUMBER or PARTITION functions are specified in the SELECT clause, then all partitioning key columns of the underlying table are considered to be in the SELECT clause.

The statement cannot be processed.

Action: Correct the statement by including the columns in the GROUP BY clause that are in the SELECT clause or by removing the columns from the SELECT clause.

sqlcode: -122

sqlstate: 42803

SQL0123N

The parameter in position "<n>" in the function "<name>" must be a constant or a keyword.

Cause: 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.

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

sqlcode: -123

sqlstate: 42601

SQL0125N

The column number in the ORDER BY clause is either less than one or greater than the number of columns in the result table.

Cause: The ORDER BY clause in the statement contains a column number that is either less than 1 or greater than the number of columns in the result table (the number of items in the SELECT clause).

The statement cannot be processed.

Action: Correct the syntax of the ORDER BY clause so each column identifier properly identifies a column of the result table.

sqlcode: -125

sqlstate: 42805

SQL0127N

DISTINCT is specified more than once.

Cause: The DISTINCT qualifier cannot be used:

- In both the SELECT clause and a column function
- In two or more column functions in the same SELECT statement.

The statement cannot be processed.

Action: This error is only applicable to releases of DB2 prior to DB2 Version 2 and hosts accessed through DDCS.

sqlcode: -127

sqlstate: 42905

SQL0129N

The statement contains too many table names (the maximum is 15).

Cause: The SQL statement contains too many table names. A single SQL statement can reference up to 15 tables. Each table in any view referenced is included in this limit.

The statement cannot be processed.

Action: Break the SQL statement into two or more simple statements with 15 or fewer table references.

This message is only applicable to Version 1.2 servers and earlier, and hosts accessed through DDCS.

sqlcode: -129

sqlstate: 54004

SQL0130N

The ESCAPE clause is not a single character, or the pattern string contains an invalid occurrence of the escape character.

Cause: The escape character must be a single character no more than two bytes in length. It can only appear in the pattern string if it is followed by itself, a percent sign, or an underscore. For more information about the ESCAPE clause on the LIKE predicate, refer to the *SQL Reference*.

Action: Correct the pattern string or the escape character accordingly.

sqlcode: -130

sqlstate: 22019, 22025

SQL0131N

The operands of a LIKE predicate have incompatible data types.

Cause: If the expression to the left of a LIKE or NOT LIKE is of type character, the expression to the right must be of type character.

If the expression to the left is of type graphic, the expression to the right must be of type graphic.

If the expression to the left is of type BLOB, the expression to the right must be of type BLOB.

The statement cannot be processed.

Action: Correct the expressions of the LIKE predicate to be the same data type.

sqlcode: -131

sqlstate: 42818

SQL0132N

A LIKE predicate or POSSTR scalar function is not valid because the first operand is not a string expression or the second operand is not a string.

Cause: A LIKE predicate or POSSTR scalar function appearing in the statement is not valid because either the first operand is not a string expression or the second operand is not a string.

The operand appearing to the left of a LIKE or NOT LIKE predicate or the first operand of POSSTR must be a string expression. The value appearing to the right of

the predicate or the second operand of POSSTR can be one of:

- a constant
- a special register
- a host variable
- a scalar function whose operands are any of the above
- an expression concatenating any of the above

with the restrictions that:

- no element in the expression can be of type LONG VARCHAR, CLOB, LONG VARGRAPHIC, or DBCLOB. In addition it cannot be a BLOB file reference variable.
- the actual length of the expression cannot be more than 4000 bytes.

A LIKE predicate or POSSTR scalar function cannot be used with DATE, TIME, or TIMESTAMP.

The statement cannot be processed.

Action: Check and correct the syntax of LIKE and POSSTR

sqlcode: -132

sqlstate: 42824

SQL0134N

Improper use of a string column, host variable, constant, or function "<name>".

Cause: The use of the string "<name>" is not permitted.

An expression resulting in a string data type with a maximum length greater than 254 bytes is not permitted in:

- A SELECT DISTINCT statement
- A GROUP BY clause
- An ORDER BY clause
- A column function with DISTINCT
- A SELECT or VALUES statement of a set operator other than UNION ALL.

An expression resulting in a LONG VARCHAR or LONG VARGRAPHIC data type is not permitted in:

- A predicate other than EXISTS or NULL
- A column function
- The SELECT clause of a subquery of a predicate other than EXISTS or NULL
- The SELECT clause of a subselect in an INSERT statement
- The value expression of a SET clause in an UPDATE statement unless the expression is a

SQL0137N •SQL0142N

LONG VARCHAR or LONG VARGRAPHIC host variable

- A SELECT statement of a set operator (except UNION ALL)
- VARGRAPHIC scalar function.

DataJoiner users: in a pass-through session, a data source-specific restriction can cause this error.

The statement cannot be processed.

Action: The requested operation on the string is not supported.

Note: If it is unclear as to how the 254 byte limit is being exceeded, consider that codepage conversion operations may be required to evaluate the string expression. Depending on the source and target codepages, the target may have a greater length attribute than the source. For more information, refer to the SQL Reference for discussions on string restrictions and string conversions.

sqlcode: -134

sqlstate: 42907

SQL0137N

The length resulting from "<operation>" is greater than "<maximum value>".

Cause: The result of concatenating the given operands was longer than what is supported by the result type.

Character string results are limited to 32,700 bytes unless one of the operands is a CLOB and then the limit is 2 gigabytes.

Graphic string results are limited to 16,350 characters unless one of the operands is a DBCLOB and then the limit is 1,073,741,823 (1 less than 1 gigabyte) double byte characters.

Binary string results (operands are BLOB) are limited to 2 gigabytes.

Action: Ensure that the sum of the lengths of the operands does not exceed the supported maximum and try the operation again.

sqlcode: -137

sqlstate: 54006

SQL0138N

The second or third argument of the SUBSTR function is out of range.

Cause: One of the following conditions occurred:

- The second argument of the SUBSTR function is less than 1 or greater than M.
- The third argument of the SUBSTR function is an expression with a value less than 0 or greater than M-N+1.

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

The statement cannot be processed.

Action: Ensure that the second and third arguments of the SUBSTR function have values that conform to the above rules.

sqlcode: -138

sqlstate: 22011

SQL0139W

A redundant clause appears in the specification for column "<column>".

Cause: The clause in the column specification is redundant.

The statement was processed successfully, but the redundant clause was ignored.

Action: Correct the column specification.

sqlcode: +139

sqlstate: 01589

SQL0142N

The SQL statement is not supported.

Cause: An embedded SQL statement that may be valid for other IBM relational database products is not supported by the database manager.

DataJoiner users: check to see if an SQL statement was directed at a data source that does not support the SQL statement.

The statement cannot be processed.

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

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the

Problem Determination Guide for procedures to follow to identify the failing data source) and examine the SQL dialect for that data source.

SQL0143W

The SQL statement is not supported; invalid syntax is ignored.

Cause: An embedded SQL statement that may be valid for other IBM relational database products is understood but is not supported by the database manager.

The statement may produce inconsistent or unwanted results.

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

SQL0150N

The view in the INSERT, DELETE, or UPDATE statement is a view for which the requested operation is not permitted.

Cause: The view named in the INSERT, UPDATE, or DELETE statement is defined so that the requested insert, update, or delete operation cannot be performed.

The view is read only if the SELECT statement contains any of the following:

- A DISTINCT keyword
- A column function in the select list
- A GROUP BY or HAVING clause
- A FROM clause that identifies one of the following:
 - More than one table or view
 - A read-only view (READONLY column of SYSCAT.SYSVIEWS is set to 'Y')
 - A table or view that is also identified in the FROM clause of a subquery of the SELECT statement. (NOTE: This only applies to releases prior to DB2 Version 2.)
- A set operator (other than UNION ALL).
- DataJoiner users: a data source specific limitation that causes the column not to be updateable

Note that these conditions do not apply to subqueries of the SELECT statement.

The statement cannot be processed.

Action: The requested function cannot be performed on the view.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and examine the object definition and the update restrictions for that data source.

sqlcode: -150

sqlstate: 42807

SQL0151N

The column "<name>" cannot be updated.

Cause: The specified column cannot be updated because one of the following was attempted.

- the object table is a view, and the specified column is derived from a scalar function, expression, keyword, constant, or column of a view where that column cannot be updated.
- the specified column is a non-updateable column of a system catalog.

DataJoiner users should check to see if:

- The column is not an updateable column. See section on "System Catalog Tables", in the *IBM DataJoiner Application Programming and SQL Reference Supplement* for a description of the system catalog tables and which columns are updateable.
- Some other data source specific limitation prevents the column from being updated.

Some DataJoiner data sources do not provide the appropriate values for the "<name>". In these cases the appropriate fields contain values (such as "unknown") that indicate that the actual value is unknown.

The statement cannot be processed.

Action: The requested function is not supported. For a list of updateable catalogs (and the updateable columns) see the *SQL Reference*.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the object definition and the update restrictions for that data source.

sqlcode: -151

sqlstate: 42808

SQL0153N •SQL0158N

SQL0153N

The CREATE VIEW statement or common table expression does not include a column list.

Cause: A column list must be specified in a CREATE VIEW statement or a common table expression when:

- any element of the SELECT list in the fullselect is other than a column name and is not named using the AS clause
- any two elements are the same column name that were not renamed using the AS clause.

The statement cannot be processed. For a CREATE VIEW statement, the view was not created.

Action: Provide a column name list in the CREATE VIEW statement or common table expression or name the columns in the SELECT list of the fullselect using the AS clause.

sqlcode: -153

sqlstate: 42908

SQL0155N

A trigger transition table cannot be modified.

Cause: The trigger includes a REFERENCING clause with an OLD_TABLE or NEW_TABLE identified. A DELETE, INSERT or UPDATE triggered SQL statement has used the name specified as the OLD_TABLE or NEW_TABLE as the table to modify.

Action: Remove the DELETE, INSERT or UPDATE triggered SQL statement from the triggered action or change the name of the transition table so that it does not conflict with the table you are attempting to modify.

sqlcode: -155

sqlstate: 42807

SQL0156N

The name used for this operation is not a table.

Cause: The SQL statements ALTER TABLE, DROP TABLE, SET CONSTRAINTS, CREATE TRIGGER, CREATE INDEX, LOCK TABLE, and RENAME TABLE are applicable only to tables, not to views. The RUNSTATS and LOAD utilities are also applicable only to tables, not to views.

DataJoiner users: ALTER TABLE and DROP TABLE are not allowed on nicknames.

The statement or utility cannot be processed.

Action: Verify that the correct table name is specified in the statement. If an alias name was supplied, ensure that the alias resolves to a table.

DataJoiner users: if the statement is an ALTER TABLE or DROP TABLE statement, verify that the object is not a nickname.

sqlcode: -156

sqlstate: 42809

SQL0157N

"<name>" is not allowed in a FOREIGN KEY clause because it identifies a view.

Cause: The view "<name>" was identified in a FOREIGN KEY clause of a CREATE or ALTER TABLE statement. A FOREIGN KEY clause must identify a table, not a view.

The statement cannot be processed. The specified table is not created or altered.

Action: Correct the statement to specify a table name in the FOREIGN KEY clause.

If an alias name was supplied, ensure that the alias resolves to a table.

sqlcode: -157

sqlstate: 42810

SQL0158N

The number of columns specified for "<name>" is not the same as the number of columns in the result table of the associated fullselect.

Cause: The identifier "<name>" could identify:

- a view named in a CREATE VIEW statement
- a table name of a common table expression
- a correlation name of a nested table expression.

The number of column names specified must be equal to the number of columns in the result table of the associated fullselect.

The statement cannot be processed.

Action: Correct the syntax so that the list of column names that immediately follow "<name>" specify a name for each column of the result table in the associated fullselect.

sqlcode: -158

sqlstate: 42811

SQL0159N

DROP or COMMENT ON “<object>” identifies a(n) “<object-type>” rather than a(n) “<expected-object-type>”.

Cause: The object “<object>” specified as part of a DROP or COMMENT ON statement refers to an object of type “<object-type>” instead of the expected type “<expected-object-type>”.

The type of the object provided with a DROP or COMMENT ON statement must match the type identified by the key word used in the statement. For example, if the statement is DROP ALIAS *PBIRD.T1*, then *PBIRD.T1* must be an alias name.

Action: Change the statement to properly match the type of object identified by “<expected-object-type>”.

sqlcode: -159

sqlstate: 42809

SQL0160N

The WITH CHECK option is not valid for the specified view.

Cause: The WITH CHECK option cannot be used in a view definition if:

- The view is defined as read only. The view is read only if the SELECT statement contains any of the following. (Note that these conditions do not apply to subqueries of the SELECT statement.)
 - A DISTINCT keyword
 - A column function in the selected list
 - A GROUP BY or HAVING clause
 - A FROM clause that identifies either:
 - More than one table or view
 - A read-only view
 - A set operator (other than UNION ALL).
- The SELECT statement in the CREATE VIEW statement includes a subquery (except for specific statistical columns of some catalog tables).

The statement cannot be processed. The specified view was not created.

Action: Remove the WITH CHECK option or change the view definition so it conforms to the rules above.

sqlcode: -160

sqlstate: 42813

SQL0161N

The resulting row of the INSERT or UPDATE does not conform to the view definition.

Cause: The WITH CHECK option was specified in the view definition that is the object of the INSERT or UPDATE statement. Consequently, all attempts to insert or update rows in that view are checked to ensure that the results conform to the view definition.

The statement cannot be processed. No inserts or updates are performed, and the contents of the view and underlying base table remain unchanged.

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

Requested INSERT or UPDATE may be trying to put out of range value(s) in the target column(s). For system catalog updates, see the *SQL Reference* for valid ranges of values in various updateable columns of catalogs.

DataJoiner users, if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the object definition and the view definition for that data source.

sqlcode: -161

sqlstate: 44000

SQL0170N

The number of arguments for function “<name>” is incorrect.

Cause: The specified scalar function “<name>” has either too few or too many arguments.

The statement cannot be processed.

Action: Ensure that the correct number of arguments is specified for the scalar function.

sqlcode: -170

sqlstate: 42605

SQL0171N

The data type, length or value of argument “<n>” of function “<name>” is incorrect.

Cause: The data type, length or value of argument “<n>” of scalar function “<name>” is incorrect.

The statement cannot be processed.

Action: Ensure the arguments of the scalar function conform to the function rules.

SQL0172N •SQL0181N

sqlcode: -171

sqlstate: 42815

SQL0172N

“<name>” is not a valid function name.

Cause: The SQL statement includes an unknown scalar function.

The statement cannot be processed.

Action: Ensure that you correctly spell the function name.

sqlcode: -172

sqlstate: 42601

SQL0176N

The second, third or fourth argument of the TRANSLATE scalar function is incorrect.

Cause: The statement is not correct for one or more of the following reasons:

- The translate scalar function does not allow replacement of a character by another character which is encoded using a different number of bytes. For example, a single-byte character cannot be replaced with a double-byte character nor can a double-byte character be replaced with a single-byte character.
- The second and third arguments of the translate scalar function must end with correctly formed characters.
- The fourth argument of the translate scalar function must be a correctly formed single-byte character if the first argument is CHAR or VARCHAR.
- The fourth argument of the translate scalar function must be a correctly formed double-byte character if the first argument is GRAPHIC or VARGRAPHIC.

The statement cannot be processed.

Action: Ensure that the second, third, and fourth arguments of the translate scalar function have correct values.

sqlcode: -176

sqlstate: 42815

SQL0180N

The syntax of the string representation of a datetime value is incorrect.

Cause: The string representation of a date, time, or timestamp value does not conform to the syntax for the specified or implied data type.

The statement cannot be processed.

Action: Ensure that the syntax of the date, time, or timestamp value conforms to the syntax for its data type. If the string is not intended to be a date, time, or timestamp value, ensure that when used, it does not imply that data type.

DataJoiner users: the problem might be due to a date/time representation problem at the DataJoiner data source. If the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the date/time representation restrictions for that data source.

sqlcode: -180

sqlstate: 22007

SQL0181N

The string representation of a datetime value is out of range.

Cause: The string representation of a date, time or timestamp value contains a value that is out of range.

This error could be caused by accessing a datetime value from an application using a country code whose datetime format is different than the one used by the application that created it. For example, a string datetime value stored in the format dd/mm/yyyy will not be valid when read by an application expecting its format to be mm/dd/yyyy.

The correct ranges for date, time, or timestamp values are as follows:

- 0001 to 9999 for years.
- 1 to 12 for months.
- 1 to 31 for days when the month is 1, 3, 5, 7, 8, 10, and 12.
- 1 to 30 for days when the month is 4, 6, 9, 11.
- 1 to 28 for days when the month is 2 in a non-leap year.
- 1 to 29 for days when the month is 2 in a leap year.
- 0 to 24 for hours. If the hour is 24, the other parts of the time are 0. If the format is USA, the hour cannot be greater than 12.
- 0 to 59 for minutes.

- 0 to 59 for seconds.
- 0 to 999999 for microseconds.
- 001 to 365 for the day portion of a Julian calendar date when the year is not a leap year.
- 001 to 366 for the day portion of a Julian calendar date when the year is a leap year.

DataJoiner users: the problem might be due to a date/time representation problem at the data source. Refer to the data source's documentation for the ranges for date and time values at the data source. If the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the date/time representation restrictions for that data source.

The statement cannot be processed.

Action: Ensure that the value is within the valid range, and the application's datetime format is the same as the string value.

sqlcode: -181

sqlstate: 22007

SQL0182N

An expression with a datetime value or a labeled duration is not valid.

Cause: The specified expression contains an improperly used date, time, or timestamp value or labeled duration.

The statement cannot be processed.

Action: Examine the SQL statement to determine the cause of the problem and correct the statement.

sqlcode: -182

sqlstate: 42816

SQL0183N

A datetime arithmetic operation or datetime scalar function has a result that is not within the valid range of dates.

Cause: The result of an arithmetic operation is a date or timestamp duration which is outside the range 0001-01-01 through 9999-12-31.

The statement cannot be executed.

Action: Examine the SQL statement to determine the cause of the problem. If the problem is data-dependent, examine the data processed when the error occurred.

sqlcode: -183

sqlstate: 22008

SQL0187N

A reference to a current date/time special register is invalid.

Cause: An error indication from the operating system was detected while retrieving date/time information.

Action: Ensure that the system TOD clock and timezone settings are correct.

sqlcode: -187

sqlstate: 22506

SQL0191N

MBCS conversion error occurred because of a fragmented MBCS character.

Cause: The data contained an improperly formed multi-byte character. For example, the first byte of a DBCS character was found, but the second character was not.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Correct the input data and try again.

DataJoiner users: if the data is correct, isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the DBCS restrictions of that data source. If the data appears to be correct, contact IBM service for assistance.

sqlcode: -191

sqlstate: 22504

SQL0193N

In an ALTER TABLE statement, the column "<column-name>" has been specified as NOT NULL and either the DEFAULT clause was not specified or was specified as DEFAULT NULL.

Cause: When new columns are added to a table that already exists, a value must be assigned to that new column for all existing rows. By default, the null value is assigned. However, since the column has been defined as NOT NULL, a default value other than null must be defined.

Action: Either remove the NOT NULL restriction on the column or provide a default value other than null for the column.

sqlcode: -193

SQL0197N •SQL0199N

sqlstate: 42601

SQL0197N

A qualified column name is not allowed in the ORDER BY clause.

Cause: The ORDER BY clause of a fullselect that includes a set operator (UNION, EXCEPT, INTERSECT) cannot have qualified column names.

Action: Ensure that all column names in the ORDER BY clause are unqualified.

sqlcode: -197

sqlstate: 42877

SQL0198N

The statement string of the PREPARE or EXECUTE IMMEDIATE statement is blank or empty.

Cause: The host variable that was the object of the PREPARE or EXECUTE IMMEDIATE statement either contained all blanks or was an empty string.

The PREPARE or EXECUTE IMMEDIATE could not be completed.

Action: Correct the logic of the program to ensure that a valid SQL statement is provided in the operand of the PREPARE or EXECUTE IMMEDIATE statement before it is executed.

sqlcode: -198

sqlstate: 42617

SQL0199N

The use of reserved word "<keyword>" following "<text>" is not valid. Expected tokens may include: "<token-list>".

Cause: A syntax error in the SQL statement was detected at the point in the statement when the reserved word "<keyword>" appears following "<text>". The "<text>" field indicates the 20 characters of the SQL statement that preceded the reserved word. Clauses in the statement may be in the wrong order.

As an aid to the programmer, a partial list of valid tokens is provided in the SQLERRM field of the SQLCA as "<token-list>". This list assumes the statement is correct to that point.

The statement cannot be processed.

Action: Examine the statement in the keyword area. Add a colon or SQL delimiter, if missing. Verify that the clauses are in the correct order. If the reserved word identified in the messages is listed as a reserved word, make the word a delimited identifier.

NOTE: This error is only applicable to releases of DB2 prior to Version 2.

sqlcode: -199

sqlstate: 42601

SQL0200 - SQL0299

SQL0203N

A reference to column "<name>" is ambiguous.

Cause: The column "<name>" is used in the statement and there is more than one possible column to which it could refer. This could be the result of:

- two tables specified in a FROM clause that have columns with the same name
- the ORDER BY clause refers to a name that applies to more than one column in the select list
- a reference to a column from the subject table in a CREATE TRIGGER statement does not use the correlation name to indicate if it refers to the old or new transition variable.

The column name needs further information to establish which of the possible table columns it is.

The statement cannot be processed.

Action: Add a qualifier to the column name. The qualifier is the table name or correlation name. A column may need to be renamed in the select list.

sqlcode: -203

sqlstate: 42702

SQL0204N

"<name>" is an undefined name.

Cause: This error is caused by one of the following:

- The object identified by "<name>" is not defined in the database.
- A data type is being used. If "<name>" is qualified, then the data type does not exist. If "<name>" is unqualified, then a data type of this name does not exist in any schema of the current function path.

- A function is being referenced in one of:
 - a DROP FUNCTION statement
 - a COMMENT ON FUNCTION statement
 - the SOURCE clause of a CREATE FUNCTION statement

If "<name>" is qualified, then the function does not exist. If "<name>" is unqualified, then a function of this name does not exist in any schema of the current function path. Note that a function cannot be sourced on the COALESCE, NULLIF, or VALUE built-in functions.

This return code can be generated for any type of database object.

DataJoiner users: the object identified by "<name>" is not defined in the database or "<name>" is not a nickname in a DROP NICKNAME statement.

Some DataJoiner data sources do not provide the appropriate values for "<name>". In these cases, the message token will have the following format: "OBJECT:<data source> TABLE/VIEW", indicating that the actual value for the specified data source is unknown.

The statement cannot be processed.

Action: Ensure that the object name (including any required qualifiers) is correctly specified in the SQL statement and it exists. For missing data type or function in SOURCE clause, it may be that the object does not exist, OR it may be that the object does exist in some schema, but the schema is not present in your function path.

DataJoiner users: if the statement is DROP NICKNAME, make sure the object is actually a nickname. The object might not exist at DataJoiner or at the data source. Verify the existence of the DataJoiner objects (if any) and the data source objects (if any).

sqlcode: -204

sqlstate: 42704

SQL0205N

"<name>" is not a column of table "<table-name>".

Cause: No column with the specified "<name>" is defined for the table or view "<table-name>".

DataJoiner users: "<table-name>" could refer to a DataJoiner nickname.

The statement cannot be processed.

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

Also, if you receive this error during a REORG or an IMPORT, the column names in the index may violate the database manager naming rules as defined in the *Administration Guide*.

sqlcode: -205

sqlstate: 42703

SQL0206N

"<name>" is not a column in an inserted table, updated table, or any table identified in a FROM clause or is not a valid transition variable for the subject table of a trigger.

Cause: This error can occur in the following cases:

- For an INSERT or UPDATE statement, the specified column is not a column of the table, or view that was specified as the object of the insert or update.
- For 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.
- For an ORDER BY clause, the specified column is a correlated column reference in a subselect, which is not allowed.
- For a CREATE TRIGGER statement:
 - A reference is made to a column of the subject table without using an OLD or NEW correlation name.
 - The left hand side of an assignment in the SET transition-variable statement in the triggered action specifies an old transition variable where only a new transition variable is supported.

The statement cannot be processed.

Action: Verify that the column and table names are specified correctly in the SQL statement. For a SELECT statement, ensure that all the required tables are named in the FROM clause. For a subselect in an ORDER BY clause, ensure that there are no correlated column references. If a correlation name is used for a table, verify that subsequent references use the correlation name and not the table name.

For a CREATE TRIGGER statement, ensure that only new transition variables are specified on the left hand side of assignments in the SET transition-variable statement and that any reference to columns of the subject table have a correlation name specified.

sqlcode: -206

sqlstate: 42703

SQL0207N • SQL0214N

SQL0207N

A column name is not allowed in the ORDER BY clause of a SELECT statement used with a set operator.

Cause: A SELECT statement with a set operator contains an ORDER BY clause, which specifies column names. In this case, the list of columns in the ORDER BY clause must contain only integers.

The statement cannot be processed.

Action: Specify only integers in the list of columns in the ORDER BY clause.

NOTE: This error is only applicable to releases of DB2 prior to Version 2 and hosts accessed through DDCS.

sqlcode: -207

sqlstate: 42706

SQL0208N

The ORDER BY clause is not valid because column "<name>" is not part of the result table.

Cause: The statement is not valid because a column "<name>" specified in the ORDER BY list is not specified in the SELECT list and is not in the result table. Only columns in the result table can be used to order that result when the fullselect of the select-statement is not a subselect.

The statement cannot be processed.

Action: To correct the syntax of the statement, either add the specified column to the result table or delete it from the ORDER BY clause.

sqlcode: -208

sqlstate: 42707

SQL0212N

"<name>" is a duplicate table designator or is specified more than once in the REFERENCING clause of a trigger definition.

Cause: The exposed table, view, alias, or correlation name specified by "<name>" is identical to another exposed table, view, alias, or correlation name in the same FROM clause.

If the statement is a CREATE TRIGGER, the REFERENCING clause may have specified the same name as the subject table or may have the same name for more

than one of the OLD or NEW correlation names or the NEW_TABLE or OLD_TABLE identifiers.

The statement cannot be processed.

Action: Rewrite the FROM clause of the SELECT statement. Associate correlation names with table, view, or alias names so no exposed table, view, alias, or correlation name is identical to any other exposed table, view, alias, or correlation name in the FROM clause.

For a CREATE TRIGGER statement, change the names in the REFERENCING clause so that there are no duplicates.

sqlcode: -212

sqlstate: 42712

SQL0214N

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

Cause: 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 the expression cannot be matched exactly with an expression in the select list. This reason code occurs only when "<clause-type>" is ORDER BY.
- 3 Grouping is caused by the presence of a column function in the ORDER BY clause. This reason code occurs only when "<clause-type>" is ORDER BY.
- 4 Expression in a GROUP BY clause cannot be a scalar-fullselect. This reason code occurs only when "<clause-type>" is GROUP BY.

The statement cannot be processed.

Action: Modify the select-statement based on the reason specified by the "<reason-code>" as follows:

- 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.

- 2 Remove DISTINCT from the select clause or change the sort key to the simple-integer or simple-column-name form.
- 3 Add a GROUP BY clause or remove the column function from the ORDER BY clause.
- 4 Remove any scalar-fullselect from the GROUP BY clause. If grouping is desired on a column of the result that is based on a scalar-fullselect use a nested table expression or a common table expression to first provide a result table with the expression as a column of the result.

sqlcode: -214

sqlstate: 42822

SQL0216N

The number of elements on each side of a predicate operator does not match. Predicate operator is "<predicate-operator>".

Cause: A predicate includes a list of elements on the right or left side (or both sides) of the predicate operator. The number of elements must be the same on both sides. These elements may appear in a list of expressions enclosed in parentheses or as elements of a select list in a fullselect.

The statement cannot be processed.

Action: Correct the predicate with mismatched number of elements on each side of the predicate operator.

sqlcode: -216

sqlstate: 428C4

SQL0217W

The statement was not executed as only Explain information requests are being processed.

Cause: The current value of one of the Explain special registers has been set to EXPLAIN. This value allows dynamic SQL statements to be prepared and explained but prevents any dynamic statement from being executed.

Action: Change the value of the appropriate Explain special register to a setting other than EXPLAIN by issuing the appropriate SET statement from the interface or application that is encountering this condition.

sqlcode: +217

sqlstate: 01604

SQL0219N

The required Explain table "<name>" does not exist.

Cause: The Explain facility has been invoked but was unable to find the required Explain table "<name>". The Explain tables must be created prior to invoking Explain.

Action: Create the required Explain tables. The SQL Data Definition Language statements needed to create the Explain tables are available in the file called EXPLAIN.DDL in the misc directory under sqllib.

sqlcode: -219

sqlstate: 42704

SQL0220N

The Explain table "<name>", column "<name2>" does not have the proper definition or is missing.

Cause: The Explain facility has been invoked but the Explain table "<name>" did not have the expected definition. The definition could be incorrect due to:

- Incorrect number of columns defined (if "<name2>" is numeric)
- Incorrect data type assigned to columns (if "<name2>" is a column name).

Action: Correct the definitions of the specified Explain table. The SQL Data Definition Language statements needed to create the Explain tables are available in the file called EXPLAIN.DDL in the misc directory under sqllib.

sqlcode: -220

sqlstate: 55002

SQL0236W

SQLDA has only provided "<integer1>" SQLVAR entries. "<integer2>" SQLVAR entries are required for "<integer3>" columns. No SQLVAR entries have been set.

Cause: The value of the SQLN field of the SQLDA should be at least as large as the number of columns in the result set.

The database manager has not set any SQLVAR entries (and the SQLDOUBLED flag has been set to "off" (i.e. to the space character)).

Action: Increase the value of the SQLN field in the SQLDA to the value indicated in the message (making

SQL0237W • SQL0257N

sure the SQLDA is large enough to support that amount) and resubmit the statement.

sqlcode: +236

sqlstate: 01005

SQL0237W

SQLDA has only provided "<integer1>" SQLVAR entries. Since at least one of the columns being described is a distinct type, "<integer2>" SQLVAR entries should have been specified. None of the Secondary SQLVAR entries have been set.

Cause: Since at least one of the columns in the result set is a distinct type, space should be provided for twice as many SQLVAR entries as the number of columns in the result set. The database manager has only set the Base SQLVAR entries (and the SQLDOUBLED flag has been set off (i.e. to the space character).

Action: If there is no need for the additional information about the distinct type(s) in the result set, then no action is required. If the distinct type information is needed, the value of the SQLN field in the SQLDA should be increased to the value indicated in the message (after making sure that the SQDA is large enough to support that amount) and the statement should be resubmitted.

sqlcode: +237

sqlstate: 01594

SQL0238W

SQLDA has only provided "<integer1>" SQLVAR entries. Since at least one of the columns being described is a LOB, "<integer2>" SQLVAR entries are required for "<integer3>" columns. No SQLVAR entries have been set.

Cause: Since at least one of the columns in the result set is a LOB, space must be provided for twice as many SQLVAR entries as the number of columns in the result set. Note also that one or more of the columns in the result set may be a distinct type.

The database manager has not set any SQLVAR entries (and the SQLDOUBLED flag has been set off (i.e. to the space character).

Action: Increase the value of the SQLN field in the SQLDA to the value indicated in the message (after

making sure that the SQDA is large enough to support that amount) and resubmit the statement.

sqlcode: +238

sqlstate: 01005

SQL0239W

SQLDA has only provided "<integer1>" SQLVAR entries. Since at least one of the columns being described is a distinct type, "<integer2>" SQLVAR entries are required for "<integer3>" columns. No SQLVAR entries have been set.

Cause: If any of the columns in the result set is a distinct type then space should be provided for twice as many SQLVAR entries as the number of columns in the result set.

The database manager has not set any SQLVAR entries (and the SQLDOUBLED flag has been set off (i.e. to the space character).

Action: If the distinct type information is needed, the value of the SQLN field in the SQLDA should be increased to the value indicated in the message (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 in the result set.

sqlcode: +239

sqlstate: 01005

SQL0257N

Raw DEVICE containers are currently not supported on this platform.

Cause: An attempt was made to use DEVICE containers. These are not currently supported on this platform.

Action: Use FILE containers or system-managed table spaces instead.

sqlcode: -257

sqlstate: 42994

SQL0258N

Containers cannot be added while a rebalance of the table space is pending or in progress.

Cause: One of the following conditions is true:

1. An ALTER TABLESPACE to add containers to the same table space (on the same node) has previously been issued in the same unit of work. Containers for a table space can only be added to one node in one ALTER TABLESPACE statement in a unit of work.
2. The table space to which you are adding containers is currently being rebalanced. Details can be found in the system error log and/or the database manager error log.

Action:

1. If possible, roll back the unit of work and issue a single ALTER TABLESPACE to add all the containers. Otherwise, wait until the rebalance has completed and then try the operation again.
2. Wait until the rebalance has completed and then try the operation again.

sqlcode: -258

sqlstate: 55041

SQL0259N

Container map for table space is too complicated.

Cause: The map structure keeps a record of how the table space address space is mapped to the various containers. If this gets too complicated, it does not fit in the table space file.

Details can be found in the system error log and/or the database manager error log.

Action: The table space may need to be rebalanced to more evenly distribute the data among the containers. This may simplify the mapping.

If this does not work, try making as many containers as possible the same size. Existing container sizes can be changed by backing up the table space and then using the database administration utility to change the containers. Restore the table space to the new containers.

sqlcode: -259

sqlstate: 54037

SQL0260N

Column "<name>" cannot belong to the partitioning key because it is a LONG-type column.

Cause: A partitioning key cannot have a LONG-type column.

The statement cannot be processed.

Action: Use only non-LONG type columns for the partitioning key.

If the table does not have a non-LONG type column, either add one to the table and use it for the partitioning key, or define the table without a partitioning key in a single-node nodegroup.

sqlcode: -260

sqlstate: 42962

SQL0262N

Table "<table-name>" cannot be created in multinode nodegroup "<nodegroup-name>" because it contains only LONG-type columns. No partitioning key can be created.

Cause: The table "<table-name>" consisting of only LONG-type columns cannot be created in a multinode nodegroup. The table must have at least one non-LONG type column for use in a partitioning key.

The statement cannot be processed.

Action: Either create the table with one or more non-LONG type columns, or create the table in a single-node nodegroup.

sqlcode: -262

sqlstate: 428A2

SQL0263N

Node range from "<node-number-1>" to "<node-number-2>" is not valid. Second node number must be greater than or equal to first node number.

Cause: The specified node range is not valid.

The statement cannot be processed.

Action: Correct the node range in the statement, then try the request again.

sqlcode: -263

sqlstate: 428A9

SQL0264N • SQL0268N

SQL0264N

Partitioning key cannot be added or dropped because table resides in a table space defined on the multi-node nodegroup "<name>".

Cause: You can only add or drop a partitioning key on a table in a single-node nodegroup.

The statement cannot be processed.

Action: Do one of the following and try the request again:

- Define an identical table with a partitioning key.
- Redistribute the nodegroup to a single-node nodegroup.

sqlcode: -264

sqlstate: 55037

SQL0265N

Node "<node-number>" is a duplicate node.

Cause: For the CREATE NODEGROUP statement, a node can only appear once in the ON NODES clause.

For the CREATE TABLESPACE and ALTER TABLESPACE statement, a node can appear only once and in only one ON NODES clause.

For the ALTER NODEGROUP statement or REDISTRIBUTE NODEGROUP command, one of the following occurred:

- The node appeared more than once in the ADD NODES or the DROP NODES clause.
- The node appeared in both the ADD NODES and the DROP NODES clause.
- The node to be added is already a member of the nodegroup.

The statement cannot be processed.

Action: Ensure that the node names or node numbers in the ON NODES, ADD NODES, or DROP NODES clause are unique. For the CREATE TABLESPACE and ALTER TABLESPACE statements, ensure that a node appears in no more than one ON NODES clause.

In addition, for the ALTER NODEGROUP statement or REDISTRIBUTE NODEGROUP command:

- Do not specify a node in both the ADD NODES and the DROP NODES clause.

- Remove the node from the ADD NODES clause if the node is already defined in the nodegroup.

sqlcode: -265

sqlstate: 42728

SQL0266N

Node "<node-number>" is not defined.

Cause: The node "<node-number>" is not valid for one of the following reasons:

- the node number is not in the valid range of 0 to 999
- the node is not in the node configuration file
- the node is not part of the nodegroup, therefore the requested operation cannot be processed.

The statement cannot be processed.

Action: Depending on the condition:

- issue the statement, command or API with node numbers in the valid range.
- follow the procedure to add a node to the system.
- remove the node from the specified nodes in the statement, command or API.

sqlcode: -266

sqlstate: 42729

SQL0268N

"<operation>" cannot be performed while nodegroup is being redistributed.

Cause: One of the following:

- The nodegroup is being redistributed. It cannot be altered, dropped or redistributed again until the current operation is complete.
- The partitioning key of a table cannot be dropped while the nodegroup of the table is being redistributed.

The statement cannot be processed.

Action: Wait until the redistribution is complete, then try the request again.

sqlcode: -268

sqlstate: 55038

SQL0269N

Database contains maximum number of partitioning maps.

Cause: Because the database contains the maximum number of partitioning maps (32,768), you cannot create a new nodegroup, alter a nodegroup, or redistribute an existing one.

The statement cannot be processed.

Action: Drop one or more nodegroups in the database.

Note: Dropping a nodegroup drops all database objects such as table spaces, tables and views that reside in the nodegroup.

sqlcode: -269

sqlstate: 54033

SQL0270N

Function not supported (Reason code = "<reason-code>").

Cause: The statement cannot be processed because it violates a restriction as indicated by the following reason code:

1. The primary key, each unique constraint, and each unique index must contain all partitioning columns of the table (columns may appear in any order).
2. Update of the partitioning key column value is not supported.
3. A foreign key cannot include any nullable partitioning key columns when defined with ON DELETE SET NULL. This is a special case of reason code 2 since defining such a constraint would result in attempting to update a partitioning key column.
4. A table defined using a multipartition nodegroup or a single-partition nodegroup on other than the catalog partition does not support DATA CAPTURE CHANGES.

Action: The action corresponding to the reason code is:

1. Correct the CREATE TABLE, ALTER TABLE or CREATE UNIQUE INDEX statment.
2. Do not attempt to update the partitioning key columns for a multipartition table or consider deleting and then inserting the row with the new values in the partitioning columns.

3. Make the partitioning key column not nullable, specify a different ON DELETE action, or change the partitioning key of the table so that the foreign does not include any columns of the partitioning key.
4. Either specify DATA CAPTURE NONE or ensure that the table is placed in a table space on a single-partition nodegroup that specifies the catalog partition.

sqlcode: -270

sqlstate: 42997

SQL0271N

Index file for table with fid "<fid>" is either missing, or is not valid.

Cause: The index file for the table with fid "<fid>" is required during processing. The file is either missing, or it is not valid.

The statement cannot be processed, and the application is still connected to the database. This condition does not affect other statements that do not use the index on this table.

Action: Ensure that all users are disconnected from the database, then issue the RESTART DATABASE command on all nodes. Then try the request again.

The index (or indexes) is re-created when the database is restarted.

sqlcode: -271

sqlstate: 58004

SQL0276N

Connection to database "<name>" cannot be made because it is in the restore pending state.

Cause: The database must be restored before a connection can be done.

No connection was made.

Action: Restore the database, then issue the CONNECT statement again.

sqlcode: -276

sqlstate: 08004

SQL0279N • SQL0283N

SQL0279N

The database connection has been terminated during COMMIT processing. The transaction could be in doubt. Reason code = "<reason-code>".

Cause: Commit processing encountered an error. The transaction has been put in the commit state, but the commit processing may not have completed. The application's database connection has been terminated.

The cause of the error is indicated by the "<reason-code>":

1 A node involved in the transaction has failed.

Action: Determine the cause of the error. It may be necessary to contact the system administrator for assistance since the most common cause of the error is node failure or connection failure. The RESTART DATABASE command will complete the commit processing for this transaction.

sqlcode: -279

sqlstate: 08007

SQL0280W

View or trigger "<name>" has replaced an existing, inoperative view or trigger.

Cause: An existing, inoperative view or trigger "<name>" was replaced by:

- the new view definition as a result of a CREATE VIEW statement
- the new trigger definition as a result of a CREATE TRIGGER statement.

Action: None required.

sqlcode: +280

sqlstate: 01595

SQL0281N

Table space "<tablespace-name>" cannot be altered with additional containers because it is a system managed table space.

Cause: Additional containers cannot be added to a system managed table space. The exception to this is when a nodegroup was modified to add a node without table spaces, then containers can be added once on the new node using the ALTER TABLESPACE command.

In general, the table space must be managed by the database in order to add additional containers.

The statement cannot be processed.

Action: To add more containers to a system managed table space, drop and recreate the table space with more containers, ensuring that each container is of the same size and less than the container size limit, or change to a DMS table space.

sqlcode: -281

sqlstate: 42921

SQL0282N

Table space "<tablespace-name>" cannot be dropped because at least one of the tables in it, "<table-name>", has one or more of its parts in another table space.

Cause: A table in the specified table space does not contain all its parts in that table space. The base table, indexes or long data may be in another table space. Dropping this table space will not completely drop the table. This would leave the table in an inconsistent state. This table space cannot be dropped.

Action: Ensure that all objects contained in table space "<tablespace-name>" contain all their parts in this table space before attempting to drop the table space.

This may require dropping the table "<table-name>" before dropping the table space.

sqlcode: -282

sqlstate: 55024

SQL0283N

Temporary table space "<tablespace-name>" cannot be dropped because it is the only temporary table space in the database.

Cause: A database must contain at least one temporary table space. Dropping table space "<tablespace-name>" would remove the last temporary table space from the database.

Action: Ensure there will be another temporary table space in the database before attempting to delete this table space.

sqlcode: -283

sqlstate: 55026

SQL0284N

Table space "<tablespace-name>" following the clause "<clause>" cannot be a "<tablespace-type>" table space.

Cause: The CREATE TABLE statement specified a table space named "<tablespace-name>" following the clause "<clause>" that is not a valid type of table space for this clause.

This can occur in the following situations:

- "<tablespace-name>" was specified on the IN clause and the table space is not a REGULAR table space.
- "<tablespace-name>" was specified on the LONG IN clause and the table space is not a LONG, managed by database table space.
- "<tablespace-name>" was specified on the INDEX IN clause and the table space is not a REGULAR, managed by database table space.

Action: Correct the CREATE TABLE statement to specify a table space with the correct type for the "<clause>" clause.

sqlcode: -284

sqlstate: 42838

SQL0285N

The indexes and/or long columns for table "<table-name>" cannot be assigned to separate table spaces because the primary table space "<tablespace-name>" is a system managed table space.

Cause: If the primary table space is a system managed table space, all table parts must be contained in that table space. A table can have parts in separate table spaces only if the primary table space, index table space and long table space are database managed table spaces.

Action: Either specify a database managed table space for the primary table space, or do not assign the table parts to another table space.

sqlcode: -285

sqlstate: 42839

SQL0286N

No default primary table space exists for the new table.

Cause: The CREATE TABLE statement did not specify a table space.

A table space

- with the name IBMDEFAULTGROUP, or
- defined by the user, or
- with the name USERSPACE1

does not exist in the database. These are the valid defaults.

Action: Specify a valid table space name in the CREATE TABLE statement or ensure that a valid default table space exists in the database.

sqlcode: -286

sqlstate: 42727

SQL0287N

SYSCATSPACE cannot be used for user objects.

Cause: The CREATE TABLE statement specified a table space named SYSCATSPACE which is reserved for catalog tables.

Action: Specify a different table space name.

sqlcode: -287

sqlstate: 42838

SQL0288N

A long table space cannot be defined using MANAGED BY SYSTEM.

Cause: The table space being defined is for use with large objects and long strings. These can only be stored in table spaces that are defined in database managed space. Thus a long table space cannot be defined to use system managed space.

Action: Remove the keyword LONG or change to MANAGED BY DATABASE in the CREATE TABLESPACE statement.

sqlcode: -288

sqlstate: 42613

SQL0289N • SQL0291N

SQL0289N

Unable to allocate new pages in table space "`<tablespace-name>`".

Cause: One of the following conditions is true:

1. One of the containers assigned to this SMS table space has reached the maximum file size. This is the likely cause of the error.
2. All the containers assigned to this DMS table space are full. This is the likely cause of the error.
3. The table space object table for this DMS table space is full.
4. A rebalance is in progress, but has not progressed far enough to enable the newly added space to be used.
5. A redirected restore is being done to containers that are too small.
6. A rollforward is being done following a redirected restore and all the containers assigned to this tablespace are full.
7. A rollforward skipping add containers is being done and all the containers assigned to this tablespace are full.

Details can be found in the system error log and/or the database manager error log.

Action: Perform the action corresponding to the cause of the error:

1. either switch to a DMS TABLESPACE or recreate the SMS TABLESPACE with more directories (PATHs) such that: (number of directories) \geq (max tablesizes / maxfilesize). Note that maximum file size is operating system dependent.
2. add new container(s) to the DMS table space and try the operation again, after the rebalancer has made the new pages available for use.
3. drop unnecessary tables from this DMS table space.
4. wait for the rebalancer to make more progress.
5. perform the redirected restore again to larger containers.
6. perform the redirected restore again to larger containers.
7. perform the rollforward again allowing add containers, or perform a redirected restore to larger containers.

sqlcode: -289

sqlstate: 57011

SQL0290N

Table space access is not allowed.

Cause: A process attempted to access a table space which is in an invalid state for which the intended access is not allowed.

- If the table space is in a quiesced state, only processes which also hold the table space in a quiesced state are allowed access to the table space.
- If the table space is in any other state, only the process which is performing the action specified is allowed access to the table space.
- A temporary table space cannot be dropped which contains active temporary tables.
- The SET CONTAINER api cannot be used to set the container list unless the table space is in a "restore pending" state.

Details can be found in the system error log and/or the database manager error log.

Action: Possible actions include:

- If the table space is in a quiesced state, attempt to acquire a quiesced share or quiesced update state on the table space. Or, attempt to quiesce reset the table space.
- If the table space is in any other state, wait until the table space has returned to normal state before attempting to access the table space.

compact.

Refer to the systems administration guide for further information about the table space states.

sqlcode: -290

sqlstate: 55039

SQL0291N

State transition not allowed on table space.

Cause: An attempt was made to change the state of a table space. Either the new state is not compatible with the current state of the table space, or an attempt was made to turn off a particular state and the table space was not in that state.

Details can be found in the system error log and/or the database manager error log.

Action: Table space states change when a backup is taken, the load completes, the rollforward completes, etc., depending on the current state of the table spaces. Refer to the systems administration guide for further information about the table space states.

sqlcode: -291

sqlstate: 55039

SQL0292N

An internal database file could not be created.

Cause: An internal database file could not be created. Details can be found in the system error log and/or the database manager error log.

Action: Check that the directory containing the file is accessible (e.g. mounted) and writeable by the database instance owner.

sqlcode: -292

sqlstate: 57047

SQL0293N

Error accessing a table space container.

Cause: One of the following conditions is true:

- A container (directory, file or raw device) was not found.
- A container is not tagged as being owned by the proper table space.
- A container tag is corrupt.

Details can be found in the system error log and/or the database manager error log.

Action: Try the following:

1. Check that the directory, file or device exists and that the file system is mounted (if it is on a separate file system). Containers must be readable and writable by the database instance owner.
2. If you have a recent backup, try restoring the table space or database. If that fails because of the bad container and the container is not a DEVICE type, try manually removing the container first.
3. Call your IBM service representative.

sqlcode: -293

sqlstate: 57048

SQL0294N

The container is already in use.

Cause: Table space containers may not be shared. The possible causes of this error include the following.

- A CREATE TABLESPACE or ALTER TABLESPACE statement included a container that is already in use by another table space.
- A CREATE TABLESPACE or ALTER TABLESPACE statement included a container from a table space that has been dropped but the drop statement has not been committed.
- An ALTER NODEGROUP statement used to add a node used the containers of a LIKE node that is on the same physical node. These containers would therefore already be in use.
- A CREATE TABLESPACE or ALTER TABLESPACE statement is attempting to use the same container on more than one logical node on a single physical node. The same containers cannot be used for more than one node on the same physical node.
- An ADD NODE command or API used the containers from the temporary table spaces of a LIKE node that is on the same physical node. These containers would therefore already be in use.

Details can be found in the system error log and/or the database manager error log.

Action: Ensure the containers are unique.

- For the CREATE or ALTER TABLESPACE statement, specify a different container for the table space.
- For the CREATE or ALTER TABLESPACE statement including a container from a dropped table space, try again after the drop statement is committed or specify a different container.
- For the ALTER NODEGROUP statement, reissue the statement using the WITHOUT TABLESPACES clause, and then use the ALTER TABLESPACE statement to create unique containers for the new node.
- For CREATE or ALTER TABLESPACE statements where the environment includes more than one logical node on a physical node, ensure that the same containers are not specified for such logical nodes.
- For an ADD NODE command or API, reissue the statement using the WITHOUT TEMPORARY TABLESPACES clause, and then use the ALTER

SQL0295N • SQL0298N

TABLESPACE statement to create unique containers at the new node for the temporary table spaces.

sqlcode: -294

sqlstate: 42730

SQL0295N

The combined length for all container names for the table space is too long.

Cause: The total space required to store the list of containers exceeds the space allotted for this table space in the table space file.

Details can be found in the system error log and/or the database manager error log.

Action: Try one or more of the following:

- Use symbolic links, mounted file systems, etc. to shorten the new container names.
- Back up the table space and then use the database administration utility to reduce the number and/or name lengths of the containers. Restore the table space to the new containers.

sqlcode: -295

sqlstate: 54034

SQL0296N

Table space limit exceeded.

Cause: This database contains the maximum number of table spaces. No more can be created.

Details can be found in the system error log and/or the database manager error log.

Action: Delete table spaces that are not being used any more. Combine small table spaces by moving all data into one of them and deleting the other.

sqlcode: -296

sqlstate: 54035

SQL0297N

Pathname for container is too long.

Cause: The full path specifying the container name exceeds the maximum length allowed. If the container was specified as a path relative to the database directory, the concatenation of these two values must not exceed the maximum length.

Details can be found in the system error log and/or the database manager error log.

Action: Shorten the path length.

sqlcode: -297

sqlstate: 54036

SQL0298N

Bad container path.

Cause: The container path violates one of the following requirements:

- Container paths must be valid fully-qualified absolute paths or valid relative paths. The latter are interpreted relative to the database directory.
- The path must be read/write accessible to the instance id (check file permissions on UNIX-based systems).
- Containers must be of the type specified in the command (directory, file or device).
- Containers (directories) in system managed table spaces must be empty when designated as containers and must not be nested underneath other containers.
- The containers for one database must not be located underneath the directory of another database, and they may not be underneath any directory that appears to be for another database. This rules out any directory of the form SQLnnnnn, where 'n' is any digit.
- The container must be within the file size limit for the operating system.
- Containers (files) for dropped database managed table spaces can only be reused as containers (directories) for system managed table spaces after all agents terminate and vice versa.
- During a redirected restore, an SMS container was specified for a DMS table space or a DMS container was specified for an SMS table space.

This message will also be returned if any other unexpected error occurred which prevents DB2 from accessing the container.

Details can be found in the system error log and/or the database manager error log.

Action: Specify another container location or change the container to make it acceptable to DB2 (such as changing file permissions) and try again.

sqlcode: -298

sqlstate: 428B2

SQL0299N

Container is already assigned to the table space.

Cause: The container that you are attempting to add has already been assigned to the table space.

Details can be found in the system error log and/or the database manager error log.

Action: Choose another container and try again.

sqlcode: -299

sqlstate: 42731

SQL0300 - SQL0399

SQL0301N

The value of a host variable in the EXECUTE or OPEN statement cannot be used because of its data type.

Cause: A host variable could not be used as specified in the statement because its data type is incompatible with the intended use of its value.

This error can occur as a result of specifying an incorrect host variable or an incorrect SQLTYPE value in a SQLDA on an EXECUTE or OPEN statement.

The statement cannot be processed.

Action: Verify that the data types of all host variables in the statement are compatible with the manner in which they are used.

sqlcode: -301

sqlstate: 07006

SQL0302N

The value of a host variable in the EXECUTE or OPEN statement is too large for its corresponding use.

Cause: The value of an input host variable was found to be too large for its use in the SELECT, VALUES, or prepared statement. One of the following occurred:

- The corresponding host variable or parameter marker used in the SQL statement is defined as string, but the input host variable contains a string that is too long.
- The corresponding host variable or parameter marker used in the SQL statement is defined as numeric, but the input host variable contains a numeric value that is too large.
- The terminating NUL character is missing from the C language NUL-terminated character string host variable.
- DataJoiner users: in a pass-through session, a data source-specific restriction might have been violated.

This error occurs as a result of specifying either an incorrect host variable or an incorrect SQLLEN value in an SQLDA on an EXECUTE or OPEN statement.

The statement cannot be processed.

Action: Ensure that the input host variable value is the correct type and length. If the input host variables supply values to parameter markers, match values with the implied data type and length of the parameter marker.

DataJoiner users: for a pass-through session, determine what data source is causing the error (see the *Problem Determination Guide* for procedures to follow to identify the failing data source). Examine the SQL dialect for that data source to determine which specific restriction has been violated, and adjust the failing statement as needed.

sqlcode: -302

sqlstate: 22001, 22003

SQL0303N

A value cannot be assigned to a host variable in the SELECT, VALUES, or FETCH statement because the data types are not compatible.

Cause: An imbedded SELECT or VALUES statement selects into a host variable "<name>", but the data type of the variable is not compatible with the data type of the corresponding SELECT-list or VALUES-list element. Both must be numeric, character, or graphic. For

SQL0304N • SQL0309N

example, if the data type of the column is date or time, the data type of the variable must be character with an appropriate minimum length.

The statement cannot be processed.

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

sqlcode: -303

sqlstate: 42806

SQL0304N

A value cannot be assigned to a host variable because the value is not within the range of the host variable's data type.

Cause: A FETCH, VALUES, or SELECT into a host variable list failed because the host variable was not large enough to hold the retrieved value.

The statement cannot be processed. No data was retrieved.

Action: Verify that table definitions are current and that the host variable has the correct data type. For the ranges of SQL data types, refer to the *SQL Reference*.

DataJoiner users: for the ranges of SQL data types, refer to the *IBM DataJoiner Application Programming and SQL Reference Supplement*.

sqlcode: -304

sqlstate: 22001, 22003

SQL0305N

The NULL value cannot be assigned to a host variable in the SELECT or FETCH statement because no indicator variable is specified.

Cause: A FETCH or embedded SELECT or VALUES operation resulted in the retrieval of a NULL value to be inserted into a host variable for which no indicator variable was provided. An indicator variable must be supplied if a column can return a NULL value.

The statement cannot be processed. No data was retrieved.

Action: Examine the definition of the FETCH or SELECT object table or the elements of the VALUES list. Correct the program to provide indicator variables for all host variables where NULL values from those columns can be retrieved.

sqlcode: -305

sqlstate: 22002

SQL0306N

The host variable "<name>" is undefined.

Cause: The host variable "<name>" is not declared in any DECLARE SECTION.

The statement cannot be processed.

Action: Ensure that the host variable is declared and the name spelled correctly.

SQL0307N

The host variable "<name>" is already defined.

Cause: The host variable "<name>" has already been declared in a DECLARE SECTION.

The definition is ignored. The previous definition is used.

Action: Ensure that the host variable name is spelled correctly and the name is defined only once for each program.

SQL0308N

The limit on the number of host variables has been reached.

Cause: The limit on the number of host variables is dependent on how many will fit in the HOST_VARS column of SYSPLAN. This limit has been reached.

The remaining variable declarations are ignored.

Action: Either simplify the program, split the program into smaller, separate programs, or do both.

SQL0309N

The value of a host variable in the OPEN statement is NULL, but its corresponding use cannot be NULL.

Cause: The value of an input host variable was found to be NULL but the corresponding use in the SELECT, VALUES, or prepared statement did not specify an indicator variable.

The statement cannot be processed.

Action: Ensure you need a USING clause. Otherwise, ensure an indicator variable is specified only if required.

sqlcode: -309

sqlstate: 07002

SQL0310N

SQL statement contains too many host variables.

Cause: The maximum number of host variables was exceeded in the statement.

The statement cannot be processed.

Action: Ensure the statement has fewer host variables or is less complex.

SQL0311N

The specified length of a host variable is negative.

Cause: When evaluated, the length specification for a host string variable was negative. Either a negative SQLLEN value is used or a varying length string has a negative length.

The statement cannot be processed.

Action: Correct the program to ensure that all host string variable lengths are not negative.

sqlcode: -311

sqlstate: 22501

SQL0312N

The host variable "<host-name>" is used in a dynamic SQL statement, a view definition, or a trigger definition.

Cause: The host variable "<host-name>" appears in the SQL statement, but host variables are not allowed in dynamic SQL statements, in the SELECT statement of a view definition, or in the triggered action of a trigger definition.

The statement cannot be processed.

Action: Use parameter markers (?) instead of host variables for dynamic SQL statements. Do not use host variables and parameter markers in view or trigger definitions.

sqlcode: -312

sqlstate: 42618

SQL0313N

The number of host variables in the EXECUTE or OPEN statement is not equal to the number of input values required.

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

The statement cannot be processed.

Action: Correct the application program so the number of host variables specified in the EXECUTE or OPEN statement and the number of host variables or parameter markers in the SQL statement are the same.

sqlcode: -313

sqlstate: 07001, 07004

SQL0314N

The host variable "<name>" is incorrectly declared.

Cause: The host variable "<name>" is not declared correctly for one of the following reasons:

- The type specified is not one that is supported.
- The length specification is 0, negative, or too large.
- An initializer is used.
- An incorrect syntax is specified.

The variable remains undefined.

Action: Ensure that you correctly specify only the declarations the database manager supports.

SQL0315N

The host variable is incorrectly declared.

Cause: The host variable is not declared correctly for one of the following reasons:

- The type specified is not one that is supported.
- The length specification is 0, negative or too large.
- An incorrect syntax is specified.

The variable remains undefined.

Action: Ensure that you correctly specify only the declarations the database manager supports.

SQL0317N • SQL0332N

SQL0317N

No END DECLARE SECTION was found after a BEGIN DECLARE SECTION.

Cause: The end of input was reached during processing of a DECLARE SECTION.

Precompilation is terminated.

Action: Add an END DECLARE SECTION statement to end a DECLARE SECTION.

SQL0318N

An END DECLARE SECTION was found without a previous BEGIN DECLARE SECTION.

Cause: An END DECLARE SECTION statement was found, but there was no previous BEGIN DECLARE SECTION.

The statement cannot be processed.

Action: Enter a BEGIN DECLARE SECTION before an END DECLARE SECTION.

SQL0324N

The "<usage>" variable "<name>" is the wrong type.

Cause: Either the INDICATOR variable "<name>" is not a small integer or the STATEMENT variable "<name>" is not a character data type.

The statement cannot be processed.

Action: Ensure that the variable is the correct type and is specified correctly.

SQL0332N

There is no available conversion for the source code page "<code page>" to the target code page "<code page>". Reason code "<reason-code>".

Cause: No conversion of data is supported from the source code page to the target code page. This error can occur under the following conditions:

- An error has occurred executing an SQL statement. The data cannot be processed by the database manager.
- An error has occurred when trying to import or export a WSF or an IXF file. The import or export will fail.

- DataJoiner users: the data source does not support the specified code page conversion.

The reason codes are as follows:

- 1 source and target code page combination is not supported by the database manager.
- 2 source and target code page combination is either not supported by the database manager or by the operating system character conversion utility on the client node.
- 3 source and target code page combination is either not supported by the database manager or by the operating system character conversion utility on the server node.

Action: Possible solutions include:

- Verify that data conversion between the source and target code page is supported by the database manager. For database manager code page support, check the *Quick Beginnings*. If Distributed Database Connection Services (DDCS) is being used, check the DDCS Installation and Configuration Guide.
- Data conversion for some code page combinations may be supported through database manager install options, depending on the language group of the source or target code page. Ensure that the appropriate ones are installed and accessible to the database manager and the client application, as indicated by the reason code returned. For a list of install options, consult the *Quick Beginnings* or the DDCS Installation and Configuration Guide.
- Data conversion for some code page combinations may be supported by the database manager through an operating system-provided character conversion utility, depending on the language group of the source or target code page. Check your operating system documentation for a list of supported conversions and ensure that the appropriate ones are installed and accessible to the database manager and the client application, as indicated by the reason code returned. For a list of operating system conversion utilities used, consult the *Quick Beginnings* or the DDCS Installation and Configuration Guide.
- Change the unsupported code page(s) to one of the documented pairs.

DataJoiner users: for DataJoiner code page support, see "National Language Support", in the *IBM DataJoiner Planning, Installation, and Configuration Guide*.

sqlcode: -332

sqlstate: 57017

SQL0334N

Overflow occurred while performing conversion from codepage "<source>" to codepage "<target>". The maximum size of the target area was "<max-len>". The source string length was "<source-len>" and its hexadecimal representation was "<string>".

Cause: During the execution of the SQL statement, a code page conversion operation has resulted in a string that is longer than the maximum size of the target object.

Action: Modify the data to avoid the overflow condition, depending on the circumstances, by:

- decreasing the length of the source string or increasing the size of the target object (please refer to the note below),
- altering the operation, or,
- ensuring that the application codepage and the database codepage are the same. This eliminates the need for codepage conversions for most connections.

Note: Automatic promotion of character or graphic string data types will not occur as part of character conversion. If the resultant string length exceeds the maximum length of the data type of the source string then an overflow has occurred. To correct this situation either change the data type of the source string or use data type casting to allow for an increase in the string length due to conversion.

sqlcode: -334

sqlstate: 22524

SQL0338N

An ON clause associated with a JOIN operator is not valid.

Cause: An ON clause associated with a JOIN operator is not valid for one of the following reasons.

- The join condition cannot include any subqueries.
- Column references in an ON clause must only reference columns of tables that are in the scope of the ON clause (included in the same joined-table clause as the ON clause).

- Scalar fullselects are not allowed in the expressions of an ON clause.
- A function referenced in an ON clause of a full outer join must be deterministic and have no external action.

The statement cannot be processed.

Action: Correct the ON clause to reference appropriate columns or delete any subqueries or scalar fullselects.

If using full outer join ensure that all functions in the ON clause are deterministic and have no external action.

sqlcode: -338

sqlstate: 42972

SQL0340N

The common table expression "<name>" has the same identifier as another occurrence of a common table expression definition within the same statement.

Cause: 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.

The statement cannot be processed.

Action: Change the name of one of the common table expressions.

sqlcode: -340

sqlstate: 42726

SQL0341N

A cyclic reference exists between the common table expressions "<name1>" and "<name2>".

Cause: 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.

The statement cannot be processed.

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

sqlcode: -341

sqlstate: 42835

SQL0342N • SQL0346N

SQL0342N

The common table expression “<name>” cannot use SELECT DISTINCT and must use UNION ALL because it is recursive.

Cause: 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.

The statement cannot be processed.

Action: 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.

sqlcode: -342

sqlstate: 42925

SQL0343N

The column names are required for the recursive common table expression “<name>”.

Cause: The recursive common table expression “<name>” must include the specification of the column names following the identifier of the common table expression.

The statement cannot be processed.

Action: Add column names following the identifier of the common table expression.

sqlcode: -343

sqlstate: 42908

SQL0344N

The recursive common table expression “<name>” has mismatched data types, lengths or code pages for column “<column-name>”.

Cause: The recursive common table expression “<name>” has a column “<column-name>” that is referred to in the iterative fullselect of the common table expression. The data type, length and code page 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, length or code page that may result in failure to assign the value for the column.

The statement cannot be processed.

Action: Correct the column used in the fullselects of the recursive common table expression so that the initialization column matches the iterative columns.

sqlcode: -344

sqlstate: 42825

SQL0345N

The fullselect of the recursive common table expression “<name>” must be the UNION of two or more fullselects and cannot include column functions, GROUP BY clause, or HAVING clause.

Cause: 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 column functions
- and cannot include a HAVING clause.

The statement cannot be processed.

Action: Change the common table expression by:

- making it a union of two or more fullselects
- removing any column functions, GROUP BY clause, or HAVING clause
- removing the recursive reference.

sqlcode: -345

sqlstate: 42836

SQL0346N

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.

Cause: 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 refer-

ences 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.

The statement cannot be processed.

Action: 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.

sqlcode: -346

sqlstate: 42836

SQL0347W

The recursive common table expression “<name>” may contain an infinite loop.

Cause: 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.

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

sqlcode: +347

sqlstate: 01605

SQL0350N

LOB column “<column-name>” cannot be used in an index, a key, or a constraint.

Cause: Even in cases where it would not violate the maximum size of an index, key, or constraint, a LOB column or a distinct type column based on a LOB column cannot be used in an index, key or constraint.

The statement cannot be processed.

Action: Remove the LOB column from the specification of the index, key, or constraint.

sqlcode: -350

sqlstate: 42962

SQL0351N

LOB data in position “<position-number>” of the select-list cannot be sent using DRDA protocol.

Cause: LOB data types are not defined in DRDA. Hence, LOB data or distinct types based on LOB data cannot be flowed using the DRDA protocol. “<position-number>” is the position of the element with a LOB data type in the select-list.

The statement cannot be processed.

Action: Make sure that LOB data is not being retrieved when using DRDA by excluding them in the select-list, or select smaller pieces of the LOB by using CHAR(SUBSTR(CLOB)).

sqlcode: -351

sqlstate: 56084

SQL0352N

LOB data in position “<position-number>” of the input-list cannot be sent using DRDA protocol.

Cause: LOB data types are not defined in DRDA. Hence, LOB data cannot be flowed using the DRDA protocol. “<position-number>” is the position of the element with a LOB data type in the input-list.

The statement cannot be processed.

Action: Make sure that LOB data is not being sent when using DRDA by excluding them in the input-list.

sqlcode: -352

sqlstate: 56084

SQL0355N • SQL0355N

SQL0355N

The column "<column-name>", as defined, is too large to be logged.

Cause: Large Object data types (BLOB, CLOB, and DBCLOB) may be created in sizes up to 2 gigabytes (2147483647 bytes). Logging of data values is allowed only upon objects which are less than or equal to than 1 gigabyte (1073741823 bytes) in size. Therefore, large objects greater than 1 gigabyte in size can not be logged.

Action: Either explicitly indicate logging of data is not required, by using the NOT LOGGED phrase during column creation, or reduce the maximum size of the column to 1 gigabyte or below.

sqlcode: -355

sqlstate: 42993

SQL0400 - SQL0499

SQL0401N

The data types of the operands for the operation "<operator>" are not compatible.

Cause: The operation "<operator>" appearing within the SQL statement has a mixture of numeric and nonnumeric operands, or the operation operands are not compatible.

DataJoiner users: this data type violation can be at the data source or at DataJoiner.

Some DataJoiner data sources do not provide the appropriate values for "<operator>". In these cases the message token will have the following format: "<data source>:UNKNOWN", indicating that the actual value for the specified data source is unknown.

The statement cannot be processed.

Action: Check all operand data types to ensure that they are comparable and compatible with the statement usage.

If all the SQL statement operands are correct and accessing a view, check the data types of all the view operands.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the

Problem Determination Guide for procedures to follow to identify the failing data source) and examine the data type restrictions for that data source.

sqlcode: -401

sqlstate: 42818

SQL0402N

The data type of an operand of an arithmetic function or operation "<operator>" is not numeric.

Cause: A nonnumeric operand is specified for the arithmetic function or operator "<operator>".

The statement cannot be processed.

Action: Correct the SQL statement syntax so all specified function or operator operands are numeric.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and examine the operators applied to that data source.

sqlcode: -402

sqlstate: 42819

SQL0403W

The newly defined alias "<name>" resolved to the object "<name2>" which is currently undefined.

Cause: The alias <name> has been defined upon:

- a table or view which currently is not defined in the database
- another alias which resolves to a table or view which is not defined in the database.

The object <name2> is the undefined object. This object must exist before any SQL statement (other than CREATE ALIAS) can successfully use the newly created alias. The specified alias <name> is created.

An inoperative view is considered to be undefined for the purposes of creating an alias.

Action: Ensure that the undefined object <name2> is defined prior to using the newly created alias in an SQL statement (other than CREATE ALIAS).

sqlcode: +403

sqlstate: 01522

SQL0408N • SQL0410N

- A SET transition-variable statement in a trigger cannot set values in that column to NULL.
- 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.

DataJoiner users: this situation can be detected by DataJoiner or by the data source. Some DataJoiner data sources do not provide the appropriate values for “<name>”. In these cases the message token will have the following format: “<data source>:UNKNOWN”, indicating that the actual value for the specified data source is unknown.

The statement cannot be processed.

Note: Under some circumstances, the token “<name>” may not be filled in (sqlerrmc field of the SQLCA not filled in).

Action: Correct the SQL statement after examining the object table definition to determine which columns of the table have the NOT NULL attribute and do not have the WITH DEFAULT attribute.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and examine the object definition for that data source. Remember that the defaults (NULL and NOT NULL) are not necessarily the same between data sources.

sqlcode: -407

sqlstate: 23502

SQL0408N

An UPDATE, INSERT, or SET transition-variable value is not compatible with the data type of its target column “<name>”.

Cause: The data type of the value to be inserted into or set in the column “<name>” by an INSERT, UPDATE, or SET transition-variable statement is incompatible with the declared data type of that column. Both must be:

- Numeric
- Character
- Graphic
- Dates or character
- Times or character
- Timestamps or character.
- the same distinct type

The statement cannot be processed.

Action: Examine the current definition for the object table. Ensure the host variable or literal value assigned to the specified column is the proper data type.

sqlcode: -408

sqlstate: 42821

SQL0409N

The operand of a COUNT function is not valid.

Cause: As specified in the SQL statement, the operand of the COUNT function does not conform to the rules of SQL syntax. Only COUNT(*) and COUNT(DISTINCT column) are allowed.

The statement cannot be processed.

Action: Specify COUNT(*) or COUNT(DISTINCT column).

NOTE: This message is only applicable to versions of DB2 prior to Version 2.

sqlcode: -409

sqlstate: 42607

SQL0410N

The floating point literal “<literal>” contains more than 30 characters.

Cause: The specified floating point literal is more than 30 characters in length, excluding leading zeros. A floating point literal has a maximum length of 30 characters.

The statement cannot be processed.

Action: Shorten the specified literal.

sqlcode: -410

sqlstate: 42820

SQL0412N

The SELECT clause of a subquery specifies multiple columns.

Cause: In the context of the SQL statement, the subquery can have only one column specified in its SELECT clause.

The statement cannot be processed.

Action: Specify only one column in the SELECT clause of the subquery.

sqlcode: -412

sqlstate: 42823

SQL0413N

Overflow occurred during numeric data type conversion.

Cause: 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.

DataJoiner users: numeric conversion can occur at DataJoiner, at data sources, or both.

The statement cannot be processed. No data was retrieved, updated, or deleted.

Action: Examine the syntax of the SQL statement to determine the cause of the error. If the problem is data-dependent, it may be necessary to examine the data processed at the time of the error.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and examine the data range restrictions for that data source.

sqlcode: -413

sqlstate: 22003

SQL0415N

The data types of corresponding columns are not compatible in a fullselect that includes a set operator or in the multiple rows of a VALUES clause of an INSERT or fullselect.

Cause: There are various statements where this error may occur.

- It may occur within a SELECT or VALUES statement that includes set operations (UNION, INTERSECT, or EXCEPT). The corresponding columns of the subselects or fullselects that make up the SELECT or VALUES statements are not compatible.
- It may occur within an INSERT statement that is inserting multiple rows. In this case, the corresponding columns of the rows specified in the VALUES clause are not compatible.
- It may occur within a SELECT or VALUES statement where the VALUES clause is used with multiple rows. In this case, the corresponding columns of the rows specified in the VALUES clause are not compatible.

The columns are incompatible for one of the following reasons:

- Both columns are not characters
- Both columns are not numbers
- Both columns are not dates
- Both columns are not times
- Both columns are not timestamps
- Both columns are not graphic
- Both columns are not the same user-defined distinct type.

If the data type of a column is character, date, time, or timestamp the corresponding column may be a character string constant.

The statement cannot be processed.

Action: Correct the column names used in the SELECT statements or the expressions in the VALUES clause so that all corresponding columns are compatible types.

sqlcode: -415

sqlstate: 42825

SQL0416N • SQL0419N

SQL0416N

You cannot specify a result column longer than 254 bytes in the SELECT or VALUES statements connected by a set operator other than UNION ALL.

Cause: One of the SELECT or VALUES statements connected by a set operator specifies a result column that is longer than 254 bytes. VARCHAR or VARGRAPHIC result columns longer than 254 bytes can be used only with the UNION ALL set operator.

The statement cannot be processed.

Action: Either use the UNION ALL operator instead of UNION, or remove the result columns longer than 254 bytes from the SELECT or VALUES statements.

sqlcode: -416

sqlstate: 42907

SQL0417N

A statement string to be prepared contains parameter markers as the operands of the same operator.

Cause: The statement string specified as the object of a PREPARE or EXECUTE IMMEDIATE contains a predicate or expression in which parameter markers have been used as operands of the same operator without a CAST specification. For example:

? > ?

The statement cannot be processed.

Action: This syntax is not supported. Use a CAST specification to give at least one of the parameter markers a data type.

sqlcode: -417

sqlstate: 42609

SQL0418N

A statement contains a use of a parameter marker that is not valid.

Cause: Untyped parameter markers cannot be used:

- in a SELECT list
- as the sole argument of a datetime arithmetic operation
- in some cases as the sole argument of a scalar function

Parameter markers can never be used:

- in a statement that is not a prepared statement
- in the fullselect of a CREATE VIEW statement
- in the triggered action of a CREATE TRIGGER statement

The statement cannot be processed.

Action: Correct the syntax of the statement. If untyped parameter markers are not allowed, use the CAST specification to give the parameter marker a data type.

sqlcode: -418

sqlstate: 42610

SQL0419N

A decimal divide operation is not valid because the result would have a negative scale.

Cause: A specified decimal division is not valid because it will result in a negative scale.

The formula used internally to calculate the scale of the result for decimal division is:

Scale of result = 31 - np + ns - ds

where np is the precision of the numerator, ns is the scale of the numerator, and ds is the scale of the denominator.

DataJoiner users: the specified decimal division results in an invalid scale for that data source.

The statement cannot be processed.

Action: Examine and ensure the precision and scale of all columns that may participate in a decimal division. Note that an integer or small integer value may be converted to a decimal for this calculation.

DataJoiner users: if the reason is unknown, isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and examine the data range restrictions for that data source.

sqlcode: -419

sqlstate: 42911

SQL0420N

Invalid character found in a character string argument of the function "<function-name>".

Cause: The function "<function-name>" has a character string argument that contains a character that is not valid in a numeric SQL constant. The function may have been called as a result of using the CAST specification with "<function-name>" as the target data type. The function or data type used in the SQL statement may be a synonym for "<function-name>".

If a decimal character is specified in the DECIMAL function then that is the character that must be used in place of the default decimal character.

Action: Ensure that the character strings that are being converted to numeric types contain only characters that are valid in numeric SQL constants, using the decimal character, if specified.

sqlcode: -420

sqlstate: 22018

SQL0421N

The operands of a set operator or a VALUES clause do not have the same number of columns.

Cause: The operands of a set operator such as UNION, EXCEPT, or INTERSECT must have the same number of columns. The rows in a VALUES clause must have the same number of columns.

The statement cannot be processed.

Action: Change the SQL statement so each operand, or each row of a VALUES clause, has exactly the same number of columns.

sqlcode: -421

sqlstate: 42826

SQL0423N

LOB locator variable "<variable-position>" does not currently represent any value.

Cause: A locator variable is in error. Either it has not had a LOB value assigned to it, or the locator associated with the variable has been freed.

If "<variable-position>" is provided, it gives the ordinal position of the variable in error in the set of variables specified. Depending on when the error is detected, the

database manager may not be able to determine "<variable-position>".

Action: Correct the program so that the LOB locator variables used in the SQL statement have valid LOB values before the statement is executed. A LOB value can be assigned to a locator variable by means of a SELECT INTO statement, a VALUES INTO statement, or a FETCH statement.

sqlcode: -423

sqlstate: 0F001

SQL0426N

Dynamic commit invalid for application execution environment.

Cause: An application executing in a CONNECT TYPE 2 environment or Distributed Transaction Processing (DTP) environment such as CICS has attempted to execute an SQL dynamic COMMIT statement. The SQL dynamic COMMIT statement cannot be executed in this environment.

Action:

- Use the commit statement provided by the DTP environment to perform the commit. For example, in a CICS environment this would be the CICS SYNCPOINT command.
- If this statement was executed within a stored procedure, remove the statement entirely.

sqlcode: -426

sqlstate: 2D528

SQL0427N

Dynamic rollback invalid for application execution environment.

Cause: An application executing in a CONNECT TYPE 2 environment or Distributed Transaction Processing (DTP) environment such as CICS has attempted to execute an SQL dynamic ROLLBACK statement. The SQL dynamic ROLLBACK statement cannot be executed in this environment.

Action:

- Use the rollback statement provided by the DTP environment to perform the rollback. For example, in a CICS environment this would be the CICS SYNCPOINT ROLLBACK command.
- If this statement was executed within a stored procedure, remove the statement entirely.

SQL0428N •SQL0432N

sqlcode: -427

sqlstate: 2D529

SQL0428N

DISCONNECT cannot be issued if a connection it is directed against has executed SQL within the unit of work.

Cause: DISCONNECT will not be executed against a connection in the following cases:

- If SQL has been issued against the connection within the unit of work.
- If a WITH HOLD cursor is currently open for the connection.

Note that DISCONNECT ALL causes the DISCONNECT to be directed against all connections, so the request will fail if any of the connections violate the above restrictions.

Action: Possible actions:

- Issue the DISCONNECT statement before any SQL statements have been issued to the database.
- COMMIT or ROLLBACK the unit of work before issuing the DISCONNECT.
- Close WITH HOLD cursors before committing a unit of work if a DISCONNECT is required for connections for which the cursors were open.

sqlcode: -428

sqlstate: 25501

SQL0429N

The maximum number of concurrent LOB locators has been exceeded.

Cause: A maximum of 32,000 concurrent LOB locators per unit of work, is supported by DB2.

Action: Modify the program so that it requires fewer concurrent LOB locators and try again.

sqlcode: -429

sqlstate: 54028

SQL0430N

User defined function “<function-name>” (specific name “<specific-name>”) has abnormally terminated.

Cause: An abnormal termination has occurred while the named UDF was in control.

Action: The UDF needs to be fixed. Contact the author of the UDF or your database administrator. Until it is fixed, the UDF should not be used.

sqlcode: -430

sqlstate: 38503

SQL0431N

User defined function “<function-name>” (specific name “<specific-name>”) has been interrupted by the user.

Cause: A user/client interrupt has occurred while the named UDF was in control.

Action: This could indicate some problem in the UDF, such as an infinite loop or wait. If the problem persists, (i.e. the need to interrupt results in the same error condition), then contact the author of the UDF or your database administrator. Until the problem is fixed, the UDF should not be used.

sqlcode: -431

sqlstate: 38504

SQL0432N

A parameter marker cannot have the user defined type name “<udt-name>”.

Cause: A parameter marker in the statement has been determined as having the user-defined type “<udt-name>” based on the context in which it is used. A parameter marker cannot have a user-defined type as its data type unless it is part of an assignment (VALUES clause of INSERT or SET clause of UPDATE) or it is being explicitly cast to a user-defined distinct data type using the CAST specification.

The statement cannot be processed.

Action: Use an explicit cast to the user-defined distinct data type for the parameter marker or cast the columns that are user-defined distinct data types to their corresponding source data type.

sqlcode: -432

sqlstate: 42841

SQL0433N

Value "<value>" is too long.

Cause: 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.
- a recursively referenced column whose data type and length is determined by the initialization part of recursion and may grow in the iterative part of the recursion.

The statement has failed.

Action: 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.

sqlcode: -433

sqlstate: 22001

SQL0434W

An unsupported value for clause "<clause>" has been replaced by the value "<value>".

Cause: The value that was specified for clause "<clause>" is not supported and has been replaced with the identified supported value "<value>".

Action: No change is required if the selected value is acceptable. Otherwise, specify a value that is valid for "<clause>".

sqlcode: +434

sqlstate: 01608

SQL0435N

An invalid SQLSTATE "<sqlstate>" is specified in the function RAISE_ERROR.

Cause: The SQLSTATE specified in the RAISE_ERROR function does not conform to the rules for an application defined SQLSTATE.

Action: Correct the SQLSTATE specified in the function RAISE_ERROR. The SQLSTATE must be a character string containing exactly 5 characters. It must be of type CHAR defined with a length of 5, or type VARCHAR defined with a length of 5 or greater. The SQLSTATE value must follow the rules for application-defined SQLSTATES as follows:

- Each character must be from the set of digits ('0' through '9') or non-accented upper case letters ('A' through 'Z')
- The SQLSTATE class (first two characters) cannot be '00', '01', or '02' since these are not error classes.
- If the SQLSTATE class (first two characters) starts with the character '0' through '6' or 'A' through 'H', then the subclass (last three characters) must start with a character in the range 'I' through 'Z'
- If the SQLSTATE class (first two characters) starts with the character '7', '8', '9' or 'I' through 'Z', then the subclass (last three characters) can be any of '0' through '9' or 'A' through 'Z'.

sqlcode: -435

sqlstate: 428B3

SQL0436N

The terminating NULL character is missing from the C language NULL-terminated character string host variable.

Cause: The value of an input host variable code in the C programming language requires a NULL-terminator character at the end of the string.

The statement cannot be processed.

Action: Ensure that the value of the input host variable is terminated by the NULL-terminator character.

sqlcode: -436

sqlstate: 22024

SQL0437W • SQL0440N

SQL0437W

Performance of this complex query may be sub-optimal. Reason code: “<reason-code>”.

Cause: The statement may achieve sub-optimal performance since the complexity of the query requires resources that are not available or optimization boundary conditions were encountered. The following is a list of reason codes:

- 1 The join enumeration method was altered due to memory constraints
- 2 The join enumeration method was altered due to query complexity
- 3 Optimizer cost underflow
- 4 Optimizer cost overflow
- 5 Query optimization class was too low
- 6 Optimizer ignored an invalid statistic

The statement will be processed.

Action: One or more of the following:

- Increase the size of the statement heap (stmthep) in the database configuration file. (Reason code 1)
- Break the statement up into less complex SQL statements. (Reason codes 1,2,3,4)
- Ensure predicates do not over-specify the answer set (Reason code 3)
- Change the current query optimization class to a lower value (Reason codes 1,2,4)
- Issue Runstats for the tables involved in the query (Reason codes 3,4)
- Change the current query optimization class to a higher value (Reason code 5)
- Reissue RUNSTATS for both the tables involved in the query and their corresponding indexes, i.e. use the AND INDEXES ALL clause so that table and index statistics are consistent (Reason code 6)

sqlcode: +437

sqlstate: 01602

SQL0438N

Application raised error with diagnostic text: “<text>”.

Cause: This error occurred as a result of execution of the RAISE_ERROR function or the SIGNAL SQLSTATE statement in a trigger.

Action: See application documentation.

sqlcode: -438

sqlstate: application-defined

SQL0439N

User defined function “<function-name>” is indirectly implemented by function “<source-function>” which resulted in error “<sqlcode>”.

Cause: The function “<function-name>” was referenced in the user's statement. However, because the SOURCE clause was used in the definition of this function, it has turned out that function “<source-function>” actually implements the function. (It may be a direct or an indirect definition path from “<function-name>” to “<source-function>”.) At compile time, the encapsulator (DB2 code which acts on behalf of a function) for “<source-function>” has returned the error identified by “<sqlcode>”.

Action: The actual error situation needs to be understood better before corrective action can be taken. Look up the explanation for “<sqlcode>”. If “<source-function>” is a built-in function, the “<sqlcode>” should indicate the problem, as in the case where a built-in function is directly referenced in the user's statement. If “<source-function>” is a user defined function, the message most likely indicates a problem with one of the arguments or with the result from the function.

Correct the problem and try again.

sqlcode: -439

sqlstate: 428A0

SQL0440N

No function by the name “<function-name>” having compatible arguments was found in the function path.

Cause: This occurs in a reference to function “<function-name>”, when the database manager cannot find a function it can use to implement the reference. There are several reasons why this could occur:

- “<function-name>” was either incorrectly specified or does not exist in the database.
- A qualified reference was made, and the qualifier was incorrectly specified.
- The user's function 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.
- The right number of arguments were included, but the data types of one or more of the arguments is incorrect.

- The function does not exist in the database with a create timestamp earlier than the time the package was bound (applies to static Data Definition Language (DDL) statements).

Action: Fix the problem and retry. This could involve catalog access, change to the statement, the addition of new functions, and/or change to the function path.

sqlcode: -440

sqlstate: 42884

SQL0441N

Invalid use of DISTINCT with scalar function “<function-name>”.

Cause: The keyword DISTINCT was detected within the parentheses in a reference to function “<function-name>”, and the function has been resolved as a scalar function. Use of the keyword DISTINCT with a scalar function is invalid.

Action: If a scalar function is being used, then remove the keyword DISTINCT. It is invalid for a scalar function.

If a column function is being used, then there is a problem with function resolution. Check your function path to see if the desired function is in one of the schemas, and also check the SYSFUNCTIONS catalog for the spelling of the function name and the number and types of parameters.

Correct the error and try again.

sqlcode: -441

sqlstate: 42601

SQL0442N

Error in referring to function “<function-name>”. The maximum number of allowable arguments (90) has been exceeded.

Cause: Too many arguments were specified in the reference to function “<function-name>”. The maximum allowable is 90.

Action: Correct the statement by ensuring that the correct number of arguments has been used and try again.

sqlcode: -442

sqlstate: 54023

SQL0443N

User defined function “<function-name>” (specific name “<specific-name>”) has returned an error SQLSTATE with diagnostic text “<text>”.

Cause: An SQLSTATE of the form 38xxx was returned to DB2 by User Defined Function (UDF) “<function-name>” (specific name “<specific-name>”), along with message text “<text>”.

Action: The user will need to understand the meaning of the error. See your Database Administrator, or the author of the UDF.

Errors that are detected by the IBM supplied functions in the SYSFUN schema all return the SQLSTATE 38552. The message text portion of the message is of the form:

SYSFUN:nn

where nn is a reason code meaning:

- 01 Numeric value out of range
- 02 Division by zero
- 03 Arithmetic overflow or underflow
- 04 Invalid date format
- 05 Invalid time format
- 06 Invalid timestamp format
- 07 Invalid character representation of a timestamp duration
- 08 Invalid interval type (must be one of 1, 2, 4, 8, 16, 32, 64, 128, 256)
- 09 String too long
- 10 Length or position in string function out of range
- 11 Invalid character representation of a floating point number

sqlcode: -443

sqlstate: 38xxx (the SQLSTATE returned by the UDF).

SQL0444N

User defined function “<function-name>” (specific name “<specific-name>”) is implemented with code in library or path “<library-or-path>”, function “<function-code-id>” which cannot be accessed. Reason code: “<code>”.

Cause: The DBMS is trying to access the body of the code that implements user defined function “<function-name>” (specific name “<specific-name>”), and cannot access it for the reason given by reason code “<code>” (the codes are listed below). The file implementing the function is identified by “<library-or-path>”, and the function by “<function-code-id>”.

SQL0445W • SQL0445W

(Note that these last two tokens may be truncated, due to limitations in the total token length which can be provided. If this happens, then the definition of the function in the catalogs may need to be accessed in order to determine the full library or path and function code id that were defined for the function.)

Action: Given for each reason code:

- 1 Path name "<library-or-path>" is longer than the maximum (255 bytes). Either the function definition needs to be changed to specify a shorter path, or the DB2 instance path name is too long. Look at the catalog definition to determine which is the case. It may be necessary to move the function body to a directory with a shorter path name.
- 2 The DB2 instance path name could not be retrieved from DB2. See your system administrator.
- 3 The path "<library-or-path>" could not be found. See the function creator or your database administrator. The function definition or the location of the function itself will need to be corrected.
- 4 The file in "<library-or-path>" could not be found. See the function creator or your database administrator. The function definition or the location of the function may need to be corrected, or the function may need to be re-linked.
- 5 There was insufficient memory to load the library containing the function. Contact the function creator or your database administrator to make sure the library was correctly linked. The system configuration may need to be changed to make more memory available to DB2.
- 6 The function "<function-code-id>" could not be found in the module named. See the function creator or your database administrator. The function definition or the function itself will need to be corrected.
- 7 The symbol given as the function name ("<function-code-id>") is not the name of a valid function in the named library. See the function creator or your database administrator. The function definition or the function itself will need to be corrected.

- 8 The "load" system function has failed, for other than the reasons given above. It may be that the module was not linked at all, or not linked correctly.
- 9 There was insufficient memory to resolve the function name "<function-code-id>" in the library identified in "<library-or-path>". Contact the function creator or your database administrator to make sure the library containing the function was correctly linked. The system configuration may need to be changed to make more memory available to DB2 Server.
- 10 The loadquery system call has failed. This can only happen on unix-based systems, and is a symptom that the database manager itself has not been installed correctly. Contact your system administrator.
- 11 The agent process is searching for a particular database manager function that should be in the libdb2.a library, and it cannot find it. This can only happen on unix-based systems, and is a symptom that the database manager is not correctly installed. Contact your system administrator.
- other An unidentified system failure has occurred. Note the code, and see your system administrator.

DataJoiner users: if this user defined function is strictly used to represent a remote user defined function (and thus no code is required to reside on DataJoiner), you may want to consider modifying the SQL statement or statistics to enable this function to be evaluated on the remote data source.

sqlcode: -444

sqlstate: 42724

SQL0445W

Value "<value>" has been truncated.

Cause: The value "<value>" was truncated by a system (built-in) cast or adjustment function, which was called to transform the value in some way. This is a warning situation.

The value being transformed is the output of a user-defined function (UDF), and is being transformed because of a CAST FROM specification in the UDF definition, or because the UDF is sourced on another function and the result needed to be transformed.

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

sqlcode: +445

sqlstate: 01004

SQL0447W

The statement contains redundant specifications involving the clause “<clause>”.

Cause: The “<clause>” keyword was included more than once in the statement. This is a warning condition.

Action: If the redundancy was intentional, or if it is determined that no harm has resulted, then no response is necessary. The type of “harm” alluded to could include, for example, the omission of some other desired keyword.

sqlcode: +447

sqlstate: 01589

SQL0448N

Error in CREATE statement for user defined function or stored procedure “<function-name>”. The maximum number of allowable parameters (90 for user defined functions / 32767 for stored procedures) has been exceeded.

Cause: Too many parameters were specified in the CREATE statement for function or procedure “<function-name>”.

Action: Change the CREATE statement to include fewer parameters.

sqlcode: -448

sqlstate: 54023

SQL0449N

The CREATE for user defined function or stored procedure “<function-name>” contains an invalidly formatted library/function identification in the EXTERNAL NAME clause.

Cause: An error was found in the EXTERNAL NAME clause of the CREATE statement for user defined function (UDF) or stored procedure “<function-name>”. The rules for the library/function identification are as follows:

The name takes the form '<a>!' or '<a>'. No blanks are permitted within the single quotes. <a> is one of the following:

- the full-path identification of a file (e.g. (on AIX) /u/slick/udfs/math or (on OS/2) d:\myfunc\math)
- a file name (e.g. math) assumed to be in 'function' directory in the sqllib directory.

If is omitted, the default is the entry point defined when the named file was linked. If is present, it identifies the entry point (function) within <a> that will be invoked as the body of the UDF or stored procedure.

Action: Correct the problem and try again. A possible cause is the inclusion of a blank, or having the '!' at the beginning or end of the name.

sqlcode: -449

sqlstate: 42878

SQL0450N

User-defined function “<function-name>” (specific name “<specific-name>”) has generated a result value, SQLSTATE value, message text, or scratchpad which is too long.

Cause: Upon return from user-defined function (UDF) “<function-name>” (specific name “<specific-name>”), DB2 has detected that more bytes were returned than were allocated for one of the following:

- the result value (based upon the function definition). There are several possible causes:
 - Too many bytes were moved to the result buffer.
 - The data type is one where the data value must be delimited by a null, such as VARCHAR(n), and the delimiting null was not within the range of the defined size.
 - DB2 is expecting a two- or four- byte length value preceding the value, and this length exceeds the defined size of the result.

The definition of the result argument in the UDF must conform to the requirement for the data type. Refer to the *Embedded SQL Programming Guide* for more information.

- the SQLSTATE value (6 bytes including the null terminator)
- the message text (71 bytes including the null terminator).
- the scratchpad content (100 bytes, plus 4 byte binary length preceding it).

This is not permitted.

Action: See your Database Administrator, or the author of the UDF.

SQL0451N • SQL0452N

sqlcode: -450

sqlstate: 39501

SQL0451N

The “<data-item>” definition, in the CREATE for user defined function “<function-name>”, contains a data type “<type>” that is not appropriate for an external function written in the given language.

Cause: An error was made in the “<data-item>” part of the CREATE statement for the user defined function (UDF) “<function-name>”. The user’s CREATE statement contained the invalid type “<type>”, or it contained a user defined type (UDT) which is based on the invalid type “<type>”.

“<data-item>” is a token that identifies the area of the problem in the CREATE statement. For example, “PARAMETER 2” or “RETURNS” or “CAST FROM”.

Action: Determine which situation has occurred, and take corrective action. Possible corrective actions include:

- Changing the function definition to a supported type, e.g. from DECIMAL to FLOAT. This may involve a change in the UDF body itself, and may also involve use of cast functions upon use of the function.
- Creating a new (suitably based) user defined type, or changing the definition of an existing UDT.

sqlcode: -451

sqlstate: 42815

SQL0452N

Unable to access the file referenced by host variable “<variable-position>”. Reason code: “<reason-code>”.

Cause: An error was encountered attempting to access or while accessing the file referenced by the “nth” host variable, where n = “<variable-position>”, for the reason given by “<reason-code>”. <variable-position> is set to 0 if the host variable position could not be determined. The possible reason codes are as follows:

- 01 - The file name length is invalid or the file name and/or the path has an invalid format.
- 02 - The file option is invalid. It must have one of the following values:

SQL_FILE_READ -read from an existing file
SQL_FILE_CREATE -create a new file for write
SQL_FILE_OVERWRITE -overwrite an existing file.
If the file does not exist,
create the file.
SQL_FILE_APPEND -append to an existing file.
If the file does not exist,
create the file.

- 03 - The file cannot be found.
- 04 - The SQL_FILE_CREATE option was specified for a file with the same name as an existing file.
- 05 - Access to the file was denied. The user does not have permission to open the file.
- 06 - Access to the file was denied. The file is in use with incompatible modes. Files to be written to are opened in exclusive mode.
- 07 - Disk full was encountered while writing to the file.
- 08 - Unexpected end of file encountered while reading from the file.
- 09 - A media error was encountered while accessing the file.
- 10 - An incomplete or invalid multibyte character was encountered while reading from the file.
- 11 - An error was encountered while converting data from the file code page to the application’s graphic character code page.

Action:

For reason code 01, correct the file name length, file name and/or path.

For reason code 02, specify a valid file option.

For reason code 03, ensure that the file specified exists before attempting to access the file.

For reason code 04, either delete the file if it is no longer required or specify a file name that does not currently exist.

For reason code 05, ensure that the user has access (correct file permissions) to the file.

For reason code 06, either use a different file or, if the file must be accessed, modify the application to ensure that the file is not accessed concurrently.

For reason code 07, delete unnecessary files to free up disk space or specify a file that resides on another drive/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.

For reason code 08, if a file is to be used for input, ensure that the file is not modified before the entire file has been read.

For reason code 09, correct all errors on the media where the file resides.

For reason code 10, ensure that the file contains valid multibyte characters based on the code page of the application or submit the request while running under the same code page as the contents of the file.

For reason code 11, ensure that character conversion support between the code page of the file, for example Japanese EUC, and the graphic code page of the application, for example UCS-2, is installed.

sqlcode: -452

sqlstate: 428A1

SQL0453N

A problem has been identified with the RETURNS clause in the CREATE statement for user defined function “<function-name>”.

Cause: A problem casting the result of user defined function (UDF) “<function-name>” has been identified. The CAST FROM data type is not castable to the RETURNS data type, and it should be. See the *SQL Reference* for details on casting between data types.

Action: Change the RETURNS or CAST FROM clause so that the CAST FROM data type is castable to the RETURNS data type.

sqlcode: -453

sqlstate: 42880

SQL0454N

The signature provided in the CREATE statement for user defined function or stored procedure “<function-name>” matches the signature of some other function or procedure already existing in the schema.

Cause: The signature a function consists of the 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).

The signature of a procedure consists of the procedure name and the number of parameters defined for the procedure (data types are not considered).

In this case, there is a function or procedure (“<function-name>”) already in the schema having the same signature as the function or procedure being created.

The statement cannot be processed.

Action: Determine if the existing function or procedure already provides the functionality desired. If not, then the new function's or procedure's signature will have to be changed (e.g. change the function or procedure name).

sqlcode: -454

sqlstate: 42723

SQL0455N

In the CREATE for user defined function or stored procedure “<function-name>”, the schema name “<schema-name1>” provided for the SPECIFIC name does not match the schema name “<schema-name2>” of the function or procedure.

Cause: 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.

Action: Correct the statement and try again.

sqlcode: -455

sqlstate: 42882

SQL0456N

In the CREATE of user defined function or stored procedure “<function-name>”, the SPECIFIC name “<specific-name>” already exists in the schema.

Cause: The user has supplied an explicit SPECIFIC name “<specific-name>” in the CREATE statement for function or procedure “<function-name>”, but this name already exists as the SPECIFIC name for a function or procedure in the schema.

Action: Choose a new SPECIFIC name and try again.

sqlcode: -456

sqlstate: 42710

SQL0457N • SQL0462W

SQL0457N

A function or distinct type cannot be called "<name>" since it is reserved for system use.

Cause: The user defined function or distinct type cannot be created because the name selected is reserved for use by the system. Names that cannot be used for functions or distinct types include:

"=", "<", ">", ">=", "<=", "&=", "&>", "&<", "!=", "!>", "!<", "<>", SOME, ANY, ALL, NOT, AND, OR, BETWEEN, NULL, LIKE, EXISTS, IN, UNIQUE, OVERLAPS, SIMILAR, and MATCH.

Action: Select a name for the function or distinct type that is not reserved for system use.

sqlcode: -457

sqlstate: 42939

SQL0458N

In a reference to function or stored procedure "<function-name>" by signature, a matching function or stored procedure could not be found.

Cause: In a reference to function or stored procedure "<function-name>" by signature, no matching function or stored procedure could be found. If a data type is used that can accept a parameter (e.g. CHAR(12)), then the type parameter is optional, i.e. you can specify the parameter (CHAR(12) or omit it (CHAR())). If you specify the parameter, then the DBMS will only accept an exact match on the data type AND the data type parameter. If you omit the parameter, then the DBMS will accept a match on data type only. The CHAR() syntax provides a way to say "don't care about data type parameters in finding a matching function".

Note also that in the DROP FUNCTION/PROCEDURE and COMMENT ON FUNCTION/PROCEDURE statements, an unqualified reference is qualified with the statement authorization ID, and this is the schema where the problem can be found. In the SOURCE clause of a CREATE function, the qualification comes from the current function path. In this case, there is no matching function in the entire path.

A function cannot be sourced on the COALESCE, NULLIF, or VALUE built-in functions.

The statement cannot be processed.

Action: Possible responses include:

- Changing the function path to include the correct schema.
- Removing parameters from the specifications of data types.
- Using a SPECIFIC name to refer to the function or procedure instead of a signature.

sqlcode: -458

sqlstate: 42883

SQL0461N

A value with data type "<source-data-type>" cannot be CAST to type "<target-data-type>".

Cause: The statement contains a CAST with the first operand having a data type of "<source-data-type>" to be cast to the data type "<target-data-type>". This cast is not supported.

Action: Change the data type of either the source or target so that the cast is supported. For predefined data types these are documented in the SQL Reference. For a cast involving a user-defined distinct type, the cast can be between the base data type and the user-defined distinct type or from a data type that is promotable to the base data type to the user-defined distinct type.

sqlcode: -461

sqlstate: 42846

SQL0462W

User defined function "<function-name>" (specific name "<specific-name>") has returned a warning SQLSTATE, with diagnostic text "<text>".

Cause: An SQLSTATE of the form 01Hxx was returned to DB2 by user defined function (UDF) "<function-name>" (with specific name "<specific-name>"), along with message text "<text>".

Action: The user will need to understand the meaning of the warning. See your database administrator, or the author of the UDF.

sqlcode: +462

sqlstate: 01Hxx

SQL0463N

User defined function “<function-name>” (specific name “<specific-name>”) has returned an invalid SQLSTATE “<state>”, with diagnostic text “<text>”.

Cause: The valid SQLSTATES that a user defined function (UDF) can return are 38xxx (error), 38502 (error) and 01Hxx (warning). This user defined function “<function-name>” (specific name “<specific-name>”) returned an invalid SQLSTATE “<state>”, along with message text “<text>”. The UDF is in error.

Action: The UDF will need to be corrected. See your database administrator, or the author of the UDF. The application significance of the bad SQLSTATE can also be learned from the UDF author.

sqlcode: -463

sqlstate: 39001

SQL0465N

Unable to start, initialize, or communicate with fenced mode process. Reason code “<code>”.

Cause: There is a system related problem involved with the running of a fenced mode UDF (User Defined Function). The exact nature of the problem is indicated by “<code>”. This is NOT a user problem. Possible reason codes are:

UDF process errors

- 21:** Failure to initialize internal data or application data.
- 22:** Failure to register signal handlers.
- 23:** Failure to grant agent process the access permission for the REQUEST QUEUE.
- 24:** Failure to connect to the UDF process Shared Memory.
- 25:** Failure to open the REPLY QUEUE.
- 26:** Failure to write to the REPLY QUEUE.
- 27:** Failure to create the REQUEST QUEUE.
- 28:** Failure to read from the REQUEST QUEUE.
- 29:** UDF process dies.
- 30:** UDF process catches an USER INTERRUPT signal.
- 31:** Failure to unload UDF module.
- 32:** Failure to allocate storage for control blocks used in module loading/unloading.
- 33:** Failure to send SIGINT from agent process to UDF process.

- 34:** Failure to initialize OLE library.
- 40:** Internal error occurred in UDF process.

Agent process errors

- 41:** Failure to spawn UDF process.
- 42:** Failure to create the REPLY QUEUE.
- 43:** Failure to read from the REPLY QUEUE.
- 44:** Failure to open the REQUEST QUEUE.
- 45:** Failure to write to the REQUEST QUEUE.
- 47:** Failure to grant the UDF process the access permission to the UDFP shared memory set.
- 48:** Failure to grant the UDF process the access permission to the REPLY QUEUE.
- 49:** Failure to allocate storage for control blocks used in module loading/unloading.
- 50:** Agent process died while running UDF code or agent code.
- 51:** Agent process catches USER INTERRUPT while running un-fenced UDF code.
- 60:** Internal error occurred in UDF process.

Action: Contact your Database or System administrator.

sqlcode: -465

sqlstate: 58032

SQL0466W

There is one or more result sets associated with a stored procedure.

Cause: This message is returned as a result of issuing a CALL SQL statement. It indicates that the stored procedure associated with the CALL SQL statement has one or more result sets associated with it.

Action: None required.

sqlcode: +466

sqlstate: 01610

SQL0467W

Another result set exists for a stored procedure.

Cause: This message is returned as a result of closing a cursor. It indicates that another result set exists for a stored procedure.

Action: None required.

sqlcode: +467

sqlstate: 01611

SQL0473N • SQL0478N

SQL0473N

A user defined data type having the same name as a system predefined type cannot be created.

Cause: The name of a data type to be created has an unqualified name that is the same as a system-predefined data type or is BOOLEAN. This is not allowed. Adding delimiters does not make the name valid.

The statement could not be processed.

Action: Correct the statement to use another identifier.

sqlcode: -473

sqlstate: 42918

SQL0475N

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>”.

Cause: In order for the CREATE of a sourced user defined function (UDF) 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.

Action: Change the RETURNS data type or the SOURCE function identification so that the result type of the SOURCE function is castable to the RETURNS data type.

sqlcode: -475

sqlstate: 42866

SQL0476N

Reference to function or stored procedure “<function-name>” was made without a signature, but the function or stored procedure is not unique in its schema.

Cause: References to a function or stored procedure without a signature is permitted, but the named function or store procedure “<function-name>” must be unique in its schema and is not.

Note that in the DROP FUNCTION/PROCEDURE and COMMENT ON FUNCTION/PROCEDURE statements,

an unqualified reference is qualified with the statement authorization ID, and this is the schema where the problem can be found. In the SOURCE clause of a CREATE FUNCTION, the qualification comes from the current function path. In this case, the first schema in the path containing a function with this name had other functions by the same name.

DataJoiner users: if the statement is a CREATE FUNCTION MAPPING statement, this error indicates that an attempt was made to create a function mapping from one remote function to more than one local function.

Action: Correct the reference by one of the following:

- completing the signature
- using the SPECIFIC name of the desired function or procedure
- changing the function path

and try again.

sqlcode: -476

sqlstate: 42725

SQL0478N

The object type “<object-type1>” cannot be dropped because there is an object “<object-name>”, of type “<object-type2>”, which depends on it.

Cause: The base object, which is an object of type “<object-type1>” cannot be dropped because another object depends on it. There is a restrict dependency defined with objects of type “<object-type2>” (of which object “<object-name>” is an example).

It may be that the dependency is indirect. That is, the named object is dependent on another object which is dependent on the object being dropped.

For example:

- function F1 is sourced on function F2
- table V1 is defined using F1
- an attempt to drop F2 will fail due to the direct dependency of F1 on F2 and the indirect dependency of V1 on F2

Action: Either do not drop this object or drop the dependent objects first.

sqlcode: -478

sqlstate: 42893

SQL0481N

The **GROUP BY** clause contains “<element 1>” nested within “<element 2>”.

Cause: The following types of nesting are not allowed within a **GROUP BY** clause:

CUBE within CUBE, ROLLUP, or GEL

ROLLUP within CUBE, ROLLUP, or GEL

() within CUBE, ROLLUP, or GEL

GROUPING SET within GROUPING SET, CUBE, ROLLUP, or GEL

where GEL represents the element shown as grouping-expression-list in the syntax diagram of the **GROUP BY** clause.

In some instances the value “---” will be shown for “<element 2>”. In this case “---” represents one of CUBE, ROLLUP, GROUPING SET, or GEL.

The statement cannot be processed.

Action: Modify the **GROUP BY** clause to remove the nesting.

sqlcode: -481

sqlstate: 428B0

SQL0483N

In the **CREATE** for user defined function “<function-name>” statement, the number of parameters does not match the number of parameters of the **SOURCE** function.

Cause: 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.

Action: 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 function path needs to be corrected in order for correct function resolution to occur.

sqlcode: -483

sqlstate: 42885

SQL0486N

The **BOOLEAN** data type is currently only supported internally.

Cause: One or more of the data types in the statement is **BOOLEAN**. This is not supported in the current version of DB2.

Action: Change the data type(s) then resubmit the statement.

sqlcode: -486

sqlstate: 42991

SQL0487N

User defined function “<function-name>” (specific name “<specific-name>”) attempted to execute an SQL statement.

Cause: The program used to implement the body of a user defined function is not allowed to execute SQL statements. This user defined function “<function-name>” (specific name “<specific-name>”) contains SQL statements.

Action: Remove any SQL statements then recompile the program.

sqlcode: -487

sqlstate: 38502

SQL0489N

The function “<function-name>” in a **SELECT** or **VALUES** list item has produced a **BOOLEAN** result.

Cause: The function “<function-name>” is defined for use as a predicate, returning a boolean result. Such a result is not valid in a select list.

The statement cannot be processed.

Action: Correct the function name or remove the use of the function.

sqlcode: -489

SQL0491N • SQL0493N

sqlstate: 42844

SQL0491N

The CREATE statement for user defined function “<function-name>” must have a RETURNS clause, and either the EXTERNAL clause (with other required keywords) or the SOURCE clause.

Cause: A required clause is missing in the CREATE for function “<function-name>”. If EXTERNAL was specified, the following must also be specified: LANGUAGE, PARAMETER STYLE, VARIANT or NOT VARIANT, NO SQL, and EXTERNAL ACTION or NO EXTERNAL ACTION.

Action: Add the missing clause, then try again.

sqlcode: -491

sqlstate: 42601

SQL0492N

There is a problem in the CREATE for user defined function “<function-name>”, with parameter number “<number>”. It may involve a mismatch with a SOURCE function.

Cause: The parameter in position “<number>” of function “<function-name>” is in error and the CREATE cannot be performed. The parameter in position “<number>” of the source function is not castable to the corresponding parameter of the function being created.

Action: 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.

sqlcode: -492

sqlstate: 42879

SQL0493N

User defined function “<function-name>” (specific name “<specific-name>”) has returned a date, time or timestamp value which is syntactically or numerically invalid.

Cause: The body of user defined function (UDF) “<function-name>” (specific name “<specific-name>”) has returned an invalid date, time or timestamp value.

An example of a syntactically invalid date value is

'1994-12*25': the '*' should be a '-'. An example of a numerically invalid time value is '11.71.22': there is no 71st minute in the hour.

Action: The UDF needs fixing. See your DBA, or the author of the UDF.

sqlcode: -493

sqlstate: 22007

SQL0500 - SQL0599

SQL0501N

The cursor specified in a FETCH or CLOSE statement is not open.

Cause: The program attempted to either: (1) FETCH using a cursor, or (2) CLOSE a cursor at a time when the specified cursor was not open.

The statement cannot be processed.

Action: Check for a previous message (SQLCODE) that may have closed the cursor. Note that after the cursor is closed, any fetches or close cursor statements receive SQLCODE -501.

If no previous SQLCODEs have been issued, correct the application program to ensure that the cursor is open when the FETCH or CLOSE statement is executed.

sqlcode: -501

sqlstate: 24501

SQL0502N

The cursor specified in an OPEN statement is already open.

Cause: The program attempted to execute an OPEN statement for an open cursor.

The statement cannot be processed. The cursor was unchanged.

Action: Correct the application program to ensure it does not attempt to execute an OPEN statement for a cursor already open.

sqlcode: -502

sqlstate: 24502

SQL0503N

A column cannot be updated because it is not identified in the FOR UPDATE clause of the SELECT statement of the cursor.

Cause: Using a cursor, the program attempted to update a value in a table column that was not identified in the FOR UPDATE clause in the cursor declaration or the prepared SELECT statement.

Any column to be updated must be identified in the FOR UPDATE clause of the cursor declaration.

The statement cannot be processed.

Action: Correct the application program. If the column requires updating, add its name to the FOR UPDATE clause of the cursor declaration.

sqlcode: -503

sqlstate: 42912

SQL0504N

The cursor "<name>" is not defined.

Cause: An UPDATE or DELETE WHERE CURRENT OF "<name>" was specified, but the cursor "<name>" was not declared in the application program.

The statement cannot be processed.

Action: Ensure the completeness of the application program and correct spelling errors in the cursor names.

sqlcode: -504

sqlstate: 34000

SQL0505N

The cursor "<name>" is already defined.

Cause: The cursor name specified in the DECLARE statement has already been declared.

The statement cannot be processed.

Action: Ensure the name is spelled correctly.

SQL0507N

The cursor specified in the UPDATE or DELETE statement is not open.

Cause: The program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement when the specified cursor was not open.

The statement cannot be processed. No update or delete was performed.

Action: Check for a previous message (SQLCODE) that may have closed the cursor. Note that after the cursor is closed, any fetches or close cursor statements receive SQLCODE -501 and any updates or deletes receive 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.

sqlcode: -507

sqlstate: 24501

SQL0508N

The cursor specified in the UPDATE or DELETE statement is not positioned on a row.

Cause: The program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement when the specified cursor was not positioned on an object table row. The cursor must be positioned on the row to be updated or deleted.

The cursor is no longer positioned on a row if the row is deleted.

DataJoiner users: the record in a remote data source has been updated and/or deleted by another application (or a different cursor within this application) and the record no longer exists.

The statement cannot be processed. No data is updated or deleted.

Action: Correct the logic of the application program to ensure that the cursor is correctly positioned on the intended row of the object table before the UPDATE or DELETE statement is executed. Note that the cursor is not positioned on a row if FETCH returned message SQL0100W (SQLCODE = 100).

sqlcode: -508

sqlstate: 24504

SQL0509N • SQL0511N

SQL0509N

The table specified in the UPDATE or DELETE statement is not the same table specified in the SELECT for the cursor.

Cause: The program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement where the table named did not match the name of the table specified in the SELECT statement that declared the cursor.

The statement cannot be processed.

Action: Correct the application program to ensure that the table identified in the UPDATE or DELETE statement is the same table identified in the cursor declaration.

sqlcode: -509

sqlstate: 42827

SQL0510N

UPDATE or DELETE is not allowed against the specified cursor.

Cause: The program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement against a table or view definition that does not permit the requested update or delete operation. For example, this error can occur in a delete from a read-only view or in an update where the cursor was not defined with the FOR UPDATE clause.

On the database manager the view is read-only if the SELECT statement

- The DISTINCT keyword
- A column function in the SELECT list
- A GROUP BY or HAVING clause
- A FROM clause that identifies one of the following:
 - More than one table or view
 - A read-only view (READONLY column of SYSCAT.SYSVIEWS is set to 'Y')
 - A table or view that is also identified in the FROM clause of a subquery of the SELECT statement. (NOTE: This is a restriction only in releases of DB2 prior to Version 2).
- A set operator (other than UNION ALL).

Note that these conditions do not apply to subqueries of the SELECT statement.

The cursor is declared with a FOR FETCH ONLY or ORDER BY clause.

The cursor is ambiguous and the BLOCKING ALL bind option was specified.

The statement cannot be processed.

Action: If the database manager is failing the statement and the cursor is based on a read-only SELECT or VALUES statement, do not issue any update or delete statements against it.

If the database manager is failing the statement and the cursor is not based on a read-only SELECT or VALUES statement and is defined with a FOR FETCH ONLY or ORDER BY clause, either remove this clause from the cursor definition or do not issue any update or delete statements.

If the database manager is failing the statement and the cursor cannot be determined to be either fetch only or updateable from its definition or context, rebind the program with either the BLOCKING NO or BLOCKING UNAMBIG bind option.

DataJoiner users: isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source). If a data source is failing the request, examine the restrictions for that data source to determine the cause of the problem and its solution. If the restriction exists on a data source, see the SQL reference manual for that data source to determine why the object is not updateable.

sqlcode: -510

sqlstate: 42828

SQL0511N

The FOR UPDATE clause is not allowed because the table specified by the cursor cannot be modified.

Cause: The result table of the SELECT or VALUES statement cannot be updated.

On the database manager, the result table is read-only if the cursor is based on a VALUES statement or the SELECT statement contains any of the following:

- The DISTINCT keyword
- A column function in the SELECT list
- A GROUP BY, HAVING, or ORDER BY clause
- A FROM clause that identifies one of the following:
 - More than one table or view
 - A read-only view
 - A table or view that is also identified in the FROM clause of a subquery of the SELECT statement. (NOTE: This is only a restriction on version of DB2 prior to Version 2).
- A set operator (other than UNION ALL).

Note that these conditions do not apply to subqueries of the SELECT statement.

The statement cannot be processed.

Action: Do not perform updates on the result table as specified.

DataJoiner users: isolate the problem to the data source failing the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source). If a data source is failing the request, examine the restrictions for that data source to determine the cause of the problem and its solution. If the restriction exists on a data source, see the SQL reference manual for that data source to determine why the object is not updatable.

sqlcode: -511

sqlstate: 42829

SQL0513W

The SQL statement will modify an entire table or view.

Cause: The UPDATE or DELETE statement does not contain a WHERE clause so all rows of the table or view are modified if this statement is executed.

The statement is accepted.

DataJoiner users: not all data sources report this warning condition. DataJoiner attempts to issue this warning whenever the condition exists, but there is no guarantee that DataJoiner can always detect this condition. Do not rely on this warning to preclude UPDATE/DELETE operations from affecting an entire table or view.

Action: Ensure that you intend to modify the entire table or view.

SQL0514N

The cursor "<name>" is not in a prepared state.

Cause: The application program tried to use a cursor "<name>" that is not in a prepared state. The cursor is associated with a statement that either (1) was never prepared, (2) was made not valid by a ROLLBACK, or (3) was made not valid by either an explicit or implicit rebind of the package.

The statement cannot be processed.

Action: For case (1), prepare the statement named in the DECLARE CURSOR statement for "<name>" before you try to open the cursor. For case (2), do not issue a

ROLLBACK until after you finish using the cursor. For case (3), the prepare for the cursor must be reissued.

sqlcode: -514

sqlstate: 26501

SQL0516N

The DESCRIBE statement does not specify a prepared statement.

Cause: The statement name in the DESCRIBE statement must specify a statement that was prepared in the same database transaction.

The statement cannot be processed.

Action: Verify that the statement name specifies a statement that has been prepared.

sqlcode: -516

sqlstate: 26501

SQL0517N

The cursor "<name>" identifies a prepared statement that is not a SELECT or VALUES statement.

Cause: The cursor "<name>" could not be used as specified because the prepared statement named in the cursor declaration was not a SELECT or VALUES statement.

The statement cannot be processed.

Action: Verify that the statement name is specified correctly in the PREPARE and the DECLARE CURSOR for cursor "<name>" statements. Or correct the program to ensure that only prepared SELECT or VALUES statements are used in association with cursor declarations.

sqlcode: -517

sqlstate: 07005

SQL0518N

The statement named in the EXECUTE statement is not in a prepared state or is a SELECT or VALUES statement.

Cause: The application program tried to EXECUTE a statement that (1) was never prepared, (2) was made not valid by a ROLLBACK, (3) is a SELECT or VALUES statement, or (4) was made not valid by either an explicit or implicit rebind of the package.

The statement cannot be processed.

SQL0519N • SQL0531N

Action: For case (1), prepare the statement before attempting the EXECUTE. For case (2), either do not issue a ROLLBACK until after you finish using the prepared statement, or prepare the statement again after the ROLLBACK. For case (3), ensure that the statement is not a SELECT or VALUES statement. For case (4), the prepare for the cursor must be reissued.

sqlcode: -518

sqlstate: 07003

SQL0519N

The PREPARE statement identifies the SELECT or VALUES statement of the open cursor “<name>”.

Cause: The application program attempted to prepare the SELECT or VALUES statement for the specified cursor when that cursor is already open.

The statement cannot be prepared. The cursor was not affected.

Action: Correct the application program so it does not attempt to prepare the SELECT or VALUES statement for a cursor that is open.

sqlcode: -519

sqlstate: 24506

SQL0528N

The table “<tablename>” already has a unique constraint that is a duplicate of constraint “<name>”.

Cause: A UNIQUE clause uses the same column list as the PRIMARY KEY clause, another UNIQUE clause or the PRIMARY KEY or a UNIQUE constraint that already exists for the table “<tablename>”. Duplicate unique constraints are not allowed.

“<name>” is the constraint name, if one was specified or exists. If a constraint name is not specified, “<name>” is the first column name specified in the column list of the UNIQUE clause followed by three periods.

The statement cannot be processed.

Action: Remove the duplicate UNIQUE clause or change the column list to a set of columns that is not already part of a unique constraint.

sqlcode: -528

sqlstate: 42891

SQL0530N

The insert or update value of the FOREIGN KEY “<constraint-name>” is not equal to any value of the parent key of the parent table.

Cause: A value in a foreign key of the object table is being set, but this value is not equal to any 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 some value of the parent key of any row of the parent table of the associated relationship.

Similarly, when the value of a foreign key is updated, the update value of a foreign key must be equal to the value of the parent key of any row of the parent table of the associated relationship at the completion of the statement.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<constraint name>”. In these cases the message token will have the following format: “<data source>:UNKNOWN”, indicating that the actual value for the specified data source is unknown.

The statement could not be executed. The contents of the object table are unchanged.

Action: 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 and correct the problem.

sqlcode: -530

sqlstate: 23503

SQL0531N

The parent key in a parent row of relationship “<constraint-name>” cannot be updated.

Cause: An operation attempted to update a parent key in the row of the parent table but the parent key in the specified row has dependent rows in the dependent table associated with it in the “<constraint-name>” constraint.

When the update rule of constraint “<constraint-name>” is NO ACTION, the value of a parent key in a parent row cannot be updated if the parent row has any dependent rows at the completion of the statement.

When the update rule of constraint “<constraint-name>” is RESTRICT, the value of a parent key in a parent row cannot be updated if the parent row has any dependent rows at the time the update of the parent key is attempted.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<constraint name>”. In these cases the message token will have the following format: “<data source>:UNKNOWN”, indicating that the actual value for the specified data source is unknown.

The statement could not be executed. The contents of the parent table are unchanged.

Action: 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 show the problem, examine the contents of the object table and the dependent table to determine and correct the problem.

sqlcode: -531

sqlstate: 23001, 23504

SQL0532N

A parent row cannot be deleted because the relationship “<constraint-name>” restricts the deletion.

Cause: An operation attempted to delete a specified row of the parent table but the parent key in the specified row has dependent rows in the referential constraint “<constraint-name>” and the delete rule of NO ACTION or RESTRICT is specified for the relationship.

When the delete rule of constraint “<constraint-name>” is NO ACTION, a row of the parent table cannot be deleted if the dependent rows are still dependent on the parent key at the completion of the statement.

When the delete rule of constraint “<constraint-name>” is RESTRICT, a row of the parent table cannot be deleted if the parent row has any dependent rows at the time of the delete.

Note that a delete can cascade to delete other rows in dependent tables that have a delete rule of NO ACTION

or RESTRICT. Thus the constraint “<constraint-name>” may be on a different table than the original delete operation.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<constraint name>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The statement could not be executed. The contents of the table are unchanged.

Action: Examine the delete rule for all descendent tables to determine and correct the problem. The specific tables involved can be determined from the relationship “<constraint-name>”.

sqlcode: -532

sqlstate: 23001, 23504

SQL0533N

The INSERT statement is not valid because a relationship restricts the result of the fullselect to one row.

Cause: An INSERT operation with a fullselect attempted to insert multiple rows into a table that is a parent and a dependent in the same relationship of a referential constraint.

The fullselect of the INSERT operation should return no more than one row of data.

The INSERT statement could not be executed. The contents of the object table are unchanged.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Action: Examine the search condition of the fullselect to ensure selection of no more than one row of data.

sqlcode: -533

sqlstate: 21501

SQL0534N • SQL0537N

SQL0534N

Invalid multiple-row update.

Cause: An UPDATE operation attempted to perform a multiple-row update of a column included in a primary key or unique index.

Multiple-row updates of columns of a primary key or unique index are not supported.

The UPDATE statement could not be executed. The contents of the table are unchanged.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Action: Ensure the search condition of the UPDATE statement selects only one object table row to update.

sqlcode: -534

sqlstate: 21502

SQL0535N

The DELETE statement is not valid because a self-referencing relationship restricts the deletion to one row.

Cause: A DELETE operation with a WHERE clause attempted to delete multiple rows from a table which is a parent and a dependent in the same relationship of a referential constraint with a RESTRICT or SET NULL delete rule.

The WHERE clause of the DELETE operation should select no more than one row of data.

The DELETE statement could not be executed. The contents of the object table are unchanged.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Action: Examine the WHERE clause search condition to ensure no more than one row of data is selected.

NOTE: This is only a restriction in releases of DB2 prior to Version 2.

sqlcode: -535

sqlstate: 21504

SQL0536N

The DELETE statement is not valid because table "<name>" can be affected by the operation.

Cause: A DELETE operation was attempted with the indicated table referenced in a subquery.

The indicated table referenced in a subquery of the DELETE statement can be affected because it is either:

- A dependent of the DELETE object table in a relationship with a CASCADE or SET NULL delete rule.
- A dependent of another table in a relationship with a CASCADE or SET NULL delete rule and deletions from the DELETE object table can cascade to that table.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for "<name>". In these cases the appropriate fields contain values (such as "unknown") that indicate that the actual value is unknown.

The statement could not be processed.

Action: Do not reference a table in a DELETE statement subquery when the table can be affected by the DELETE statement.

NOTE: This error is only applicable to releases of DB2 prior to Version 2 and hosts accessed through DDCS.

sqlcode: -536

sqlstate: 42914

SQL0537N

The PRIMARY KEY clause, a FOREIGN KEY clause, a UNIQUE clause, or a PARTITIONING KEY clause identifies column "<name>" more than once.

Cause: The column "<name>" appears more than once in a PRIMARY KEY clause, FOREIGN KEY clause, UNIQUE clause or PARTITIONING KEY clause of a CREATE or ALTER statement.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<name>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The statement cannot be processed.

Action: Specify unique names for each column.

sqlcode: -537

sqlstate: 42709

SQL0538N

FOREIGN KEY “<name>” does not conform to the description of the parent key of table “<table-name>”.

Cause: The definition of the indicated foreign key does not conform to the parent key description of the table “<table-name>”.

Possible errors are:

- The number of columns in the foreign key column list does not match the number of columns in the parent key column list.
- The number of columns in the foreign key column list does not match the number of columns in the primary key of the parent table (a parent key column list is not specified).
- The descriptions of the corresponding columns are not compatible. Column descriptions are compatible if corresponding columns have compatible data types (both columns are numeric, character strings, graphic, date/time, or have the same distinct type).

“<name>” is the constraint name if specified in the FOREIGN KEY clause. If a constraint name was not specified, “<name>” is the first column name specified in the clause followed by three periods.

DataJoiner users: some DataJoiner data sources do not provide the appropriate values for “<name>” and “<table-name>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

The statement cannot be processed.

Action: Correct the statement so the foreign key description conforms to the parent key description.

sqlcode: -538

sqlstate: 42830

SQL0539N

Table “<name>” does not have a “<key-type>” key.

Cause: One of the following occurred:

- The table “<name>” was specified as a parent in a FOREIGN KEY clause but the table is not defined as a parent because it does not have a primary key.
- The ALTER TABLE statement attempted to drop the primary key for the table “<name>” but the table does not have a primary key.
- The ALTER TABLE statement attempted to drop the partitioning key for the table “<name>” but the table does not have a partitioning key.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<name>” and “<key-type>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The statement cannot be processed. A system catalog cannot be defined as a parent in a referential constraint.

Action: When creating a referential constraint, specify the primary key before specifying any foreign keys (constraints).

sqlcode: -539

sqlstate: 42888

SQL0541W

The referential, primary key, or unique constraint “<name>” is ignored because it is a duplicate constraint.

Cause: If “<name>” refers to a referential constraint, then a FOREIGN KEY clause uses the same foreign key and parent table as another FOREIGN KEY clause.

If “<name>” refers to a primary key or unique constraint, then one of the following situations exists.

- A PRIMARY KEY clause uses the same set of columns as a UNIQUE clause in the statement.
- A UNIQUE clause uses the same set of columns as the PRIMARY KEY clause or another UNIQUE clause in the statement.

SQL0542N • SQL0545N

- A PRIMARY KEY or a UNIQUE constraint on the same set of columns already exists for the table “<tablename>”.

“<name>” is the constraint name, if specified. If a constraint name was not specified, “<name>” is the first column name specified in the column list of the FOREIGN KEY or UNIQUE clause followed by three periods.

DataJoiner users: the constraint can exist on DataJoiner (if the child and parent tables exist as tables on DataJoiner), or it can exist on the data source (if the child and parent tables exist on the data source).

Some DataJoiner data sources do not provide the appropriate values for “<name>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The indicated referential constraint or unique constraint was not created. The statement was processed successfully.

Action: No action is required. Processing can continue.

sqlcode: +541

sqlstate: 01543

SQL0542N

“<name>” cannot be a column of a primary key or unique key because it can contain null values.

Cause: The column “<name>” identified in a PRIMARY KEY clause or UNIQUE clause is defined to allow null values.

DataJoiner users: some DataJoiner data sources do not provide the appropriate values for “<name>”. In these cases the appropriate fields contain values (such as “unknown”) that indicate that the actual value is unknown.

The statement cannot be processed.

Action: Correct the column, primary key or unique key definition.

sqlcode: -542

sqlstate: 42831

SQL0543N

A row in a parent table cannot be deleted because the check constraint “<constraint-name>” restricts the deletion.

Cause: 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.

The statement cannot be processed.

Action: 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 with each other.

sqlcode: -543

sqlstate: 23511

SQL0544N

The check constraint “<constraint-name>” cannot be added because the table contains a row that violates the constraint.

Cause: At least one existing row in the table violates the check constraint that is to be added in the ALTER TABLE statement.

The statement cannot be processed.

Action: Examine the check constraint definition that was specified in the ALTER TABLE statement and the data in the table to determine why there is a violation of the constraint. Change either the check constraint or the data so that the constraint is not violated.

sqlcode: -544

sqlstate: 23512

SQL0545N

The requested operation is not allowed because a row does not satisfy the check constraint “<constraint-name>”.

Cause: Check constraint violations can occur on either INSERT or UPDATE operations. The resulting row violated the check constraint definition on that table.

The statement cannot be processed.

Action: Examine the data and the check constraint definition in the catalog view SYSCAT.CHECKS to deter-

mine why the INSERT or UPDATE statement failed. Change the data so that the constraint is not violated.

sqlcode: -545

sqlstate: 23513

SQL0546N

The check constraint "<constraint-name>" is invalid.

Cause: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- the constraint definition contains a subquery
- the constraint definition contains a column function
- the constraint definition contains a host variable
- the constraint definition contains a parameter marker
- the constraint definition contains a special register
- the constraint definition contains a variant user defined function
- the constraint definition contains a user defined function with external action
- the constraint definition contains a user defined function with the scratchpad option
- the check constraint is part of a column definition, and its check-condition contains a reference to a column name other than the column being defined.

The statement cannot be processed.

Action: The user response is one of the following, depending on the cause of the error:

- change the check constraint so that it does not include the listed item.
- move the check constraint definition outside the column definition, so that it becomes a table level constraint definition.

sqlcode: -546

sqlstate: 42621

SQL0548N

A check constraint that is defined with "<check-condition-element>" is invalid.

Cause: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- the constraint definition contains a subquery
- the constraint definition contains a column function
- the constraint definition contains a host variable

- the constraint definition contains a parameter marker
- the constraint definition contains a special register
- the constraint definition contains a variant user defined function
- the constraint definition contains a user defined function with external action
- the constraint definition contains a user defined function with the scratchpad option
- the check constraint is part of a column definition, and its check-condition contains a reference to a column name other than the column being defined.

The token within the text of the error message lists the invalid item.

The statement cannot be processed.

Action: The user response is one of the following, depending on the cause of the error:

- change the check constraint so that it does not include the listed item.
- move the check constraint definition outside the column definition, so that it becomes a table level constraint definition.

sqlcode: -548

sqlstate: 42621.

SQL0551N

"<authorization-ID>" does not have the privilege to perform operation "<operation>" on object "<name>".

Cause: Authorization ID "<authorization-ID>" attempted to perform the specified "<operation>" on "<name>" without the proper authorization.

If creating or altering a table with referential constraints, this message (SQLCODE) can indicate that the user does not have the REFERENCES privilege to create or drop a FOREIGN KEY. In this case the "<operation>" is "REFERENCES" and the "<name>" is the object the constraint references.

If attempting to run a DB2 utility or CLI application, the DB2 utility programs may need to be rebound to the database because the userid who created the database no longer exists or no longer has the required privileges.

DataJoiner users: if this message is returned when the user is changing the remote_pw column of the SYSCAT.REMOTEUSERS view, the user is not authorized to change a password for another user. The user performing the alter operation must have either SYSADM authority or an authorization ID (the value in the USER special register) that matches the value of the

SQL0552N • SQL0554N

authid column in the rows being updated. Some data sources do not provide the appropriate values for “<authid>”, <operation>, and <name>. In these cases the message tokens will have the following format: “<data source> AUTHID:UNKNOWN”, “UNKNOWN”, and “<data source>:TABLE/VIEW”, indicating that the actual values for the authid, operation, and name at the specified data source are not known.

The statement cannot be processed.

Action: Ensure that “<authorization-ID>” has the authorization necessary to perform the operation.

DataJoiner users: this authorization can be at DataJoiner, the data source, or both.

If the DB2 utility programs need to be rebound to the database, the database administrator can accomplish this by issuing one of the following CLP command from the bnd subdirectory of the instance, while connected to the database:

- "DB2 bind @db2ubind.lst blocking all grant public" for the DB2 utilities.
- "DB2 bind @db2cli.lst blocking all grant public" for CLI.

sqlcode: -551

sqlstate: 42501

SQL0552N

“<authorization-ID>” does not have the privilege to perform operation “<operation>”.

Cause: Authorization ID “<authorization-ID>” attempted to perform the specified “<operation>” without the proper authorization.

DataJoiner users: some DataJoiner data sources do not provide the appropriate values for “<authorization-ID>” and <operation>. In these cases the message tokens will have the following format: “<data source> AUTHID:UNKNOWN”, and “UNKNOWN” indicating that the actual values for authid and operation at the specified data source are not known.

The statement cannot be processed.

Action: Ensure that “<authorization-ID>” has the authorization to perform the operation.

DataJoiner users: this authorization can be at DataJoiner, the data source, or both.

sqlcode: -552

sqlstate: 42502

SQL0553N

An object cannot be created with the schema name “<schema-name>”.

Cause: The reason the schema name “<schema-name>” is invalid depends on the type of object that is being created.

- Objects of types that existed in releases prior to DB2 Version 2 (tables, views, indexes and packages) cannot be created with the schema name SYSCAT, SYSFUN, SYSSTAT or SYSIBM. It is strongly advised that schema names should not start with SYS since additional schemas starting with these letters may be reserved for exclusive use of DB2 in the future.
- Objects of types that are being introduced starting with DB2 Version 2 (user defined functions, distinct types, triggers, schemata, and aliases) cannot be created with any schema name that starts with the letters SYS.

The statement cannot be processed.

Action: Use a valid schema name or remove the explicit schema name and rerun the statement.

sqlcode: -553

sqlstate: 42939

SQL0554N

An authorization ID cannot grant a privilege to itself.

Cause: An authorization ID attempted to execute a GRANT statement where the authorization ID itself appears as one of the entries in the authorization ID list to which privileges are to be granted.

The statement cannot be processed.

Action: Remove the authorization ID from the list.

sqlcode: -554

sqlstate: 42502

SQL0555N

An authorization ID cannot revoke a privilege from itself.

Cause: An authorization ID attempted to execute a REVOKE statement where the authorization ID itself appears as one of the entries in the authorization ID list from which privileges are to be revoked.

The statement cannot be processed.

Action: Remove the authorization ID from the list.

sqlcode: -555

sqlstate: 42502

SQL0556N

An attempt to revoke a privilege from "<authorization-ID>" was denied because "<authorization-ID>" does not hold this privilege.

Cause: The privilege cannot be revoked because "<authorization-ID>" does not hold the privilege.

The statement cannot be processed.

Action: Change the REVOKE statement to conform to the REVOKE rules and resubmit the statement. Ensure that when a REVOKE statement lists several privileges to be revoked and a list of authorization IDs that each authorization ID possesses at least one of the specified privileges.

sqlcode: -556

sqlstate: 42504

SQL0557N

The specified combination of privileges cannot be granted or revoked.

Cause: One of the following occurred:

- The GRANT or REVOKE statement contains a combination of privileges that are of different classes. The privileges must all be of one class. Examples are DATABASE, PLAN, or TABLE.
- The GRANT statement attempted to grant a privilege for a view that is not allowed. ALTER, INDEX and REFERENCES cannot be granted for a view.

The statement cannot be processed.

Action: Correct and resubmit the statement.

sqlcode: -557

sqlstate: 42852

SQL0558N

An attempt to revoke a privilege from "<authorization-ID>" was denied because "<authorization-ID>" would still hold "<control>" authority.

Cause: "<authorization-ID>" holds the "<control>" privilege. The privilege to be revoked is implicit in the "<control>" privilege, so it cannot be revoked unless the "<control>" privilege is also revoked.

The valid values for "<control>" are the following:

- DBADM
- CONTROL

The statement cannot be executed. No privileges are revoked.

Action: Revoke the "<control>" privilege, if desired.

sqlcode: -558

sqlstate: 42504

SQL0562N

The specified database privileges cannot be granted to PUBLIC (public).

Cause: The GRANT statement attempted to grant a database privilege to the reserved authorization ID PUBLIC (public). DBADM authority cannot be granted to PUBLIC (public).

The statement cannot be processed.

Action: The implied function is not supported.

sqlcode: -562

sqlstate: 42508

SQL0567N

"<authorization-ID>" is not a valid authorization ID.

Cause: The authorization ID specified by "<authorization-ID>" is not valid for one of the following reasons:

- It begins with "SYS", "sys", "IBM", "ibm", "SQL", or "sql".
- It contains characters other than a through z, A through Z, 0 through 9, and the three special characters (#,@,\$).
- It is delimited and contains lower case letters.
- It is GUESTS, ADMINS, USERS, or LOCAL.

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- It is PUBLIC preceded by the keyword USER or GROUP in a GRANT or REVOKE statement.

The statement cannot be processed.

Action: Correct the invalid authorization ID.

sqlcode: -567

sqlstate: 42602

SQL0569N

The GRANT/REVOKE statement failed because "<authorization-name>" may identify both a user and a group in the system.

Cause: The GRANT or REVOKE statement specified an authorization name that may identify both a user and a group in the security namespace, and did not explicitly specify the USER or GROUP keyword in the statement. The statement is therefore ambiguous. Note that when using DCE security, the USER or GROUP keyword is always required.

Action: Change the statement to explicitly specify the USER or GROUP keyword to uniquely identify the required authorization id.

sqlcode: -569

sqlstate: 56092

SQL0570W

Not all requested privileges on object "<object-name>" of type "<object-type>" were granted.

Cause: A GRANT operation was attempted on object "<object-name>" of type "<object-type>", but some or all of the privileges were not granted. The authorization ID that issued the statement does not have all of the privileges to be granted with grant option or does not have DBADM authority.

All valid requested privileges were granted.

Action: Obtain the required authority and try the the operation again.

sqlcode: +570

sqlstate: 01007

SQL0572N

Package "<pkgname>" is inoperative.

Cause: The package "<pkgname>" is marked as inoperative and must be explicitly rebound before it can be used. This package cannot be used because one or more user-defined functions that it depends upon have been dropped.

Action: Explicitly rebind the named package using either the REBIND or the BIND command.

sqlcode: -572

sqlstate: 51028

SQL0573N

A column list specified in the references clause of constraint "<name>" does not identify a unique constraint of the parent table "<table-name>".

Cause: A list of column names was specified in the references clause for the constraint identified by "<name>" that does not match the column names of the primary key or any unique key of the referenced table "<table-name>".

"<name>" is the constraint name, if specified. If a constraint name was not specified, "<name>" is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: Correct the column list in the references clause or add the unique constraint to the referenced table.

sqlcode: -573

sqlstate: 42890

SQL0574N

DEFAULT value is not valid for column "<column-name>" in table "<table-name>". Reason code: "<reason-code>".

Cause: The DEFAULT value for column "<column-name>" in table "<table-name>" is not valid. The possible reason codes are as follows:

- 1 The value is not assignable to the column because the constant does not conform to the format for a constant of that data type, the value has an incorrect length or precision, or the function returns an incorrect data type.

- 2 A floating-point constant is specified and the column is not a floating point data type
- 3 A decimal constant is specified and non-zero digits would be truncated when assigned to the column
- 4 The value is more than 254 bytes, including quotes for strings, introducer characters such as the X for a hex constant, fully qualified function names, and parentheses. Non-significant blanks in the value are ignored. In an unequal code page environment, the value may be more than 254 bytes due to expansion of the string in the database code page.
- 5 The USER special register is specified and the length attribute of the character string data type is less than 8.
- 6 A datetime special register (CURRENT DATE, CURRENT TIME, or CURRENT TIMESTAMP) is specified and does not match the data type of the column.
- 7 A function was specified that is not supported. The specified function must be system-generated cast function or one of the built-in functions BLOB, DATE, TIME, or TIMESTAMP.
- 8 The argument to a datetime function was not a character string constant or the corresponding datetime special register.
- 9 A system-generated cast function was specified and the column is not defined with a user-defined distinct type.
- <0 Any reason code that is less than zero is an SQLCODE. The error in the DEFAULT value specification can be determined by checking the error message corresponding to this SQLCODE.

The statement cannot be processed.

Action: Correct the DEFAULT value based on the reason code that was returned.

sqlcode: -574

sqlstate: 42894

SQL0575N

View "<name>" cannot be used because it has been marked inoperative.

Cause: The view "<name>" has been marked inoperative because a table, view, alias, or privilege upon which it is dependent has been removed. The view cannot be used by any SQL statement other than one of the following:

- COMMENT ON
- DROP VIEW
- CREATE ALIAS
- CREATE VIEW

The statement cannot be processed.

Action: Recreate the view by issuing a CREATE VIEW statement using the same view definition as the inoperative view.

sqlcode: -575

sqlstate: 51024

SQL0576N

Alias "<name>" cannot be created for "<name2>" as it would result in a repetitive alias chain.

Cause: The alias definition of "<name>" on "<name2>" would have resulted in a repetitive alias chain which could never be resolved. For example, "alias A refers to alias B which refers to alias A" is a repetitive alias chain which could never be resolved.

The statement cannot be processed.

Action: Change the alias definition for "<name>" or revise the definition of one of the other alias definitions in the alias chain to avoid a repetitive chain.

sqlcode: -576

sqlstate: 42916

SQL0580N

The result-expressions of a CASE expression cannot all be NULL.

Cause: There is a CASE expression in the statement that has all the result-expressions (expressions following THEN and ELSE keywords) coded with the keyword NULL.

The statement cannot be processed.

SQL0581N • SQL0583N

Action: Change the CASE expression to include at least one result-expression that is other than the keyword NULL.

sqlcode: -580

sqlstate: 42625

SQL0581N

The data types of the result-expressions of a CASE expression are not compatible.

Cause: 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 a CASE expression is determined using the "Rules for Result Data Types" on the result-expressions. The data types of the result-expressions may be incompatible for one of the following reasons:

- they are not all character data types
- they are not all numeric data types
- They are not all date data types
- They are not all time data types
- They are not all timestamp data types
- They are not all the same user-defined distinct data types

The statement cannot be processed.

Action: Correct the result-expressions so that they are compatible.

sqlcode: -581

sqlstate: 42804

SQL0582N

A CASE expression in a select list, VALUES clause, IN predicate, or ORDER BY clause cannot include a quantified predicate, an IN predicate using a fullselect or an EXISTS predicate.

Cause: A search condition of a CASE expression is:

- a quantified predicate (one using SOME, ANY, or ALL),
- an IN predicate using a fullselect or
- an EXISTS predicate

and the CASE expression is part of:

- a select list
- a VALUES clause
- an IN predicate
- a GROUP BY clause or

- an ORDER BY clause.

Such CASE expressions are not supported.

The statement cannot be processed.

Action: Remove the use of the quantified predicate, IN predicate, or EXISTS predicate from the CASE expression. In some cases, it may be possible to write the query so that the CASE expression is not part of the select list or an IN predicate.

sqlcode: -582

sqlstate: 42625

SQL0583N

The use of function "<function.name>" is invalid because it is variant or has an external action.

Cause: The function "<function-name>" is defined as a variant function or a function with an external action. This type of function is not supported in the context in which it is used. The contexts in which these are not valid are:

- as the first operand of a BETWEEN predicate
- in the expression prior to the first WHEN keyword in a simple-case-expression.
- in an expression of a GROUP BY clause
- in an expression of an ORDER BY clause (external action only)

The statement cannot be processed.

Action: If the use of a variant or external action function was not intended, substitute a function without these characteristics. If the behaviour associated with the variant or external action function is intentional, use the alternate form of the statements that make that intent explicit.

- Instead of the BETWEEN predicate, use the corresponding statement using the equivalent combination of comparison predicates ($a \geq b$ and $a \leq c$ instead of a between b and c).
- Instead of a simple-when-clause, use the corresponding searched-when-clause where the function would get specified in each search-condition.
- Remove the variant or external action function from the GROUP BY clause. If grouping is desired on a column of the result that is based on a variant or external action function use a nested table expression or a common table expression to first provide a result table with the expression as a column of the result.

- Remove the external action function 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.

sqlcode: -583

sqlstate: 42845

SQL0584N

Invalid use of NULL or DEFAULT.

Cause: DEFAULT can only be used in a VALUES clause that is part of an INSERT statement.

A VALUES clause that is not part of an INSERT statement must have a value other than NULL in at least one row for each column.

If DEFAULT is used as a column-name in a WHERE or HAVING clause, it must be capitalized and enclosed in double quotes.

DataJoiner users: DEFAULT can not be used in a VALUES clause of an INSERT statement where the object is a nickname.

Action: Substitute a value other than NULL or DEFAULT in the VALUES clause. If DEFAULT is used as a column-name, capitalize it and enclose it in double quotes.

sqlcode: -584

sqlstate: 42608

SQL0585N

The schema name "<schema-name>" can not appear more than once in the function path.

Cause: The function path includes "<schema-name>" more than once. The function path can only include one occurrence of each schema name.

The statement cannot be processed.

Action: Remove duplicate occurrences of "<schema-name>" from the function path.

sqlcode: -585

sqlstate: 42732

SQL0586N

The total length of the CURRENT FUNCTION PATH special register cannot exceed 254 characters.

Cause: The CURRENT FUNCTION PATH special register is defined as a VARCHAR(254). The content of the string includes each schema name delimited with double quotes and separated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT FUNCTION PATH cannot exceed 254 characters. The SET CURRENT FUNCTION PATH statement or the FUNCPATH option of the PREP or BIND command causing this message would exceed this limit.

The statement or command cannot be processed.

Action: Remove schema names to reduce the total length to fit the 254 character maximum length. If all the schema names are required, it may be necessary to consolidate some user-defined functions so that less schema names are required on the CURRENT FUNCTION PATH.

sqlcode: -586

sqlstate: 42907

SQL0595W

Isolation level "<requested-level>" has been escalated to "<escalated-level>".

Cause: The isolation level specified is not supported by DB2. It has been escalated to the next higher level of isolation supported by DB2.

Action: To avoid this warning, specify an isolation level which is supported by DB2. DB2 supports isolation levels Repeatable Read (RR), Read Stability (RS), Cursor Stability (CS), and Uncommitted Read (UR).

sqlcode: +595

sqlstate: 01526

SQL0598W • SQL0599W

SQL0598W

Existing index "<name>" is used as the index for the primary key or a unique key.

Cause: An index was required for an ALTER TABLE operation that defined a primary key or a unique key, and the indicated index matches the required index.

When creating a primary key or unique key index, an index description matches if it identifies the same set of columns (in any order) as the primary or unique key without regard to ascending or descending specifications, and is specified as unique.

The statement is processed successfully.

Action: No action is required.

sqlcode: +598

sqlstate: 01550

SQL0599W

Comparison functions are not created for a distinct type based on a long string data type.

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

This is a warning situation. The statement is processed successfully.

Action: No action is required.

sqlcode: +599

sqlstate: 01596

SQL0600 - SQL0699

SQL0600N

A function could not be generated because of a duplicate signature.

Cause: While attempting to create a distinct type, the generated cast function by the same name as the distinct type name could not be created because one with the same signature already exists in the schema.

The statement could not be processed.

Action: Choose another name for the distinct type or drop the function with the same name as the distinct type name.

sqlcode: -600

sqlstate: 42710

SQL0601N

The name of the object to be created is identical to the existing name "<name>" of type "<type>".

Cause: The CREATE or ALTER statement tried to create or add an object "<name>" when an object of type "<type>" already exists with that name on the application server or in the same statement.

If "<type>" is FOREIGN KEY, PRIMARY KEY, UNIQUE, or CHECK CONSTRAINT, the "<name>" is the constraint name specified in the CREATE or ALTER TABLE statement or generated by the system.

DataJoiner users: some DataJoiner data sources do not provide the appropriate values for the "<name>" and "<type>" message tokens. In these cases, "<name>" and "<type>" will have the following format: "OBJECT:<data source> TABLE/VIEW", and "UNKNOWN" indicating that the actual values at the specified data source are not known.

The statement cannot be processed. No new object is created, and the existing object is not altered or modified.

Action: Either drop the existing object or choose another name for the new object.

DataJoiner users: if the statement is a CREATE FUNCTION MAPPING or a CREATE TYPE MAPPING statement, the user can also consider not supplying a type mapping name and the system will automatically generate a unique name for this mapping.

sqlcode: -601

sqlstate: 42710

SQL0602N

The CREATE INDEX statement specifies too many columns (16 is the maximum).

Cause: The number of columns specified in the CREATE INDEX statement exceeds the maximum of 16 for the database manager.

DataJoiner users: the limit for other data sources is different. That limit has been exceeded. This problem may be detected on DataJoiner, or it may be detected on the data source.

The statement cannot be processed.

Action: Change the index definition to conform to the column limit of 16.

DataJoiner users: change the index definition to conform to the column limit for the data source.

sqlcode: -602

sqlstate: 54008

SQL0603N

A unique index cannot be created because the table contains rows which are duplicates with respect to the values of the identified columns.

Cause: The index defined in the CREATE INDEX statement could not be created as unique, because the specified table already contains rows that duplicate the values of the identified columns.

DataJoiner users: this situation may be detected by DataJoiner or it may be detected by the data source.

The statement cannot be processed. The specified index is not created.

Action: Examine the data to determine if the duplicate data is permitted. Alternatively, consider creating a non-UNIQUE index.

sqlcode: -603

sqlstate: 23515

SQL0604N

The length, precision, or scale attribute for column, distinct type, function, or type mapping "<data-item>" is not valid.

Cause: There is an error in the data type specification in a CREATE or ALTER statement, or a CAST specification. An invalid length, precision or scale attribute may have been specified, or it may be that the data type itself is incorrect or not permitted in this context. The location of the error is given by "<data-item>" as follows:

- for a CREATE or ALTER TABLE statement, "<data-item>" gives the name of the column containing the error.
- for a CREATE FUNCTION statement, "<data-item>" is a token that identifies the area of the problem in the statement. For example, "PARAMETER 2" or "RETURNS" or "CAST FROM".
- for a CREATE DISTINCT TYPE statement, "<data-item>" gives the name of the type being defined.
- for CAST(expression AS data-type), "<data-item>" is "CAST".

DataJoiner users: if the statement is a CREATE TYPE MAPPING statement, an attempt was made to create a type mapping where a type attribute for either the local data type or the remote data type is not valid. Possible reasons include:

- The local length/precision is set to 0 or a negative value.
- The length/precision attribute is specified for data types such as date/time/timestamp, float, or integer.
- The scale attribute is specified for data types such as character, date/time/timestamp, float, or integer.
- The FOR BIT DATA clause is specified for a non-character type.
- The remote precision is set to 0 for remote types other than Informix datetime.
- An invalid field qualifier is being used in a type mapping for an Informix datetime type.
- An ending value is lower than the starting value in a precision/scale range.

The statement cannot be processed.

Action: Correct the syntax and try again.

sqlcode: -604

sqlstate: 42611

SQL0605W • SQL0612N

SQL0605W

The index was not created because the index "<name>" already exists with the required description.

Cause: A CREATE INDEX operation attempted to create a new index and the indicated index matches the required index.

For CREATE INDEX, two index descriptions match if they identify the same columns in the same order with the same ascending or descending specifications, and are both specified as unique or the new index is specified as non-unique.

The new index was not created.

Action: No action is required unless the existing index "<name>" is not a suitable index.

sqlcode: +605

sqlstate: 01550

SQL0607N

"<operation>" is not defined for system objects.

Cause: The "<operation>" specified in the SQL statement cannot be performed on system objects. One of the following was attempted:

- DROP or ALTER a system owned object such as a system catalog table, built-in function or built-in data type
- COMMENT ON a system owned built-in function.
- INSERT or DELETE on a system catalog table.
- UPDATE directly on a system catalog table. Some columns of a subset of system catalog tables are updateable. For UPDATE operation on these catalog tables, updateable views in SYSSTAT schema should be used. For a description of updateable catalog views (SYSSTAT views), see the *SQL Reference*.
- CREATE or DROP of an index on a system table
- CREATE of a trigger on a system table
- A non-updateable system table was identified in the FROM clause of a SELECT statement containing a

FOR UPDATE clause. For a list of updateable system catalogs see the *SQL Reference*.

- DROP or ALTER of a system table space.
- DROP or ALTER of a system nodegroup.
- REDISTRIBUTE of the IBMCATGROUP or IBMTEMPGROUP nodegroups.

The statement cannot be processed.

Action: Do not attempt to modify any system objects except for those columns of the system catalog tables which are updateable through updateable SYSSTAT views. See the *SQL Reference* for more information.

sqlcode: -607

sqlstate: 42832

SQL0612N

"<name>" is a duplicate column name.

Cause: A statement was issued with the same column name appearing more than once where duplicates are not allowed. Where these column names appears varies depending on the type of statement.

- CREATE TABLE statements cannot have the same column name defined for two columns.
- CREATE VIEW statements or common table expression definitions cannot have the same column name in the column name list. If no column name list is specified, then the column names of the columns in the select list of the view must be unique.
- ALTER TABLE statement cannot add a column to a table using the name of a column that already exists or is the same as another column being added.
- CREATE INDEX cannot have a column name specified more than once as part of the index key.
- CREATE TRIGGER cannot have a column name specified more than once in the list of columns that cause an update trigger to be activated.

The statement cannot be processed.

Action: Specify unique names for each column as appropriate for the type of statement.

sqlcode: -612

sqlstate: 42711

SQL0613N

The primary key or a unique key identified by “<name>” is too long or has too many columns.

Cause: The sum of the internal lengths of columns in the PRIMARY KEY clause or a UNIQUE clause identified by “<name>” exceeds 255 or the number of columns exceeds the maximum of 16. Also, a primary key or a unique key cannot be defined using a LONG VARCHAR column.

“<name>” is the constraint name, if specified, of the primary key or unique constraint. If a constraint name was not specified, “<name>” is the first column name specified in the primary key or unique constraint clause followed by three periods.

The statement cannot be processed.

Action: Modify the primary key or a unique key definition by eliminating one or more key columns to conform to the column limit of 16 and the key length limit.

sqlcode: -613

sqlstate: 54008

SQL0614N

The index cannot be created because the combined length of the specified columns is more than 255 bytes.

Cause: The index could not be created because the sum of the key column internal lengths would exceed 255. Also, an index cannot be created using a LONG VARCHAR, LONG VARGRAPHIC, or LOB column.

The statement cannot be processed. The specified index was not created.

Action: To modify the index definition, eliminate one or more key columns and reduce the key length to the permitted maximum.

sqlcode: -614

sqlstate: 54008

SQL0624N

Table “<name>” already has a “<key-type>” key.

Cause: A primary key or partitioning key cannot be defined in an ALTER TABLE statement because the indicated table already has a key of this type.

The statement cannot be executed.

Action: A table cannot have more than one primary key or partitioning key.

sqlcode: -624

sqlstate: 42889

SQL0628N

Multiple or conflicting keywords involving the “<clause-type>” clause are present.

Cause: There are several possible reasons why this condition might have been diagnosed for the statement. Exactly which one happened is indicated by the value of “<clause-type>”. The possibilities to consider are:

- The keyword may not be specified in the same statement as some other keyword.
- The keyword may be part of a sequence of keywords where the order in which they are specified is not enforced. A keyword in such a sequence may have been specified with the contradicting keyword also specified.
- The keyword may appear more than once with different associated values.

Action: Check that the statement conforms to the syntax and rules defined for the statement. Correct any invalid occurrences of duplicate or conflicting keywords.

sqlcode: -628

sqlstate: 42613

SQL0629N

SET NULL cannot be specified because FOREIGN KEY “<name>” cannot contain null values.

Cause: The SET NULL option of the indicated FOREIGN KEY clause is not valid because no column of the key allows null values.

“<name>” is the constraint name, if specified, in the FOREIGN KEY clause. If a constraint name was not specified, “<name>” is the first column name specified in

SQL0631N • SQL0633N

the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: Change either a column of the key to allow null values or change the delete rule.

sqlcode: -629

sqlstate: 42834

SQL0631N

FOREIGN KEY “<name>” is too long or has too many columns.

Cause: The sum of the column internal lengths identified in the FOREIGN KEY clause in a CREATE TABLE statement exceeds 255, or the number of columns identified exceeds 16. Also, a foreign key cannot be defined using a LONG VARCHAR column.

“<name>” is the constraint name, if specified, in the FOREIGN KEY clause. If a constraint name was not specified, “<name>” is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: To modify the foreign key definition, eliminate one or more key columns and conform to the 16 column limit and the key length limit.

sqlcode: -631

sqlstate: 54008

SQL0632N

FOREIGN KEY “<name>” is not valid because the table cannot be defined as a dependent of table “<table-name>” because of delete rule restrictions (reason code = “<reason-code>”).

Cause: A referential constraint cannot be defined because the object table of the CREATE TABLE or ALTER TABLE statement cannot be defined as a dependent of table “<table-name>” for one of the following reason codes:

- (01) The relationship is self-referencing and a self-referencing relationship already exists with the SET NULL delete rule.
- (02) The relationship forms a cycle of two or more tables that cause the table to be delete connected to itself (all other delete rules in the cycle would be CASCADE).

- (03) The relationship causes the table to be delete connected to the indicated table through multiple relationships and the delete rule of the existing relationship is SET NULL.

The delete rules of the existing relationships cause an error, not the delete rule specified in the FOREIGN KEY clause of the CREATE TABLE or ALTER TABLE statement.

“<name>” is the constraint name, if specified, in the FOREIGN KEY clause. If a constraint name was not specified, “<name>” is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: If possible, eliminate the particular FOREIGN KEY clause from the CREATE TABLE or ALTER TABLE statement.

sqlcode: -632

sqlstate: 42915

SQL0633N

The delete rule of FOREIGN KEY “<name>” must be “<delete-rule>” (reason code = “<reason-code>”).

Cause: The delete rule specified in a FOREIGN KEY clause of the CREATE TABLE or ALTER TABLE statement is not valid. The indicated delete rule is required for one of the following reason codes:

- (01) The referential constraint is self-referencing and an existing self-referencing constraint has the indicated delete rule (NO ACTION, RESTRICT or CASCADE).
- (02) The referential constraint is self-referencing and the table is dependent in a relationship with a delete rule of CASCADE.
- (03) The relationship would cause the table to be delete-connected to the same table through multiple relationships and such relationships must have the same delete rule (NO ACTION, RESTRICT or CASCADE).

“<name>” is the constraint name, if specified, in the FOREIGN KEY clause. If a constraint name was not specified, “<name>” is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: If possible, change the delete rule.

sqlcode: -633

sqlstate: 42915

SQL0634N

The delete rule of FOREIGN KEY "<name>" must not be CASCADE (reason-code = "<reason-code>").

Cause: The CASCADE delete rule specified in the FOREIGN KEY clause of the CREATE TABLE or ALTER TABLE statement is not valid for one of the following reason codes:

- (01) A self-referencing constraint exists with a delete rule of SET NULL, NO ACTION or RESTRICT.
- (02) The relationship would form a cycle that would cause a table to be delete connected to itself. One of the existing delete rules in the cycle is not CASCADE, so this relationship may be definable if the delete rule is not CASCADE.
- (03) The relationship would cause another table to be delete-connected to the same table through multiple paths with different delete rules or with delete rule equal to SET NULL.

"<name>" is the constraint name, if specified, in the FOREIGN KEY clause. If a constraint name was not specified, "<name>" is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed.

Action: If possible, change the delete rule.

sqlcode: -634

sqlstate: 42915

SQL0637N

More than one PRIMARY KEY clause or more than one DROP PRIMARY KEY clause was specified.

Cause: The CREATE TABLE statement contains two or more PRIMARY KEY clauses, or the ALTER TABLE statement contains two or more PRIMARY KEY or DROP PRIMARY KEY clauses.

The statement cannot be processed.

Action: Correct the statement.

sqlcode: -637

sqlstate: 42614

SQL0638N

Table "<name>" cannot be created because no column definitions were specified.

Cause: The CREATE TABLE statement does not contain any column definitions.

The statement cannot be processed.

Action: Add one or more column definitions to the statement.

sqlcode: -638

sqlstate: 42601

SQL0644N

Invalid value specified for keyword "<keyword>" in statement "<statement-type>".

Cause: The keyword "<keyword>" is followed by an invalid value as allowed by the description of "<statement-type>". For numeric values, the value may be outside a defined range. For other types, the value is not in the defined set of valid values.

Action: Determine from reference documentation for the "<statement-type>" what are valid values and make the appropriate change.

sqlcode: -644

sqlstate: 42615

SQL0658N

The object "<name>" cannot be explicitly dropped.

Cause: The identifier "<name>" identifies a cast function or comparison function that cannot be dropped using the DROP statement because it was created by the system for use with a distinct type.

The statement cannot be processed.

Action: The function "<name>" can only be dropped by dropping the distinct type that caused the function to be defined. The distinct type name corresponds to either the name of the function or the type of the parameters to the function.

sqlcode: -658

sqlstate: 42917

SQL0659N • SQL0669N

SQL0659N

Maximum size of a table object has been exceeded.

Cause: One or more of the objects which make up a table has reached its maximum size. The storage objects that make up a table are:

- Data: This is where basic column data is stored
- Index: This is where all indexes on the table are stored
- Long Data: This is where LONG VARCHAR and LONG VARGRAPHIC column data is stored
- Lob/Lob Allocation: This is where BLOB, CLOB, and DBCLOB column data and control information are stored

Once a storage object has grown to its maximum size, it cannot be extended further.

Action: To make existing space within the object available to store new data, the following actions may be taken:

- Reorganize the table
- Delete unnecessary rows from the table
- Drop an index from the table
- Update rows to reduce the amount of data (a reorg may be required after this action in order to reclaim unused storage)

sqlcode: -659

sqlstate: 54032

SQL0667N

The FOREIGN KEY “<name>” cannot be created because the table contains rows with foreign key values that cannot be found in the parent key of the parent table.

Cause: The definition of the indicated foreign key failed because the table being altered contains at least one row where the foreign key does not match the parent key value in the parent table.

“<name>” is the constraint name, if specified. If a constraint name was not specified, “<name>” is the first column name specified in the column list of the FOREIGN KEY clause followed by three periods.

The statement cannot be processed. The specified table is not altered.

Action: Remove the erroneous table rows and define the foreign key.

sqlcode: -667

sqlstate: 23520

SQL0668N

Operation not allowed when the underlying table (or a dependent table) is in the Check Pending state.

Cause: When a table is in a check pending state, there may be one or more rows that violate constraints defined on the data. This table cannot be used for the operation. An operation on a parent table that is not in a check pending state may also receive this error if a dependent table is in a check pending state.

Action: Execute the SET CONSTRAINTS statement with the IMMEDIATE CHECKED option and ensure that the data satisfies all the constraints defined on the table or the table depending on it.

sqlcode: -668

sqlstate: 57016

SQL0669N

A primary key or unique constraint index cannot be dropped explicitly.

Cause: The DROP INDEX statement attempted to drop an index required to enforce the primary key or unique constraint of the table. A system required index cannot be dropped using the DROP INDEX statement.

The statement cannot be processed. The specified index is not dropped.

Action: If you do not want to keep the primary or unique constraint, use the DROP PRIMARY KEY clause or 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.

sqlcode: -669

sqlstate: 42917

SQL0670N

The row length of the table is too long (the database manager maximum row length is 4005 bytes).

Cause: The row length of a table in the database manager cannot exceed 4005 bytes. The length is calculated by adding the internal lengths of the columns. Details of internal column lengths can be found under CREATE TABLE in the *SQL Reference*.

One of two conditions can occur:

- The row length for the table exceeds 4005 as defined in the CREATE TABLE or CREATE VIEW statement.
- The row length would exceed 4005 bytes for a temporary table needed to process the SELECT statement.

The statement cannot be processed.

Action: In the case of CREATE TABLE or CREATE VIEW, to reduce the row length, eliminate one or more columns or reduce the lengths of one or more columns.

In the other case, eliminate one or more columns from the temporary table.

sqlcode: -670

sqlstate: 54010

SQL0673N

A primary or unique key index cannot be created because the table contains rows which are duplicates with respect to the values of the identified primary or unique key columns of constraint "<name>"

Cause: The primary or unique key definition of the constraint identified by "<name>" failed because the table being altered already contains rows with duplicate values for the PRIMARY KEY or UNIQUE clause columns.

"<name>" is the constraint name, if specified. If a constraint name was not specified, "<name>" is the first column name specified in the primary key or unique constraint clause followed by three periods.

The statement cannot be processed. The specified table is not altered.

Action: Remove the erroneous rows from the table before attempting to define the primary or unique key.

sqlcode: -673

sqlstate: 23515

SQL0680N

Too many columns are specified for a table or view.

Cause: The maximum number of columns permitted for each table is 500.

The maximum number of columns permitted for each view is 5000.

DataJoiner users: other data sources may have a different maximum column limit. This limit has been exceeded.

The statement cannot be processed.

Action: Ensure that the number of table or view columns does not exceed the limit. Create separate tables or views, as required, to hold additional information beyond the limit.

DataJoiner users: limit the number of table columns to the maximum supported by the data source. Create separate tables or views, as required, to hold additional information beyond the maximum number of columns supported by the data source.

sqlcode: -680

sqlstate: 54011

SQL0683N

The specification for column, distinct type or function "<data-item>" contains incompatible clauses.

Cause: There is an error in a data item specification in a CREATE or ALTER. Incompatible specifications are present, such as: "INTEGER and FOR BIT DATA". The location of the error is given by "<data-item>" as follows:

- for a CREATE or ALTER TABLE statement, "<data-item>" gives the name of the column containing the error.
- for a CREATE FUNCTION statement, "<data-item>" is a token that identifies the area of the problem in the statement. For example, "PARAMETER 3" or "RETURNS" or "CAST FROM".
- for a CREATE DISTINCT TYPE statement, "<data-item>" gives the name of the type being defined.

The statement cannot be processed.

Action: Remove the incompatibility and try the statement again.

sqlcode: -683

SQL0696N • SQL0697N

sqlstate: 42842

SQL0696N

The definition of trigger “<trigger-name>” includes an invalid use of correlation name or transition table name “<name>”. Reason code=“<reason-code>”.

Cause: The trigger definition included an invalid use of “<name>”. The value of “<reason-code>” indicates 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.

The statement cannot be processed.

Action: Remove the invalid correlation name or transition table name along with the preceding keyword.

sqlcode: -696

sqlstate: 42898

SQL0697N

OLD or NEW correlation names are not allowed in a trigger defined with the FOR EACH STATEMENT clause.

Cause: The trigger, as defined, includes a REFERENCING clause with OLD or NEW correlation names specified (or both) and the FOR EACH STATEMENT clause. These cannot be specified together.

The statement cannot be processed.

Action: Remove any OLD or NEW correlation names from the REFERENCING clause or replace FOR EACH STATEMENT with FOR EACH ROW.

sqlcode: -697

sqlstate: 42899

SQL0700 - SQL0799

SQL0707N

The object “<name>” cannot be created because the first three characters are reserved for system objects.

Cause: The following is a list of reserved names:

- a table space name cannot start with 'SYS'
- a nodegroup name cannot start with 'SYS' or 'IBM'

Action: Select a name that does not start with a reserved prefix.

sqlcode: -707

sqlstate: 42939

SQL0713N

The replacement value for “<special-register>” is invalid.

Cause: Either the value specified in the SET <special-register> statement is not a valid value of the indicated special register, or the value specified is NULL as a result of an indicator variable.

The statement cannot be executed.

Action: Correct the replacement value and/or any indicator variables. See the *SQL Reference* for an explanation of the valid values of each special register.

sqlcode: -713

sqlstate: 42815

SQL0723N

An error occurred in a triggered SQL statement in trigger “<trigger-name>”. Information returned for the error includes SQLCODE “<sqlcode>”, SQLSTATE “<sqlstate>” and message tokens “<token-list>”

Cause: An SQL statement in the trigger “<trigger-name>” has failed during execution of the trigger. 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 trigger and the original SQL statement that caused the trigger to execute cannot be processed.

Action: Check the message associated with the SQLCODE of the SQL statement that failed. Follow the action suggested by that message.

sqlcode: -723

sqlstate: 09000

SQL0724N

The activation of trigger “<trigger-name>” would exceed the maximum level of cascading.

Cause: Cascading of triggers occurs when a triggered SQL statement in a trigger would result in another trigger being activated or when a referential constraint delete rule causes additional triggers to be activated. 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 is a form of cascading that is very likely to cause this error if there are no conditions to prevent cascading from exceeding the limit.

The “<trigger-name>” specified is one of the triggers that would have been activated at the seventeenth level of cascading.

Action: Start with the triggers that are activated by the UPDATE, INSERT or DELETE statement that received this error. If any of these triggers are recursive, ensure that there is some condition that prevents the trigger from being activated more than the limit allows. If this is not the cause of the problem, follow the chain of triggers that are activated to determine the chain that exceeds the cascading limit.

sqlcode: -724

sqlstate: 54038

SQL0727N

An error occurred during implicit system action type “<action-type>”. Information returned for the error includes SQLCODE “<sqlcode>”, SQLSTATE “<sqlstate>” and message tokens “<token-list>”.

Cause: DB2 attempted to implicitly rebind an invalid package or to implicitly prepare a cached Dynamic SQL statement and encountered an error during this attempt. The action attempted is shown by the “<action-type>”:

- 1 implicit rebind of a package
- 2 implicit prepare of a cached dynamic SQL statement

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 original SQL statement that caused the “<action-type>” cannot be processed and the implicit system action was not successful.

Action: Check the message associated with the SQLCODE of the SQL statement that failed. Follow the action suggested by that message.

For an invalid package, the REBIND command can be used to recreate the error or to explicitly validate the package once the cause of the error has been resolved.

sqlcode: -727

sqlstate: 56098

SQL0750N

The source table cannot be renamed because it is referenced in a view, trigger, check constraint or referential constraint.

Cause: The source table in a RENAME statement cannot be renamed for one or more of the following reasons.

- The table is referenced in one or more existing views.
- The table is referenced in one or more existing triggers. This includes triggers on the table or references in triggered SQL statements.
- The table has check constraints defined.
- The table is involved in one or more referential constraints as a parent or dependent table.

The statement cannot be processed.

Action: Drop the views, triggers, check constraints or referential constraints on the table before issuing the RENAME statement. For views dependent on the table, query SYSCAT.VIEWDEP where the table matches BSHEMA and BNAME columns. For triggers dependent on the table, query SYSCAT.TRIGDEP where the table matches BSHEMA and BNAME columns. For check constraints on the table, query SYSCAT.CHECKS where the table matches TABSCHEMA and TABBNAME columns. For referential constraints dependent on the table, query SYSCAT.REFERENCES where the table matches TABSCHEMA and TABNAME columns or REFTABSCHEMA and REFTABNAME columns.

sqlcode: -750

sqlstate: 42986

SQL0751N •SQL0752N

SQL0751N

The trigger “<trigger-name>” is defined with an unsupported triggered SQL statement.

Cause: The trigger is defined with a triggered SQL statement that does not match the following list.

- A BEFORE trigger can include the following triggered SQL statements:
 - a fullselect
 - a SET transition-variable statement (only when FOR EACH ROW is specified).
- An AFTER trigger can include the following triggered SQL statements:
 - an INSERT statement
 - a searched UPDATE statement
 - a searched DELETE statement
 - a fullselect

In some cases the “<trigger-name>” is not available for use in the message.

Action: Check the triggered SQL statements in the trigger for any statement that does not match the above list and remove it.

sqlcode: -751

sqlstate: 42987

SQL0752N

Connecting to a database is not permitted within a logical unit of work when the CONNECT type 1 connection setting is in use.

Cause: An attempt was made to connect to either another database or the same database before issuing a COMMIT or ROLLBACK statement. The request cannot be processed within a CONNECT type 1 environment.

Action:

- Submit a COMMIT or ROLLBACK statement before requesting a connection to another database.
- If multiple databases need to be updated within a unit of work, change the connection settings to SYNCPOINT TWOPHASE and CONNECT 2 by re-precompiling or by issuing the SET CLIENT API from within the application.

sqlcode: -752

sqlstate: 0A001

SQL0800 - SQL0899

SQL0801N

Division by zero was attempted.

Cause: The processing of a column function or arithmetic expression resulted in division by zero.

The statement cannot be processed. For the INSERT, UPDATE, or DELETE statements, no inserts or updates are performed.

Action: Examine the SQL statement to determine the cause of the problem. If the problem is data dependent, it is necessary to examine the data processed when the error occurred. Refer to the *SQL Reference* to see the valid ranges for the data types.

DataJoiner users: examine the SQL statement to determine the cause of the problem. If the problem is data dependent, examine the data being processed at the data sources when the error occurred.

sqlcode: -801

sqlstate: 22012

SQL0802N

Arithmetic overflow or other arithmetic exception occurred.

Cause: The processing of a column function or arithmetic expression has resulted in an arithmetic overflow.

The statement cannot be processed. For the INSERT, UPDATE, or DELETE statements, no inserts or updates are performed.

Action: Examine the SQL statement to determine the cause of the problem. If the problem is data dependent, it is necessary to examine the data processed when the error occurred. Refer to the *SQL Reference* to see the valid ranges for the data types.

DataJoiner users: examine the SQL statement to determine the cause of the problem. If the problem is data dependent, examine the data being processed at the data sources when the error occurred. Refer to the corresponding SQL Reference for the data source to determine the valid ranges for the data types.

sqlcode: -802

sqlstate: 22003

SQL0803N

One or more values in the INSERT statement, UPDATE statement, or foreign key update caused by a DELETE statement are not valid because they would produce duplicate rows for a table with a primary key, unique constraint, or unique index.

Cause: The INSERT or UPDATE object table is constrained by one or more UNIQUE indexes to have unique values in certain columns or groups of columns. Alternatively, a DELETE statement on a parent table caused the update of a foreign key in a dependent table that is constrained by one or more UNIQUE indexes to have unique values in certain columns or groups of columns. The unique index may exist to support a primary key or unique constraint defined on the table. Completing the requested insert or update results in duplicates of the column values.

Alternatively, if a view is the object of the INSERT or UPDATE statement, it is the table on which the view is defined that is constrained.

The statement cannot be processed. The table remains unchanged.

Action: Examine the definitions for all UNIQUE indexes defined on the object table to determine the uniqueness constraints those indexes impose.

For an UPDATE statement, ensure that the specified operation is not itself inconsistent with those uniqueness constraints. If this does not show the error, examine the object table content to determine the cause of the problem.

For an INSERT statement, examine the object table content to determine which of the values in the specified value list violates the uniqueness constraint. Alternatively, if the INSERT statement contains a subquery, the object table contents addressed by that subquery must be matched against the object table contents to determine the cause of the problem.

For a DELETE statement, examine the dependent tables for unique constraints on foreign keys that are defined with the rule ON DELETE SET NULL. One such table has a foreign key column included in a unique index that cannot be set to null since there is already a null in the column for that table.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and examine the index definitions and data for the conditions listed previously.

sqlcode: -803

sqlstate: 23505

SQL0804N

The application program input parameters for the current request are not valid.

Cause: An error occurred while processing the current request.

The call parameter list (which may have been created by the precompiler) may be not correct. This can occur if the application programmer has modified the output of the precompiler, used a variable name beginning with *SQL* in the application program, or overwrote the call parameter list in another way.

The problems may include the following:

- the contents of the SQLDA are incorrect.
- the request being made is not supported or is out of context.
- the section number for the request is out of range for the package.
- an invalid LOB input/output seek request was made.

The SQLDA, which is created by the application program, may be invalid for one of the following reasons:

- the length of the input host variable (as provided in the length field of a VARCHAR, VARGRAPHIC, or LOB data type) is greater than the declared length, or is uninitialized
- the length of the data accessed via the SQLDATA pointer is greater than SQLLEN
- SQLN is less than SQLD
- the SQLDA contains a LOB type host variable but the SQLDOUBLED flag is not set
- the SQLLEN is not correct for the specified data type
- the SQLTYPE is invalid
- the data provided in the SQLDA is not encoded properly for the given SQLTYPE. For example, packed decimal data must be encoded according to the Binary Coded Decimal notation described in the SQL Reference manual.

The statement cannot be processed.

Action: Examine the application program for any errors noted. Note that the programmer should not attempt to modify the precompiler output.

sqlcode: -804

sqlstate: 07002

SQL0805N • SQL0818N

SQL0805N

Package "<package-name>" was not found.

Cause: Possible causes for this message (SQLCODE) are:

- The specified package or program is not defined in the database.
- The program was not bound or it was dropped.
- The application being run is not bound to the database.
- If attempting to run a DB2 utility or CLI application, the DB2 utilities may need to be rebound to the database.

The statement cannot be processed.

Action: Specify the correct package name or bind the program. If the application being run is not bound to the database, contact the database administrator to do the necessary binding.

If the DB2 utility programs need to be rebound to the database, the database administrator can accomplish this by issuing one of the following CLP command from the bnd subdirectory of the instance, while connected to the database:

- "DB2 bind @db2ubind.lst blocking all grant public" for the DB2 utilities.
- "DB2 bind @db2cli.lst blocking all grant public" for CLI.

DataJoiner users: ensure that the packages required for DataJoiner are bound at the applicable data sources. Refer to the *IBM DataJoiner Planning, Installation, and Configuration Guide* for more information on binding packages DataJoiner uses to the data sources.

sqlcode: -805

sqlstate: 51002

SQL0808N

The CONNECT statement semantics are not consistent with those of other existing connections.

Cause: The CONNECT statement originates from a source file which was precompiled having different connection options (SQLRULES, CONNECT type, SYNCPOINT, or RELEASE type) than that of a source file for which a connection exists.

Action: Ensure that all source files are precompiled using the same CONNECT options, or if this is not possible, call the SET CLIENT api to set the desired options for the application process before issuing the first CONNECT statement.

sqlcode: -808

sqlstate: 08001

SQL0811N

The result of a scalar fullselect, SELECT INTO statement, or VALUES INTO statement is more than one row.

Cause: One of the following caused the error:

- Execution of an embedded SELECT INTO or VALUES INTO statement resulted in a result table of more than one row.
- Execution of a scalar fullselect resulted in a result table of more than one row.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

The statement cannot be processed.

Action: Ensure that the statement contains the proper condition specifications. If it does, there may be a data problem that is causing more than one row to be returned when only one is expected.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and examine the selection criteria and data for that object.

sqlcode: -811

sqlstate: 21000

SQL0818N

A timestamp conflict occurred.

Cause: The timestamp generated by the precompiler at precompile time is not the same as the timestamp stored with the package at bind time.

This problem can be caused by the following:

- Precompile, compile, and link without doing an application bind.
- Precompile and bind without doing the program compile and link.
- Bind the application using a bind file that resulted from a different precompile of the program than the precompile that produced the object module linked into the application module.
- Bind an application with the same name as an existing plan and execute the existing (old) application.

DataJoiner users: in addition to the causes listed previously, the problem can also be due to:

- Not binding the DataJoiner packages at all applicable data sources.

The statement cannot be processed.

Action: Bind the application again, using the bind file for the program that matches the object module. Or, execute the program that corresponds to the package stored in the database.

If installing the sample database, record the number and text of this message and then contact your technical service representative.

DataJoiner users: in addition to the previously listed actions, ensure that the packages required for DataJoiner are bound at the applicable data sources. Refer to the *IBM DataJoiner Planning, Installation, and Configuration Guide* for more information on binding packages DataJoiner uses to the data sources.

sqlcode: -818

sqlstate: 51003

SQL0822N

The SQLDA contains a data address or indicator variable address which is not valid.

Cause: The application program placed an address that is not valid in the SQLDA.

The statement cannot be processed.

Action: Correct the application program so that valid addresses are placed in SQLDA.

sqlcode: -822

sqlstate: 51004

SQL0840N

Too many items were returned in a SELECT list.

Cause: The number of items returned in the SELECT list exceeds the allowable maximum. The maximum for SELECT lists (other than on common table expressions) is 500. The maximum for SELECT lists in common table expressions is 5000.

The statement cannot be processed.

Action: 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 possible, rewrite the SQL statement so only the necessary items of information are returned. If all the information is necessary, break the SQL statement into two or more statements.

sqlcode: -840

sqlstate: 54004

SQL0842N

A connection to server "<server-name>" already exists.

Cause: SQLRULES(STD) is in effect and a CONNECT statement identifies an existing SQL connection.

Action: The correction depends on the error:

- If the server 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).

Correct the error in the application and try again.

sqlcode: -842

sqlstate: 08002

SQL0843N

The SET CONNECTION, DISCONNECT or RELEASE statement must specify an existing connection.

Cause: 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 SQL connection of the application process.
- A DISCONNECT statement must identify an existing SQL connection of the application process.

Action: The correction depends on the error:

- If the server name is not the intended name, correct it.
- Ensure that a connection to the server has been established and is in a current or dormant state before issuing SET CONNECTION, DISCONNECT or RELEASE for that connection.

Correct the error in the application and try again.

sqlcode: -843

sqlstate: 08003

SQL0859N • SQL0866N

SQL0859N

Access to the Transaction Manager Database failed with SQLCODE "<SQLCODE>".

Cause: The application was precompiled with SYNCPOINT(TWOPHASE) and requires a Transaction Manager Database to coordinate the two phase commit. Reasons why the Transaction Manager Database is not available might include the following:

- It was not created.
- The *tm_database* field of the database manager configuration file has not been updated and activated with the name of the database.
- The database exists, but communication to the database failed.

Action: Possible actions:

- Refer to the SQLCODE that was returned with this message, and follow the appropriate action for that SQLCODE.
- Verify that the *tm_database* exists; if not, create a new database or select a database that currently exists for use as the TM database. It is recommended to create a separate database if there are no serious constraints on disk storage.
- Update the database manager configuration for the TM database using the field *tm_database* if that has not already been done.
- Verify that a connection to the *tm_database* can be made. For example, attempt the connection using the Command Line Processor.
- Ensure that the *tm_database* chosen is not a database accessed through DDCS.

sqlcode: -859

sqlstate: 08502

SQL0863W

A successful connection was made, but only single byte characters should be used.

Cause: The server database and client application are using codepages for different language types and any characters outside the 7-bit ASCII range cannot be guaranteed (only the characters in the 7-bit ASCII range exist in all codepages). For example, the connection might be between a Japanese and a Latin-1 codepage, but none of the Japanese characters will be available in the Latin-1 codepage, so all of these characters should be avoided (English characters are fine though).

DataJoiner users: possible causes are:

- The DataJoiner database supports single-byte and double-byte characters but the database client system supports only single-byte characters.
- The data source supports single-byte and double-byte characters but the DataJoiner system supports only single-byte characters.

Action: Do not submit SQL statements or commands that use characters which are not common between the application and database codepages.

DataJoiner users: do not submit SQL statements or commands that use characters which are not common between the client system, the DataJoiner system, and the data source.

sqlcode: +863

sqlstate: 01539

SQL0865N

Invalid tm_database value.

Cause: The database chosen as the *tm_database* in the database manager configuration is not valid. The database must be at level DB2 V2.1 or later, and cannot be a database accessed through DRDA protocol (ie. through DDCS).

The statement cannot be executed.

Action:

1. Update the database manager configuration to specify a valid database for the *tm_database parameter*.
2. Issue db2stop and db2start to ensure that the change takes effect.

sqlcode: -865

sqlstate: 08001

SQL0866N

Connection redirection failed. Reason code: "<reason-code>"

Cause: Directory cataloging for a database caused a connection to be redirected in a manner which is not supported.

Possible reason codes are:

- 01 A database connection involved more than one redirection from a server to another server; only one connection redirection is supported.

- 02** A connection was attempted which involved both a current version of DB2 client or server and a version 1 client or server. This attempt failed because redirection is not supported with version 1 clients or servers.

Action: By the reason code, the actions are:

- 01** Recatalog the database so that there is no more than one server redirecting the connection to another server in the path of the connection.
- 02** Recatalog the database so that there is no intermediary server redirecting the connection.

sqlcode: -866

sqlstate: 08001

SQL0868N

A CONNECT using a USER/USING clause was attempted to a server for which a connection already exists.

Cause: A current or dormant connection to a server exists, and an attempt to CONNECT to this server using the USER/USING clause is invalid.

Action: Possible actions:

- Use the SET CONNECTION statement to make the connection to the DORMANT connection current.
- Use the CONNECT statement without USER/USING if SQLRULES(DB2) are being used by the application.
- Complete the existing unit of work, disconnect, and then reconnect using USER/USING.

sqlcode: -868

sqlstate: 51022

SQL0900 - SQL0999

SQL0900N

The application state is in error. A database connection does not exist.

Cause: A connection to a database does not exist. This may be due to one of the following reasons:

- A serious error in the application state has caused the database connection to be lost.
- The application may have disconnected from a data-

base and not established a new current connection before executing the next SQL statement.

Action: Reestablish a current connection by either switching to an existing dormant connection (using CONNECT TO or SET CONNECTION) or by establishing a new connection (using CONNECT).

sqlcode: -900

sqlstate: 08003

SQL0901N

The SQL statement failed because of a non-severe system error. Subsequent SQL statements can be processed. (Reason "<reason>".)

Cause: An error has occurred which is due to a system error. Processing of the SQL statement has ended for reason "<reason>" (this is in English only and is useful only to IBM support personnel).

Action: Record the message number (SQLCODE) and reason "<reason>".

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact your technical service representative with the following information:

- Problem description
- SQLCODE
- reason "<reason>"
- SQLCA contents if possible
- Trace file if possible.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and take the necessary diagnostic steps for that data source. The problem determination procedures for data sources vary, so refer to the applicable data source manuals.

sqlcode: -901

sqlstate: 58004

SQL0902C • SQL0905N

SQL0902C

A system error (reason code = "<reason-code>") occurred. Subsequent SQL statements cannot be processed.

Cause: A system error occurred.

Action: Record the message number (SQLCODE) and reason code in the message.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact your technical service representative with the following information:

- Problem description
- SQLCODE and embedded reason code
- SQLCA contents if possible
- Trace file if possible.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and take the necessary diagnostic steps for that data source. The problem determination procedures for data sources vary, so refer to the applicable data source manuals.

sqlcode: -902

sqlstate: 58005

SQL0903N

COMMIT statement failed, transaction rolled back. Reason code: "<reason-code>"

Cause: One or more of the servers participating in the current unit of work was unable to prepare the database to be committed. The COMMIT statement has failed and the transaction has been rolled back.

Possible reason codes are:

- 01** A connection to one of the databases participating in the unit of work was lost.

DataJoiner users: if the database you connected to is a DataJoiner database where nicknames are used, a connection to one of the data sources required for a nickname within the database was lost.

- 02** One of the databases or nodes participating in the unit of work was accessed, but unable to prepare to commit.

DataJoiner users: if the database you connected to is a DataJoiner database where nicknames are used, one of the data sources required for a nickname is unable to prepare to commit.

Action: If a connection to a database was lost, reestablish the connection. If the failure was not connection related, reference the error diagnostic logs on the remote system to determine the nature of the failure and what action might be required. Rerun the application.

sqlcode: -903

sqlstate: 40504

SQL0904N

Unsuccessful execution caused by an unavailable resource. Reason code: "<reason-code>", type of resource: "<resource-type>", and resource name: "<resource-name>"

Cause: 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 the Problem Determination documentation of DB2 for MVS for an explanation of resource type codes.

Action: Verify the identity of the resource that was not available. To determine why the resource was unavailable, refer to the specified "<reason-code>".

sqlcode: -904

sqlstate: 57011

SQL0905N

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>"

Cause: The execution of the SQL statement was terminated because a resource limit was exceeded.

The name of the resource whose limit was exceeded is "<resource-name>". It is also the name of the column in the resource limit specification table from which the limit was derived. The limit that was exceeded in CPU seconds is "<limit-amount1>" and in service units it is "<limit-amount2>". The "<resource-name>" may be ASUTIME, which is the number of CPU seconds permitted for each SQL statement. The maximum number of CPU seconds permitted is "<limit-amount1>". The maximum number in service units is "<limit-amount2>".

The source used to derive the limit-amount is "<limit-source>" and is either the name of a resource limit specification table or a 'system parameter'. 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. In either case, the limit is obtained from an install (system) parameter.

Action: Determine why this SQL statement 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.

An application program that receives this return code can execute additional SQL statements.

sqlcode: -905

sqlstate: 57014

SQL0906N

The SQL statement cannot be executed because this function is disabled due to a prior error.

Cause: 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.

Action: 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.

sqlcode: -906

sqlstate: 24514, 51005, 58023

SQL0908N

"<bind-type>" error using "<auth-id>" authority BIND, REBIND, or AUTO_REBIND operation is not allowed.

Cause: 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.

Action: 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.

sqlcode: -908

sqlstate: 23510

SQL0909N

The object has been deleted.

Cause: The application program has either (1) dropped a table and then attempted to access it, or (2) dropped an index and then tried to access its object table using that index.

Action: The logic of the application program must be corrected such that it does not attempt to access or use an object after it has been dropped.

Dropping indexes within an application program is especially hazardous, because there is no way of determining whether or not the plan that has been generated for the application (by BIND or REBIND) actually uses a particular index for access to its object table.

sqlcode: -909

sqlstate: 57007

SQL0910N • SQL0912N

SQL0910N

The SQL statement cannot access an object on which a modification is pending.

Cause: The application program attempted to access an object within the same unit of work in which either:

- The application program issued a DROP against the object or a related object (e.g. an index for a table)
- The application program issued a statement against the object that added or dropped a constraint.
- The application program issued a DROP TRIGGER or CREATE TRIGGER statement that affected the object, either directly or indirectly.

DataJoiner users: in addition to the previously listed causes, other data source specific restrictions may exist that prevent access to the object.

The SQL statement cannot be processed.

Action: Modify the application program so there is no attempt to access an object within the same unit of work in which the modification was made. In general, it is better to isolate Data Definition Language (DDL) statements in a different unit of work than Data Manipulation Language (DML) statements that access the same objects.

The unit of work must be committed or rolled back before the statement that failed can be processed successfully. If the committed modification caused an object to be dropped, then the object may have to be recreated in order for the failing SQL statement to be processed successfully.

DataJoiner users: if the previous action does not solve the problem, isolate the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and determine what additional constraints exist on the data source that are preventing access to the object. Ensure that the application is not violating any of those constraints.

sqlcode: -910

sqlstate: 57007

SQL0911N

The current transaction has been rolled back because of a deadlock or timeout. Reason code "<reason-code>".

Cause: The current unit of work was involved in an unresolved contention for use of an object and had to be rolled back.

The reason codes are as follows:

2 transaction rolled back due to deadlock.

68 transaction rolled back due to lock timeout.

Note: The changes associated with the unit of work must be entered again.

The application is rolled back to the previous COMMIT.

Action: To help avoid deadlock or lock timeout, issue frequent COMMIT operations, if possible, for a long-running application, or for an application likely to encounter a deadlock.

DataJoiner users: the deadlock can occur at the DataJoiner system or at the data source. There is no mechanism to detect deadlocks that span data sources and potentially the DataJoiner system. It is possible to identify the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement).

Deadlocks are often normal or expected while processing certain combinations of SQL statements. It is recommended that you design applications to avoid deadlocks to the extent possible.

sqlcode: -911

sqlstate: 40001

SQL0912N

The maximum number of lock requests has been reached for the database.

Cause: The maximum number of locks for the database was reached because insufficient memory was allocated to the lock list.

The statement cannot be processed.

Action: The application should submit a COMMIT or ROLLBACK statement before submitting other SQL statements. Consider increasing the database configuration parameter (*locklist*) to allow more lock list space.

sqlcode: -912

sqlstate: 57011

SQL0913N

Unsuccessful execution caused by deadlock or timeout. Reason code "<reason-code>".

Cause: The request issued was involved in an unresolved contention for use of an object and the execution failed.

The reason codes are as follows:

- 2** transaction branch failed due to deadlock.
- 68** transaction branch failed due to lock timeout.
- 80** statement failed due to timeout.

Action:

- For reason code 80, you can retry the failed statement without terminating the application. If the application accesses multiple remote databases, it may be better to rollback the transaction to avoid the possibility of a global deadlock.
- For other reason codes, issue a request to rollback the transaction. The transaction cannot be committed due to the failure of the current transaction branch.
- To help avoid deadlock or lock timeout, issue frequent COMMIT operations, if possible, within long-running applications or applications requiring data with high concurrent access.

sqlcode: -913

sqlstate: 57033

SQL0917N

Remote bind from a DRDA application requester failed.

Cause: An error has occurred during a remote bind from a DRDA application requester. This error can be issued during bind or commit processing.

Action: This problem is usually caused by an SQL statement which did not get bound because of an error. The user should consult the diagnostics facility at the DRDA application requester to determine which statement is causing the error and correct it.

sqlcode: -917

sqlstate: 42969

SQL0918N

Application must execute a rollback.

Cause: The unit of work has already been rolled back in the database but other resource managers involved in this unit of work might not. To ensure integrity of this application, all SQL requests will be rejected until the application issues a rollback.

Action: All SQL requests will be rejected until the application issues a rollback. For example, in a CICS environment, this would be a CICS SYNCPOINT ROLLBACK command.

sqlcode: -918

sqlstate: 51021

SQL0920N

Data on a database client system cannot be accessed from other database client systems.

Cause: The workstation has been configured as a client or a server with local clients. Any databases created on this system cannot be shared by other workstations.

The function cannot be processed.

Action: Request data only from server workstations.

sqlcode: -920

sqlstate: 57019

SQL0925N

SQL COMMIT invalid for application execution environment.

Cause: COMMIT is disallowed in the following cases:

- In a Distributed Transaction Processing environment such as CICS, a static SQL COMMIT statement was attempted, but a commit statement specific to the environment is required. For example, in a CICS environment this would be the CICS SYNCPOINT command.
- A DB2 application precompiled or set to use CONNECT 2 in a non-TP Monitor environment has issued a dynamic SQL COMMIT statement, whereas only static SQL COMMITs are allowed.
- When issued from a stored procedure, SQL COMMIT is also not allowed if the calling program is executing in a distributed unit of work or Distributed Transaction Processing environment.

SQL0926N • SQL0931C

Action: Correct the problem by doing one of the following:

- Remove the statement issuing the COMMIT and replace it with a statement which does the valid equivalent for the environment
- In the case of a connect type 2 in a non-TP Monitor environment, use only static COMMIT.
- In the case of a stored procedure, remove the COMMIT

sqlcode: -925

sqlstate: 2D521

SQL0926N

SQL ROLLBACK invalid for application execution environment.

Cause: ROLLBACK is disallowed in the following cases:

1. In a Distributed Transaction Processing environment such as CICS, a static SQL ROLLBACK statement was attempted, but a rollback statement specific to the environment is required. For example, in a CICS environment this would be the CICS SYNCPOINT ROLLBACK command.
2. A DB2 application precompiled or set to use CONNECT 2 has issued a dynamic SQL ROLLBACK statement, whereas only static SQL ROLLBACKs are allowed.
3. When issued from a stored procedure, SQL ROLLBACK is also restricted if the calling program is executing in a distributed unit of work (CONNECT type 2) or Distributed Transaction Processing environment.

Action:

1. Remove the statement issuing the ROLLBACK and replace it with a statement which does the valid equivalent for the environment.
2. In the case of a connect type 2, use only static COMMIT.
3. In the case of a stored procedure, remove it entirely.

sqlcode: -926

sqlstate: 2D521

SQL0930N

There is not enough storage available to process the statement.

Cause: A request was made to the database that required another memory page but no more pages are available to the database manager.

The statement cannot be processed.

Action: Possible solutions include:

- Verify that your system has sufficient real and virtual memory.
- Remove background processes.
- If the error occurs during DUOW resynchronization, increase the *maxagents* and reduce the *resync_interval* database manager configuration parameter values.

sqlcode: -930

sqlstate: 57011

SQL0931C

Operating system file table overflow occurred. Subsequent SQL statements cannot be processed.

Cause: An Operating system limit has been reached. The application program is not permitted to issue additional SQL statements. The database is marked as needing recovery and all applications using the database are prevented from accessing the database.

Action: Terminate all the applications using the database. Restart the database.

To help prevent the problem from recurring:

- Change the MAXFILOP database configuration parameter to a smaller value (this will reduce DB2's use of the operating system file table), and/or
- Terminate other applications that are using files, if appropriate, and/or,
- Refer to the operating system documentation for increasing the operating system file table limit. In most UNIX environments this can be accomplished by updating the kernel configuration with a larger value. (On AIX, this may only be possible by increasing the amount of memory in your machine).

sqlcode: -931

sqlstate: 58005

SQL0950N

The table or index cannot be dropped because it is currently in use.

Cause: A DROP TABLE or DROP INDEX statement cannot be issued when an open cursor is currently using the table or index.

The statement cannot be processed. The table or index is not dropped.

Action: Close any cursors required and resubmit the statement.

sqlcode: -950

sqlstate: 55006

SQL0951N

The table cannot be referenced in a SET CONSTRAINTS statement because it is currently in use.

Cause: A SET CONSTRAINTS statement cannot be issued for a table that has an open cursor.

The statement cannot be processed.

Action: Ensure that the SET CONSTRAINTS statement does not reference tables that have open cursors.

sqlcode: -951

sqlstate: 55007

SQL0952N

Processing was cancelled due to an interrupt.

Cause: The user may have pressed the interrupt key sequence.

The statement processing is terminated. Some changes may have been applied to the database, but not committed, before termination occurred.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Continue the application.

If installing the sample database, drop it and install the sample database again.

sqlcode: -952

sqlstate: 57014

SQL0953C

Not enough storage is available in the agent heap to process the statement.

Cause: All available memory in the server agent has been used.

The command or statement cannot be processed.

Action: Terminate the application on receipt of this message. Increase the size of the agent heap parameter (*agentheap*) in the corresponding database configuration file.

sqlcode: -953

sqlstate: 57011

SQL0954C

Not enough storage is available in the application heap to process the statement.

Cause: All available memory for the application has been used.

The statement cannot be processed.

Action: Terminate the application on receipt of this message. Increase the database configuration parameter (*applheapsz*) to allow a larger application heap.

sqlcode: -954

sqlstate: 57011

SQL0955C

Sort memory cannot be allocated to process the statement.

Cause: Insufficient virtual memory is available to the database agent for sort processing.

The statement cannot be processed but other SQL statements may be processed.

Action: Terminate the application on receipt of this message. Decrease the size of the sort heap parameter (*sortheap*) in the corresponding database configuration file.

sqlcode: -955

sqlstate: 57011

SQL0956C • SQL0961C

SQL0956C

Not enough storage is available in the database heap to process the statement.

Cause: All available memory for the database has been used.

The statement cannot be processed.

Action: Terminate the application on receipt of this message. Increase the database configuration parameter (*dbheap*) to allow a larger database heap. If the number of I/O servers is near the high limit, reducing this number may also help.

sqlcode: -956

sqlstate: 57011

SQL0957C

Not enough storage is available in the communication heap of the database client, DDCS, or DataJoiner machine to process the statement.

Cause: All available memory in the communication heap of the database client, DDCS, or DataJoiner machine has been used.

The command or statement cannot be processed.

Action: Terminate the application on receipt of this message (SQLCODE). Increase the size of the communication heap (*comheapsz*) parameter in the client, DDCS, or DataJoiner workstation database manager configuration file.

NOTE: This message is applicable only for releases of DB2 prior Version 2.

sqlcode: -957

sqlstate: 57011

SQL0958C

The maximum number of open files has been reached.

Cause: The maximum number of file handles available to the database has been reached.

The statement cannot be processed.

Action: Increase any parameter that affects the maximum number of open files allowed at the location of the database. This includes increasing the configuration parameter (*maxfilop*) to allow more file handles for the instance and terminating other sessions to reduce the number of file handles being used.

sqlcode: -958

sqlstate: 57009

SQL0959C

Not enough storage is available in the communication heap of the server to process the statement.

Cause: All available memory in the server communication heap has been used.

The command or statement cannot be processed.

Action: Terminate the application on receipt of this message. Increase the size of the communication heap (*comheapsz*) parameter in the server workstation database manager configuration file.

NOTE: This message is applicable only for releases of DB2 prior to Version 2.

sqlcode: -959

sqlstate: 57011

SQL0960C

The maximum number of files has been reached in the database.

Cause: The maximum number of database files has been reached.

The statement cannot be processed.

Action: Terminate the application on receipt of this message. Have all active applications disconnect from the database and then have them reconnect to the database. If the error continues, drop either tables, indexes, or both from the database, or split the database.

If installing the sample database, drop it and install the sample database again.

sqlcode: -960

sqlstate: 57011

SQL0961C

Not enough storage is available in the remote services heap of the database client, DDCS, or DataJoiner machine to process the statement.

Cause: All available memory in the remote services heap of the database client, DDCS, or DataJoiner machine has been used.

The command or statement cannot be processed.

Action: Terminate the application on receipt of this message. Increase the size of the remote services heap (*rsheapsz*) parameter in the client, DDCS, or DataJoiner workstation database manager configuration file.

NOTE: This message is applicable only for releases of DB2 prior Version 2.

sqlcode: -961

sqlstate: 57011

SQL0962C

Not enough storage is available in the remote services heap of the server to process the statement.

Cause: All available memory in the server remote services heap has been used.

The command or statement cannot be processed.

Action: Terminate the application on receipt of this message (SQLCODE). Increase the size of the remote services heap (*rsheapsz*) parameter in the server workstation database manager configuration file.

NOTE: This message is applicable only for releases of DB2 prior to Version 2.

sqlcode: -962

sqlstate: 57011

SQL0964C

The transaction log for the database is full.

Cause: All space in the transaction log is being used.

If a circular log with secondary log files is being used, an attempt has been made to allocate and use them. When the file system has no more space, secondary logs cannot be used.

If an archive log is used, then the file system has not provided space to contain a new log file.

The statement cannot be processed.

Action: Execute a COMMIT or ROLLBACK on receipt of this message (SQLCODE) or retry the operation.

If the database is being updated by concurrent applications, retry the operation. Log space may be freed up when another application finishes a transaction.

Issue more frequent commit operations. If your transactions are not committed, log space may be freed up when the transactions are committed. When designing

an application, consider when to commit the update transactions to prevent a log full condition.

If deadlocks are occurring, check for them more frequently. This can be done by decreasing the database configuration parameter DLCHKTIME. This will cause deadlocks to be detected and resolved sooner (by ROLLBACK) which will then free log space.

If the condition occurs often, increase the database configuration parameter to allow a larger log file. A larger log file requires more space but reduces the need for applications to retry the operation.

If installing the sample database, drop it and install the sample database again.

sqlcode: -964

sqlstate: 57011

SQL0965W

There is no message text corresponding to SQL warning "<SQLCODE>" in the message file on this workstation. The warning was returned from module "<name>" with original tokens "<token list>".

Cause: Database server returned code "<SQLCODE>" to your application. The warning code does not correspond to a message in the DB2 message file on this workstation.

Action: Refer to the documentation for your database server to determine the cause for specified "<SQLCODE>"

SQL0966N

The error mapping file "<name>" specified in the Database Connection Services directory cannot be found or cannot be opened.

Cause: One of the following conditions is true:

- The error mapping file does not exist.
- The error mapping file is currently opened by another application.
- The error mapping file is not located in the expected path.
- The error mapping file is damaged.

The error mapping data could not be retrieved.

Action: Release the file from the application in which it is open or reinstall or restore the original file.

sqlcode: -966

sqlstate: 57013

SQL0967N • SQL0973N

SQL0967N

The format of the error mapping file “<name>” specified in the Database Connection Services directory is not valid.

Cause: An error occurred while the program was reading the error mapping file.

The error mapping data could not be retrieved.

Action: Correct all syntactic errors in the error mapping file.

sqlcode: -967

sqlstate: 55031

SQL0968C

The file system is full.

Cause: One of the file systems containing the database is full. This file system may contain the database directory, the database log files, or a table space container.

The statement cannot be processed.

Action: Refer to the diagnostic log to determine which file system is full. Free system space by erasing unwanted files. Do not erase database files. If additional space is required, it may be necessary to drop tables and indexes identified as not required.

On unix-based systems, this disk full condition may be due to exceeding the maximum file size allowed for the current userid. Use the chuser command to update fsize. A reboot may be necessary.

sqlcode: -968

sqlstate: 57011

SQL0969N

There is no message text corresponding to SQL error “<error>” in the message file on this workstation. The error was returned from module “<name>” with original tokens “<token list>”.

Cause: The Database server returned SQLCODE “<error>” to your application. The error code does not correspond to a message in the DB2 message file on this workstation.

Action: Refer to the documentation for your database server to determine the cause for the specified SQLCODE. Take action specified in the documentation for the database server to fix this problem.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement). Find the “<error>” in the applicable manual at the data source. Examine the application to determine the cause of the problem. If the problem is data dependent, it may be necessary to examine the data being processed at the data source at the time the error occurred.

SQL0970N

The system attempted to write to a read-only file.

Cause: A file used by the database is marked read-only but requires write access.

The statement cannot be processed.

Action: Terminate the application on receipt of this message (SQLCODE). Ensure that all database files are allowed both read and write access.

sqlcode: -970

sqlstate: 55009

SQL0972N

The database drive does not contain the correct diskette.

Cause: The diskette in the drive is not the database diskette.

The statement cannot be processed.

Action: Place the required diskette into the drive. Do not remove a diskette if the application starts using a database that resides in it.

sqlcode: -972

sqlstate: 57019

SQL0973N

Not enough storage is available in the “<heap-name>” heap to process the statement.

Cause: All available memory for this heap has been used. The statement cannot be processed.

Action: Terminate the application on receipt of this message (SQLCODE). Increase the configuration parameter for “<heap-name>” to increase the heap size.

sqlcode: -973

sqlstate: 57011

SQL0974N

The drive containing the database is locked.

Cause: The system reported that the drive containing the database is locked.

The statement cannot be processed.

Action: Ensure no other processing (for example, CHKDSK) that can lock the drive is occurring on the system. Retry the operation.

If installing the sample database, drop it and install the sample database again.

sqlcode: -974

sqlstate: 57020

SQL0975N

A new transaction could not be started because database or instance "<name>" is quiesced by user "<username>". Quiesce type: "<type>".

Cause: Another user has quiesced the instance or database that you are attempting to use, and no new transactions are allowed until the instance or database is no longer in the quiesced state.

Quiesce type "<type>" refers to the instance or database already quiesced and is a '1' for an instance and a '2' for a database.

Action: Contact the user who currently has the instance or database quiesced to determine when DB2 will no longer be quiesced, and retry the request at that time.

sqlcode: -975

sqlstate: 57046

SQL0976N

The diskette drive door is open.

Cause: The drive door for the database is open.

The statement cannot be processed.

Action: Close the drive door and retry the operation.

sqlcode: -976

sqlstate: 57021

SQL0977N

COMMIT state unknown.

Cause: The *tm_database* has become unavailable during COMMIT processing, and this has caused the result of the COMMIT to be unknown. Resynchronization of the databases will occur when the *tm_database* becomes available. Note that the transaction may be rolled back during resynchronization. Further execution of SQL statements can safely occur, however locks might be held until the resynchronization process is complete.

Action: Verify that the connection to the *tm_database* can be made, for example by using CLP. If it cannot be made, follow the necessary actions for the SQLCODE returned to ensure that a connection can be established.

sqlcode: -977

sqlstate: 40003

SQL0978N

The diskette is write-protected.

Cause: A write operation was attempted to the database but the database diskette is write protected.

The statement cannot be processed.

Action: Verify that you are using the correct diskette. Remove protection from the diskette, if necessary.

sqlcode: -978

sqlstate: 55009

SQL0979N

COMMIT has failed against "<num>" databases for an application process running with SYNCPOINT of NONE. The failures include the following database alias and SQLSTATE pairs (a maximum of four can be returned): "<alias/SQLSTATE1>", "<alias/SQLSTATE2>", "<alias/SQLSTATE3>", "<alias/SQLSTATE4>".

Cause: An application was connected to multiple databases, and a COMMIT was issued which failed for one or more of these connections.

DataJoiner users: if one of the failed connections is a DataJoiner database where nicknames are used, then a commit against one of the data sources required for a nickname has failed.

Action: Depending upon the nature of the application and the data being updated, the user might wish to dis-

SQL0980C • SQL0984C

continue the processing being done, log the failure, and issue the appropriate SQL to ensure that the changes intended by the application are consistently reflected across all databases involved.

If a full list of databases affected by COMMIT errors could not be returned please refer to the diagnostic log for a full list.

sqlcode: -979

sqlstate: 40003

SQL0980C

A disk error occurred. Subsequent SQL statements cannot be processed.

Cause: A disk error occurred that prevented successful execution of the current and subsequent SQL statements. The application program is not permitted to issue additional SQL statements. For example, a recovery routine associated with the application program cannot issue additional SQL statements. The database is marked as needing recovery and all applications using the database are prevented from accessing the database.

The statement cannot be processed.

Action: Record all error information from the SQLCA, if possible. Terminate all applications using the database. Determine if the error is a hardware error and take the appropriate action as specified in the *Troubleshooting Guide* for hardware problems. Restart the database. If recovery is not possible, restore the database from a backup copy.

If installing the sample database, drop it and install the sample database again.

sqlcode: -980

sqlstate: 58005

SQL0982N

A disk error occurred. However, subsequent SQL statements can be processed.

Cause: A disk error occurred during processing of a temporary system file that prevented successful execution of the current SQL statement. However, subsequent SQL statements can be processed.

The statement cannot be processed.

Action: Terminate the application on receipt of this message (SQLCODE).

sqlcode: -982

sqlstate: 58004

SQL0983N

The transaction log does not belong to the current database.

Cause: The signature stored in the log file does not match the database dependent signature. This error usually occurs when the user specified that the log file be stored in a directory different from where the database is stored. File redirection can be involved.

The statement cannot be processed.

Action: Resubmit the command with the proper access to the log file.

sqlcode: -983

sqlstate: 57036

SQL0984C

COMMIT or ROLLBACK was not successful. Subsequent SQL statements cannot be processed.

Cause: A commit or rollback operation could not be processed successfully because of a system error. 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. The database is marked as needing recovery and all applications using the database are prevented from accessing the database.

The statement cannot be processed.

Action: Record the message number (SQLCODE) and all SQLCA error information, if possible. Terminate all applications using the database. Restart the database. If installing the sample database, drop it and install the sample database again.

If recovery is not possible, restore the database from a backup copy.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Contact your technical service representative with the following information:

Information required:

- Problem description
- SQLCODE
- SQLCA contents if possible

- Trace file if possible.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and take the necessary diagnostic steps and database recovery procedures for that data source. The problem determination procedures and database recovery procedures for data sources vary, so refer to the applicable data source manuals.

sqlcode: -984

sqlstate: 58005

SQL0985C

A file error occurred while processing the database catalogs. The database is not usable.

Cause: The system is unable to recover from an I/O error on a catalog file.

The system cannot process any statements using the database.

Action: Restore the database from a backup copy.

If installing the sample database, drop it and install the sample database again.

sqlcode: -985

sqlstate: 58005

SQL0986N

A file error occurred while processing a user table. The table is not usable.

Cause: The data in the table is no longer valid.

The system cannot process any statements using the table.

Action: Restore the database from a backup version if the database is inconsistent.

If installing the sample database, drop it and install the sample database again.

sqlcode: -986

sqlstate: 58004

SQL0987C

The application control shared memory set cannot be allocated.

Cause: The application control shared memory set cannot be allocated. This error is caused by insufficient memory resources for either the database manager or the environment in which its operations are being attempted. Memory resources that can cause this error include:

- The number of shared memory identifiers allocated in the system.
- The amount of paging or swapping space available in the system.
- The amount of physical memory available in the system.

Action: One or more of the following:

- Ensure that sufficient memory resources are available to satisfy the database manager requirements and those of the other programs running on the system.
- Reduce the database manager memory requirement for this memory set by reducing the database configuration parameter, `app_ctl_heap_sz`, which affects it.
- Where appropriate, stop other programs using the system.

sqlcode: -987

sqlstate: 57011

SQL0990C

An index error occurred. Reorganize the table.

Cause: An index has had considerable activity that used all the free space for indexes.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

The statement cannot be processed.

Action: Commit your work and retry the command. If the error continues, roll back your work. If errors still persist, reorganize the table, if possible.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and follow the index re-creation procedures for that data source.

SQL0992C • SQL0997W

SQL0992C

The release number of the precompiled program is not valid.

Cause: The release number of the precompiled program (package) is not compatible with the release number of the installed version of the database manager.

The precompiled program (package) cannot be used with the current version of the database manager. The command cannot be processed.

Action: Use only programs that are precompiled with a compatible release level of the database manager.

sqlcode: -992

sqlstate: 51008

SQL0993W

The new path to the log (newlogpath) in the database configuration file is not valid.

Cause: The path to the log file is not valid for one of the following reasons:

- The path does not exist.
- A file with the correct name was found in the specified path, but it is not a log file for this database.
- The database manager instance id does not have permission to access the path or a log file.

The requested change is not made.

Action: To change the path to the log file, submit a database configuration command with a valid value.

sqlcode: +993

sqlstate: 01562

SQL0994N

Invalid usage of the application savepoint.

Cause: The application savepoint function has been used inconsistently. The program attempted to perform one of the following:

- Request more than one active savepoint.
- Issue an end savepoint call without an active savepoint.
- Issue a rollback savepoint call without an active savepoint.

The function cannot be processed.

Action: Correct the savepoint usage in the program.

SQL0995W

The current path to the log file (logpath) is not valid. The log file path is reset to the default.

Cause: The path to the log file is not valid for one of the following reasons:

- The path does not exist.
- A file with the correct name was found in the specified path, but it is not a log file for this database.
- The database manager instance id does not have permission to access the path or log file.

For circular logging, the log file is created in the default log path. For archive logging, the next log file is created in the default log path. The requested change is not made.

Action: To change the path to the log file, submit a configuration command with a valid value.

sqlcode: +995

sqlstate: 01563

SQL0996N

Cannot free pages for an object in a table space.

Cause: There are corrupted internal database pages or internal logic errors in a table space. Details can be found in the system error log and/or the database manager error log.

Action: Discontinue use of the object or table space. Contact IBM service to inspect the object and the table space.

sqlcode: -996

sqlstate: 58035

SQL0997W

General informational message for transaction processing. Reason Code = "<XA-reason-code>"

Cause: The SQLCODE 997 is only passed between components of the database manager and will not be returned to an application. It is used to carry XA return codes for non-error situations. The possible reason codes are:

- XA_RDONLY (3) - the transaction branch was read-only and has been committed.
- 64 - TM database indicates transaction to be committed on DUOW resynchronization

- 65 - TM database indicates transaction to be rolled back on DUOW resynchronization

Action: No action required.

SQL0998N

Error occurred during transaction or heuristic processing. Reason Code = "<reason-code>" Subcode = "<subcode>".

Cause: An error is detected when processing a distributed transaction. The transaction is:

- Running under a Distributed Transaction Processing environment (such as those from CICS or other transaction managers).
- Performing heuristic operations.
- Updating multiple nicknames within a DataJoiner database, where each updated nickname represents a different data source. In this case, one of the data sources has failed during transaction processing. The reason code returned in this case is the reason for the failure at the data source, not the DataJoiner database.

The possible reason codes (corresponding X/Open XA reason codes are shown in parenthesis) are:

- 01 - (XAER_ASYNC) asynchronous operation already outstanding.
- 02 - (XAER_RMERR) a resource manager error occurred in the transaction branch.
- 03 - (XAER_NOTA) the XID is not valid.
- 04 - (XAER_INVALID) invalid arguments were given. Possible subcodes are:
 - 01 - xa_info pointer is invalid, eg. the XAOpen string is null.
 - 02 - database name exceeds maximum length.
 - 03 - username exceeds maximum length.
 - 04 - password exceeds maximum length.
 - 05 - username specified but not a password.
 - 06 - password specified but not a username.
 - 07 - too many parameters in the xa_info string.
 - 08 - multiple xa_opens generate different RM ids for the same database name.
 - 09 - database name not specified.
- 05 - (XAER_PROTO) routine invoked in improper context.
- 06 - (XAER_RMFAIL) resource manager unavailable.
- 07 - (XAER_DUPID) the XID already exists.
- 08 - (XAER_OUTSIDE) RM doing work outside global transaction.
- 09 - registration (ax_reg) with the transaction manager failed. Possible subcodes are:
 - 01 - Joining XID not found

- 02 - dynamic library specified in the tp_mon_name configuration parameter could not be loaded.

- 10 - attempted to start a different transaction while suspended.
- 12 - unregistering (ax_unreg) with the transaction manager failed.
- 13 - ax interface failure: ax_reg() and ax_unreg() not found.
- 35 - Heuristic operations are invalid for non-XA database.
- 36 - The XID is not known by the database manager.
- 37 - The transaction has already been heuristically committed.
- 38 - The transaction has already been heuristically rolled back.
- 39 - The transaction is not an indoubt transaction.
- 40 - Only rollbacks are allowed for this transaction.
- 69 - Database log ID mismatch during DUOW resynchronization.
- 85 - As a result of heuristic processing, the transaction has partially committed and rolled back.

Action: For reason codes 1 through 8, an entry will be made in the system log because sometimes the SQLCA cannot be returned to the caller.

If the error is due to a failed data source associated with a DataJoiner nickname, the location of the failed data source will always appear in DataJoiner's system log.

For reason code 4, verify the content of the xa open string and make necessary corrections.

For reason code 9, subcode 02, ensure that the tp_mon_name configuration parameter contains the name of the dynamic library in the external product which has the ax_reg() function used for dynamic registration of transactions.

For reason code 35, you attempted to perform a heuristic operation against a database that only participates as a read-only resource manager in a global transaction. Examples are any DRDA databases such as DB2 on MVS. These type of non-XA databases would not have any XA indoubt transactions.

For reason codes 36, 37, and 38, you attempted to perform an invalid heuristic operation on an indoubt transaction. Either you specified the wrong XID, or a heuristic or resync operation had taken place since you recorded this XID. Perform a Heuristic Query request to get the current list of indoubt transactions to verify if you still need to perform your heuristic operation.

For reason code 39, the XID specified is for a transaction that has ended and is waiting for the two-phase

SQL1000N •SQL1002N

commit process to begin. You can only perform heuristic operations on transactions that have entered the two-phase commit process and become indoubt transactions.

For reason code 40, an SQL statement was attempted under a transaction which has failed. An example of this is to attempt an SQL statement in a transaction thread that has successfully registered after a tightly coupled thread participating in the same transaction has abnormally terminated.

For reason code 69, either the transaction manager (TM) database or the resource manager (RM) database or both are different from the ones when the indoubt transaction was generated. In other words, the TM database or RM database names could be referencing different database instances. The log ID mismatch may be caused by the following reasons:

- The database directory for the TM database at the RM instance is incorrect.
- The configuration may have been changed after the indoubt transaction was generated.
- The database may have been dropped and recreated. In that case, you can only commit or rollback the indoubt transaction heuristically.

For reason code 85, you are updating multiple data sources, and some of the data sources have been heuristically rolled back or committed, resulting in the transaction having partially committed and rolled back. With this reason code data is now in an inconsistent state, you must manually check every data source updated by the transaction to correct the data.

General information collection procedure:

If you cannot resolve the problem identified by the reason codes, record the message number (SQLCODE), reason code, and the optional subcode in the message or the SQLCA in the system log.

If the failure is from a DataJoiner database, you should also record the location of the failed data source found in DataJoiner's system log.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then, contact your technical service representative with the following information:

- Problem description
- SQLCODE, embedded reason code, and subcode
- SQLCA contents (if possible)

- Trace file (if possible)
- Location of the failed data source if the failure is from DataJoiner

There might be additional information in the console or message logs of the transaction manager and the database manager.

sqlcode: -998

sqlstate: 58005

SQL1000 - SQL1099

SQL1000N

"<alias>" is not a valid database alias name.

Cause: The alias specified in the command or api is not valid. The alias must contain 1 to 8 characters (bytes in MBCS countries) and all the characters must be from the database manager base character set.

The command cannot be processed.

Action: Resubmit the command with the correct alias.

SQL1001N

"<name>" is not a valid database name.

Cause: The syntax of the database name specified in the command is not valid. The database name must contain 1 to 8 characters and all the characters must be from the database manager base character set.

The command cannot be processed.

Action: Resubmit the command with the correct database name.

sqlcode: -1001

sqlstate: 2E000

SQL1002N

"<drive>" is not a valid drive.

Cause: The drive specified in the command is not valid. The drive is a single character (A to Z) indicating the diskette drive or fixed-disk partition where the database or database directory is located.

The command cannot be processed.

Action: Resubmit the command with the correct drive.

SQL1003N

The password is not valid because the syntax is not correct or the password does not match the password of the specified database.

Cause: The length of the password is expected to be 18 characters or less. However, if the password is to be verified for an APPC conversation, it must be 8 characters or less.

Action: Ensure that the password is not longer than the limit allowed.

sqlcode: -1003

sqlstate: 28000

SQL1004C

There is not enough storage on the file system to process the command.

Cause: There is not enough storage on the specified file system to process the command.

The command cannot be processed.

Action: Choose a different file system or erase some non-database files from the specified file system to make space for the database manager functions.

SQL1005N

The database alias "<name>" already exists in either the local database directory or the system database directory.

Cause: The alias name specified has already been used. If no alias is specified in the catalog database command, the database name is used as the alias. When a database is created, the alias name is the same as the database name.

This error may occur on the catalog database command when the alias already exists in the system database directory.

On the create database command this error may occur in one of the following situations:

- The alias already exists in the system database directory and local database directory.

- The alias already exists in the system database directory but not in the local database directory.
- The alias already exists in the local database directory but not in the system database directory.

Action: For the catalog database command, uncatalog the alias from the system database directory and resubmit your original command or catalog the database with a different alias name.

For the create database command, do the following operations with respect to the above 3 situations:

- Drop the database using the alias name. Resubmit your original command.
- Uncatalog the alias. Resubmit your original command.
- Catalog the alias into the system database directory. Drop the database using the same alias. Resubmit your original command.

SQL1006N

The code page "<code page>" of the application does not match the code page "<code page>" of the database.

Cause: The application could not connect to the database because the active codepage is different from the one that was active when the database was created.

The command cannot be processed.

Action: Exit the current application program and return to the operating system. Change the code page for the process and restart the application program.

SQL1007N

Error in finding pages for an object in a table space.

Cause: There are corrupted internal database pages or internal logic error for a table space. Details can be found in the system error log and/or the database manager error log.

Action: Discontinue use of the object or table space. Contact IBM service to inspect the object and the table space.

sqlcode: -1007

sqlstate: 58034

SQL1008N • SQL1013N

SQL1008N

Invalid table space ID.

Cause: The table space ID specified does not exist. It is either larger than the current maximum table space ID, or the table space has been dropped.

Action: Discontinue use of the database. Save the diagnostic information in the error log and contact IBM service.

sqlcode: -1008

sqlstate: 58036

SQL1009N

The command is not valid.

Cause: The command is not supported when issued on a client-only workstation or against remote databases. An example of such a command is cataloging a local database.

The command cannot be processed.

Action: Possible solutions include:

- Issue the specified command from a non client-only workstation or from the workstation where the database resides.
- Verify that the database is cataloged correctly.
- Issue a different command.

SQL1010N

"<type>" is not a valid type parameter.

Cause: The type specified in the Database Environment command is not valid. It must be '0' for an indirect database or '1' for a remote database.

In addition, on the Unix and OS/2 platforms, the type can be '3' for a database that has a DCE global name.

The command cannot be processed.

Action: Resubmit the command with a valid type.

SQL1011N

No path was specified in the CATALOG DATABASE command for an indirect entry.

Cause: A CATALOG DATABASE command was issued for an indirect entry but no path was specified. Indirect entries must specify the path where the database resides.

The command cannot be processed.

Action: Resubmit the command with the required path or change the type.

SQL1012N

No node name was specified in the CATALOG DATABASE command for a remote entry.

Cause: There was no *nodename* parameter specified in the CATALOG DATABASE command for a remote entry. Remote entries must specify the node name of the database.

The command cannot be processed.

Action: Resubmit the command with the *nodename* parameter or a different type.

SQL1013N

The database alias name or database name "<name>" could not be found.

Cause: The database name or alias specified in the command is not an existing database or the database could not be found in the (client or server) database directories.

Action: Ensure that the specified database name exists in the system database directory. If the database name does not exist in the system database directory, then the database either does not exist or the database name has not been cataloged.

If the database name appears in the system database directory and the entry type is INDIRECT, ensure that the database exists in the specified local database directory. If the entry type is REMOTE, then ensure that the database exists and is cataloged on the database directories of the server node.

For CREATE DATABASE with the AT NODE clause, ensure that the database name is in the system database directory with an entry type of INDIRECT and with a catalog node number that does not equal -1.

DataJoiner users: in addition to the above, verify that the database names specified in SYSCAT.SERVERS are all valid. Correct any SYSCAT.SERVERS entry for which the database specified in that entry does not exist.

sqlcode: -1013

sqlstate: 42705

SQL1014W

There are no more entries in the directory, file, or list being scanned.

Cause: The scan of the directory, file, or list is finished.

Action: No action is required.

SQL1015N

The database must be restarted because the previous session did not conclude normally.

Cause: The database must be restarted because of an abnormal termination of the previous session (for example, a power failure).

The command cannot be processed.

Action: On receipt of this message (SQLCODE), an application can post a message warning the user that it takes time to recover the database. To restart the database, issue the RESTART DATABASE command. In a partitioned database server environment, the command must be issued on all nodes.

sqlcode: -1015

sqlstate: 55025

SQL1016N

The local_lu alias "<name>" specified in the CATALOG NODE command is not valid.

Cause: The local logical unit (*local_lu*) alias specified in the CATALOG NODE command is not permitted. The local logical unit alias is the local SNA logical unit alias and must be 1 to 8 characters and cannot contain blank characters.

The command cannot be processed.

Action: Verify that the alias is a permitted logical unit name. Verify the characters used in the name. Resubmit the command with a valid logical unit name.

SQL1017N

The mode parameter "<mode>" specified in the CATALOG NODE command is not valid.

Cause: The *mode* specified in the CATALOG NODE command is not permitted.

The *mode* parameter identifies the communications profile the Communications Manager uses to set up a session. The mode must be 1 to 8 characters. Valid characters are uppercase or lowercase A through Z, 0 through 9, #, @, and \$. The first character must be alphabetic. The system changes lowercase characters to uppercase.

The command cannot be processed.

Action: Verify that the name is a permitted mode name. Verify the characters used in the name. Resubmit the command with a correct mode.

SQL1018N

The node name "<name>" specified in the CATALOG NODE command already exists.

Cause: The node name specified in the *nodename* parameter of the CATALOG NODE command is already cataloged in the node directory on this file system.

The command cannot be processed.

Action: If the *nodename* parameter is typed correctly, continue processing.

Uncatalog the cataloged node in the node directory if the node cataloged information is no longer valid and resubmit the command. If the node cataloged information is valid, define a new node name and resubmit the command using the new node name.

SQL1019N

The node name "<name>" specified in the command is not valid.

Cause: The node name specified in the command is not valid. The node name may be 1 to 8 characters and all of the characters must be from the database manager base character set.

The command cannot be processed.

Action: Resubmit the command with the correct node name.

SQL1020C • SQL1024N

SQL1020C

The node directory is full.

Cause: The node directory cannot hold any more entries.

The command cannot be processed.

Action: Uncatalog any unnecessary entries in the node directory.

SQL1021N

The node name "<name>" specified in the UNCATALOG NODE command was not found.

Cause: The *nodename* specified in the command could not be found in the node directory.

The command cannot be processed.

Action: If the *nodename* parameter is correct, the node may already have been uncataloged, and processing can continue. Otherwise, resubmit the command with the correct node name.

SQL1022C

There is not enough memory available to process the command.

Cause: Not enough random access memory (RAM) is available to process the command.

If a remote procedure was invoked, the remote procedure may use a local variable space that is larger than the allowable maximum (4K).

If the statement involves a user-defined function (UDF), the memory set controlled by the *udf_mem_sz* database manager configuration parameter may be larger than the memory available.

The command cannot be processed.

Action: Stop the application. Possible solutions include:

- Change the MEMMAN NO SWAP, NO MOVE option in the CONFIG.SYS file to SWAP, MOVE.
- Remove background processes.
- Decrease the values of the configuration parameters that define allocation of memory, including *udf_mem_sz* if UDFs are involved in the failing statement.
- Install more random access memory (RAM).
- If a remote procedure was invoked, ensure that the remote procedure uses a local variable space that is less than or equal to 4K.

- If you are using Remote Data Services, increase the Remote Data Services heap size (*rsheapsz*) in the server and client configuration because at least one block is used per application.
- On OS/2 systems, change PROTECT to NOPROTECT in the MEMMAN statement of the CONFIG.SYS file. This will make more memory space available to applications, but disables certain protection features of OS/2. Refer to the OS/2 documentation for more information and to determine if this will be appropriate for your environment.
- On OS/2 systems, increase the value of the *min_priv_mem* database manager configuration parameter. This will cause the database manager to reserve more private memory space at db2start time.

NOTE: This is applicable only for releases of DB2 prior to Version 2.

sqlcode: -1022

sqlstate: 57011

SQL1023C

The communications conversation failed.

Cause: An error occurred in the communications conversation.

The command cannot be processed.

Action: Retry the original command. If the error persists, contact your communications administrator.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

sqlcode: -1023

sqlstate: 08001

SQL1024N

A database connection does not exist.

Cause: There is no connection to a database. Other SQL statements cannot be processed unless an SQL CONNECT was previously executed.

The command cannot be processed.

Action: If the error occurred when disconnecting from the database, continue processing. If the error occurred on another SQL statement, issue an SQL CONNECT statement and resubmit the command or statement.

sqlcode: -1024

sqlstate: 08003

SQL1025N

The database manager was not stopped because databases are still active.

Cause: The stop database manager command cannot be processed if there are any applications connected to databases under control of the database manager, or if any databases have been activated.

No action is taken.

Action: Usually no action is required. To stop the database manager, all active applications must disconnect from all the databases they are using. Alternatively, the user can use the FORCE command to force applications to disconnect, and the DEACTIVATE command to deactivate the database.

SQL1026N

The database manager is already active.

Cause: A start database manager command is already processed.

The command cannot be processed.

Action: Because the command is already processed, the application may continue processing.

SQL1027N

The node directory cannot be found.

Cause: The list node directory command cannot be processed because the node directory could not be found.

The command cannot be processed.

Action: Issue a CATALOG NODE command with the appropriate parameters and resubmit the current command.

SQL1029N

The partner_lu alias "<name>" specified in the CATALOG NODE command is not valid.

Cause: The *partner_lu* alias specified in the CATALOG NODE command was not specified or contains characters that are not valid. The *partner_lu* alias is the partner SNA logical unit alias and must be 1 to 8 characters and must not contain blank characters.

The command cannot be processed.

Action: Examine the *partner_lu* for a typing error. Verify that the alias is a permitted logical unit name.

Verify the characters used in the alias. Resubmit the command with a correct *partner_lu*.

SQL1030C

The database directory is full.

Cause: Either the system database directory or the local database directory cannot hold any more entries.

The command cannot be processed.

Action: Uncatalog any unnecessary entries in the directory. Create new databases on another file system if the local database directory is full.

SQL1031N

The database directory cannot be found on the indicated file system.

Cause: The system database directory or local database directory could not be found. A database has not been created or it was not cataloged correctly.

The command cannot be processed.

Action: Verify that the database is created with the correct path specification. The Catalog Database command has a path parameter which specifies the directory where the database resides.

sqlcode: -1031

sqlstate: 58031

SQL1032N

No start database manager command was issued.

Cause: The start database manager command has not been processed. It must be processed before a stop database manager, any SQL statement, or utility can be issued.

The command cannot be processed.

Action: Issue a start database manager command and resubmit the current command.

If using multiple logical nodes, ensure the DB2NODE environment variable is set correctly. The DB2NODE environment variable indicates the node the application will attempt to connect to. DB2NODE must be set to the node number of one of the nodes defined on the same host as the application.

sqlcode: -1032

sqlstate: 57019

SQL1033N • SQL1036C

SQL1033N

The database directory cannot be accessed because it is being used.

Cause: The database directory cannot be accessed if it is currently being updated. Also, the directory cannot be accessed for update if it is already being accessed for any reason. This situation could exist with either the system database directory or the local database directory.

The command cannot be processed.

Action: Wait until the access has completed, then resubmit the command.

sqlcode: -1033

sqlstate: 57019

SQL1034C

The database is damaged. The application has been disconnected from the database. All applications processing the database have been stopped.

Cause: Damage has occurred to the database. It cannot be used until it is recovered. All applications connected to the database have been disconnected and all processes running applications on the database have been stopped.

The command cannot be processed.

Action: Issue a RESTART DATABASE command to recover the database. If the RESTART command consistently fails, you may want to restore the database from a backup. In a partitioned database server environment, check the syslog to find out if the RESTART command fails because of node or communication failures before restoring the database from a backup. If so, ensure the database manager is up and running and communication is available among all the nodes, then resubmit the restart command.

If you encountered this error during roll-forward processing, you must restore the database from a backup and perform roll-forward again.

Note that in a partitioned database environment, the RESTART database command is run on a per-node basis. To ensure that the database is restarted on all nodes, use the command:

```
db2_all db2 restart database <database_name>
```

This command may have to be run several times to ensure that all in-doubt transactions have been resolved.

If you are installing the sample database, drop it and install the sample database again.

sqlcode: -1034

sqlstate: 58031

SQL1035N

The database is currently in use.

Cause: One of the following conditions exists:

- Exclusive use was requested, but the database is already in use as a shared database by another user (in the same process).
- Exclusive use was requested, but the database is already in use as an exclusive database. (Two different processes are trying to access the same database.)
- The maximum number of connections to the database has been reached.
- The database is being used by another user on another system.
- Activate/Deactivate database is in progress.

The command cannot be processed.

Action: Possible solutions include:

- Resubmit the command later when the database is not in use.
- Change the authorization to match the current user or wait until the database is not in use.
- Wait until the database is not in exclusive use.
- Wait until other users on another system have disconnected from the database.

sqlcode: -1035

sqlstate: 57019

SQL1036C

An I/O error occurred while accessing the database.

Cause: At least one database file has an I/O error:

- The system cannot open, read from, or write to a database file.
- The system cannot create the database because an error occurred while the system was creating a database file or a directory for the database.
- The system cannot drop the database because an error occurred while the system was deleting a database file or a directory for the database.
- The system cannot create the database because an interrupt was received while the system was cre-

ating or deleting a database file or a directory for the database.

- The system cannot locate the database subdirectory or database configuration file during connect.

The database cannot be used.

Action: If the error occurred during the processing of a database, resubmit the command. If the error continues, restore the database from a backup version.

If the error occurred during CREATE DATABASE or DROP DATABASE, a subsequent CREATE DATABASE or DROP DATABASE command attempts to erase files and directories left from the unsuccessful CREATE DATABASE or DROP DATABASE command.

If installing the sample database, drop it and install the sample database again.

If the error occurred while trying to connect to a database, get a trace and call IBM support for the possibility of recovering the database.

sqlcode: -1036

sqlstate: 58030

SQL1037W

The Node directory is empty.

Cause: An attempt was made to read the contents of the node directory, but no entries existed.

Action: No action is required.

sqlcode: +1037

sqlstate: 01606

SQL1038C

An I/O error occurred while accessing the node directory.

Cause: The node directory could not be accessed because of an I/O error.

The command cannot be processed.

Action: Resubmit the command. If the error continues, remove the node directory (sqlnodir under the sqllib directory) and recatalog the node names on the network.

sqlcode: -1038

sqlstate: 58031

SQL1039C

An I/O error occurred while accessing the database directory.

Cause: Either the system database directory or the local database directory cannot be accessed. This error may occur not only when the system is cataloging or uncataloging a database but also when the system is accessing a database that is cataloged in the directory.

The command cannot be processed.

Action: Possible solutions include:

- If the error occurred on a diskette system, verify that the correct diskette is in the drive and ready to use. Verify that it is not write-protected.
- If the database directory is damaged, restore the databases that were cataloged there from backup versions and catalog them.

If installing the sample database, drop it and install the sample database again.

sqlcode: -1039

sqlstate: 58031

SQL1040N

The maximum number of applications is already connected to the database.

Cause: The number of applications connected to the database is equal to the maximum value defined in the configuration file for the database.

The command cannot be processed.

Action: Wait for other applications to disconnect from the database. If more applications are required to run concurrently, increase the value for *maxapps*. After all applications disconnect from the database and the database is restarted, the new value takes effect.

sqlcode: -1040

sqlstate: 57030

SQL1041N

The maximum number of concurrent databases have already been started.

Cause: The application attempted to start an inactive database but the number of active databases already equals the maximum value defined in the system configuration file.

The command cannot be processed.

SQL1042C • SQL1044N

Action: Wait for one of the databases to become inactive. If more databases are required to be active at the same time, increase the value for *numdb*. The new value takes effect after the next successful database manager start.

sqlcode: -1041

sqlstate: 57032

SQL1042C

An unexpected system error occurred.

Cause: A system error occurred. One possible reason for this error is that the database manager is not installed correctly or the environment is not set up correctly.

On OS/2, while trying to start the database manager, a very common reason for this error is a corrupted NET.ACC file.

The command cannot be processed.

Action: If the error occurred on OS/2 while trying to start the database manager, and the NET.ACC file is suspected, replace the NET.ACC files on the system with those on diskette 1 of the DB2 for OS/2 installation diskettes.

If the error occurred while trying to connect to a database, get a trace (instructions below) and call IBM support.

If the problem falls outside of the above suggestions, ensure that the system time and date is correctly set, and make sure your system has enough memory and swapping/paging space available.

Resubmit the current command.

If the error continues, stop the database manager and restart it.

If the error still continues, reinstall the database manager.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE or message number
- SQLCA contents if possible
- Trace file if possible.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source). If the problem is with a data source follow the problem determination procedures for that data source.

sqlcode: -1042

sqlstate: 58004

SQL1043C

The database manager could not initialize the system catalogs. Error “<error>” was returned.

Cause: The CREATE DATABASE command failed while initializing the system catalogs.

Action: Record the message number (SQLCODE) and error in this message.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact your technical service representative with the following information:

- Environment: Application
- Required information:
 - Problem description
 - SQLCODE or message number and error identifier
 - SQLCA contents if possible
 - Trace file if possible.

SQL1044N

Processing was cancelled due to an interrupt.

Cause: The user may have pressed the interrupt key sequence.

Processing is stopped.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Continue processing to handle the interrupt.

If installing the sample database, drop it and install the sample database again.

If starting the database manager, issue a db2stop before issuing any db2 commands.

sqlcode: -1044

sqlstate: 57014

SQL1045N

The database was not found because it was not cataloged correctly.

Cause: An indirect entry in the database directory points to another non-HOME entry.

The command cannot be processed.

Action: Verify the entries in all the associated database directories with the directory scan commands.

sqlcode: -1045

sqlstate: 58031

SQL1046N

The authorization ID is not valid.

Cause: The authorization specified at logon is not valid for either the data source or the database manager. One of the following occurred:

- The authorization contains more than 8 characters.
- The authorization contains characters not valid for an authorization. Valid characters are A through Z, a through z, 0 through 9, #, @ and \$.
- The authorization is PUBLIC or public.
- The authorization begins with SYS, sys, IBM, ibm, SQL or sql.
- The authorization violates some data source-specific naming convention.

The command cannot be processed.

Action: Log on with a valid authorization ID.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and use an authorization ID valid for that data source.

sqlcode: -1046

sqlstate: 28000

SQL1047N

The application is already connected to another database.

Cause: An application cannot create a database while connected to another database.

Binding a bind file to one database while already connected to another database is not permitted.

The command cannot be processed.

Action: Disconnect from the active database and resubmit the command.

SQL1048N

The use parameter "<parameter>" in the START USING DATABASE or CONNECT TO command is not valid. It must be an S for shared access, an X for exclusive use or an N for exclusive use at single node. For DDCS connections, only S is supported. N is only supported in MPP configuration.

Cause: The *use* parameter in the START USING DATABASE or CONNECT TO command must be either an S for shared or an X for exclusive use. If connecting to a database using Distributed Database Connection Services (DDCS), only shared access is allowed. Mnemonic equates for these values are provided in the SQLENV.H file.

The command cannot be processed.

Action: Resubmit the command with a valid *use* parameter (preferably from the mnemonic equates).

SQL1049C

The application state is in error. The database connection has been lost.

Cause: The connection to the database has been lost.

The command cannot be processed.

Action: Issue a CONNECT RESET statement.

SQL1050N

The database cannot be uncataloged because it is a home database.

Cause: The database specified in the UNCATALOG DATABASE command is a home database. Home databases cannot be uncataloged because their directory entries are deleted when the database is dropped.

The command cannot be processed.

Action: Continue processing if the database name was specified correctly.

SQL1051N • SQL1058N

SQL1051N

The path "<path>" for the database directory does not exist.

Cause: The path specified in the database directory parameter of the command or in the database directory entry is not valid. There is no file system with that name.

The command cannot be processed.

Action: Resubmit the command with the correct path for the database directory.

sqlcode: -1051

sqlstate: 57019

SQL1052N

The database path "<path>" does not exist.

Cause: The path specified in the *path* parameter of the command is not valid. There is no path with that name.

The command cannot be processed.

Action: Resubmit the command with the correct database path.

SQL1053N

An interrupt is already being processed.

Cause: The system is currently processing an interrupt so another interrupt is not honored.

The interrupt request is ignored.

Action: Wait until the current interrupt processing finishes and resubmit the command.

SQL1054N

A COMMIT is in progress and cannot be interrupted.

Cause: The system is currently processing a COMMIT. The user entered an interrupt key sequence.

The interrupt request is ignored.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Wait until COMMIT is finished and resubmit the request.

SQL1055N

A ROLLBACK is in progress and cannot be interrupted.

Cause: The system is currently processing a ROLLBACK. The user entered an interrupt key sequence.

The interrupt request is ignored.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Wait until ROLLBACK is finished and resubmit the request.

SQL1056N

There are already eight database directory scans open.

Cause: Eight database directory scans in this process are already open. No more than eight open scans are allowed.

The command cannot be processed.

Action: Issue one or more CLOSE DIRECTORY SCAN commands and resubmit the command.

sqlcode: -1056

sqlstate: 54029

SQL1057W

The system database directory is empty.

Cause: An attempt was made to read the contents of the system database directory, but no entries existed.

Action: No action is required.

sqlcode: +1057

sqlstate: 01606

SQL1058N

The handle parameter in the Directory Scan command is not valid.

Cause: The *handle* parameter specified in the Directory Scan command is not valid. The *handle* must be the one returned from the OPEN DIRECTORY SCAN or the OPEN NODE DIRECTORY SCAN command.

The command cannot be processed.

Action: Resubmit the command with a valid *handle* parameter.

SQL1059N

A Get Next command cannot be processed because no Open Scan command was issued.

Cause: A directory scan command was issued before the scan was opened.

The command cannot be processed.

Action: Issue an OPEN DIRECTORY SCAN or OPEN NODE DIRECTORY SCAN command and resubmit the current command.

SQL1060N

User “<authorization-ID>” does not have the CONNECT privilege.

Cause: The specified authorization does not have the CONNECT privilege to access the database. The CONNECT privilege must be granted before the user can connect to a database.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

The command cannot be processed.

Action: Contact the system administrator or database administrator for the database and request a GRANT CONNECT for the authorization ID. Resubmit the command.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and ensure that correct authorizations exist on that data source.

sqlcode: -1060

sqlstate: 08004

SQL1061W

RESTART completed successfully, but indoubt transactions exist against the database.

Cause: A RESTART was successfully completed, except indoubt transactions were discovered. The database is usable, but if the indoubt transactions are not resolved before the last connection to the database is dropped, then the database will again require a RESTART before it can be used.

Action: Either resolve the indoubt transactions, or be prepared to RESTART the database whenever you wish to use it. If the transaction manager (TM) that was using the database (in an XA/DTP environment) is available, then the administrator should instruct the TM to resolve the indoubt transactions. Alternatively, with great caution, the administrator can use the CLP to heuristically complete the transactions.

Note that in a partitioned database server environment, the RESTART database command is run on a per-node basis. In order to ensure that the database is restarted on all nodes, use the following command:

```
db2_all db2 restart database <database_name>
```

Issuing the above command will resolve any in-doubt transactions if all nodes are operational.

This command may have to be run several times to ensure that all in-doubt transactions have been resolved.

SQL1062N

The database path “<path>” was not found.

Cause: The database *path* parameter specified in the command does not exist. If the path is not specified, the default path defined in the system configuration file is used, and it does not exist.

The command cannot be processed.

Action: Verify the path or the default path and make sure they exist in the system. Resubmit the command.

SQL1063N

The start database manager processing was successful.

Cause: The command to start the database manager completed successfully.

SQL1064N

The stop database manager processing was successful.

Cause: The command to stop the database manager completed successfully.

SQL1065W • SQL1070N

SQL1065W

The database was created, but an error occurred on one or more bind files in list “<list-name>”. The following files were not bound: “<list>”.

Cause: One or more utilities were not bound to the database. The list file “<list-name>” contains a list of the bind files. The numbers in “<list>” indicate the relative positions of the unbound files in the list file.

The listed utility bind files are not bound to the newly created database.

Action: The user may bind the indicated utilities to the database. The format option must not be used on the binder call.

SQL1066N

DB2START processing was successful. IPX/SPX protocol support was not successfully started.

Cause: The IPX/SPX protocol support was not successfully started. Remote clients cannot use IPX/SPX to connect to the server. Possible causes are:

- The workstation is not logged in to the NetWare file server.
- The workstation does not have authority to create an object in the NetWare file server bindery.
- Another database manager on the network is using the same object name specified in the database manager configuration file.

Action: Ensure that the workstation is logged in to the NetWare file server, and has sufficient authority to create an object in the bindery at the file server. The user must be logged in as SUPERVISOR or equivalent. Also ensure that the object name specified in the database manager configuration file is unique for all database managers in the network. Make any corrections, run DB2STOP, and then run DB2START again.

If the problem continues, at the operating system command prompt type DB2TRC ON -L 0X100000. Run DB2START again, then at the command prompt, type DB2TRC DUMP filename to save the trace information. To turn trace off, type DB2TRC OFF. Contact your service coordinator with the trace information.

SQL1067N

DB2STOP processing was not successful. IPX/SPX protocol support was not successfully stopped.

Cause: The IPX/SPX protocol support was not successfully stopped. Possible causes are:

- The workstation is not logged in to the NetWare file server.
- The workstation does not have authority to delete an object in the NetWare file server bindery.

Action: Ensure that the workstation is logged in to the NetWare file server, and has sufficient authority to delete an object in the bindery at the file server. The user must be logged in as SUPERVISOR or equivalent. Make any corrections, and run DB2STOP again.

If the problem continues, at the operating system command prompt type DB2TRC ON -L 0X100000. Run DB2STOP again, then at the command prompt, type DB2TRC DUMP filename to save the trace information. To turn trace off, type DB2TRC OFF. Contact your service coordinator with the trace information.

SQL1069N

The database “<name>” is not a home database.

Cause: The database is not a local database. A local database is cataloged as indirect in the system database directory and this entry references a home entry in the local database directory on the same node. Remote databases cannot be dropped.

The command cannot be processed.

Action: If the specified database name was incorrect, resubmit the command with the correct database name. If the specified database name was correct and the intent is to remove the database name from the database directory, use the UNCATALOG DATABASE command.

SQL1070N

The address of the database name parameter is not valid.

Cause: The application program used an address that is not valid for the database name parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Correct the application program so a correct address is used and the input string is null terminated.

SQL1071N

The address of the database alias name parameter is not valid.

Cause: The application program used an address that is not valid for this parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1072C

The database manager resources are in an inconsistent state. the database manager may have been incorrectly terminated, or another application may be using system resources in a way which conflicts with the way the database manager uses system resources. System resource cleanup may be required.

Cause: The request failed because the database manager resources are in an inconsistent state. This can occur if:

- DB2 was incorrectly terminated (on UNIX-based systems, for example, this may occur if the processes were terminated with the "kill" command, rather than the stop database manager command).
- Another application or user may have removed the database manager resources (on UNIX-based systems, for example, a user with sufficient privilege may have accidentally removed an Interprocess Communication (IPC) resource owned by the database manager, using the "ipcrm" command).
- Another application's use of system resources conflicts with the database manager's use of system resources (on UNIX-based systems, for example, another application may be using the same keys that the database manager uses for creating IPC resources).
- Another instance of the database manager may be using the same resources. This could occur on UNIX-based systems if the two instances are on different file systems and the sqllib directories happen to have the same i-node (i-nodes are used to get the IPC keys).

Action: Resource cleanup may be required:

- Remove all the database manager processes running under the instance id (on UNIX-based systems, you can use "ps -eaf -u <instance id> | grep db2" to list all the database manager processes running under the instance id, and the "kill -9 <process id>" command to remove them).
- Ensure that no other application is running under the instance id, and then remove all resources owned by the instance id (on UNIX-based systems, you can use the "ipcs | grep <instance id>" command to list all IPC resources owned by the instance id, and the "ipcrm -[q|m|s] <id>" command to remove them).
- If there is another instance of the database manager running, and it is on a different filesystem, and an i-node conflict is suspected, then change the i-node by the following steps:
 - create another directory at the same level as sqllib
 - move everything from under sqllib to the new directory
 - delete sqllib
 - rename the new directory to sqllib
- Restart the database manager instance.

SQL1073N

The node directory release number is not correct.

Cause: The node directory release number does not match the product expected release number. The node directory could be from a previous release.

Action: Re-catalog all the node entries and try the command again.

SQL1074N

The address of the password parameter is not valid.

Cause: The application program used an address that is not valid for this parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1075N •SQL1082N

SQL1075N

The address of the database comment parameter is not valid.

Cause: The application program used an address that is not valid for this parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1076N

The address of the count parameter is not valid.

Cause: The application program used an address that is not valid for the *count* parameter.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program.

SQL1077N

The address of the handle parameter is not valid.

Cause: The application program used an address that is not valid for the *handle* parameter.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program.

SQL1078N

The address of the buffer parameter is not valid.

Cause: The application program used an address that is not valid for the *buffer* parameter.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program.

SQL1079N

The address of the nodename parameter is not valid.

Cause: The application program used a *nname* parameter address that is invalid. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1080N

The address of the local_lu name parameter is not valid.

Cause: The application program used an address that is not valid for the *local_lu* name parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1081N

The address of the partner_lu parameter is not valid.

Cause: The application program has used an address that is not valid for the *partner_lu* parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1082N

The address of the mode parameter is not valid.

Cause: The application program has used an address that is not valid for the *mode* parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the

application program and the input string is null terminated.

SQL1083N

The database description block cannot be processed, reason code="`<reason-code>`".

Cause: The application issued a CREATE DATABASE command, but the database descriptor block (DBDB) could not be processed for one of the following reason codes:

- The address of the DBDB is not valid (reason code 01).
- The value of the SQLDBDID field of the DBDB is not valid (reason code 02). It should be set to the value SQLDBDB1.
- The value of the SQLDBCSS field of the DBDB is not valid (reason code 04).

The command cannot be processed.

Action: Correct the error and resubmit the command.

SQL1084C

Shared memory segments cannot be allocated.

Cause: The database manager could not allocate segments while processing a Database Environment command or an SQL CONNECT statement.

The dbheap parameter may be too small.

Action: Record the message number (SQLCODE). The cause of this error may be insufficient memory resources either for the database manager or the environment where operation of the database manager is being attempted. Validate that sufficient memory resources are available to satisfy the database manager requirements. You may also close any background processes that do not need to be active.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE or message number

- SQLCA contents if possible
- Trace file if possible.

sqlcode: -1084

sqlstate: 57019

SQL1085N

The application heap cannot be allocated.

Cause: The application could not connect to the database because the database manager could not allocate the number of application heap 4K pages specified in the database configuration file. The system is out of 4K pages. The command cannot be processed.

Action: Possible solutions are:

- Lower the size of the application heap (applheapsz) in the database configuration file.
- Reduce the maximum number of applications in the database configuration file.
- Remove background processes.
- Install more memory.

sqlcode: -1085

sqlstate: 57019

SQL1086C

An operating system error "`<error>`" occurred.

Cause: The command received an error from the operating system that prevents further processing.

The command cannot be processed.

Action: Refer to the operating system user publications to determine the nature of the error.

SQL1087W

The database was created, but an error occurred while opening the list file "`<name>`". The utilities are not bound to the database.

Cause: CREATE DATABASE could not open the list file containing the list of utility bind files. The list file should be located in the *bnd* subdirectory of the *sqlib* subdirectory.

The utility bind files are not bound to the newly created database.

Action: Bind the utilities to the database. Do not use the format option on the binder call.

SQL1088W • SQL1092N

SQL1088W

The database was created, but an error occurred while binding the utilities. The utilities are not bound to the database.

Cause: CREATE DATABASE or MIGRATE DATABASE could not bind the utility bind files to the database.

The utility bind files are not bound to the newly created or migrated database.

Action: Bind the utilities to the database. Do not use the format option on the binder call.

SQL1089W

The database was created, but the binding of the utilities was interrupted. The utilities are not bound to the database.

Cause: CREATE DATABASE was interrupted while binding the utilities to the database. The interrupt key sequence may have been pressed.

The utility bind files are not bound to the newly created database.

Action: Bind the utilities to the database. Do not use the format option on the binder call.

SQL1090C

The release number of the precompiled application program or utility is not valid.

Cause: The release number of the precompiled application program or utility is not compatible with the release number of the installed version of the database manager.

The command cannot be processed.

Action: Reinstall the database manager if the error occurred during the processing of a utility.

If the error occurred during the processing of an application program:

- Repeat the precompile process, if possible, with the current database manager.
- Use only application programs precompiled with a compatible release level of the database manager.

SQL1091C

The release number of the database is not valid.

Cause: The release number of the database is not compatible with the release number of the installed version of the database manager.

The command cannot be processed. If the error occurred during a Migrate or Restore, you are attempting to migrate or restore an incompatible release of database.

Action: Use only databases created with a compatible release of database manager. If the error occurred during a Migrate or Restore, you must first migrate the database to a release which can be migrated by the current release of the database manager.

SQL1092N

"<authorization-ID>" does not have the authority to perform the requested command.

Cause: The user attempted to execute a command or operation without having the proper authority for that command or operation.

The command cannot be processed.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Log on as a user with the correct authority and retry the failed command or operation. Correct authorities may include SYSADM, SYSCTRL, SYSMANT, and DBADM. DBADM is granted on databases and all other authorities are determined by membership in the groups defined in the database manager configuration (eg. if *sysctrl_group* in the database manager configuration file is defined as 'beatles', then you must belong to the group 'beatles' to have SYSCTRL authority). Refer to the *Command Reference* or the *SQL Reference* for the listing of required authorities for the attempted command or operation.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and ensure that correct authorizations exist on that data source.

Contact the System Administrator for authority request assistance. Do not attempt to execute the command without appropriate authorization.

SQL1093N

The user is not logged on.

Cause: A user must be logged on before any command requiring authorization can be processed. Possible causes for this error include:

- Unable to get a user ID.
- An unexpected operating system error occurred when attempting to log on.
- The application is running in a background process.
- The user cancelled an attempted logon.

The command cannot be processed.

Action: Log on with a valid user ID and resubmit the command. If several concurrent processes are attempting to log on, wait a few seconds and retry the logon procedure.

sqlcode: -1093

sqlstate: 51017

SQL1094N

The node directory cannot be accessed because it is being updated.

Cause: The node directory cannot be scanned or used while it is being updated. Also, the directory cannot be accessed for update if it is already being accessed for any reason.

The command cannot be processed.

Action: Resubmit the command after the update is finished.

sqlcode: -1094

sqlstate: 57009

SQL1095N

There are already eight node directory scans open.

Cause: Eight node directory scans are already open in this process and no more than eight are allowed.

The command cannot be processed.

Action: Issue one or more CLOSE NODE DIRECTORY SCAN commands. Resubmit the command.

sqlcode: -1095

sqlstate: 54029

SQL1096N

The command is not valid for this node type.

Cause: A command was issued on a node that does not support the command, or the system environment was found to be set up incorrectly for this node type. For example, a database was cataloged as LOCAL on a client node.

The command cannot be processed.

Action: Verify that the command and parameters are correct for the node type. Also verify that the environment where the command is to be processed is correct. Resubmit the command.

SQL1097N

The node name was not found in the node directory.

Cause: Either the node name listed in the database directory for a remote database or the node name specified on an attach command was not cataloged in the node directory.

The command cannot be processed.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Verify that the node name listed in the database directory or as the object of the attach command is cataloged in the node directory. If the node is not listed in the node directory, submit a CATALOG NODE command.

DataJoiner users: in addition to the actions listed above, also verify that the node names listed in all the SYSCAT.SERVERS entries are correct. If the node is not listed in the node directory and the server is a member of the DB2 family, submit a CATALOG NODE command for that node.

sqlcode: -1097

sqlstate: 42720

SQL1098N • SQL1099N

SQL1098N

The application is already connected to this database.

Cause: A connection to a database was requested but the application is already connected to the specified database.

The command cannot be processed.

Action: No action is necessary.

sqlcode: -1098

sqlstate: 53056

SQL1099N

The diskette is write-protected.

Cause: A write operation was attempted to a database residing on a write-protected diskette.

The statement cannot be processed.

Action: Verify you are using the correct diskette. Remove protection from the diskette, if necessary.

SQL1100 - SQL1199

SQL1100W

The node name "<name>" specified in the Catalog Database command has not been cataloged in the Node Directory.

Cause: The Catalog Database command specified node name "<name>" but that is not cataloged in the node directory. The node name must be cataloged before the remote database can be used.

The CATALOG DATABASE command completed successfully.

Action: Issue a CATALOG NODE command.

SQL1101N

Remote database "<name>" on node "<node-name>" could not be accessed with the specified authorization id and password.

Cause: A connection to the remote database "<name>" on node "<node-name>" was requested, and the remote node does not accept the authorization ID and password combination specified for this node (either in the remote authorization tables or at runtime).

The request cannot be processed.

Action: Resubmit the request with a valid authorization ID and password combination for the remote system.

SQL1102N

A database name was not specified.

Cause: No database name was provided to proceed with migration.

The statement cannot be processed.

Action: Specify a database name for migration.

SQL1103W

The Migrate Database command processing was successful.

Cause: The Migrate command completed successfully.

Note that this message will also be returned if the database was already at the current level and did not need to be migrated.

Processing continues.

Action: No action is required.

SQL1104N

The address of the program name parameter is not valid.

Cause: The application program has used an address for the program name that is not valid.

The command cannot be processed.

Action: Use a correct address in the application program.

SQL1105N

The SQL CONNECT RESET statement is not allowed in a Remote Application Interface Procedure.

Cause: The remote application procedure contains an SQL CONNECT RESET statement.

The remote procedure is not allowed to continue.

Action: Remove the SQL CONNECT RESET statement and retry the remote procedure.

sqlcode: -1105

sqlstate: 42987

SQL1106N

The specified DLL "<name>" module was loaded, but the function "<function>" could not be executed.

Cause: The function within the DLL (dynamic link library) cannot be found.

The command cannot be processed.

Action: Ensure that the DLL module is built correctly. Reference the module in the definition file.

sqlcode: -1106

sqlstate: 42724

SQL1107N

An interrupt was received while loading the specified DLL "<name>".

Cause: When loading the DLL (dynamic link library) module, the command was interrupted, perhaps by Ctrl+Break.

Processing is stopped.

Action: Resubmit the command.

sqlcode: -1107

sqlstate: 42724

SQL1108N

An unexpected I/O error or operating system error was received while loading the specified DLL "<name>".

Cause: An unexpected error occurred when trying to load the DLL (dynamic link library) module specified in the program name field.

The command cannot be processed.

Action: Resubmit the current command. If the error continues, reinstall the database manager.

If reinstallation does not correct the error, record the message number (SQLCODE) and all information in the SQLCA if possible.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact your technical service representative.

sqlcode: -1108

sqlstate: 42724

SQL1109N

The specified DLL "<name>" could not be loaded.

Cause: The DLL (dynamic link library) module specified could not be found.

The command cannot be processed.

Action: Ensure that the specified file is in a subdirectory identified in the system LIBPATH.

sqlcode: -1109

sqlstate: 42724

SQL1110N

A supplied data area was invalid and could not be used.

Cause: The data area is not initialized correctly.

The command cannot be processed.

Action: Ensure that the user-supplied input SQLDA or output SQLDA fields are initialized correctly.

SQL1111N • SQL1116N

SQL1111N

The program name “<name>” specified was not valid.

Cause: The DLL (dynamic link library) module or program name syntax is not correct.

The command cannot be processed.

Action: Ensure that the DLL or program name is specified correctly.

sqlcode: -1111

sqlstate: 42724

SQL1112N

There are not enough system resources to load the specified DLL “<name>”.

Cause: There is not enough random access memory (RAM) to load the specified DLL (dynamic link library) module.

The command cannot be processed.

Action: Stop the application. Possible solutions are:

- Change the MEMMAN NO SWAP, NO MOVE option in the CONFIG.SYS file to SWAP, MOVE.
- Remove background processes.
- Decrease the values of the configuration parameters that define the allocation of memory.
- Install more random access memory (RAM).

sqlcode: -1112

sqlstate: 42724

SQL1113N

The data type for sqlvar “<n>” in the output SQLDA was changed from “<type 1>” to “<type 2>”.

Cause: The remote stored procedure changed the data type of the *n*th sqlvar in the output SQLDA; *n* is the sequence number of the first mismatched sqlvar.

The stored procedure does not return any data.

Action: Correct the remote stored procedure so the data type information in the output SQLDA is not changed.

sqlcode: -1113

sqlstate: 39502

SQL1114N

The data length for the sqlvar “<n>” in the output SQLDA was changed from “<length 1>” to “<length 2>”.

Cause: The remote stored procedure changed the data length of the *n*th sqlvar in the output SQLDA; *n* is the sequence number of the first mismatched sqlvar.

The stored procedure does not return any data.

Action: Correct the remote stored procedure so the data length information in the output SQLDA is not changed.

sqlcode: -1114

sqlstate: 39502

SQL1115N

The number of sqlvars in the output SQLDA was changed from “<count 1>” to “<count 2>”.

Cause: The remote procedure changed the sqld field in the output SQLDA; sqld is the number of used sqlvars in the SQLDA.

The stored procedure does not return any data.

Action: Correct the remote stored procedure so the sqld field in the output SQLDA is not changed.

sqlcode: -1115

sqlstate: 39502

SQL1116N

A connection to or activation for database “<name>” cannot be made because of BACKUP PENDING.

Cause: The specified database requires a backup to be taken to provide a starting point for roll-forward recovery.

No connection was made.

Action: Back up the database by calling the BACKUP routine or, if roll-recovery is not required, set the log retain and user exit database configuration parameters off.

sqlcode: -1116

sqlstate: 57019

SQL1117N

A connection to or activation for database "`<name>`" cannot be made because of ROLL-FORWARD PENDING.

Cause: The specified database is enabled for roll-forward recovery and it has been restored but not rolled forward.

No connection was made.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Roll forward the database or indicate that you do not wish to roll forward by using the ROLLFORWARD command. Note that if you do not roll forward the database, the records written since the last backup of the database will not be applied to the database.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and take recovery action appropriate to that data source to bring the data source to a point of consistency.

sqlcode: -1117

sqlstate: 57019

SQL1118N

A connection to or activation of database "`<name>`" cannot be made because a previous backup is incomplete.

Cause: The database is in an inconsistent state because a system error occurred during a backup function.

No connection was made.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Issue the BACKUP command and then try the command again.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and issue the BACKUP command against that data source prior to trying the command again.

sqlcode: -1118

sqlstate: 57019

SQL1119N

A connection to or activation of database "`<name>`" cannot be made because a previous restore is incomplete.

Cause: The database is in an inconsistent state because a system error occurred during a restore function.

No connection was made.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Issue the RESTORE command and then try the command again.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and issue the RESTORE command against that data source prior to trying the command again.

sqlcode: -1119

sqlstate: 57019

SQL1120N

A connection to or activation of database "`<name>`" cannot be made because a previous backup or restore is incomplete.

Cause: The database is in an inconsistent state because a system error occurred during a backup or restore function. It cannot be determined if backup or restore was being processed.

No connection was made.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Issue the BACKUP or RESTORE command, and then try the command again.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and issue the BACKUP or RESTORE command against that data source prior to trying the command again.

sqlcode: -1120

sqlstate: 57019

SQL1121N •SQL1127N

SQL1121N

The address of the node structure parameter is not valid.

Cause: The application used an address for the node structure parameter that is not valid. Either the address points to an unallocated buffer or the buffer is not large enough to contain the required input.

The command cannot be processed.

Action: Verify that the program allocates the required buffer area and resubmit the command.

SQL1122N

The address of the protocol structure parameter is not valid.

Cause: The application used an address for the protocol structure parameter that is not valid. Either the address points to an unallocated buffer or the address points to the incorrect protocol buffer.

The command cannot be processed.

Action: Verify that the program allocates the required buffer area based on the protocol field in the node structure and resubmit the command.

SQL1123N

The protocol "<type>" is not valid.

Cause: The protocol type specified in the node structure for the Catalog command does not represent a recognized value. The valid protocol types are defined in the *sqlenv* header files.

The command cannot be processed.

Action: Verify the protocol type in the node structure and resubmit the command.

SQL1124N

The remote workstation name "<name>" is not valid.

Cause: The remote workstation name specified in the NETBIOS protocol structure for the Catalog command is not specified or contains characters that are not valid. The workstation name must be 1 to 8 characters. Valid characters are A through Z, a through z, 0 through 9, #, @, and \$. The first character must be alphabetic or a

special character: #, @, or \$. Lowercase characters are changed to uppercase by the system.

The command cannot be processed.

Action: Verify the characters specified in the remote workstation name. Resubmit the command with a valid workstation name.

SQL1125N

The adapter number "<number>" is not valid.

Cause: The adapter number specified in the NETBIOS protocol structure for the Catalog command is not valid.

The command cannot be processed.

Action: Verify that the adapter number is valid and resubmit the command.

SQL1126N

The network ID "<ID>" is not valid.

Cause: The network ID specified in the APPN protocol structure for the Catalog command is not valid. The network ID identifies the SNA network where the remote logical unit (LU) resides. The network ID must be 1 to 8 characters. Valid characters are A through Z, a through z, 0 through 9, #, @, and \$. The first character must be alphabetic or a special character: #, @, or \$. Lowercase characters are changed to uppercase by the system.

The command cannot be processed.

Action: Verify the characters specified in the network ID. Resubmit the command with a valid network ID.

SQL1127N

The remote LU name "<name>" is not valid.

Cause: The remote logical unit (LU) name specified in the APPN protocol structure for the Catalog command is not valid. The remote LU name is the remote SNA logical unit name and must be 1 to 8 characters. Valid characters are A through Z, a through z, 0 through 9, #, @, and \$. The first character must be alphabetic or a special character: #, @, or \$. Lowercase characters are changed to uppercase by the system.

The command cannot be processed.

Action: Verify the characters specified in the remote LU name. Resubmit the command with a remote LU name.

SQL1129N

New DARI (Stored Procedure) process could not be started because there are insufficient resources for a new process to be created.

Cause: New DARI (Stored Procedure) process could not be started because there are insufficient resources for a new process to be created.

Action: Do one of the following:

- Reduce the number of users using DB2
- Increase the system process limit.

sqlcode: -1129

sqlstate: 42724

SQL1130N

New DARI (Stored Procedure) process could not be started because the maximum number of DARI processes allowed to be present at the server at the same time has been reached.

Cause: New DARI (Stored Procedure) process could not be started because the maximum number of DARI processes allowed to be present at the server at the same time has been reached.

Action: Increase the maximum number of DARI processes, *maxdari*, configuration parameter. See the database configuration parameter *maxdari* for more details.

sqlcode: -1130

sqlstate: 42724

SQL1131N

DARI (Stored Procedure) process has been terminated abnormally.

Cause: The cause of this error may be:

- There was a coding error (e.g. segmentation violation) within the DARI routine.
- The DARI process has been terminated by another process through the use of a signal.

Action: Reinitiate the DARI request after doing the following :

- Ensure that the DARI procedure is free from programming errors.
- Make sure that no user is sending a termination signal to the DARI process.

sqlcode: -1131

sqlstate: 38503

SQL1132N

The command is not allowed to execute within a DARI (Stored Procedure).

Cause: An illegal command has been made within the scope of DARI (Stored Procedure).

The DARI procedure is not allowed to continue.

Action: Remove the illegal command in the DARI procedure and retry.

sqlcode: -1132

sqlstate: 42987

SQL1133N

A pointer address inside an sqlvar (index = "<n>") of the output SQLDA was modified within the DARI (Stored Procedure) function.

Cause: The "sqlind" or the "sqldata" pointer within the sqlvar of the output SQLDA has been altered within the user prepared DARI function.

The stored procedure does not return any data.

Action: Correct the usage of the indicated sqlvar within the output SQLDA so that pointer addresses are not changed within the DARI (Stored Procedure) function routine.

sqlcode: -1133

sqlstate: 39502

SQL1134N

For database authentication type CLIENT, the command is not allowed within the scope of DARI (Stored Procedure).

Cause: All SYSADM commands are not allowed to execute within DARI (Stored Procedure) when the database authentication type is CLIENT.

The stored procedure does not return any data.

The DARI procedure is not allowed to continue.

Action: Remove the illegal command in the DARI procedure and retry.

sqlcode: -1134

sqlstate: 42987

SQL1135N •SQL1160N

SQL1135N

An invalid value was specified for the number of segments when creating a database.

Cause: The value that was specified for the number of segments was out of range. The valid range is from 1 to 256.

Action: Respecify the number of segments and try to create the database again.

SQL1136N

An invalid value was specified for the default table space extent size (dft_extentsize) when creating a database.

Cause: The value that was specified for the default table space extent size (dft_extentsize) is out of range. The valid range is from 2 to 256.

Action: Correct the table space extent size and try again.

SQL1137W

The database manager was unable to remove the database path or some of the containers when dropping database "<dbalias>". Cleanup is required.

Cause: Either the list of containers could not be accessed or some failure occurred while attempting to remove them or the database directory.

Action: System managed containers (directories) and database managed file containers may be manually removed using operating system commands. To release device containers, please call your IBM service representative for assistance.

If the log directory has been changed via the New Log Path configuration parameter, then manually unmount the log directory file system and remove the log and database directories.

SQL1138W

The unique index "<name>" was migrated to support deferred uniqueness checking. A new index was not created.

Cause: A CREATE INDEX operation was attempted on an existing index. Since the index had not yet been migrated to support deferred uniqueness checking, this migration was performed.

The migrated format of the unique index will allow multiple row updates to check the uniqueness of the columns of the index at the end of the update statement instead of when each row is updated.

Action: No action is required.

sqlcode: +1138

sqlstate: 01550

SQL1150N

The address of the user id parameter is not valid.

Cause: The application program used an address that is not valid for this parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

The command cannot be processed.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL1160N

The DOS "<network protocol>" TSR has not been loaded.

Cause: The Terminate and Stay Resident (TSR) network driver for the specified communications protocol has not been loaded. The TSR must be loaded before attempting to use network communications.

Action: Ensure that the TSR for the specified communications protocol has been successfully loaded, then run your application again.

SQL1164N

The type "<type>" SQLDA or host variables used in the SQL statement are not valid. Reason code "<reason-code>", host variable/SQLVAR number "<var-number>".

Cause: Explanation: An error occurred while processing the SQLDA or host variable(s) in the SQL statement.

The call parameter list, which is created by the precompiler, may be not correct if the application programmer has modified the output of the precompiler, used a variable name beginning with SQL in the application program, or over wrote the call parameter list in another way.

Also, if an SQLDA is passed directly by the application, it may not be initialized correctly.

Host variable/SQLDA types:

- 1 input host variable(s) or SQLDA
- 2 output host variable(s) or SQLDA

In SQL statements with host variables, use the host variable number to count in from the beginning of the statement (or substatement, in the case of compound SQL) to locate the invalid host variable. For statements using an SQLDA, the SQLVAR number is used to locate the invalid SQLVAR. For an input SQLDA, count only input host variables or SQLVARs; similarly for output. Note that this number is based at 1, and may not be applicable to all reason codes. Reason codes are interpreted as follows:

- 1 SQLDA.SQLN is less than SQLDA.SQLD
- 2 SQLVAR.SQLTYPE is invalid
- 3 the length specified in SQLVAR.SQLEN is incorrect for the SQL type given in SQLVAR.SQLTYPE.
- 4 a Large Object SQLVAR is present, but the SQLDOUBLED field of SQLDA.SQLDAID is not set to '2'.
- 5 an input varchar is supplied whose current length (from the length field of the varchar itself) is greater than the maximum length. The maximum length is determined by the declaration (in the case of a host variable) or by the setting of SQLVAR.SQLEN (in the case of a user-defined SQLDA.)
- 6 an input Large Object is passed in whose current length (either in the length field of the LOB itself, or as indicated by the SQLVAR2.SQLDATALEN pointer) is greater than the maximum length. The maximum length is determined by the declaration

(in the case of a host variable) or by the setting of SQLVAR2.SQLLONGLEN (in the case of a user-defined SQLDA.)

- 7 a double-byte character Large Object has an odd value indicated by the SQLVAR2.SQLDATALEN pointer, which is always in terms of bytes, even for DBCLOBs.
- 8 one of the SQLDATA, SQLIND or SQLDATALEN pointers is invalid, or points to insufficient storage.

The statement cannot be processed.

Action: User Response: Examine the application program for any errors noted. Note that the programmer should not attempt to modify the precompiler output.

sqlcode: -1164

sqlstate: 07002

SQL1165W

A value cannot be assigned to a host variable because the value is not within the range of the host variable's data type.

Cause: A FETCH, VALUES, or SELECT into a host variable list failed because the host variable was not large enough to hold the retrieved value.

The statement processing continued returning a null indicator of -2.

Action: Verify that table definitions are current and that the host variable has the correct data type. For the ranges of SQL data types, refer to the *SQL Reference*.

sqlcode: +1165

sqlstate: 01515

SQL1166W

Division by zero was attempted.

Cause: The processing of an arithmetic expression resulted in division by zero. This warning may be returned with a row other than the row which caused the warning. For example, this occurs with arithmetic expressions in predicates or when the query is processed using temporary tables. The warning may be issued again since it is also returned whenever a null indicator variable is set to -2.

The statement processing continued, using null as the result of the division expression and possibly returning a null indicator of -2.

Action: Examine the SQL statement to determine the cause of the problem. If the problem is data dependent,

SQL1167W • SQL1181N

it is necessary to examine the data processed when the error occurred.

sqlcode: +1166

sqlstate: 01564

SQL1167W

Arithmetic overflow or other arithmetic exception occurred.

Cause: The processing of an arithmetic expression has resulted in an arithmetic overflow, underflow or other arithmetic exception. This warning may be returned with a row other than the row which caused the warning. For example, this occurs with arithmetic expressions in predicates or when the query is processed using temporary tables. The warning may be issued again since it is also returned whenever a null indicator variable is set to -2.

The statement processing continued, using null as the result of the arithmetic expression and possibly returning a null indicator of -2.

Action: Examine the SQL statement to determine the cause of the problem. If the problem is data dependent, it is necessary to examine the data processed when the error occurred. Refer to the *SQL Reference* to see the valid ranges for the data types.

sqlcode: +1167

sqlstate: 01519

SQL1180N

User defined function "<function-name>" (specific name "<specific-name>") has caused an OLE error. HRESULT="<hresult>". Diagnostic text: "<message text>".

Cause: DB2 received an OLE error code while trying to communicate with the OLE automation server of user defined function (UDF) "<function-name>" (specific name "<specific-name>"). HRESULT "<hresult>" is the returned OLE error code, and "<message text>" is the retrieved error message.

The following shows a partial list of error messages, HRESULTS, and possible causes. The error message text may be changed by OLE, and new error codes may be added by OLE.

Unknown interface (0x80020001): The specified OLE object does not support the IDispatch interface.

Type mismatch (0x80020005): One or more of the SQL data types do not match the data types of the method arguments.

Unknown name (0x80020006): The specified method name was not found for the specified OLE object.

Invalid number of parameters (0x8002000E): The number of arguments passed to the method is different from the number of arguments accepted by the method.

Invalid class string (0x800401F3): The specified ProgID or CLSID is invalid.

Class not registered (0x80040154): CLSID is not properly registered.

Application not found (0x800401F5): Local server EXE not found.

DLL for class not found (0x800401F8): In-process DLL not found.

Server execution failed (0x80080005): Creation of the OLE object failed.

Action: Consult the *OLE Programmer's Reference Guide* for a complete documentation, including the meaning of the special terminology.

sqlcode: -1180

sqlstate: 42724

SQL1181N

User defined function "<function-name>" (specific name "<specific-name>") has raised an exception with description "<message text>".

Cause: The user defined function (UDF) "<function-name>" (specific name "<specific-name>") has raised an exception. The message text shows the textual description of the exception returned by the UDF.

Action: The user will need to understand the meaning of the exception. See the author of the UDF.

sqlcode: -1181

sqlstate: 38501

SQL1200 - SQL1299

SQL1200N

The object parameter is not valid.

Cause: The value specified for the object parameter in the COLLECT DATABASE STATUS function call is not valid. Valid values are:

SQL_E_DATABASE

Status is to be collected for a single database.

SQL_E_DRIVE

Status is to be collected for all LOCAL databases on a single path.

SQL_E_LOCAL

Status is to be collected for all LOCAL databases.

The command cannot be processed.

Action: Correct the object parameter and resubmit the COLLECT DATABASE STATUS function call.

SQL1201N

The status parameter is not valid.

Cause: The value specified for the status parameter in the COLLECT DATABASE STATUS function call is not valid. Valid values are:

SQL_E_SYSTEM

System status is to be collected.

SQL_E_DATABASE

System status and database status is to be collected.

SQL_E_ALL

System status, database status and user status is to be collected.

The command cannot be processed.

Action: Correct the status parameter and resubmit the COLLECT DATABASE STATUS function call.

SQL1202N

Status has not been collected.

Cause: The value specified for the *handle* parameter in the GET NEXT DATABASE STATUS BLOCK or the FREE DATABASE STATUS RESOURCES function calls is not valid. The handle must be the one returned as the positive function value from the COLLECT DATABASE STATUS function call.

This is the second COLLECT DATABASE STATUS call made from the process. The first COLLECT DATABASE

STATUS call terminates and its handle can no longer be used.

The command cannot be processed.

Action: Correct the *handle* parameter and resubmit the COLLECT DATABASE STATUS function call.

SQL1203N

The database has no users connected.

Cause: A request was made for user status on a database, but the database has no users connected.

The command cannot be processed.

Action: Verify the database name and the connection status. Resubmit the command with a database currently being used.

SQL1204N

The code page "<code page>" and/or country code "<country code>" is not supported by the installed version of the database manager.

Cause: This version of the database manager does not support the active code page or country code or both.

The command cannot be processed.

Choose an active code page and country code supported by this version of the database manager.

DataJoiner users: if necessary isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and choose an active code page and country code supported by both DataJoiner and the data source.

Action: Exit the current program and return to the operating system.

sqlcode: -1204

sqlstate: 22522

SQL1205N

The code page "<code page>" and/or country code "<country>" that has been specified is not valid.

Cause: This version of DB2 does not support the active code page or country code or both, as specified by the Create Database command.

The command cannot be processed.

SQL1207N •SQL1216N

Action: Refer to the Create Database command in the *Command Reference* for details of valid code page and country code pairs supported by DB2/2.

SQL1207N

Communication Manager configuration file "`<name>`" cannot be found.

Cause: The Communication Manager configuration file name specified on the CATALOG NODE command was not found either in the path specified or in the CMLIB directory on the default drive.

The command cannot be processed.

Action: Resubmit the command with the correct configuration file name and path.

SQL1209W

The partner_lu name "`<name>`" specified in the CATALOG NODE function does not exist. One was created.

Cause: The logical partner unit name specified in the CATALOG NODE function does not exist in the Communications Manager configuration file located in the CMLIB directory on the default drive.

A logical unit profile of the specified name was created.

Action: No action is required.

SQL1210W

Default values were returned for one or more DOS Requester/WINDOWS Requester configuration file parameters.

Cause: One or more of the DOS Requester/WINDOWS Requester configuration values returned was defaulted. The parameter may not be defined in the DOS Requester/WINDOWS Requester configuration file or the configuration file could not be opened or an error occurred reading the file.

Action: Ensure that the DOS Requester/WINDOWS Requester configuration file exists in the appropriate path and that the parameters are explicitly defined.

SQL1211N

The computer name "`<name>`" is not valid.

Cause: The computer name specified in the NPIPE protocol structure for the Catalog command is not valid. The size of the computer name must be 15 characters or less.

The command cannot be processed.

Action: Verify that the computer name is valid and resubmit the command.

SQL1212N

The instance name "`<name>`" is not valid.

Cause: The instance name specified for the Catalog command is not valid. The size of the instance name must be 8 characters or less.

The command cannot be processed.

Action: Verify that the instance name is valid and resubmit the command.

SQL1216N

Graphic data and graphic functions are not supported for this database.

Cause: The code page of the database does not support graphic data. The data types GRAPHIC, VARGRAPHIC, and LONG VARGRAPHIC are not valid for this database. The GRAPHIC literal and the VARGRAPHIC scalar functions are not valid for this database.

The statement cannot be processed.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Resubmit the command with valid data types.

sqlcode: -1216

sqlstate: 56031

SQL1217N

The REAL data type is not supported by the target database.

Cause: An SQL operation is using a data type of REAL (single-precision floating point number) as an input or output variable. The REAL data type is not supported on the target database for this request.

The statement is not processed.

Action: Replace the declaration of any host variable that corresponds to the SQL data type of REAL with a declaration that corresponds to an SQL data type of DOUBLE in your application.

sqlcode: -1217

sqlstate: 56099

- The number of shared memory identifiers allocated in the system
- The amount of paging or swapping space available in the system
- The amount of physical memory available in the system

Action: One or more of the following:

- Validate that sufficient memory resources are available to satisfy the database manager's requirements, and those of the other programs running on the system.
- Reduce database manager's memory requirement for this memory set by reducing the database manager configuration parameters which affect it. These are: *maxagents*, *maxdari* and, *numdb*.
- Where appropriate, stop other programs using the system.

SQL1219N

The request failed because private virtual memory could not be allocated.

Cause: The instance was unable to allocate enough private virtual memory to process the request. This may be a result of shared memory allocations made in other (unrelated) processes.

Action: The problem may be corrected by:

- On OS/2, increasing the *min_priv_mem* configuration parameter. This will result in more private virtual memory being reserved when the instance is started.
- Stopping other applications running on the machine, especially those that use large amounts of shared memory.

sqlcode: -1219

sqlstate: 57011

SQL1221N

The Application Support Layer heap cannot be allocated.

Cause: The Application Support Layer heap could not be allocated. The cause of this error may be insufficient memory resources either for the database manager or the environment in which its operations are being attempted. Memory resources that can cause this error include:

- The number of shared memory identifiers allocated in the system
- The amount of paging or swapping space available in the system
- The amount of physical memory available in the system

Action: One or more of the following:

- Validate that sufficient memory resources are available to satisfy the database manager's requirements, and those of the other programs running on the system.
- Reduce the *aslheapsz* configuration parameter.
- Where appropriate, stop other programs using the system.

sqlcode: -1221

sqlstate: 57011

SQL1220N

The database manager shared memory set cannot be allocated.

Cause: The database manager could not allocate its shared memory set. The cause of this error may be insufficient memory resources either for the database manager or the environment in which its operation is being attempted. Memory resources that can cause this error include:

SQL1222N • SQL1224N

SQL1222N

Not enough storage is available in the Application Support Layer heap to process the request.

Cause: All available memory in the Application Support Layer heap has been used.

Action: Increase the *aslheapsz* configuration parameter.

sqlcode: -1222

sqlstate: 57011

SQL1223N

An agent could not be started to service this request.

Cause: The request failed because the *maxagents* configuration parameter limit would be exceeded.

Action: Increase the *maxagents* configuration parameter, and/or reduce the number of users using the database.

sqlcode: -1223

sqlstate: 57019

SQL1224N

A database agent could not be started to service a request, or was terminated as a result of a database system shutdown or a force command.

Cause: The message may be attributed to any of the following cases.

- The database manager has not been started on the database server
- The database manager was stopped
- The database manager has already allocated the maximum number of agents
- The database agent was forced off by the system administrator
- The database agent was terminated due to an abnormal termination of a key database manager process
- The application is using multiple contexts with local protocol. In this case the number of connections is limited by the number of shared memory segments to which a single process can be attached. For example, on AIX, the limit is ten shared memory segments per process.

Additional DataJoiner cases are:

- The maximum number of processes per user (*maxuproc*) at the AIX system level has been exceeded.
- In the client/server environment using the TCP/IP protocol, the port number assigned to the TCP/IP service name on the client is not the same as the port number on the server.

This situation can be detected by DataJoiner or by the data source.

Action: Reissue the database request. If a connection cannot be established, then ensure that the database manager has been started successfully. Additionally, ensure that the *maxagents* database manager configuration parameter is appropriately configured.

DataJoiner users, should also:

- Isolate the problem to the data source rejecting the request (see the *Problem Determination Guide* for procedures to follow to identify the failing data source) and ensure that the communication subsystem is active and that the database manager and required communication protocol server processes have been started on the database server.
- Check the setting of *maxuproc* and change it if needed. *maxuproc* restricts the number of processes that can run under a given DataJoiner server. The default setting is 40.

You can check the current setting of *maxuproc* with the operating system command:

```
lsattr -E -l sys0
```

To view the number of processes currently running under a given DataJoiner server, use the operating system command:

```
ps -ef | grep instdj1 | wc -l
```

where "instdj1" is the instance name of the DataJoiner server.

To change *maxuproc*, use the operating system command:

```
chdev -l sys0 -a maxuproc='nn'
```

where **nn** is the new integer value of *maxuproc*.

If the application is using multiple contexts with local protocol, then either reduce the number of connections in the application, or switch to another protocol (for example, TCP/IP).

sqlcode: -1224

sqlstate: 55032

SQL1225N

The request failed because an operating system process, thread, or swap space limit was reached.

Cause: An operating system process, thread, or swap space limit was reached. On UNIX-based systems, this may mean that the maxuproc value is too low. On OS/2-based systems, this may mean that the THREADS CONFIG.SYS value is too low.

Action: Increase the limit which was reached (or have your system administrator increase it). On UNIX-based systems, the maxuproc limit can be changed with the chdev command.

sqlcode: -1225

sqlstate: 57049

SQL1226N

The maximum number of coordinating agents are already started.

Cause: The number of coordinating agents started is already equal to the maximum value defined in the system configuration file.

The statement cannot be processed.

Action: Wait for other applications to disconnect from the database. If one or more applications are required to run concurrently, increase the value for max_coordagents. The new value takes effect after the next successful database manager start.

sqlcode: -1226

sqlstate: 57030

SQL1227N

The catalog statistic "<value>" for column "<column>" is out of range for its target column, has an invalid format, or is inconsistent in relation to some other statistic. Reason Code = "<code>"

Cause: The value or format of a statistic provided for an updateable catalog is either invalid, out of range, or inconsistent. The most common checks for value, range and format are (corresponding to "<code>"):

- 1 Numeric statistics must be -1 or ≥ 0 .
- 2 Numeric statistics representing percentages (eg. CLUSTERRATIO) must be between 0 and 100.

3 HIGH2KEY, LOW2KEY related rules :

- The datatype of any HIGH2KEY, LOW2KEY value must be the same as the datatype of the corresponding user column.
- The length of HIGH2KEY, LOW2KEY value must be the smaller of 33 or the target column's datatype's maximum length.
- HIGH2KEY must be $>$ LOW2KEY whenever there are 3 or more distinct values in the corresponding column. In the case of less than 3 distinct values in the column, HIGH2KEY can be equal to LOW2KEY.

4 PAGE_FETCH_PAIRS related rules :

- Individual values in the PAGE_FETCH_PAIRS statistic must be separated by a series of blank delimiters.
- Individual values in PAGE_FETCH_PAIRS statistics must not be longer than 10 digits and must be less than the maximum integer value (MAXINT = 2147483647).
- There must always be a valid PAGE_FETCH_PAIRS value if the CLUSTERFACTOR is > 0 .
- There must be exactly 11 pairs in a single PAGE_FETCH_PAIR statistic
- buffer size entries of PAGE_FETCH_PAIRS must be ascending in value. Also, any buffer size value in a PAGE_FETCH_PAIRS entry cannot be greater than $\text{MIN}(\text{NPAGES}, 524287)$ where NPAGES is the number of pages in the corresponding table.
- "fetches" entries of PAGE_FETCH_PAIRS must be descending in value, with no individual fetches entry being less than NPAGES. Also, any "fetch" size value in a PAGE_FETCH_PAIRS entry must not be greater than CARD (cardinality) statistic of the corresponding table.
- If buffer size value is the same in two consecutive pairs, then page fetch value must also be the same in both the pairs.

5 CLUSTERRATIO and CLUSTERFACTOR related rules :

- Valid values for CLUSTERRATIO are -1 or between 0 and 100
- Valid values for CLUSTERFACTOR are -1 or between 0 and 1
- Either CLUSTERRATIO or CLUSTERFACTOR must be -1 at all times.
- If CLUSTERFACTOR is a positive value, it must be accompanied by a valid PAGE_FETCH_PAIR statistic.

SQL1228W • SQL1230W

- 6 The cardinality of a column (COLCARD statistic in SYSCOLUMNS) cannot be greater than the cardinality of its corresponding table (CARD statistic in SYSTABLES).
- 7 No statistics are supported for columns with datatype: LONG VARCHAR, LONG VARGRAPHIC, BLOB, CLOB, DBCLOB.
- 8 A statistic is inconsistent with other related statistics for this entity or is invalid in this context.

Action: Make sure the new catalog statistic satisfies the above range/length/format checks.

Make sure that any updates to statistics are consistent in their inter-relationships (eg. cardinality).

sqlcode: -1227

sqlstate: 23521

SQL1228W

DROP DATABASE has completed but the database alias name or database name "<name>" could not be found on "<num>" nodes.

Cause: The drop database command has completed successfully, however, there are some nodes where the database alias or database name was not found. It is possible that DROP DATABASE AT NODE was already performed on these nodes.

Action: This is a warning message only. No response is necessary.

SQL1229N

The current transaction has been rolled back because of a system error.

Cause: A system error, such as node failure or connection failure, has occurred. The application is rolled back to the previous COMMIT.

Note that in the case of DB2 utility functions, the behavior is described below:

Import - The application is rolled back. If the COMMITCOUNT parameter was used, the operation is rolled back to a previous committed point.

Reorg - The operation is aborted and must be resubmitted.

Redistribute - The operation is aborted, however, some of the operation may have been successful. Issuing the request again with the "continue" option will restart the operation from the point of failure.

Rollforward - The operation is aborted and the database is still in rollforward pending state. The command must be resubmitted.

Backup/Restore - The operation is aborted and must be resubmitted.

Action: Try the request again. If the error persists, you can find more information about the problem in the syslog files. It may be necessary to contact the system administrator for assistance since the most common reason for this error is that a node has failed.

Note that in an SP environment where the high speed switch is used, this error can be a symptom of a failure in the high speed switch.

The sixth sqlerrd field of the SQLCA will indicate the node number that detected the node failure. On the node that detected the failure a message will be placed in the syslog that identifies the failed node.

sqlcode: -1229

sqlstate: 40504

SQL1230W

At least one agent id specified could not be forced.

Cause: At least one agent id specified on the Force command could not be forced. Causes of this warning may be:

- A nonexistent or invalid agent id was specified.
- The agent disconnected from the database manager between the time that the agent ids were collected and the Force command was issued.
- The agent id specified was for a parallel agent (exists on DB2 Extended Enterprise Edition only) which cannot be forced.

Action: If a nonexistent or invalid agent id was specified, retry the command using the valid agent id.

SQL1231N

Invalid Force count specified.

Cause: The value specified for the count parameter of the Force command is not valid. The value specified must either be a positive integer or SQL_ALL_USERS. A value of 0 will result in an error.

Action: Correct the value of count and resubmit the command.

SQL1232N

Invalid Force mode specified.

Cause: The value specified for the mode parameter of the Force command is not valid. Only asynchronous mode is supported for the Force command. The parameter must be set to the value SQL_ASYNC.

Action: Set the mode to SQL_ASYNC and resubmit the command.

SQL1240N

The maximum number of quiescers has been reached.

Cause: An attempt was made to acquire a quiesce state on a table space which has already been quiesced by 5 processes.

Action: Wait for one of the processes to release its quiesce state and try again.

SQL1241N

An invalid value was specified for the "<tbs-name>" table space definition when creating a database. Attribute is "<string>".

Cause: The value for a table space attribute was out of range. See the Data Structures section of API Reference for the format of the sqletsdesc structure used for the create database api. The identified attribute is the field name of this structure.

Action: Correct the create database request.

SQL1244W

Disconnect for transaction manager database "<database-name>" will occur at next COMMIT.

Cause: A disconnect has been issued against a database which is acting as the TM database. The disconnect cannot be completed until the next COMMIT is processed.

Action: If it is necessary that the database which is acting as the TM database be disconnected immediately, issue a COMMIT statement before execution continues.

sqlcode: +1244

sqlstate: 01002

SQL1245N

Connection limit has been reached. No more connections are allowed from this client.

Cause: The maximum number of concurrent database connections has been reached for an environment where the number of connections is restricted or must be pre-defined. The primary example of where this would occur is when the NETBIOS protocol is being used.

Action: Possible actions:

- Use the SET CLIENT command or API to set the MAX NETBIOS CONNECTIONS field to the maximum number of concurrent connections required. This must be done before any connections are made.

sqlcode: -1245

sqlstate: 08001

SQL1246N

Connection settings cannot be changed while connections exist.

Cause: One of the following occurred:

- An attempt was made to change the connection settings for an application using the SET CLIENT API. This was rejected because one or more connections exist.
- The application contains both DB2 Call Level Interface API calls and calls to functions containing embedded SQL, and the connection management was not invoked using the CLI APIs.

Action: Possible actions:

SQL1247N •SQL1261N

- Ensure that the application disconnects from all servers before attempting to issue the SET CLIENT API (sqlesetc or sqlgsetc) or CLP command.
- Ensure that all connection management requests are issued via the DB2 Call Level Interface APIs if CLI is being used by the application.

SQL1247N

Applications running in an XA transaction processing environment must use the SYNCPOINT TWOPHASE connection setting.

Cause: The application was precompiled with the option SYNCPOINT ONEPHASE or SYNCPOINT NONE, or the SYNCPOINT connection setting was changed to one of these values using the SET CLIENT API. These settings are invalid for applications which cause transaction processing syncpoint commands (for example CICS SYNCPOINT) to be executed. Note that SYNCPOINT ONEPHASE is the default precompiler option.

Action: Possible actions:

- Re-compile the application using the precompiler option SYNCPOINT TWOPHASE.
- Modify the program such that the SET CLIENT API is called to set the connection option to SYNCPOINT TWOPHASE prior to any other processing.

sqlcode: -1247

sqlstate: 51025

SQL1248N

Database "<database alias>" not defined with the transaction manager.

Cause: You attempted to access a database that had not been opened by the transaction manager. A database must be defined to the transaction manager in order to participate in the two-phase commit process.

Action: Define the database as a resource manager to the transaction manager of your Distributed Transaction Processing environment. For example, in a CICS environment this requires adding the database to the XAD file and provides the database alias name in the XAOpen string of the XAD entry.

sqlcode: -1248

sqlstate: 42705

SQL1251W

No data returned for heuristic query.

Cause: There are no in-doubt transactions in the database, nor any transactions that have ended and are waiting to enter the syncpoint process.

Action: No action is required.

SQL1260N

Database "<name>" is not configured for roll-forward recovery on node(s) "<node-list>".

Cause: The specified database is not configured for roll-forward recovery on the specified node(s). If "... " is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

The database is not rolled forward on the specified node(s).

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Ensure that recovery is required on the specified node(s), then restore the most recent backup version of the database on these nodes.

SQL1261N

Database "<name>" is not in rollforward pending state on node(s) "<node-list>", so it does not need to be rolled forward on these nodes.

Cause: The specified database is not in roll-forward pending state on the specified node(s). This may be because the database has not been restored, or was restored with the WITHOUT ROLLING FORWARD option, or roll-forward recovery is complete on these nodes.

If "... " is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

The database is not rolled forward.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Do the following:

1. Ensure that recovery is required on the specified node(s).

2. Restore a backup version of the database on these nodes.
3. Issue the ROLLFORWARD DATABASE command.

SQL1262N

The point-in-time specified for rolling forward database “<name>” is not valid.

Cause: The timestamp parameter specified for the point-in-time stopping value is not valid. The timestamp must be entered in ISO format (YYYY-MM-DD-hh.mm.ss.<sssss> where YYYY represents year, MM represents month, DD represents day, hh represents hours, mm represents minutes, ss represents seconds, and ssssss represents optional microseconds).

The database is not rolled forward.

Action: Ensure that the timestamp is entered in the correct format.

When you issue a ROLLFORWARD DATABASE command, ensure that you are not specifying a year greater than 2105.

SQL1263N

The archive file “<name>” is not a valid log file for database “<name>” on node “<node-number>”.

Cause: The specified archive log file exists in the database log directory or the overflow log directory on the specified node, but the file is not valid.

Roll-forward recovery processing stops.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file into the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file, and issue the ROLLFORWARD DATABASE command again. Alternatively, resubmit the command with the overflow log path pointing to the correct archive file.

SQL1264N

The archive file “<name>” does not belong to database “<database-name>” on node “<node-number>”.

Cause: The archive log file specified was found in the log directory or the overflow log directory but does not belong to the specified database.

Roll-forward recovery processing stops.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file into the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file and issue the ROLLFORWARD DATABASE command again. Alternatively, resubmit the command with the overflow log path pointing to the correct archive file.

SQL1265N

The archive log file “<name>” is not associated with the current log sequence for database “<name>” on node “<node-number>”.

Cause: For roll-forward recovery, the log files need to be processed in correct sequence. The log file sequence is determined by the database that has been restored or the log files that have been processed. In addition to this, for table space level roll-forward recovery, the log files must be processed in the sequence through which the current state of the database has been reached. The specified archive log file was found in the log directory or the overflow log path for the database on the specified node but the log file is not in the correct log sequence.

Roll-forward recovery processing stops.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file into the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file and issue the ROLLFORWARD

SQL1266N • SQL1271W

DATABASE command again. Alternatively, resubmit the command with the overflow log path pointing to the correct archive file.

SQL1266N

Database “<name>” has been rolled forward to “<timestamp>”, which is past the specified point-in-time.

Cause: Roll-forward is requested to stop at a timestamp that is before the current point in time in the specified database log file. This can happen when rolling forward either the database or a subset of table spaces to a point in time.

Database roll-forward processing stops.

Action: Specify the correct point in time or restore the database or table space subset from a backup version and resubmit the ROLLFORWARD command.

SQL1267N

The system could not find db2uexit in the current PATH environment variable.

Cause: The user-supplied file *db2uexit* cannot be found, either because it is not in the current PATH environment variable or it does not exist.

The command cannot be processed.

Action: Update the current PATH environment variable to include the path to *db2uexit* or create a *db2uexit* file and update the current PATH environment variable if necessary.

SQL1268N

Roll-forward recovery stopped due to error “<error>” while retrieving log file “<logfile>” for database “<name>” on node “<node-number>”.

Cause: Roll-forward processing invokes *db2uext2* to retrieve the log file. The error may have occurred in *db2uext2*.

Roll-forward processing stopped. The database is still in a roll forward pending state on the specified node.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: See the user exit documentation in the *Administration Guide* for a description of the error and resume or terminate roll-forward recovery.

SQL1269N

Table space level roll-forward recovery is already running.

Cause: An attempt has been made to use table space level roll-forward recovery but it is already running. Only one agent can be executing roll-forward recovery at any given time.

Action: Wait until table space level roll-forward recovery is complete. If more table spaces need recovery, initiate table space level roll-forward recovery again.

SQL1270C

The LANG environmental variable is set to “<string>”. This language is not supported.

Cause: The LANG environmental variable is set to a language that is not supported by the database manager. Processing cannot continue.

Action: Set the LANG environmental variable to a language that is supported. For more information please refer to “National Language Support” appendix in the *Administration Guide*.

DataJoiner users: see the *IBM DataJoiner Planning, Installation, and Configuration Guide* for NLS information.

SQL1271W

Database “<name>” is recovered but one or more table spaces are off-line on node(s) “<node-list>”.

Cause: This message can occur after crash recovery, database level roll-forward recovery, or table space level roll-forward recovery. For database level roll-forward recovery, the database is available for use if the STOP option was specified. One or more table spaces on the specified node(s) are not available. This could happen if:

- the STOP option is not specified for a table space level roll-forward recovery to a point in time.
- one or more table spaces receive errors during recovery.
- additional table spaces are restored while a table space level roll-forward recovery is already in progress.
- the database is rolled forward past a previous point-in-time table space roll-forward, causing all table

spaces involved to be placed in restore pending state.

The table spaces that are off-line can be identified on the specified node(s) by the LIST TABLESPACES command or the db2dart utility. The diagnostic log will provide more information on specific table spaces.

If ",..." is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Repair or restore the table spaces if necessary and run roll-forward recovery. If the same error occurs, try running table space level roll-forward recovery offline.

SQL1272N

Table space level roll-forward recovery for database "<name>" has stopped before completion on node(s) "<node-list>".

Cause: Table space level roll-forward recovery has stopped on the specified node(s) before all qualifying table spaces could be rolled forward. This can be caused by one of the following:

- The transaction table is full.
- All table spaces being rolled forward received I/O errors.
- Point-in-time table space level roll-forward encountered an I/O error on one of the table spaces being rolled forward.
- Point-in-time table space level roll-forward encountered an active transaction that made changes to one of the table spaces being rolled forward. This transaction could be an indoubt transaction.
- The table space level roll-forward was interrupted and, before it was resumed, all table spaces that were being rolled forward are restored again.

If ",..." is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Check the diagnostic log for the cause. Do one of the following depending on the cause:

- Use the LIST TABLESPACES command to determine if the table spaces received I/O errors. If so, repair them.
- If the transaction table became full, include the MAXAPPLS database configuration parameter or try running table space level roll-forward recovery offline.
- If the cause is an active or indoubt transaction, complete the transaction.
- If the table spaces were restored after a previous table space level roll forward was interrupted, the previous table space level roll-forward is now canceled. The next table space level roll-forward command will check for table spaces in rollforward pending state.

Run table space level roll-forward recovery again.

SQL1273N

Roll-forward recovery on database "<name>" cannot reach the specified stop point (end-of-log or point-in-time) because of missing log file "<name>" on node "<node-number>".

Cause: The Rollforward Database utility cannot find the specified archive log file in the database log directory or the overflow log directory on the specified node.

Roll-forward recovery has stopped.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Do one of the following:

- Move the specified archive log file into the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file, and issue the ROLLFORWARD DATABASE command again. Alternatively, resubmit the command with the overflow log path pointing to the correct archive file.
- If you cannot find the missing log files, restore the database/table space on all nodes, then do point-in-time recovery using a timestamp that is earlier than that of the missing log file.

SQL1274N • SQL1277N

SQL1274N

The database "<name>" requires table space level roll-forward recovery and the point-in-time must be to the end of logs.

Cause: The database needs to be rolled forward at the table space level. For table space level roll-forward recovery, the point-in-time must be to the end of logs.

The database is not rolled forward.

Action: Resubmit the ROLLFORWARD command specifying ROLLFORWARD TO END OF LOGS.

SQL1275N

The stoptime passed to roll-forward must be greater than or equal to "<timestamp>", because database "<name>" on node(s) "<node-list>" contains information later than the specified time.

Cause: The database or at least one of the table spaces to be rolled forward were backed up online. An advanced virtual timestamp is in the database or table space backup. The stoptime passed to roll-forward must be greater than or equal to the time the online backup ended on the specified node.

If "... " is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Do one of the following:

- Resubmit the command with a stoptime greater than or equal to "<timestamp>". Time must be specified in CUT (Coordinated Universal Time).
- Restore an earlier backup on node(s), then issue the ROLLFORWARD DATABASE command again.

SQL1276N

Database "<name>" cannot be brought out of rollforward pending state until roll-forward has passed a point in time greater than or equal to "<timestamp>", because node "<node-number>" contains information later than the specified time.

Cause: A request was made to bring the database or subset of table spaces out of rollforward pending state

by specifying caller action SQLUM_ROLLFWD_STOP, SQLUM_STOP, SQLUM_ROLLFWD_COMPLETE, or SQLUM_COMPLETE. However, the database or at least one of the table spaces to be rolled forward was backed up online. The request cannot be granted until the database or all table spaces have been rolled forward to the end of the online backup timestamp on the specified node.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Resubmit the command with a stoptime greater than or equal to "<timestamp>".

SQL1277N

Restore has detected that one or more table space containers are inaccessible, or has set their state to "storage must be defined".

Cause: Restore validates that the containers needed by each table space being restored are currently accessible on the system. Where possible, restore will create the containers if they do not exist. If they cannot be created, or are currently in use by another table space, or are inaccessible for any other reason, then the list of containers needed must be corrected before the restore can continue.

If this is a redirected restore, the state of each container of the table spaces being restored is set to "storage must be defined". This makes it possible to use the SET TABLESPACE CONTAINERS api or command against the containers to redefine their storage.

Action: To determine the list of containers for each table space being restored, use the TABLESPACE CONTAINER QUERY api or the LIST TABLESPACE CONTAINERS command. To specify an updated list for each table space, use the SET TABLESPACE CONTAINERS api or command. This api or command lets you specify whether this should be the initial list of containers (i.e. a subsequent rollforward will redo any "add container" operations described in the database log) or the final list (rollforward will not redo "add container" operations).

It is also possible that the container(s) are read-only, in which case the only action required before continuing with the restore is to give read/write access to the container.

SQL1278W

Roll-forward operation has completed successfully. Active or indoubt transactions required rollback on node(s) "<node-list>".

Cause: The roll-forward of a table space subset to a point in time was completed successfully, however one or both of the following situations occurred:

1. There was one or more active transactions at the point in time specified. Each transaction was rolled back from the table spaces in the table space subset.
2. There was one or more indoubt transactions at the point in time specified. Each indoubt transaction was rolled back from the table spaces in the table space subset.

Transactions that were rolled back from the table spaces in the table space subset may still be committed in other table spaces not involved in the roll-forward.

If ",..." is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: The diagnostic log will contain details on the transactions that were rolled back by roll-forward recovery.

SQL1279W

Some indexes may not have been recreated.

Cause: An error occurred during index recreation while performing a database restart or following a table reorganization which prevented some of the indexes from being recreated successfully. Details can be found in the system error log and/or the database manager error log.

Database restart or Reorg table was successful.

Action: Examine the error log(s) to determine why the index(es) could not be recreated and correct the problem. The invalid indexes for a table will be recreated when the table is first accessed.

SQL1280N

The stoptime passed to roll-forward must be less than or equal to "<timestamp>" for database "<name>" because at least one of the table spaces was already rolled forward to this point in time.

Cause: At least one of the table spaces specified by the roll-forward to point in time has already been rolled forward to an earlier point in time. It cannot be rolled forward any further.

Action: Do one of the following:

- Resubmit the command with stoptime "<timestamp>".
- Restore all table spaces again, and resubmit the command with a stoptime less than "<timestamp>".
- Restore the table space backup(s) taken following the earlier table space roll-forward to point in time and resubmit the command with the same stoptime.

Time must be specified in CUT (Coordinated Universal Time).

SQL1281N

The connection to database "<database-alias>" has been severed because the pipe "<pipe-name>" has been broken.

Cause: The connection was lost because the DB2 server broke the pipe. The current transaction has been rolled back.

Action: Resubmit the current command. If the error continues, contact your technical service representative.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE or message number
- SQLCA contents, if possible
- Trace file, if possible.

sqlcode: -1281

sqlstate: 40504

SQL1282N • SQL1290N

SQL1282N

The attempt to connect to database "<database-alias>" failed because all the pipe instances on "<pipe-name>" are busy.

Cause: Attempts to connect to the named pipe failed because the connection was refused by DB2. There is a limit to the number of connections that are allowed on the named pipe.

Action: Increase the connection limit on the DB2 server, or terminate some of the applications using named pipe to free up connection resources.

sqlcode: -1282

sqlstate: 08001

SQL1283N

The attempt to connect to database "<database-alias>" failed because the pipe "<pipe-name>" is in use by another process.

Cause: The name of the named pipe is already in used by another process. Named pipe support did not start.

Action: Choose a different name by setting the environment variable DB2PIPENAME, or have the other programs which use named pipe use a different pipe name.

SQL1284N

The attempt to connect to database "<database-alias>" failed because the pipe "<pipe-name>" cannot be found.

Cause: The server has not started its named pipe support, or the server is using a different name for the named pipe.

Action: Start the database manager and ensure the named pipe support starts. If the named pipe support has been started, then ensure the name of the named pipe is the same between the client and server by setting the environment variable DB2PIPENAME to the same value.

sqlcode: -1284

sqlstate: 08001

SQL1285N

The attempt to connect to database "<database-alias>" failed because the pipe "<pipe-name>" is invalid.

Cause: The alternate pipe name set by the environment variable DB2PIPENAME is invalid.

Action: The value of the environment variable DB2PIPENAME must be a valid pipe name. The pipe name must be no longer than eight characters, and has the same syntactical restrictions as a normal file name.

sqlcode: -1285

sqlstate: 08001

SQL1286N

The connection to database "<database-alias>" has been severed because the operating system ran out of resources for pipe "<pipe-name>".

Cause: Named pipe failed because the operating system ran out of resources (swapping space, disk space, file handles). The current transaction has been rolled back.

Action: Free up the system resources and try again.

sqlcode: -1286

sqlstate: 40504

SQL1287N

ATTACH to instance "<instance>" failed because the named pipe "<pipe>" cannot be found.

Cause: The server has not started its named pipe support, or the instance name is incorrect.

Action: Ensure that the database manager is started at the server and that the named pipe support is started. Ensure that the instance name is correct.

SQL1290N

The value of either the DFT_CLIENT_COMM database manager configuration parameter or the DB2CLIENTCOMM environment variable is not valid.

Cause: Either an incorrect value was specified or the protocol(s) specified are not supported by the target database. The acceptable values are, for Unix platforms, TCPIP and APPC, and for OS/2, TCPIP, APPC,

IPXSPX, and NETBIOS. If more than one value is specified, then they must be delimited by a comma.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use global directory services, this message may be returned from the DDCS gateway.

Action: Correct the value and try again.

sqlcode: -1290

sqlstate: 08001

SQL1291N

A directory services error has been detected.
Service: "<directory-services-type>", **API:**
 "<API>", **function:** "<function>", **error code:**
 "<rc>".

Cause: An error has been detected by the directory services subsystem. Refer to the token values for details. The following is the explanation of the token values:

"<directory-services-type>"

The type of the directory services being used. Valid tokens include:

- DCE

"<API>"

The application programming interface used to access the above directory services. Valid tokens include:

- XDS/XOM

"<function>"

The name of the directory services subsystem function that returned the error code.

"<rc>"

The error code returned from the above function. The meaning of the value is specific to the API being used.

For XDS functions such as `ds_read`, the return code values can be found in the DCE include file `xds.h`.

For XOM functions such as `om_get`, the return code values can be found in the DCE include file `xom.h`.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use

global directory services, this message may be returned from the DDCS gateway.

Action: Ensure that:

- The product providing the directory services is properly installed and operational.
- You are logged in to the directory services with the appropriate authorization to access the directory entries, if login is required by the directory services provider, for example, DCE.

If the problem persists, consult with your system administrator and/or database administrator to determine the cause of the problem using the set of tokens provided.

sqlcode: -1291

sqlstate: 08001

SQL1292N

The global name of the database or database manager instance is invalid.

Cause: The global name of the database or database manager instance cannot be NULL and cannot be longer than 255 characters. It must start with either `"/.../"` or `"/./."`.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use global directory services, this message may be returned from the DDCS gateway.

Action: Correct the global name and try again.

SQL1293N

An error was found in a global directory entry.
Error code: "<error-code>".

Cause: An error has been detected in one of the global database directory entries used. Refer to the following error codes for details:

- 1 The database object does not contain authentication information
- 2 Both the database object and the database locator object do not contain communication protocol information
- 10 Entry not a database object
- 11 Native database name in the database object is either not found or too long
- 12 Database protocol in the database object is either not found or too long

SQL1294N • SQL1295N

- 13 Invalid authentication value found in the database object
- 14 Insufficient or invalid communication protocol information in the database object
- 15 Database locator object name not found in the database object
- 16 Database locator object name in the database object invalid

- 20 Entry not a database locator object
- 22 Insufficient or invalid communication protocol information in the database locator object

- 30 Entry not a routing information object
- 31 Target database information not found in the routing information object
- 32 Insufficient information for the target database in the routing information object
- 33 No appropriate gateway found in the routing information object
- 34 Invalid flag for authentication at gateway
- 35 Database locator object name for the gateway invalid
- 36 Database name in the target database information attribute of the routing information object is either not found or too long
- 37 Database protocol in the target database information attribute of the routing information object is either not found or too long

Note that you may also see this message if the DCE subsystem is not operational, or if you do not have sufficient privilege to read the DCE directory entry.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use global directory services, this message may be returned from the DDCS gateway.

Action: Make sure the DCE subsystem is operational and that you have the appropriate privilege to read the directory entry. If the problem persists, inform the database administrator to correct the error in the directory entry. Refer to the *Administration Guide* for the format of these directory objects.

sqlcode: -1293

sqlstate: 08001

SQL1294N

The directory path name being used for global directory access is not specified or not valid.

Cause: In order to use global directory services, a directory path name must be specified either in the *dir_path_name* database manager configuration parameter, or in the DB2DIRPATHNAME environment variable. You either did not specify it, or the name you specified is not valid.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use global directory services, this message may be returned from the DDCS gateway.

Action: Consult your database administrator for the correct name to use, specify it, and try again.

sqlcode: -1294

sqlstate: 08001

SQL1295N

The routing information object name being used for global directory access is not specified or not valid.

Cause: In order to use global directory services to access a remote database with a database protocol that is not native to this client, the name of a routing information object must be specified either in the *route_obj_name* database manager configuration parameter, or in the DB2ROUTE environment variable. You either did not specify it, or the name you specified is not valid.

Note that this message may be returned from an intermediate node involved in your connection. For example, if you are trying to connect to a DRDA server via a DDCS gateway and your client workstation does not use global directory services, this message may be returned from the DDCS gateway.

Action: Consult with your database administrator for the correct object name to use, specify it and try again.

sqlcode: -1295

sqlstate: 08001

SQL1296N

Valid values must be specified for the DIR_PATH_NAME and DIR_OBJ_NAME database manager configuration parameters if the DIR_TYPE parameter has a value other than NONE.

Cause: These three parameters are interrelated. If the DIR_TYPE value is NONE, then the other two are ignored. If the DIR_TYPE value is not NONE, then the other two must both contain valid values. The following rules apply when the DIR_TYPE value is not NONE:

1. The DIR_PATH_NAME and DIR_OBJ_NAME values cannot be NULL (or blanks).
2. If the DIR_TYPE value is DCE, then the DIR_PATH_NAME value must start with either of the special DCE strings enclosed in the following quotes: "/.../" or "/.:".

Action: If you want to change the DIR_TYPE value, make sure the DIR_PATH_NAME and DIR_OBJ_NAME parameters have been specified with the valid values first. If you want to blank out either the DIR_PATH_NAME or the DIR_OBJ_NAME parameter, make sure you set DIR_TYPE to NONE first.

SQL1297N

This command is currently not supported on this platform.

Cause: The function requested using this command is not supported on this platform.

Action: Do not use this command.

SQL1300 - SQL1399**SQL1300N**

Invalid DCE principal name in catalog statement.

Cause: The DCE principal name in the catalog database operation was invalid. DCE principal names are subject to the following conditions:

- If AUTHENTICATION is specified as DCE, a principal name must be included in the catalog statement.
- If AUTHENTICATION is not specified as DCE, a principal name can not be included in the catalog statement.

- The maximum length of the principal name is 1024 bytes.

Action: Ensure that the principal name conforms to the conditions above, and resubmit the catalog command.

SQL1301N

An error occurred when accessing the server's DCE keytab file.

Cause: An error occurred when accessing the server's DCE keytab file. For a keytab file to be valid, the following conditions must be satisfied:

- The server's keytab file exists, has the name keytab.db2, and is in the sqllib/security directory.
- There is only a single entry in the keytab file.

Action: Make sure that DCE is started. Next, check that the keytab file exists, and contains a single entry (with rgy_edit). Retry the operation.

SQL1302N

DCE principal to DB2 authorization id mapping error. Reason code: "<reason-code>".

Cause: An error occurred when mapping a DCE principal to a DB2 authorization id. Refer to the reason code below.

- 1. Missing or invalid DCE user to DB2 authorization id mapping
- 2. Missing or invalid DCE group to DB2 authorization id mapping

Action: The DCE principal must have an ERA mapping to a DB2 authorization id. Add the missing entry to the DCE registry, and retry the operation.

sqlcode: -1302

sqlstate: 08001

SQL1303N

Security daemon could not be restarted.

Cause: An attempt to restart the security daemon has failed after communication between the agents and the security daemon was severed or the security daemon terminated abnormally. All new connections to the database manager will be rejected, as authentication is not possible.

Action: Stop the database manager and start it again. If the db2start command fails, follow the user response for that sqlcode. Check the First Failure Service

SQL1304N •SQL1307N

Log(db2diag.log) to determine what errors have occurred.

sqlcode: -1303

sqlstate: 58004

SQL1304N

The TCP/IP security type SOCKS is not valid.

Cause: The TCP/IP security type SOCKS in the TCP/IP protocol structure of the Catalog Node command is invalid with authentication type DCE.

Action: Make sure you do not use the combination of TCP/IP protocol with security type SOCKS and authentication type DCE.

sqlcode: -1304

sqlstate: 08001

SQL1305N

An internal DCE error occurred.

Cause: DB2 processing failed due to an internal DCE error.

Action: Make sure DCE is started. If the problem persists, contact a service representative for assistance.

sqlcode: -1305

sqlstate: 58004

SQL1306N

An invalid parameter was specified during invocation of the security audit facility. Reason Code: "<reason-code>".

Cause: One of the parameters of the security audit API is incorrect. Reasons:

- 1 An invalid audit option was specified.
- 2 Invalid pointer to Configure/Describe `sqlcaucfg` structure.
- 3 Invalid Configure/Describe parameter token.
- 4 Invalid Configure/Describe parameter value. The value is incorrect or outside the valid range for the parameter.
- 5 Invalid count specification for Configure/Describe parameter.
- 6 Insufficient length allocated for Configure/Describe parameter.
- 7 Invalid pointer to Extract `sqlcauextract` structure.
- 8 Invalid Extract parameter token.

- 9 Invalid Extract parameter value. The value is incorrect or outside the valid range.
- 10 Invalid count specification for Extract parameter.
- 11 Invalid length for Extract parameter.

Action: The system administrator should take specific actions for each of the reasons.

- 1 Provide the right option value for the audit API call by looking at the `sqlutil.h` include file.
- 2 Check to see if a valid pointer has been provided to a Configure/Describe structure.
- 3 The correct parameter should be specified by looking up the audit facility reference section for the `sqlcaucfg` parameter tokens.
- 4 Correct the parameter value by looking up the valid values in the audit facility reference.
- 5 Specify the correct count and allocate/initialize the appropriate length for variable length parameters.
- 6 Correct the length allocated for Configure/Describe parameter based on the error token that is returned in the SQLCA.
- 7 Check to see if a valid pointer has been provided to a Extract structure.
- 8 The correct parameter should be specified by looking up the audit facility reference section for the `sqlcauextract` parameter tokens.
- 9 Correct the parameter value by looking up the valid values in the audit facility reference.
- 10 Specify the correct count and allocate/initialize the appropriate length for variable length parameters.
- 11 Correct the length allocated for Extract parameter based on the error token that is returned in the SQLCA.

SQL1307N

An error occurred during invocation of the security audit facility. Reason Code: "<reason-code>".

Cause: The invocation of the security audit API caused an error to occur. Reasons:

1. Audit is already started.
2. Audit is already stopped.
3. Invalid checksum for audit configuration file.
4. The default or user-provided audit pathname is too long.
5. Could not update the audit configuration file. Either the filesystem is full or the permissions do not allow write.
6. Configuration File not found. Either the file or the directory which contains the file does not exist.

7. The extract file is not found.
8. Invalid format of audit records during extract. The file is corrupted.

Action: The system administrator should take specific actions for each of the reasons.

1. No action required.
2. No action required.
3. Restore the configuration file from backup or issue 'audit reset' command.
4. Choose a different audit pathname which is within the filename length limit.
5. If the file permissions are incorrect, set the permissions to allow write by owner. If the filesystem is full, create free space before proceeding.
6. If the audit configuration file is missing, then restore it from a backup or issue the 'reset' command to initialize the file to defaults. If the directory is missing, restore from a backup or recreate the database manager instance.
7. Verify that file exists in the specified path. If file missing, restore from backup if available.
8. The audit log file is most likely corrupted. If problem persists for other audit log files, notify DB2 service.

SQL1308W

The audit Extract Facility completed Processing. "`<num-records>`" records were extracted.

Cause: The security audit extract facility completed its processing successfully and extracted the specified number of records.

Action: If zero records were extracted, the user should verify that the extract pathname contains extract files and the extract parameters are correct.

SQL1309N

Invalid server principal name.

Cause: The server principal name specified in the database catalog statement does not exist in the DCE registry. Because of this a DCE ticket could not be obtained for the DB2 server.

Action: Make sure that the principal name in the database catalog entry corresponds to the DCE principal being used by the DB2 server. It may be necessary to fully qualify the principal name.

sqlcode: -1309

sqlstate: 08001

SQL1310N

The Database Connection Services directory service failed while attempting to access the Database Connection Services directory.

Cause: The Database Connection Services Directory Service failed because of file errors while trying to access the Database Connection Services directory file.

The function cannot be processed.

Action: Rerun the function after doing one of the following:

- If you are adding an entry to the Database Connection Services directory, ensure that there is sufficient space for the directory file to become larger.
- Ensure that no other concurrently running program is trying to access the file.
- Verify that the directory file has not been damaged. If it is unrecoverable, you must erase it and recreate it or restore it from a backed-up version.

SQL1311N

The Database Connection Services directory cannot be found.

Cause: The directory cannot be found. The directory may have been deleted.

The function cannot be processed.

Action: Use the CATALOG DCS DATABASE command to add an entry to the Database Connection Services directory, or restore the directory from a backed-up version.

SQL1312W

The Database Connection Services directory is empty.

Cause: An attempt was made to read the contents of the Database Connection Services directory, but no entries existed.

Processing continues, but subsequent commands expecting entries to be available cannot be processed.

Action: Use the Catalog DCS Database command to add entries to the directory or restore a backed-up version that contains entries.

SQL1313N •SQL1319N

SQL1313N

The Database Connection Services directory is full.

Cause: The entry cannot be added to the Database Connection Services directory because the directory has already reached its maximum size.

The function cannot be processed.

Action: Delete an entry or entries from the directory before adding any more entries.

SQL1314N

The address of the Database Connection Services directory entry parameter is not valid.

Cause: The application program has used an address for this parameter that is not valid. Either the address points to an unallocated buffer or the buffer is not large enough to contain the required input.

The function cannot be processed.

Action: Ensure that the application program has allocated the required buffer area and resubmit the command.

SQL1315N

The local database name is not valid.

Cause: A local database name was specified that contains characters that are not valid. All characters must be from the database manager base character set.

The function cannot be processed.

Action: Ensure that the characters used in the local database name are from the database manager base character set and resubmit the command.

SQL1316N

No entry was found in the Database Connection Services directory for the specified local database name.

Cause: The Database Connection Services directory service failed because no entry could be found in the Database Connection Services directory that corresponds to the input local database name.

The function cannot be processed.

Action: Ensure that the local database name is correct and resubmit the command.

SQL1317N

The local database name already exists in the Database Connection Services directory.

Cause: The entry could not be added to the directory because an entry for that local database name already exists in the directory.

The function cannot be processed.

Action: Specify a unique local database name or delete the existing entry and add the new entry.

SQL1318N

The length of element "<name>" in the input structure for parameter 1 is not valid.

Cause: The length values in the Database Connection Services directory entry structure should not be less than zero nor greater than the maximum length for the element it represents.

The function cannot be processed.

Action: If an element of the directory entry structure is specified, the associated length value should represent the number of bytes in the element. Otherwise, the length value should be zero. Ensure that all the directory entry structure elements have the required specifications and lengths for the command and resubmit the command.

SQL1319N

The Database Connection Services directory entries have not been collected.

Cause: A request to copy all the directory entries was received, but either a prior request to collect the entries was not received or the prior request to collect the entries failed.

The function cannot be processed.

Action: Issue a request to open the directory and collect the entries. Then resubmit this command.

SQL1320N

The Database Connection Services directory cannot be accessed at this time.

Cause: A request to access the Database Connection Services directory failed. Access to the Database Connection Services directory is dependent on the type of access requested and the current activity in the directory. If the request is for the intention of updating the directory, then the directory must not be active. If the request is to read the directory, then access is allowed if the directory is not being updated.

The function cannot be processed.

Action: Wait for the current activity to complete and resubmit the command.

SQL1321N

The structure ID specified in the directory entry structure is not valid.

Cause: The structure ID received in the directory entry structure does not represent a recognized value.

The function cannot be processed.

Action: Verify the structure ID passed in the directory entry structure is a valid value and resubmit the command.

SQL1325N

The remote database environment does not support the command or one of the command options.

Cause: An attempt has been made to issue a DB2 workstation database specific command or command option against a host database through DDCS or DataJoiner. The following commands generate this error when issued against a DB2 for MVS*, DB2 for OS/400* or SQL/DS* database:

- OPSTAT (Collect Operational Status)
- DARI (Database Application Remote Interface)
- GETAA (Get Administrative Authorizations)
- GETTA (Get Table Authorizations)
- PREREORG (Prepare to Reorganize Table)
- REORG (Call Reorganize Function)
- RQSVPT/ENSVPT/RLBSVPT (Subtransaction Requests)
- RUNSTATS (Run Statistics).
- COMPOUND SQL ATOMIC STATIC (Atomic Compound SQL)

- ACTIVATE DATABASE
- DEACTIVATE DATABASE

As well, the following commands generate this error with incorrect options:

- IMPORT (Import table) The filetype must be IXF, commitcount must be 0, and the first word in the Action String (e.g. "REPLACE into ...") must be INSERT.
- EXPORT (Export table) The filetype must be IXF.

The command cannot be processed.

Action: Do not attempt to issue this command against a host database through DDCS or DataJoiner.

SQL1326N

The file or directory "<name>" cannot be accessed.

Cause: The file or directory "<name>" cannot be accessed because either the file permissions are incorrect, the file path is incorrect, or there is insufficient space in the directory or path.

Action: Verify that any path or filename specified in the command is valid, you have the proper permissions to access the path or filename, and there is sufficient space to contain the file. Correct the problem and resubmit the command. If the problem persists, contact your System Administrator.

SQL1327N

An implicit connection attempt failed. "<database-name>" is not a valid database name.

Cause: An attempt to perform an implicit connection failed. The syntax of the database alias name specified by the DB2DBDFT environment variable is not valid. The database name must contain 1 to 8 bytes and all the characters must be from the database manager base character set.

The command cannot be processed.

Action: Correct the database alias name specified by the DB2DBDFT environment variable and resubmit your command. If using the command line processor, then a "db2 terminate" should be issued prior to resubmitting the command. If you do not want an implicit connection to be performed, remove the DB2DBDFT environment variable.

sqlcode: -1327

sqlstate: 2E000

SQL1328N • SQL1331N

SQL1328N

An implicit connection attempt failed. The database alias name or database name "<name>" was not found in the local database directory.

Cause: An attempt to perform an implicit connection failed. The database name specified by the DB2DBDFT environment variable does not name an existing database. The database could not be found in the database directory.

The command cannot be processed.

Note that a CONNECT RESET request issued within a distributed unit of work will attempt an implicit connect to the default database. This may be the reason for this error.

Action:

- Correct the database alias name specified by the DB2DBDFT environment variable and resubmit the command.
- If the intended action is to remove a connection while operating in a distributed unit of work environment, consider replacing the CONNECT RESET statement with a DISCONNECT or RELEASE statement.
- If using the command line processor, then a "db2 terminate" should be issued prior to resubmitting the command.
- If you do not want an implicit connection to be performed, remove the DB2DBDFT environment variable.

sqlcode: -1328

sqlstate: 42705

SQL1329N

The resolved path specified on the command is too long.

Cause: The resolved path specified on the command exceeds the maximum length supported by the database manager. The resolved path must be no longer than 215 characters in length. During a Create Database, Catalog Database, Open Database Directory for scan, and change database comment commands, the database manager instance name is appended to the end of the specified path.

Action: Check that the fully resolved absolute or relative path name, including the database manager

instance name, does not exceed 215 characters in length. Correct the path and resubmit the command.

SQL1330N

The symbolic destination name "<name>" is not valid.

Cause: The symbolic destination name in the CPIC protocol structure of the Catalog Node command is either not specified or longer than the allowable length. The name must be 1 to 8 bytes in length.

Action: Verify that the symbolic destination name is specified and that it is not longer than 8 bytes in length. Resubmit the command with a valid symbolic destination name.

SQL1331N

The CPIC security type "<type>" is not valid.

Cause: The CPIC security type specified in the CPIC protocol structure of the Catalog Node command is invalid. The security type specifies the security information that will be included when a database client allocates a conversation with a partner LU, as specified by the LU 6.2 architecture. Correct values for security type are:

- SQL_CPIC_SECURITY_NONE
 - No access security information will be included.

Note: This is not supported when using DataJoiner. When DDCS is used, it is only supported when authentication type is DCE.

- SQL_CPIC_SECURITY_SAME
 - A userid will be included together with an indicator specifying that the userid is already verified. This is not supported when authentication type DCS is used with DDCS or DataJoiner, or when authentication type is DCE.
- SQL_CPIC_SECURITY_PROGRAM
 - Both a userid and a password will be included. This is not supported when authentication type CLIENT is used with DDCS or when authentication type is DCE.

Action: Set the security type to one of the above and resubmit the command.

sqlcode: -1331

sqlstate: 08001

SQL1332N

The Host Name "<name>" is not valid.

Cause: The host name in the TCP/IP protocol structure of the Catalog Node command is either not specified or longer than the allowable length. The name must be 1 to 255 characters in length and cannot be all blanks.

Action: Verify that the host name is specified and that it is not longer than 255 characters in length. Resubmit the command with a valid host name.

SQL1333N

The Service Name "<name>" is not valid.

Cause: The service name in the TCP/IP protocol structure of the Catalog Node command is either not specified or longer than the allowable length. The name must be 1 to 14 characters in length and cannot be all blanks.

Action: Verify that the service name is specified and that it is not longer than 14 characters in length. Resubmit the command with a valid service name.

SQL1334N

The database server cannot be used to route a remote request to a second database server in this configuration.

Cause: An attempt was made to route a request through a database server node using an unsupported combination of client and target database server. Either a client or target database prior to release version 2 was used or an attempt was made to route the request from a DRDA client to a DRDA target database. The request must be routed directly from the client to the node on which the target database is running.

Action: Uncatalog the database at the client machine and then catalog the database specifying the node on which the database actually resides. Ensure that the node is also cataloged.

SQL1335N

The application requestor name is not valid

Cause: An application requestor name was specified that contains characters that are not valid. All characters must be from the database manager base character set.

Action: Ensure that the characters used in the application requestor name are from the database manager base character set and resubmit the command.

SQL1336N

The remote host "<hostname>" was not found.

Cause: The system cannot resolve the address of the remote host. Possible causes are:

- An incorrect hostname value was specified when the TCP/IP node was cataloged.
- The correct hostname was specified, but was not defined in any TCP/IP name server accessible to your client node, nor in the client's hosts file.
- The TCP/IP name server where the hostname was defined was not available at the time you tried to connect.
- TCP/IP is not running.

Action: Make sure that TCP/IP is running and that the hostname specified when cataloging the TCP/IP node is a correct name, and that it is defined in an accessible name server or in the local hosts file.

DataJoiner users: verify that the remote host is cataloged correctly in the SYSCAT.SERVERS view.

SQL1337N

The service "<service-name>" was not found.

Cause: The system cannot resolve the port number associated with the service-name. Possible causes are:

- An incorrect service-name value was specified when the TCP/IP node was cataloged.
- The correct service-name was specified, but was not defined in the client's services file.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Make sure that the service-name specified when cataloging the TCP/IP node is a correct name, and that it is defined in the local services file.

SQL1338N • SQL1342N

DataJoiner users must also ensure that the name is defined in the services file at the data source.

SQL1338N

The symbolic destination name "<symbolic-destination-name>" was not found.

Cause: The system cannot find the Side Information associated with the symbolic-destination-name you specified. Possible causes are:

- An incorrect symbolic-destination-name value was specified when the CPIC NODE was cataloged.
- The symbolic destination name and its associated side information have not been defined to the SNA communications subsystem.

Action: Make sure that the symbolic-destination-name specified when cataloging the CPIC node is a correct name, and that it has been defined to the local SNA communication subsystem.

SQL1339N

"<n>" SQL error(s) were detected in the execution of a Not Atomic Compound SQL statement, and have the following identification: "<error1>" "<error2>" "<error3>" "<error4>" "<error5>" "<error6>" "<error7>".

Cause: One or more SQL substatements within a Compound SQL statement resulted in SQL errors (negative return codes).

Action: Examine the error identification information provided. There will be <n> <errorX> tokens filled in, up to a maximum of 7. Each <errorX> represents an SQL statement error. These errors are listed in the order that they were encountered. If the message text has not been formatted, this information can be found in the second and subsequent tokens of the SQLERRMC field (tokens are separated by a one byte hexadecimal value 0xFF).

Each <errorX> is of the format PPPSSSSS where:

PPP PPP represents the position of the statement that caused the error within the Compound SQL block, and is left-justified. For example, if the first statement failed, this field would contain the number one ("1").

SSSSS SQLSTATE of the statement that failed.

More information can be found by examining the SQLCA itself. The third SQLERRD field contains the number of rows affected by the compound SQL statement, the fourth SQLERRD field contains the position of the last statement that succeeded, the 5th SQLERRD field contains the number of rows affected by referential integrity when DB2 Client/Server and SQL/DS databases are accessed, and the 6th SQLERRD field contains the number of statements that failed (returned negative SQLCODES).

sqlcode: +1339

sqlstate: 56091

SQL1340N

The file server "<fileserv>" was not found.

Cause: The system cannot find the specified file server on the network. Possible causes are:

- An incorrect *fileserv* name was specified when the IPX/SPX node was cataloged.
- The correct *fileserv* name was specified, but the file server was not available at the time the connect was tried.

Action: Make sure that the *fileserv* name specified when cataloging the IPX/SPX node is correct, and that the file server is available on the network.

SQL1341N

A workstation name must be specified in the client database manager configuration file.

Cause: A workstation name has not been specified in the client database manager configuration file. A workstation name must be specified when using NetBIOS to communicate with the server.

Action: Specify a workstation name in the client database manager configuration file.

SQL1342N

The File Server name "<name>" is missing or invalid."

Cause: The File Server name specified in the command/API is missing or invalid.

Action: Verify that a File Server name was specified, that the name does not contain invalid characters, and is not longer than 48 characters in length. Resubmit the command/API with a valid File Server name.

SQL1343N

The Object Name "<name>" is missing or invalid.

Cause: The Object Name specified in the command/API is missing or invalid.

Action: Verify that the Object Name was specified, that the name does not contain invalid characters, and is not longer than 48 characters in length. Resubmit the command/API with a valid Object Name.

SQL1350N

The application is not in the correct state to process this request. Reason code="<rc>".

Cause: Corresponding to "<rc>":

- 01** The application is currently processing SQL and cannot process the utility command requested.
- 02** A Backup request is in progress. A warning was received from the initial utility call indicating that further requests are required before Backup can complete.
- 03** A Restore request is in progress. A warning was received from the initial utility call indicating that further requests are required before Restore can complete.
- 04** A Rollforward request is in progress. A warning was received from the initial utility call indicating that further requests are required before Rollforward can complete.
- 05** A Load request is in progress. A warning was received from the initial utility call indicating that further requests are required before Load can complete.
- 07** DataJoiner users: the application cannot process this command after executing SQL statements.

Action: Corresponding to "<rc>":

- 01** Complete the unit of work (using either COMMIT or ROLLBACK) before reissuing this command.
- 02-05** Issue the required call(s) to complete the utility in progress, then reissue this command.

- 07** DataJoiner users: the application must issue the commands after establishing a connection to the database manager but prior to any other SQL statements.

SQL1360N

Current processing cannot be interrupted.

Cause: The user attempted to interrupt a process which is not interruptible.

Action: Do not interrupt the current process.

SQL1361W

Execution time has exceeded timeout value. Do you wish to interrupt it?

Cause: If a command takes longer than a pre-defined timeout period, a dialog box pops up asking if the (Windows client) user wants to interrupt it or not.

Note that this message is applicable in Windows environments only, and will only be seen in a dialog pop up box.

Action: There are three choices: YES - interrupt now; NO - continue, don't prompt me; CANCEL - continue, same timeout.

SQL1370N

An attempt to quiesce instance or database "<name1>" failed because instance or database "<name2>" is already quiesced by user "<username>". Quiesce type: "<type>".

Cause: An attempt was made to quiesce an instance or database which would have caused an overlapping quiesce, such as quiescing an instance while a database is already quiesced by another user.

Quiesce type "<type>" refers to the instance or database already quiesced and is a '1' for an instance and a '2' for a database.

Action: Contact the user who currently has the instance or database quiesced to determine when DB2 will no longer be quiesced, and retry the request at that time.

SQL1371N • SQL1391N

SQL1371N

Instance or database "<name>" is already quiesced by user "<username>". Quiesce type: "<type>".

Cause: An attempt was made to quiesce an instance or database which is already quiesced.

Quiesce type "<type>" refers to the instance or database already quiesced and is a '1' for an instance and a '2' for a database.

Action: Contact the user who currently has the instance or database quiesced to determine when DB2 will no longer be quiesced, and retry the request at that time.

SQL1372N

Cannot perform a quiesce while in a transaction.

Cause: An attempt was made to quiesce a database or instance while the user issuing the quiesce has uncompleted units of work. Quiesce cannot be issued while in this state.

Action: Complete the unit of work (COMMIT or ROLLBACK) and retry the request.

SQL1373N

Cannot QUIESCE RESET instance or database "<name>", because it is not quiesced.

Cause: QUIESCE RESET failed because the instance or database is not quiesced.

Action: Ensure that the quiesce reset is being issued for the correct instance or database and try again.

SQL1374N

Cannot QUIESCE RESET instance or database "<name>", because it has been quiesced by another user "<username>".

Cause: The instance or database is quiesced, but you are not the quiescer.

Action: Ensure that the quiesce reset is being issued for the correct instance or database.

SQL1375N

An invalid parameter was passed to the api. Parameter "<parm-code>" is in error.

Cause: "<parm-code>" indicates the parameter in error:

- 1 scope
- 2 options

The value may be out of range or invalid.

Action: Check the syntax of the api, correct the parameter and try again.

SQL1390C

The environment variable DB2INSTANCE is not defined or is invalid.

Cause: The environment variable DB2INSTANCE is not defined or is not set to a valid instance owner.

Action: Set the DB2INSTANCE environment variable to the name of the instance to use. If you do not know the name of the instance to use or how to set the DB2INSTANCE environment variable to the instance name, refer to the *Administration Guide*.

DataJoiner users: refer to the *IBM DataJoiner Planning, Installation, and Configuration Guide* for DB2INSTANCE information.

Ensure your PATH environment variable contains the sqllib/adm path in the home directory of the instance you want to use (for example, /u/instance/sqllib/adm, where /u/instance is the home directory of the instance owner on a UNIX system).

SQL1391N

The database is already in use by another instance.

Cause: The request failed because the database is in use by another instance of the database manager (a database may only be used by one instance.) This may be caused by attempting to access a database located on a mounted file system accessible to another instance located on another machine.

This can also occur if you have an open connection (via SNA) to a database and the database manager was brought down abnormally.

Action:

- Validate that you are using the correct database and ensure no other instance uses this database.

- If the database manager was brought down abnormally, and you have a command line processor connection to it, perform a db2 terminate to close the offending open connection before attempting to connect again.

sqlcode: -1391

sqlstate: 51023

SQL1392N

Multiple instances of applications using “<prep, bind, import, export>” is not supported.

Cause: Only 1 instance of prep, bind, import, or export can be running at any one time within WINDOWS.

Action: Within WINDOWS, do not attempt to start more than 1 application that uses prep, bind, import, or export.

SQL1393C

The environment variable DB2PATH is not defined or is invalid.

Cause: The environment variable DB2PATH is not defined or is not set to a valid directory path.

Action: Set the DB2PATH environment variable to the directory where the database manager is installed.

SQL1394N

The instance is not defined.

Cause: The new instance can not be set for the application because the instance is not defined.

Action: Ensure that the specified instance exists. Use the db2ilist command to display the list of instances:

```
db2ilist
```

SQL1395N

Unable to switch to another instance because the application is using multiple contexts.

Cause: The request to switch to another instance failed because the application is using multiple contexts.

Action: Ensure that the application is not using multiple contexts before switching to another instance.

SQL1396N

Unable to switch to another instance because the application is connected to a database or attached to an instance.

Cause: Request to switch to another instance failed because the application is connected to a database or attached to an instance.

Action: Ensure that the application is not connected to any database or attached to any instance before switching to another instance.

SQL1397N

The DB2 service failed to logon.

Cause: DB2 service did not start due to a logon failure.

Action: If you are starting the DB2 Administration Server, then use the DB2ADMIN SETID command to set a new logon account. If you are starting a DB2 server on Windows NT, you can set the logon account for a DB2 service by using the Services dialog box from the Control Panel.

SQL1400 - SQL1499

SQL1400N

Authentication is not supported.

Cause: The authentication type supplied is not one of the supported types.

The command can not be processed.

Action: The user should reissue the command with a valid parameter value.

See *API Reference* for a list of supported authentication types.

SQL1401N

Authentication types do not match.

Cause: The user is attempting to connect to a remote database which is cataloged on the local node with a different authentication type from the remote node.

DataJoiner users: this message can also appear when:

- A data source is identified in SYSCAT.SERVER_OPTIONS with SETTING='N' for OPTION='PASSWORD' and the data source is not

SQL1402N • SQL1404N

running in trusted client mode (that is, the data source expects a password)

- The data source is identified in SYSCAT.SERVER_OPTIONS with SETTING='Y' for OPTION='PASSWORD' and the data source is running in trusted client mode (that is, the data source does not expect a password)
- There is no server option specified for OPTION='PASSWORD' in SYSCAT.SERVER_OPTIONS and the system default value for PASSWORD violates the data source password requirement.

Action: The command can not be processed.

The user should recatalog the database alias on the client node with the same authentication type as the remote database. Resubmit the command.

DataJoiner users:

- If the problem is that the data source requires a password but SYSCAT.SERVER_OPTIONS contains SETTING='N' for OPTION='PASSWORD' for that server, alter SYSCAT.SERVER_OPTIONS to reflect the true data source password requirement using the ALTER SERVER OPTION sql statement.
- If the problem is that the data source does not require a password but SYSCAT.SERVER_OPTIONS contains SETTING='Y' for OPTION='PASSWORD' for that server, alter SYSCAT.SERVER_OPTIONS to reflect the true data source password requirement using the ALTER SERVER OPTION sql statement.
- If the server option for OPTION='PASSWORD' is not set in SYSCAT.SERVER_OPTIONS, create an entry using the CREATE SERVER OPTION sql statement to reflect the true data source password requirement.

sqlcode: -1401

sqlstate: 08001

SQL1402N

Unable to authenticate user due to unexpected system error.

Cause: Call your system administrator. On unix-based systems, the file *db2ckpw* may not have the correct permission bits set, or the system may have run out of swap/paging space. On Windows NT, the DB2 security service may not have been started.

The command can not be processed.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: On unix-based systems, have the system administrator ensure the correct access permissions are set for *db2ckpw*, and that there is enough swap/paging space allocated. On Windows NT, have the system administrator verify that the DB2 security service is installed and started.

SQL1403N

The username and/or password supplied is incorrect.

Cause: The username and/or password supplied is incorrect or not a valid username/password combination or the database to which you are attempting to connect to has an authentication type of SERVER and no username and password was supplied on the CONNECT TO statement.

If DDCS is being used, the problem may be that the DCS directory entry for the host connection could not be found.

If a connection is being made from an OS/2 client to a UNIX-based server with authentication server, and the userid and password are being picked up from UPM, then the userid on the server must be defined in lowercase and have an uppercase password.

The command can not be processed.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action: Supply the correct username and password combination.

DataJoiner users: ensure that the entry in SYSCAT.REMOTEUSERS contains the correct username and password for the data source being accessed.

sqlcode: -1403

sqlstate: 08004

SQL1404N

Password expired.

Cause: Your password has expired.

Action: Change your password, then retry the request using the new password.

sqlcode: -1404

sqlstate: 08004

SQL1405N

Unable to communicate with local DB2 authentication server.

Cause: The application failed to authenticate due to an error while communicating to the local DB2 authentication server.

Action: Ensure that the DB2 authentication server is started by entering the following command from an OS/2 window:

```
detach db2upm
```

SQL1415N

The statement was compiled for diagnostic purposes only and has not been executed.

Cause: The statement was processed through parts of the system to collect diagnostic information using service features. The necessary steps to allow further processing of the statement have not been completed.

Action: This error is returned to prevent further processing by the system of statements prepared using service features and is expected.

SQL1419N

Package "<pkgname>" cannot be executed.

Cause: The package "<pkgname>" can not be executed from the current EUC application (application running in an Extended Unix Code codepage) because it was bound on a previous database manager level which lacks EUC support.

Action: To execute the package from the EUC application, explicitly rebind the named package using either the REBIND or the BIND command. Otherwise, execute the package from a non-EUC application.

sqlcode: -1419

sqlstate: 51028

SQL1420N

Too many concatenation operators.

Cause: The database manager has reached an internal limit while evaluating an expression, of long or large object string result type, that contains concatenation operators.

Action: Reduce the number of concatenations in the expression and try again.

sqlcode: -1420

sqlstate: 54001

SQL1421N

MBCS conversion error occurred when converting host variable or sqlvar "<number>" to or from wchar_t format. Reason code "<rc>".

Cause: A C/C++ application with embedded SQL statements was precompiled with the WCHARTYPE CONVERT option. At runtime, the application received an error which occurred during conversion in either wcstombs(), for input host variables, or mbstowcs(), for output host variables. The host variable or sqlvar number indicates which data item experienced the problem. Valid reason codes are:

- 1 the problem occurred with input data
- 2 the problem occurred with output data

Action: If application data is already in MBCS format, re-compile the application with WCHARTYPE NOCONVERT and re-build. If application data is intended to be in wchar_t format, then input data failing in wcstombs() may be corrupt. Correct the data and re-execute the application.

sqlcode: -1421

sqlstate: 22504

SQL1422N

The size of the container is invalid.

Cause: One of the containers to be used in a database managed table space is either too large or too small. A container must be at least extentsize + 1 pages in length. The maximum size of a container is operating system dependent. The most common system limit is 2 gigabytes (524288 4K pages).

Action: Check the diagnostic log for details. Then correct the SQL statement.

sqlcode: -1422

sqlstate: 54039

SQL1423N • SQL1428N

SQL1423N

The query includes a column with a large object data type.

Cause: The query includes a column with a data type of BLOB, CLOB or DBCLOB. In general, such data types cannot be handled from clients available prior to Version 2.1.

The error occurred for a condition that corresponds to warning SQLCODE +238. See this message for details that explain the condition. The client level receiving this message cannot process BLOB data types. It may be able to handle CLOB and DBCLOB data types by using the SUBSTR function or by setting the data type in the SQLDA to one of the character data types available in Version 1 if the LOB column is not larger than the supported length of the character data type.

Action: Change the query to exclude any column that has a data type of BLOB, CLOB or DBCLOB. This is the only possible action if the query includes a column of type BLOB. If the column (say C1) is a CLOB, you could use CAST(C1 AS LONG VARCHAR) to get the first 32700 characters. Similarly for DBCLOB column (DC1) use CAST(DC1 AS LONG VARGRAPHIC) to get the first 16350 characters. If the application code can be changed, code can be added to change the SQLDA to use LONG VARCHAR or LONG VARGRAPHIC for CLOB and DBCLOB.

sqlcode: -1423

sqlstate: 56093

SQL1424N

Too many references to transition variables and transition table columns or the row length for these references is too long. Reason code="<rc>".

Cause: The trigger includes a REFERENCING clause that identifies one or more transition tables and transition variables. The triggered action of the trigger contains references to transition table columns or transition variables with one of the following conditions identified by the reason code:

- 1 references total more than the limit of the number of columns in a table
- 2 sum of the lengths of the references exceeds the maximum length of a row in a table.

Action: Reduce the number of references to transition variables and transition table columns in the trigger

action of the trigger so that the length is reduced or the total number of such references is less than the maximum number of columns in a table.

sqlcode: -1424

sqlstate: 54040

SQL1425N

A password has been supplied without a userid.

Cause: Any command/API that accepts a userid and password will not accept a password without a userid.

Action: Resubmit the command/API and supply a userid if you are also supplying a password.

SQL1426N

A default instance cannot be determined.

Cause: If an explicit 'attach to instance' has not been performed, instance commands try to form an implicit attachment to a default instance. The default instance is determined from the DB2INSTDFLT and DB2INSTANCE environment variables. If neither of these are set, then no implicit attachment can be formed.

Action: Set one of these environment variables to a valid instance name and resubmit the command.

SQL1427N

An instance attachment does not exist.

Cause: The application is not attached to an instance. The attempted command/API cannot be executed unless there is an existing instance attachment.

Action: If the error occurred when detaching from an instance, continue processing. If the error occurred during the execution of any other command, attach to an instance and reissue the failed command.

SQL1428N

The application is already attached to "<nodename1>" while the command issued requires an attachment to "<nodename2>" for successful execution.

Cause: In order to successfully process the command, an attachment to a node other than that which currently exists is required. The application must either: 1) have no attachment when the command is issued, or 2) already be attached to the node required by the command.

Action: Ensure that the application has no attachment before issuing the command or that the attachment that exists is to the correct node.

SQL1429N

A node directory entry cannot be created in which the node name matches the value of the DB2INSTANCE environment variable.

Cause: The CATALOG NODE command or API does not allow an entry whose nodename matches the value of the DB2INSTANCE environment variable.

Action: Choose another node name for the node being cataloged and try again.

SQL1430N

The database name "<database>" cannot be found in the system database directory on node "<nodename>".

Cause: When specific database names are provided to the database monitor, those databases must reside either at the node to which you are currently attached or at the local node.

Action: Make sure the databases listed in the request all reside at the node to which you are attached or at the local node. Reissue the request.

SQL1431N

The relative path "<path>" is not allowed when executing remotely.

Cause: When the application is remote from the server, relative paths are not allowed.

Action: Specify a fully qualified path that is valid at the server and reissue the command.

SQL1432N

A request has been sent to a server using a database protocol which the server does not recognize.

Cause: This error is caused by sending a DB2 request to a server which does not understand the database protocol being used to transmit the request. This situation will occur most frequently when sending a DB2 ATTACH request to a server listed in your node directory which is not a DB2 Version 2 or greater server. This error will also arise if you send an attach request to DB2 for AS/400, DB2 for MVS, or DB2 for VM and VSE servers.

Action: Do not attempt to attach to any of the servers listed above.

SQL1433N

The application is already connected to "<database1>" while the command issued requires a connection to "<database2>" for successful execution.

Cause: In order to successfully process the command, a connection to a database other than that which currently exists is required. The application must either: 1) have no connection when the command is issued, or 2) already be connected to the database required by the command.

Action: Ensure that the application has no connection before issuing the command or that the connection that exists is to the correct database.

SQL1440W

The WITH GRANT OPTION has been ignored on the GRANT (Database Authorities) statement, GRANT (Package Privileges) statement, GRANT (Index Privileges) statement, or when granting CONTROL privilege on a table or view.

Cause: The WITH GRANT OPTION is not applicable when granting database authorities or privileges on packages or indexes. The WITH GRANT OPTION does not apply to CONTROL privilege on tables, views, indexes, or packages.

All valid requested privileges were granted.

Action: When granting database authorities, package privileges or index privileges do not include the WITH GRANT OPTION clause. When granting CONTROL, use a separate grant statement for the CONTROL privilege without specifying the WITH GRANT OPTION clause.

sqlcode: +1440

sqlstate: 01516

SQL1441N

Invalid parameter. Reason code "<code>".

Cause: The following is a list of valid reason codes:

- 1 A NULL was passed in for the context pointer.
- 3 The context pointer has been initialized, but not to a valid context area.
4. Invalid option

SQL1442N • SQL1453N

5 reserved parameter was not NULL

Action: Ensure that the application context pointer has been properly initialized and that any options used are valid and try again.

SQL1442N

The context is not in use or is not in use by the current thread. Reason code "<code>".

Cause: The call failed because:

- 1 The context is not in use by any thread (no attach was done)
- 2 The context is not in use by the current thread.
- 3 The current thread is not using a context.

Action: For a detach call, ensure that the context is the one in use by the current thread, and that a corresponding attach was done.

For a get current context call, ensure that the thread is currently using a context.

SQL1443N

Thread is already attached to a context.

Cause: The user attempted to attach a context to a thread, and the thread is already using a context.

Action: Detach from the previous context before attaching to a new one.

SQL1444N

The application context cannot be destroyed because it is in use.

Cause: The user attempted to destroy an application context while it is still in use. Either there is a thread attached to the context, or the context has a CONNECT or ATTACH associated with it. A CONNECT RESET or DETACH must be done (if a CONNECT or ATTACH has been done), and all threads must detach from the context before it can be destroyed.

Action: Ensure that all calls to attach to a context have a corresponding detach, all CONNECTS have a corresponding CONNECT RESET, and all ATTACHES have a corresponding DETACH.

SQL1445N

Thread or process does not have a context to use.

Cause: A context type of SQL_CTX_MULTI_MANUAL is in effect, but the current thread or process has not been attached to a context.

Action: Make sure the current thread or process is attached to a context before making any database calls.

SQL1450N

Invalid registration information pointer.

Cause: An invalid registration information pointer was passed to the register/deregister DB2 server command/API.

Action: Verify that a valid pointer was passed to the register/ deregister DB2 server command/API.

SQL1451N

Register/deregister DB2 server must be issued from a server node.

Cause: Register/deregister DB2 server was issued from an invalid node.

Action: Reissue the register/deregister DB2 server command/API from a server node.

SQL1452N

An invalid registration location was specified.

Cause: An invalid registration location was passed to the register/deregister DB2 server command/API.

Action: Verify that a valid registration location was passed to the register/deregister DB2 server command/API.

SQL1453N

The entry in the database manager configuration file for file server name is missing or invalid.

Cause: The file server name specified in the configuration command/API or in the database manager configuration file is missing or invalid.

Action: Verify that a file server name was specified, that the name does not contain invalid characters, and is not longer than 48 characters in length. Update the file

server name in the database manager configuration file and resubmit the command/API.

SQL1454N

The entry in the database manager configuration file for object name is missing or invalid.

Cause: The object name specified in the configuration command/API or in the database manager configuration file is missing or invalid.

Action: Verify that an object name was specified, that the name does not contain invalid characters, and is not longer than 48 characters in length. Update the object name in the database manager configuration file and resubmit the command/API.

SQL1455N

The entry in the database manager configuration file for IPX socket number is missing or invalid.

Cause: The IPX socket number specified in the configuration command/API or in the database manager configuration file is missing or invalid.

Action: Verify that an IPX socket number was specified, that the number does not contain invalid characters, and is not longer than 4 characters in length. Update the IPX socket number in the database manager configuration file and resubmit the command/API.

SQL1456N

The object name specified in the database manager configuration file already exists on the NetWare file server.

Cause: A duplicate object name was found when trying to register the DB2 server object name on the NetWare file server.

Action: The object name specified in the database manager configuration file is already in use. Change the object name and then re-register the DB2 server.

SQL1457N

Register/deregister failed to login to the NetWare file server specified because a NetWare directory services connection is already established to that file server.

Cause: A bindery login using NWLoginToFileServer cannot be performed if a NetWare directory services connection is already established to the specified file server.

Action: Sever the directory services connection by logging out and detaching from Directory Services, and then reissue register/deregister.

SQL1458N

IPX/SPX has been configured in the database manager configuration file for direct addressing. It is not necessary to register/deregister the DB2 server at/from a NetWare file server.

Cause: Issuing register/deregister is not necessary since the database manager configuration file has been configured for IPX/SPX direct addressing. ie. Fileserver and objectname have been specified as '*'.

Action: Note that since the DB2 server has been configured for direct addressing only, IPX/SPX clients using fileserver addressing will not be able to connect to this server. For the server to support both types of IPX/SPX client addressing, specify a fileserver and objectname in the database manager configuration file.

SQL1460N

The environment variable "<variable>" required for SOCKS server name resolution is not defined or not valid.

Cause: The SOCKS environment variable SOCKS_NS or SOCKS_SERVER is not defined. SOCKS protocol support requires that both these environment variables be defined.

SOCKS_NS This is the IP address of the domain name server where the SOCKS server is defined.

SOCKS_SERVER This is the hostname of the SOCKS server.

Action: Define the missing environment variable and resubmit the command.

SQL1461N • SQL1470N

SQL1461N

The security option "<security>" is not valid.

Cause: The SECURITY option for a TCP/IP node has a value other than 'SOCKS'. This option is used to enable the TCP/IP node being cataloged to use SOCKS protocol support to traverse a firewall. No value other than 'SOCKS' is permitted.

Action: Verify that SOCKS protocol support is required. If so, re-catalog the node with SECURITY SOCKS. If not, re-catalog the node, but omit the SECURITY option.

SQL1462N

Request is only valid for a syncpoint manager connection.

Cause: A request was attempted which is only valid for a syncpoint manager connection, but the syncpoint manager instance is not connected to.

Action: Connect to the syncpoint manager instance and reissue the request.

SQL1468N

The database manager TCP/IP listener must be configured and running on the server instance "<instance>" (nodenum "<node-num1>") before attempting to CONNECT or ATTACH to node "<node-num2>".

Cause: The SET CLIENT command or api or the environment variable DB2NODE was used to set the node for CONNECT or ATTACH to "<node-num2>". In order to CONNECT or ATTACH to this node, the Database Manager TCP/IP listener must be configured and running on the server instance "<instance>" (node "<node-num1>").

Note: This message may be returned by an implicit CONNECT or ATTACH.

Action: Either:

- Ensure that *svccname* has been specified in the database manager configuration on the instance "<instance>", node "<node-num1>", the DB2COMM environment variable has been set to use TCP/IP, and that TCP/IP listener was successfully started at DB2START time.

or

- Explicitly catalog the node and database.

sqlcode: -1468

sqlstate: 08004

SQL1469N

Instance "<instance-name>" (nodenum "<node-num1>") does not have node "<node-num2>" specified in its db2nodes.cfg file.

Cause: The SET CLIENT command or api or the environment variable DB2NODE was used to set the node for CONNECT or ATTACH to "<node-num2>". Subsequent CONNECT or ATTACH processing was unable to locate this node in the db2nodes.cfg file on the instance "<instance-name>" (node "<node-num1>").

Note: This message may be returned by an implicit CONNECT or ATTACH.

Action: Ensure that the node number specified by the SET CLIENT command or api or the DB2NODE environment variable exists in the db2nodes.cfg file of the intermediate instance "<instance-name>", node "<node-num1>".

sqlcode: -1469

sqlstate: 08004

SQL1470N

Value of DB2NODE environment variable is not valid.

Cause: The DB2NODE environment variable indicates the node the application will attempt to connect to. If DB2NODE is unset or is blank, the application will attempt to connect to the default node. Otherwise, DB2NODE must be set to the node number of one of the nodes defined on the same host as the application.

Action: Set the DB2NODE environment variable to one of the following values:

unset causes the application to connect to the default node.

blank causes the application to connect to the default node.

A number causes the application to connect to the node with that node number. The node must be running on the same host as the application.

sqlcode: -1470

sqlstate: 08001

SQL1471N

Cannot connect to database "<database-name>" on node "<node-number>" because the database on this node is not synchronized with catalog node.

Cause: The end-of-log information on this node does not match the corresponding record on the catalog node. This can be caused by restoring the database on various nodes with backups taken from different times.

Action: If the database is restored without rolling forward on one node, ensure that the database is restored from consistent offline backups on all nodes without rolling forward.

sqlcode: -1471

sqlstate: 08004

SQL1472N

Cannot connect to database "<database-name>" on node "<node-number>" because the difference between the system time on the catalog node and the virtual timestamp on this node is greater than the `max_time_diff` database manager configuration parameter.

Cause: The system time difference for the machines in the configuration (listed in the `db2nodes.cfg` file) is greater than the `max_time_diff` database manager configuration parameter.

Action: Synchronize the system times on all machines, and ensure that the `max_time_diff` parameter is configured to allow for normal communication delays among the database machines.

If the above does not fix the problem, see the *Administration Guide* for possible causes and actions.

sqlcode: -1472

sqlstate: 08004

SQL1473N

Cannot commit the transaction because the time difference between the system time on the local node and the virtual timestamps of node(s) "<node-list>" is greater than the `max_time_diff` database manager configuration parameter. The transaction is rolled back.

Cause: The system time difference for the machines in the configuration (listed in the `db2nodes.cfg` file) is

greater than the `max_time_diff` database manager configuration parameter.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Synchronize the system times on all machines, and ensure that the `max_time_diff` parameter is configured to allow for normal communication delays among the database machines.

sqlcode: -1473

sqlstate: 40504

SQL1474W

The transaction completed successfully, but the time difference between the system time on the local node and the virtual timestamps of node(s) "<node-list>" is greater than the `max_time_diff` database manager configuration parameter.

Cause: The system time difference for the machines in the configuration (listed in the `db2nodes.cfg` file) is greater than the `max_time_diff` database manager configuration parameter.

This warning message is returned to read-only transactions because they are not affected by this condition. However, other transactions would be rolled back. This message is to inform the user about this condition so that action can be taken at the earliest possible time.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Synchronize the system times on all machines, and ensure that the `max_time_diff` parameter is configured to allow for normal communication delays among the database machines.

sqlcode: 1474

sqlstate: 01607

SQL1475W

A system error occurred during CONNECT RESET processing.

Cause: The CONNECT RESET was successful but a system error such as a node failure or a communications error may have occurred.

Action: Check the `db2diag.log` file for details. The database at this node may need to be restarted.

sqlcode: 1475

sqlstate: 01622

SQL1476N • SQL1479W

SQL1476N

The current transaction was rolled back because of error "<sqlcode>".

Cause: A table was being created with the NOT LOGGED INITIALLY option. During the same unit of work, an error occurred. This unit of work is rolled back, and any table that was created in it is dropped.

The "<sqlcode>" reported is the SQLCODE of the original error.

Action: Correct the problem, then run the transaction again.

sqlcode: -1476

sqlstate: 40506

SQL1477N

Table "<table-name>" cannot be accessed.

Cause: An attempt was made to access a table that is not accessible. The table is not accessible because the Rollforward utility found a log record indicating one of the following:

- The table was created with the NOT LOGGED INITIALLY parameter.
- The Load utility was run on the table.

After successful roll-forward recovery, access to this table is not allowed because its integrity cannot be guaranteed.

Action: Drop the table. If this table is required, re-create it.

sqlcode: -1477

sqlstate: 55019

SQL1478W

The database has been started but only one buffer pool has been activated.

Cause: Only one small buffer pool with no extended storage has been activated. This is because of one of the following reasons:

- Not enough memory could be allocated for the total size of the buffer pools and the extended storage specified for this database.

- The buffer pool files in the database directory are missing or corrupt.

Action: Check the db2diag.log file for the correct source of the problem. Possible solutions will be:

- Drop or alter the size of one or more of the buffer pools to allow the database to start properly. If there is extended storage specified for the database, adjust the configuration values of num_estore_segs and estore_seg_sz for less memory consumption.
- Run db2dart on the database and verify the validity of the buffer pool files. If the db2dart reports an error, contact your local service representative.

After making the changes, disconnect from the database and start the database again.

sqlcode: +1478

sqlstate: 01626

SQL1479W

Attempt to fetch before the result set returned the first rowset.

Cause: The requested rowset overlapped the start of the result set and, depending on the fetch orientation specified:

SQL_FETCH_PRIOR

one of the following situations:

- the current position was beyond the first row, and the number of the current row is less than or equal to the rowset size.
- the current position was beyond the end of the result set, and the rowset size was greater than the result set size.

SQL_FETCH_RELATIVE the absolute value of the fetch offset was less than or equal to the current rowset size.

SQL_FETCH_ABSOLUTE the fetch offset was negative, and the absolute value of the fetch offset was greater than the result set size but less than or equal to the current rowset size.

Action: No action needed.

SQL1480N

The discover type specified in the DISCOVER database manager configuration parameter is invalid.

Cause: Valid values for the DISCOVER parameter in the database manager configuration file are: DISABLE, KNOWN, or SEARCH.

Action: Update the DISCOVER database manager configuration parameter with a type of DISABLE, KNOWN, or SEARCH.

SQL1481N

One or more of the communications protocols specified in the DISCOVER_COMM parameter is invalid.

Cause: Valid values for the DISCOVER_COMM parameter in the database manager configuration file are any combination of IPXSPX, NETBIOS, and TCPIP, separated by commas.

Action: Update the DISCOVER_COMM database manager configuration parameter with any combination of IPXSPX, NETBIOS, and TCPIP, separated by commas.

SQL1482W

The BUFFPAGE parameter will only be used if one of the buffer pools is defined with a size of -1.

Cause: This is a warning that the BUFFPAGE database configuration parameter will be ignored if none of the database's buffer pools is defined with a size of -1. -1 indicates that the buffer pool is to use the BUFFPAGE parameter as the number of buffer pool pages.

Action: You can select from the SYSCAT.BUFFERPOOLS to review the buffer pool definitions. If none of the buffer pools are defined with size -1 (NPAGES), then setting the BUFFPAGE parameter will not change the size of the buffer pools for the database.

SQL1490W

Activate database is successful, however, the database has already been activated on one or more nodes.

Cause: Database has already been explicitly started (activated) on one or more nodes.

Action: Refer to the diagnostic log to see which node returns the warning.

SQL1491N

The database "<name>" was not deactivated because the database is still being used.

Cause: The database cannot be deactivated if there are any applications connected to the specified database.

Action: Ensure that all applications have done a CONNECT RESET, then try again.

SQL1492N

The database "<name>" was not deactivated because it was not activated.

Cause: The database cannot be deactivated because the specified database was not active.

Action: No action is required.

SQL1493N

The application is already connected to an active database.

Cause: The ACTIVATE DATABASE and DEACTIVATED DATABASE commands cannot proceed because the application is already connected to a database.

Action: Disconnect from the database then re-submit the command.

SQL1494W

Activate database is successful, however, there is already a connection to the database.

Cause: There is already database connection on one or more nodes.

Action: Refer to the diagnostic log to see which node returns this warning.

SQL1495W • SQL1497W

SQL1495W

Deactivate database is successful, however, there is still a connection to the database.

Cause: There is still database connection to one or more nodes.

Action: Refer to the diagnostic log to see which node returns this warning.

SQL1496W

Deactivate database is successful, but the database was not activated.

Cause: Database was not explicitly started on one or more nodes when deactivate database was executed.

Action: Refer to the diagnostic log to see which node returns this warning.

SQL1497W

Activate/Deactivate database is successful, however, error occurs on some nodes.

Cause: Activate/Deactivate database is successful at least on the catalog node and coordinator node, however, on some other node(s) an error has occurred.

Action: Refer to the diagnostic log to find out what error has occurred on which node, fix the problem if possible and then reissue the activate/deactivate database command.

SQL1500 - SQL1599

SQL1512N

ddcstrc could not write to the specified file.

Cause: *ddcstrc* was not able to write the trace information to the filename that it has been instructed to write to.

Action: Ensure that the filename specified is valid for your file system. If a filename is not specified, ensure that you have the necessary permission to write to the default file *ddcstrc.tmp*.

SQL1513W

ddcstrc has not been turned off.

Cause: Because of an error condition *ddcstrc* has not been turned off. This was done to ensure that the trace information will not be lost before being safely placed in a file.

Action: Correct the *ddcstrc* error condition reported prior to this error and attempt to turn off the trace again.

SQL1520N

Buffersize must be a numeric value greater than or equal to 65536.

Cause: The user specified an invalid buffersize for the *ddcstrc* command.

Action: Ensure that the buffersize used is numeric and greater than or equal to 65536 (64K). Note that the memory to be used will be a multiple of 64K. *ddcstrc* rounds down the buffersize specified to the nearest multiple of 64K.

SQL1525N

An error occurred when starting the DB2 security daemon.

Cause: An unexpected error occurred when starting the DB2 security daemon.

Action: Check the *db2diag.log* file for further information, and then retry the *DB2START* command.

SQL1530W

The specified degree of parallelism will be ignored because the system is not enabled for intra-partition parallelism.

Cause: Either the *DEGREE* bind option was specified with a value greater than 1 or the *SET CURRENT DEGREE* statement was executed with a value greater than 1, but the database manager was not enabled for intra-partition parallelism.

The database manager must be started with the *intra_parallel* configuration parameter set to *ON* in order for the instance to be enabled for intra-partition parallelism.

The statement or command completed successfully, but the degree specification was ignored.

Action: If you want to use intra-partition parallelism restart the database manager with the `intra_parallel` configuration parameter set to ON.

Otherwise use a value of 1 or ANY for the degree specification.

sqlcode: +1530

sqlstate: 01623

SQL1580W

Trailing blanks were truncated while performing conversion from codepage "<source>" to codepage "<target>". The maximum size of the target area was "<max-len>". The source string length was "<source-len>" and its hexadecimal representation was "<string>".

Cause: During the execution of the SQL statement, a code page conversion operation has resulted in a string that is longer than the maximum size of the target object. Processing continued because only blank characters were truncated.

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

sqlcode: 1580

sqlstate: 01004

SQL1590N

LONG VARCHAR and LONG VARGRAPHIC fields are not permitted in TABLESPACES which are built on DEVICES.

Cause: Devices (raw i/o) on HP require i/o to be aligned on 1024 byte boundaries. LONG VARCHAR and LONG VARGRAPHIC fields are handled in 512 byte pieces, and thus can only be used in SYSTEM MANAGED TABLESPACES or in DATABASE MANAGED TABLESPACES with only FILE containers.

Action: Alternatives:

- Choose one of the LOB columns types (BLOB,CLOB,DBCLOB) instead of LONG.
- Use a table space with the correct attributes.

sqlcode: 1590

sqlstate: 56097

SQL1600 - SQL1699

SQL1601N

The Database System Monitor input parameter "<parameter>" is a null pointer.

Cause: The user called one of the Database System Monitor APIs and provided a null pointer instead of a required parameter.

The command can not be processed.

Action: The user should reissue the command with a valid parameter value.

SQL1602N

An object type supplied in the input data structure (sqlma) is not supported.

Cause: An object type specified in the variable data area of the input data structure (sqlma) for Database System Monitor Snapshot API is not supported.

The command can not be processed.

Action: Reissue the command using a valid object type. Refer to the *Programming Guide* and *API Reference* for further information about valid object types.

SQL1603N

The parameter "<parameter>" is not specified in the input data structure (sqlma).

Cause: A required parameter is not specified in the input data structure (sqlma) of the Database System Monitor Snapshot or Estimate Buffer Size API.

The command cannot be processed.

Action: The user should reissue the command specifying a valid parameter value.

SQL1604N

The parameter "<parameter>" is not null terminated.

Cause: A null character is expected at the end of the character string parameter.

The command can not be processed.

Action: Add a null character at the end of the character string parameter and reissue the command.

SQL1605W • SQL1610N

SQL1605W

The database “<db-alias>” is not active.

Cause: The Database System Monitor Reset API was called for a specific database, but the database was not active.

The command completed successfully but no action was taken.

Action: Verify that the database alias is correct and the database has been started.

SQL1606W

The Database System Monitor output buffer is full.

Cause: The Database System Monitor output buffer area is not large enough to accommodate the returned data. Likely causes are intense system activity when the call was made, or in the case of a Database Monitor API call within a user application, the user allocated a buffer too small to contain the returned data.

The command completed successfully and data collected prior to the buffer overflow is returned in the user's buffer.

Action: The user should reissue the command, or in the case of a Database Monitor API call within a user application, allocate a larger buffer or reduce the amount of information requested.

SQL1607N

There is not enough working memory to execute the requested Database System Monitor function.

Cause: The database manager is out of working memory to process the Database System Monitor command.

The command can not be processed.

Action: Reduce the buffer size in the input parameter and reissue the command.

SQL1608W

Two or more database aliases specified on input refer to the same database.

Cause: A Database System Monitor Snapshot or Estimate Buffer Size API call was issued specifying the same request for two or more database aliases in the sqlma input data structure, and they point to the same database.

Database System Monitor executes successfully, but returns only one copy of the information in the output buffer.

Action: No action is required. However, the user should verify that the database aliases specified on input are correct if information on different databases was expected.

SQL1609N

The database “<db-alias>” is a remote database and cannot be monitored.

Cause: A Database System Monitor API call was issued specifying the database alias of a remote database. Database System Monitor does not support monitoring of remote databases.

The command cannot be processed.

Action: The user should verify that the database alias specified on input is correct, and reissue the command with the correct database alias.

SQL1610N

The Database System Monitor input parameter “<parameter>” is invalid.

Cause: The user called one of the Database System Monitor APIs and specified an invalid value for the specified parameter.

The command can not be processed.

Action: The user should reissue the command with a valid parameter value.

SQL1611W

No data was returned by Database System Monitor.

Cause: None of the monitoring information requested by the users was available at the time the Database System Monitor API call was issued. This can occur when a requested database or application is inactive, or when a monitoring group such as the Table group is turned OFF, and Table information is requested.

Action: The command completed successfully, but no data is returned to the user.

The user should make sure that the databases or applications for which monitoring is desired are active at the time the Database System Monitor API is called, or that the desired monitoring groups are active.

SQL1612N

The specified event monitor target path is invalid.

Cause: The target path specified in the CREATE EVENT MONITOR statement is not a valid path name. The command could not be processed.

Action: Resubmit the statement with the correct event monitor target path.

sqlcode: -1612

sqlstate: 428A3

SQL1613N

The specified event monitor option is invalid.

Cause: The option specified in the CREATE EVENT MONITOR statement is not valid. Possible causes include:

- The specified MAXFILES, MAXFILESIZE, or BUFFERSIZE is too low.
- MAXFILESIZE is smaller than BUFFERSIZE.
- MAXFILESIZE NONE was specified with MAXFILES not equal to 1.

The command could not be processed.

Action: Resubmit the statement with the corrected event monitor options.

sqlcode: -1613

sqlstate: 428A4

SQL1614N

An I/O error occurred when activating an event monitor. Reason code = "<reason-code>".

Cause: An I/O error was detected when an event monitor was activated. <reason-code> is one of the following:

- 1 Encountered an unknown event monitor target type.
- 2 The Event monitor target path was not found.
- 3 Access to event monitor target path was denied.
- 4 Event monitor target path is not the name of a pipe.
- 5 No process has opened the event monitor target pipe for reading.
- 6 Encountered an unexpected I/O error.
- 7 The target pipe was not opened in message mode. (This reason code is applicable on OS/2 only.)
- 8 The target pipe buffer is too small. The inbound pipe buffer must be at least 4096 bytes in size. (This reason code is applicable on OS/2 only.)

Action: Where possible, fix the problem described by the reason code, and resubmit the SET EVENT MONITOR statement.

sqlcode: -1614

sqlstate: 58030

SQL1615W

The specified event monitor is already in the requested state.

Cause: An attempt was made to either activate an already active event monitor, or deactivate an already inactive event monitor. The SET EVENT MONITOR statement was ignored.

Action: No user response is required.

sqlcode: +1615

sqlstate: 01598

SQL1616N •SQL1622N

SQL1616N

The limit on the maximum number of active event monitors has already been reached.

Cause: A maximum of 32 event monitors can be active simultaneously per database. This limit has already been reached. The specified event monitor cannot be activated.

Action: If possible, deactivate one of the active event monitors and resubmit the SET EVENT MONITOR statement.

sqlcode: -1616

sqlstate: 54030

SQL1617N

The specified event monitor has already reached its MAXFILES and MAXFILESIZE limit.

Cause: The specified event monitor was created with a limit on the amount of data that would be allowed in the event monitor target directory. This limit has already been reached. The specified event monitor cannot be activated.

Action: If possible, delete some of the event monitor data files from the target directory, and resubmit the SET EVENT MONITOR statement.

sqlcode: -1617

sqlstate: 54031

SQL1618N

The target path of the specified event monitor is in use by another event monitor.

Cause: The specified event monitor was created with the same target path as another event monitor. Since this other event monitor is currently active, the specified event monitor cannot be activated.

Action: If possible, deactivate the event monitor that is using the target path and resubmit the SET EVENT MONITOR statement. Alternatively, recreate the required event monitor, specifying a different target path, and resubmit the SET EVENT MONITOR statement.

sqlcode: -1618

sqlstate: 51026

SQL1619N

Cannot DROP an active event monitor.

Cause: The specified event monitor is currently active, and therefore cannot be dropped.

Action: Deactivate the event monitor and resubmit the DROP EVENT MONITOR statement.

sqlcode: -1619

sqlstate: 55034

SQL1621N

The transaction in which the specified event monitor was created has not yet been committed. The event monitor cannot be activated.

Cause: An event monitor cannot be activated until the transaction in which it was created has been committed.

Action: Commit the transaction in which the event monitor was created and then reissue the SET EVENT MONITOR statement.

sqlcode: -1621

sqlstate: 55033

SQL1622N

The STATE value specified in the SET EVENT MONITOR STATE statement is invalid.

Cause: The STATE value specified in the SET EVENT MONITOR STATE statement is not within the range of valid values, or the value is NULL as a result of an indicator variable.

Valid values for the Event Monitor State include:

0 to deactivate the event monitor

1 to activate the event monitor

The statement cannot be executed.

Action: Correct the event monitor state value and/or any indicator variable and reissue the statement.

sqlcode: -1622

sqlstate: 42815

SQL1623N

The `sqlmonsz` or `sqlmonss` API was called with too many objects specified in the `sqlma` input structure.

Cause: The limit imposed on the number of objects that are permitted in the `sqlma` input structure has been exceeded.

Action: Reduce the number of objects in the `sqlma` parameter and try the call again.

SQL1624N

All databases referenced by the `sqlmonsz` or `sqlmonss` API must be located at the same node.

Cause: The `sqlma` parameter contained references to databases that reside on different nodes.

Action: Modify the `sqlma` parameter so that all database objects reference the same node and then try the call again.

SQL1625W

The monitor is not able to convert from the code page "`<source>`" to the code page "`<target>`". This conversion was attempted for data pertaining to type "`<type>`".

Possible types are as follows:

1. statement text
2. dcs application
3. application
4. table
5. locks
6. table space

Cause: Conversion of data from the source code page to the target code page is not supported. This condition can occur under the following conditions:

1. source and target code page combination is not supported by the database manager.
2. source and target code page combination is not supported by the operating system character conversion utility on the server node.

This situation can occur when the monitor tries to convert data pertaining to a database whose code page is incompatible to that of the monitor application.

Action: Check your operating system documentation for a list of supported conversions and ensure that the

appropriate ones are installed and accessible to the database manager.

If possible ensure that the database being monitored and the monitoring application are in the same codepage.

SQL1626W

Overflow occurred while performing conversion from codepage "`<source>`" to codepage "`<target>`". The size of the target area was "`<max-len>`", the data pertained to type "`<type>`" and the first eight characters are "`<data>`".

Possible types are as follows:

1. statement text
2. dcs application
3. application
4. table
5. locks
6. table space

Cause: The monitor is unable to convert the data due to space constraints. The data is retained in its original form.

Action: If possible ensure that the database being monitored and the monitoring application are in the same codepage.

SQL1650N

The function invoked is no longer supported.

Cause: The user has attempted to call an API that is no longer supported in this version of the database manager.

Action: The function required may be supported by a different API call. Check in the *API Reference* and *Programming Guide* to determine if the function is supported through a different API call.

SQL1651N

The request cannot be executed because the DB2 server version does not support this functionality.

Cause: Some new functionality is not supported against older DB2 server versions.

Action: Execute the request against a DB2 server where the latest DB2 server version has been installed, or upgrade the server to the latest DB2 server version.

SQL1652N • SQL1671N

SQL1652N

File I/O error occurred.

Cause: Error occurred either opening, reading, writing, or closing a file.

Action: Check the db2diag.log for details. Also, check for disk full conditions, file permissions, and operating system errors.

SQL1653N

An invalid profile path was specified.

Cause: A full path to a file where server information should be generated must be specified.

Action: Ensure that the profile path specified is correct and not null.

SQL1654N

An instance path error was encountered.

Cause: The instance path could not be returned.

Action: Check that the DB2INSTANCE path was specified correctly. Check that the complete path length specified is not approaching the maximum supported by the operating system.

SQL1660N

The Generator at the server, which is used by Discovery to gather server information, has failed.

Cause: A server system failure has occurred.

Action: Report the failure to your DB2 server administrator. More details of the failure can be found in the server's db2diag.log file.

SQL1670N

The discover type specified in the DISCOVER database manager configuration parameter indicates discovery is disabled.

Cause: DISCOVER = DISABLE is configured in the database manager configuration file.

Action: If DISCOVER functionality is required, change the discover type to KNOWN or SEARCH.

SQL1671N

The search discovery request failed. Check the db2diag.log for further details.

Cause: The search discovery request failed for one of the following reasons:

1. Initialization failed (sqlCommonInitializationForAPIs)
2. Failed to retrieve the client instance path (sqlinstancepath)
3. Failed to open the output file (sqlofopn)
4. Failed to write to output file (sqlofprt)
5. Failed to get memory (sqlogmbk)
6. Failed to retrieve database manager configuration (sqlfcsys)
7. NetBIOS call failed
8. DB2 internal system function failed (sqlogpid, sqlogmt)

Check the db2diag.log for details.

Action:

1. If initialization fails, try re-booting the machine or re-installing the product.
2. If there was an instance path failure, check the DB2INSTANCE value to ensure it is correctly set.
3. If the open or write to file failed, check that you have access to open and write a file to the <sqllib path>\<instance>\tmp directory on Intel machines, or the <instance path>/sqllib/tmp directory on UNIX machines.
4. If get memory failed, check the available memory on your machine.
5. If retrieving the DBM configuration failed, try re-booting the machine or re-installing the product.
6. If a NetBIOS call failed:
 - If Add Name failed with a return code of 13, check that the nname configured in the DBM configuration was not used to configure another DB2 client/server on the network.
 - Check that NetBIOS was installed and configured properly, and is functioning correctly.
 - Check your network for problems.
7. If a DB2 internal system function failed, check that the operating system functions on your machine are functioning correctly.

DB2 Service can provide details about the error codes returned by the above functions and written to the db2diag.log.

SQL1673N

The address list specified as input to the discover interface is invalid.

Cause: The application program used an invalid input address list pointer. The address list points to nothing.

Action: Ensure that a valid input address list pointer is specified in the application program, and that it is not null.

SQL1674N

The server address specified as input to the discover interface is invalid.

Cause: The application program used an invalid input server address pointer. The server address points to nothing.

Action: Ensure that a valid input server address is specified in the application program, and that it is not null.

SQL1675N

Discovery is only allowed against DB2 administration servers. The communications information provided does not access an administration server.

Cause: A KNOWN discovery request was issued against a DB2 server that is not a DB2 administration server. The communications information specified is not correct.

Action: Verify that DB2ADMINSERVER is set on the DB2 server instance you are accessing. This indicates that the server instance is a DB2 administration server. Retry the KNOWN discovery request with the correct communications information.

SQL1700 - SQL1799**SQL1700N**

The reserved schema name "<name>" was found in the database during database migration.

Cause: The database contains one or more database objects which use the schema name "<name>" that is reserved by the current Database Manager.

The command cannot be processed.

Action: Ensure that all the database objects that use the reserved schema name are dropped and recreate the objects using a different schema name. This correction must be made in the release of Database Manager where the database was originally created. Ensure that no reserved schema names are in use before attempting the migration again. Then, resubmit the database migration command under the current release of Database Manager.

SQL1701N

The database cannot be migrated because the last session was abnormally terminated.

Cause: The last database operation was abnormally terminated (for example, a power failure) under the previous database manager. Database migration cannot be done until the database has been restarted.

The command cannot be processed.

Action: The database must be restarted. You must issue the RESTART DATABASE command using the release of Database Manager where the database was last accessed. Then, resubmit the database migration command under the current release of Database Manager.

SQL1702W

The "<protocol>" connection managers have started successfully.

Action: No action required.

SQL1703W • SQL1750N

SQL1703W

The db2event directory could not be created during database migration.

Cause: The database was migrated successfully but the db2event directory could not be created.

This is a warning only.

Action: The db2event directory must be created if the event monitor is to be used. The db2event directory must be created in the database directory where the migrated database resides. The database directory of the migrated database can be determined by invoking LIST DATABASE DIRECTORY.

SQL1704N

Database migration failed. Reason code "<reason-code>".

Cause: Database migration failed. The reason codes are as follows:

- 1 an invalid schema name was found.
- 2 database is not migrateable. The database could be in one of the following states:
 - backup pending state
 - roll-forward pending state
 - transaction inconsistent state.
- 3 database logs are full.
- 4 insufficient disk space.
- 5 cannot update database configuration file.
- 6 failed to relocate database.
- 7 failed to access the database subdirectory or one of the database files.
- 8 failed to update database container tag.
- 9 table space access is not allowed.

Action: Possible solutions based on the reason code are:

- 1 The reserved schema names are: SYSIBM, SYSCAT, SYSSTAT, and SYSFUN. Ensure that all the database objects that use one or more of these schema names are dropped and recreate the objects using a different schema name. This correction must be made in the release of database manager in use prior to the current release. Resubmit the database migration command under the current release.

- 2 Correct the database state by going back to release of database manager in use prior to the current release and perform any necessary corrective action to the database. Resubmit the database migration command under the current release.
- 3 Increase the database configuration parameters *logfilesiz* or *logprimary* to a larger value. Resubmit the database migration command.
- 4 Ensure that there is sufficient disk space and resubmit the database migration command.
- 5 There was a problem in updating the database configuration file. Ensure that the database configuration file is not being held exclusively by any users and is updateable. Resubmit the database migration command. If the problem persists, inform your IBM service representatives.
- 6 Restore the database from the database backup.
- 7 Restore the database from the database backup.
- 8 Resubmit the database migration command. If the problem persists, contact your IBM service representative.
- 9 Correct the table space by going back to the release of the database manager in use prior to the current release. Refer to message SQL0290N for the suggested actions to take to correct the table space.

SQL1705W

Unable to update a database directory entry to the current release level.

Cause: One or more database aliases could not be updated in the database directory for a database which has just been migrated from a previous release.

Action: Uncatalog the database alias(es) for the migrated database and re-catalog the database alias using the same information.

SQL1750N

Foreign keys cannot reference a parent key table "<table-name>" that was created with the NOT LOGGED INITIALLY clause.

Cause: A table that was created with the NOT LOGGED INITIALLY clause cannot be referenced by a foreign key.

Action: Remove the foreign key reference to "<table-name>" in the ALTER or CREATE TABLE statement.

sqlcode: -1750

sqlstate: 429A0

SQL1751N

The resulting nodegroup would not contain any nodes that can be used in a partition map.

Cause: A nodegroup must contain at least one node that can be used in a partition map. If a node is added to a nodegroup WITHOUT TABLESPACES, it cannot be included in the partition map because there are no containers for the table spaces defined on the nodegroup. If a node is added LIKE another node and the other node does not have containers for all table spaces on the nodegroup then neither node can be included in the partition map.

Action: Do not drop all the nodes in the nodegroup without adding at least one node. If tablespaces are already defined on the nodegroup but there are no tables, ensure that at least one node has containers for all the table spaces.

sqlcode: -1751

sqlstate: 428C0

SQL1752N

The table space cannot be created in the nodegroup "<ngname>".

Cause: The nodegroup IBMTEMPGROUP can be specified if and only if the table space is a temporary table space.

Action: For temporary table space, specify nodegroup IBMTEMPGROUP. For other table space types, specify a nodegroup other than IBMTEMPGROUP.

sqlcode: -1752

sqlstate: 429A1

SQL1753N

Node "<node-number>" does not have containers for all the temporary table spaces defined in the nodegroup IBMTEMPGROUP.

Cause: A node must have containers defined for all the temporary table spaces defined in the nodegroup IBMTEMPGROUP for this database before it can be included in a nodegroup.

Action: Issue the ALTER TABLESPACE statement to

add containers on every node for every temporary table space in the database.

sqlcode: -1753

sqlstate: 57052

SQL1754N

The index table space or long table space is not in the same nodegroup as the primary table space.

Cause: All the table spaces specified in the CREATE TABLE statement must belong to the same nodegroup.

Action: Make sure all the table spaces specified in the CREATE TABLE statement belong to the same nodegroup.

sqlcode: -1754

sqlstate: 42838

SQL1755N

Node "<node-number>" does not have containers for all the table spaces defined in the nodegroup "<ngname>".

Cause: A node must have containers defined for all the table spaces defined in a nodegroup before that node can be included in a redistribution operation of a nodegroup.

Action: Issue the ALTER TABLESPACE statement to add containers on the node for all the table spaces defined in the nodegroup.

SQL1756N

More than one clause specifies containers without the ON NODES clause.

Cause: For the CREATE TABLESPACE, the USING clause without the ON NODES clause can only be specified once.

For the ALTER TABLESPACE, the ADD clause without the ON NODES clause can only be specified once.

The statement was not processed.

Action: Correct the statement and reissue it.

sqlcode: -1756

sqlstate: 428B1

SQL1757N •SQL1761N

SQL1757N

A USING clause without an ON NODES clause is missing.

Cause: In CREATE TABLESPACE statement, every USING clause specifies the ON NODES clause. However not all the nodes in the nodegroup are included, and therefore not all nodes in the nodegroup have containers.

The statement is not processed.

Action: Ensure that the USING clause without the ON NODES clause is specified or that each node in the nodegroup is included once in an ON NODES clause.

sqlcode: -1757

sqlstate: 428B1

SQL1758W

The containers not designated for specific nodes are not used by the table space on any node.

Cause: The ALTER TABLESPACE and CREATE TABLESPACE statement includes container specification for all the nodes in the nodegroup. The specification of the containers that is not followed by an ON NODES clause is redundant and has been ignored.

The statement has been processed.

Action: If the containers are needed on some of the nodes, issue an ALTER TABLESPACE statement to add the necessary containers.

sqlcode: -1758

sqlstate: 01589

SQL1759W

Redistribute nodegroup is required to change data partitioning for objects in nodegroup “<nodegroup-name>” to include some added nodes or exclude some dropped nodes.

Cause: This warning indicates that a change being made using the ALTER NODEGROUP or ALTER TABLESPACE statements has not caused the partitioning map for the nodegroup to be changed. The partitioning map for a nodegroup is only changed immediately by these statements if there are no tables defined using any table space defined in the nodegroup or the node being dropped is not in the partitioning map.

This warning is issued in the following cases:

- One or more nodes are added using ALTER NODEGROUP ADD NODE
- One or more nodes are dropped using ALTER NODEGROUP DROP NODE
- Containers are added for table space and no further containers are required for a node to be used.

For all of these cases, a table is already defined using a table space in the nodegroup.

Action: If you want the node included or excluded for data partitioning then issue the REDISTRIBUTE NODEGROUP command or API. Another alternative is to drop all tables that use table spaces in the nodegroup.

sqlcode: +1759

sqlstate: 01618

SQL1760N

The CREATE statement for stored procedure “<procedure-name>” must have a valid LANGUAGE clause, EXTERNAL clause and PARAMETER STYLE clause.

Cause: A required clause is missing in the CREATE for procedure “<procedure-name>”. LANGUAGE, EXTERNAL and PARAMETER STYLE must be specified.

Action: Add the missing clause, then try again.

sqlcode: -1760

sqlstate: 42601

SQL1761N

The nodegroup “<ngname>” is not defined for the buffer pool “<bpname>”.

Cause: The nodegroup for the table space has not been defined for the buffer pool. The table space cannot be created or altered to use this combination of nodegroup and buffer pool.

The statement cannot be processed.

Action: The possible actions are:

- specify a buffer pool that has defined the nodegroup for the table space
- alter the buffer pool to add the nodegroup of the table space
- If CREATE TABLESPACE, specify a nodegroup that is defined for the buffer pool.

sqlcode: -1761

sqlstate: 42735

SQL1800 - SQL1899

SQL1800N

An invalid pointer to structure sqle_request_info was passed to the catalog admin command/api.

Cause: The pointer to structure sqle_request_info passed as a parameter to the catalog admin command/api was invalid. For Client Configuration Assistance request this pointer must not be NULL.

Action: Specify a valid pointer to sqle_request_info and re-submit the command.

SQL1801N

Invalid request type.

Cause: The specified request type is not supported for this command.

Action: Ensure that the request type is one of the following supported request types:

1. SQLE_CCA_REQUEST - CCA catalog node request for catalog and open scan command
2. SQLE_DAS_REQUEST - DAS catalog node request for catalog and open scan command
3. SQLE_CND_REQUEST - Open scan command for CCA and DAS catalog entries

SQL1802N

No entry belongs to the request type.

Cause: There is no entry in the node directory that is catalogued by the given request type.

Action: Catalog an entry with the same request type and re-submit the command.

SQL1820N

Action on the LOB value failed. Reason code = "<reason-code>".

Cause: The possible reasons codes are:

1. Not enough buffer space to store the LOB value.
2. The remote data source does not support the current action on LOB datatype.
3. Some internal programming limitation exceeded.

Action: Reduce the size of the LOB or replace the function which is being applied on the LOB datatype. As a last resort, remove the LOB datatype from the statement.

sqlcode: -1820

sqlstate: 560A0

SQL1821W

The LOB value retrieved may have changed.

Cause: The LOB value was evaluated on a deferred retrieval basis. The LOB value may have changed between the time it was first accessed and when it was actually retrieved.

Action: Set the "deferred_lob_retrieval" to "N" in SYSSERVEROPTIONS, resubmit your query, or ignore the warning.

sqlcode: +1821

sqlstate: 01621

SQL1822N

Unexpected error code "<error code>" received from data source "<data source name>". Associated text and tokens are "<tokens>".

Cause: While referencing a data source, DataJoiner received an unexpected error code from the data source that does not map to a DB2 equivalent.

Action: Identify and correct the root cause of the problem by locating the appropriate message text and corrective action for the specified error at the data source.

SQL1823N

No data type mapping exists for data type "<data type name>" from server "<server name>".

Cause: An attempt was made to create a nickname for an object. One or more columns of that object are of a type currently unknown to DataJoiner. The name of (one of) the unknown type(s) is listed in the message.

Action: Create a mapping for the specified type name on the specified server using the CREATE TYPE MAPPING statement.

sqlcode: -1823

sqlstate: 428C5

SQL1824W • SQL1828N

SQL1824W

Some base tables in the operands of this UNION ALL may be the same table.

Cause: A nickname can refer to a remote base table, a remote view, a remote alias/synonym, or a remote nickname. If two operands of a UNION ALL view refer to different nicknames, they may potentially be pointing to the same table (if not both of them are known to be remote base tables). This message is issued to warn the user that potentially one remote base table can get updated/deleted twice via updates/deletes through two operands.

Action: Verify if all operands point to different remote tables. If two operands point to the same remote base table, consider issuing a rollback to reverse the update/delete operation.

sqlcode: +1824

sqlstate: 01620

SQL1825N

This SQL statement cannot be handled in DataJoiner.

Cause: Due to some limitation, the current SQL statement cannot be handled in DataJoiner. Possible limitations include:

- A cursor update/delete statement involves a refetch of a column into DataJoiner that is not being fetched in the cursor select statement.
- Some internal programming limitation is exceeded.

Action: Based on the cause:

- If this is the cursor update/delete statement that involves refetch of a column not being fetched in the cursor select statement, modify the cursor select statement so that the needed column is fetched.
- If some internal programming limitation is exceeded, try to simplify or rewrite the part of the statement that seems complex, e.g. expression.

sqlcode: -1825

sqlstate: 429A9

SQL1826N

An invalid value "<value>" was specified for column "<column-name>" in a system catalog object "<object-name>".

Cause: An invalid value "<value>" was specified for a column "<column-name>" in a system catalog object "<object-name>".

The statement cannot be processed.

Action: Refer to the *IBM DataJoiner Application Programming and SQL Reference Supplement* for valid values for the specified column in the specified system catalog object. Correct the statement and reissue it.

sqlcode: -1826

sqlstate: 23521

SQL1827N

No user mapping is defined from local authorization ID "<auth-ID>" to server "<server-name>".

Cause: An attempt was made to drop or alter a user mapping that is not defined.

Action: If it is an ALTER USER MAPPING statement, first create a user mapping using the CREATE USER MAPPING statement. Then, alter the user mapping. If it is a DROP USER MAPPING statement, no extra action is needed because the user mapping does not exist.

sqlcode: -1827

sqlstate: 42704

SQL1828N

No server option "<option-name>" is defined for remote server "<server-name>" or for a group of remote servers: server type "<server-type>", version "<server-version>", and protocol "<server-protocol>".

Cause: An attempt was made to drop or alter a server option that is not defined.

Action: If it is an ALTER SERVER OPTION statement, first create a server option using the CREATE SERVER OPTION statement. Then, alter the server option. If it is a DROP SERVER OPTION statement, no extra action is needed because the server option for the servers does not exist.

sqlcode: -1828

sqlstate: 42704

SQL1900 - SQL1999**SQL1900N****The command completed successfully.**

Cause: The command line utility successfully completed the command.

Action: No action is required.

SQL1901N**The syntax of the command is not correct.**

Cause: The command line utility could not process the command.

Action: Correct and resubmit the command.

SQL2000 - SQL2099**SQL2000N****The drive specified in the utility command is not a valid diskette drive or fixed disk.**

Cause: The input or output drive specified in the utility command does not exist.

The utility stops processing.

Action: Resubmit the utility command with the correct drive specifier.

SQL2001N**The utility was interrupted. The output data may be incomplete.**

Cause: The user may have pressed the interrupt key sequence, or had called the utility with a terminate caller action.

This message can also be returned by DB2 Extended Enterprise Edition during a backup or restore operation on a database node when the database catalog node is down.

The utility stops processing.

Action: Restart the application or reissue the command, if needed. The output data from the inter-

rupted command may be incomplete, and should not be used.

SQL2002N**The specified database utility command is not valid for remote databases. The database specified in the command must reside on your local workstation.**

Cause: The database utility command is only valid for local databases.

The utility stops processing.

Action: Run the utility locally.

SQL2003C**A system error occurred.**

Cause: An operating system error occurred. The return code can be found in the SQLERRD[0] field of the SQLCA.

The utility stops processing.

Action: Look at the error return code in the SQLERRD[0] field of the SQLCA. Correct the error, if possible, and resubmit the command.

SQL2004N**An SQL error "<sqlcode>" occurred during processing.**

Cause: The utility was using an SQL statement when an error occurred.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL2005C**An I/O error occurred during a read operation. The data may be incomplete.**

Cause: Incomplete data was read during an I/O operation.

The utility stops processing.

Action: Determine if the I/O error can be corrected and resubmit the command.

SQL2006C

**An I/O error occurred during a write operation.
The data may be incomplete.**

Cause: Incomplete data was written during an I/O operation.

The utility stops processing.

Action: Determine if the I/O error can be corrected and resubmit the command.

SQL2008N

**The callerac parameter is not within valid range
or the requested action is out of sequence.**

Cause: Either the *callerac* parameter value is not one of the acceptable values or the requested action is out of sequence.

The command cannot be processed.

Action: Each utility has its own list of valid *callerac* values. Check the *API Reference* for the valid values for the *callerac* for the utility in use. Resubmit the command with a valid *callerac* parameter.

SQL2009C

**There is not enough memory available to run the
utility.**

Cause: More memory is needed to run the specified utility.

The command cannot be processed.

Action: Possible actions include:

- Verify that your system has sufficient real and virtual memory.
- Remove background processes.
- Increase the DBHEAP database configuration parameter.

SQL2010N

**The utility encountered an error "<error>" while
connecting to the database.**

Cause: The utility could not connect to the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2011N

**The utility encountered an error "<error>" while
disconnecting from the database.**

Cause: The utility could not disconnect from the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2012N

Interrupt handling could not be enabled.

Cause: The utility could not enable interrupt handling. The actual return code can be found in the SQLERRD[0] field of the SQLCA.

The utility stops processing.

Action: Look at the error return code in the SQLERRD[0] field of the SQLCA. Correct the error, if possible, and resubmit the command.

SQL2013N

**The utility could not access the database direc-
tory. Error "<error>" was returned.**

Cause: An error occurred while the utility was accessing the database directory.

The utility stops processing.

Action: If the path in the *database* parameter is not the database directory path, resubmit the command with the correct path. Otherwise, look at the error number in the message for more information. Make changes and resubmit the command.

SQL2014N

A database environment error occurred.

Cause: The utility received an error from a database environment command. The database manager configuration file and the database configuration file may contain incompatible values.

The utility stops processing.

Action: Check the database manager configuration file and the database configuration file for inconsistent values. Resubmit the command.

SQL2015N

The database parameter is not valid. The database name is too long, it was not specified, or the address of the name is not valid.

Cause: The database name is required. It must contain 1 to 8 characters and the characters must be chosen from the database manager base character set. The name must be located at a valid address for the application.

The utility stops processing.

Action: Resubmit the command with a valid database name.

SQL2016C

The PATH command does not contain a path to "<program-name>".

Cause: The utility could not find the required program using the operating system Select Path.

The utility stops processing.

Action: Update the PATH command to include the path to the indicated program name.

SQL2017N

Too many sessions are already started or OS/2 Start Session did not complete successfully.

Cause: The BACKUP or RESTORE utility could not start the new session because:

- The maximum number of sessions is already started.
- The OS/2 Start Session program returned an error.

The utility stops processing.

Action: Wait until some of the current sessions stop processing and resubmit the command. Or, see the SQLERRD[0] field in the SQLCA for more information and resubmit the command.

SQL2018N

The utility encountered an error "<error>" while attempting to verify the user's authorization ID or database authorizations.

Cause: The user attempted to execute a utility and one of the following has occurred:

- The user authorization ID is not valid.
- An error occurred attempting to access the user's authorizations for the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2019N

An error occurred while binding the utilities to the database.

Cause: Because the current level of the utility being executed was not bound to the database, the system attempted to bind all utilities to the database and this binding process failed. Possible causes for the error include:

- The system may have run out of disk space.
- A system resource problem such as too many files opened.
- A missing or invalid list of utility programs to be bound (db2ubind.lst).
- A missing or invalid bind file for one of the utilities (db2uxxxx.bnd).
- The user does not have the required authorization for binding utilities. The required privileges are:
 - BIND privilege for the utility programs
 - SELECT privilege for the system catalogs.

For the RESTORE utility, the database is restored, but at least one utility is not bound to the database. The other utilities stop processing.

Action: Complete all activities that may be competing for system resources and resubmit the utility command. If the error continues, perform one of the following actions:

- Have a user with SYSADM or DBADM authority retry the command.
- Reinstall the database manager or reapply any recent updates or do both.
- Bind the utility programs (db2uxxxx.bnd files) individually to the database (with no format option) to isolate the problem and, possibly enable some utilities to operate successfully.

SQL2020N

The utility is not bound to the database correctly.

Cause: All the utilities were rebound to the database because the utility was not bound to the database or the package of the utility that was bound to the database was not compatible with the installed version of the database manager, but there is still a timestamp conflict between the installed version of the database manager and the package so the utility and bind file are not compatible.

The utility stops processing.

Action: Reinstall the database manager or reapply any recent updates or do both. Resubmit the utility command.

SQL2021N

The correct diskette is not in the drive.

Cause: The diskette to be used for Backup Database or for Restore Database is not in the drive or is not valid.

The command cannot be processed.

Action: Verify that the correct diskette is in the drive or insert a new diskette.

SQL2023N

The utility encountered an I/O error "<code>" while accessing the log control file.

Cause: The read or write operation against the log control file failed.

The utility stops processing.

Action: Record the error return code value. Determine whether the I/O error can be corrected.

SQL2024N

The utility encountered an I/O error "<code>" while accessing the .BRG file.

Cause: An I/O error occurred while accessing the specified file.

The .BRG file is used to determine whether a Restore operation has terminated abnormally. The .BRG file resides in the local database directory of the database in question and consists of a filename equivalent to the database token and filetype of .BRG.

The utility stops processing.

Action: Record the error return code. Determine whether the I/O error can be corrected.

SQL2025N

An I/O error "<code>" occurred on media "<dir/devices>".

Cause: An I/O error occurred while accessing a file on the specified media.

The utility stops processing.

Action: Record the error return code. Determine whether the I/O error can be corrected.

SQL2026N

An error "<sqlcode>" occurred while trying to internally disconnect from the database.

Cause: The internal disconnect command failed. The SQLCODE is returned in the message.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL2027N

An error "<sqlcode>" occurred while trying to internally connect to the database.

Cause: The internal connection failed. The SQLCODE is returned in the message. The database manager configuration file and the database configuration file may contain incompatible values.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command. Check that the database manager configuration file values and the backup image's database configuration file values are compatible.

SQL2028N

Error "<sqlcode>" occurred while installing the interrupt handler.

Cause: The utility could not enable the interrupt handler. The SQLCODE is returned in the message.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL2029N

An error "<error>" occurred while "<command-file-name>" was processing.

Cause: An error was returned from either the specified command file, or from the operating system.

Action: The user has either requested a "Backup changes only" of a database enabled for ROLLFORWARD recovery, or has requested a "Backup changes only" while requesting the use of the user exit.

SQL2030N

The "<name>" drive is full. At least "<number>" free bytes are needed on this drive.

Cause: The specified drive does not have enough space for creating an internal subdirectory and information file.

The utility stops processing.

Action: Free the indicated space on the specified drive and resubmit the command.

SQL2031W

Warning! Please mount the target or source media on device "<device>".

Cause: A database utility process either writes data to or reads data from the media on the specified device. The utility returns so that the user may mount the correct media for the operation.

The utility waits for a response to continue.

Action: Mount the media and return to the utility with the *callerac* parameter indicating if processing continues or ends.

SQL2032N

The "<parameter>" parameter is not valid.

Cause: The parameter is incorrectly specified. Either the value is out of range or is incorrect.

Action: Resubmit the command with a correct value for the parameter.

SQL2033N

The AD SM error "<error>" occurred.

Cause: During the processing of a database utility, AD SM was called and encountered an error.

Action: Consult the AD SM documentation for a description of the error, take corrective actions and resubmit the command.

SQL2034N

The address of the "<parm>" parameter is not valid.

Cause: The application program used an address that is not valid for this parameter. Either the address points to an unallocated buffer or the character string in the buffer does not have a null terminator.

Action: Ensure that a valid address is used in the application program and the input string is null terminated.

SQL2035N

The warning condition "<warn>" was encountered while executing the utility in non-interrupt mode.

Cause: The calling application invoked the utility with *no interrupt* mode. During the operation a warning condition was encountered.

Action: Resubmit the operation without specifying the *no interrupt* condition in the *callerac* parameter or take actions to prevent the warning and resubmit the operation.

SQL2036N

The path for the file or device "<path/device>" is not valid.

Cause: The application calling the utility has supplied a source or target path that is not valid. The path or device specified may not exist or is incorrectly specified.

Action: Reissue the utility command with a path that represents a correct path or device.

SQL2037N

ADSM could not be loaded.

Cause: A call to a database utility specified ADSM as the target or source of the backup. An attempt was made to load the ADSM client. Either the ADSM client is not available on the system or an error was encountered in the load procedure.

Action: Ensure that the system has ADSM available. Resubmit the command after ADSM is made available, or resubmit the command without utilizing ADSM.

SQL2038N

A database system error "<errcode>" occurred during processing.

Cause: A database system error was encountered during the processing of one of the utilities.

Action: Examine the error code in the message for more information. Take corrective action and resubmit the command.

SQL2039N

The application calling the utility has terminated.

Cause: The application calling the utility has terminated. The application side of the utility is in the same process as the calling application and terminates with the application. The agent side of the utility terminates as a result.

Action: Reissue the command after determining why the application terminated.

SQL2040N

The database alias parameter "<dbalias>" is not valid or not specified.

Cause: The application calling the Backup or Restore utility has supplied a database alias parameter that is not valid. The alias must be 1 to 8 bytes and the characters must be chosen from the database manager base character set.

Action: Reissue the Backup or Restore command with a valid database alias.

SQL2041N

The buffer size parameter specified is not valid. The buffer size must be specified as 0 or be between 16 and 16384 inclusive.

Cause: The application calling the utility has supplied a buffer size parameter that is not valid. The buffer size is used to determine the internal buffer size. The value is the number of 4K pages that are obtained for this buffer. The value must be specified as 0 or be between 16 and 16384 inclusive.

When running the backup or restore utility, if 0 is specified, the default buffer size defined in the database manager configuration is used.

If the target media is a diskette, the buffer size must be smaller than the diskette size.

SQL2042W

Warning! I/O error "<error>" accessing device "<device>". Additional information (if available): "<additional_information>". Please ensure media is mounted and positioned correctly.

Cause: The application calling the utility has encountered an I/O error while trying to read or write to the tape device. The utility returns so that the user may correctly mount and position the tape.

The message may contain additional information to help diagnose the problem.

The utility waits for a response to continue.

Action: Correctly mount and position the tape and return to the utility indicating if processing continues or ends.

The error, device and the additional information (if present) can be used to diagnose and correct the problem.

SQL2043N

Unable to start a child process or thread.

Cause: Unable to start up the child processes or threads required during the processing of a database utility. On UNIX-based systems, this may mean that the maxuproc value is too low. On OS/2-based systems, this may mean that the THREADS CONFIG.SYS value is too low. The problem may also be that there was insufficient memory to create the new process or thread. The utility stops processing.

Action: Ensure the system limit for number of processes or threads has not been reached (either increase the limit or reduce the number of processes or threads already running). Ensure that there is sufficient memory for the new process or thread. Resubmit the utility command.

SQL2044N

An error occurred while accessing a message queue. Reason code: "<reason-code>"

Cause: An unexpected error or bad message was received on one of the message queues during the processing of a database utility. The following is a list of reason codes:

- 1 Unable to create a message queue. The number of message queues allowed may have been exceeded.
- 2 An error was encountered while reading from a message queue.
- 3 An error was encountered while writing to a message queue.
- 4 An invalid message was received from a message queue.
- 5 An error was encountered while opening a message queue.
- 6 An error was encountered while closing a message queue.
- 7 An error was encountered while querying a message queue.
- 8 An error was encountered while deleting a message queue.

The utility stops processing.

Action: Ensure the number of message queues allowed is not reached. Reduce the number of message queues in use if necessary and resubmit the utility command.

SQL2045W

Warning! Error "<error>" occurred while writing to media "<media>".

Cause: A database utility process encountered error "<error>" returned by the operating system while writing to the media "<media>". The utility returns so that the user may attempt to fix the problem or cancel the operation.

The utility waits for a response to continue.

Action: Consult the problem determination documentation for your operating system and correct the "<error>" condition. Return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL2048N

An error occurred while accessing object "<object>". Reason code: "<reason-code>".

Cause: An error occurred while accessing an object during the processing of a database utility. The following is a list of reason codes:

- 1 An invalid object type is encountered.
- 2 A lock object operation failed. The lock wait may have reached the lock timeout limit specified in the database configuration.
- 3 An unlock object operation failed during the processing of a database utility.
- 4 Access to an object failed.
- 5 An object in the database is corrupted.
- 6 The object being accessed is a table space and either the table space is in such a state that the operation is not allowed or one or more containers of the table space is not available. (LIST TABLESPACES will list the current table space state.)
- 7 A delete object operation failed.
- 8 Trying to load into a table that is not defined on this partition.

The utility stops processing.

Action: If a lock object operation failed, ensure the lock timeout limit in the database configuration is adequate and resubmit the utility command. You may also consider using the QUIESCE command to bring the database to a quiesced state to ensure access.

If the error was encountered during backup, take corrective action to recover the database and resubmit the utility command.

If the error was encountered during restore or load recovery, ensure the backup or copy image is correct and resubmit the utility command.

If the object is a table space and the error was encountered during a restore, the set table space container api may be used to modify the table space before resubmitting the utility command.

SQL2054N

The backup or copy image is corrupted.

Cause: The backup or copy image in use is corrupted. The utility stops processing.

Action: Discard the image as it is not a valid image. Resubmit the utility command with a valid image.

SQL2055N

Unable to access memory from memory set “<memory-heap>”.

Cause: A database utility was unable to access memory during processing.

The utility stops processing.

Action: Stop the database manager, then restart it and resubmit the utility command.

SQL2056N

An invalid media type was encountered on media “<media>”.

Cause: An invalid media type was encountered during the processing of a database utility.

The utility stops processing.

Action: Ensure the media used is among of the types supported by the utility. Resubmit the command with a valid media list.

SQL2057N

The media “<media>” is already opened by another process.

Cause: The source or target media specified during the processing of a database utility is already open by another process. The utility does not allow shared access for the operation.

The utility stops processing.

Action: Ensure the media used is not in use currently. Resubmit the command with a valid media list.

SQL2058W

An end-of-media warning was encountered on media “<media>”.

Cause: An end-of-media warning was encountered during the processing of a database utility.

The utility is waiting for a response to continue.

Action: Correct the end-of-media condition and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL2059W

A device full warning was encountered on device “<device>”.

Cause: An device full warning was encountered during the processing of a database utility.

The utility is waiting for a response to continue.

Action: Correct the device full condition and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL2060W

The device “<device>” is empty.

Cause: An empty device was encountered during the processing of a database utility. The utility is waiting for a response to continue.

Action: Mount the media and return to the utility with the caller action parameter to indicate if processing should continue or terminate.

SQL2061N

An attempt to access media “<media>” is denied.

Cause: An attempt to access a device, file, ADSM or the vendor shared library is denied during the processing of a database utility. The utility stops processing.

Action: Ensure the device, file, ADSM or vendor shared library used by the utility allows the access requested and resubmit the utility command.

SQL2062N

An error occurred while accessing media “<media>”. Reason code: “<reason-code>”

Cause: An unexpected error occurred while accessing a device, file, ADSM or the vendor shared library during the processing of a database utility. The following is a list of reason codes:

- 1** An attempt to initialize a device, file, ADSM or the vendor shared library failed.
- 2** An attempt to terminate a device, file, ADSM or the vendor shared library failed.
- other** If you are using ADSM, this is an error code returned by ADSM.

The utility stops processing.

Action: Ensure the device, file, ADSM or vendor shared library used by the utility is available and resubmit the utility command. If the command is still unsuccessful, contact your technical service representative.

SQL2065W

Caller action “<caller-action>” specified is not allowed when the media “<media>” specified is the only one left connected to the utility.

Cause: The caller action specified is not allowed because there is only one device left connected to the database utility.

Action: Return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL2066N

Table space name “<name>” specified does not exist in the database or cannot be used for the utility operation.

Cause: The table space name specified is syntactically correct, but it does not exist in the database or cannot be used in an utility operation. If the utility in use is a backup operation, the table space may be disallowed because it is a temporary table space or is in an inconsistent state.

Action: Check the table space name and resubmit the utility command with the correct table space name.

SQL2068N

An invalid image was encountered on media “<media>”. There was no media header.

Cause: An invalid image was encountered during the processing of a database utility. The utility was not able to locate a valid media header. The utility stops processing.

Action: Resubmit the command with correct backup or copy images.

SQL2069N

An invalid image was encountered on media “<media>”. The image was created for database alias “<dbalias>”.

Cause: An invalid image was encountered during the processing of a database utility. The image provided was from a different database alias. The utility stops processing.

Action: Resubmit the command with correct backup or copy images.

SQL2070N

An invalid image was encountered on media “<media>”. The image contained timestamp “<timestamp>”.

Cause: An invalid image was encountered during the processing of a database utility. The image provided was from a backup or copy with a different timestamp. The utility stops processing.

Action: Resubmit the command with correct backup or copy images.

SQL2071N

An error occurred while accessing the shared library “<shr-lib-name>”. Reason code: “<reason-code>”

Cause: An unexpected error occurred while accessing a vendor shared library during the processing of a database utility. The following is a list of reason codes:

- 1** An invalid shared library path was encountered.
- 2** An attempt to load the backup shared library failed.
- 3** An error was encountered while unloading the shared library.

The utility stops processing.

Action: Ensure the shared library provided is valid and resubmit the utility command or use another supported media.

SQL2072N

Unable to bind the shared library “<shr-lib-name>”. Reason code: “<reason-code>”.

Cause: An error was encountered while binding the shared library during the processing of a database utility. The utility stops processing.

Action: Note the reason code returned from the vendor utility in the message and take corrective action if possible. Resubmit the command with a valid shared library or using another supported media.

SQL2100 - SQL2199

SQL2154N

The RESTORE was not successful. The backup used to restore the table space(s) is not associated with the current log sequence for the database.

Cause: For table space restore, the backup must have been taken during the current log sequence of the database. The log file sequence is determined by the database that has been restored previously or the log files that have been processed. In addition, the backup must have been taken after the last time the database was enabled for roll forward recovery.

Table space restore has stopped.

Action: Resubmit the command with a correct backup image.

SQL2155W

Changes have been made to the recovery history file since the open scan was issued.

Cause: Changes have been made to the recovery history file since the file was open for a scan. The data read may not be consistent.

Action: If it is essential to have consistent data from the scan, close the recovery history file and resubmit the command.

SQL2157N

There are already eight recovery history file scans open.

Cause: Eight recovery history file scans in this process are already open. No more than eight open scans are allowed.

The command cannot be processed.

Action: Issue one or more CLOSE RECOVERY HISTORY FILE SCAN commands and resubmit the command.

SQL2160W

A damaged recovery history file has been replaced. Processing continued.

Cause: An error was encountered during an access to the recovery history file. The utility is able to recover the file from an alternate copy. The utility continues processing.

Action: The utility continues processing successfully. The user should take appropriate precautions to ensure the recovery history file is not damaged again.

SQL2161N

A damaged recovery history file could not be fixed. The specified action failed.

Cause: An error was encountered during an access to the recovery history file. The utility is not able to recover the file. The utility stops processing.

Action: To continue processing, the user may remove the recovery history file and resubmit the command. The utility will regenerate a new file. Any data from the corrupted file are lost. The user may look at the corrupted file to see if any information can be saved. The user should take appropriate precautions to ensure the recovery history file is not damaged again.

SQL2165W

The SQLUHINFO structure did not provide enough TABLESPACE entries.

Cause: The SQLUHINFO structure was not large enough to hold the entry that was to be returned (including all of its TABLESPACES). The value of the SQLN field of the SQLUHINFO structure should be at least as large as the SQLD field returned.

The command cannot be processed.

Action: Increase the value of the SQLN field in the SQLUHINFO structure to the value indicated by the SQLD field (making sure the SQLUHINFO structure is large enough to support that amount) and resubmit the command.

SQL2170N

The utility encountered entries with the same identifier in the recovery history file. Write fails.

Cause: The utility has encountered an entry with the same identifier (timestamp to the second) in the recovery history file while writing to it. The write to the recovery history file terminates. Database manager ensures the uniqueness of the recovery history file identifiers and makes provisions for it even if there are more than one request per second. However, there may be cases where it will fail if numerous requests come in within a few seconds.

Action: Check the First Failure Service Log (db2diag.log) for additional information. If the applications are running utilities (such as backup, quiesce, load) that generate numerous entries to the history file, try to pace the utility requests to prevent the problem.

SQL2171N

The update of the recovery history file failed because the specified object part does not exist in the file.

Cause: The entry specified to be updated in the recovery history file does not exist in the file. The utility stops processing.

Action: Resubmit the command with a valid entry.

SQL2172W

The utility has completed but it is not able to log the event in the recovery history file due to error "<error>".

Cause: The utility has encountered an error writing to the recovery history file. This warning does not affect processing.

Action: Check the First Failure Service Log (db2diag.log) for additional information. Correct the error condition to prevent future warnings.

SQL2200 - SQL2299

SQL2200N

The qualifier for the table or index name is too long or it was not specified as part of the table or index name.

Cause: The table name or index must be fully qualified. The format is *authid.name* where *authid* must be 1 to 8 characters and *name* must be 1 to 18 characters (bytes in a MBCS environment).

The utility stops processing.

Action: Resubmit the command with a fully qualified name including the correct qualifier.

SQL2203N

The tablename parameter is not valid. Either the table name is too long, only an authorization ID was specified, the table name was not specified, or the address of the name is not valid.

Cause: The table name is required. It must be fully qualified and in the format *authid.name* where *authid* is 1 to 8 characters and *name* is 1 to 18 characters (bytes in MBCS environments). The table name must be located at a valid application address.

The utility stops processing.

Action: Resubmit the command with the correct table name.

SQL2204N

The iname parameter is not valid. The name of the index is too long, only an authorization ID was specified, or the address of the index is not valid.

Cause: If an index is specified, it must be fully qualified and in the format *authid.name* where *authid* is 1 to 8 characters and *name* is 1 to 18 characters (bytes in MBCS environments). The index must be located at a valid application address.

The utility stops processing.

Action: Resubmit the command with a valid index name.

SQL2205N

The specified index does not exist.

Cause: The specified index does not exist for the specified *authid.table* or *authid.index*.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

The utility or operation stops processing.

Action: Resubmit the command with a valid index.

SQL2207N

The filepath specified by the datafile parameter is not valid.

Cause: The datafile parameter is not any of the values that indicate the default filepath. Also the datafile parameter is not a valid non-default value. One of the following may apply:

- The pointer is not valid.
- The pointer points to a string that is too long for a filepath designation.
- The specified path value is not valid (on the server machine).
- The file path does not end with an appropriate separator for the server machine.

The utility stops processing.

Action: Resubmit the command with a valid datafile parameter.

SQL2208N

The table space specified by the table space parameter is not valid.

Cause: The table space parameter does not contain a valid value. One of the following conditions may exist:

- The pointer is not valid
- The pointer points to a string that is too long for a table space name
- The specified table space does not exist.

The utility stops processing.

Action: Resubmit the command with a valid table space parameter or do not use the table space name parameter. In the latter case, the Reorganize Table utility will use the table space(s) in which the table itself resides.

SQL2211N

The specified table does not exist.

Cause: The table does not exist in the database. Either the table name or the authorization ID is incorrect. The command cannot be processed.

Action: Resubmit the command with a valid table name.

SQL2212N

The specified table is a view. The Reorganize Table utility cannot be run against a view.

Cause: The Reorganize Table utility cannot be run against a view.

The utility stops processing.

Action: Resubmit the command with a valid table name.

SQL2213N

The specified table space is not a temporary table space.

Cause: The Reorganize Table utility requires that any table space specified is a temporary table space. The table space name provided is not a table space defined to hold temporary tables.

The utility stops processing.

Action: Resubmit the command with the name of a temporary table space or do not use the table space name parameter. In the latter case, the Reorganize Table utility will use the table space(s) in which the table itself resides.

SQL2214N

The user does not have the authority to run the Reorganize Table utility on table "<name>".

Cause: The user attempted to reorganize the specified table without the appropriate authorization (either SYSADM or DBADM authority or the CONTROL privilege on the table).

The utility stops processing.

Action: Logon as a user with the appropriate authority or privilege and resubmit the reorganize table utility command.

SQL2215N

SQL error “<sqlcode>” occurred while committing previous work for the database.

Cause: The user was already connected to the database specified in the Reorganize Table command. An error occurred while committing the previous work in progress for the database.

The utility stops processing with no attempt to roll back the work or break the database connection.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL2216N

SQL error “<sqlcode>” occurred while reorganizing a database table.

Cause: An error occurred during the reorganization of a database table.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL2300 - SQL2399

SQL2300N

The identifier for the table name is too long or it was not specified as part of the table name.

Cause: The table name must be fully qualified. The format is *authid.tablename* where *authid* contains 1 to 8 characters and *tablename* contains 1 to 18 characters (bytes in MBCS environments).

The utility stops processing.

Action: Resubmit the command with the fully qualified table name, including the correct qualifier.

SQL2301N

The tablename parameter is not valid. Either it is too long, only an authorization ID was specified, or the address of the name is not valid.

Cause: The table name must be fully qualified and in the format *authid.name* where *authid* contains 1 to 8 characters and *name* contains 1 to 18 characters (bytes in MBCS environments) and must be located at a valid application address.

The utility stops processing.

Action: Resubmit the command with the correct table name.

SQL2302N

The index list is not valid. Either the address for the list is not valid, the number of entries in the list is less than the number of indexes specified, or the address for an index in the list is not valid.

Cause: The address for the list is not valid, the number of entries in the list is less than the number of indexes specified, or the address for an index in the list is not valid.

The utility stops processing.

Action: Resubmit the command with a valid index list.

SQL2303N

The statsopt parameter is not valid.

Cause: The *statsopt* parameter in the Run Statistics command must be one of the following:

- T for basic table only
- I for basic indexes only
- B for both basic table and indexes
- D for table and distribution
- E for table and distribution and basic indexes
- X for extended indexes only
- Y for extended indexes and basic table
- A for all

The utility stops processing.

Action: Resubmit the command with a valid *statsopt* parameter.

SQL2304N

The sharelev parameter is not valid. It must be 'R' for reference or 'C' for change.

Cause: The *sharelev* parameter in the RUN STATISTICS command must be R for reference or C for change.

The utility stops processing.

Action: Resubmit the command with a valid *sharelev* parameter.

SQL2305N

The table specified is a view. The utility cannot be run against a view.

Cause: The *tname* parameter specified a view rather than a table.

The utility stops processing.

Action: Resubmit the command with a valid *tname* parameter.

SQL2306N

The table or index "<name>" does not exist.

Cause: The table or index identified by "<name>" does not exist in the database, or the index identified by "<name>" is not defined on the specified table. The qualifier for the table or one of the indexes may be incorrect.

The utility stops processing.

Action: Resubmit the command with valid table names and indexes.

SQL2307N

The table specified is a system table. The Runstats utility cannot be run against a system table.

Cause: The Run Statistics utility command may not be run against a system table.

The utility stops processing.

Action: Resubmit the command with a valid table name.

SQL2308N

The qualifier for the index name "<name>" is too long, or it was not specified as part of the index name.

Cause: The index name must be a fully qualified name. The format is *authid.tablename* where *authid* contains 1 to 8 characters and *tablename* contains 1 to 18 characters (bytes in MBCS environments).

The utility stops processing.

Action: Resubmit the command with a fully qualified name, including the correct qualifier.

SQL2309N

The index name "<name>" is not valid. It is too long or only a qualifier was specified.

Cause: The index name must be a fully qualified name. The format is *authid.name* where *authid* contains 1 to 8 characters and *name* contains 1 to 18 characters (bytes in MBCS environments).

The utility stops processing.

Action: Resubmit the command with a valid index.

SQL2310N

The utility could not generate statistics. Error "<sqlcode>" was returned.

Cause: An error occurred while the utility was gathering statistics.

The utility stops processing.

Action: Look at the message error number for more information. Make changes and resubmit the command.

SQL2311N

The user does not have the authority to run the Run Statistics utility on table "<name>".

Cause: The user attempted to run statistics on the specified table without the appropriate authorization (either the SYSADM or DBADM authority or the CONTROL privilege on the table).

The utility stops processing.

Action: Do not attempt to call the Run Statistics utility command without appropriate authorization.

SQL2312N

Statistics heap size is too small to carry out the operation. Suggested heap size is "<num>" pages.

Cause: The setting of the database configuration parameter *stat_heap_sz* is not big enough to collect non-uniform distribution statistics on the table.

Action: Update the database configuration parameter *stat_heap_sz* to the suggested value and try again.

SQL2313W

All available memory in the statistics heap has been used. Statistics were collected on the first "<n1>" rows out of a total of "<n2>" rows.

Cause: The setting of the database configuration parameter *stat_heap_sz* is not big enough to collect non-uniform distribution statistics on the table. Only <n1> of <n2> rows could be processed.

Action: Update the database configuration parameter *stat_heap_sz* by 20 percent and try again.

SQL2400 - SQL2499

SQL2400N

The type specified in the BACKUP command is not valid. It must be either 0 to back up the entire database or 1 to back up only the current changes.

Cause: The type must be either 0 for backing up the whole database or 1 for backing up changes only.

The utility stops processing.

Action: Resubmit the utility command with the correct type.

SQL2401N

"Backup changes only" cannot be performed until a backup of the entire database has been done. The type must be 0.

Cause: A backup of changes only has been requested without requesting a backup of the entire database first, or an internal file has been damaged such that the BACKUP utility cannot determine whether a full backup had been taken. The backup of changes only cannot be used until after a backup of the entire database.

The utility stops processing.

Action: Resubmit the utility command with the correct type.

SQL2403N

The user does not have the authority to run the utility against the database.

Cause: The user attempted to execute a database utility without either SYSADM or DBADM authority.

The utility stops processing.

Action: Do not attempt to call the utility command without appropriate authorization.

SQL2404N

The backup target media is full. At least "<number>" free bytes are needed on the target media.

Cause: The backup target media does not have enough space for creating an internal subdirectory and information file.

The utility stops processing.

Action: Prepare a backup media that has at least the specified number of bytes of free space and then resubmit the command.

SQL2405N

The BACKUP cannot be performed because there is a previously incomplete RESTORE.

Cause: The database is in an inconsistent state due to a system crash during a restore operation or due to an abnormally terminated RESTORE.

The utility stops processing.

Action: Resubmit the RESTORE command.

SQL2406N

The BACKUP cannot be performed because the database needs to be rolled forward.

Cause: The backup failed because the database is in an inconsistent state.

The utility stops processing.

Action: Use the ROLLFORWARD command to make the database usable. Then resubmit the BACKUP command.

SQL2407N

An I/O error occurred reading the file "<name>". The BACKUP cannot be performed because it cannot determine if a RESTORE was completed.

Cause: The indicated file cannot be read due to the I/O error. Since the file exists, a BACKUP or RESTORE command must have not completed. Upon successful completion of the process this file is deleted.

The utility stops processing.

Action: Determine which process was executed previously. Delete the indicated file and resubmit the previous command.

SQL2408W

The database was backed up, but an I/O error "<error>" occurred while deleting the file "<name>".

Cause: The BACKUP command ran successfully. The indicated file was not deleted due to an I/O error.

The utility completed processing.

Action: Try to delete the file indicated in the message.

SQL2409N

When doing a BACKUP of changes only, the most recent backup image must be used.

Cause: The user has attempted to perform a changes only backup but the backup image specified is not the most current backup or the previous backup of changes only failed.

The utility stops processing.

Action: Locate the most recent backup image and resubmit the command. If the most recent backup image cannot be located or if the previous backup of changes only failed, resubmit the command requesting a backup of the entire database rather than a changes only backup.

SQL2410N

"Backup changes only" cannot be performed if the database is enabled for ROLLFORWARD or if the BACKUP is being done through a user exit.

Cause: The user requested a changes only backup of a database with roll-forward enabled, or has requested a changes only backup through the user exit program.

Action: Possible solutions include:

- If the database is roll-forward enabled, resubmit the BACKUP utility command requesting a backup of the entire database.
- Disable roll-forward by turning off the SQL_ENABLE_LOG_RETAIN flag and SQL_ENABLE_USER_EXIT flag in the database configuration file. Then resubmit the BACKUP utility command requesting a changes only backup.
- If the backup was requested through the user exit program, resubmit the BACKUP utility command to do a changes only backup not using the user exit program.
- If the backup was requested through the user exit program to a standard device, resubmit the BACKUP utility command to do a changes only backup not using the user exit program.

SQL2411C

An I/O error occurred while running a utility. Either the disk could not be physically written to or has been filled.

Cause: An operating system error occurred when the utility was writing to the disk or diskette. The actual return code can be found in the SQLERRD[0] field of the SQLCA.

Action: Look at the error return code in the SQLERRD[0] field of the SQLCA. Correct the error, if possible, and resubmit the command.

SQL2412C

A corrupted database page was encountered while running a database utility.

Cause: During the utility operation a corrupted database page was encountered. The database is in an unpredictable state and the utility cannot continue.

Action: Record the message number (SQLCODE).

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact your technical service representative with the following information:

- Problem description
- SQLCODE or message number
- SQLCA if possible
- Trace file if possible.

SQL2413N

Online backup is not allowed because either logretain or userexit for roll-forward is not activated, or a backup pending condition is in effect for the database.

Cause: Online backup cannot be performed while the database is not logging for forward recovery as forward recovery will be required at restore time. Forward recovery is placed into effect by setting either the database configuration logretain parameter or the userexit parameter, and then performing an offline backup of the database.

Action: Execute an offline backup or reconfigure the database for roll-forward recovery and issue an offline backup so that subsequent online backups will be allowed.

SQL2414W

Warning! Insufficient space on device "<device>" to contain backup control information. This media will not contain backup information.

Cause: During the Backup operation a new media was mounted and positioned after one or more media became full. There is not enough space on this media to contain the Backup Control Information and the media should not be included during the Restore operation.

Action: Mount a new media, or reposition the current media to provide enough space for this header, then return to the utility with the *callerac* parameter indicating if processing continues.

SQL2416W

Warning! Device "<device>" is full. Please mount new media.

Cause: The tape which the utility is using has become full.

Action: Mount another tape and continue the operation with the *callerac* parameter indicating if processing continues.

SQL2418N

The database specified for Backup does not exist.

Cause: The database specified in the *dbase* parameter of the Database Backup command could not be found.

Action: Ensure that the correct database alias was specified for the Backup Database utility and that the database exists for this alias. Resubmit the command with the correct alias.

SQL2419N

The target disk "<disk>" has become full.

Cause: During the processing of a database utility, the target disk became full. The utility has stopped and the target is deleted.

Action: Ensure enough disk space is available for the utility or direct the target to other media, such as tape.

On unix-based systems, this disk full condition may be due to exceeding the maximum file size allowed for the current userid. Use the *chuser* command to update *fsize*. A reboot may be necessary.

On non unix-based systems, this disk full condition may be due to exceeding the maximum file size allowed for the operating system. Direct the target to other media, such as tape, or use multiple targets.

SQL2420N

Insufficient space on device "<device>" to contain initial backup control information.

Cause: During the Backup operation an initial backup header needs to be created at the start of the backup image. This header must fit on one tape when backing up to tape. There is insufficient space on the tape to contain this header.

Action: Resubmit the Backup operation and either direct the output to a new tape, or reposition the current tape to provide enough space for this header.

SQL2421N

Table space level backup is not allowed because roll-forward recovery is not enabled.

Cause: Table space level backup cannot be performed while the database is not logging for forward recovery as forward recovery will be required at restore time. Forward recovery is placed into effect by setting either the database configuration logretain parameter or the userexit parameter, and then performing an offline backup of the database.

Action: Execute a full database backup or reconfigure the database for roll-forward recovery and issue an offline backup so that subsequent table space level backups will be allowed.

SQL2422N

The database cannot be backed up with a back-level backup API due to incompatible table space locations.

Cause: This database contains table space(s) which have been defined in a location other than the database subdirectory. This is not compatible with the API being used.

Action: Use the current backup API to backup the database.

SQL2423N

The database cannot be backed up because some index files are missing.

Cause: Some of the index files required by the backup are missing. These index files must be recreated prior to backing up the database.

Action: Run the 'db2recr1' program to recreate the missing index files and then resubmit the backup command.

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SQL2501C

The database was restored but the data in the restored database was unusable.

Cause: The RESTORE utility either could not read data from the restored database or only a portion of the database was restored. Both cases indicate that the restored database is not usable.

The database is unusable and the RESTORE utility stops processing.

Action: Resubmit the RESTORE command.

SQL2502C

An error occurred while reading the backup files. Either the disk could not physically be read or the specified disk did not contain a valid backup.

Cause: An operating system error occurred when the RESTORE utility was reading the diskette or disk, or the diskette or disk does not contain a backup of the database directory or does not contain the results of any previous backup.

The utility stops processing.

Action: If the input drive specified is a diskette drive, check the diskette being used. If the input drive is a hard file, verify that it is the correct hard file. Resubmit the command with the correct input drive and the correct diskettes, if applicable.

SQL2503N

The RESTORE was not successful. The backup used to restore the database contained the wrong database.

Cause: The name of the database contained on the backup disk does not match the database name specified on the RESTORE command. The RESTORE utility cannot determine the name until after the database has been restored because a previous release backup image was restored.

The utility stops processing.

Action: If the wrong database name was used in the command, resubmit the command with the correct database name. If the input drive specified is a diskette drive, check the diskette being used. If the input drive is a hard file, verify that it is the correct hard file. Resubmit the command with the correct input drive and the correct diskettes, if applicable.

SQL2504W

Insert the first backup diskette into drive "<drive>".

Cause: The RESTORE utility reads the first backup diskette to determine the path of the database directory that was backed up. If the backup media is a diskette and the diskette is not found in the specified input drive, the utility returns to the caller with this prompt. The calling program is expected to query the user and return to the utility with the user response.

The utility waits for a response from the caller.

Action: Prompt the user for the diskette and return to the utility with the *callerac* parameter, indicating if processing continues or ends.

SQL2505W

Warning! Database "<name>" resides at "<drive>". The files for this database will be deleted.

Cause: If the database being restored already exists, its files will be deleted before the restore process starts. The utility returns to the caller with this warning. The caller is expected to query the user and return to the utility with the user response. Once the database is dropped, it cannot be accessed again.

The utility waits for response from the caller.

Action: Warn the user that the database files will be deleted and return to the utility with the *callerac* parameter indicating if processing continues or ends.

SQL2506W

The database was restored, but there may be extra files in the database.

Cause: If changes-only backups were performed and database files were deleted between backups, the RESTORE utility adds these deleted files back into the database. The restore process could not delete the extra files either because of an I/O error or by the failure of an internal connection to an internally stopped database.

The utility ends successfully.

Action: Either use the database as it is or attempt to restore it again. Ensure that the DB2 configuration is compatible with the restored database configuration before rerunning the RESTORE utility.

SQL2507W

The RESTORE utility is not bound to the database correctly.

Cause: Because the RESTORE utility was not bound to the database or the package of the utility that was bound to the database is not compatible with the installed version of DB2, all the utilities have been rebound to the database. But there is a timestamp conflict between the installed version of DB2 and the package so the utility and bind file are not compatible.

The database is restored, but the utility is not correctly bound.

Action: Reinstall DB2 or reapply recent updates and resubmit the utility command.

SQL2508N

The Database Restore timestamp parameter "<timestamp>" is not valid.

Cause: The timestamp parameter must contain either NULL or a portion of a valid timestamp, the portion consisting of complete components of a timestamp.

Action: Resubmit the Restore operation with a valid timestamp value.

SQL2509N**The database drive parameter is not valid.**

Cause: The drive specified does not exist, or the database does not exist on this drive or is not cataloged on this drive. RESTORE should use the *db2uexit* command to perform the database restore.

The utility stops processing.

Action: Resubmit the utility command with a valid drive.

SQL2510N**An operating system semaphore error occurred.**

Cause: An error occurred in the wait or post semaphore.

The utility stops processing.

Action: Stop the database manager, then restart it and resubmit the utility command.

SQL2511N**The utility encountered an error “<error>” while dropping the database.**

Cause: The utility could not drop the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2512N**The utility encountered an error “<error>” while creating the database.**

Cause: The utility could not create the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2513N**The utility encountered an error “<error>” renaming the database.**

Cause: The utility could not rename the database.

The utility stops processing.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL2514C**The RESTORE was not successful. The backup used to restore the database contained a database with a release number that is not compatible with the installed version of the database manager.**

Cause: The release number of the restored database is not compatible with the release number of the installed version of the database manager.

The utility erases the restored database and stops processing.

Action: Resubmit the command with a backup that is compatible with the release level of the database manager.

SQL2515N**The user does not have the authority to run the RESTORE utility against the database.**

Cause: The user attempted to execute the RESTORE utility without SYSADM authority.

The utility stops processing.

Action: Do not attempt to call the RESTORE utility command without appropriate authorization.

SQL2516N**The RESTORE utility cannot complete because at least one database on the workstation is in use.**

Cause: In some situations, the RESTORE utility can attempt to move a database to a directory by renaming the directory associated with the database. This cannot be done if any databases are in use in any process on the workstation.

The utility stops processing.

Action: Wait until no databases on the workstation are in use and resubmit the command.

SQL2517W

The restored database was migrated to the current release.

Cause: The database being restored was backed up using a previous release of DB2. The RESTORE utility migrated it to the format of the current release.

The user who submitted the RESTORE command is given DBADM authority for the database. If there are other users, the database administrator with DBADM authority must grant authorization privileges to the specific database users.

The RESTORE utility completes successfully.

Action: No action is required.

SQL2518N

The RESTORE was not successful. An I/O error occurred while trying to restore the database configuration file.

Cause: The database configuration file could not be restored due to an I/O error.

The utility stops processing.

Action: Determine whether the I/O error can be corrected. Resubmit the command.

SQL2519N

The database was restored, but the restored database was not migrated to the current release. Error "<sqlcode>" with tokens "<tokens>" is returned.

Cause: The backup image contains a previous release of the database. After the database files were restored, an attempt was made to migrate the database to the current release. The migration failed.

The utility finishes processing but the database was not migrated.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and submit the Migrate command before using the database.

SQL2520W

The database was restored. The backup version of the configuration file was used.

Cause: When a database is restored, the current database configuration file is not always replaced with the backup version. The current database configuration file was not usable. It has been replaced by the backup version.

The utility completed successfully.

Action: Some values in the database configuration file may be different after the restore process. Check that the configuration parameters are set to the desired values.

SQL2521W

The database was restored, but an I/O error "<code>" occurred while deleting the .BRG file.

Cause: The restore process ran successfully. The .BRG file was not deleted due to an I/O error.

The .BRG file is used to determine whether a Restore operation has terminated abnormally. The .BRG file resides in the local database directory of the database in question and consists of a filename equivalent to the database token and filetype of .BRG.

The utility completed successfully.

Action: Try to delete the .BRG file. If you are unsuccessful, contact your technical service representative.

SQL2522N

More than one backup file matches the timestamp value provided for the backed up database image.

Cause: The backup image file filename consists of a database alias and a timestamp component. A filename is constructed from the source database alias and timestamp parameters provided in the Database Restore call. A portion of a timestamp may have been specified so that a match with more than one backup image filename was found.

Action: Resubmit the operation by specifying a timestamp with sufficient timestamp components to result in a match to a unique backup file.

SQL2523W

Warning! Restoring to an existing database that is different from the database on the backup image, but have matching names. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted.

Cause: The database alias and name of the target database are the same as the backup image database alias and name. The database seeds are not the same indicating that the databases are not the same. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted. The current configuration file will be overwritten with the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2524W

Warning! Restoring to an existing database which appears to be the same but the alias "<dbase>" of the existing database does not match the alias "<dbase>" of the backup image. The target database will be overwritten by the backup version.

Cause: The database seeds of the target database and the database image are the same, indicating these are the same databases, the database names are the same, but the database aliases are not the same. The target database will be overwritten by the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2525W

Warning! Restoring to an existing database that is different from the database on the backup image, and the alias "<dbase>" of the existing database does not match the alias "<dbase>" of the backup image, but the database names are the same. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted.

Cause: The database aliases of the target database and database image are not the same, the database

names are the same, and the database seeds are not the same, indicating these are different databases. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted. The current configuration file will be overwritten with the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2526W

Warning! Restoring to an existing database that is the same as the backup image database, and the alias names are the same, but the database name "<dbname>" of the existing database does not match the database name "<dbname>" of the backup image. The target database will be overwritten by the backup version.

Cause: The database aliases of the target database and database image are the same, and the database seeds are the same, however the database names are different. These are the same databases. The target database will be overwritten by the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2527W

Warning! Restoring to an existing database that is different from the backup image database, and the database name "<dbname>" of the existing database does not match the database name "<dbname>" of the backup image, but the alias names are the same. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted.

Cause: The database aliases of the target database and database image are the same, the database names are not the same, and the database seeds are not the same, indicating these are different databases. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted. The current configuration file will be overwritten with the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2528W

Warning! Restoring to an existing database that is the same as the backup image database, but the alias name "<dbase>" of the existing database does not match the alias "<dbase>" of backup image, and the database name "<dbname>" of the existing database does not match the database name "<dbname>" of the backup image. The target database will be overwritten by the backup version.

Cause: The database aliases of the target database and database image are not the same, the database names are not the same, and the database seeds are the same, indicating these are the same databases. The current database will be overwritten by the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2529W

Warning! Restoring to an existing database that is different from the backup image database, and the alias name "<dbase>" of the existing database does not match the alias name "<dbase>" of the backup image, and the database name "<dbname>" of the existing database does not match the database name "<dbname>" of the backup image. The target database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted.

Cause: The database aliases of the target and database image are not the same, the database names are not the same, and the database seeds are not the same, indicating these are different databases. The current database will be overwritten by the backup version. The Roll-forward recovery logs associated with the target database will be deleted. The current configuration file will be overwritten with the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2530N

The backup image is corrupted. Restore of database from this backup image is not possible.

Cause: The backup image being restored is corrupted making the database image non-restorable.

Action: Discard the backup image as it is unusable. Restore from a previous backup if possible.

SQL2531N

The backup image selected for restore is not a valid database backup image.

Cause: The file selected for restore is not a valid backup image. Either the file selected has become corrupted or a backup tape is not at the correct position.

Action: Determine the location of the correct backup image file, and resubmit the Restore command.

SQL2532N

The backup file contains the backup image of database "<dbalias>" taken at timestamp "<timestamp>". This is not the backup image requested.

Cause: The file selected for restore does not contain the requested backup image. The image is for a different database than that requested.

Action: If using tape, ensure that the correct tape is mounted. If a restore or load is being done from disk, then the file must have been renamed. Rename the file to the correct filename with a match on database name and timestamp. Resubmit the command after taking the appropriate action.

SQL2533W

Warning! The backup file on device "<device>" contains the image of database "<database>" taken at timestamp "<timestamp>". This is not the backup image requested.

Cause: The backup image read from the tape position contains a media header that does not match the header of the image of the first file of the backup file sequence.

Action: Ensure that the tape is positioned at the correct backup, then return to the utility with the *callerac* parameter indicating if processing continues.

SQL2534W

Warning! The media on device "<device>" is not positioned at a valid backup media header.

Cause: The data read from the tape position does not contain a valid backup media header.

Action: Ensure that the tape is positioned at the correct position, then return to the utility with the *callerac* parameter indicating if processing continues.

SQL2535W

Warning! End of media on device "<device>" has been reached. Please mount the next source media.

Cause: The end of tape has been reached and there is still more data to be processed. The remainder of the backup or load source exists on another tape or on several more tapes.

Action: Mount the next tape in sequence that contains the source image and resubmit the Restore or Load command with the *callerac* parameter set to continue or end.

SQL2536W

Warning! The backup image on device <device> contains an incorrect sequence number. Sequence number <number> is expected.

Cause: The tape is positioned on a backup image file that is out of sequence. The tape containing the backup image must be positioned to the file of sequence number "<sequence>" of the backup image.

Action: Position the tape containing the backup image to the correct file and resubmit the Restore command with the *callerac* parameter set to continue or end.

SQL2537N

Roll-forward is required following the Restore.

Cause: SQLUD_NOROLLFWD was specified for the *rst_type* parameter of the Database Restore utility, indicating that a roll-forward is not required to make the restored database usable. The database to be restored was backed up in online mode and a roll-forward operation is necessary to make the database usable.

Action: Resubmit the Database Restore command without specifying SQLUD_NOROLLFWD for the *rst_type* parameter.

SQL2538N

Unexpected End of File of Backup Image reached on media "<media>".

Cause: While reading and restoring from the Backup Image file, an end of file condition was reached unexpectedly. The backup image is unusable and the restore operation terminates.

Action: Resubmit the Database Restore command with a usable backup image file.

SQL2539W

Warning! Restoring to an existing database that is the same as the backup image database. The database files will be deleted.

Cause: The database aliases, names and seeds of the target database and database image are the same, indicating these are the same databases. The current database will be overwritten by the backup version.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2540W

Restore is successful, however a warning "<warn>" was encountered during Database Restore while processing in No Interrupt mode.

Cause: The Database Restore utility was invoked in No Interrupt mode, i.e. SQLUB_NO_INTERRUPT or SQLUD_NO_INTERRUPT was specified. During the processing a warning was encountered but not returned at the time it was encountered. The Restore has completed successfully and the warning message found is shown at the completion in this message.

Action: Ensure that the action that caused this warning to be generated has not resulted in a condition not wanted.

SQL2541W

The utility was successful, however the file containing the backup image could not be closed.

Cause: The utility was successful, but the file containing the backup image could not be closed.

Action: Attempt to close the file containing the backup image.

SQL2542N

No match for a database image file was found based on the source database alias and timestamp provided.

Cause: The backup image file filename consists of a database alias and a timestamp component. A filename is constructed from the source database alias and timestamp parameters provided in the Database Restore call. No filename existed in the source directory that matched based on the source database alias and timestamp provided.

Action: Ensure that the database backup image resides on the media source. Resubmit the operation by specifying a correct timestamp to result in a match.

SQL2543N

The target directory specified for the database is not valid.

Cause: The application calling the Restore utility has supplied a target directory for the new database to be created. Either this directory does not exist, or is not a valid directory for database creation. An invalid directory for database creation would be a directory of greater than 255 characters in length.

Action: Reissue the Backup or Restore command with a valid target directory.

SQL2544N

The directory where the database is being restored has become full.

Cause: While the database was being restored the directory to which it was being restored had become full. The database being restored is unusable. The Restore terminates and if the database being restored is a new database, then it is deleted.

Action: Free up sufficient space on the directory for the database, and reissue the Restore, or if restoring to a

new database supply a directory with sufficient space to contain the database.

SQL2545W

Warning! The backup image on the ADSM server is currently stored on mountable media. The time required to make it available is unknown.

Cause: The backup image is not immediately accessible by the ADSM server. The restore process can continue and make the request to the server to retrieve the data. The time required is unknown.

Action: Return to the utility with the callerac parameter indicating processing to continue or end.

SQL2546N

The image on media "<media>" is not the first in sequence from the backup or copy.

Cause: During restore or load recovery, the first image from the backup or copy must be processed first. The image found on the media is not the first in sequence.

The utility waits for a response to continue.

Action: Mount the media with the correct backup or copy image and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL2547N

The database was not restored because the backup image is from a previous release and was an online backup.

Cause: The physical log file formats have changed between these releases, making rollforward impossible.

Action: Restore the database using the version of DB2 used to create the database and rollforward to the end of logs. Take an off-line full database backup at this time. This new backup image will be restorable on the new release of DB2.

SQL2548N

Database codepage "<codepage1>" indicated in the backup image differs from that of the current on-disk database codepage "<codepage2>". The Restore operation has failed.

Cause: The database contained in the backup image contains data stored in a codepage different from that of the database into which the data is being restored.

This problem can be caused by one of the following situations:

- 1 The database you are restoring into has a different codepage than that of the database in the backup image.
- 2 The user is restoring into a new database from a session with a different codepage than the backup.
- 3 The backup image is corrupt, and contains invalid character set information.

Action:

- 1 If restoring over an existing database, make sure that the codepage of the existing database matches that of the backup image.
- 2 If restoring to a new database, make sure that the codepage of the session from which the restore command was issued is the same as that of the backup image.
- 3 Contact IBM Service.

SQL2549N

The database was not restored because either all of the table spaces in the backup image are inaccessible, or one or more table space names in list of table space names to restore are invalid.

Cause: The containers which were used by the table spaces in the backup image are not available, are already in use, or one or more table space names specified in the list on the restore command do not exist in the backup image.

Action: Use redirected restore to redefine the containers for the table spaces in this backup image, or specify a list of valid table space names to restore.

SQL2550N

Database backed up on node "<node1>" cannot be restored to node "<node2>".

Cause: The backup image used for the restore is a backup of a database from a different node. You can only restore a backup to the same node.

Action: Ensure that you have the correct backup image for the node then issue the request again.

SQL2551N

Database with catalog node "<node1>" cannot be restored to a database with catalog node "<node2>".

Cause: The catalog node can exist on only one node and there is a discrepancy between the backup image and the node being restored to. This can occur in the following cases:

1. The backup image specified catalog node "<node1>" and the restore was attempted to an existing database whose catalog node is node "<node2>".
2. The restore was attempted to a new database and the catalog node has not been restored first.

Action: Verify that the correct backup image is being restored.

If you are restoring to an existing database and want to change the catalog node to "<node2>", the existing database must be dropped first.

If you are restoring to a new database, restore the catalog node "<node1>" first.

SQL2560N

The target database is not identical to the source database for a restore from a table space level backup.

Cause: For a restore from a table space level backup, the target database must be either the original database from which the backup is taken or a new database.

Action: Specify the correct target database and resubmit the utility command.

SQL2561W

Warning! Restoring from a table space level backup to a database which does not exist. A database with the same attributes in the backup will be created.

Cause: For a restore from a table space level backup, the target database must have the same attributes (database name, alias and seed) as the source database. If the database does not already exist, it will be created.

Action: Return to the utility with the *callerac* parameter indicating processing to continue or end.

SQL2562N

Table space level restore from a full database backup is not allowed.

Cause: For a restore from a full database level backup, the restore type cannot be table space level.

Action: Specify a correct restore type or use a correct backup image and resubmit the utility command.

SQL2563W

The restore process has completed successfully, but one or more table spaces from the backup were not restored.

Cause: The restore process has completed successfully. One or more table spaces that are in the backup were not restored for one of the following reasons:

- an error was encountered while accessing the containers of the table spaces. If the table spaces have been dropped since the backup was taken, no further action is necessary.
- the restore command was invoked with a list of table spaces so that only a subset of the table spaces in the backup were restored. No further action is necessary.

Action: If this message is not due to a subset restore, use the query table space function to check the states of the table spaces. If a table space is in the "storage definition pending" state, the storage definition for the table space must be corrected for restore to complete successfully. See the Administration Guide for details about recovering the table space.

SQL2565N

The option specified for RESTORE is not allowed with the backup image provided.

Cause: The database contained in the backup image is an existing database and does not match the database to be restored. The option you have specified for restore requires that the database being restored to is new or the same as in the backup image.

The utility stops processing.

Action: Resubmit the command with the correct database name.

SQL2600 - SQL2699

SQL2600W

The input parameter pointer to the authorization block is invalid or the block's size is incorrect.

Cause: The pointer to the authorization structure parameter is NULL, the pointer to the authorization structure points to an area that is smaller than the length indicated in the structure length field, or the authorization structure length field is not set to the correct value.

The command cannot be processed.

Action: Correct the value of the input parameter and resubmit the command.

SQL2650N

An invalid parameter was passed to the asynchronous read log API. Reason Code = "<reason-code>".

Cause: An invalid parameter was passed to the asynchronous read log API. The possible reason codes are as follows:

- 01** Invalid action specified.
- 02** The starting log sequence number is greater than or equal to the current database active log sequence number.
- 03** The log sequence number range bounded by the starting and ending log sequence numbers is not large enough to span a log record.
- 04** The starting log sequence number does not represent the start of an actual log record.
- 05** The starting log sequence number's location could not be determined.

- 06 The ending log sequence number is less than or equal to the starting log sequence number.
- 07 The buffer is not valid for the indicated size.
- 08 The buffer is not of sufficient size to store a log record.
- 09 A pointer is not valid.

Action: For reason code 01, ensure that the action is either SQLU_RLOG_QUERY, SQLU_RLOG_READ, or SQLU_RLOG_READ_SINGLE.

For reason code 02, ensure that the starting log sequence number is less than the current active log sequence number returned in the read log information structure.

For reason code 03, ensure that the ending log sequence number is sufficiently larger than the starting log sequence number.

For reason code 04, ensure that the starting log sequence number is either the initial log sequence number or one byte larger than the last read log sequence number returned in the read log information structure.

For reason code 05, ensure that the starting log sequence number resides in a log extent in the database log file path.

For reason code 06, ensure that the ending log sequence number is greater than the starting log sequence number.

For reason code 07, ensure that the buffer has been allocated and is of the size indicated by the log buffer size parameter.

For reason code 08, increase the size of the allocated buffer.

For reason code 09, ensure that memory has been correctly allocated and the pointers properly initialized.

SQL2651N

The log records associated with the database can not be asynchronously read.

Cause: The asynchronous read log API was used against a connected database which does not have LOG RETAIN or USER EXITS ON. Only databases which are forward recoverable may have their associated logs read.

Action: Update the database configuration for the database, identified to the asynchronous read log API, turning LOG RETAIN and/or USER EXITS ON.

SQL2652N

Insufficient memory to run the asynchronous log reader.

Cause: The allocation of the internal buffers used by the asynchronous read log API has failed.

Action: Increase the amount of available memory available to the process (increase real or virtual memory or remove unnecessary background processes) or decrease the log sequence number range provided to the asynchronous read log API.

SQL2653W

A Restore, Forward or Crash Recovery may have reused log sequence number ranges. Reason code "<reason-code>"

Cause: A Restore, Forward or Crash Recovery may have reused log sequence number ranges. The possible reason codes are as follows:

- 01 - Restore has taken place.
- 02 - Forward Recovery (ROLLFORWARD) has taken place.
- 03 - Crash Recovery has taken place.

Action: No action is required.

SQL2654W

The database log has been asynchronously read to the end of the current active log.

Cause: All log records in the database active log have been read by the asynchronous log reader.

Action: No action is required.

SQL2655N

The Asynchronous Log Reader encountered log file "<name>" which is not associated with the database being asynchronously read.

Cause: The Asynchronous Log Reader attempted to read log records from the specified log file. The specified log file is not associated with the database being asynchronously read.

Action: Remove this log file from the database log directory. Move the correct log file into the database log directory and resubmit the call to the Asynchronous Read Log API.

SQL2656N

The Asynchronous Log Reader has encountered log file "<name>" which cannot be read.

Cause: The Asynchronous Log Reader attempted to read log records from the specified log file. The specified log file has been corrupted and cannot be read.

Action: Increase the start read log sequence and resubmit the call to the Asynchronous Read Log API to start reading after the specified log file.

SQL2657N

The Asynchronous Log Reader requires log file "<name>" which does not currently reside in the database log directory.

Cause: The Asynchronous Log Reader requires log records from the specified log file. The specified log file does not currently reside in the database log directory.

Action: Move the specified log file into the database log directory of the database being asynchronously read. Resubmit the call to the Asynchronous Read Log API.

SQL2700 - SQL2799

SQL2701N

Invalid command line option for "<progrname>". Reason code: "<reason-code>"

Cause: Command line option for the data splitting utility is not valid. Valid options are:

- -c "Configuration file name"
- -d "Distribution file name"
- -i "Input file name"
- -o "Output file prefix"
- -h Usage message

Action: Given for each reason code:

- 1 There is an option not started with '-' sign.
- 2 Each option except 'h' (or 'H') must be followed by an argument.
- 3 There is an invalid option.
- 4 The argument of an option is too long (maximum 80 characters).

SQL2702N

Failed to open the configuration file "<config-file>".

Cause: The utility cannot read the configuration file "<config-file>".

Action: Please ensure the configuration file exists and is readable.

SQL2703N

Failed to open the log file "<log-file>".

Cause: The utility cannot open the log file "<log-file>" for writing or appending.

Action: Please ensure the log file exists and is writable.

SQL2704N

Failed to open the input data file "<input-data-file>".

Cause: The utility cannot read the input data file "<input-data-file>".

Action: Please ensure the input data file exists and is readable.

SQL2705N

Failed to open the input partitioning map file "<in-map-file>".

Cause: The utility cannot read the input partitioning map file "<in-map-file>".

Action: Please ensure the input partitioning map file exists and is readable.

SQL2706N

Failed to open the output partitioning map file "<out-map-file>".

Cause: The utility cannot open the output partitioning map file "<out-map-file>" for writing.

Action: Please ensure the output partitioning map file is writable.

SQL2707N

Failed to open the distribution file "<dist-file>".

Cause: The utility cannot open the distribution file "<dist-file>" for writing.

Action: Please ensure the distribution file is writable.

SQL2708N

Failed to open the output data file "<out-data-file>".

Cause: The utility cannot open the output data file "<out-data-file>" for writing.

Action: Please ensure the output data file is writable.

SQL2709N

Syntax error at line "<line>" of the configuration file.

Cause: There is a syntax error in the specification of a keyword and its argument.

Action: A keyword and its argument must be delimited by an '=' sign.

SQL2710N

Invalid keyword at line "<line>" of the configuration file.

Cause: There is an undefined keyword in the configuration file.

Action: Valid keywords (case insensitive) are:

- DESCRIPTION, CDELIMITER, SDELIMITER, NODES, TRACE, MSG_LEVEL, RUNTYPE, OUTPUTNODES, NODES, OUTPUTNODES, OUTPUTTYPE, PARTITION, MAPFILE, INFILE, MAPFILO, OUTFILE, DISTFILE, LOGFILE, NEWLINE, HEADER, FILETYPE

SQL2711N

Invalid column delimiter (CDELIMITER) at line "<line>" of the configuration file.

Cause: The column delimiter (CDELIMITER) specified in the configuration file is not valid.

Action: Make sure the column delimiter (CDELIMITER) is a single byte character.

SQL2712N

Invalid string delimiter (SDELIMITER) at line "<line>" of the configuration file.

Cause: The string delimiter (SDELIMITER) specified in the configuration file is not valid.

Action: The string delimiter (SDELIMITER) cannot be a period.

SQL2713N

Invalid run type (RUNTYPE) at line "<line>" of the configuration file.

Cause: The value for run type (RUNTYPE) specified in the configuration file is not valid.

Action: Valid run type (RUNTYPE) can be either PARTITION or ANALYZE (case insensitive).

SQL2714N

Invalid message level (MSG_LEVEL) at line "<line>" of the configuration file.

Cause: The value for message level (MSG_LEVEL) specified in the configuration file is not valid.

Action: Valid message level (MSG_LEVEL) can be either CHECK or NOCHECK (case insensitive).

SQL2715N

Invalid check level (CHECK_LEVEL) at line "<line>" of the configuration file.

Cause: The value for check level (CHECK_LEVEL) specified in the configuration file is not valid.

Action: Valid check level (CHECK_LEVEL) can be either CHECK or NOCHECK (case insensitive).

SQL2716N

Invalid record length (RECLLEN) "<reclen>" at line "<line>" of the configuration file.

Cause: The value for record length (RECLLEN) "<reclen>" specified in the configuration file is not valid.

Action: The record length (RECLLEN) must be between 1 and 32767.

SQL2717N

Invalid node specification (NODES) at line "<line>" of the configuration file. Reason code "<reason-code>".

Cause: The node specification (NODES) in the configuration file is not valid.

Action: Given for each reason code:

- 1 NODES has already been defined.
- 2 The format is not valid. A valid example:
NODES=(0,30,2,3,10-15,57)
- 3 Each entry must be numeric data between 0 and 999.
- 4 Range specification must be from a lower number to a higher number.

SQL2718N

Invalid output node specification (OUTPUTNODES) at line "<line>" of the configuration file. Reason code "<reason-code>".

Cause: The output node specification (OUTPUTNODES) in the configuration file is not valid.

Action: Given for each reason code:

- 1 OUTPUTNODES has already been defined.
- 2 The format is not valid. A valid example:
OUTPUTNODES=(0,30,2,3,10-15,57)
- 3 Each entry must be numeric data between 0 and 999.
- 4 Range specification must be from a lower number to a higher number.

SQL2719N

Invalid output type (OUTPUTTYPE) at line "<line>" of the configuration file.

Cause: The output type (OUTPUTTYPE) in the configuration file is not valid.

Action: Valid output types (OUTPUTTYPE) are W (write) or S (stdin), case insensitive.

SQL2720N

Number of partition keys exceeded the maximum "256". This error was detected at line "<line>" of the configuration file.

Cause: The number of partitioning keys defined cannot exceed the maximum limit: 256.

Action: Remove one or more partitioning keys defined in the configuration file.

SQL2721N

Invalid partitioning key specification (PARTITION) at line "<line>" of the configuration file. Reason code "<reason-code>".

Cause: A partitioning key specification (PARTITION) in the configuration file is not valid. Valid format:

PARTITION=<key name>,<position>,<offset>,<len>,<nullable>,<datatype>

If a delimited-data file, <position> must be defined; otherwise, <offset> and <len> must be defined.

Action: Given for each reason code:

- 1 Fields must be delimited by the ',' character.
- 2 <position>, <offset> and <len> must be positive integers.
- 3 <nullable> must take a value from {N,NN,NNWD}.
- 4 Valid <data type> includes: SMALLINT, INTEGER, CHARACTER, VARCHAR, FOR_BIT_CHAR, FOR_BIT_VARCHAR, FLOAT (for binary numerics only), DOUBLE (for binary numerics only), DATE, TIME, TIMESTAMP, DECIMAL(x,y).
- 5 For DECIMAL data type, precision (x) and scale (y) must be specified and they must be positive integers.
- 6 For CHARACTER or VARCHAR data type, <len> must be specified."

SQL2722N

Invalid log file specification (LOGFILE) at line "<line>" of the configuration file.

Cause: The log file specification (LOGFILE) in the configuration file is not valid.

Action: The log file specification (LOGFILE) must be in one of the following two formats:

- LOGFILE=<log file name>,<log type>
- LOGFILE=<log file name>

<log type> can only be W (write) or A (append), case insensitive.

SQL2723N

Invalid trace specification (TRACE) at line "<line>" of the configuration file.

Cause: The trace specification (TRACE) in the configuration file is not valid.

Action: The trace specification (TRACE) must be a positive integer between 0 and 65536 (exclusive).

SQL2724N

Invalid node list specification.

Cause: The node list specification is not valid.

Action: One and only one of the two parameters: NODES and MAPFIL (input partition map) must be specified in the configuration file.

SQL2725N

Filename for output partition map was not specified.

Cause: If run type is ANALYZE, a filename for the output partition map must be defined.

Action: Specify a filename for the output partition map.

SQL2726N

There is no partitioning key defined.

Cause: At least one partitioning key must be defined.

Action: Specify one or more partitioning keys.

SQL2727N

Partition key "<key-name>" exceeds the record length "<reclen>".

Cause: For non-delimited data, starting position for a key must be less than the record length.

Action: Make sure starting position for a key is less than the record length.

SQL2728N

Output node "<out-node>" is not defined in the node list.

Cause: Output node list must be a subset of the node list, which is derived from NODES or the input partition map file.

Action: Make sure all output nodes are defined in the node list.

SQL2729N

Invalid input partition map.

Cause: There is at least one error in the input partition map file.

Action: The input partition map must contain no less than 4096 data entries, and each data entry must be a number between 0 and 999.

SQL2730N

Error while writing header to output data file "<out-data-file>".

Cause: An I/O error occurred while writing the header to an output data file.

Action: Check your operating system documentation for file I/O errors and ensure that there is sufficient space on the output device.

SQL2731N

Error while reading from input data file "<filename>".

Cause: An I/O error occurred while reading from input data file.

Action: Check your operating system documentation for file I/O errors.

SQL2732N

Line "<line>" of the input data file contains binary data.

Cause: Binary data is not permitted on the host versions of this utility program.

Action: Check your input data file.

SQL2733N

Run type (RUNTYPE) was not defined in the configuration file.

Cause: The run type (RUNTYPE) must be defined as either PARTITION or ANALYZE.

Action: Please specify run type (RUNTYPE) in the configuration file.

SQL2734N

Invalid specification for parameter 32KLIMIT at line "<line>" of the configuration file.

Cause: The specification for parameter 32KLIMIT in the configuration file is not valid.

Action: Parameter 32KLIMIT can be either YES or NO, case insensitive.

SQL2735W

The record "<rec-no>" of the input data file was discarded because it was an empty record.

Cause: The record "<rec-no>" of the input data is discarded because it contains nothing but spaces.

Action: Check record "<rec-no>" in the input data file.

SQL2736N

sqlugrpi_api returned an error when processing record at line "<line>" of the input data file.

Cause: Partitioning key fields contain invalid data.

Action: Check the input data file at line "<line>".

SQL2737N

Failed to write output data file for output node "<out-node>" when processing record at line "<line>" of input data file.

Cause: An I/O error occurred while writing a record to the output data file for node "<out-node>".

Action: Check your operating system documentation for file I/O errors and ensure that there is sufficient space on the output device.

SQL2738W

Record at line "<line>" of input data file has been truncated when writing to the output data file for node "<out-node>". Expected writing length is "<reclen>" while actual writing length is "<real-len>".

Cause: Expected writing length (RECLLEN) does not match the actual writing length.

Action: Adjust record length value defined in the configuration file.

SQL2739N

The record length was not specified for a binary numerical data file.

Cause: If a binary numerical input data file, the record length has to be defined.

Action: Please specify the record length in your configuration file.

SQL2740N

Float data type is not allowed in a non-binary input data file.

Cause: Float data type is only supported when the file type is BIN (binary).

Action: Make sure data types and the type of input data file match.

SQL2741N

Invalid file type specification at line "<line>" of the configuration file.

Cause: The file type specification (FILETYPE) in the configuration file is not valid.

Action: The valid value of file type parameter can be ASC (positional ascii data file), DEL (delimited ascii data file), or BIN (binary numerical data file), case insensitive.

SQL2742N

The length of partition key "<partition-key>" does not match its precision.

Cause: In a binary input data file, the length of a partition key with decimal data type must conform to the equation: $LENGTH=(PRECISION+2)/2$ (integer division), because it is a packed decimal.

Action: Match the length of a decimal-typed partition key with its precision if the input data file is a binary data file.

SQL2743N

The length of partition key "<partition-key>" does not match its data type.

Cause: In a binary input data file, the length of a partition key with integer, small integer, float, and double data type must be a predefined constant, i.e. 4 for integer, 2 for small integer, 4 for float, and 8 for double.

Action: Check partition key definitions in the configuration file.

SQL2744N

Illegal file name specification for "<file>" at line "<line>" of the configuration file.

Cause: The maximum length for a file name is 80 bytes.

Action: Check the configuration file.

SQL2745N

Invalid NEWLINE flag at line "<line>" of the configuration file.

Cause: The NEWLINE flag must be either YES or NO, and if not given, it is NO.

Action: Check the specification of NEWLINE flag in the configuration file.

SQL2746N

An incomplete record was found while reading record "<record-number>" from the input data file.

Cause: If a fixed-length positional ASC file or a binary numerical data file, each record has to be exactly the same length as the value of the RECLLEN parameter in the configuration file.

Action: Make sure the input data file is complete.

SQL2747N

A record was too long while reading record "<rec-no>" from the input data file.

Cause: For a positional ASC input data file or a delimited data file with parameter 32KLIMIT on, the maximum record length can not exceed the 32k (bytes) limit.

Action: Check your input data file and make sure the record length is less than 32k bytes.

SQL2748N

Record "<record-number>" has a length of "<length>" bytes, which is too short to hold the partitioning key "<key>".

Cause: For a positional ASC input data file or a binary numerical data file, each record has to be long enough to hold all partitioning keys.

Action: Check the record length of your input data file.

SQL2749N

Partitioning key "<key-no>" of record "<rec-no>" was not in the first 32k bytes of the record.

Cause: If a record is greater than 32k bytes long in a delimited data file, all partitioning keys of each record have to be within the first 32k bytes of the record.

Action: Check record "<rec-no>" in the input data file.

SQL2750N

The length of line "<line-number>" in the configuration was more than 255 bytes.

Cause: The maximum length of a line in the configuration file must be less than 255 bytes.

Action: Check your configuration file and make sure all lines are less than 255 bytes.

SQL2751N

The actual length "<actual-reclen>" of record "<rec-no>" did not match the expected length "<exp-reclen>".

Cause: If new line checking is required for a fixed length ASC data file (NEWLINE parameter is YES and RECLLEN parameter is not zero), the actual length of each record has to match the expected record.

Action: Check record "<rec-no>" in the input data file.

SQL2752N

Invalid codepage specification "<codepage>" at line "<line>" of the configuration file.

Cause: The codepage specification is not valid. It must be a positive integer.

Action: Correct the codepage specification in the configuration file.

SQL2753N

Failed to get the country code and codepage for the application. Return code from function "<function-name>" is "<rc>".

Cause: The program failed to get the country code and codepage of its environment.

Action: Check with your database system administrator.

SQL2754N

Codepage "<source-cp>" cannot be converted to codepage "<target-cp>".

Cause: The database does not support codepage conversion between those two codepages.

Action: Please ensure your data is in a convertible codepage.

SQL2761N

Only one of table name or nodegroup can be specified.

Cause: Specify either the table name or the nodegroup name, but not both.

Action: Check your command line options.

SQL2762N

The utility failed to find the database installation path.

Cause: The utility needs to know where the database manager is installed, then it can find its bind file.

Action: Make sure your database manager is properly installed.

SQL2763N

The table "<tbl-name>" was not found.

Cause: The table "<tbl-name>" cannot be located in sysibm.systables.

Action: Make sure the table exists in the database.

SQL2764N

The nodegroup "<nodegroup>" was not found.

Cause: The nodegroup "<nodegroup>" cannot be located in sysibm.sysnodegroupdef.

Action: Make sure the nodegroup exists in the database.

SQL2765W

The utility failed to open output partition map file "<out-map-file>".

Cause: The utility cannot open the output partition map file for writing. It will write the output to stdout.

Action: Check your file access permissions.

SQL2766N

The partition map is not of the correct size "`<map-size>`".

Cause: The size of the partition map is not correct. Data is corrupted in the database.

Action: Contact the Database Administrator to resolve the problem.

SQL2767N

A command line option is not valid.

Cause: There is an invalid command line option.

Action: Make sure to specify the correct command line options.

SQL2800 - SQL2899

SQL2800N

CREATE, DROP, or CHANGE NODE failed.
Reason code "`<reason-code>`".

Cause: The utility failed to add, drop, or change the node because the input parameters specified are invalid as indicated by the following reason codes:

- (1) The node number is not specified
- (2) The TCP/IP host name is not specified
- (3) The computer name is not specified
- (4) The node number is invalid.
- (5) The port number is invalid.
- (6) The TCP/IP host name is invalid.
- (7) The port value is not defined for your instance in the services file.
- (8) The port value is not in the valid range defined for your instance in the services file.
- (9) The node number is not unique.
- (10) The host name/port couple is not unique.
- (11) The host name value has no corresponding port 0.

Action: The action corresponding to the reason code is:

- (1) Ensure that the node number is specified
- (2) Ensure that the TCP/IP host name is specified
- (3) Ensure that the computer name is specified
- (4) Ensure that the node number is between 0 and 999.
- (5) Ensure that the port number is between 0 and 999.

- (6) Ensure that the host name specified is both defined on the system and is operational
- (7) Ensure that the TCP/IP services on your system contains an entry for your instance
- (8) Ensure that you only use port values that are specified in the services file on your system
- (9) Ensure that the node number specified is unique.
- (10) Ensure that the new host name/port is not already defined in the db2nodes.cfg file.
- (11) Ensure that the port value 0 has been defined for host name specified.

SQL2801N

The syntax of the DB2NCRT command is incorrect.

Cause: The DB2NCRT utility creates a new node in a partitioned database system.

```
DB2NCRT /n:node ffl/h:host"  
                ffl/m:machine"  
                ffl/p:port"  
                ffl/i:instance"  
                ffl/u:username,password"
```

The command options are:

- /h Specify the TCP/IP host name
- /m Specify the workstation name
- /p Specify the logical port number
- /i Specify the instance if different from the default/current instance
- /u Specify the Logon Account name and password

Action: Issue the DB2NCRT command with one of the valid command options.

SQL2802N

The syntax of the DB2NCHG command is incorrect.

Cause: The DB2NCHG utility changes or updates node configuration for a given node in a partitioned database system.

```
DB2NCHG /n:node ffl/h:host"  
                ffl/m:machine"  
                ffl/p:port"  
                ffl/i:instance"  
                ffl/u:username,password"
```

The command options are:

- /h Change the TCP/IP host name
- /m Change the workstation name
- /p Change the logical port number

- /i Specify the instance if different from the default/current instance
- /u Change the Logon Account name and password

Action: Issue the DB2NCHG command with one of the valid command options.

SQL2803N

The syntax of the DB2NDROP command is incorrect.

Cause: The DB2NDROP utility drops a node from a partitioned system.

```
DB2NDROP /n:node f/i:instance"
```

The command options are:

- /i Specify the instance if different from the default/current instance

Action: Issue the DB2NDROP command with one of the valid command options.

SQL2804N

The syntax of the DB2NLIST command is incorrect.

Cause: The DB2NLIST utility list all nodes in a partitioned system.

```
DB2NLIST f/i:instance"
f/s"
```

The command options are:

- /i Specify the instance if different from the default/current instance
- /s Display node status

Action: Issue the DB2NLIST command with one of the valid command options.

SQL2805N

A service error has occurred. Reason code "<reason-code>".

Cause: A service error has occurred during CREATE, DROP or ADD NODE processing as indicated by the following reason codes:

- (1) Unable to register the service
- (2) Unable to set the required User Rights Policy
- (3) Unable to set the Logon Account for the service
- (4) Unable to delete the service

Action: The action corresponding to the reason code is:

- (1) If the workstation name is specified during DB2NCRT, ensure that the workstation name is correct.
- (2) Ensure that the user name specified is valid.
- (3) Ensure that the user name and the password specified are valid.
- (4) If the node resides on another machine, ensure that the machine is running.

If the problem persists, examine the db2diag.log for problem determination information and contact an IBM Service Representative for assistance.

SQL2806N

Node "<node>" not found for instance "<instance>".

Cause: DB2NDROP failed because the node does not exist.

Action: Ensure the node number is correct and reissue the command.

SQL2807N

Node "<node>" already exists for instance "<instance>".

Cause: DB2NCRT failed because the node already exists.

Action: Ensure the node number is correct and reissue the command.

SQL2808W

Node "<node>" for instance "<instance>" has been deleted.

Cause: The DB2NDROP processing has completed successfully.

Action: No further action is required.

SQL2809W

Node "<node>" added to instance: "<instance>" {Host: "<host-name>" Machine: "<machine-name>" Port: "<port-num>"}

Cause: The DB2NCRT processing has completed successfully.

Action: No further action is required.

SQL2810W

Node: "<node>" changed in instance: "<instance>" {Host: "<host-name>" Machine: "<machine-name>" Port: "<port-num>"}

Cause: The DB2NCHG processing has completed successfully.

Action: No further action is required.

SQL2811N

The command is invalid because the instance is not a partitioned database instance.

Cause: The command is only valid if the instance is a partitioned database instance.

Action: Ensure that the specified instance name is valid. If the instance name is not specified on the command line, ensure that the DB2INSTANCE environment is set to a valid partitioned database instance.

SQL3000 - SQL3099

SQL3001C

An I/O error (reason = "<reason>") occurred while opening the output file.

Cause: A system I/O error occurred while opening the output file.

The command cannot be processed. No data is processed.

Action: For IMPORT/LOAD, verify that the output file exists. For EXPORT, verify that the output media has enough free space. Resubmit the command with a valid output file name, including the correct path. Look in the message file for additional information.

SQL3002C

An I/O error occurred while writing to the output data file.

Cause: A system I/O error occurred while writing to the output data file. The output may be incomplete or the disk may be full.

The utility stops processing.

Action: If the output data file is incomplete, erase it and resubmit the command.

SQL3003C

An I/O error occurred while closing the output data file.

Cause: A system I/O error occurred while closing the output data file.

The file is not closed.

Action: If the output data file is incomplete, erase it and resubmit the command.

SQL3004N

The filetype parameter is not valid.

Cause: The *filetype* parameter must be DEL, ASC, IXF, WSF, or DB2CS for the command.

The *filetype* parameter must be DEL, IXF, or WSF for the EXPORT command.

The *filetype* parameter must be ASC, DEL, IXF, or DB2CS for the LOAD command.

IXF files can not be used to load into a table defined on a multinode nodegroup.

The command cannot be processed.

Action: Resubmit the command with a valid *filetype* parameter.

SQL3005N

Processing was interrupted.

Cause: An interrupt was received during processing. The user may have pressed the interrupt key sequence.

The utility stops processing. Any database updates not committed are rolled back.

Action: Resubmit the command. If doing an import, see *Command Reference* for information on how to use commitcount and restartcount parameters. If doing a load, see *Command Reference* for information on how to restart the load.

SQL3006C

An I/O error occurred while opening the message file.

Cause: A system I/O error occurred while opening the message file. This error can refer to a problem on either the client or the server.

The command cannot be processed.

Action: Resubmit the command with a valid message file name, including the correct path.

SQL3007C

An I/O error occurred while writing to the message file.

Cause: A system I/O error occurred while writing to the message file.

Processing may not have finished.

Action: If the message file is incomplete, erase it and resubmit the command.

SQL3008N

The utility encountered an error "<error>" while connecting to the database.

Cause: The IMPORT or EXPORT utility could not connect to the database.

No data is imported or exported.

Action: Look at the error number in the message for more information. Make changes and resubmit the command.

SQL3009N

The Action String parameter is not valid.

Cause: The *Action String* (e.g. "REPLACE into ...") parameter in the command is not valid. The *Action String* pointer may be incorrect. The structure that the *Action String* points to may be incorrect. The *Action String* structure may contain characters that are not valid.

The command cannot be processed.

Action: Verify the *Action String* pointer and the structure it points to. Resubmit the command with a valid *Action String*.

SQL3010N

The METHOD parameter is not valid.

Cause: The *METHOD* parameter in the command is not valid. The *METHOD* pointer may be incorrect. The structure that the *METHOD* points to may be incorrect. The *METHOD* structure may contain characters that are not valid.

The command cannot be processed.

Action: Examine the *METHOD* pointer and the structure it points to. Resubmit this command with a valid *METHOD*.

SQL3011C

There is not enough storage to process the command.

Cause: A memory allocation error occurred. Not enough memory is available to process the command, or there was an error freeing storage.

The command cannot be processed.

Action: Stop the application. Possible solutions include:

- Verify that your system has sufficient real and virtual memory.
- Remove background processes.
- Increase the *util_heap_sz* for the database.
- Decrease the size of buffers to use for the LOAD.
- The *util_heap_sz* is shared by the LOAD, BACKUP and RESTORE utilities, so have fewer concurrent instances of these utilities running.

SQL3012C

A system error occurred.

Cause: An operating system error occurred.

The command cannot be processed.

Action: Check your message file, correct the problem and resubmit the command.

SQL3013N

The length of the filemod is out of the acceptable range. It should be greater than or equal to zero and less than or equal to 8000.

Cause: The filemod specified is outside the acceptable range (greater than or equal to zero and less than or equal to 8000).

The command cannot be processed.

Action: Examine the *filemod* pointer and the structure it points to. Resubmit the command with a valid *filemod*.

SQL3014C

An I/O error occurred while closing the message file.

Cause: A system I/O error occurred while closing the message file.

The message file is not closed.

Action: If the message file is incomplete, resubmit the command.

SQL3015N

An SQL error "<sqlcode>" occurred during processing.

Cause: An SQL error occurred during the utility call.

The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL3016N

An unexpected keyword "<keyword>" was found in the filemod parameter for the filetype.

Cause: A keyword that does not apply to the filetype for the utility was found in the filetype modifier (the *filemod* parameter or the phrase following *MODIFIED BY* in a CLP command).

The utility stops processing.

Action: Remove the filetype modifier or specify at least one valid keyword in the filetype modifier. See the Command Reference for more information on filetype modifiers.

SQL3017N

A delimiter is not valid or is used more than once.

Cause: For Delimited ASCII (DEL) files, one of two errors occurred:

- The character specified for either the column delimiter, character string delimiter, or decimal point character is not valid.
- The same character is specified for more than one of the preceding items.

The command cannot be processed.

Action: Examine the specified delimiters for validity and uniqueness. Resubmit the command with valid delimiter overrides.

SQL3018N

The period was specified as a character string delimiter.

Cause: For Delimited ASCII (DEL), the period cannot be specified as the character string delimiter.

The command cannot be processed.

Action: Resubmit the command with valid delimiter overrides.

SQL3019N

No Action String parameter was specified in the command.

Cause: No *Action String* (e.g. "REPLACE into ...") parameter is specified for this utility call. This parameter is required.

The command cannot be processed.

Action: Resubmit the command with an *Action String* parameter.

SQL3020N

The user does not have the authority to run the specified Export command.

Cause: The user attempted to export data without the appropriate authorization (either the SYSADM or DBADM authority), or the CONTROL or SELECT privilege for each table involved in the export.

The export action is not performed.

Action: Request appropriate authorization before exporting data from the tables.

SQL3021N

The user does not have the authority to run the specified Import command on table "<name>".

Cause: The user attempted to import data without the appropriate authorization for the specified option and table.

Import using the INSERT option requires one of the following:

- SYSADM or DBADM authority
- CONTROL privilege on the table or view
- INSERT and SELECT privilege on the table or view.

Import to an existing table or view using the INSERT_UPDATE, REPLACE, or the REPLACE_CREATE option, requires one of the following:

- SYSADM or DBADM authority
- CONTROL privilege on the table or view.

Import to a table that does not exist, using the CREATE or REPLACE_CREATE option, requires one of the following:

- SYSADM or DBADM authority
- CREATETAB authority on the database and one of:
 - IMPLICIT_SCHEMA authority on the database, if the schema name of the table does not exist
 - CREATEIN privilege on the schema, if the schema of the table exists

The import operation is not performed.

Action: Ensure that the user has the authorization to perform the import operation.

SQL3022N

An SQL error "<sqlcode>" occurred while processing the SELECT string in the Action String parameter.

Cause: In IMPORT or EXPORT, during processing of the SELECT string from the *Action String* (e.g. "REPLACE into ...") structure, an SQL error occurred.

The command cannot be processed.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL3023N

The database name parameter is not valid.

Cause: The database name parameter is not valid. See the SQLERRD[0] field in the SQLCA for more information.

The database name must contain 1 to 8 characters and the characters must be from the database manager base character set.

The command cannot be processed.

Action: Resubmit the statement with a valid database name parameter.

SQL3025N

A parameter specifying a filename or path is not valid.

Cause: The parameter contains a path, directory, or file name that is not valid.

For IMPORT and EXPORT, verify the *datafile* parameter.

For LOAD, verify that each entry in the parameters of type *sql_media_list: datafile* should contain valid filenames; *lobpaths copytarget*, and *workdirectory* should contain valid paths on the server including the final separator and a null terminator.

The pointer to *lobpaths*, *copytarget* and *workdirectory* must be valid or null.

The pointer to the targets in these structures must be valid.

Check that sessions and *media_type* are specified correctly.

Also, if the *lobpaths* parameter is specified, check that the *media_type* is the same as that specified for the *datafile* structure.

If the filetype is IXF, the length of the file name may be too long.

The command cannot be processed.

Action: Resubmit the statement with a valid parameter.

SQL3026N

The msgfile or remotefile parameter is not valid.

Cause: For IMPORT or EXPORT, the *msgfile* parameter contains a path, directory, or file name that is not valid.

For LOAD, either the *msgfile* parameter contains a path, directory, or file name that is not valid on the client, or the *remotefile* parameter contains a path, directory, or file name that is not valid on the server.

If the database to which the application is connected is a remote database, the *msgfile* must be fully qualified. For a local database the utility will attempt to fully qualify the *msgfile* if it is not already fully qualified. Also verify that the pointer to the *msgfile* is valid.

The command cannot be processed.

Action: Resubmit the statement with a valid *msgfile* and/or *remotefile* parameter.

SQL3028N

The export method indicator is not valid. It must be either 'N' or 'D'.

Cause: The export method indicator must be either N for Names or D for Default.

The command cannot be processed.

Action: Resubmit the statement with a valid method indicator.

SQL3029N

No filetype parameter was specified.

Cause: The *filetype* parameter was either not specified or null. The system does not know which format to use for the data file.

The command cannot be processed.

Action: Resubmit the statement with a valid *filetype*.

SQL3030C

An I/O error (reason = "<reason>") occurred while opening the input file.

Cause: A system I/O error occurred while opening the input file. This error can refer to a problem on either the client or the server.

A possible cause may be that the input file is in use by another application.

The command cannot be processed.

Action: Ensure that the input file is valid, including the path, and that it is not currently in use by another application.

Resubmit the command. Look in the diagnostics log file for additional information.

SQL3031C

An I/O error occurred while reading from the input file.

Cause: A system I/O error occurred while reading from the input file. This error can refer to a problem on either the client or the server.

The command cannot be processed.

Action: Verify that the input file is readable.

SQL3032N

The LOAD/IMPORT method indicator is not valid for the specified filetype. It must be either 'N', 'P', or 'default'.

Cause: For the IXF and WSF filetypes, the LOAD/IMPORT method indicator must be either N for Names, P for Positional, or D for Default.

The command cannot be processed.

Action: Resubmit the command with a valid method indicator.

SQL3033N

A keyword such as INSERT, REPLACE, CREATE, INSERT_UPDATE, or REPLACE_CREATE is missing from the target specification or it is misspelled.

Cause: For IMPORT, the *Action String* (e.g. "REPLACE into ...") parameter does not contain the keyword INSERT, REPLACE, CREATE, INSERT_UPDATE, or REPLACE_CREATE. For LOAD, the *Action String* parameter does not contain the keyword INSERT, REPLACE, or RESTART. The keyword must be followed by at least one blank.

The command cannot be processed.

Action: Resubmit the command with a valid *Action String* parameter.

SQL3034N

The keyword INTO is missing from the target specification or it is misspelled.

Cause: The INTO keyword is missing or spelled incorrectly. INTO must be followed by at least one blank.

The command cannot be processed.

Action: Resubmit the command with a valid *Action String* (e.g. "REPLACE into ...") parameter.

SQL3035N

The tablename parameter in the target specification is not valid.

Cause: For IMPORT, the *tablename* in the *Action String* (e.g. "REPLACE into ...") is not valid. For LOAD, the *tablename* or the *exception tablename* in the *Action String* is not valid.

The command cannot be processed.

Action: Resubmit the command with a valid *tablename*. Also ensure that all command keywords and parameters are entered in the correct order.

SQL3036N

The tcolumn-list in the target specification does not have a closed parenthesis.

Cause: The *tcolumn-list* must be delimited by parentheses. The list was not terminated by the closed parenthesis.

The command cannot be processed.

Action: Resubmit the statement with a valid, complete column list in the *Action String* (e.g. "REPLACE into ...") parameter.

SQL3037N

An SQL error "<sqlcode>" occurred during Import processing.

Cause: An SQL error occurred during processing of the *Action String* (e.g. "REPLACE into ...") parameter.

The command cannot be processed.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL3038N

The Action String parameter contains unexpected characters.

Cause: For IMPORT, there are characters other than blanks after the closing parenthesis of the column list in the *Action String* (e.g. "REPLACE into ...") parameter. For LOAD, there are characters other than blanks after the closing parenthesis of the column list and/or the exception tablename in the *Action String* parameter.

The command cannot be processed.

Action: Resubmit the command with a valid *Action String* parameter.

SQL3039W

The available memory in the utility heap prohibits full LOAD parallelism. Load parallelism of "<tok-1>" will be used.

Cause: The LOAD utility attempted to determine the optimal level of CPU parallelism for SMP exploitation based on the system configuration, or the user specified a value for LOAD parallelism when invoking the utility. However, the amount of free memory in the utility heap prohibits this degree of parallelism. A lesser degree of parallelism, suitable for the memory available, will be used.

Action:

1. Ignore this message, and the LOAD will complete normally using the smaller value for LOAD parallelism.
2. Specify a smaller value for LOAD parallelism when invoking the utility.
3. Increase the size of the utility heap.

SQL3040N

Unable to use the lobpath/lobfile parameters as specified. Reason code: "<reason-code>".

Cause: The utility is unable to use the lobpath or lobfile parameters as specified for the reason given by "<reason-code>". The codes are listed below.

Action: Given for each reason code:

- 1 The lobpath is not a valid `sqlu_media_list` or the values provided are not valid. The `media_type` must be `SQLU_LOCAL_MEDIA` and all pathnames must be terminated with a valid path separator.

- 2 The lobfile is not a valid `sqlu_media_list` or the values provided are not valid. The `media_type` must be `SQLU_LOCAL_MEDIA`.
- 3 There are not enough `lobpath` names provided. For export, there is not enough space on the paths provided to hold all the lobs.
- 4 There are not enough lobfile names provided. For export, there are more lobs than the number of lobfile names provided multiplied by `SQLU_MAX_SESSIONS`.
- 5 The combination of a `lobpath` name and lobfile name would exceed the maximum size of a lobfile name (255 bytes).
- 6 An error occurred while trying to access the file.

SQL3045N

A `dcolumn` position in the `METHOD` parameter is less than one or greater than the maximum number of columns (1024) in a Delimited ASCII file.

Cause: The `dcolumn` position is less than 1 or greater than the maximum number of columns (1024) in a delimited file.

The command cannot be processed.

Action: Resubmit the command with valid `dcolumn` positions.

SQL3046N

The number of columns in the `METHOD` parameter is less than one.

Cause: For `METHOD` methods other than Default, the number of columns specified must be a positive number (greater than 0).

The command cannot be processed.

Action: Resubmit the command with a valid number of columns in the `METHOD` parameter.

SQL3047N

The `LOAD/IMPORT` method specified in `METHOD` is not valid for Delimited ASCII files. It must be either 'P' or 'default'.

Cause: The only valid `LOAD/IMPORT` methods for Delimited ASCII files are P for Positions or D for Default. The command cannot be processed.

Action: Resubmit the command with a valid import method.

SQL3048N

There are fewer columns specified from the input file than database columns, but one of the database columns is not nullable.

Cause: When fewer columns are specified in the `METHOD` list than are specified for the target table, the values for the missing input columns are loaded as nulls. Because the columns in the target table that correspond to one or more of these input columns are not nullable, null cannot be inserted.

The file cannot be loaded.

Action: Define a new table that has the same number of columns as the input file or that has nullable columns. Resubmit the command.

SQL3049N

The data type "<type>" of the database column "<name>" is not compatible with this format file, but the database column is not nullable.

Cause: The database column type is not valid for this format file. The database column is not nullable so the utility is ended.

The utility stops processing. No data is loaded.

Action: Redefine the database table so the columns are compatible with the columns loaded from the file.

SQL3050W

Conversions on the data will be made between the IXF file code page and the application code page.

Cause: If an IMPORT of an IXF data file has been issued and the code page of the character data in the IXF file is different from the code page of the application invoking the import operation, a conversion will be made from the code page of the data file to the code page of the application and the operation will continue.

If a LOAD of an IXF data file has been issued and the code page of the character data in the IXF file is different from the database code page, a conversion will be made from the code page of the data file to the code page of the database and the operation will continue.

Action: If you do not want a conversion to be performed, invoke the utility using the FORCEIN option; otherwise no action is required.

SQL3051W

The data to be loaded into "<column_name>" has been loaded, but conversion from the IXF file code page to the application code page has not been performed.

Cause: The data that was loaded into the CLOB or DBCLOB column is stored in a separate file and no conversions have been performed on it.

To properly load the data, call the utility from an application that has the same code page as the IXF file.

Action: This is a warning only.

SQL3053N

There are more than 8191 rows to be exported to a worksheet formatted file.

Cause: The maximum number of rows that can be placed in a worksheet format file (WSF) is 8191.

The EXPORT utility stops processing after placing 8191 rows in the file.

Action: To prevent this error, use a SELECT statement that results in fewer rows to export, and resubmit the command.

SQL3054N

The input file is not a valid PC/IXF file. The file is too short to contain a valid H record.

Cause: The end of the file was reached before the expected end of the first record. The file may not be a PC/IXF file.

The LOAD/IMPORT utility stops processing. No data is imported.

Action: Verify that the input file is correct.

SQL3055N

The input file is not a valid PC/IXF file. The length field in the first record cannot be converted to a numeric value.

Cause: The value in the length field of the first record is not the ASCII representation of a number. The file may not be a PC/IXF file.

The utility stops processing. No data is loaded.

Action: Verify that the input file is correct.

SQL3056N

The input file is not a valid PC/IXF file. The value in the length field of the H record is too small.

Cause: The value in the length field of the H record is not large enough for a valid H record. The file may not be a PC/IXF file.

The utility stops processing. No data is loaded.

Action: Verify that the input file is correct.

SQL3057N

The input file is not a valid PC/IXF file. The type field in the first record is not H.

Cause: The type field in the first record is not H. The first record is not a valid H record. The file may not be a PC/IXF file.

The utility stops processing. No data is loaded.

Action: Verify that the input file is correct.

SQL3058N

The identifier field in the H record is not IXF.

Cause: The identifier field in the H record does not identify the file as a PC/IXF file.

The utility stops processing. No data is loaded.

Action: Examine the identifier field in the H record.

SQL3059N

The version field in the H record is not valid.

Cause: The version field in the H record contains a value that is not valid.

The utility stops processing. No data is loaded.

Action: Examine the version field in the H record.

SQL3060N

The HCNT field in the H record cannot be converted to a numeric value or the value is out of range.

Cause: The Heading-record-count field in the H record is not an ASCII representation of a number or is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the HCNT field in the H record.

SQL3061N

The single-byte and/or double-byte code page field in the H record cannot be converted to a numeric value or the value is out of range.

Cause: The single-byte and/or double-byte code page field in the H record is not an ASCII representation of a number or is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the single-byte and double-byte code page field in the H record, change them to appropriate values as specified in the *API Reference* and resubmit the command.

SQL3062N

The double-byte code page field in the H record cannot be converted to a numeric value or the value is out of range.

Cause: The double-byte code page field in the H record is not an ASCII representation of a number or is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the double-byte code page field in the H record, change it to an appropriate value as specified in the *API Reference* and resubmit the command.

SQL3063N

The single-byte code page value “<value 1>” in the H record is not compatible with the single-byte code page value “<value 2>” for the application. The FORCEIN option was not specified.

Cause: The single-byte code page value in the H record is not compatible with the application code page value. When the FORCEIN option is not used, the data cannot be loaded unless conversion from value 1 to value 2 is supported.

The utility stops processing. No data is loaded.

Action: To load this data, resubmit the command with the FORCEIN option.

SQL3064N

The double-byte code page value “<value 1>” in the H record is not compatible with the double-byte code page value “<value 2>” for the application. The FORCEIN option was not specified.

Cause: The double-byte code page value in the H record is not compatible with the application code page value. When the FORCEIN option is not used, the data cannot be loaded unless value 1 and value 2 are the same.

The utility stops processing. No data is loaded.

Action: To load data where the double-byte code page values do not match, resubmit the command with the FORCEIN option.

SQL3065C

The value for the application code page cannot be determined.

Cause: The system encountered an error while determining the code page of the application.

The utility stops processing. No data is loaded or unloaded.

Action: Contact your technical service representative.

SQL3066N

While reading or looking for the T record, the end of the file was reached.

Cause: The end of the file was reached while the system was looking for the T record or while it was reading the T record.

The utility stops processing. No data is loaded.

Action: Examine the T record of the input file. If the PC/IXF file was copied from one medium to another, compare the copy with the original or repeat the copy process.

SQL3067N

The length field in the T record cannot be converted to a numeric value.

Cause: The length field in the T record is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the length field in the T record.

SQL3068N

The value in the length field of the T record is too small.

Cause: The value in the length field of the T record is not large enough so the T record is not valid.

The utility stops processing. No data is loaded.

Action: Examine the length field in the T record.

SQL3069N

The first non-A record following the H record is not a T record.

Cause: After the H record, the first record not an A record is also not a T record. The H record must be immediately followed by a T record but A records may exist before the T record.

The utility stops processing. No data is loaded.

Action: Examine the records following the H record.

SQL3070N

The length field in an A record is out of range.

Cause: The length field in an A record is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the length field in the A records.

SQL3071N

The data-convention field in the T record is not C.

Cause: The data-convention field in the T record is a value other than C.

The utility stops processing. No data is loaded.

Action: Examine the data-convention field in the T record.

SQL3072N

The data-format field in the T record is not M.

Cause: The data-format field in the T record is a value other than M.

The utility stops processing. No data is loaded.

Action: Examine the data-format field in the T record.

SQL3073N

The machine-form field in the T record is not PCbbb (where b = blank).

Cause: The machine-form field in the T record is a value other than PCbbb, where each b is a blank.

The utility stops processing. No data is loaded.

Action: Examine the machine-form field in the T record.

SQL3074N

The data-location field in the T record is not I.

Cause: The data-location field in the T record is a value other than I.

The utility stops processing. No data is loaded.

Action: Examine the data-location field in the T record.

SQL3075N

The CCNT in the T record cannot be converted to a numeric value or the value is out of range.

Cause: The C-record count field in the T record is not an ASCII representation of a number or is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the CCNT field in the T record.

SQL3076N

The name length field in the T record cannot be converted to a numeric value or the value is out of range.

Cause: The name length field in the T record is not an ASCII representation of a number or is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the name length field in the T record.

SQL3077N

The number of C records specified in the CCNT field in the T record "<value>" exceeds the maximum allowed "<maximum>".

Cause: The value in the CCNT field of the T record is larger than the maximum allowed for the indicated release.

The utility stops processing. No data is loaded.

Action: Examine the CCNT field in the T record.

SQL3078N

The length field in an A record cannot be converted to a numeric value.

Cause: The length field in an A record is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the length fields in the A records.

SQL3079N

The length field in a C record cannot be converted to a numeric value.

Cause: The length field in a C record is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the length field in the C records.

SQL3080N

The value in the length field of the C record is too small.

Cause: The value in the length field of a C record is not large enough so the C record is not valid.

The utility stops processing. No data is loaded.

Action: Examine the length field in the C records.

SQL3081N

Not enough C records were found.

Cause: The number of C records found (in the correct position) is less than the number expected from the C-record-count (CCNT) in the T record.

The utility stops processing. No data is loaded.

Action: Examine the T and C records.

SQL3082N

While reading or looking for a C record, the end of the file was reached.

Cause: The end of the file was reached while the system was looking for a C record or while it was still reading a C record.

The utility stops processing. No data is loaded.

Action: Examine the C records in the input file. If the PC/IXF file was copied from one medium to another,

compare the copy with the original or repeat the copy process.

SQL3083N

The D-record-id field in the C record for column “<name>” cannot be converted to a numeric value.

Cause: The D-record-id field in the C record for the indicated column is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the D-record-id field in the C record.

SQL3084N

The D-record-position field in the C record for column “<name>” cannot be converted to a numeric value.

Cause: The D-record-position field in the C record for the indicated column is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the D-record-position field in the C record.

SQL3085N

The D-record-id and D-record-position fields in the C record for column “<name>” are out of range or inconsistent with the previous C record.

Cause: The D-record-id or the D-record-position fields in the C record for the indicated column contain a value that is either out of the value range or is not correct relative to the previous C record.

The utility stops processing. No data is loaded.

Action: Examine the D-record-id and D-record-position fields in the C record.

SQL3086N

There was no source column specified to be loaded into database column “<name>” or the specified source column does not exist, but the database column is not nullable.

Cause: Either there was not a PC/IXF column specified to be exported into the indicated column or the specified PC/IXF source column does not exist. Nulls cannot be inserted because the database column is not nullable.

The utility stops processing. No data is loaded.

Action: Check the *METHOD* parameter for erroneous names or positions or for fewer entries in the *METHOD* parameter than the *Action String* (e.g. "REPLACE into ...") parameter states or implies.

SQL3087N

The source column specified to be loaded into database column “<name>” is not valid, but the database column is not nullable.

Cause: The PC/IXF column cannot be loaded into the indicated database column and the reason was given in a previous message in the message log. Nulls cannot be inserted because the database column is not nullable.

The utility stops processing. No data is loaded.

Action: Read the previous messages to understand why the column is not valid.

SQL3088N

The source column specified to be loaded into database column “<name>” is not compatible with the database column, but the database column is not nullable.

Cause: The source PC/IXF column is not compatible with the target database column. The column types or lengths may be incompatible. Nulls cannot be inserted because the database column is not nullable.

The utility stops processing. No data is loaded.

Action: Compare the columns in the source PC/IXF file with the columns in the database.

SQL3089N

A non-D record was found where a D record was expected.

Cause: Some record other than a D record was found where a D record was expected.

The utility stops processing. No data is loaded.

Action: Examine the D records in the file.

SQL3090N

The length field in a D record cannot be converted to a numeric value.

Cause: The length field in a D record is not an ASCII representation of a number.

The utility stops processing. No data is loaded.

Action: Examine the length field in the D records.

SQL3091N

The length field in a D record is out of range.

Cause: The length field in a D record is a number that is not valid for this field.

The utility stops processing. No data is loaded.

Action: Examine the length field in the D records.

SQL3092N

The identifier field in a D record does not contain the expected value.

Cause: The identifier field in a D record is not valid. One or more D records may have been written out of sequence.

The utility stops processing. No data is loaded.

Action: Examine the identifier field in the D records.

SQL3093N

The input file is not a valid WSF file.

Cause: The first record in the worksheet format (WSF) file was not a beginning-of-file (BOF) record, or the version of the WSF file is not supported.

The IMPORT utility stops processing. No data is imported.

Action: Verify that the file is a valid WSF file and that the name was entered correctly.

SQL3094N

The input column "<name>" was not found, but the corresponding database column is not nullable.

Cause: The specified column was not in the input file. Because the corresponding database column is not nullable, data cannot be loaded into the column.

The utility stops processing. No data is loaded. The column names processed before the error occurred are in the database.

Action: Verify that the input file contains the specified column names.

SQL3095N

The specified column position "<position>" is not in the valid range of 1 to 256.

Cause: A column position was specified that was not within the range of 1 to 256.

The utility stops processing. No data is loaded. The column names processed before the error occurred are in the database.

Action: Verify that the specified column position is within the range 1 to 256.

SQL3096N

The data type "<type>" of the database column "<name>" is not compatible with any WSF column type, but the database column is not nullable.

Cause: There is not any worksheet format (WSF) column type that is compatible with the indicated database column. The database column is not nullable so the IMPORT utility stops processing.

No data is imported.

Action: Redefine the database table so the columns are compatible with the columns being imported from the WSF file. Resubmit the command.

SQL3097N

The record length field in the WSF record is not valid for its record type.

Cause: The worksheet format (WSF) records have an expected fixed length or a variable-length range. The record does not contain the fixed length, or the variable length is out of range. Some damage occurred to the WSF file, or it was generated incorrectly, possibly with a level of the Lotus product not supported by the database manager.

The IMPORT utility stops processing.

Action: Regenerate the WSF file with a supported level of the Lotus product.

SQL3098N

The row number from the input file is not in the valid range of 1 to 8192.

Cause: The maximum number of rows that a worksheet format (WSF) spreadsheet can contain is 8192. The cell coordinate contains a value outside the valid range. Some damage occurred to the WSF file, or it was generated incorrectly, possibly with a level of the Lotus product not supported by the database manager.

The IMPORT utility stops processing.

Action: Regenerate the WSF file with a supported level of the Lotus product.

SQL3099N

The column number from the input file is not in the valid range of 1 to 256.

Cause: The maximum number of columns that a worksheet format (WSF) spreadsheet can contain is 256. The cell coordinate contains a value outside the valid range. Some damage has occurred to the WSF file, or it was generated incorrectly, possibly with a level of the Lotus product that is not supported by the database manager.

The IMPORT utility stops processing.

Action: Regenerate the WSF file with a supported level of the Lotus product.

SQL3100W

Column number "<column-number>" (identified as "<name>") in the output DEL format file is longer than 254 bytes.

Cause: The length or maximum length of the specified output column is greater than 254 bytes. Columns larger than 254 are not supported by some other products.

The entire field is exported without truncation.

Action: If the output file cannot be processed by another product, export only a substring of the incorrect column, redefine the table, or manually truncate the data in the DEL column.

SQL3101W

There is a character string delimiter in column "<column-number>" in row "<row-number>".

Cause: The system puts character string delimiters around the character strings being exported but it found a character string that already has the delimiter in the character string.

Delimiters will be placed around the character string. Future use of that string leads to an appearance of truncation. Processing can continue.

Action: Review the data for the given column and row in the output table or file. To avoid loss of data, change the character delimiter to some character that is not in the data.

SQL3102W

The number of columns in the METHOD parameter is greater than the number of columns in the Action String (e.g. "REPLACE into ...") parameter.

Cause: The number of columns taken from the input file or table is greater than the number to be put in the output table or file.

Only data for the columns indicated in the output table or file will be processed. Data in the excess input columns is not processed.

Action: Review the data in the output table or file.

SQL3100 - SQL3199

SQL3103W

The number of columns in the METHOD parameter is less than the number of columns in the Action String (e.g. "REPLACE into ...") parameter.

Cause: The number of columns taken from the input file or table is less than the number to be put in the output table or file.

Only data for the columns indicated in the input table or file will be processed. Data in the excess output columns is not processed.

Action: Review the data in the output table or file.

SQL3104N

The Export utility is beginning to export data to file "<name>".

Cause: This is the normal beginning message.

Action: No action is required.

SQL3105N

The Export utility has finished exporting "<number>" rows.

Cause: This is the summary message for the export utility which is printed at the end of the message file. This message will state how many rows resulting from the SELECT statement were processed before the export utility terminated.

Action: If an sqlcode of 0 was returned from the utility, then no response is required. If an sqlcode of 3107 was returned, check the message file for warnings that occurred during the export and resubmit the command if desired. If a negative sqlcode was returned, an error occurred during the export and the data file may not contain all the data requested. The command should be resubmitted with the error corrected.

SQL3106N

An error occurred while formatting a message for the message file.

Cause: The error message may be incomplete or formatted incorrectly.

Action: No action is required.

SQL3107W

There is at least one warning message in the message file.

Cause: At least one warning was received during processing.

This warning does not affect processing.

Action: Review the message file warning.

SQL3109N

The utility is beginning to load data from file "<name>".

Cause: This is the normal beginning message. The message may indicate the name of a temporary file created on the server instead of the source file.

Action: No action is required.

SQL3110N

The utility has completed processing. "<number>" rows were read from the input file.

Cause: This is the normal ending message.

Action: No action is required.

SQL3111C

An I/O error occurred while closing the input data file.

Cause: A system I/O error occurred while closing the input data file. This error can refer to a problem on either the client or the server.

The file is not closed.

Action: Examine the input file for an I/O error.

SQL3112W

There are fewer input file columns specified than database columns.

Cause: There are fewer columns specified in the input file than in the output table. Because the extra columns in the table are defined as nullable, the values in those columns are filled with nulls.

Action: No action is required.

SQL3113W

The data type “<type>” of the database column “<name>” is not compatible with this format file. Null values are inserted for the column.

Cause: The database column type is not valid for this file. Because the column is nullable, nulls are inserted.

Null values are loaded for the indicated column.

Action: If nulls are not acceptable for the column, do one of the following:

- Edit the data in the table.
- If possible, use another compatible column in the database table as the target column and resubmit the command.
- Redefine the database table so the columns are compatible with the columns being loaded and resubmit the command.

SQL3114W

Some data following “<text>” in row “<row-number>” and column “<column-number>” was not loaded.

Cause: Some data in the specified row and column is not loaded, probably because the column contains data as follows:

- A closed string delimiter
- An isolated carriage return or line feed control character
- A non-delimited string value.

The text that was loaded is shown in the “<text>” token.

The contents of the field may be incomplete.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command, or edit the data in the table.

SQL3115W

The field value beginning “<text>” in row “<row-number>” and column “<column-number>” is longer than the longest allowable table column. The value was truncated.

Cause: The field value is longer than 32700 bytes.

The value was truncated after 32700 bytes.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table. Check for unmatched character string delimiters.

SQL3116W

The field value in row “<row-number>” and column “<column-number>” is missing, but the target column is not nullable.

Cause: A null field value was encountered in the input file. Because the target column in the table is not nullable, it cannot be loaded.

For files other than ASCII files, the value of the column number specifies the field within the row of the missing data. For ASCII files, the value of the column number specifies the byte position within the row of the missing data.

The row is not loaded.

Action: If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3117W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a SMALLINT value. A null was loaded.

Cause: The value in the specified field cannot be converted to a SMALLINT value. There may be a data type mismatch. The value may be larger than a 2-byte integer.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

A null value is loaded.

Action: Examine the input value. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3118W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a SMALLINT value, but the target column is not nullable. The row was not loaded.

Cause: The value in the specified field cannot be converted to a SMALLINT value. There may be a data type mismatch. The value may be larger than a 2-byte integer. A null cannot be loaded because the output column in the table is not nullable.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

The row is not loaded.

Action: Correct the input file and resubmit the command or edit the data in the table.

SQL3119W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to an INTEGER value. A null was loaded.

Cause: There may be a data type mismatch because the value in the specified field cannot be converted to an INTEGER value.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

A null value is loaded.

Action: Examine the input value. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3120W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to an INTEGER value, but the target column is not nullable. The row was not loaded.

Cause: There may be a data type mismatch because the value in the specified field cannot be converted to an INTEGER value. A null cannot be loaded because the output column in the table is not nullable.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

The row is not loaded.

Action: Correct the input file and resubmit the command or edit the data in the table.

SQL3121W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a FLOAT value. A null was loaded.

Cause: The value in the specified field cannot be converted to a FLOAT value. There may be a data type mismatch.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

A null value is loaded.

Action: Examine the input value. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3122W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a FLOAT value, but the target column is not nullable. The row was not loaded.

Cause: The value in the specified field cannot be converted to a FLOAT value. There may be a data type mismatch. A null cannot be loaded because the output column in the table is not nullable.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

The row is not loaded.

Action: Correct the input file and resubmit the command or edit the data in the table.

SQL3123W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a PACKED DECIMAL value. A null was loaded.

Cause: The value in the specified field cannot be converted to a PACKED DECIMAL value. There may be a data type mismatch.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the

column number specifies the byte location within the row where the value in question begins.

A null value is loaded.

Action: Examine the input value. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3124W

The field value in row “<row-number>” and column “<column-number>” cannot be converted to a PACKED DECIMAL value, but the target column is not nullable. The row was not loaded.

Cause: The value in the specified field cannot be converted to a PACKED DECIMAL value. There may be a data type mismatch. A null cannot be loaded because the output column in the table is not nullable.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

The row is not loaded.

Action: Correct the input file and resubmit the command or edit the data in the table.

SQL3125W

The character data in row “<row-number>” and column “<column-number>” was truncated because the data is longer than the target database column.

Cause: The length of the field data in the input file was longer than the length of the database field where it is being loaded.

The character data was truncated.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table. The width of the database column cannot be increased. If necessary, define a new table with wider columns and repeat the process.

SQL3128W

The field containing “<data>” in row “<row-number>” and column “<column-number>”. was truncated into a DATE field because the data is longer than the database column.

Cause: The date value in the specified field is longer than the length of the string representation of a date.

The date value is truncated to fit into the table.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3129W

The date, time, or timestamp field containing “<text>” in row “<row-number>” and column “<column-number>” was padded with blanks.

Cause: The field data in the input file was shorter than the database column.

The data on the right is padded with blanks.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3130W

The field containing “<text>” in row “<row-number>” and column “<column-number>” was truncated into a TIME field because the data is longer than the database column.

Cause: The time value in the specified field is longer than the length of the string representation of a time.

The time value is truncated to fit into the table.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3131W

The field containing “<text>” in row “<row-number>” and column “<column-number>” was truncated into a TIMESTAMP field because the data is longer than the database column.

Cause: The timestamp value in the specified field is longer than the length of the string representation of a timestamp.

The timestamp value is truncated to fit into the table.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3132W

The character data in column "<column>" will be truncated to size "<size>".

Cause: The character data column has a defined size that is longer than the longest default character column which can be exported; each value will be truncated to the specified size.

For example, by default, only the first SQL_LONGMAX bytes of a LOB column will be exported. If the entire LOB column is desired, the *LOBSINFILE* keyword must be specified in the filetype modifier and each LOB column will be stored into a separate file.

Action: This is a warning only. No action is required.

SQL3137W

Row "<row-number>" is too short. At least one input value being loaded to a non-nullable database column is missing. The row was not loaded.

Cause: If loading from a delimited ASCII file, the row contains too few fields. If loading from a non-delimited ASCII file, the row contains too few bytes of data. There is no input value for at least one non-nullable target column.

The row is not loaded.

Action: Examine the input file and the contents of the target table. Correct the input file and resubmit the command, or edit the data in the table.

SQL3138W

The ending character string delimiter was not found before the end of the input data file was reached.

Cause: The end of the input data file was reached before the terminating character string delimiter was found.

A closing character string delimiter is assumed at the end of the data.

Action: Compare the value in the output table with the input file. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3139W

An error "<error>" occurred while the utility was disconnecting from the database.

Cause: The IMPORT or EXPORT utility could not disconnect from the database.

The output data may be incomplete.

Action: Use the error number in the message to determine the exact error.

SQL3142W

The column heading for column "<column-number>" is being truncated to 240 bytes.

Cause: The LOTUS 1-2-3** and Symphony** programs have a limit of 240 bytes for label records. If a column heading greater than 240 bytes is specified for export, it is be truncated to 240 bytes.

The column heading is truncated. Processing continues.

Action: Verify that the column headings are 240 bytes or less. Check for a possible error in specifying the names for the columns in the output worksheet format (WSF) file.

SQL3143W

A maximum length of variable length column "<column-number>" exceeds the limitation of 240 bytes. Data from the column may be truncated.

Cause: The LOTUS 1-2-3** and Symphony** programs have a limit of 240 bytes for label records. Whenever a character field longer than 240 bytes is written to a worksheet format (WSF) file, the data will be truncated to 240 bytes.

Continue processing. Subsequent data entries for the column may be truncated.

Action: Verify the output. If significant data from the column is lost because of truncation, investigate selecting the data from the column in several fields by substringing, or redesign the database.

SQL3144W

The length of fixed length column “<column-number>” exceeds the 240-byte limitation. Data from the column may be truncated.

Cause: The Lotus 1-2-3** and Symphony** programs have a limit of 240 bytes for label records. Whenever a character field longer than 240 bytes is written to a worksheet format (WSF) file, the data will be truncated to 240 bytes.

All data entries for the column are truncated with no additional messages written to the message log.

Continue processing.

Action: Verify output. If significant data from the column is lost because of truncation, investigate selecting the data from the column in several fields by substringing, or redesign the database.

SQL3145W

The data for row “<row-number>”, column “<column-number>” is being truncated to 240 bytes.

Cause: The Lotus 1-2-3** and Symphony** programs have a limit of 240 bytes for label records. Whenever a character field longer than 240 bytes is written to a worksheet format (WSF) file, the data is truncated to 240 bytes. This message is preceded by message SQL3143 associated with the column.

Processing continues. The data is truncated.

Action: Verify the output. If significant data from the column is lost because of truncation, investigate selecting the data from the column in several fields by substringing, or redesign the database.

SQL3146N

The DATE or TIMESTAMP value for row “<row-number>” and column “<column-number>” is out of range.

Cause: The value for a date or timestamp is not valid. A date value from 01-01-1900 to 12-31-2099 is valid for worksheet format (WSF) files.

The cell record is not created.

Action: Compare the value in the output file with the input table. If necessary, correct the input value and resubmit the command or edit the data in the table.

SQL3147W

More than 2048 rows were exported into a worksheet formatted file.

Cause: The number of rows exported exceeds 2048. The first generation products cannot support more than 2048 rows.

Continue processing.

Action: The rows beyond 2048 can be read only by second and third generation products.

SQL3148W

A row from the input file was not inserted into the table. SQLCODE “<sqlcode>” was returned.

Cause: The database operation to insert a row of data read from the input file failed. One or more of the fields in the input file is not compatible with the database field where the field is being inserted.

Processing continues with the next row of input data.

Action: See the next message in the message file for the row number not inserted. Examine the input file and the database contents. If desired, modify the database or modify the input file and rerun the operation.

SQL3149N

“<number-1>” rows were processed from the input file. “<number-2>” rows were successfully inserted into the table. “<number-3>” rows were rejected.

Cause: This summary message tells how many rows of data were read from the input file, how many rows were successfully inserted into the database table, and how many rows were rejected. If using the INSERT_UPDATE option, the number of rows updated is the number of rows processed minus the number inserted and rejected.

Action: None, because this is a summary message. The detail messages may suggest corrective action.

SQL3150N

The H record in the PC/IXF file has product “<product>”, date “<date>”, and time “<time>”.

Cause: Information is given about the product that created the PC/IXF file and when it was created.

Action: No action is required.

SQL3151N

No data conversion will be done from the single-byte code page value "<code-page>" in the H record to the application single-byte code page value "<code-page>" because the FORCEIN option was specified.

Cause: No data conversion will be performed from the IXF code page to the application code page because the FORCEIN option was specified.

Action: No action is required. If the conversion from the IXF file code page to the application code page is supported by the database manager, the operation can be resubmitted without the FORCEIN option and the data will be converted.

SQL3152N

The double-byte code page value "<value>" in the H record is not compatible with the double-byte code page value "<value>" for the application. Data will be inserted because the FORCEIN option was specified.

Cause: The double-byte code page values in the record and the application are not compatible. Because the FORCEIN option was used, the data is inserted.

Action: No action is required.

SQL3153N

The T record in the PC/IXF file has name "<name>", qualifier "<qualifier>", and source "<source>".

Cause: Optional information is given about the name of the table where data was extracted, the product that created the table, and the original source of the data.

Action: No action is required.

SQL3154W

The HCNT value in the H record and the CCNT value in the T record are not compatible. The CCNT value in the T record will be used.

Cause: The HCNT value in the H record and the CCNT value in the T record do not agree.

The CCNT value in the T record is used.

Action: Verify that the CCNT value is correct. If not,

make the necessary changes to the HCNT or CCNT values and resubmit the command.

SQL3155W

The name length field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The value in the name length field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the name length field in the C record and resubmit the command.

SQL3156W

The null field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The null field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the null field in the C record and resubmit the command.

SQL3157W

The type field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The type field in the C record for the indicated column is not valid. The code page values may not be compatible with the column type.

Data from the indicated column is not loaded.

Action: Change the type field in the C record and resubmit the command.

SQL3158W

The single-byte code page field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The single-byte code page field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the single-byte code page field in the C record and resubmit the command.

SQL3159W

The double-byte code page field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The double-byte code page field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the double-byte code page field in the C record and resubmit the command.

SQL3160W

The column length field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The column length field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the column length field in the C record and resubmit the command.

SQL3161W

The precision field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The precision field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the precision field in the C record and resubmit the command.

SQL3162W

The scale field in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The scale field in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the scale field in the C record and resubmit the command.

SQL3163W

The column length field in the C record for floating point column "<name>" is blank. A value of 00008 will be used.

Cause: The column length field in the C record for the indicated column is blank.

A column length of 00008 is used.

Action: No action is required.

SQL3164W

The column length field in the C record for floating point column "<name>" is not valid. Data from the column will not be loaded.

Cause: The column length field in the C record for the indicated column is not valid. The indicated column is a floating point column.

Data from the indicated column is not loaded.

Action: Change the column length field in the C record and resubmit the command.

SQL3165W

The column type field "<type>" in the C record for column "<name>" is not valid. Data from the column will not be loaded.

Cause: The column type in the C record for the indicated column is not valid.

Data from the indicated column is not loaded.

Action: Change the column type field in the C record and resubmit the command.

SQL3166W

No PC/IXF column was specified to be loaded into database column "<name>", or the specified PC/IXF column does not exist. Nulls will be inserted.

Cause: Either there was not a PC/IXF column specified to be loaded into the indicated column, or the specified PC/IXF source column does not exist.

Null values are loaded for the indicated column.

Action: No action is required. If nulls are not acceptable for this column, check the *METHOD* parameter for erroneous names or positions or for fewer entries in the *METHOD* parameter than columns stated in or implied by the *Action String* (e.g. "REPLACE into ...") parameter.

SQL3167W

The PC/IXF column specified to be loaded into database column “<name>” is not valid. Nulls will be inserted.

Cause: Values in the PC/IXF column cannot be loaded into the indicated database column and the reason is given in a previous message in the log.

Null values are loaded for the indicated column.

Action: Read the previous messages to understand why the column is not valid.

SQL3168W

The PC/IXF column specified to be loaded into database column “<name>” is not compatible with the database column. Nulls will be inserted.

Cause: The source PC/IXF and the target database column types or lengths may not be compatible.

Null values are loaded for the indicated column.

Action: Compare the columns in the source PC/IXF file and the database.

SQL3169N

The FORCEIN option may be used to make the PC/IXF column “<name>” acceptable for loading into database column “<name>”.

Cause: This is for information only about the optional use of the *FORCEIN* option.

Action: No action required.

SQL3170W

The end of the file was reached within a row of data. The partial row of data was not loaded.

Cause: The end of the file was reached before the end of the current row of data. The file may contain only part of the expected data.

The partial row of data is not loaded.

Action: If the PC/IXF file was copied from one medium to another, compare the copy with the original or repeat the copy process.

SQL3171W

A non-label record was found in the column header row. The record was not processed.

Cause: The IMPORT utility expects only label records in the column header row (row one) of the worksheet format (WSF) file.

The system does not process the record and continues to the next record.

Action: Remove all data and information except the column headers from the first row of the spreadsheet file. Resubmit the command.

SQL3172W

The specified input column “<name>” was not found. The corresponding database column will contain null values.

Cause: The specified input column was not found in the input spreadsheet file. The database column is nullable and contains null values.

Action: Verify the specified input column name.

SQL3173N

The inserted data for column “<name>” will always contain fewer characters than the column width.

Cause: The database column width is larger than the maximum worksheet format (WSF) label record.

Continue processing.

Action: No action is required.

SQL3174W

The data type “<type>” of the database column “<name>” is not compatible with any WSF column type. Null values will be inserted for this column.

Cause: The database column type is not valid for a worksheet format (WSF) file. Because the column is nullable, nulls are imported for the column.

Action: If nulls are not acceptable for the column, do one of the following:

- Edit the data in the table.
- If possible, use another compatible column in the database table as the target column and resubmit the command.

- Redefine the database table so that the columns are compatible with the columns imported from the WSF file, and resubmit the command.

SQL3175W

The input record for database row "<row>", column "<column>" is not valid.

Cause: The record in the spreadsheet file is not compatible with the data type of the database column. If the database column is a graphic data type, the input data may contain an odd number of bytes.

If the column is nullable, a null is inserted. If the column is not nullable, the row is not imported.

Action: Either edit the data in the table or verify that the data in the spreadsheet file is valid for importing into a database manager database and resubmit the command.

SQL3176W

The value for row "<row>", column "<column>" in the WSF file is out of range for a date value.

Cause: The record in the spreadsheet file contains a value that is too large or too small to represent a valid worksheet format (WSF) date. A valid WSF date is between 1 and 73050, inclusive.

If the column is nullable, a null is inserted. If the column is not nullable, the row is not imported.

Action: Either edit the data in the table or verify that the data in the spreadsheet file is valid for import into a database manager database and resubmit the command.

SQL3177W

The value in the WSF file for row "<row>", column "<column>" is out of range for a time value.

Cause: The record in the spreadsheet file contains a value that is either too large or too small to represent a valid worksheet format (WSF) time. A WSF time is a value equal to or greater than zero, but less than one.

If the column is nullable, a null is inserted. If the column is not nullable, the row is not imported.

Action: Either edit the data in the table or verify that the value to be imported is a time value in the input spreadsheet file and resubmit the command.

SQL3178W

The type of record in the WSF file for database row "<row-number>", column "<column-number>" is not valid for representing a time value.

Cause: The input value is an integer value. A time value must be represented by a floating point number or a fraction of a day in a worksheet format (WSF) spreadsheet file.

If the column is nullable, a null is inserted. If the column is not nullable, the row is not imported.

Action: Either edit the data in the table or verify that the value to be imported is a time value in the input spreadsheet file and resubmit the command.

SQL3179W

Row "<row>" in the input file is missing data for inserting into a non-nullable column in the database. The row was not inserted.

Cause: The row of data from the input file has missing or not valid data for a non-nullable column. The values in the remaining database columns in that row are not inserted.

Processing continues with the next row. The row is not inserted.

Action: Either edit the data in the table or verify that the data in the spreadsheet file is valid for inserting into a database manager database.

SQL3180W

Insert diskette "<number>" into drive "<drive>".

Cause: This is a request for the application to prompt the user to place the specified diskette in the specified drive.

The utility is waiting to be called again after the user puts the diskette in the drive.

Action: Prompt the user for the diskette and then return to the utility with the *callerac* parameter indicating whether processing continues or ends.

SQL3181W

The end of the file was reached before the expected ending record was found.

Cause: During the load of a PC/IXF file created by the database manager, the A record of subtype E that is expected as the last A record was not found.

The input file probably is damaged.

Continue processing.

Action: Check for data that was not loaded. If data is missing, edit the table or change the input file and resubmit the command. If the PC/IXF file was copied from one medium to another, compare the copy with the original or repeat the copy process.

SQL3182W

Insert diskette "<number>" into drive "<drive>". The diskette that is currently inserted is not the right diskette or the continuation diskette is not valid.

Cause: During the load of a PC/IXF file that is contained on more than one diskette, a request to insert a diskette was sent to the application, a confirmation that the diskette is in the drive was returned but the continuation file is not there or is not valid. This action does not apply to the first diskette.

The utility waits for a response from the application to either continue processing or stop processing.

Action: Have the user verify that the correct diskette is in the drive. If the correct diskette is in the drive, call the utility again with the *callerac* parameter set to stop processing.

SQL3183W

Multiple delimiter overrides in the filemod parameter are not separated by blanks.

Cause: At least one COLDEL, CHARDEL or DECPY keyword in the *filemod* parameter is not at the beginning of the *filemod* parameter and does not follow a blank (space). This condition may arise during the LOAD/IMPORT or export of delimited ASCII (DEL) files.

The utility stops processing. The erroneous delimiter overrides are ignored.

Action: Resubmit the command with a correct *filemod* parameter.

SQL3185W

The previous error occurred while processing data from row "<row-number>" of the input file.

Cause: This message provides the identification of the row where the error occurred for the previous message listed in the message file (for example, SQL3306).

Action: No action is required.

SQL3186W

Data was not loaded into the database, because the log was full. SQLCODE "<sqlcode>" was returned. A commit will be attempted and the operation will continue if the commit is successful.

Cause: The utility could not insert a row of data into the database because the database transaction log is full.

The completed database transactions are committed and the insert is tried again. If the repeated insert continues to indicate that the log is full, the utility stops processing.

Action: Be aware that a subsequent failure of the utility causes the database to roll back to the state after the last commit, not to the state before the utility was initially called.

SQL3187W

An error occurred while creating an index. SQLCODE "<sqlcode>" was returned.

Cause: The IMPORT utility was creating an index when an error occurred. An index may already exist for some table.

This error occurs only during the import of a PC/IXF file.

The utility continues processing. The file was imported, but the index was not created on the table.

DataJoiner users: in addition to the previously listed cause, this error can occur when a CREATE NICKNAME statement was issued at DataJoiner and the table at the data source had an index or indexes with too many columns, or the total index row size could not be represented in the DataJoiner catalog. The "<sqlcode>" in the message provides further information about the problem encountered.

Action: Read the next message in the message log (SQL3189) for the name of the index that was not created. Create the index with the CREATE INDEX command.

DataJoiner users: select from the data source catalog and the DataJoiner catalog to determine which index or indexes were not created in the DataJoiner catalog. Either:

- Create the indexes using the CREATE INDEX command. Remember to truncate columns as appropriate in order to not violate limits which caused the index to not be created in the first place.
- Do nothing and allow DataJoiner to function without knowledge about the index.

Both of the previously listed options have potential performance implications.

SQL3188N

An error occurred while erasing the contents of the table.

Cause: When running LOAD/IMPORT with the REPLACE option, the specified database table is truncated before inserting the data back into the table. An error occurred during the truncation processing.

The utility ends with an error.

Action: Resubmit the command.

SQL3189N

The previous message refers to index "<name>" with columns "<column list>".

Cause: This message always follows message SQL3187 when an error occurs while creating an index. "<name>" is the name of the index where the create failed. "<column list>" is a string of index column names. Each column name in the string is preceded by a plus (+) or a minus (-) sign indicating ascending or descending order.

The utility continues processing.

Action: Manually create the index with the CREATE INDEX command.

SQL3190N

The indexxf option is not valid for this Import operation.

Cause: If INDEXXF is used in the *filetmtd* parameter of the IMPORT command, each of the following is also required:

- The IMPORT must be replacing the contents of a table.
- The *METHOD* parameter must be null.

- Each IXF column must be targeted to a database column with the same name.

The utility stops processing. No data is imported.

Action: Resubmit the command either without the INDEXXF option or with the other parameters that are valid with the INDEXXF option.

SQL3193N

The specified view cannot be updated. You cannot LOAD/IMPORT into this view.

Cause: The LOAD/IMPORT utility can be run against a view only if the view can be updated. The specified view is defined such that data in it may not be changed.

The LOAD/IMPORT utility stops processing. No data is inserted.

Action: Resubmit the command with the name of a table or a view that can be updated.

SQL3194N

The specified table is a system table. You cannot load a system table.

Cause: The utility cannot be run against a system table.

The utility stops processing. No data is loaded.

Action: Resubmit the command with a valid table name.

SQL3195W

The diskette "<number>" in drive "<drive>" cannot be used for the output file. Insert a formatted diskette with writable free space.

Cause: The EXPORT utility cannot use the current diskette for exporting to a PC/IXF file for one of the following reasons:

- The output file cannot be opened on the diskette. The diskette may be unformatted.
- Not enough free space is available on the diskette.

This warning code is a request for the application to prompt the user to place another diskette in the specified drive.

The utility is waiting to be called again after the user puts the diskette in the drive.

Action: Prompt the user for the diskette and then return to the utility with the *callerac* parameter indicating whether processing continues or ends.

SQL3196N

The input file was not found.

Cause: The source file to be loaded into a database could not be found in the path indicated by the *datafile* parameter.

The command cannot be processed.

Action: Verify that the input file does exist and that the path to it is correct.

SQL3197N

An attempt was made to execute multiple copies of import or export.

Cause: An attempt was made to execute more than one instance of the import or export utility on a system where this is not supported.

The command cannot be processed.

Action: Resubmit the second operation when no other processes are attempting to execute the same utility.

SQL3200 - SQL3299

SQL3201N

The specified table cannot be replaced because another table is dependent on it.

Cause: A table that is a parent in a relationship with another table cannot be replaced.

The command cannot be processed.

Action: Select a different option, such as INSERT, or select a different target for the utility operation.

SQL3203N

The INSERT_UPDATE option is not permitted for the specified target because it has no primary key or all columns are in the primary key.

Cause: The INSERT_UPDATE option is only valid when the target table has a primary key and the target columns include all columns of the primary key. In addition, the target table should contain at least one column that is not part of the primary key.

The command cannot be processed.

Action: Select a different option such as INSERT, or choose a different target for the utility operation.

SQL3204N

The INSERT_UPDATE option may not be applied to a view.

Cause: The INSERT_UPDATE option is not valid for views and a view has been selected as the target of the utility operation.

The command cannot be processed.

Action: Select a different option such as INSERT, or choose a different target for the utility operation.

SQL3205N

The specified view cannot be replaced because the base table has a dependent.

Cause: A view whose base table is a parent table in a referential relationship with any table (including itself) cannot be replaced.

The command cannot be processed.

Action: Select a different option such as INSERT, or choose a different target for the utility operation.

SQL3206N

The specified view cannot be replaced because its definition involves a subquery.

Cause: A view whose definition involves a subquery cannot be replaced. If the view definition depends on the definition of other views, the other views cannot contain subqueries. The use of a subquery anywhere in the definition of any view on which the target view is based prohibits the REPLACE option.

The command cannot be processed.

Action: Select a different option, such as INSERT, or choose a different target for the utility operation.

SQL3220W

Volume <volume-name> was not found in the <directory-name> directory. Copy the volume into this directory and continue the LOAD/IMPORT.

Cause: An attempt to LOAD/IMPORT a multiple IXF file was made, but one of the files is missing from the directory specified. LOAD/IMPORT tries to find the parts in the same directory as the first part.

The import will terminate.

Action:

- Find the part and put it in the same directory as the first part. Then call LOAD/IMPORT again with *callerac* of SQLU_CONTINUE. The LOAD/IMPORT will continue processing the file.
- Terminate the LOAD/IMPORT by calling LOAD/IMPORT with a *callerac* of SQLU_TERMINATE.

SQL3221W

...Begin COMMIT WORK. Input Record Count = <count>

Cause: The import is about to attempt a COMMIT of the work performed.

Action: If the SQL3222W message is not printed immediately after this message, then the COMMIT failed and you will need to check your table or view to see which records have been imported. You can then start the import again with a RESTARTCOUNT set to the number of records successfully imported to skip those rows and import the rest of the file. (If you had been doing a CREATE or REPLACE_CREATE or REPLACE, call the second import with INSERT option.)

SQL3222W

...COMMIT of any database changes was successful.

Cause: The COMMIT was successful.

Action: None necessary if you get this message.

SQL3223N

The parameter of type pointer to <parameter> is not specified properly.

Cause: The parameter of type <parameter> is not specified properly. The types are one of "struct sqluimpt_in", "struct sqluimpt_out", "struct sqluexpt_out", "struct sqluload_in", "struct sqluload_out", "struct sqluunld_in", or "struct sqluunld_out". The pointer should be either a NULL pointer or should point to the appropriate structure and its sizeOfStruct field should be initialized to one of SQLUIMPT_IN_SIZE for struct sqluimpt_in, SQLUIMPT_OUT_SIZE for struct sqluimpt_out, SQLUEXPT_OUT_SIZE for struct sqluexpt_out, SQLULOAD_IN_SIZE for struct sqluload_in, SQLULOAD_OUT_SIZE for struct

sqluload_out, SQLUUNLD_IN_SIZE for struct sqluunld_in or SQLUUNLD_OUT_SIZE for struct sqluunld_out.

The command cannot be processed.

Action: Call the utility again with a proper parameter.

SQL3225N

The RESTARTCOUNT value is greater than the number of rows in the file. No rows were loaded.

Cause: The utility was called with a RESTARTCOUNT value which was greater than the number of rows in the input file resulting in no rows being loaded into the table/view.

Action: Ensure that the RESTARTCOUNT value is correct or call the utility again with the REPLACE or INSERT option and a correct RESTARTCOUNT value.

SQL3250N

COMPOUND=<value> is an invalid value or is not allowed in conjunction with other import parameters.

Cause: The COMPOUND=x option was specified for the import utility and cannot be processed due to one of the following reasons:

- It is invalid when the INSERT_UPDATE option is used.
- The database being imported to is accessed through a server or gateway of a previous release.
- The value is not within the allowed range of 1 to 100. (On DOS or Windows, the maximum value is 7).

Action: Change the filemod option to correct the usage of COMPOUND=x.

SQL3251N

"number" more errors occurred during the import.

Cause: The utility encountered more errors than can be relayed in the sqlca (maximum number is 7) while using the COMPOUND option. Messages for these errors will not be printed to the message file.

The utility continues processing.

Action: If you desire all the error messages for each row inserted during an import, do not use the COM-

POUND option or use a COMPOUND value less than or equal to 7.

SQL3300 - SQL3399

SQL3300N

The records in the input file are not in the correct sequence.

Cause: The records in the worksheet format (WSF) file are expected to be in ascending order (row 1, col 1 ... row 1, col 256; row 2, col 1 ... row 2, col 256, and so on). Some damage has occurred to the WSF file or it was generated incorrectly, possibly with a level of the Lotus product not supported by the database manager.

The IMPORT utility stops processing.

Action: Regenerate the WSF file with a supported level of the Lotus product.

SQL3301N

A BOF record was found in the middle of the input file.

Cause: A beginning-of-file (BOF) record must be the first record of a worksheet format (WSF) file. It cannot occur at any other location in the file. Some damage has occurred to the WSF file or it was generated incorrectly, possibly with a level of the Lotus product not supported by the database manager.

The IMPORT utility stops processing.

Action: Regenerate the WSF file with a supported level of the Lotus product.

SQL3302N

An EOF record was found before any data was imported.

Cause: The input file is valid, but it did not contain any usable data to be imported. The first worksheet row is reserved for title information. The second worksheet row is used for column labels. Data begins in the third row.

The IMPORT utility stops processing.

Action: Regenerate the worksheet format (WSF) file with valid data in the rows that the database manager uses for data.

SQL3303N

The file type must be IXF when using the CREATE or REPLACE_CREATE keywords in the Action String parameter.

Cause: File types other than IXF are not allowed with the CREATE or REPLACE_CREATE keywords in the *Action String* (e.g. "REPLACE into ...") parameter.

The IMPORT utility stops processing. No data is imported.

Action: Change the file type to IXF, or use INSERT, INSERT_UPDATE or REPLACE.

SQL3304N

The table does not exist.

Cause: The parameters specified on the command require that the table exists.

The utility stops processing. No data is loaded.

Action: Do one of the following:

- Resubmit the command with a table name of an existing table.
- If the input file is a PC/IXF file, resubmit the command with the CREATE option.

SQL3305N

The table cannot be created because it already exists.

Cause: The CREATE keyword indicates that a new table must be created but a table with the specified name already exists.

The IMPORT utility stops processing. No data is imported.

Action: Either erase the existing table or use a keyword other than CREATE and resubmit the command.

SQL3306N

An SQL error "<sqlcode>" occurred while inserting a row into the table.

Cause: An SQL error occurred while inserting a row into the table.

If the SQL error is not severe the row will be rejected and the utility continues processing; otherwise the utility stops processing.

Action: Examine other messages in the message file for details about the actual error and resubmit the command, if necessary.

SQL3307N

The number of columns in the METHOD parameter does not match the number of entries in the Action String parameter, or a column specified in the METHOD parameter does not exist.

Cause: The CREATE or REPLACE_CREATE option was specified on the IMPORT command. Either:

- If the NAMES or POSITIONS method indicator was specified in the *METHOD* parameter, the number of columns explicitly specified in *METHOD* is not equal to the number of columns explicitly specified in the *Action String* (e.g. "REPLACE into ...") parameter.
- If the DEFAULT method indicator was specified in the *METHOD* parameter, the number of columns in the PC/IXF file is less than the number of columns specified in the *Action String* parameter.
- One column specified in the *METHOD* parameter does not exist in the PC/IXF file.

The IMPORT utility stops processing. No table is created.

Action: Either correct the columns specified in the *METHOD* and *Action String* parameters or correct the columns specified in the *METHOD* parameter.

SQL3308N

The code page values of the PC/IXF column "<name>" are not compatible with the code page values for the application. The FORCEIN parameter was not specified.

Cause: The code page values for the column and the application are not compatible. When the *FORCEIN* parameter is not specified, the data cannot be loaded if the conversion from the IXF file code page to the application code page is not supported.

The utility stops processing. No data is loaded.

Action: To load data with these code pages, resubmit the command with the *FORCEIN* option.

SQL3309N

Column "<name>" in the PC/IXF file is defined as a graphic column. The FORCEIN parameter was not specified.

Cause: During the load of a PC/IXF file, a graphic data column was encountered. Because the *FORCEIN* parameter was not used, the data cannot be loaded.

The utility stops processing. No data is loaded.

Action: If you want to load the data with the graphic data, resubmit the command with the *FORCEIN* parameter.

SQL3310N

Column "<name>" in the PC/IXF file is not valid.

Cause: The CREATE or REPLACE_CREATE option was specified on the IMPORT command. A column with an invalid C record was found while importing the PC/IXF file.

The IMPORT utility stops processing. The table is not created.

Action: Verify the column definition information in the input file.

SQL3313N

The disk is full. Processing was ended.

Cause: The disk or diskette is full. During the export to a PC/IXF file, either the PC/IXF data file is on a fixed disk, or the PC/IXF data file and the database are on the same drive, or the PC/IXF data file and the message file are on the same drive.

The EXPORT utility stops processing. The exported data is not complete.

Action: Provide more space on the disk or diskette or specify that the data file be located on a different drive than the database or the message file and resubmit the command.

SQL3314N

The date and time fields in an A record do not match the date and time fields in the H record.

Cause: During the load of a PC/IXF file, an A record was found in the PC/IXF file, that contained run identification information (in the date and time fields) that differs from the run identification information in the header (H) record. This action does not apply to an A record at the start of a continuation file.

The input file has probably been damaged.

The utility stops processing.

Action: Re-create the damaged file, or repair the damaged file to recover as much data as possible. Resubmit the command.

SQL3315N

The volume fields in an A record of subtype C are not valid.

Cause: During the load of a PC/IXF file that was created by Database Services, an A record was found in the PC/IXF file, that contained volume information (in the volume fields) that is not valid.

The input file has probably been damaged.

The utility stops processing.

Action: Re-create the damaged file, or repair the damaged file to recover as much data as possible. Resubmit the command.

SQL3316N

An I/O error occurred while closing part of the input file.

Cause: During the load of a multiple part PC/IXF file, an I/O error occurred while the system was closing one of the files that make up the input PC/IXF file. This action does not apply to the last file in the group of files that make up the PC/IXF file.

The utility stops processing.

Action: Resubmit the command.

SQL3317N

The string pointed to by the filemod parameter contains conflicting information.

Cause: The *filemod* string defines the generation and product family for the output WSF file. More than one generation or product family was defined in the string.

The utility stops processing. The output file is not created.

Action: Change the *filemod* string to define only one generation and product family. Resubmit the command.

SQL3318N

There are duplicate keywords in the filemod parameter.

Cause: A COLDEL, CHARDEL, or DECPT keyword appears more than once in the *filemod* parameter. This condition may arise while using delimited ASCII (DEL) files.

The utility stops processing. No data is loaded or exported.

Action: Resubmit the command with a correct *filemod* parameter.

SQL3319N

An SQL error "<sqlcode>" occurred while creating the table.

Cause: An SQL error occurred while creating the table.

The IMPORT utility stops processing. The table was not created. No data was imported.

Action: Look at the SQLCODE (message number) in the message for more information. Make changes and resubmit the command.

SQL3320N

There is no delimiter or decimal point character after a keyword in the filemod parameter.

Cause: A COLDEL, CHARDEL, or DECPT keyword is located at the very end of the *filemod* parameter. There is no delimiter or decimal point character following the keyword. This condition may arise while using delimited ASCII (DEL) files.

The utility stops processing. No data is loaded or exported.

Action: Resubmit the command with a correct *filetmod* parameter.

SQL3321C

Data was not imported into the database because the log was full. Recovery was not successful. SQLCODE "<sqlcode>" was returned.

Cause: The IMPORT utility could not insert a row of data into the database because the database transaction log was full. All work was committed, but the utility could not insert the row, because the database transaction log remains full.

The utility stops processing. All previous changes were committed, but the current row was not imported.

Action: Check the amount of space remaining on the filesystem containing your database files. Consider increasing the maximum log size in the database configuration file.

SQL3322N

An operating system semaphore error occurred.

Cause: An error occurred in the wait/post semaphores. The utility stops processing. For the EXPORT utility, data may be incomplete on the media. For the IMPORT utility, data not already committed is rolled back.

Action: Stop and restart DB2 and resubmit the utility.

SQL3324N

Column "<name>" has a type of "<type>" which is not recognized.

Cause: A column of data returned by the SQL statement is not supported.

Action: Correct the error and retry the command.

SQL3325W

All the columns in row "<row-number>" have NULL values; the row will not be included in the WSF data file.

Cause: When you are doing an export of a WSF file and the SELECT statement results in a row of all NULL values, the row will not be added to the WSF file. The total number of rows specified in message SQL3105N is the number of rows resulting from the SELECT statement and not the number of rows in the WSF file.

The command continues processing.

Action: No action required. This is an informational message.

SQL3326N

The column list following the table name in the Action String parameter is invalid.

Cause: When you call IMPORT or LOAD with an *Action String* (e.g. "REPLACE into ...") parameter which contains a column list after the table name, this message will result if it is invalid. For example, the following *Action String* parameters will fail:

insert into tablea() no columns within the parenthesis

insert into tablea(two words) invalid column name

insert into tablea(grant.col1) column name should not be qualified

insert into tablea(x1234567890123456789) column name too long

insert into tablea(col1,col2) missing column name

The command cannot continue.

Action: Change the *Action String* parameter with a valid column list and call the utility again.

SQL3327N

A system error occurred (reason code1 = "<reason-code-1>" and reason code2 = "<reason-code-2>").

Cause: A system error occurred during processing.

The utility stops processing.

Action: Record all error information from the SQLCA, if possible. Retain the message file. Terminate all applications using the database. Reboot the system. Restart the database. Try the command again.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

SQL3330W

In row “<row-number>” a character field has an odd length but its target database column is a graphic column. The row was not loaded.

Cause: Only even length character fields can be loaded into graphic database columns.

The row is not loaded.

Action: Either load the data to a new table using the CREATE option in the IMPORT command or do not load this column into this table.

SQL3331C

The permission setting of a file (or directory) does not allow the specified access.

Cause: This may accompany another error message. It indicates an attempt was made to get access to a file or directory in a way that is incompatible with the attributes of the file. One of the following may be the source of the difficulty:

- Opening a file for writing on a read-only device
- Opening a file for writing on a read-only file
- Opening a directory instead of a file
- Encountering a locking or sharing violation.

The command cannot be processed.

Action: Retry the utility when the file is not in use, or retry the utility directing the output to a path and file that allows writing.

SQL3332C

The maximum number of open files has been reached.

Cause: This message may accompany another error message. It indicates that the maximum number of open files has been reached.

The command cannot be processed.

Action: Terminate other applications to reduce the number of files open and retry the utility.

SQL3333C

The file or directory does not exist.

Cause: This message may accompany another error message. It indicates that a file or directory to be accessed does not exist or cannot be found.

The command cannot be processed.

Action: Resubmit the command with the correct file name, including a valid path.

SQL3334C

There is not enough storage available.

Cause: This message may accompany another error message. It indicates there is not enough storage available to open the file.

The command cannot be processed.

Action: Stop the application. Possible solutions include:

- Verify that your system has sufficient real and virtual memory.
- Remove background processes.

SQL3335C

The file system is full.

Cause: This message may accompany another error message. It indicates there is no available space for writing on the device.

The command cannot be processed.

Action: To make space available on the device, delete unneeded files or direct the output data to a device with space available.

SQL3337N

An I/O error occurred while writing data to the server.

Cause: An I/O error has occurred while attempting to write data to a temporary file on the server (temporary files are created in the tmp directory under the sqllib directory for the instance of the database manager). The file system on the server may be full.

The utility stops processing. The database is unchanged.

Action: Contact the System Administrator for the server to make space available on the server, and resubmit the command.

SQL3338N

An I/O error occurred reading a temporary message file on the server.

Cause: A system I/O error has occurred while attempting to read the temporary message file on the server.

The IMPORT operation is complete; however, the message file on the database client system may be empty or incomplete.

Action: Query the remote database to determine if the utility operation was successful.

SQL3400 - SQL3499

SQL3400N

The method specified in METHOD is not valid for Non-Delimited ASCII files. It must be 'L' for locations.

Cause: When loading from a non-delimited ASCII file, columns must be selected by locations in the file.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3401N

The method specified in METHOD is not valid for any filetype.

Cause: The method for selecting columns in the file is not a value allowed for any *filetype*. Choose one of the following method indicators:

- P for positions
- N for names
- L for locations
- D for default

Further restrictions are based on *filetype*.

The command cannot be processed.

Action: Resubmit the command with a valid method indicator.

SQL3402N

A beginning-ending location pair with both values zero was specified for non-nullable column "<name>".

Cause: A location pair with both the beginning and the ending location set to zero was specified for the indicated column, but the column is not nullable.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3403N

The beginning-ending location pair for inserting into column "<name>" is not valid.

Cause: The field specification for locating the input data for the indicated database column within the input non-delimited ASCII file is not valid. The field specification has one of the following errors:

- The beginning location is less than zero.
- The ending location is less than zero.
- The ending location is less than the beginning location.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3404N

The beginning-ending location pair for inserting into column "<name>" is not valid for a number.

Cause: The field specification for locating the data for the indicated database column within the input non-delimited ASCII file is not valid. The location pair defines a field longer than 50 bytes.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3405N

The beginning-ending location pair for inserting into column "<name>" is not valid for a date.

Cause: The field specification for locating data for the indicated database column within the non-delimited ASCII file is not valid. The location pair defines a field length that is not valid for an external representation of a date.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3406N

The beginning-ending location pair for inserting into column "<name>" is not valid for a time.

Cause: The field specification for locating the data in the indicated database column within the input non-delimited ASCII file is not valid. The location pair defines a field length that is not valid for an external representation of a time.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3407N

The beginning-ending location pair for inserting into column "<name>" is not valid for a timestamp.

Cause: The field specification for locating the data for the indicated database column within the input non-delimited ASCII file is not valid. The location pair defines a field length that is not valid for an external representation of a timestamp.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the file.

SQL3408W

The beginning-ending location pair for inserting into column "<name>" defines a field larger than the target column. Data may be truncated.

Cause: The field specification for obtaining data from the input non-delimited ASCII file defines a field larger than the size (or maximum size) of the target database column.

The utility continues processing. Truncation occurs when necessary.

Action: No action is required.

SQL3409W

The beginning-ending location pair for inserting into column "<name>" defines a field shorter than the target fixed-length column. Data will be padded.

Cause: The indicated database column is a fixed-length column. The field specification for obtaining data from the input non-delimited ASCII file defines a field smaller than the size of the target database column.

The utility continues processing. Values input to the indicated database column are padded with spaces as necessary, on the right.

Action: No action is required.

SQL3410N

The beginning-ending location pair for inserting into column "<name>" is not valid for a graphic column.

Cause: The field specification for locating the input data in the ASCII file that is to be inserted into the indicated database column defines a field with an odd number of bytes.

The command cannot be processed.

Action: Resubmit the command with a valid set of locations for the columns in the source file.

SQL3411W

The field value in row "<row-number>" and column "<column-number>" is not valid for a graphic column. A null was inserted.

Cause: The value in the field indicated is not an acceptable graphic column value. The value may contain an odd number of bytes. For DEL files, the value of the column number specifies a field in the indicated row. For ASCII files, the value of the column number specifies the byte location within the row where the value begins.

The row is not inserted.

Action: If a null is not acceptable, correct the input file and resubmit the command, or edit the data in the table.

SQL3412W

The field value in row "<row-number>" and column "<column-number>" is not valid for a graphic column but the target column is not nullable. The row was not inserted.

Cause: The value in the field indicated is not an acceptable graphic column value. The value may contain an odd number of bytes. A null cannot be inserted because the target column is not nullable. For DEL files, the value of the column number specifies a field in the indicated row. For ASCII files, the value of the column number specifies the byte location within the row where the value begins.

The row is not inserted.

Action: No action is required. If the row is necessary, correct the input file and resubmit the command, or edit the data in the table.

SQL3413W

The field value in row "<row-number>" and column "<column-number>" is too short for the target column. A null was inserted.

Cause: The value in the specified field is not acceptable because it is too short for the target column. The value of the column number specifies the byte location within the row where the field begins.

A null value is inserted.

Action: No action is required. If a null is not acceptable, correct the inner field and resubmit the command, or edit the data in the table.

SQL3414N

The temporary file "<filename>" could not be found.

Cause: At the end of the load phase a temporary file is created with information necessary to restart the load. If the load is interrupted before this point, this file is not created.

This message indicates that this file could not be found during load restart.

The utility stops.

Action: Depending on where the interrupt occurred, it may be possible to restart the load at the build phase.

SQL3415W

Failed to convert the field value in row "<row-number>" and column "<column-number>" from the codepage of the input data file to the codepage of the database. A null value was loaded.

Cause: The value in the field indicated cannot be converted from the codepage of the input data file to the codepage of the database.

Action: If a null value is not acceptable, correct the input data file and resubmit the command, or edit the data in the table.

SQL3416W

Failed to convert the field value in row "<row-number>" and column "<column-number>" from the codepage of the input data file to the codepage of the database. The row was not loaded.

Cause: The value in the field indicated cannot be converted from the codepage of the input data file to the codepage of the database.

Action: No action is required. If the row is necessary, correct the input data file and resubmit the command, or edit the data in the table.

SQL3500 - SQL3599

SQL3500W

The utility is beginning the "<phase>" phase at time "<timestamp>".

Cause: This is an informational message indicating that a phase is about to begin and that the previous phase has ended. The phases are (in order of appearance):

- LOAD
- BUILD
- DELETE

During the LOAD phase, data is loaded into your table. If there are any indexes to be built, BUILD phase will follow the LOAD phase. If there were any duplicate keys found for a unique index, the DELETE phase will follow the BUILD phase.

If the LOAD is terminated before the end of the LOAD, you need to know the phase at which you should restart the LOAD.

Action: No action is required.

SQL3501W

The table space(s) in which the table resides will not be placed in backup pending state since forward recovery is disabled for the database.

Cause: COPY NO was specified on the invocation of LOAD which results in the table space(s) in which the table resides being placed into backup pending state unless forward recovery is disabled for the database.

The utility continues.

Action: No action is required.

SQL3502W

The utility has encountered "<number>" warnings which exceeds the total number of warnings allowed.

Cause: The number of warnings issued during the command has exceeded the total number of warnings that the user specified at invocation of the utility.

The utility terminates.

Action: Ensure that the correct data is being loaded with the appropriate options or increase the number of warnings allowed. Resubmit the command.

SQL3503W

The utility has loaded "<number>" rows which equals the total count specified by the user.

Cause: The number of rows loaded has equaled the total number of rows that the user specified at invocation of the utility.

The utility has successfully completed.

Action: No response required.

SQL3504W

A consistency point is being established.

Cause: Consistency points will be established at times other than the regular interval specified in the SAVECOUNT parameter at invocation when:

- the threshold for the amount of meta-data kept in memory or in temporary files has been reached.
- A device error occurred for the copy image and the load must terminate.

Action: If the LOAD continues after this message, no action is required. If the LOAD terminates, it can be restarted after all errors are corrected (such as activating a device or decreasing the interval at which consistency points are to be established).

SQL3505N

The length specified in the filemod for the RECLen option is not in the valid range of 1 to 32767.

Cause: In the *filemod* parameter, the RECLen option was specified for an ASC file. The length specified is not valid.

Action: Correct the length specified and resubmit the command.

SQL3506W

The value specified in the null indicator in row "<row-number>" and column "<column-number>" is not valid. A value of 'N' will be assumed.

Cause: For ASC files, a null indicator column can be specified for each data column and should contain either a 'Y' or a 'N'. A 'Y' indicates that the column is a null value and a 'N' indicates that the column contains data. If neither of these values are in the null indicator column,

it is assumed to be a 'N' and data will be loaded into the column.

Action: If the data or the null indicator are incorrect, correct the input file and resubmit the command.

SQL3507N

The column number specified for a null indicator is not in the valid range of 0 to 32767 or the null indicator parameter is not valid.

Cause: In the *null_ind* parameter, columns for null indicators were specified for an ASC file but one of the columns is not valid or the pointer passed in for the null indicators is not valid.

Action: Correct the parameter and resubmit the command.

SQL3508N

Error in accessing a file of type "<file-type>" during load or load query. Reason code: "<reason-code>". Path: "<path/file>".

Cause: An error occurred while trying to access a file during load or load query processing. The utility stops processing.

Action: If doing a load and the table space is not in load pending state, correct the problem and invoke the load utility again. If the table space is in load pending state, then invoke the load utility in RESTART or REPLACE mode, or restore a backup of the table space(s). The state of the table space can be determined using the LIST TABLESPACES command.

The following is a list of reason codes:

1 Unable to open the file.

This could be caused by an incorrect file name or insufficient authority to access the file/directory. Correct the problem and either restart or rerun the load.

2 Unable to read/scan the file.

This could be the result of a hardware error. If the error is a hardware error, take the appropriate action as specified in the *Troubleshooting Guide* for hardware problems and restart or rerun the load.

3 Unable to write to or change size of the file.

This could be the result of a disk full condition or a hardware error. Refer to the file type list below and either ensure there is enough space to run the load or specify a different location to be used. Restart or

rerun the load. If the error is a hardware error, take the appropriate action as specified in the *Troubleshooting Guide* for hardware problems and restart or rerun the load.

4 The file contains invalid data.

A file required by the load contains incorrect data. See the action described for REMOTE_FILE.

5 Unable to close the file.

If the load cannot be restarted or rerun, contact your IBM service representative.

6 Unable to delete the file.

If the load cannot be restarted or rerun, contact your IBM service representative.

7 Parameter specified incorrectly. Refer to the list of file types to determine the parameter in error and rerun the load with a valid parameter.

The following is a list of file types:

SORTDIRECTORY Ensure that the workdirectory parameter is specified properly. There must be enough combined space in all the directories to hold twice the size of the index keys for the loaded data. For load insert and load restart there must also be room for twice the size of the index keys of the existing data in the table.

MSGFILE Ensure that the messagefile parameter is specified properly. There must be enough disk space to write out the messages that occur during the load.

If this is a load query, ensure that the local message file parameter is NOT the same as the messagefile parameter used for the load whose status is being queried.

REMOTE_FILE Ensure that the remotefile parameter is specified properly. The default name for this parameter is db2utmp. See the *Admin Guide* for more details on this parameter.

One reason for getting this message could be that two loads are running using the same remote file (or defaulting to the same value). The remotefile parameter must be specified when running load in order to ensure that each load uses a different set of files.

If the file in the third token has the extension ".msg", make sure there is enough disk space to write out the message information for messages that occur during the load. If this is a load query, the remotefile parameter must be

the same as the remotefile parameter used for the load whose status is being queried.

If the file in the third token has the extension “.rid”, and this is a restart of a load in the delete phase, ensure that the remotefile parameter is the same as the first load. This file created from the original load is required by a load being restarted in the delete phase. If the correct remotefile parameter was used, it is possible that the file was removed or corrupted and the load must be restarted in the build phase.

If the file in the third token has the extension “.log”, ensure that there is enough disk space to write temporary meta-data in this directory. If this is a RESTART, the remotefile parameter must be the same as the remotefile parameter used for the original load since this file which is created during the original load is required by load restart. If the correct remotefile parameter was used and sufficient disk space is available, it is possible that the logfile was removed or corrupted, and either a load replace must be done or the table space must be restored from an existing backup.

SQL3509W

The utility has deleted "<number>" rows from the table.

Cause: When a table with a unique index is loaded, rows causing violation of uniqueness of an index will be deleted from the table during the delete phase. This message provides information on how many rows have been deleted.

Action: No action is required.

SQL3510N

The working directory for the sort phase cannot be accessed.

Cause: One or more of the specified working directories for the sort phase either does not exist or has no read/write permission.

Action: Ensure that the specified working directories exist and the read/write permission is setup correctly and resubmit the command.

SQL3511W

The file named in row "<row-number>" and column "<column-number>" cannot be found. A null was loaded.

Cause: The filename in the specified field cannot be found. There may be a data type mismatch.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

A null value is loaded.

Action: Examine the input value. If necessary, correct the input file and resubmit the command or edit the data in the table.

SQL3512W

The file named in row "<row-number>" and column "<column-number>" cannot be found, but the target column is not nullable. The row was not loaded.

Cause: The filename in the specified field cannot be found. A null cannot be loaded because the output column in the table is not nullable.

For delimited ASCII (DEL) files, the value of the column number specifies the field within the row that contains the value in question. For ASCII files, the value of the column number specifies the byte location within the row where the value in question begins.

The row is not loaded.

Action: Correct the input file and resubmit the command or edit the data in the table.

SQL3513N

The codepage of the file does not match the codepage of the database. The file cannot be loaded.

Cause: DB2CS files cannot be loaded into a database with a codepage that differs from the original database.

Action: Change the codepage of the database and resubmit the command or use another filetype (such as PC/IXF) to move your data from the original database to the new database.

SQL3514N

A utility system error occurred. Function code: "<function>". Reason code: "<reason-code>". Error code: "<error-code>".

Cause: A system error occurred during database utility processing.

Action: Different actions are required depending on the value of "<function>".

The possible function codes are:

- 1 - An error occurred while Load was sorting.
Try to restart the load. If the error persists, provide the function, reason code and error code to your technical service representative.
- 2 - An error occurred using the vendor sort utility.
Try the load again using the DB2 Client/Server sort utility instead of the vendor sort. To do this, reset the Profile Registry value at the server to blank. You may have to restart the Database Manager in order to pick up the new Profile Registry value. If the error persists, provide the function, reason code and error code to your vendor sort technical service representative.

SQL3515W

The utility has finished the "<phase>" phase at time "<timestamp>".

Cause: This is an informational message indicating that a phase has finished. The phases are (in order of appearance):

- LOAD
- BUILD
- DELETE

Action: No action is required.

SQL3516N

The utility could not restart the load as specified.

Cause: The Load Utility detected discrepancies in the last consistency point performed by Load before failure occurred. This condition might be caused either by a system error or an invalid log file.

Action: Restart the Load at the Build phase, to bring the table to a consistent state and create indexes (if applicable), or perform Load with the REPLACE option.

SQL3517N

An unexpected record was read from the input source.

Cause: The utility has encountered a record that is in a format that is not valid. The source may have been corrupted when copied from the original source.

Processing terminates.

Action: Copy the record from the original source in binary and restart the LOAD.

SQL3518N

The data in the source is not compatible to the table to be loaded.

Cause: The source cannot be used to load this table because one of the following reasons:

- the table definition does not match the table definition of the source.
- the source was created on a different platform than the table that is being loaded.
- the source was created from a table that had a different codepage from the table that is being loaded.

Action: Ensure that both the table and source are correctly specified. If you want to load data from a table with a different definition or from a different platform or codepage, use another filetype such as IXF or DEL.

SQL3519W

Begin Load Consistency Point. Input record count = "<count>".

Cause: The Load Utility is about to attempt to perform a Consistency Point to commit the table data that has already been loaded.

Action: If message SQL3520W is not printed immediately after this message, then the Consistency Point failed. The Load will have to be restarted at the Build phase, to ensure that the table is brought back to a consistent state and all indexes (if any) created. It will then be possible to check which records have been loaded. Start the Load again with a RESTARTCOUNT set to the number of records successfully loaded to skip those rows and load the rest of the file.

If this message is followed by messages SQL3520W, then this message is informational only and no response is required.

SQL3520W

Load Consistency Point was successful.

Cause: The Consistency Point performed by Load was successful.

Action: This is an informational message only. No response is required.

SQL3521N

The input source file "<sequence-num>" was not provided.

Cause: A load was invoked with multiple input files but not all the files were provided. For the DB2CS filetype, all the input source files that were created originally must be provided. For the IXF filetype, all the input source files must be provided in the correct order.

The utility terminates.

Action: Restart the utility providing all the input source files and setting the RESTARTCOUNT appropriately for the data that was already loaded.

SQL3522N

A copy target cannot be provided when both log retain and user exits are disabled.

Cause: A copy target has been specified on invocation of load for a database that has both log retain and user exits disabled. Copy targets are not valid for such databases.

The utility stops processing.

Action: Verify that the database should have log retain and user exits disabled and invoke the load without specifying a copy target.

SQL3523W

There are no messages to be retrieved from the message file. Reason code: "<rc>".

Cause: No messages are returned from a query of the remote file. The possible reason codes are:

- 1 the remote file does not exist.
- 2 there are no messages in the remote file.

Action: Ensure that the correct remote file has been specified. If the remote file is specified correctly and messages are expected, check the database monitor to verify that the utility is active and it is not waiting for

resources such as locks. Note that the remote file will not be created until the utility is in progress and it will be deleted after the completion of the utility.

SQL3524N

Option "<option>" has an invalid value of "<value>". It must be in the range of 0 and 100 inclusive.

Cause: The value provided must be an integer and in the range of 0 and 100.

For option TOTALFREESPACE, the value is interpreted as a percentage of the total pages in the table that are to be appended to the end of the table as free space.

For option PAGEFREESPACE, the value is interpreted as a percentage of each data page that is to be left as free space.

The utility stops processing.

Action: Correct the value and resubmit the utility in either REPLACE or RESTART mode.

SQL3525W

The "<option-1>" option is incompatible with the "<option-2>" option.

Cause: Incompatible options have been provided to the utility.

Action: Remove or modify one of the options and resubmit the command. See the Command Reference for more information on valid options.

SQL3526N

The modifier clause "<clause>" is inconsistent with the current load options. Reason code: "<reason-code>".

Cause: The load file type mode (modifier) indicated, is incompatible with your load/import/export command. This is because of one of the following reasons:

1. The current option requires that "reclen" and "noeofchar" be specified. One or more of these options are missing from your command.
2. The indicated option is inconsistent with the format of the input or output data file. (e.g. DEL, ASC, etc)

Action: Check the requirements of the option you are using. Reissue the command using modifier clauses (file type modes) and utility options that are consistent. * SQLLULA_INVALID_CODEPAGE

SQL3527N

The number specified in the FILETMOD parameter for the CODEPAGE option is not valid.

Cause: In the FILETMOD parameter, the CODEPAGE option was invalid.

Action: Correct the codepage number and resubmit the command.

SQL3528W

The delimiter (column delimiter, string delimiter, or decimal point) specified in the CLP command may get translated from the application codepage to the database codepage.

Cause: When a CLP command is sent from the client to the server, it may get translated from the codepage of client to the codepage of server, if they are different.

Action: To ensure that delimiters are not converted, they should be specified in hex format.

SQL3600 - SQL3699

SQL3600N

The IMMEDIATE CHECKED option of the SET CONSTRAINTS statement is not valid since the table "<table-name>" is not in the check pending state.

Cause: The data is checked for constraint violations only if the table is placed in the check pending state.

Action: Use the SET CONSTRAINT statement with the OFF option to place a table in the check pending state.

sqlcode: -3600

sqlstate: 51027

SQL3601W

Setting the constraints for a parent table to OFF in a referential structure or adding a foreign key when the parent table in check pending state has resulted in one or more descendent tables being automatically placed into a Check Pending state.

Cause: Setting a parent table in a referential structure requires dependent and descendent tables to be set in

check pending. This is necessary to enforce referential integrity constraints. Adding a foreign key when the parent table is in a check pending state requires all new dependents and descendents of the parent table to be placed automatically in check pending.

Action: This is a warning message. The user must execute the SET CONSTRAINTS statement with the IMMEDIATE CHECKED option in order to check constraints on all the dependent and descendent tables as well.

sqlcode: +3601

sqlstate: 01586

SQL3602W

Check data processing found constraint violations and moved them to exception tables.

Cause: There are rows that violate constraints that were specified to be checked by the SET CONSTRAINTS statement execution. These were moved to exceptions tables.

Action: Check the exception tables for rows that violate constraints. The rows have been deleted from the original table but can be corrected and transferred back from the exception tables.

sqlcode: +3602

sqlstate: 01603

SQL3603N

Check data processing through the SET CONSTRAINTS statement has found that constraint "<constraint-name>" has been violated.

Cause: A row has been found to violate a constraint defined on a table specified to be checked by the SET CONSTRAINTS statement.

Action: The row has not been deleted from the table since the FOR EXCEPTION option was not used.

It is advisable to execute the SET CONSTRAINTS statement using the FOR EXCEPTION option when checking the data. The data may be corrected with the information from the exception table(s).

sqlcode: -3603

sqlstate: 23514

SQL3604N

Exception table “<excp-table-name>” corresponding to table “<table-name>” in the SET CONSTRAINTS statement does not have the proper structure, has been defined with unique indexes, constraints or triggers, or is in the check pending state itself.

Cause: The exception table corresponding to a table must have its definition similar to that of the original table. Optional columns for the utility are as specified in the relevant section of the documentation describing the exception tables. There must not be any constraints or triggers defined on the exception table. The exception table itself should not be in the check pending state.

Action: Create the exception table as indicated in the relevant section of the documentation and re-run the utility.

sqlcode: -3604

sqlstate: 428A5

SQL3605N

Table “<table-name>” named in the SET CONSTRAINTS statement is either not listed to be checked or is an exception table specified more than once.

Cause: When the FOR EXCEPTION clause is specified in the SET CONSTRAINTS statement, this error could be caused by one of the following :

- The table is missing from the list of tables to be checked
- The table to be checked is the same as an exception table
- The exception table is specified for more than one table to be checked

Action: Correct the table names and execute the command again.

sqlcode: -3605

sqlstate: 428A6

SQL3606N

There is a mismatch in the number of tables being checked and in the number of exception tables specified in the SET CONSTRAINTS statement.

Cause: There must be a one-to-one correspondence between the original tables and the exception tables provided in the list.

Action: Create the missing exception table if not already done and specify it in the list in order to execute the command again.

sqlcode: -3606

sqlstate: 428A7

SQL3608N

Cannot check or reset the Check Pending state on dependent table “<dep-table-name>” using the SET CONSTRAINTS statement while the parent table “<par-table-name>” is in the check pending state.

Cause: The parent table must be clean (not in the check pending state) or be included in the invocation list in order to

- reset the check pending state of a dependent table
- check a dependent table.

Action: Ensure that the parent table is not in check pending by executing the SET CONSTRAINT statement to check the parent table.

It is recommended to check the parent table first. It is also possible to check the dependent table and include the parent table in the invocation list. In this case, the command could still fail if there are constraint violations in the parent table and they are not deleted (ie., if the FOR EXCEPTION option is not used).

In the case of a referential cycle, all tables must be included in the invocation list.

sqlcode: -3608

sqlstate: 428A8

SQL3700 - SQL3799

SQL3700W

Device "<device>" is full. There are "<active-devices>" other active devices. Please mount new media or take appropriate action.

Cause: The media on the specified device is full. This device is one of the "<active-devices>" + 1 target devices to which unloaded data is being directed.

Action: Take ONE of the following actions:

- Mount a new target media on the specified device and continue unloading by invoking unload with caller action 1 (SQLU_CONTINUE).
- OR
- If "<active-devices>" is not zero, continue the unload without this device by invoking the UNLOAD utility with the caller action 4 (SQLU_DEVICE_TERMINATE).
- OR
- Cancel the unload by invoking the UNLOAD utility with caller action 2 (SQLU_TERMINATE).

SQL3701W

The lobpaths parameter was specified, but the table does not contain any LOB or Long data. This parameter will be ignored.

Cause: The lobpaths parameter specifies a separate target for LOB and Long data. The table does not contain any LOB or Long data, so the targets specified by the lobpaths parameter will not be used.

Action: No action required.

SQL3702W

Warning. SQLCODE "<sqlcode>" was received for device "<device>". Unload will attempt to continue without this device.

Cause: SQLCODE "<sqlcode>" was detected for the specified device which is one of the targets for the unload. Unload will continue but will ignore this device.

Action: The media loaded on the specified device will not contain any unloaded data and should not be included with the media supplied to the LOAD utility when the unloaded data is being loaded. In order to fix the problem with the device, look up the returned SQLCODE in the Messages Reference.

SQL3703W

"<xxx>" of "<yyy>" number of type "<type>" pages have been unloaded and sent to be written out to the target media.

Cause: The table being unloaded consists of "<yyy>" pages of the specified type of data. "<xxx>" of these have been processed by the UNLOAD utility and have been sent to a media writer which will write the data to the target media.

"<type>" is one of:

- 0 for regular data
- 2 for Long data and allocation information
- 3 for LOB data
- 4 for LOB allocation information

Note that for Long and LOB data, "<xxx>" may be less than "<yyy>" when unload is complete, because unused space is not unloaded, but will be recreated when the data is reloaded.

Even for regular data, a final message where "<xxx>" = "<yyy>" may not be issued. Instead message 3105 is used to indicate that the unload completed successfully.

Action: This is an informational message. No action is required.

SQL3704N

The num_buffers parameter specified is invalid.

Cause: The num_buffers parameter determines the number of buffers that the utility will use. The minimum is 2 if the lobpaths parameter is not specified and 3 if the lobpaths parameter is specified. This is the minimum required to allow the utility to work. There is, however, an optimal number of buffers that the utility will use if this parameter is not specified. This optimal number is based on the number of internal processes that the utility will have running and whether or not the lobpaths parameter was specified. If the number of buffers specified is less than the optimal number, some processes will be waiting for buffers to use. Therefore, it is recommended to specify 0 for this parameter and let the utility choose the number of buffers. Only specify this parameter if, due to the size of the utility storage heap, it is necessary to limit the amount of memory that the utility uses.

Action: Resubmit the command using a valid num_buffers parameter.

SQL3705N

The buffer size parameter specified is not valid. The buffer size must be specified as 0 or be between 8 and 16384 inclusive. For multiple buffers, the total buffer size must not exceed 16384.

Cause: The application calling the utility has supplied a buffer size parameter that is not valid. The buffer size is used to determine the internal buffer size. The value is the number of 4K pages that are obtained for this buffer. The value must be specified as 0 or be between 8 and 16384 inclusive. If there are multiple buffers, the number of buffers multiplied by the buffer size must not exceed 16384.

When 0 is specified:

- for a table whose regular data is in a database managed storage table space, the default buffer size chosen is the extent size for the table space or 8, whichever is larger.
- for a table whose regular data is in a system managed storage table space, the default buffer size chosen is 8.

Action: Reissue the command with a valid buffer size.

SQL3706N

A disk full error was encountered on "`<path/file>`".

Cause: A disk full error was encountered during the processing of a database utility. The utility stops.

Action: Ensure enough disk space is available for the utility or direct the output to other media such as tape.

SQL3707N

The sort memory size parameter specified "`<size1>`" is not valid. The minimum size required is "`<size2>`".

Cause: The sort memory size is not large enough for sorting the keys of the index(es).

Action: Reissue the command with a valid sort memory size.

To ensure that only the minimum amount of storage is used, specify a value of 0 (to let it default). However,

using more than the minimum should improve the performance of the sort.

SQL3783N

An error was encountered while opening the copy location file. Open file error code is "`<errcode>`".

Cause: During load recovery, an error was encountered while opening the copy location file. The operating system file open return code is returned.

Action: Look at the error code in the message for more information. Correct the error, if possible, and resubmit the command.

SQL3784W

Invalid data was encountered while reading from the copy location file. Failure occurred at line "`<line-no>`" with error type "`<errtype>`".

Cause: During load recovery, invalid data was encountered while reading from the copy location file. The line number and error type are returned. The utility waits for a response to continue.

Action: Correct the data in the copy location file and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL3785N

Load recovery for table "`<schema.tablename>`" at time "`<timestamp>`" on node "`<node-number>`" failed due to error "`<sqlcode>`" with additional information "`<additional-info>`".

Cause: A severe error occurred during load recovery. The utility stops processing.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Examine the error code in the message for more information. Take corrective action and resubmit the command.

SQL3798W

An invalid value was used for parameter “<parameter>” to invoke the roll-forward recovery API to continue load recovery.

Cause: Load recovery is in progress and one of the parameters passed in is not valid for the current state of load recovery.

Action: Correct the value in error and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL3799W

Load recovery for table “<schema.tablename>” at time “<timestamp>” on node “<node-number>” is pending due to warning “<sqlcode>” with additional information “<additional-info>”.

Cause: A warning condition is encountered during load recovery. The utility waits for a response to continue.

(Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Examine the error code in the message for more information. Take corrective action and return to the utility with the correct caller action parameter to indicate if processing should continue or terminate.

SQL3800 - SQL3899**SQL3802N**

An invalid quiesce mode “<quiesce-mode>” was encountered.

Cause: An invalid quiesce mode was passed to the quiesce API.

Action: Resubmit the command with the correct parameters.

SQL3804N

The index is invalid.

Cause: An invalid index was encountered during the processing of a utility command.

Action: Check in the *Administration Guide* to determine the appropriate way to revalidate the index and resubmit the command after the condition is corrected.

SQL3805N

The state of the application or of one or more table spaces for the table specified prohibits the loadapi action or quiescemode “<action>”. Reason code = “<reason-code>”.

Cause: The loadapi action (either quiescemode or callerac) passed to the load API is in conflict with either the state of the application or the state of one or more table spaces for the table.

The possible reason codes are as follows:

- 01** the state of one of the table spaces for the table specified prohibits the loadapi action or quiescemode.
- 02** the application is not at the start of its logical unit of work. This condition prohibits the load action specified.
- 03** the state of the application prohibits the load action specified.
- 04** one or more of the table spaces for the table is already quiesced by the maximum number of quiescers.
- 05** system catalog table space cannot be quiesced.
- 06** load copy not allowed when table space is in backup pending state.
- 07** Attempt to restart a load at an incorrect phase

Action: Corresponding to each of the above reasons:

- 01** Resubmit the command with the correct loadapi action or quiescemode, or correct the state of the table spaces for the table.
- 02** Resubmit the command with the correct load action or complete the current logical unit of work by issuing either a COMMIT or ROLLBACK.
- 03** Resubmit the command with the correct load action.
- 04** Determine which table spaces for the table have reached the maximum number of quiescers. QUIESCE RESET these table spaces.
- 05** Resubmit the command with a table which is not in the system catalog table space.

- 06 Resubmit the command omitting the copy parameter
- 07 Determine at which phase the load should be restarted and resubmit the command with the correct phase.

SQL3806N

Not all table constraints are off for the table to be loaded.

Cause: One or more constraints for the table to be loaded are still on when the load API is invoked.

Action: Resubmit the command after all table constraints are turned off.

SQL4000 - SQL4099

SQL4001N

The character “<character>” in column “<column>” on line “<line>” is not valid.

Cause: The specified character is not a valid character in SQL statements.

The statement cannot be processed.

Action: Remove or replace the character that is invalid.

SQL4002N

“<token 1>” and “<token 2>” are undeclared host variables that cannot both be used as descriptor names in a single SQL statement.

Cause: The specified identifiers have not been declared as host variables. Descriptor names are not declared before using. Because more than one descriptor name in a single statement is not valid, at least one of the host variables is not valid.

The statement cannot be processed.

Action: Correct the use of descriptor names or undeclared host variables in the statement. Note that the statement can contain additional undeclared host variables.

SQL4003N

The SQL statement on line “<line>” is not supported by this version of the precompiler.

Cause: The release numbers of the precompiler and the installed version of the database manager are not compatible. The specified statement is supported by the database manager but not the precompiler.

The statement cannot be processed.

Action: Repeat the precompile process with the current version of the precompiler.

SQL4004N

The package name is not valid.

Cause: The package name contains characters that are not valid. Either the name is too long or no name was specified with the PACKAGE option.

No package is created.

Action: Resubmit the command with a valid package name or without the PACKAGE option.

SQL4005N

An invalid token “<token>” was found starting in position “<position>” on line “<line>”.

Cause: A syntax error in the SQL statement was detected at the specified token “<token>”.

The statement cannot be processed.

Action: Examine the statement, especially around the specified token. Correct the syntax.

SQL4010N

Illegal nesting of Compound SQL statements.

Cause: This error is returned when a BEGIN COMPOUND clause is detected as a sub-statement of a Compound SQL statement.

Action: Resubmit the precompilation without the nested BEGIN COMPOUND.

SQL4011N

Invalid SQL sub-statement in a Compound SQL statement.

Cause: This error is returned when an invalid sub-statement is detected in a Compound SQL statement. Valid statements are:

- ALTER TABLE
- COMMENT ON
- CREATE INDEX
- CREATE TABLE
- CREATE VIEW
- Positioned DELETE
- Searched DELETE
- DROP
- GRANT
- INSERT
- LOCK TABLE
- REVOKE
- SELECT INTO
- Positioned UPDATE
- Searched UPDATE
- COMMIT; only when specified as the last sub-statement.

Action: Resubmit the precompilation without the invalid sub-statement.

SQL4012N

Invalid use of COMMIT in a Compound SQL statement.

Cause: This error is returned when a sub-statement is detected after a COMMIT has been found in a COMPOUND SQL statement.

Action: Make the COMMIT sub-statement the last sub-statement, and resubmit the precompilation.

SQL4013N

An END COMPOUND statement was found without a previous BEGIN COMPOUND statement.

Cause: This error is returned when an END COMPOUND statement has been found without a preceding BEGIN COMPOUND.

Action: Either remove the END COMPOUND, or add a BEGIN COMPOUND, and resubmit the precompilation.

SQL4014N

Invalid Compound SQL syntax.

Cause: This error is returned when a Compound SQL statement contains a syntax error. Possible causes include:

- END COMPOUND is missing
- one of the substatements is empty (zero length or blank).

Action: Fix the syntax error and re-precompile.

SQL4100 - SQL4199**SQL4100I**

The "<sqlflag-type>" SQL language syntax is used for syntax checking by the flagger.

Cause: The SQL statements that have passed the pre-compiler checking will be subject to checking against the specified syntax by the flagger. Warning message will be issued against the statement when there is a syntax deviation.

Processing continues.

Action: None. This is an informational message only.

SQL4102W

An SQL syntax deviation has occurred at the token starting with the text "<text>".

Cause: The flagger has detected a deviation from the SQL language syntax specified in the SQLFLAG pre-compiler option.

Processing continues.

Action: Correct the SQL statement.

SQL4103W

A data definition statement is not within a CREATE SCHEMA statement.

Cause: The FIPS standard requires that all data definition statements are contained within a CREATE SCHEMA statement.

Processing continues.

Action: Correct the SQL statement.

SQL4104W

There is a non-standard embedded comment.

Cause: A comment embedded in an SQL statement does not meet the requirements of the standard being flagged. The comment does not begin with at least two consecutive hyphens

Processing continues.

Action: Correct the SQL statement.

SQL4105W

An SQL syntax deviation has occurred. The statement is not complete.

Cause: The SQL statement has terminated before all required elements have been found.

Processing continues.

Action: Correct the SQL statement.

SQL4106W

The identifier "<identifier>" is more than 18 characters.

Cause: Authorization identifier, table identifier, column name, correlation name, module name, cursor name, procedure name, or parameter name has a length of more than 18 characters.

Processing continues.

Action: Correct the SQL statement.

SQL4107W

Column "<column>" has an invalid length, precision, or scale attribute.

Cause: One of the following conditions has not been met:

- Length value should be greater than zero.
- Precision value should be greater than zero.
- Scale value should not be greater than precision.

Processing continues.

Action: Correct the SQL statement.

SQL4108W

An indicator variable has data type other than exact numeric, or has a non-zero scale.

Cause: Data type of an indicator variable should be exact numeric with a scale of zero.

Processing continues.

Action: Correct the SQL statement.

SQL4109W

The SET FUNCTION SPECIFICATION references column "<column>".

Cause: One of the following conditions has not been met:

- The COLUMN REFERENCE of a DISTINCT SET FUNCTION cannot reference a column derived from a SET FUNCTION SPECIFICATION.
- COLUMN REFERENCES in the VALUE EXPRESSION of an ALL SET FUNCTION cannot reference a column derived from a SET FUNCTION SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4110W

A VALUE EXPRESSION containing "<column>" cannot include operators.

Cause: A VALUE EXPRESSION cannot include operators in an OUTER REFERENCE COLUMN REFERENCE.

Processing continues.

Action: Correct the SQL statement.

SQL4111W

The COLUMN REFERENCE is missing or is invalid for the ALL column function "<function>".

Cause: The VALUE EXPRESSION of an ALL SET FUNCTION SPECIFICATION should include a COLUMN REFERENCE.

Processing continues.

Action: Correct the SQL statement.

SQL4112W

Column “<column>” is not unique and requires qualification.

Cause: The specified column is not unique within the current scope. Qualification must be given to uniquely identify the required column.

Processing continues.

Action: Correct the SQL statement.

SQL4113W

A VALUE EXPRESSION may not contain a SET FUNCTION SPECIFICATION.

Cause: The VALUE EXPRESSION of an ALL SET FUNCTION may not contain SET FUNCTION SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4114W

Column “<column>” does not identify a column of a table within the current scope.

Cause: One of the following conditions has not been met:

- The table or correlation name used as a qualifier does not exist.
- The column name does not exist within the current scope or the scope of the qualifier.

Processing continues.

Action: Correct the SQL statement.

SQL4115W

A column function that contains the OUTER REFERENCE column “<column>” is not in the subquery of a HAVING clause.

Cause: A column function must be contained in a subquery of a HAVING clause if it contains an OUTER REFERENCE COLUMN REFERENCE.

Processing continues.

Action: Correct the SQL statement.

SQL4116W

The result of a SUM or AVG function cannot be a character string.

Cause: Character string is not valid for the result of a SUM or AVG SET FUNCTION SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4117W

Operator “<operator>” is invalid in this context.

Cause: One of the following conditions has not been met:

- A VALUE EXPRESSION containing a DISTINCT SET FUNCTION cannot include dyadic operators.
- First character following a monadic operator cannot be a plus or minus sign.
- VALUE EXPRESSION should not contain operators if PRIMARY is of type character string.

Processing continues.

Action: Correct the SQL statement.

SQL4118W

The “<exptype>” EXPRESSION is comparing incompatible data types.

Cause: The data types of one of the following (identified by exptype) do not match:

- exptype = COMPARISON - Comparison operators must match
- exptype = BETWEEN - The three VALUE EXPRESSIONs must match
- exptype = IN - VALUE EXPRESSION, subquery and all VALUE SPECIFICATIONs must match
- exptype = QUANTIFIED - VALUE EXPRESSION and subquery must match

Processing continues.

Action: Correct the SQL statement.

SQL4119W

The operand in the LIKE predicate is not a character string.

Cause: One of the following conditions has not been met:

- Data type of the column in a LIKE predicate is not a character string.
- Data type of the pattern in a LIKE predicate is not a character string.

Processing continues.

Action: Correct the SQL statement.

SQL4120W

The ESCAPE character must be a one-byte character string.

Cause: Escape character in a LIKE predicate must have the data type of character string with a length of 1.

Processing continues.

Action: Correct the SQL statement.

SQL4121W

The WHERE clause, GROUP BY clause, or HAVING clause is invalid for the grouped view “<schema-name>.”.<view>”.

Cause: If the table identified in the FROM clause is a grouped view, then the TABLE EXPRESSION must not contain a WHERE clause, GROUP BY clause, or HAVING clause.

Processing continues.

Action: Correct the SQL statement.

SQL4122W

“<schema-name>.”.<name>” occurs more than once in a FROM clause.

Cause: One of the following conditions has not been met:

- Table name occurs more than once in a FROM clause.
- Correlation name is identical to a table name or to another correlation name in a FROM clause.

Processing continues.

Action: Correct the SQL statement.

SQL4123W

Only one table reference is allowed in the FROM clause for a GROUPed view.

Cause: If the table identified by table name is a GROUPed view, then the FROM clause must contain exactly one table reference.

Processing continues.

Action: Correct the SQL statement.

SQL4124W

A reference to column “<column>” derived from a column function is invalid in a WHERE clause.

Cause: A VALUE EXPRESSION directly contained in the SEARCH CONDITION of a WHERE clause must not include a reference to a column derived from a column function.

Processing continues.

Action: Correct the SQL statement.

SQL4125W

A HAVING clause must contain the WHERE clause when the WHERE clause has a column function.

Cause: If a VALUE EXPRESSION directly contained in the SEARCH CONDITION is a column function, then the WHERE clause must be contained in a HAVING clause.

Processing continues.

Action: Correct the SQL statement.

SQL4126W

The COLUMN REFERENCE for “<column>” must be an OUTER REFERENCE.

Cause: If a VALUE EXPRESSION directly contained in the SEARCH CONDITION is a function, then the COLUMN REFERENCE in the column function expression must be an OUTER REFERENCE.

Processing continues.

Action: Correct the SQL statement.

SQL4127W

Column “<column>” is duplicated within the current scope.

Cause: The specified column is duplicated within the current scope.

Processing continues.

Action: Correct the SQL statement.

SQL4128W

The COLUMN REFERENCE for “<column name>” should be a grouping column or should be specified within a column function.

Cause: Each COLUMN REFERENCE contained in a subquery in the SEARCH CONDITION of a HAVING clause must reference a grouping column or be specified within a column function.

Processing continues.

Action: Correct the SQL statement.

SQL4129W

DEGREE of table “<schema-name>.”<table>” should be 1 when using a SELECT LIST of *.

Cause: The DEGREE of the TABLE EXPRESSION must be 1 if a SELECT LIST of * is specified in a subquery of any predicate other than an EXISTS predicate.

Processing continues.

Action: Correct the SQL statement.

SQL4130W

The column function is not valid for the TABLE EXPRESSION beginning with table “<schema-name>.”<table>”.

Cause: One of the following conditions has not been met:

- If the TABLE EXPRESSION is a grouped view, the SELECT LIST of a subquery cannot contain a SET FUNCTION SPECIFICATION.
- If the TABLE EXPRESSION is a grouped view, the SELECT LIST of a QUERY SPECIFICATION cannot contain a column function.

Processing continues.

Action: Correct the SQL statement.

SQL4131W

The COLUMN REFERENCE for “<column>” is invalid.

Cause: One of the following conditions has not been met:

- For a GROUPed table, the COLUMN REFERENCE must reference a GROUPing column or be specified within a SET FUNCTION SPECIFICATION.
- If not a GROUPed table and VALUE EXPRESSION includes a SET FUNCTION SPECIFICATION, then each COLUMN REFERENCE must be specified within a SET FUNCTION SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4132W

DISTINCT is specified more than once.

Cause: One of the following conditions has not been met:

- DISTINCT must not be specified more than once in a QUERY SPECIFICATION, excluding any subquery of that QUERY SPECIFICATION.
- DISTINCT must not be specified more than once in a subquery, excluding any subquery contained in that subquery.

Processing continues.

Action: Correct the SQL statement.

SQL4133W

The COMPARISON PREDICATE subquery cannot contain a GROUP BY or HAVING clause.

Cause: If a subquery is specified in a COMPARISON PREDICATE, then the TABLE EXPRESSION whose FROM clause identifies the named table must not contain a GROUP BY clause or a HAVING clause.

Processing continues.

Action: Correct the SQL statement.

SQL4134W

The COMPARISON PREDICATE subquery cannot identify a GROUPed view.

Cause: If a subquery is specified in a COMPARISON PREDICATE, then the TABLE EXPRESSION whose FROM clause identifies the named table must not identify a GROUPed view.

Processing continues.

Action: Correct the SQL statement.

SQL4135W

There is an invalid AUTHORIZATION IDENTIFIER "<authid>".

Cause: The AUTHORIZATION IDENTIFIER prefixed to the table name is invalid.

Processing continues.

Action: Correct the SQL statement.

SQL4136W

Table or view "<schema-name>."<name>" already exists.

Cause: The table name or view name specified already exists in the catalog.

Processing continues.

Action: Correct the SQL statement.

SQL4137W

The COLUMN DEFINITION is missing.

Cause: At least one COLUMN DEFINITION should be specified for a CREATE TABLE.

Processing continues.

Action: Correct the SQL statement.

SQL4138W

The data type "<type1>" of the target is not compatible with the data type "<type2>" of the source.

Cause: Data types should match:

- In a FETCH statement, between source and target.
- In a SELECT statement, between source and target.

Processing continues.

Action: Correct the SQL statement.

SQL4139I

You must specify a VIEW COLUMN LIST for "<schema-name>."<table>".

Cause: If any two columns in the table specified by the QUERY SPECIFICATION have the same column name, or if any column of that table is an unnamed column, then a VIEW COLUMN LIST must be specified.

Processing continues.

Action: Correct the SQL statement.

SQL4140W

An error has occurred causing the flagger to stop. Module name = "<module-name>". Internal error code = "<error code>".

Cause: The flagger has encountered an internal error. If the syntax, bindfile or package option is also specified, processing continues but flagger operation is discontinued. Otherwise, processing is terminated.

Action: Record this message number (SQLCODE), module name and error code in the message. Contact your technical service representative with the information.

SQL4141W

An error has occurred when attempting to produce message "<message number>" in module "<module name>".

Cause: The FLAGGER has attempted to produce an undefined message.

Processing continues.

Action: Record this message number (SQLCODE), module name and error code in the message. Contact

your technical service representative with the information.

SQL4142W

There is not enough memory for flagger operation. Internal error code = "<error code>".

Cause: There is not enough memory for the flagger to operate. If the syntax, bindfile or package option is also specified, processing continues but flagger operation is discontinued. Otherwise, processing is terminated.

Action: Ensure that your system has sufficient real and virtual memory, and remove any unnecessary background processes.

SQL4143W

An error has occurred when releasing flagger memory. Internal error code = "<error code>".

Cause: The flagger cannot release allocated memory. If the syntax, bindfile or package option is also specified, processing continues but flagger operation is discontinued. Otherwise, processing is terminated.

Action: Restart precompilation if flagging is required.

SQL4144W

Internal error on call to the FLAGGER found in module "<module-name>". Internal error code = "<error code>".

Cause: The FLAGGER encountered an internal error. Preprocessing continues but FLAGGER operation is discontinued.

Action: Record this message number (SQLCODE), module name and error code in the message. Contact your technical service representative with the information.

SQL4145W

Error during FLAGGER access to the system catalog. Flagging continues to check syntax only. SQLCODE = "<nnn>" SQLERRP = "<modname>" SQLERRD = "<nnn>" Creator = "<creatorname>" Table = "<tablename>"

Cause: An internal error has occurred during FLAGGER access to the system catalog.

Processing continues but with flagger syntax checking only.

Action: Record this message number (SQLCODE), module name and error code in the message. Contact your technical service representative with the information.

SQL4146W

Internal error occurred causing the semantics processing to stop. Module name = "<module name>". Internal error code = "<error code>".

Cause: The FLAGGER has encountered a severe internal error in a semantics analysis routine.

Processing continues but with flagger syntax checking only.

Action: Record this message number (SQLCODE), module name and error code in the message. Contact your technical service representative with the information.

SQL4147W

Invalid flagger version number.

Cause: An invalid flagger version number is passed to the Precompiler Services COMPILE SQL STATEMENT API. If the syntax, bindfile or package option is also specified, processing continues but flagger operation is discontinued. Otherwise, processing is terminated.

Action: Provide a valid flagger version number. Refer to the *Command Reference* manual.

SQL4170W

You must declare column "<column>" as NOT NULL.

Cause: All columns identified as UNIQUE must be defined with the NOT NULL option.

Processing continues.

Action: Correct the SQL statement.

SQL4171W

The viewed table "<schema-name>."<table>" must be updateable.

Cause: When the WITH CHECK OPTION is specified then the viewed table must be updateable.

Processing continues.

Action: Correct the SQL statement.

SQL4172W**Invalid number of column names.**

Cause: The number of column names in the VIEW COLUMN LIST should be the same as the DEGREE of the table specified by the QUERY SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4173W**You must declare cursor “<cursor>” before using it.**

Cause: The cursor specified has not been declared in a DECLARE CURSOR statement.

Processing continues.

Action: Correct the SQL statement.

SQL4174W**Cursor “<cursor>” is already declared.**

Cause: Cursor specified has already been declared in a DECLARE CURSOR statement.

Processing continues.

Action: Correct the SQL statement.

SQL4175W**Only * or column names are valid in this context.**

Cause: When UNION is specified, the SELECT LIST for the specification of the two TABLE EXPRESSIONS identified by the QUERY EXPRESSION and QUERY TERM should consist of * or COLUMN REFERENCE(s).

Processing continues.

Action: Correct the SQL statement.

SQL4176W**The descriptions of tables identified by the QUERY EXPRESSION beginning with “<schema-name1>”.“<table1>” and the QUERY TERM beginning with “<schema-name2>”.“<table2>” should be identical.**

Cause: When UNION is specified, the descriptions of the two tables should be identical, except for the column names.

Processing continues.

Action: Correct the SQL statement.

SQL4177W**The SORT SPECIFICATION “<number>” is outside the DEGREE of cursor “<cursor>”.**

Cause: If the SORT SPECIFICATION contains an unsigned integer, it should be greater than 0 and not greater than the number of columns in the table.

Processing continues.

Action: Correct the SQL statement.

SQL4178W**Table “<schema-name>”.“<table>” is a read-only table.**

Cause: A DELETE, an INSERT, or an UPDATE was specified on a read-only table.

Processing continues.

Action: Correct the SQL statement.

SQL4179W**Table “<schema-name>”.“<table>” must not be identified in a FROM clause of any subquery contained in a SEARCH CONDITION.**

Cause: A table specified in a DELETE or an UPDATE cannot be used in a FROM clause of any subquery contained in its SEARCH CONDITION.

Processing continues.

Action: Correct the SQL statement.

SQL4180W**Table “<schema-name1>”.“<table1>” is not the first table “<schema-name2>”.“<table2>” specified in the DECLARE CURSOR statement.**

Cause: Table specified in a DELETE or an UPDATE statement should be the first table specified in the FROM clause of the DECLARE CURSOR statement.

Processing continues.

Action: Correct the SQL statement.

SQL4181W

The number of TARGET SPECIFICATIONS does not match the DEGREE of cursor “<cursor>”.

Cause: The number of TARGET SPECIFICATIONS in the FETCH statement does not match the DEGREE of the table specified.

Processing continues.

Action: Correct the SQL statement.

SQL4182W

Target table “<schema-name>.” “<table>” of the INSERT statement is also in the FROM clause or in the subquery.

Cause: The named table must not be identified in a FROM clause of a QUERY SPECIFICATION or of any subquery contained in the QUERY SPECIFICATION.

Processing continues.

Action: Correct the SQL statement.

SQL4183W

The number of columns specified does not match the number of values specified.

Cause: In an INSERT statement, the number of columns specified does not match the number of values specified.

Processing continues.

Action: Correct the SQL statement.

SQL4184W

The number of columns specified does not match the DEGREE of the QUERY SPECIFICATION beginning with table “<schema-name>.” “<table>”.

Cause: In an INSERT statement, the number of columns specified does not match the DEGREE of the table specified in the QUERY SPECIFICATION

Processing continues.

Action: Correct the SQL statement.

SQL4185W

There is a data type or length mismatch between column “<column>” and the INSERT or UPDATE item.

Cause: One of the following conditions has not been met:

- If the data type of the column name is character string, then the corresponding item in the INSERT or UPDATE statement should be character string of length equal to or less than the length of the column name.
- If the data type of the column name is exact numeric, then the corresponding item in the INSERT or UPDATE statement should be exact numeric.
- If the data type of the column name is approximate numeric, then the corresponding item in the INSERT or UPDATE statement should be approximate numeric or exact numeric.

Processing continues.

Action: Correct the SQL statement.

SQL4186W

You cannot use a GROUP BY or HAVING clause or identify a GROUPEd view in this context.

Cause: The table identified in the FROM clause of the TABLE EXPRESSION in a SELECT statement should not include a GROUP BY or HAVING clause and should not identify a GROUPEd view.

Processing continues.

Action: Correct the SQL statement.

SQL4187W

The number of elements specified in the SELECT LIST should match the number in the SELECT TARGET LIST.

Cause: In the SELECT statement, the number of elements specified in the SELECT LIST should match the number of elements in the SELECT TARGET LIST.

Processing continues.

Action: Correct the SQL statement.

SQL4188W

A column function is not allowed in a SET clause of an UPDATE statement.

Cause: A VALUE EXPRESSION in a SET clause of an UPDATE statement should not include a column function.

Processing continues.

Action: Correct the SQL statement.

SQL4189W

You cannot specify NULL for NOT NULL column "<column>".

Cause: If NULL is specified in the SET clause of the UPDATE statement, then the corresponding column should allow nulls.

Processing continues.

Action: Correct the SQL statement.

SQL4190W

A host variable of an unrecognized data type is referenced. Host variable position is "<position>".

Cause: The host variable reference at position "<position>" is of a data type not recognized by the standard.

Processing continues.

Action: Correct the SQL statement.

SQL4191W

The data type of column "<column name>" is not recognized.

Cause: The data type of the column is not recognized by the standard.

Processing continues.

Action: Correct the SQL statement.

SQL4192W

Table "<schema-name>."<table>" is not found in the catalog.

Cause: The named table or view does not exist in the system catalog.

SQL4300 - SQL4399**SQL4300N**

Java support is not installed on this platform.

Cause: The Java stored procedure / user defined function enablement is not installed on this server.

Action: If Java support is available on this platform, install the Java stored procedure / user defined function enablement module.

sqlcode: -4300

sqlstate: 42724

SQL4301N

Java interpreter startup or communication failed, reason code "<reason-code>".

Cause: An error occurred while attempting to start or communicate with a Java interpreter. The reason codes are:

- 1 Java environment variables or Java database configuration parameters are invalid.
- 2 A Java Native Interface call to the Java interpreter failed.
- 3 The "db2java.zip" file may be corrupt or missing.
- 4 The Java interpreter has terminated itself and cannot be restarted.

Action: Ensure that the Java database configuration parameters (jdk11_path and java_heap_sz) are correctly set. Ensure that a supported Java runtime environment is installed. Ensure that internal DB2 classes (COM.ibm.db2) are not overridden by user classes.

sqlcode: -4301

sqlstate: 58004

SQL4302N

Java stored procedure or user-defined function "<name>", specific name "<spec-name>" aborted with an exception "<string>".

Cause: The Java stored procedure or user-defined function aborted with a Java exception. The First Failure Service Log (db2diag.log) contains a Java stack traceback for the aborted method.

Action: Debug the Java method to eliminate the exception.

sqlcode: -4302

sqlstate: 38501

SQL4303N

Java stored procedure or user-defined function "<name>", specific name "<spec-name>" could not be identified from external name "<string>".

Cause: The CREATE PROCEDURE or CREATE FUNCTION statement that declared this stored procedure or user-defined function had a badly formatted EXTERNAL NAME clause. The external name must be formatted as follows:

"package.subpackage.class!method".

Action: Submit a corrected CREATE PROCEDURE or CREATE FUNCTION statement.

sqlcode: -4303

sqlstate: 42724

SQL4304N

Java stored procedure or user-defined function "<name>", specific name "<spec-name>" could not load Java class "<class>", reason code "<reason-code>".

Cause: The Java class given by the EXTERNAL NAME clause of a CREATE PROCEDURE or CREATE FUNCTION statement could not be loaded. The reason codes are:

- 1 The class was not found on the CLASSPATH.
- 2 The class did not implement the required interface ("COM.ibm.db2.app.StoredProc" or "COM.ibm.db2.app.UDF") or lacked the Java "public" access flag.
- 3 The default constructor failed or was unavailable.

Action: Ensure that the compiled ".class" file is installed in the CLASSPATH, for example under "sqllib/function". Ensure it implements the required Java interfaces and is "public".

sqlcode: -4304

sqlstate: 42724

SQL4306N

Java stored procedure or user-defined function "<name>", specific name "<spec-name>" could not call Java method "<method>", signature "<string>".

Cause: The Java method given by the EXTERNAL NAME clause of a CREATE PROCEDURE or CREATE FUNCTION statement could not be found. Its declared argument list may not match what the database expects, or it may not be a "public" instance method.

Action: Ensure that a Java instance method exists with the "public" flag and the expected argument list for this call.

sqlcode: -4306

sqlstate: 42724

SQL4400 - SQL4499

SQL4400N

"<authorization-ID>" does not have the authority to perform the task at the DB2 Administration Server.

Cause: The user does not have the necessary authority at the DB2 Administration Server to perform the attempted action.

Action: Attach to the DB2 Administration Server using a user ID with the necessary Authority. Most tasks performed at the DB2 Administration Server require SYSADM authority.

SQL4401C

The DB2 Administration Server encountered an error during startup.

Cause: An error was encountered during startup of the DB2 Administration Server.

Action: Refer to the DB2 Administration Server's First Failure Data Capture Log for additional information. Take the appropriate action as necessary and attempt to restart the DB2 Administration Server.

If the problem persists contact your technical service representative.

SQL4402W**The DB2ADMIN command was successful.****Cause:** All processing completed normally.**Action:** No further action is required.**SQL4403N****The syntax of the command is invalid.****Cause:** The command was entered using invalid arguments or an invalid number of parameters.**Action:** Re-submit the command with valid argument(s).**SQL4404N****The DB2 Administration Server does not exist.****Cause:** The DB2 Administration Server was not found on the machine.**Action:** Create the DB2 Administration Server on the machine by entering DB2ADMIN command as follow:

```
DB2ADMIN CREATE
```

SQL4405W**The DB2 Administration Server already exists.****Cause:** The DB2 Administration Server already exists on the machine**Action:** No further action is required.**SQL4406W****The DB2 Administration Server was started successfully.****Cause:** All processing completed normally.**Action:** No further action is required.**SQL4407W****The DB2 Administration Server was stopped successfully.****Cause:** All processing completed normally.**Action:** No further action is required.**SQL4408N****The DB2 Administration Server was not dropped because it is active.****Cause:** The DB2 Administration Server must be stopped before it can be dropped.**Action:** To stop the DB2 Administration Server, enter the following command:

```
DB2ADMIN STOP
```

SQL4409W**The DB2 Administration Server is already active.****Cause:** The DB2ADMIN START command can not be processed because the DB2 Administration Server is already active.**Action:** No further action is required.**SQL4410W****The DB2 Administration Server is not active.****Cause:** The DB2ADMIN STOP command can not be processed because the DB2 Administration Server is not active.**Action:** No further action is required.**SQL4411N****The requested operation is not allowed because the server instance is not the DB2 Administration Server.****Cause:** The requested operation is only valid when issued against the DB2 Administration Server.**Action:** The DB2 Administration Server should be set up using the DB2ADMIN command. Refer to the Installation and Operation guide for further information about the DB2ADMIN command.

SQL4412N

The logon user account for the DB2 Administration Server is invalid.

Cause: To perform the requested task, the DB2 Administration Server must be running under a valid logon user account. This error is either caused by the account not being setup, or the logon user account does not contain a valid DB2 user ID.

Action: If a logon user account has been set up, then ensure that the account uses a valid DB2 user ID.

You can set up the logon user account for the DB2 Administration Server by using the following command:

```
DB2ADMIN SETID <userid> <password>
```

SQL4413W

Usage: DB2ADMIN creates, drops, starts, or stops the DB2 Administration Server.

Cause: The DB2ADMIN command syntax is:

```
DB2ADMIN CREATE #/USER:<username> /PASSWORD:<password>#
DROP
START
STOP
SETID <username> <password>
/h
```

The command options are:

CREATE create the DB2 Administration Server
DROP delete the DB2 Administration Server
START start the DB2 Administration Server
STOP stop the DB2 Administration Server
SETID set the logon account for the DB2 Administration Server
/USER specify the logon account name during DB2ADMIN CREATE
/PASSWORD specify the logon account password during DB2ADMIN CREATE
/h display the usage information

Action: Issue the DB2ADMIN command with one of the valid command options.

SQL4414N

The DB2 Administration Server is not active.

Cause: The request cannot be processed unless the DB2 Administration Server is active.

Action: Start the DB2 Administration Server by issuing the command DB2ADMIN START, and reissue the request.

SQL4900 - SQL4999**SQL4901N**

Precompiler Services requires reinitialization because of a previous error.

Cause: On a previous function call, an error occurred. The requested function call cannot be processed until Precompiler Services is reinitialized.

The function cannot be completed.

Action: Call the sqlainit function to reinitialize Precompiler Services

SQL4902N

At least one of the characters in parameter "<n>" of function "<function>" is not valid.

Cause: The specified parameter in the specified function contains at least one character that is not valid.

The function cannot be completed.

Action: Correct the specified parameter and call the function again.

SQL4903N

The length of parameter "<n>" of function "<name>" is not valid.

Cause: The length of the specified parameter in the specified function is not valid.

The function cannot be completed.

Action: Correct the specified parameter and call the function again.

SQL4904N

The pointer to parameter "<n>" of function "<function>" is not valid.

Cause: The pointer to the specified parameter in the specified function is not valid.

The function cannot be completed.

Action: Correct the specified parameter and call the function again.

SQL4905N

The value of parameter "<n>" of function "<function>" is not within the valid range.

Cause: The value of the specified parameter in the specified function is outside the valid range for that parameter. If the specified parameter is a structure, it may contain values that are within the valid range but are not valid when considered together. Some structures contain headers that specify the allocated size and how much of that size is being used. It is not valid for the allocated size to be less than the used size.

The function cannot be completed.

Action: Correct the specified parameter and call the function again.

SQL4906N

The list of table space names specified is an incomplete set for the rollforward operation.

Cause: For point-in-time tablespace recovery, a self-contained list of table space names must be specified. The table spaces in the list must contain all objects of every table included in the table spaces.

Action: Check the table space list and resubmit the rollforward command with the complete table space list.

SQL4907W

Database "<name>" is recovered but one or more of the tables in the table space list included for the rollforward operation are placed in check pending states.

Cause: One or more of the tables involved in the point-in-time tablespace recovery have referential constraints with tables outside of the table space list used for recovery. All these tables are placed in check pending state. Rollforward operation is otherwise completed successfully.

Action: Check the state for the tables in the table spaces and take appropriate actions if necessary.

SQL4908N

The table space list specified for roll-forward recovery on database "<name>" is invalid on node(s) "<node-list>".

Cause: If starting a new table space rollforward, one or more of the table spaces specified in the list to be rolled forward is not in rollforward pending state on the specified nodes. If continuing a table space rollforward that is already in progress, one or more of the table spaces specified in the list to be rolled forward is not in rollforward in progress state on the specified nodes.

If "... " is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

Roll-forward recovery stops.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Use the LIST TABLESPACES SHOW DETAIL command on the nodes specified to find out which table spaces are not ready to be rolled forward. Use the QUERY STATUS option of the rollforward command to determine the status of the table space rollforward. If the rollforward status is "TBS pending", a new table space rollforward can be started. If the rollforward status is "TBS working", a table space rollforward is already in progress.

If starting a new table space rollforward, put the tablespaces into rollforward pending state by restoring them.

If continuing a table space rollforward and one or more of the table spaces involved have been restored and put into rollforward pending state, the table space rollforward in progress must be canceled. Submit the rollforward command again with the CANCEL option and the same table space list. When the rollforward in progress is canceled, the table spaces will have been put into restore pending state. Restore the table spaces and submit the original rollforward command again.

SQL4911N

The host variable data type is not valid.

Cause: The data type of the host variable is not valid. The function cannot be completed.

Action: Correct the data type of the host variable and call the function again.

SQL4912N**The host variable data length is out of range.**

Cause: The length of the host variable is not valid.
The function cannot be completed.

Action: Correct the length of the host variable and call the function again.

SQL4913N**The host variable token ID has already been used.**

Cause: The token ID of the host variable has already been used. The token ID must be unique within the module.

The function cannot be completed.

Action: Correct the token ID of the host variable and call the function again.

SQL4914N**The host variable token ID is not valid.**

Cause: The token ID of the host variable is not valid.
The function cannot be completed.

Action: Correct the token ID of the host variable and call the function again.

SQL4915N**The “sqlainit” function has already been called.**

Cause: Precompiler Services has already been initialized.

Action: No action is required. Continue processing.

SQL4916N**The “sqlainit” function has not been called.**

Cause: Precompiler Services must be initialized before the requested function call can be processed.

The function cannot be completed.

Action: Issue an sqlainit function call to initialize Precompiler Services.

SQL4917N**Element “<number>” in the option array is not valid.**

Cause: The option array contains an element with an *option.type* or *option.value* that is not valid. The element number in the message is the *n*th element in the option portion of the option array.

The function cannot be completed.

Action: Correct the values stored in the option array. Call the function again.

SQL4918N**The term_option parameter of function “sqlainit” is not valid.**

Cause: The *term_option* parameter is not valid.

The function cannot be completed.

Action: Correct the *term_option* parameter and call the function again.

SQL4919N**The task_array parameter of function “sqlacmpl” is too small.**

Cause: The task array structure passed to Precompiler Services on the sqlacmpl function call is too short.

The function did not complete successfully.

Action: Increase the size of the precompiler task array structure allocated by the precompiler. Recompile the application program.

SQL4920N**The token_id_array parameter of function “sqlacmpl” is too small.**

Cause: The token id array structure passed to Precompiler Services on the sqlacmpl() function call is too small.

The function did not complete successfully.

Action: Increase the size of the precompiler token id array structure allocated by the precompiler. Recompile the application program.

SQL4930N

Bind or precompile option or option value “<option-name>” is invalid.

Cause: Either “<option-name>” is an invalid bind or precompile option or the value specified for this option is invalid. The bind or precompile cannot continue.

Action: Correct the bind or precompile option or option value and retry the bind or precompile command.

SQL4940N

The “<clause>” clause is not permitted or is required.

Cause: The indicated clause is either not allowed in the context where it appears in the SQL statement or it is required in the statement.

A subquery, an INSERT statement, or a CREATE VIEW statement cannot have INTO, ORDER BY, or FOR UPDATE clauses. An embedded SELECT statement cannot have ORDER BY or FOR UPDATE clauses. An embedded SELECT statement cannot contain a set operator except in a subquery. SELECT statements used in cursor declarations cannot have an INTO clause.

An embedded SELECT statement must have an INTO clause.

The function cannot be completed.

Action: Remove or add the clause to correct the statement.

SQL4941N

The SQL statement is blank or empty.

Cause: The text following EXEC SQL was blank or empty.

The function cannot be completed.

Action: Ensure that a valid SQL statement is provided following the word EXEC SQL.

SQL4942N

The statement selects an incompatible data type into host variable “<name>”.

Cause: An embedded SELECT statement selects into a host variable “<name>” but the data type of the variable and the corresponding SELECT list element are not compatible. If the data type of the column is date and time, the data type of the variable must be character with an appropriate minimum length. Both must either be numeric, character, or graphic.

The function cannot be completed.

Action: Verify that the table definitions are current and that the host variable has the proper data type.

SQL4943W

The number of host variables in the INTO clause is not the same as the number of items in the SELECT clause.

Cause: The number of host variables specified in both the INTO clause and the SELECT clause must be the same.

The function is processed.

Action: Correct the application program to specify the same number of host variables as SELECT list expressions.

SQL4944N

An update or insert value is NULL but the object column cannot contain NULL values.

Cause: One of the following occurred:

- The update or insert value was NULL but the object column is declared as NOT NULL in the table definition. Therefore, null values cannot be inserted into that column, and values in that column cannot be set to NULL by an update.
- The column name list for the INSERT statement omits a column that was declared as NOT NULL in the table definition.
- The view for the INSERT statement omits a column that was declared as NOT NULL in the base table definition.

The function cannot be completed.

Action: Examine the definition of the object table to determine which columns of the table have the NOT NULL attribute, and correct the SQL statement.

SQL4945N

The use of a parameter marker is not valid.

Cause: Parameter markers can be used only in dynamic SQL statements.

The function cannot be completed.

Action: Use host variables instead of parameter markers for static SQL statements.

SQL4946N

The cursor or statement name “<name>” is not defined.

Cause: The cursor or statement name “<name>” specified in the statement is not defined.

The function cannot be completed.

Action: Check the application program for completeness and possible spelling errors in the cursor or statement names.

SQL4947W

An INCLUDE SQLDA statement was encountered and ignored.

Cause: The FORTRAN precompiler shipped by the database manager does not support the INCLUDE SQLDA statement.

The statement is ignored. Processing continues.

Action: No action is required. To prevent this message, remove the INCLUDE SQLDA statement from the program.

SQL4950N

Compound SQL statements containing user-defined SQLDAs are not supported in this environment.

Cause: Compound SQL statements containing user-defined SQLDAs are not supported in a 16-bit application.

Action: Move the statement out of the compound SQL block or replace the statement with one that uses host variables instead of an SQLDA.

SQL4951N

The sqlda_id parameter of function “<name>” is not valid.

Cause: The *sqlda_id* parameter of the specified function in the application program is not valid. The *sqlda_id* parameter cannot be null.

The function cannot be completed.

Action: Correct the *sqlda_id* parameter in the application program.

SQL4952N

The sqlvar_index parameter of function “<name>” is not valid.

Cause: The *sqlvar_index* parameter of the specified function in the application program is not valid. The *sqlvar_index* may be larger than the number of sqlvar elements in the SQLDA.

The function cannot be completed.

Action: Correct the *sqlvar_index* parameter in the application program.

SQL4953N

The call_type parameter of function “<name>” is not valid.

Cause: The *call_type* parameter of the specified function in the application is not valid.

The function cannot be completed.

Action: Correct the *call_type* parameter in the application program.

SQL4954N

The section_number parameter of function “<name>” is not valid.

Cause: The *section_number* parameter of the specified function in the application program is not valid. Note that for the following SQL statements, the *section_number* parameter of the function *sqlacall()* is used to pass in the statement type:

- CONNECT
- SET CONNECTION
- RELEASE
- DISCONNECT

The function cannot be completed.

Action: Correct the *section_number* parameter in the application program.

SQL4970N

Roll-forward recovery on database "<name>" cannot reach the specified stop point (end-of-log or point-in-time) because of missing log file(s) on node(s) "<node-list>".

Cause: This message is returned in the following situations:

- a request was made to bring the specified database out of roll-forward pending state by specifying caller action SQLUM_ROLLFWD_STOP, SQLUM_STOP, SQLUM_ROLLFWD_COMPLETE, or SQLUM_COMPLETE but the Rollforward Database utility cannot find the necessary archive log file(s) in the database log directory or the overflow log directory on the specified node(s) to reach the stopping point from the previous ROLLFORWARD DATABASE command.
- in a multi-node environment, if the Rollforward Database utility cannot find the necessary archive log file(s) to bring a node into synchronization with the catalog node.

If "... " is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

Roll-forward recovery has stopped. The database is left in roll-forward pending state.

Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.

Action: Use the ROLLFORWARD DATABASE command with the QUERY STATUS option to determine which log files are missing.

Do one of the following:

- Make sure that all archive log files are available in the database log directory or the overflow log path, and issue the ROLLFORWARD DATABASE command again.
- If you cannot find the missing log files, restore the database/table space on all nodes, then do point-in-time recovery using a timestamp that is earlier than that of the earliest missing log file.

SQL4971N

Roll-forward recovery on database "<name>" on node "<node-number>" failed previously while stopping. Roll-forward recovery must be stopped.

Cause: A request was made to continue rolling forward the specified database by specifying caller action SQLUM_ROLLFWD. The previous iteration of roll-forward recovery failed while stopping. If rolling forward at the database level, this means that it failed during log truncation. Roll-forward recovery for this database must now be stopped by specifying caller action SQLUM_ROLLFWD_STOP, SQLUM_STOP, SQLUM_ROLLFWD_COMPLETE, or SQLUM_COMPLETE.

Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.

Action: Reissue the ROLLFORWARD DATABASE command with caller action SQLUM_ROLLFWD_STOP, SQLUM_STOP, SQLUM_ROLLFWD_COMPLETE, or SQLUM_COMPLETE. Any stoptime specified will be ignored since the previous stoptime is already being processed.

SQL4972N

Log extent "<extent>" on node "<node-number>" could not be moved to the database logpath.

Cause: The Rollforward utility was invoked with the STOP option. As part of roll-forward processing, the log extent "<extent>" has to be truncated. This extent must exist in the database logpath. Currently, the extent exists in the overflow log path. An attempt was made to move the extent from the overflow log path to the database logpath. The attempt failed. Roll-forward processing has been stopped.

Note : if you are using a partitioned database server, the node number indicates which node the error occurred on. Otherwise, it is not pertinent and should be ignored.

Action: Move the extent from the overflow log path to the database logpath and then resubmit the ROLLFORWARD DATABASE command.

SQL4973N

Forward recovery on database "<name>" cannot complete because the log information on node(s) "<node-list>" does not match the corresponding record(s) on the catalog node.

Cause: The Rollforward utility processed all the log files found on each node, but the stop points on the specified nodes do not match the corresponding records on the catalog node. This can be caused by missing log files on either the catalog node or on the specified nodes, or the catalog node must be included in the list of nodes to be rolled forward.

The ROLLFORWARD DATABASE processing stops.

Action: Do one of the following:

- Check if the catalog node needs to be rolled forward. If it does, submit the ROLLFORWARD DATABASE command again and include the catalog node.
- Use the ROLLFORWARD DATABASE command with the QUERY STATUS option to determine which log files are missing. When you find the log files, put them in the log path or overflow log path and resume forward recovery.
- If you cannot find the missing log files, restore the database on all nodes, then do point-in-time recovery using a stoptime that is earlier than that of the earliest missing log file.

SQL4974W

The ROLLFORWARD DATABASE QUERY STATUS command encountered sqlcode "<sqlcode>".

Cause: The ROLLFORWARD DATABASE QUERY STATUS command encountered an error with the sqlcode "<sqlcode>". The query might not be successful on some nodes for various reasons. The most severe error is indicated by "<sqlcode>". The roll-forward status is only returned for the successful nodes.

Action: Look up the sqlcode "<sqlcode>" in the *Messages Reference*, or online to determine the problems on the failed nodes. Take the required corrective

actions, then continue the forward recovery on these nodes.

SQL4975W

Roll-forward operation was cancelled successfully. The database or selected table spaces have to be restored on node(s) "<node-list>".

Cause: A roll-forward operation was cancelled before it successfully completed, and the database or selected table spaces are left in an inconsistent state. The database or selected table spaces are in restore pending state on the listed nodes.

If ",..." is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.

Action: Restore the database or selected table spaces on the listed nodes. The table spaces that are in restore pending state can be identified on the specified node(s) by the LIST TABLESPACES command or the db2dart utility.

SQL4976N

The ROLLFORWARD DATABASE command cannot be submitted on a non-catalog node.

Cause: The ROLLFORWARD DATABASE command is only accepted on the catalog node.

Action: Submit the command on the catalog node.

SQL4994N

Precompilation was ended because of a user interrupt request.

Cause: Precompilation was terminated because of an interrupt. The user may have pressed an interrupt key sequence.

Processing is terminated. No package was created.

Action: Resubmit the precompilation if needed.

SQL4997N

The authorization ID is not valid.

Cause: The authorization ID for the application was specified previously but it was defined with more than 8 characters or with characters that are not valid for an authorization ID.

The authorization ID must not be PUBLIC (public) and it must not begin with SYS (sys), IBM (ibm), or SQL (sql). Also, it must not contain the underscore character or any characters outside the database manager base character set.

The function cannot be processed.

Action: Retry the application with a valid authorization ID.

SQL4998C

The application state is in error; the database connection has been lost.

Cause: The connection to the database has been lost.

The function cannot be processed.

Action: Reconnect to the database.

SQL4999N

A Precompiler Services or Run-Time Services error occurred.

Cause: A database manager error occurred that prevents Precompiler Services or Run-Time Services from processing function calls.

No Precompiler Services or Run-Time Services function calls can be processed.

Action: Record the message number (SQLCODE) and all error information from the SQLCA if possible.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

- Environment: Outer Precompiler Using Precompiler Services API
- Required information:
 - Problem description
 - SQLCODE

- SQLCA contents if possible
- Trace file if possible.

SQL5000 - SQL5099

SQL5001N

"<authorization-ID>" does not have the authority to change the database manager configuration file.

Cause: The user attempted to Update or Reset the database manager configuration file without having SYSADM authority.

The requested change is not made.

Action: Do not attempt to change the database manager configuration file without appropriate authorization. Contact a user with SYSADM authority if a change is required.

SQL5005C

System Error.

Cause: An operating system error, probably an I/O error, occurred.

The command cannot be processed.

Action: Resubmit the command. If the error continues while accessing the database manager configuration file, either use the backup version of the file or reinstall the database manager. If the error continues while accessing a database configuration file, drop the database and restore it from a backup version.

SQL5010N

The path name to the database manager configuration file is not valid.

Cause: An error occurred while determining the path for the database manager configuration file. The database manager directory structure may have been altered.

The command cannot be processed.

Action: Resubmit the command. If the error continues, reinstall the database manager.

SQL5012N

The entry in the database manager configuration file for the maximum number of segments allowed for the DB2 kernel is not in the valid range.

Cause: The value for the maximum number of segments allowed for the DB2 kernel must be between 8 and 8192.

The requested change is not made.

Action: Resubmit the command with a valid value for the maximum number of DB2 segments allowed.

SQL5018N

The entry in the database manager configuration file for the maximum number of remote connections to the workstation (numrc) is not in the valid range.

Cause: The value for the maximum number of remote connections to the workstation must be between 1 and 255.

The requested change is not made.

Action: Resubmit the command with a valid value for the maximum number of remote connections to the workstation.

SQL5020N

The entry in the database manager configuration file for the node name for the workstation (nname) is not valid.

Cause: The node name specified in the configuration command is not valid. The node name may be 1 to 8 characters. All the characters must be chosen from the database manager base character set.

The command cannot be processed.

Action: Resubmit the command with a valid node name.

SQL5021N

The entry in the database manager configuration file for the index recreation time (indexrec) is not valid. Possible values are 1 (during index access) and 2 (during database restart).

Cause: An invalid value was passed to Configuration Services for the Index Recreation Time flag (indexrec) in the database manager configuration file. The invalid value may have been entered through the Command Line Processor or through a program API call. The only valid values for the API call are 1 (during database access), and 2 (during database restart). The valid values for the command line processor are ACCESS and RESTART.

The update to the database manager configuration file is rejected.

Action: Repeat the update request, entering one of the possible values.

SQL5022N

The entry in the database configuration file for the index recreation time (indexrec) is not valid. Possible values are 0 (use system setting), 1 (during index access), and 2 (during database restart).

Cause: An invalid value was passed to Configuration Services for the Index Recreation Time flag (indexrec) in a database configuration file. The invalid value may have been entered through the Command Line Processor or through a program API call. The only valid values for the API call are 0 (use system setting), 1 (during index access), and 2 (during database restart).

The valid values for the command line processor are SYSTEM, ACCESS, and RESTART.

The update to the database configuration file is rejected.

Action: Repeat the update request, entering one of the possible values.

SQL5025C

The database manager configuration file is not current.

Cause: The database manager configuration file has been updated since you connected to the database. It is not compatible with the configuration for the database to which you are connected.

No access is allowed to the database manager configuration file.

Action: Wait until all applications disconnect from the databases. Issue the stop database manager command, and then issue the start database manager command.

If installing the sample database, drop it and install the sample database again.

SQL5028N

The value of sysadm_group must be the primary group of the instance owner.

Cause: An attempt was made to update sysadm_group in the database manager configuration file. For Version 2 of DB2 on Unix-based platforms, this value is only allowed to be the primary group of the instance owner.

Action: Use the primary group of the instance owner to update this field in the database manager configuration file on Unix-based platforms.

SQL5030C

The release number is not valid.

Cause: The release number in the database manager configuration file or database configuration file is not valid.

The command cannot be processed.

Action: Verify that the release levels of your database and DB2 match.

If installing the sample database, drop it and install the sample database again.

sqlcode: -5030

sqlstate: 58031

SQL5035N

The database requires migration to the current release.

Cause: The database was created on a lower level system release. The Migrate Database command must be used to convert the database to the current release level.

The command cannot be processed.

Action: Perform the Migrate Database command before attempting to use the database with the current system release.

If this message is received during a restore, drop the existing database before proceeding.

sqlcode: -5035

sqlstate: 55001

SQL5040N

One of the socket addresses required by the TCP/IP server support is being used by another process.

Cause: One of the socket addresses required by the server either is in use by another program, or has not been freed completely by the TCP/IP subsystem after the database manager has been stopped.

Action: If you have just issued db2stop, wait for a couple of minutes so that the TCP/IP subsystem has enough time to clean up its resources. Otherwise, make sure no other programs on your workstation are using the port numbers reserved for your service name in the /etc/services file. The port number is a component of a socket address.

SQL5042N

One of the communication protocol server support processes failed to start up.

Cause: Due to system call failure, or a communication subsystem call failure, one of the communication protocol server support processes did not start up successfully.

Action: You can investigate the problem by either:

- examine the system log records;
- turning on trace, run db2start again, then examine the trace record.

SQL5043N

Support for one or more communications protocols failed to start successfully. However, core database manager functionality started successfully.

Cause: Communication protocol support did not start successfully for one or more protocols. Possible reasons can include the following:

- Communication subsystem configuration error.
- Communication subsystem call failure.
- Database manager configuration error.
- System call failure.
- Database manager licensing error.

You can still connect to the server with communication protocols that did start successfully. Local clients can also connect to the server.

Action: The database manager attempts to start all communication protocols specified by the DB2COMM environment variable.

Check the diagnostic log (db2diag.log) for details on this error. The log will contain more information on the cause of the error and also which communication protocol(s) did not start successfully.

This error only affects communication protocols specified by the DB2COMM environment variable.

SQL5047C

Insufficient memory to execute this function.

Cause: There is not enough memory available to execute this function.

The function cannot be completed.

Action: Stop the application. Possible solutions include:

- Terminate other processes.
- Decrease the values of the configuration parameters that define allocation of memory.
- Ensure that your system has sufficient real and virtual memory.

SQL5048N

The release level of the database client is not supported by the release level of the database server.

Cause: Database clients can only access database servers with a release level which is in the range of one level lower than the client to two levels higher than the client.

Action: One or more of the following:

- Upgrade the client release level to fall within the range of releases supported by the current server release level.
- Upgrade the server release level to a level supported by the current client release level.

SQL5050C

The content of the database manager configuration file is not valid.

Cause: The database manager configuration file is not valid. The file may have been altered by a text editor or a program other than the database manager.

The command cannot be processed.

Action: Reinstall the database manager.

SQL5051N

An object qualified by "<qualifier>" cannot be created in schema "<schema-name>".

Cause: An object created in a CREATE SCHEMA statement is qualified by "<qualifier>" which is different from the schema name. All objects created in a CREATE SCHEMA statement must be either qualified by the schema name "<schema-name>" or not qualified. Unqualified objects are implicitly qualified by the schema name.

The statement cannot be processed.

Action: Explicitly qualify the object in the schema with "<schema-name>" or remove "<qualifier>" from the object name.

sqlcode: -5051

sqlstate: 42875

SQL5055C

The content of the database configuration file is not valid.

Cause: The database configuration file for the database is not valid. The file may have been altered by a text editor or a program other than the database manager.

Action: Recreate the database or restore it from a backup version.

sqlcode: -5055

sqlstate: 58031

SQL5060N

The configuration parameter token specified is invalid.

Cause: A token number specified in the sqlfupd structure passed to a Configuration Services API is not valid. It does not represent any of the supported configuration parameters. Alternatively, if an UPDATE was attempted, the token specified may be that of an unmodifiable configuration parameter.

Action: Choose a valid token number from those specified in the description of the Configuration Services API in the *API Reference*. Recode the call to the API, and rerun the program.

SQL5061N

An invalid pointer to structure sqlfupd was passed to Configuration Services.

Cause: The pointer to structure sqlfupd passed as a parameter to one of the Configuration Services APIs was invalid. It is either NULL, or does not point to an allocated block of memory of the size indicated by the count parameter. See the *API Reference* for more information.

Action: Correct the code which invokes the Configuration Services API, and retry the API call.

SQL5062N

An invalid pointer was passed within the sqlfupd structure to Configuration Services.

Cause: The structure sqlfupd passed as a parameter to one of the Configuration Services APIs contained an invalid pointer. The pointer is either NULL, or does not point to an allocated block of memory. Each token passed in the structure must have a corresponding pointer to a field that is either passed in or out of the API. See the *API Reference* for more information.

Action: Correct the code which invokes Configuration Services, and rerun the program.

SQL5065C

The nodetype value in database manager configuration file is not valid.

Cause: The *nodetype* parameter in the database manager configuration file is not valid.

The command cannot be processed.

Action: Reinstall the database manager.

SQL5070N

The count parameter in the configuration command is not valid. It must be greater than 0.

Cause: The count value passed as a parameter to a Configuration Services API must be greater than 0.

The command cannot be processed.

Action: Correct the code which invokes Configuration Services, and rerun the program.

SQL5075N

The configuration utility was interrupted.

Cause: An interrupt was received by the configuration utility. The user may have pressed the interrupt key sequence.

The command was not processed. Any requested change is not made.

Action: Resubmit the command.

SQL5081N

The entry in the database configuration file for the size of the buffer pool (buffpage) is not in the valid range.

Cause: The minimum value for the size of the buffer pool is two times the maximum number of active processes (maxappls). The maximum value for the size of the buffer pool is 524288 (number of 4KB pages) and is operating system dependent. The maximum value under AIX is 51000 (204000 for DB2 Extended Enterprise Edition) (4KB pages). Under HP-UX, the value must be between 16 and 150000 (4KB pages).

The requested change is not made.

Action: Resubmit the command with a valid value for the size of the buffer pool.

SQL5083N

The entry in the database configuration file for the initial log file size (logfile) is not in the valid range.

Cause: The value for the initial log file size must be between 12 and $(2^{32} - 1)$.

The requested change is not made.

Action: Resubmit the command with a valid value for the initial log file size.

SQL5091N

The entry in the database configuration file for the size of one log file extension (logext) is not in the valid range.

Cause: The value for the size of one log file extension must be between 4 and 256.

The requested change is not made.

Action: Resubmit the command with a valid value for the size of one log file extension.

SQL5092N

The entry in the database configuration file for the maximum allowable number of log file extensions (logmaxext) is not in the valid range.

Cause: The value for the maximum allowable number of log file extensions must be between 0 and $(2 * 10^6)$.

The requested change is not made.

Action: Resubmit the command with a valid value for the maximum allowable number of log file extensions.

SQL5093N

The entry for the database configuration parameter for the size of the agent heap is not in the valid range.

Cause: The value for the size of the agent heap must be between 2 and 85.

The requested change is not made.

Action: Resubmit the command with a valid value for the agent heap size.

SQL5099N

The new path to the log (newlogpath) in the database configuration file is not valid.

Cause: The path to the log file is not valid for one of the following reasons:

- The path string is longer than 242 bytes.
- The path does not exist.
- The first directory in the path has a name in the form SQLNNNNN, where NNNNN is a value from 00001 to 99999.
- A file with the correct name was found in the specified path, but is not a log file for this database.
- The new path to the log is currently being used by another database.

The requested change is not made.

Action: Resubmit the command with a valid value for the new log path.

sqlcode: -5099

sqlstate: 08004

SQL5100 - SQL5199

SQL5100N

The entry in the database manager configuration file for the number of allowed concurrent databases is too large.

Cause: The requested change would cause (1) the number of allowed concurrent databases to be too large or (2) the number of segments allowed for DB2 to be too small.

The number of allowed concurrent databases is restricted by the maximum number of segments allowed for DB2. The following condition must always be true:

$$\text{segments} \geq ((\text{number of databases} * 5) + 1)$$

The requested change is not made.

Action: Do one of the following:

- Increase the maximum number of segments allowed for DB2.
- Decrease the number of allowed concurrent databases.

SQL5101N

The entries in the database configuration file define log file parameters (logprimary and logsecond) that are not in the valid range.

Cause: The requested change would cause the total number of logfiles to be out of range. The following condition must always be true:

$$\text{logprimary} + \text{logsecond} \leq 128$$

The requested change is not made.

Action: Do one or both of the following:

- Decrease the number of primary log files.
- Decrease the number of secondary log files.

SQL5103N

The entry in the database configuration file for the size of the buffer pool (buffpage) is too small for the maximum number of active applications (maxappls).

Cause: The requested change would cause the maximum number of active applications to be too large for the size of the buffer pool. The following condition must always be true:

$$\text{bufferpool_size} > (\text{number of active_processes} * 2)$$

The requested change is not made.

Action: Do one or both of the following:

- Increase the size of the buffer pool.
- Decrease the maximum number of active processes allowed.

SQL5112N

The value of the configuration parameter "<parameter>" must be either 0 or 1.

Cause: The request is not completed because the value given for "<parameter>" is invalid.

Action: Ensure that the value specified for "<parameter>" is either 0 or 1, then try the request again.

SQL5120N

Old and new log parameters cannot both be modified at the same time.

Cause: The user is attempting to modify both the previous log parameters and the new parameters. The application should only support the parameters of the current release.

The request is denied.

Action: Modify only the parameters of the current release and retry the command.

SQL5121N

The entry in the database configuration file for configuration options is not valid.

Cause: The value set for database options (SQLF_DETS) is not valid. Valid settings are between 0 and 15. The requested change is not made.

The requested change is not made.

Action: Resubmit the command with a valid database options value.

SQL5122N

Access to the database was invalid because of a machine dependent check.

Cause: The database and database configuration file cannot be accessed because of copy protection.

The user request is denied.

Action: Return to the original database and modify the configuration file to turn the copy protection off, then create a new backup which may be used to restore the database. This must be done by an individual with

SYSADM authority. If the original database is no longer available, contact your service representative.

SQL5123N

Database "<name>" cannot be configured because an I/O error occurred while accessing the log control file.

Cause: An error occurred while accessing SQLOGCTL.LFH for the specified database.

The requested change is not made.

Action: Restore the database from a backup copy or recreate the database.

SQL5126N

An attempt was made to modify the database manager configuration parameter "<parm>" which is not valid for a node type of "<node-type-code>".

Cause: The user attempted to modify a database manager configuration parameter which is invalid for the given node type. "<node-type-code>" is defined as follows:

- 1 Database server with local and remote clients
- 2 Client
- 3 Database server with local clients
- 4 Partitioned Database Server with local and remote clients

The requested change is not made.

Action: Resubmit the request with a valid parameter for the given nodetype.

SQL5130N

The value specified for the configuration parameter "<parameter>" is not in the valid range of "<start-of-range>" to "<end-of-range>".

Cause: The request is not done because the value of "<parameter>" is not within the valid range.

Action: Ensure that the value specified for "<parameter>" is within the valid range, then try the request again.

SQL5131N

The value specified for the configuration parameter "<parameter>" is not in the valid range. The valid range is "-1", or from "<start-of-range>" to "<end-of-range>".

Cause: The request is not done because the value of "<parameter>" is not within the valid range.

Action: Ensure that the value specified for "<parameter>" is within the valid range, then try the request again.

SQL5132N

The configuration parameter is null or too long. The maximum length is <maximum length>.

Cause: The configuration parameter is not set or too long.

Action: Change the value of the configuration parameter to within the maximum length given.

SQL5133N

The configuration parameter is invalid. The valid set of values is "<value 1>" or "<value 2>".

Cause: The configuration parameter is not one of the two values given.

Action: Change the value of the configuration parameter to one of the two values given.

SQL5134N

The configuration parameter tpname contains invalid characters.

Cause: One or more characters in the tpname is not in the valid range. The characters in the tpname must be one of the following:

- A - Z
- a - z
- 0 - 9
- \$
- #
- @
- . (period)

Action: Change the tpname and retry the command or function call.

SQL5135N

The settings of the maxlocks and maxappls configuration parameters do not use all of the locklist space.

Cause: The number of active processes (maxappls) times the maximum percentage of lock list space for each application (maxlocks) must be greater than or equal to 100. That is:

```
maxappls * maxlocks >= 100
```

This ensures that all of the allocated locklist space can be used.

Action: Increase the setting for maxappls, maxlocks, or both.

SQL5136N

The entry in the database manager configuration file for the default database path (dftdbpath) is invalid.

Cause: An invalid value was specified by dftdbpath. The rules for the default database path on UNIX-based systems are:

1. the path must follow the operating system's naming conventions
2. the path must exist
3. the path must be less than or equal to 215 characters

The rules for other platforms (such as OS/2, WindowsNT, Windows 95) are:

1. the path must be a drive letter
2. the drive must exist

Action: Change the dftdbpath and retry the command or function call.

SQL5137N

The entry in the database manager configuration file for the diagnostic directory path (diagpath) is invalid.

Cause: An invalid value was specified for *diagpath*. The rules for the diagnostic directory path are:

1. the path must follow the operating system's naming conventions
2. the path must exist

3. the path must be less than or equal to 215 characters

Action: Change the *diagpath* and retry the command or function call.

SQL5140N

The entry in the database manager configuration parameter authentication must be one of SERVER, CLIENT, DCS, or DCE.

Cause: The allowed values for the configuration parameter *authentication* are SERVER, CLIENT, DCS, or DCE.

The requested change is not made.

Action: Resubmit the command with a valid value for authentication.

SQL5141N

The configuration parameter avg_appls is out of range. The valid range is from 1 to the value of maxappls.

Cause: The allowable range for *avg_appls* is from 1 to the value of *maxappls*.

The requested change is not made.

Action: One or more of the following:

- Change the value of *avg_appls* to a value in the valid range.
- Increase the value of *maxappls* to a higher value, then set *avg_appls* again.

SQL5142N

The configuration parameter agentpri is not in the valid range.

Cause: The valid values for *agentpri* are -1, or a three digit number of which the first digit is a priority class ranging from 2 to 4 and the last two digits are a priority level within the class in the range of 00 to 31. The priority class is defined as follows:

- | | |
|---|-------------------|
| 2 | REGULAR |
| 3 | TIMECRITICAL |
| 4 | FOREGROUND SERVER |

For example, the number 304 would correspond to a priority class of 3 (TIMECRITICAL), with a priority level of 4.

Action: Change the value of the configuration parameter to a value within the valid range.

SQL5150N

The value specified for the configuration parameter "<parameter>" is less than the minimum allowable value of "<minimum value>".

Cause: The request is not completed because the value given for "<parameter>" is too low. "<parameter>" may not be less than "<minimum value>".

Action: Ensure that the value specified for "<parameter>" is within the valid range, then try the request again.

SQL5151N

The value specified for the configuration parameter "<parameter>" is less than the minimum allowable value of "<minimum value>" and is not -1.

Cause: The request is not completed because the value given for "<parameter>" is invalid. Except for an allowable value of -1, "<parameter>" may not be less than "<minimum value>".

Action: Ensure that the value specified for "<parameter>" is within the valid range, then try the request again.

SQL5152N

The value specified for the configuration parameter "<parameter>" is greater than the maximum allowable value of "<maximum value>".

Cause: The request is not completed because the value given for "<parameter>" is too high. "<parameter>" may not be greater than "<maximum value>".

Action: Ensure that the value specified for "<parameter>" is within the valid range, then try the request again.

SQL5153N

The update cannot be completed because the following relationship would be violated:
"<condition>"

Cause: A valid configuration file must maintain the following relationship:

"<condition>".

The update request could not be completed because the resulting configuration would violate that relationship.

Action: Resubmit the request, ensuring that the relationship is satisfied.

SQL5154N

The requested combination of configuration values for "authentication" and "<parameter>" is not allowed.

Cause: The database manager configuration parameter "authentication" must have the value "CLIENT" if the value of "<parameter>" is non-default.

The requested change is not made.

Action: Resubmit the command with a valid combination of configuration parameter values.

SQL5155W

The update completed successfully. The current value of SORTHEAP may adversely affect performance.

Cause: The value of SORTHEAP is currently greater than half the value of the database manager configuration parameter SHEAPTHRES. This may cause performance to be less than optimal.

Action: Increase the value of the database manager configuration parameter SHEAPTHRES and/or decrease the value of SORTHEAP so that SHEAPTHRES is at least twice as large as SORTHEAP.

A larger ratio is desirable in most cases. See the *Administration Guide* for recommendations on configuration parameter tuning.

SQL6000 - SQL6099

SQL6000N

DB2 Conversion of QMF Data.

Cause: This is the normal termination message.

Action: No action is required.

SQL6001N

The prefix for the filename was not specified.

Cause: The user executed a module of the SQLQMF facility directly rather than using the SQLQMF facility command.

The command cannot be processed.

Action: Use the provided SQLQMF facility command.

SQL6002N

Communications Manager encountered a download error.

Cause: Communications Manager encountered an error during the download of the host file.

The command cannot be processed.

Action: Review the Communications Manager message log.

SQL6003N

The file exported from QMF contains rows that are too long. The row length is "<number>".

Cause: The computed row size (the sum of the computed column sizes) exceeds the maximum of 7000 bytes.

The command cannot be processed.

Action: Return to your QMF host session and run a query with fewer data columns selected. EXPORT the data again and then try the SQLQMF facility command again.

SQL6004N

"<function>" returned the unexpected return code "<code>".

Cause: An unexpected error occurred during processing. The Communications Manager or DB2 may not be installed or configured correctly.

The command cannot be processed.

Action: Ensure that Communications Manager has been installed and the appropriate host communications session is active. Retry the command after checking for

other errors. If the problem persists, contact your Communications Manager system administrator.

SQL6005N

An error occurred while reading the downloaded QMF file.

Cause: One of the following conditions was encountered:

- The file could not be opened.
- The end of file was encountered prematurely.
- There was an I/O error while reading the file.

The command cannot be processed.

Action: Review the Communications Manager message log. Retry the command. If the error continues, contact your Communications Manager system administrator.

SQL6006N

An error occurred while writing to an output file.

Cause: One of the following conditions was encountered:

- Not enough space exists on the C: drive to write the data.
- An output file could not be opened.
- An I/O error occurred while writing the file.
- An I/O error occurred while closing the file.
- The file is in use by another OS/2 process.

DataJoiner users: there isn't enough space to hold the djxlink output in the /usr file system. DataJoiner is installed in the DataJoiner directory on the /usr file system and needs more space for the temporary files that djxlink creates and uses.

The command cannot be processed.

Action: Check for sufficient disk space on the C: drive. Retry the command.

DataJoiner users: increase the size of the /usr file system. To estimate the amount of free space djxlink needs, issue the following AIX command:

```
ls -e /usr/lpp/djx*/lib/libdb2euni.a
```

This command returns the number of bytes used by the listed file. Multiply that number by 3. The result is an estimate of how much free space is needed on the /usr file system. Increase the size of the file system as necessary and retry the command.

SQL6007N

The decimal number in row “<row>”, column “<column>” cannot be converted to ASCII.

Cause: The indicated decimal field could not be converted.

The command cannot be processed.

Action: Verify that the host column data type is DECIMAL. Retry the QMF EXPORT and then try the SQLQMF facility command again. If the error continues, rerun the QMF query without the named column.

SQL6008N

The file specified in the command is not in QMF data format.

Cause: The file specified by the *filename* parameter is not in the expected QMF format.

The command cannot be processed.

Action: Verify that you have typed the name correctly. If correct, return to your QMF host session and issue the command EXPORT DATA TO *filename* again. Be sure to export using the QMF data format.

SQL6009N

The file exported from QMF contains Column “<name>” with a width “<width>” that is too long. The maximum column width is 4000 bytes.

Cause: The downloaded QMF file has a column width greater than 4000 bytes.

The command cannot be processed.

Action: Return to your QMF host session, rerun the QMF query without the named column, and export the data again. Then run the SQLQMF facility command again.

SQL6010N

The downloaded QMF file has more than 255 data columns.

Cause: The file being processed has more than 255 data columns.

The command cannot be processed.

Action: Return to your QMF host session and rerun a query, selecting 255 or fewer data columns. EXPORT

the data again and then run the SQLQMF facility command again.

SQL6011N

The data type “<number>” (“<type-text>”) of column “<name>” (positioned at column “<number>”) cannot be processed.

Cause: The QMF file contains a column with data type that is not supported.

The SQLQMF facility does NOT support the following data types:

- LONG VARCHAR
- LONG VARGRAPHIC.

Only the SQLQMF facility SQLQMFDB supports graphic data types.

The command cannot be processed.

Action: Return to your QMF host session and rerun the query without selecting the named column. Then run the SQLQMF facility command again.

SQL6012N

Too many parameters were specified for the command.

Cause: Too many parameters were specified with the command.

The command cannot be processed.

Action: Retry the command with the correct number of parameters.

SQL6013N

Host filename “<host filename>” is either too long or does not begin with an alphabetic character.

Cause: The *host filename* does not begin with an alphabetic character; or, if the host is a VM System, the *host filename*, *filetype*, or *filemode* are too long.

The command cannot be processed.

Action: Retry the command with a correct *host filename* syntax.

SQL6014N

Invalid command syntax, colon (':') should follow a keyword.

Cause: Keyword parameters with operands require the keyword to be immediately followed by a ":" character and then the operand.

The command cannot be processed.

Action: Verify the command syntax and retry the command.

SQL6015N

The keyword is not recognized.

Cause: The keyword parameter indicator ("") was followed by a value that is not a keyword.

The command cannot be processed.

Action: Retry the command using a different keyword value.

SQL6016N

Too many operands for the System/370 filename "<name>".

Cause: If the host is a VM System, the host file name contains more than three space-separate tokens. If the host is an MVS System, the host filename contains embedded blanks.

The command cannot be processed.

Action: Retry the command using a different keyword value.

SQL6017N

More information may be contained in the Import message log "<name>".

Cause: The database IMPORT operation terminated with warning or error messages.

The command has left its work files allocated.

Action: Use the message preceding this message and the IMPORT message log, if it exists, to decide if the IMPORT was successful and to determine corrective action. If the import was successful, erase the DEL, CRE, COL, and IML files.

SQL6018N

No S/370 filename was specified.

Cause: The S/370 filename is a required parameter. The command cannot be processed.

Action: Retry the command with a host filename.

SQL6019N

Communications short session ID "<ID>" is either too long or is invalid.

Cause: The value provided for the communications short session ID is either longer than one byte or is not alphabetic.

The command cannot be processed.

Action: Retry the command with a valid value.

SQL6020N

An import option was specified without also providing a database name.

Cause: No database name was provided and an import option was specified.

The command has terminated.

Action: Retry the command and include a database name.

SQL6021N

Data was successfully imported.

Cause: This is a normal ending message when the SQLQMF facility imports data to a database.

Action: No action is required.

SQL6022N

System database directory is not shared by all nodes.

Cause: All nodes should be accessing one physical copy of the system database directory.

The command cannot be processed.

Action: Ensure that all nodes are accessing the system database directory that resides in the sqllib directory, then try the request again.

SQL6023N

The user does not have the authority to run the Get Table Partitioning Information utility on table "<name>".

Cause: The user attempted to retrieve partitioning information on the specified table without the appropriate authorization (either the SYSADM or DBADM authority or the CONTROL or SELECT privilege on the table).

The utility stops processing.

Action: Do not attempt to call the Get Table Partitioning Information utility without appropriate authorization. Contact your system administrator for assistance.

SQL6024N

Table or index <name> is not defined on node <node-number>.

Cause: The application is connected to node "<node-number>", and the table or index "<name>" is not defined.

The cause is one of the following:

- The node to which the application is connected is not a member of the nodegroup in which the table or index was created.
- The node is not in use by that nodegroup.

The utility stops processing.

Action: Connect the application to a node on which the table or index is defined. Determine the nodegroup in which the table was created and obtain the list of nodes in the nodegroup by selecting the appropriate rows from the NODEGROUPDEF catalog view. The nodes whose IN_USE value is set to Y are the ones on which the table or index is defined.

SQL6025N

Database backed up on node "<node1>" cannot be restored to node "<node2>".

Cause: The backup image used for the restore is a backup of the database on a different node.

Action: Ensure that you have the correct backup image for the node, then try the request again.

SQL6026N

Database with catalog node "<node1>" cannot be restored to a database with catalog node "<node2>".

Cause: The catalog node can exist on only one node and there is a discrepancy between the backup image and the node being restored to. This can occur in the following cases:

- The backup image specified catalog node "<node1>" and the restore was attempted on an existing database whose catalog node is node "<node2>".
- The restore was attempted to a new database and the catalog node has not been restored first. (Restore the catalog node first to create the database on all nodes).

Action: Verify that the correct backup image is being restored.

If you are restoring to an existing database and want to change the catalog node to "<node2>", the existing database must be dropped first.

If you are restoring to a new database, restore the catalog node "<node1>" first.

SQL6027N

The path "<path>" for the database directory is not valid.

Cause: The path "<path>" specified for either the CREATE DATABASE or the CATALOG DATABASE command starts with the character '.' or contains the character string './'.

The command cannot be processed.

Action: Ensure that the specified path is a fully qualified path, does not start with the character '.', and does not contain the character string './'. Then try the request again.

SQL6028N

Catalog database failed because database "`<dbname>`" was not found in the local database directory.

Cause: When cataloguing a local database into the system database directory, the command/API has to be issued from a node on the server where the database resides.

Action: Reissue the command/API from a node where the database resides.

SQL6030N

**START or STOP DATABASE MANAGER failed.
Reason code "`<reason-code>`".**

Cause: The reason code indicates the error. The statement cannot be processed.

- (1) Cannot access the sqllib directory of the instance.
- (2) The full path name added to the profile filename is too long.
- (3) Cannot open the profile file.
- (4) The nodenum parameter value is not defined in the db2nodes.cfg file in the sqllib directory.
- (5) The nodenum parameter must be specified when a command option is specified.
- (6) The port parameter value is not valid.
- (7) The new couple hostname/port is not unique.
- (8) The FORCE option cannot be specified when the NODENUM option is specified.
- (9) The hostname and port parameters must be specified when using the ADDNODE option.
- (10) Cannot update the db2nodes.cfg file in the sqllib directory for the ADDNODE or RESTART option.
- (11) The hostname parameter value is not valid.
- (12) The pointer to the sqledbstrtopt or sqledbstopopt structure is not valid.
- (13) No port value is defined for your DB2 instance id (/etc/services file on UNIX-based systems).
- (14) The port value is not in the valid port range defined for your DB2 instance id (/etc/services file on UNIX-based systems).
- (15) A hostname value has no corresponding port 0 defined in the db2nodes.cfg file in the sqllib directory.
- (16) The value specified for the command or option parameter is not valid.
- (17) The DROP option cannot be specified when the NODENUM option is not specified.
- (18) The value specified for the callerac parameter is not valid.
- (19) Unable to create the UNIX socket directory /tmp/db2_<version>_<release>/\$DB2INSTANCE.
- (20) The node number specified with the ADDNODE option already exists in the db2nodes.cfg file or the node has been already been added since the last stop database manager command was issued.
- (21) The tablespace type specified with the ADDNODE option is not valid.
- (22) The tablespace node specified with the ADDNODE option is out of range.

Action: The action corresponding to the reason code is:

- (1) Ensure that the \$DB2INSTANCE userid has the required permissions to access the sqllib directory of the instance.
- (2) Change the profile name to a shorter name so that the total length of the fully qualified path added to the profile name length is smaller than the SQL_PROFILE_SZ defined in the file sqlenv.h.
- (3) Ensure that the profile file exists.
- (4) Ensure that the nodenum value specified is defined in the db2nodes.cfg file in the sqllib directory and is between 0 and 999.
- (5) Resubmit the command with the nodenum parameter specified.
- (6) Ensure that the port value is between 0 and 999. If a value is not specified, the port value defaults to 0.
- (7) Ensure that the new couple hostname/port is not already defined in the db2nodes.cfg file in the sqllib directory.
- (8) Do not specify the FORCE option when you specify the NODENUM option.
- (9) Ensure that the hostname and the port values are specified when you specify the ADDNODE option.
- (10) Ensure that the \$DB2INSTANCE username has write access to the sqllib directory of the instance, that there is sufficient disk space, and the file exists.
- (11) Ensure that the specified hostname is defined on the system.
- (12) Ensure that the pointer is not NULL and points to the sqledbstrtopt for the sqlepstr() API, or to the sqledbstopopt structure for the sqlepstp() API.
- (13) Ensure that the services file (/etc/services on UNIX-based systems) contains an entry for your DB2 instance id.
- (14) Ensure that you only use port values that are specified in the services file (/etc/services file on UNIX-based systems) for your instance.

- (15) Ensure that all the hostname values have a port 0 defined in the db2nodes.cfg file in the sqllib directory including the restart option parameters.
- (16) Ensure that the value specified for the option parameter is within the valid range.
- (17) Specify the NODENUM option when you specify the DROP option.
- (18) Ensure that the value specified for the callerac parameter is within the valid range.
- (19) Check the permission of the /tmp filesystem to make sure all intermediate directories of /tmp/db2_<version>_<release>/\$DB2INSTANCE can be created.
- (20) Ensure that the correct node number is being specified. You must stop the database manager to update the db2nodes.cfg file with nodes that have been added to the system since the previous stop database manager command.
- (21) Ensure that the value specified for the tablespace type is within the valid range.
- (22) Ensure that the tablespace node value specified is defined in the db2nodes.cfg and is between 0 and 999.

SQL6031N

Error in the db2nodes.cfg file at line number "<line>". Reason code "<reason code>".

Cause: The statement cannot be processed because of a problem with the db2nodes.cfg file, as indicated by the following reason codes:

- (1) Cannot access the sqllib directory of the instance.
 - (2) The full path name added to the db2nodes.cfg filename is too long.
 - (3) Cannot open the db2nodes.cfg file in the sqllib directory.
 - (4) A syntax error exists at line "<line>" of the db2nodes.cfg file in the sqllib directory.
 - (5) The nodenum value at line "<line>" of the db2nodes.cfg file in the sqllib directory is not valid.
 - (6) The nodenum value at line "<line>" of the db2nodes.cfg file in the sqllib directory is out of sequence.
 - (7) The nodenum value at line "<line>" of the db2nodes.cfg file in the sqllib directory is not unique.
 - (8) The port value at line "<line>" of the db2nodes.cfg file in the sqllib directory is not valid.
 - (9) The hostname/port couple at line "<line>" of the db2nodes.cfg file in the sqllib directory is not unique.
 - (10) The hostname at line "<line>" of the db2nodes.cfg file in the sqllib directory is not valid.
 - (11) The port value at line "<line>" of the db2nodes.cfg file in the sqllib directory is not defined for your DB2 instance id in the services file (/etc/services on UNIX-based systems).
 - (12) The port value at line "<line>" of the db2nodes.cfg file in the sqllib directory is not in the valid port range defined for your DB2 instance id in the services file (/etc/services on UNIX-based systems).
 - (13) The hostname value at line "<line>" of the db2nodes.cfg file in the sqllib directory has no corresponding port 0.
 - (14) A db2nodes.cfg file with more than one entry exists, but the database manager configuration is not MPP.
- Action:** The action corresponding to the reason code is:
- (1) Ensure that the \$DB2INSTANCE userid has the required permissions to access the sqllib directory of the instance.
 - (2) Make the instance home directory path name shorter.
 - (3) Ensure that the db2nodes.cfg file exists in the sqllib directory and is not empty.
 - (4) Ensure that at least 2 values are defined per line in the db2nodes.cfg file and that the file does not contain blank lines.
 - (5) Ensure that the nodenum value defined in the db2nodes.cfg file is between 0 and 999.
 - (6) Ensure that all the nodenum values defined in the db2nodes.cfg file are in ascending order.
 - (7) Ensure that each nodenum value defined in the db2nodes.cfg file is unique.
 - (8) Ensure that the port value is between 0 and 999.
 - (9) Ensure that the new couple hostname/port is not already defined in the db2nodes.cfg file.
 - (10) Ensure the hostname value defined in db2nodes.cfg at line "<line>" is both defined on the system and operational.
 - (11) Ensure that the services file (/etc/services on UNIX-based systems) contains an entry for your DB2 instance id.
 - (12) Ensure that you only use port values that are specified in the services file (/etc/services file on UNIX-based systems) for your instance.
 - (13) Ensure that the port value 0 has been defined for the corresponding hostname in the db2nodes.cfg file.

- (14) Perform one of the following actions:
- Remove the db2nodes.cfg file.
 - Alter the db2nodes.cfg file to contain exactly one entry.
 - Install the DB2 Extended Enterprise Edition server.

SQL6032W

Start command processing was attempted on "<total_number>" node(s). "<number_started>" node(s) were successfully started. "<number_already_started>" node(s) were already started. "<number_not_started>" node(s) could not be started.

Cause: The database manager did not start successfully on all the nodes. Not all of the data in the database may be accessible. Data on the nodes that started successfully or were already running is accessible.

Action: Check the log file created in the log directory of the sqllib directory for the instance to see which nodes did not start.

SQL6033W

Stop command processing was attempted on "<total_number>" node(s). "<number_stopped>" node(s) were successfully stopped. "<number_already_stopped>" node(s) were already stopped. "<number_not_stopped>" node(s) could not be stopped.

Cause: The database manager did not stop successfully on all the nodes. The database manager is still active on the nodes that could not be stopped.

Action: Check the log file created in the log directory of the sqllib directory for the instance to see which nodes did not stop.

SQL6034W

Node "<node>" is not being used by any databases.

Cause: During DROP NODE VERIFY processing, all databases are scanned to verify that this node does not exist in the nodegroups of any database, and that no event monitor is defined on this node.

Action: This node can now be removed from the system by issuing the 'db2stop drop nodenum <node>' command.

SQL6035W

Node "<node>" is being used by database "<database>".

Cause: During DROP NODE VERIFY processing, databases are scanned to verify that this node does not exist in the nodegroups of any database, and that no event monitor is defined on this node. Node "<node>" is being used by database "<database>" and cannot be dropped.

Action: You must do the following before dropping the node:

1. Redistribute the data to remove it from the node using the REDISTRIBUTE NODEGROUP command. Use either the DROP NODE option of the REDISTRIBUTE NODEGROUP command or the ALTER NODEGROUP statement to drop the node from the nodegroup. This must be done for all nodegroups in which the node to be dropped is a member.
2. Drop any event monitors that are defined on the node.
3. Issue the 'db2stop drop nodenum <node>' command to drop the node.

SQL6036N

START or STOP DATABASE MANAGER command is already in progress.

Cause: A START DATABASE MANAGER or a STOP DATABASE MANAGER command is already in progress on the system.

Action: Wait for the command in progress to complete, then try the request again.

SQL6037N

START or STOP DATABASE MANAGER timeout value was reached.

Cause: The start_stop_time value defined in the database manager configuration was reached at the node. This value specifies the time, in minutes, in which a node must respond to a Start Database Manager, Stop Database Manager or Add Node command.

Action: Do the following:

- Check the First Failure Service Log (db2diag.log) to see if an error message has been logged for the node which timed out. If an error has not been logged, and timeouts persist, you may need to

increase the `start_stop_time` value specified in the database manager configuration file.

- If the timeout occurred during a Start Database Manager command, you should issue a Stop Database Manager command for all nodes which timed out.
- If the timeout occurred during a Stop Database Manager command, you should issue a Stop Database Manager command for all nodes which timed out or for all nodes. Any node which is already stopped will return with a message stating that the node is stopped.

SQL6038N

No partitioning key is defined.

Cause: The user attempted to use the Get Row Partitioning Information utility without specifying a partitioning key.

The utility stops processing.

Action: Ensure that you specify a partitioning key, then try the request again.

SQL6039N

Partitioning column "<column-number>" is currently defined as not nullable.

Cause: An attempt was made to assign a null value to partitioning column "<column-number>", which is not nullable.

The utility stops processing.

Action: Assign a non-null value or change the type of the partitioning column to be nullable.

SQL6040C

No FCM buffers are available.

Cause: No FCM buffer is available.

The statement cannot be processed.

Action: Try the request again.

If the error persists, increase the number of FCM buffers (`fc_num_buffers`) specified in the database manager configuration file, then try the request again.

sqlcode: -6040

sqlstate: 57011

SQL6041C

No FCM connection entries are available.

Cause: No FCM connection entry is available.

The statement cannot be processed.

Action: Try the request again.

If the error persists, increase the number of FCM connection entries (`fc_num_connect`) specified in the database manager configuration file, then try the request again.

sqlcode: -6041

sqlstate: 57011

SQL6042C

No FCM message anchors are available.

Cause: No FCM message anchor is available.

The statement cannot be processed.

Action: Try the request again.

If the error persists, increase the number of FCM message anchors (`fc_num_anchors`) specified in the database manager configuration file, then try the request again.

sqlcode: -6042

sqlstate: 57011

SQL6043C

No FCM request blocks are available.

Cause: No FCM request block is available.

The statement cannot be processed.

Action: Try the request again.

If the error persists, increase the number of FCM request blocks (`fc_num_rqb`) specified in the database manager configuration file, then try the request again.

sqlcode: -6043

sqlstate: 57011

SQL6044N

The syntax of the string representation "`<string>`" with value of datatype "`<datatype-value>`" and length "`<length>`" is not correct.

Cause: The specified string cannot be recognized as the target datatype. (The *Programming Reference* contains information on datatypes.) Either the syntax is not valid or the value is out of range.

The utility stops processing.

Action: Ensure that the string representation or the datatype is correct, then try the request again.

SQL6045N

The datatype "`<datatype-value>`" of length "`<datatype-length>`" is not supported.

Cause: The datatype and data length are not supported for a partitioning key.

The utility stops processing.

Action: See the *Administration Guide* for information about datatypes. See the *API Reference* for information about the Get Row Partitioning Information API.

SQL6046N

Specified DROP NODE action is not valid.

Cause: The value specified for the action parameter of the DROP NODE command is not valid. Only the verify mode is supported for the DROP NODE command. The parameter must be set to the value SQL_DROPNODE_VERIFY.

The command cannot be processed.

Action: Ensure that the action is set to SQL_DROPNODE_VERIFY, then try the request again.

SQL6047N

Nodegroup cannot be redistributed because table "`<name>`" does not have a partitioning key.

Cause: At least one table in the single-node nodegroup does not have a partitioning key. All tables in the single-node nodegroup must have a partitioning key before the nodegroup can be redistributed to a multiple-node nodegroup.

The operation was not performed.

Action: Use the ALTER TABLE command to specify partitioning keys for tables that do not have one. Then try the request again.

SQL6048N

A communication error occurred during START or STOP DATABASE MANAGER processing.

Cause: A TCP/IP communication error occurred while the START or STOP DATABASE MANAGER command was trying to establish connection with all the nodes defined in the sqllib/db2nodes.cfg file.

Action: Do the following:

- Ensure that the node has the proper authorization defined in the .rhosts or the host.equiv files.
- Ensure that the application is not using more than $(500 + (1995 - 2 * \text{total_number_of_nodes}))$ file descriptors at the same time.
- Ensure all the DB2 Extended Enterprise Edition environment variables are defined in the profile file.
- Ensure the profile file is written in the Korn Shell script format.
- Ensure that all the host names defined in the db2nodes.cfg file in the sqllib directory are defined on the network and are running.

SQL6049N

The log control file for database "`<name>`" could not be found on node(s) "`<node-list>`".

Cause: The SQLOGCTL.LFH file for the database is not in the database directory on the specified node(s).

The database was not started.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Either restore the database from a backup on the specified node(s), or re-create the database.

SQL6050N

An I/O error occurred while accessing the log control file for database "`<name>`" on node(s) "`<node-list>`".

Cause: An error occurred while accessing the SQLOGCTL.LFH file for the database on the specified node(s).

The database cannot be used.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Either restore the database from a backup on the specified node(s), or re-create the database.

SQL6051N

Database "<name>" is not configured for roll-forward recovery on node(s) "<node-list>".

Cause: The specified database is not configured for roll-forward recovery on the specified node(s).

The database is not rolled forward on all nodes.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Ensure that recovery is required on the specified node(s), then restore the most recent backup version of the database on these nodes.

SQL6052N

Cannot roll forward database "<name>" because it is not in roll-forward pending state on node(s) "<node list>".

Cause: The specified database is not in the roll-forward pending state on the specified node(s). This may be because the database has not been restored, or was restored with the WITHOUT ROLLING FORWARD option, or roll-forward recovery is complete on these nodes.

The database is not rolled forward.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Do the following:

1. Ensure that recovery is required on the specified node(s).
2. Restore a backup version of the database on these nodes.
3. Issue the ROLLFORWARD DATABASE command.

SQL6053N

Error exists in file "<file>". Reason code = "<reason-code>".

Cause: There is an error in the specified file as indicated by the reason code:

- (1) The number of values in the partitioning map file is not 1 or 4,096.

- (2) The number of values in the distribution file is not 4,096.
- (3) The data in the distribution file is not in a valid format.
- (4) The node number in the partitioning map is not between 0 and 999.
- (5) The sum of all the values in the distribution file is greater than 4,294,967,295.
- (6) The specified target partition map contains a node number that is not defined in SYSCAT.NODEGROUPDEF for the specified nodegroup.

Action: The action corresponding to the reason code is:

- (1) Ensure that the partitioning map file contains only a single value (if the resultant nodegroup is a single-node nodegroup) or exactly 4,096 values (if the resultant nodegroup is a multinode nodegroup).
- (2) Ensure that the distribution file contains exactly 4,096 values, one per hash partition.
- (3) Ensure that the values in the distribution file are integers greater than or equal to 0, and that the sum of all the distribution values is less than or equal to 4,294,967,295.
- (4) Ensure that the node numbers are in the range of greater than or equal to 0 and less than or equal to 999.
- (5) Ensure that the sum of all the distribution values for the 4,096 partitions is less than or equal to 4,294,967,295.
- (6) Either issue ALTER NODEGROUP to add the missing node(s) or change the partitioning map file to exclude the node(s) not defined in sysibm.sysnodegroupdef.

SQL6054N

The archive file "<name>" is not a valid log file for the database "<name>" on node "<node-number>".

Cause: An archive log file exists in the log directory on the specified node, but it is not valid.

The ROLLFORWARD DATABASE processing stops.

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file to the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file and issue the ROLLFORWARD DATABASE command again.

SQL6055N

The archive file "<name>" does not belong to database "<name>" on node "<node-number>".

Cause: An archive log file in the log directory on the specified node does not belong to the specified database.

The ROLLFORWARD DATABASE processing stops.

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file to the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file and issue the ROLLFORWARD DATABASE command again.

SQL6056N

Nodegroup cannot be redistributed. Reason code = "<reason-code>".

Cause: The operation cannot be executed. The reason code indicates the error.

- (1) The nodegroup specification is not legal. The resulting nodegroup after redistribution would not contain any nodes.
- (2) A previous redistribution operation did not complete successfully.
- (3) A redistribution operation is already in progress.
- (4) There is no previously aborted redistribution command to CONTINUE or ROLLBACK.
- (5) No data redistribution is performed because the data in the nodegroup is already distributed as specified.
- (6) The REDISTRIBUTE NODEGROUP command was not submitted from the catalog node.
- (7) The REDISTRIBUTE NODEGROUP command is not available nor applicable in this non-partitioned version of the product.

Action: The action corresponding to the reason code is:

- (1) Do not drop all the nodes of the nodegroup during redistribution.
- (2) Identify why the previous redistribution failed and take the required corrective action. Submit the REDISTRIBUTE NODEGROUP command using

either the CONTINUE or ROLLBACK option. CONTINUE will complete the previously aborted redistribution operation and ROLLBACK will undo the effects of the previously aborted operation.

- (3) Issue the next REDISTRIBUTION NODEGROUP command after the current one completes.
- (4) You cannot invoke the CONTINUE or ROLLBACK option on a nodegroup that is not associated with a failed redistribution operation.
- (5) Try using a different target partitioning map or distribution file. Otherwise, redistribution is not necessary.
- (6) Issue the command again from the catalog node.
- (7) Do not issue the REDISTRIBUTE NODEGROUP command using this version of the product.

SQL6057N

Archive file "<name>" is not associated with the database "<name>" that was restored, or with the log file previously processed on node "<node-number>".

Cause: An archive log file is found in the log directory on the specified node, but does not belong to the specified database.

The ROLLFORWARD DATABASE processing stops.

Action: To determine the correct archive log file, issue the ROLLFORWARD DATABASE command with the QUERY STATUS option. Move the correct archive log file to the database log directory or, if the database is in a consistent state, change the log path to point to the correct archive file and issue the ROLLFORWARD DATABASE command again.

SQL6058N

Roll-forward recovery stopped because of error "<error>" while retrieving log file "<name>" for database "<name>" on node "<node-number>".

Cause: Roll-forward processing invokes the *db2uexit* to retrieve the log file for the database on the specified node. The error may have occurred in the *db2uexit*.

The ROLLFORWARD DATABASE processing stops.

Action: See the user exit documentation in the *Administration Guide* for a description of the error, and either resume or terminate the roll-forward recovery.

SQL6059N

The point-in-time passed to the Rollforward utility must be greater than or equal to "<timestamp>", because database "<name>" on node(s) "<node-list>" contains information later than the specified time.

Cause: An advanced virtual timestamp is in the database backup.

If ",..." is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Do one of the following:

- Issue the command again with a point-in-time that is greater than or equal to "<timestamp>".
- Restore an earlier backup on node(s), then issue the ROLLFORWARD DATABASE command again.

SQL6061N

Roll-forward recovery on database "<name>" cannot reach the specified stop point (end-of-log or point-in-time) because of missing log file(s) on node(s) "<node-list>".

Cause: The Rollforward Database utility cannot find the necessary log file(s) in the logpath.

Action: Do one of the following:

- Use the ROLLFORWARD DATABASE command with the QUERY STATUS option to determine which log files are missing. When you find the log files, put them in the log path and resume forward recovery.
- If you cannot find the missing log files, restore the database on all nodes, then do point-in-time recovery using a timestamp that is earlier than that of the earliest missing log file.

SQL6062N

Roll-forward recovery on database "<name>" cannot complete because the log information on node(s) "<node-list>" does not match the corresponding record(s) on the catalog node.

Cause: The Rollforward utility processed all the log files found on each node, but the stop points on the specified nodes do not match the corresponding records on the catalog node. This can be caused by missing log

files on either the catalog node or on the specified nodes, or the catalog node must be included in the list of nodes to be rolled forward.

The ROLLFORWARD DATABASE processing stops.

Action: Do one of the following:

- Check if the catalog node needs to be rolled forward. If it does, submit the ROLLFORWARD command again and include the catalog node.
- Use the ROLLFORWARD DATABASE command with the QUERY STATUS option to determine which log files are missing. When you find the log files, put them in the log path and resume forward recovery.
- If you cannot find the missing log files, restore the database on all nodes, then do point-in-time recovery using a timestamp that is earlier than that of the earliest missing log file.

SQL6063N

Roll-forward recovery on database "<name>" has stopped on node(s) "<node-list>" due to a change in log file size.

Cause: The Rollforward Database utility has stopped rolling forward because the log files have changed in size. It must be restarted to establish the new log file size.

If ",..." is displayed at the end of the node list, see the diagnostic log for the complete list of nodes.

Roll-forward recovery has stopped.

(Note : if you are using a partitioned database server, the node number(s) indicate which node(s) the error occurred on. Otherwise, it is not pertinent and should be ignored.)

Action: Reissue the ROLLFORWARD command to continue.

SQL6064N

SQL error "<sqlcode>" occurred during data redistribution.

Cause: An error occurred during data redistribution. The utility stops processing.

Action: Look at the SQLCODE (message number) in the message for more information. Make any required changes and try the request again.

SQL6065N

An error occurred while writing to file "<file>".

Cause: One of the following conditions was encountered:

- The file could not be opened.
- An I/O error occurred while writing to the file.
- An I/O error occurred while closing the file.

The command or the utility cannot be processed.

Action: Ensure that the file exists and that the file permissions allow write access. Try the command or the utility again.

SQL6067W

ROLLFORWARD DATABASE QUERY STATUS command encountered sqlcode "<sqlcode>".

Cause: The ROLLFORWARD DATABASE QUERY STATUS command encountered an error with the sqlcode "<sqlcode>". The query might not be successful on some nodes for various reasons. The most severe error is indicated by "<sqlcode>". The roll-forward status is only returned for the successful nodes.

Action: Look up the sqlcode "<sqlcode>" in the *DB2 Messages Reference*, or online to determine the problems on the failed nodes. Take the required corrective actions, then continue the forward recovery on these nodes.

SQL6068W

Rollforward operation was cancelled successfully. The database has to be restored on node(s) "<node-list>".

Cause: A Rollforward operation was cancelled before it successfully completed, and the database is left in an inconsistent state. The restore pending flag is on for the listed nodes.

If "... " is displayed at the end of the node list, see the syslog file for the complete list of nodes.

Action: Restore the database on the listed nodes.

SQL6069N

The ROLLFORWARD DATABASE command cannot be submitted on a non-catalog node.

Cause: The ROLLFORWARD DATABASE command is only accepted on the catalog node.

Action: Submit the command on the catalog node.

SQL6071N

The requested operation cannot be processed because a new node has been added to the system. The system must be stopped and started again before the operation can be done.

Cause: One of the following:

- The request was issued from the new node, and this node cannot communicate with other nodes.
- A CREATE or DROP DATABASE operation was requested before all nodes were stopped and started again to include the new node.

Action: Issue db2stop to stop all the nodes. When all nodes are successfully stopped, issue db2start to start all the nodes, including the new node, then try the request again.

sqlcode: -6071

sqlstate: 57019

SQL6072N

DB2START with the RESTART option cannot proceed because the specified node is already active.

Cause: The node specified for restart is already active on the system.

Action: If necessary, issue a DB2STOP specifying the node to stop and issue the DB2START command again to restart the node.

SQL6073N

Add Node operation failed. SQLCODE = "<sqlcode>".

Cause: The Add Node operation failed with sqlcode "<sqlcode>".

Action: Check the message associated with the sqlcode that is returned in either the *DB2 Messages Reference*, or online.

Take any required corrective action, then try the request again.

SQL6074N

Add Node operation failed because a Create or Drop Database operation is currently executing.

Cause: An Add Node operation cannot execute concurrently with a Create or Drop Database operation.

Action: Wait for the Create or Drop Database operation to complete, then try the request again.

SQL6075W

The Start Database Manager operation successfully added the node. The node is not active until all nodes are stopped and started again.

Cause: The db2nodes.cfg file is not updated to include the new node until all nodes are simultaneously stopped by the STOP DATABASE MANAGER (db2stop) command. Until the file is updated, the existing nodes cannot communicate with the new node.

Action: Issue db2stop to stop all the nodes. When all nodes are successfully stopped, issue db2start to start all the nodes, including the new node.

SQL6076W

Warning! This command will remove all database files on the node for this instance. Before continuing, ensure that there is no user data on this node by running the DROP NODE VERIFY command.

Cause: This procedure will remove all the database partitions from the specified node.

Action: Ensure that the DROP NODE VERIFY command was run before dropping this node. If using the API, ensure that the callerac parameter is specified correctly.

SQL6077W

The db2stop DROP NODENUM procedure ended successfully, but could not remove all the files. See the file "<file>" for details.

Cause: The db2stop DROP NODENUM procedure ended successfully, but some user data files are still on the node.

Action: Information in "<file>" file will indicate the directory structure from which files could not be deleted.

SQL6078N

The db2stop DROP NODENUM procedure could not update the database information for database "<dbname>".

Cause: The db2stop DROP NODENUM procedure could not access the catalog node for database "<dbname>".

Action: Try the request again. If the problem persists, contact your service representative.

SQL6079W

The db2stop DROP NODENUM command was cancelled successfully.

Cause: The db2stop DROP NODENUM command was stopped before it began processing.

Action: None.

SQL6080W

The Start Database Manager operation successfully added in the node, but no database partitions have been created on the node. The node is not active until all nodes are stopped and started again.

Cause: The db2nodes.cfg file is not updated to include the new node until all nodes are simultaneously stopped by the STOP DATABASE MANAGER (DB2STOP) command. Until the file is updated, the existing nodes cannot communicate with the new node.

Action: Issue DB2STOP to stop all the nodes. When all nodes are successfully stopped, issue DB2START to start all the nodes, including the new node. When all nodes are successfully started, the database system can be used.

SQL6081

A communication error caused a DB2STOP FORCE command to time out on this node.

Cause: A communication error occurred on one or more of the database nodes, causing the DB2STOP FORCE command to time out on the current node. Any node where the communication error occurred will receive the SQL6048N message.

Action: Do the following:

1. Correct the communication error on the node (or nodes) that received the SQL6048N message.
2. Issue a DB2START command and ensure that all nodes that received the SQL6048N message started successfully.
3. Issue the DB2STOP FORCE command again from any node.

SQL6100 - SQL6199

SQL6100N

The partitioning map in the data file and the partitioning map for the database are not the same.

Cause: The data to be loaded has either not been partitioned, or was partitioned with a partitioning map other than the current one for the nodegroup to which the table belongs. The data cannot be loaded.

Action: If the data was not partitioned, use the db2split program to partition the data, then load the partitioned data.

If the data was partitioned, do one of the following:

- Use the partitioning map from the header of the data file to redistribute the nodegroup to which the table belongs. Then try the request again.
- Repartition the data with the current partitioning map for the nodegroup. Then try the request again to load the newly partitioned data.

SQL6101N

This data file contains data for node “<node-1>” but the Load utility is connected to node “<node-2>”.

Cause: The data to be loaded is associated with a node number that differs from the node number of the node to which the application is connected. The data cannot be loaded.

Action: Either find the data file associated with this node and try the request again with that data file, or connect to the node associated with this data file and issue the request at that node.

SQL6102W

The parameter “<name>” is reserved for future use. Its value should be set to “<default-value>”.

Cause: A parameter reserved for future capabilities has been set to a value that is not its default value. It should be set to the default value to ensure future compatibility.

Action: Ensure that the parameter “<name>” is set to the value, “<default-value>”, then try the request again.

SQL6103C

An unexpected utility error occurred. Reason code = “<reason-code>”.

Cause: An unexpected utility error occurred.

Action: Record the message number (SQLCODE) and reason code in the message.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. See the *Administration Guide* for information on how to use this facility. Then contact your technical service representative with the following information:

- Problem description
- SQLCODE and embedded reason code
- SQLCA contents if possible
- Trace file if possible

SQL6104N

The load utility does not support the creation of indexes.

Cause: The load utility does not support the creation of indexes, but the table to be loaded has at least one index defined on it. The index may have been explicitly created with the CREATE INDEX statement or implicitly created when a primary key was defined for the table.

Action: Drop all indexes defined on the table with the DROP INDEX statement. Drop the primary key with the ALTER TABLE statement. Resubmit the command.

Use CREATE INDEX and ALTER TABLE as required to recreate indexes and primary key after the load completes successfully.

SQL6105W

The Load utility has completed processing. A Rollforward done to a point in time after the load will not succeed. Take a database backup now if database recoverability is required.

Cause: No logging is done by the Load utility. If you try to roll forward with a backup made before the load, the operation will fail when it encounters references to the data that was loaded.

Action: To ensure database recoverability after the load, do a backup before the data is modified.

SQL6106N

The filetype modifier "NOHEADER" was specified, but the nodegroup on which the table is defined is not a single-node nodegroup.

Cause: The data to be loaded was specified as having no header information. However the target table specified is not a single-node table. The data cannot be loaded.

Action: The data must be split using db2split, then loaded without the "NOHEADER" option.

SQL6107N

The partitioning key information in the data file is not correct.

Cause: Either the data was not split with db2split or the db2split operation was not successful.

Action: Use the db2split program to partition the data and then try the request again with the partitioned data. If the insert-column option is being used, ensure that all of the partitioning columns are specified in the column list.

If the problem persists, contact your technical service representative with the following information:

- Problem description
- SQLCODE and embedded reason code
- SQLCA contents if possible
- Trace file if possible

SQL6108N

The number of partitioning keys defined in the data file header ("<number-1>**") does not match the number of partitioning keys defined for the table ("**<number-2>**").**

Cause: The partitioning columns specified in the db2split configuration file were not correct. The data was not correctly split.

Action: Do the following:

1. Ensure that the correct partitioning columns are specified in the db2split configuration file.
2. Split the data.
3. Issue the Load operation with the newly partitioned data.

SQL6109N

Utility expected partitioning column "<column-name-1>**", but found partitioning column "**<column-name-2>**".**

Cause: In the db2split configuration file:

- One of the partitioning columns defined for the table was not specified.
- The order of the partitioning columns was incorrect
- A column was specified that is not a partitioning column for the table.

Action: Do the following:

1. Ensure that the db2split configuration file is correct.
2. Split the data.
3. Issue the Load operation with the newly partitioned data.

SQL6110N

Utility expected partitioning column type "<column-type-1>**" for column "**<column-name-1>**", but the data file lists it as type "**<column-type-2>**".**

Cause: The db2split configuration file is not correct.

Action: Do the following:

1. Ensure that the db2split configuration file is correct.
2. Split the data.
3. Issue the Load operation with the newly partitioned data.

SQL6111N

Cannot create a subdirectory under the path specified by newlogpath.

Cause: When the newlogpath parameter is updated, the system attempts to create a subdirectory under the specified path using the node name as the name of the subdirectory. One of the following operating system errors prevented the creation of the subdirectory:

- The file system or path does not have the appropriate permissions for file creation.
- The file system does not have enough disk space.
- The file system does not have enough file blocks or inodes.

The requested change is not made.

Action: Do one of the following, then try the request again:

- Ensure that the specified path exists and that the filesystem and path have read/write permissions.
- Specify a different newlogpath.

If the problem persists, see your system administrator.

SQL6112N

The requested change cannot be done. The resulting configuration parameter settings are not valid. Reason code "<reason-code>".

Cause: Three rules govern the settings of some configuration parameters. The rule that would be violated is indicated by the "<reason-code>":

- (1) $\text{max_coordagents} + \text{num_initagents} \leq \text{maxagents}$
- (2) $\text{num_initagents} \leq \text{num_poolagents}$
- (3) $\text{maxdari} \leq \text{max_coordagents}$

Action: Ensure that the values you specify do not violate any of the above rules, then try the request again.

SQL6500 - SQL6599

SQL6500W

RESTARTCOUNT in the load command may cause some problems.

Cause: Since multiple loading processes for the same table are completely independent, it is almost impossible to have an identical restartcount for those multiple loading processes.

Action: Please make sure you have the correct load command in the configuration file.

SQL6501N

Database name was not given in the configuration file.

Cause: Database name has to be specified in the configuration file.

Action: Please specify the database name and rerun the command.

SQL6502N

The path name (parameter: data_path) for data file was not specified.

Cause: If the input data file is remote, the file will be transferred locally. The path to the file on the remote machine must be supplied.

Action: Please specify the path name to the remote data file and rerun the command.

SQL6504N

There are errors in the output node list specification (parameter: outputnodes) in the configuration file.

Cause: The output node list specification is not valid.

Action: Check the sample configuration file, correct your output node list specification, and rerun the command.

SQL6505N

There are errors in the split node list specification (parameter: splitnodes) in the configuration file.

Cause: The split node list specification is not valid.

Action: Check the sample configuration file, correct your split node list specification, and rerun the command.

SQL6506N

The program failed to extract partitioning key information for table "<table-name>" from the system catalog table.

Cause: Either the table is not defined, or it is not defined in an MPP environment.

Action: Make sure you have the table properly defined.

SQL6507N

Checking level (parameter: check_level) in the configuration file is not valid.

Cause: Checking level (parameter: check_level) can be either CHECK or NOCHECK. The default is CHECK.

Action: Correct the parameter in the configuration file, and rerun the command.

SQL6508N

The program failed to create the output pipe for the ftp process.

Cause: If input data files are remote, they will be transferred to a local pipe. If this local pipe already exists, the process will fail.

Action: Please ensure your working space is clean.

SQL6509N

The program failed to create input pipes for the splitter processes.

Cause: The program can not create temporary input pipes for the splitter processes.

Action: Please ensure your working space is clean.

SQL6510N

The program failed to create the temporary directory at local non-NFS space of node "<node-num>".

Cause: The program needs a temporary working directory at local non-NFS space of all splitting and output nodes.

Action: Please ensure your working space is clean.

SQL6511N

The program failed to create output for the splitter process at node "<node-num>".

Cause: The program can not create temporary output pipes for the splitter at node "<node-num>".

Action: Please ensure your working space is clean.

SQL6512N

The program failed to create input pipes for the merging process at node "<node-num>".

Cause: The program can not create temporary input pipes for the merging process at node "<node-num>".

Action: Please ensure your working space is clean.

SQL6513N

The program failed to create the input pipe for the loading process at node "<node-num>".

Cause: The program can not create temporary input pipe for the loading process at node "<node-num>".

Action: Please ensure your working space is clean.

SQL6514N

The program can not read the node configuration file: "<node-cfg-file>".

Cause: Either the file does not exist, or it is not readable.

Action: Please check the existence and permissions of the node configuration file.

SQL6515N

The program failed to find a load command in the configuration file.

Cause: A CLP load command must be supplied in the configuration file.

Action: Please specify a CLP load command in the configuration file.

SQL6516N

The program failed to connect to database "<db-name>".

Cause: Either the database manager has not been started yet, or it encountered problems.

Action: Check your database manager status.

SQL6517N

The program failed to extract the node list, where the table "<tbl-name>" is defined, from the system catalog table.

Cause: Either the table is not defined, or it is not defined in an MPP environment.

Action: Check how the table was defined in the database.

SQL6518N

The record length (reclen in the load command) is not valid.

Cause: Valid record is between 1 to 32768.

Action: Please correct the record length, and rerun the command.

SQL6519N

The mode (parameter: mode) "<mode>" in the configuration file is not valid.

Cause: The running mode of this program can be: SPLIT_ONLY, LOAD_ONLY, SPLIT_AND_LOAD (default), or ANALYZE.

Action: Please correct the mode in the configuration file.

SQL6520N

The program failed to create output pipes for the process, which generates the header information for split file.

Cause: The program can not create output pipes for the process, which generates the header information for split file.

Action: Please ensure your working space is clean.

SQL6521N

The configuration file "<cfg-file>" for this program doesn't exist.

Cause: The program needs a configuration file.

Action: Please create a configuration file.

SQL6522N

The program found a path name for the input data files in the load command.

Cause: Path name for input data files in the load command is not allowed. There is a separate parameter (data_path) for this purpose.

Action: Please correct the configuration file.

SQL6523N

The element "<node-num>" in the split node list (parameter: SplitNodes) is not defined in the node configuration (db2nodes.cfg) file.

Cause: All nodes in the split node list must have an entry in the node configuration file.

Action: Please correct your split node list.

SQL6524N

The element "<node-num>" in the output node list (parameter: Outputnodes) is not a member of the node list where the table is defined.

Cause: All nodes in the output node list must be members of the node list where the table is defined.

Action: Please correct your output node list.

SQL6525N

The program can not read the input data file "<file-name>".

Cause: Either the input data file was not found, or it is not readable.

Action: Please check the existence and permissions of the input data file.

SQL6526N

The program can not write in current working directory "<cwd>".

Cause: The current working directory is not writable.

Action: Please check the permission of current working directory.

SQL6527N

The node where statistic data will be collected, (parameter: run_stat_node), is not a member of the output node list.

Cause: The node where statistic data will be collected must be a member of the output node list.

Action: Please correct the run_stat_node parameter.

SQL6528N

Record length was not specified in the load command.

Cause: If the BINARYNUMERICS or PACKEDDECIMAL modifier is specified in the load command, record length (reclen) must be specified in the load command as well.

Action: Please correct the load command.

SQL6529N

The NO Header option (NOHEADER) was not specified in the load command.

Cause: If a table is defined in a single node nodegroup, the NOHEADER modifier must be specified in the load command.

Action: Please correct the load command.

SQL6530N

The data type of one partitioning key is float or double.

Cause: If the input file is a non-binary data file, float or double columns can not be defined as partitioning key.

Action: Supply a binary data file, or change the definition of your table.

SQL6531N

The program failed to reset tablespace quiesce.

Cause: There are probably on-going loading processes. Make sure all previous loading processes are completed before another autoloader session can be started.

Action: Check the processes status on your machine.

SQL6532N

A savecount in the load command can not be set to non-zero.

Cause: The savecount in the load command can not be set to non-zero if there are multiple splitting nodes, the mode is SPLIT_AND_LOAD, and the command is either a REPLACE INTO or INSERT INTO load command.

Action: Please correct the load command.

SQL6533N

A restartcount in the load command can not be set to non-zero.

Cause: Because multiple splitting nodes produce random order of records for loading process(es), using RESTART INTO with a restartcount can not guarantee a successful recovery.

Action: Please correct the load command.

SQL6534N

There is an error in the .netrc file "<netrc-file>".

Cause: Either the .netrc file could not be found, or there is no entry for remote host "<machine>", or the permissions of the file are not correct.

Action: Please check the existence and permission of the .netrc file.

SQL6535N

The mode SPLIT_ONLT is not valid.

Cause: If a table is defined in a single node nodegroup, either splitting or analyzing is not necessary.

Action: Please change the mode from SPLIT_ONLT to LOAD_ONLY or SPLIT_AND_LOAD.

SQL6536N

The program "<progrname>" failed to open file "<filename>" for reading.

Cause: An autoloader process can not successfully open a file or pipe for reading.

Action: Please ensure everything is correct in the configuration file.

SQL6537N

The program "<progrname>" failed to open file "<filename>" for writing.

Cause: An autoloader process can not successfully open a file or pipe for writing.

Action: Please ensure everything is correct in the configuration file.

SQL6538N

The program failed to read the split file "<split-file>".

Cause: When the program is invoked in LOAD_ONLY mode, the input data file must have already been split, and all split files must be readable by the program.

Action: Check whether or not the input data file has been split, and the access permissions of the resulting split files.

SQL6539N

There is at least one command in "<cmd-list>" not found in the working environment.

Cause: The execution of this program depends on a number of common Unix commands. The process fails if any one of them is not available in the working environment.

Action: Make sure you have all necessary commands properly installed on your system.

SQL6540N

File type "<file-type>" specified in the load command is not valid.

Cause: Valid file types are ASC (positional ASCII) or DEL (delimited ASCII).

Action: Correct the load command in the configuration file.

SQL7000 - SQL7099**SQL7001N**

Unknown command "<command>" was requested.

Cause: The command submitted to REXX could not be recognized.

The command cannot be processed.

Action: Verify that the command is a valid SQL statement and rerun the procedure. Note that all commands must be in uppercase.

SQL7002N

The cursor name is invalid.

Cause: The user specified an incorrect cursor name.

The command cannot be processed.

Action: Verify that the cursor name is one of the form "c1" through "c100".

SQL7003N

The statement name is invalid.

Cause: The user has specified an incorrect statement name.

The command cannot be processed.

Action: Verify that the statement name is of the form "s1" through "s100".

SQL7004N

The syntax of the request is invalid.

Cause: REXX was unable to parse the command string submitted.

The command cannot be processed.

Action: Use proper command syntax.

SQL7005W

The cursor used by this OPEN statement has not been declared.

Cause: An OPEN statement was attempted without a declaring a cursor.

The command cannot be processed.

Action: Insert a DECLARE statement before the OPEN statement and rerun the procedure.

SQL7006N

Invalid keyword "<keyword>" given on "<request>".

Cause: The statement contains a not valid keyword "<keyword>".

The command cannot be processed.

Action: Specify the correct keyword format.

SQL7007N

REXX variable "<variable>" does not exist.

Cause: A REXX variable that did not exist in the REXX variable pool was passed.

The command cannot be processed.

Action: Verify that all variable names in the host-variable list are assigned before the command that failed. Then run the procedure again.

SQL7008N

REXX variable "<variable>" contains inconsistent data.

Cause: A variable that contained inconsistent data was passed to REXX.

The command cannot be processed.

Action: If the variable is an SQLDA, verify that the data and length fields have been assigned correctly. If it is a

REXX variable, verify that the type of data is appropriate to the command where it is being used.

SQL7009N

Truncated REXX variable "<variable>".

Cause: The variable "<variable>" passed to REXX contained inconsistent data. The data string from "<variable>" was truncated.

The command cannot be processed.

Action: Verify that the data length is consistent with the length given in the input SQLDA, and run the procedure again.

SQL7010N

Invalid scan ID "<ID>".

Cause: The scan ID "<variable>" passed to REXX did not exist or contained inconsistent or missing data.

The command cannot be processed.

Action: Verify that the data contained in the scan ID has been assigned correctly, and run the procedure again.

SQL7011N

Required parameter "<parameter>" not given.

Cause: The parameter "<parameter>" is required by REXX command syntax but was not specified.

The command cannot be processed.

Action: Specify the required parameter value, and run the procedure again.

SQL7012N

Attempted ISL change while connected to a database.

Cause: Isolation level (ISL) may not be changed while connected to a database.

The command is ignored.

Action: If a change in isolation level is necessary, disconnect from the current database, then set the isolation level and connect to the database.

SQL7013N

Mismatched cursor and statement name or hold attribute.

Cause: In REXX, the cursor and statement name form must be 'cnn' and 'snn,' where 'nn' is a number from 1 to 100. The numbers must be the same for a cursor and statement pair. Also, c1 through c50 are declared without hold and c51 through c100 with hold.

The command is ignored.

Action: Verify that the cursor and statement numbers match and rerun the procedure.

SQL7014N

Incorrect number of host variable components.

Cause: In REXX, the first component of a compound host variable lists a number which is not equal to the actual number of components defined.

The command is ignored.

Action: Verify that the number in the first component matches the number of components actually defined and rerun the procedure.

SQL7015N

The variable name "<variable>" is not valid in REXX.

Cause: The variable name specified is not valid in REXX. The name must conform to the language requirements.

The command cannot be processed.

Action: Change the name to one that conforms to the REXX requirements and resubmit the command.

SQL7016N

**Invalid syntax provided to the SQLDB2 interface.
Related Error: "<db2_error>".**

The command cannot be processed.

Cause: Invalid syntax was provided to the SQLDB2 interface, e.g. both an input file and a command were specified.

Action: Look up the related error code for more information.

SQL7099N

Invalid error "<error>" has occurred.

Cause: A REXX internal error has occurred.

The command cannot be processed.

Action: Verify that REXX is installed properly and rerun the procedure. If the error continues, note the error number and call the dealer.

SQL8000 - SQL8099

SQL8000N

DB2START processing failed; a valid product license was not found.

Cause: A valid license key could not be found and the evaluation period has expired.

Action: Install a license key for the fully entitled version of the product. You can obtain a license key for the product by contacting your IBM representative or authorized dealer.

SQL8001N

DB2 connect processing failed; a valid product license was not found.

Cause: A valid license key could not be found and the evaluation period has expired.

Action: Install a license key for the fully entitled version of the product. You can obtain a license key for the product by contacting your IBM representative or authorized dealer.

sqlcode: -8001

sqlstate: 42968

SQL8002N

DRDA connect processing failed; a valid product license was not found.

Cause: A valid license key could not be found and the evaluation period has expired.

Action: Install a license key for the fully entitled version of the product. You can obtain a license key for the product by contacting your IBM representative or authorized dealer.

sqlcode: -8002

sqlstate: 42968

SQL8006W

The product "<product-name>" does not have a valid license key installed. If you have licensed this product, please ensure the license key is properly installed.

If a license key is not installed, this product will be enabled for a "<number>" day evaluation period.

USE OF THE PRODUCT FOR THE EVALUATION PERIOD CONSTITUTES ACCEPTANCE OF THE TERMS OF THE IBM EVALUATION AGREEMENT IN THE EVALUATE.AGR FILE, LOCATED IN THE FOLLOWING DIRECTORY: "<directory-name>".

Cause: A valid license key has not been installed for this product. The product will be enabled to operate for a limited period of time for evaluation purposes. THE EVALUATION PERIOD IS CONTROLLED BY A TIME DISABLING DEVICE.

Action: If you have purchased a fully entitled version of this product, please install your license key as described in the product installation documentation. If you have already installed the license key, please verify your license file for accuracy.

USE OF THE PRODUCT FOR THE EVALUATION PERIOD IS SUBJECT TO THE TERMS OF THE IBM EVALUATION AGREEMENT IN THE EVALUATE.AGR FILE. YOUR USE OF THE PRODUCT DURING THE EVALUATION PERIOD CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS.

If you do not accept the terms, you are not authorized to use the product and you must de-install it. You can obtain a license key for the fully authorized program with the product by contacting your IBM representative or authorized dealer.

SQL8007W

There are "<number>" day(s) left in the evaluation period for the product "<text>". For evaluation license terms and conditions, refer to the IBM Evaluation Agreement in the EVALUATE.AGR file, located in the following directory: "<text>".

Cause: A valid license key has not been installed for this product. The evaluation period will expire after the specified number of days.

Action: The product is operating in evaluation mode, and is enabled for a limited period of time. When the evaluation period has expired it will not execute until a license key for the fully entitled version of the product is installed.

You can obtain a license key for the product by contacting your IBM representative or authorized dealer.

SQL8008N

The product "<text>" does not have a valid license key installed and the evaluation period has expired. Functions specific to this product are not enabled.

Cause: A valid license key could not be found and the evaluation period has expired.

Action: Install a license key for the fully entitled version of the product. You can obtain a license key for the product by contacting your IBM representative or authorized dealer.

SQL8009W

The number of concurrent users of the DB2 Server product has exceeded the defined entitlement of "<number>". Concurrent user count is "<number>".

Cause: The number of concurrent users has exceeded the number entered in the Nodelock Administration Tool.

Action: Contact your IBM representative or authorized dealer to obtain additional DB2 user entitlements and update the DB2 license information in the Nodelock Administration Tool.

SQL8010W

The number of concurrent users of the DB2 Connect product has exceeded the defined entitlement of "<number>". Concurrent user count is "<number>".

Cause: The number of concurrent users has exceeded the number entered in the Nodelock Administration Tool.

Action: Contact your IBM representative or authorized dealer to obtain additional DB2 user entitlements and update the DB2 license information in the Nodelock Administration Tool.

SQL8011W

One or more database partitions does not have a valid DB2 license key installed for the "<product-name>" product. Refer to db2diag.log for more information.

Cause: A valid license key has not been installed for this product on all database partitions. The product will be enabled to operate for a limited period of time for evaluation purposes. THE EVALUATION PERIOD IS CONTROLLED BY A TIME DISABLING DEVICE.

Action: Check the db2diag.log for more information indicating which database partitions are encountering the license problem. If you have purchased a fully entitled version of this product, please install your license key as described in the product installation documentation. If you have already installed the license key, please verify your license file for accuracy.

USE OF THE PRODUCT FOR THE EVALUATION PERIOD IS SUBJECT TO THE TERMS OF THE IBM EVALUATION AGREEMENT IN THE EVALUATE.ARG FILE. YOUR USE OF THE PRODUCT DURING THE EVALUATION PERIOD CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS.

If you do not accept the terms, you are not authorized to use the product and you must de-install it. You can obtain a license key for the fully authorized program with the product by contacting your IBM representative or authorized dealer.

SQL8100 - SQL8199

SQL8100N

The table is full.

Cause: When creating a database the following parameters may be specified:

- maximum number of pages per segment per file
- number of segments

Each table part may now have multiple files within the database segments. The file can grow until it reaches its maximum size in a segment (maximum number of pages per segment) and then it moves to the next segment to add more data. This occurs until it has used the maximum number of pages per segment in all configured segments, and the table becomes full.

Therefore, the total amount of space per database part is the product of the maximum number of pages and the number of segments. The table will be full if any of the table parts use all of their configured space.

DataJoiner users: this situation can be detected by DataJoiner or by the data source.

Action:

- Delete rows from the table
- Reorganize the table to make more space
- Create a new database with larger values for maximum pages per segment and number of segments, back up the original database and restore to the new database.

DataJoiner users: isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing to process the SQL statement) and:

- Take the necessary steps to increase the space in the table at the data source.
- If the table is on DataJoiner, create a new database with larger values for maximum pages per segment and number of segments. Back up the original database and restore to the new database.

SQL8101N

A database segment may be incorrect.

Cause: This error could occur in two ways:

1. Every database segment has an identifier file. The file may be missing or the contents of the file may be incorrect.
2. One, or more, previously allocated database segments are missing.

Action:

- Check to ensure that the file systems are mounted correctly
- Restore the database from a backup
- Call your IBM service representative

SQL9000 - SQL9099

SQL10000 - SQL10099

SQL10002N

The password supplied is too long.

Cause: The length of the password is expected to be 18 characters or less. However, if the password is to be verified for an APPC conversation, it must be 8 characters or less.

Action: Ensure that the password is not longer than the limit allowed.

sqlcode: -10002

sqlstate: 28000

SQL10003C

There are not enough system resources to process the request.

The request cannot be processed.

Cause: The database manager could not process the request due to insufficient system resources. The resources that can cause this error include:

- The amount of memory in the system
- The number of message queue identifiers available in the system.

Action: Stop the application. Possible solutions include:

- Remove background processes.
- Terminate other applications using the above resources.
- If you are using Remote Data Services, increase the Remote Data Services heap size (*rsheapsz*) in the server and client configuration because at least one block is used per application.

NOTE: This is applicable only for releases of DB2 prior to Version 2.

- Decrease the values of the configuration parameters that define allocation of memory, including *udf_mem_sz* if UDFs are involved in the failing statement.

sqlcode: -10003

sqlstate: 57011

SQL10004C

An I/O error occurred while accessing the database directory.

Cause: Either the system database directory or the local database directory cannot be accessed. This error may occur not only when the system is cataloging or uncataloging a database but also when the system is accessing a database that is cataloged in the directory.

The command cannot be processed.

Action: Possible solutions include:

- If the local database directory is damaged, restore the databases that were cataloged there from backup versions and catalog them.

If installing the sample database, drop it and install the sample database again.

sqlcode: -10004

sqlstate: 58031

SQL10005N

The mode parameter "<parameter>" in the CONNECT TO statement is not valid. It must be SHARE for shared access, EXCLUSIVE for exclusive use or EXCLUSIVE MODE ON SINGLE NODE for exclusive use on single node. For DDCS connections, only SHARE mode is supported. EXCLUSIVE MODE ON SINGLE NODE is only supported in MPP configuration.

Cause: The *mode* parameter of the CONNECT TO statement must be SHARE for shared, EXCLUSIVE for exclusive use or EXCLUSIVE MODE ON SINGLE NODE for exclusive use on single node. If connecting to a database using Distributed Database Connection Services (DDCS), only shared access is allowed. EXCLUSIVE MODE ON SINGLE NODE is only supported in MPP configuration.

The command cannot be processed.

Action: Resubmit the command with a valid *mode* parameter.

SQL1007N

**Message “<msgno>” could not be retrieved.
Reason code: “<code>”.**

Cause: The requested message <msgno> could not be retrieved from the message file. Reason code <code> is one of the following:

1. The environment variable “DB2INSTANCE” is either not set, or is set to an invalid instance. Correct it and try again.
2. The message file was found, but the file could not be opened because of permissions. Check the file permissions of the files under the message directory.
3. The message file could not be found. Either the file does not exist, or the directory the message file should be in does not exist. Check that a either a 'prime' directory (the default) or a directory with the same name as the 'LANG' environment variable exists under the message directory.
4. The requested message does not exist in the message file. Either the message file is outdated, or it is the wrong one.
5. LC_CTYPE is set to a locale which the database does not support. Correct it and try again.
6. An unexpected system error occurred. Try execution again. If problem persists, contact your IBM representative.
7. Not enough memory. An attempt to get private memory failed. Try again.

Action: Reissue the command after verifying the following:

- ensure that the DB2INSTANCE environment variable is set to the correct literal string for the username attempting this command
- ensure that correct home directory is specified for the username attempting this command (i.e. in the /etc/passwd file)
- ensure that the LANG environment variable is set to the correct value for the installed language, or is set to 'C' (defaults to whatever is in the 'prime' directory), on the username attempting this command

If all of the above are correct and the error still occurs, reinstall DB2.

SQL1009N

The codeset “<codeset>” and/or territory “<territory>” that has been specified is not valid.

Cause: This version of the database manager does not support the active codeset or territory or both, as specified by the Create Database command.

The command cannot be processed.

Action: Refer to the Create Database command in the *Administration Guide* for details of valid codeset and territory pairs supported by the database manager.

SQL10010N

The specified library, “<name>”, was loaded, but the function “<function>” could not be executed.

Cause: The function routine within the library cannot be found.

The command cannot be processed.

Action:

1. If it is a DARI library, ensure the DARI library is built correctly. Make sure that the function routine is exported through the 'export file'.
2. For other libraries, user may have to reinstall the database manager instance or the database manager product.

sqlcode: -10010

sqlstate: 42724

SQL10011N

An interrupt was received while loading the specified DARI library “<name>”.

Cause: When loading the DARI library, the command was interrupted, perhaps by the interrupt key (usually Ctrl+Break or Ctrl+C).

Processing is stopped.

Action: Resubmit the command.

sqlcode: -10011

sqlstate: 42724

SQL10012N

An unexpected operating system error was received while loading the specified library "<name>".

Cause: An unexpected error occurred when trying to load the library module specified in the program name field.

Action: Resubmit the current command. If the error continues, stop the database manager and start it again. If the error continues, reinstall the database manager.

If reinstallation does not correct the error, record the message number (SQLCODE) and all information in the SQLCA if possible.

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then contact IBM as specified in this guide.

sqlcode: -10012

sqlstate: 42724

SQL10013N

The specified library "<name>" could not be loaded.

Cause: The library module could not be found.

DataJoiner users: the specified library module could be one of the following:

- a DataJoiner system library
- a DARI library
- a DataJoiner data access module

Action: For DARI users, ensure that the specified library is available.

- If the client application uses a fully qualified path name to specify the DARI library, the DARI library must be stored in the given directory path. If the client application does not use the path name, the DARI library must be stored in the default directory (<InstanceHomeDir>/sqllib/function). Where <InstanceHomeDir> is the home directory of the database manager instance.
- If the error message occurs during database manager start time then the user will have to

reinstall the DB2 instance or the database manager product.

DataJoiner users: if the error message occurs as a result of issuing db2start on the DataJoiner system and the "<name>" is "from DJXCOMM" then DataJoiner experienced a problem loading one of the data access modules identified by the DJXCOMM environment variable. The DJXCOMM environment variable must be updated to contain only valid data access modules.

If the error message occurs as a result of issuing db2start on the DataJoiner system and the "<name>" is not "from DJXCOMM", the user must re-install the DataJoiner instance or the DataJoiner product.

If the library identifies a data access module, that module must be installed, link-edited (as required), and available in the correct directory. Refer to the *IBM DataJoiner Planning, Installation, and Configuration Guide* for more information about configuring data access modules.

sqlcode: -10013

sqlstate: 42724

SQL10014N

The invoking DARI program name "<name>" specified is not valid.

Cause: The DARI library module or the DARI program name syntax is not correct.

Action: Ensure that the DARI library or program name is specified correctly.

sqlcode: -10014

sqlstate: 42724

SQL10015N

There are not enough system resources to load the specified library "<name>".

Cause: There is not enough memory to load the library module.

Action: Stop the application. Possible solutions are:

- Remove background processes.
- Decrease the values of the configuration parameters that define the allocation of memory.
- Install more memory.

sqlcode: -10015

sqlstate: 42724

SQL10017N

The SQL CONNECT RESET statement is not allowed in a Database Application Remote Interface (DARI) procedure.

Cause: The remote procedure contains an SQL CONNECT RESET statement.

Action: Remove the SQL CONNECT RESET statement and retry the remote procedure.

sqlcode: -10017

sqlstate: 42987

SQL10018N

The disk is full. Processing was ended.

Cause: The disk is full. During the export to a PC/IXF file, either the PC/IXF data file is on a fixed disk, or the PC/IXF data file and the database are on the same file system, or the PC/IXF data file and the message file are on the same file system.

The EXPORT utility stops processing. The exported data is not complete.

Action: Provide more space on the disk or specify that the data file be located on a different file system than the database or the message file and resubmit the command.

SQL10019N

The database cannot be accessed in the specified path.

Cause: The database cannot be accessed for one of the following reasons:

- The path does not contain a database image.
- Permissions on the path are incorrect.

Action: Ensure that the path references a valid database and that the permissions are correct.

sqlcode: -10019

sqlstate: 58031

SQL10021N

The file permissions do not allow write access to the database.

Cause: A write operation was attempted to a database residing on a file system which does not allow write access.

The statement cannot be processed.

Action: Verify that the file permissions for the file system on which the database resides allow write access.

SQL20000 - SQL20099

SQL20005N

The internal identifier limit for object type "<type>" has been exceeded.

Cause: The create of an object of type "<type>" cannot be processed because the next internal identifier for the object would exceed the maximum value.

The statement cannot be processed.

Action: Drop objects of type "<type>" that are not being used any more.

sqlcode: -20005

sqlstate: 54035

SQL30000 - SQL30099

SQL30000N

Execution failed because of a Distributed Protocol Error that will not affect the successful execution of subsequent commands or SQL statements: Reason Code "<reason-code(subcode)>".

Cause: A system error occurred that prevented successful processing of the current environment command or SQL statement. This message (SQLCODE) is produced at statement compilation or execution time.

The command or statement cannot be processed. The current transaction is not rolled back and the application remains connected to the remote database.

Action: Record the message number and the reason code. Record all error information from the SQLCA, if possible. Attempt to rerun the application.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Required information:

- Problem description
- SQLCODE and reason code
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30000

sqlstate: 58008

SQL30020N

Execution failed because of a Distributed Protocol Error that will affect the successful execution of subsequent commands and SQL statements: Reason Code "<reason-code>".

Cause: A system error occurred that prevented successful execution of the current environment command or SQL statement, as well as any subsequent commands or SQL statements.

The command or statement cannot be processed. The current transaction is rolled back and the application is disconnected from the remote database.

Action: Record the message number (SQLCODE) and the reason code. Record all error information from the SQLCA, if possible. Attempt to connect the remote database and rerun the application.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Required information:

- Problem description
- SQLCODE and reason code
- SQLCA contents if possible
- Trace file if possible.

Some possible reason codes include:

121C Indicates that the user is not authorized to perform the requested command.

1232 The command could not be completed because of a permanent error. In most cases, the server will be in the process of an abend.

220A The target server has received an invalid data description. If a user SQLDA is specified, ensure that the fields are initialized correctly. Also, ensure that the length does not exceed the maximum allowed length for the data type being used.

If you are using the DDCS product in a gateway server environment with downlevel clients, this error may occur if your application's host variables and the queried table's column descriptions do not match.

sqlcode: -30020

sqlstate: 58009

SQL30021N

Execution failed because of a Distributed Protocol Error that will affect the successful execution of subsequent commands and SQL statements: Manager "<manager>" at Level "<level>" not supported.

Cause: A system error occurred that prevented successful connection of the application to the remote database. This message (SQLCODE) is produced for SQL CONNECT statement. "<manager>" and "<level>" are numeric values that identify the incompatibility between the client and the server.

The command cannot be processed.

Action: Record the message number, the "<manager>", and "<level>" values. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database again.

If the problem persists, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Then, contact your service representative with the following information:

- Problem description
- SQLCODE and reason code
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30021

sqlstate: 58010

SQL30040N

Execution failed because of unavailable resources that will not affect the successful execution of subsequent commands and SQL statements: Reason “<reason>”. Type of Resource “<resource-type>”. Resource name “<resource-name>”. Product ID “<product-ID>”.

Cause: The application cannot process the command or SQL statement because the specified resource has run out. The current transaction is not rolled back and the application remains connected to the remote database.

The command cannot be processed.

Action: Increase the size of the specified resource and resubmit the command.

sqlcode: -30040

sqlstate: 57012

SQL30041N

Execution failed because of unavailable resources that will affect the successful execution of subsequent commands and SQL statements: Reason “<reason>”. Type of Resource “<resource-type>”. Resource name “<resource-name>”. Product ID “<product-ID>”.

Cause: The application cannot process the command or SQL statement because resources are not available at the remote database. This SQLCODE is produced at statement compilation or processing time.

DataJoiner users: this situation can be detected by DataJoiner or by the data source. Possible causes are:

- If the “<reason>” is “stubOnly”, “<resource type>” identifies a data source type where the client libraries have been either not link-edited or incorrectly link-edited with DataJoiner. “<resource name>” identifies the data source function DataJoiner attempted to invoke but was unable to find.
- If the “<resource name>” is “Encrypt” or “Decrypt”, the user exits for password encryption or decryption are unavailable or had an error.

The command or statement cannot be processed.

Action: Investigate the remote database system environment.

DataJoiner users:

- If the “<reason>” is “stubOnly”, the data source client libraries must be link-edited with DataJoiner using djxlink as described in the *IBM DataJoiner Planning, Installation, and Configuration Guide*.
- If the password encryption or decryption user exit failed, “<reason>” is the integer value that DataJoiner received when invoking the user exit. Ensure that no errors occurred when the encryption and decryption user exits were link-edited with DataJoiner.

If using a user-supplied user exit, please check the user exit source code to determine why the “<reason>” was returned. If the error is found in the user exit source code, fix the error, link-edit the object code with DataJoiner, and reissue the failing command or statement.

- For all other cases, isolate the problem to the data source failing the request (refer to the *Problem Determination Guide* to determine which data source is failing in processing an SQL statement), correct the problem at the data source, and reissue the failing command or statement.

sqlcode: -30041

sqlstate: 57013

SQL30050N

“<number>” command or SQL statement invalid while bind is in progress.

Cause: An application attempted to issue a command or SQL statement that is not valid while a precompile/bind operation is in progress. <number> is a numeric value that identifies the erroneous command or SQL statement.

The command or statement is not processed.

Action: If the application is not the database manager precompiler/binder, verify that bind is not active before issuing the command or SQL statement.

If the application is the database manager precompiler/binder, record the message number (SQLCODE) and the <number> value. Record all error information from the SQLCA, if possible. Attempt to perform the bind operation again.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and reason code
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30050

sqlstate: 58011

SQL30051N

Bind process with the specified package name and consistency token not active.

Cause: An attempt has been made to issue a precompile/bind operation when precompile/bind is not active or an attempt was made to use an invalid package name and/or consistency token during an active precompile/bind operation.

The command or statement cannot be processed.

Action: If the application is not the database manager, precompiler/binder, verify that precompile/bind is active before issuing the bind operation and that correct information is being passed on the bind operation.

If the application is the database manager precompiler/binder, record the message number (SQLCODE) and all error information from the SQLCA, if possible. Attempt to perform the operation again.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and reason code
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30051

sqlstate: 58012

SQL30052N

Program preparation assumptions are incorrect.

Cause: The SQL statement being compiled is not recognized by the precompiler and cannot be processed by the database.

The statement cannot be processed.

Action: Ensure that the statement is correct and attempt to perform the operation again. If the problem continues, remove the statement from the program.

sqlcode: -30052

sqlstate: 42932

SQL30053N

The value for OWNER failed the authorization check at the remote database.

Cause: The value specified for the OWNER option on the precompile/bind failed the authorization check at the remote database. This SQLCODE is produced during precompile/bind. It is not produced by the database manager precompiler/binder.

The precompile/bind operation cannot be processed.

Action: Ensure that you are authorized to use the ID specified for the OWNER option, or do not use the OWNER option.

sqlcode: -30053

sqlstate: 42506

SQL30060N

"<authorization-ID>" does not have the privilege to perform operation "<operation>".

Cause: Authorization ID <authorization-ID> attempted to perform the specified <operation> without having been granted the proper authorization to do so. This SQLCODE is produced at statement compilation or processing time.

The statement cannot be processed.

Action: Ensure that the <authorization-ID> has been granted the authorization necessary to perform the desired operation.

sqlcode: -30060

sqlstate: 08004

SQL30061N

The database alias or database name “<name>” was not found at the remote node.

Cause: The database name is not an existing database at the remote database node.

The statement cannot be processed.

Action: Resubmit the command with the correct database name or alias.

DataJoiner users: check to ensure that the entry in SYSCAT.SERVERS correctly specifies the database name of the data source.

sqlcode: -30061

sqlstate: 08004

SQL30070N

“<command-identifier>” Command is not supported.

Cause: The remote database received a command that it does not recognize. The current environment command or SQL statement cannot be processed successfully, nor can any subsequent commands or SQL statements.

The current transaction is rolled back and the application is disconnected from the remote database. The statement cannot be processed.

Action: Record the message number (SQLCODE) and the command identifier. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database and rerun the application.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and command identifier
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30070

sqlstate: 58014

SQL30071N

“<object-identifier>” Object is not supported.

Cause: The remote database received data it does not recognize. The current environment command or SQL statement cannot be processed successfully, nor can any subsequent commands or SQL statements.

The current transaction is rolled back and the application is disconnected from the remote database. The command cannot be processed.

Action: Record the message number (SQLCODE) and the object identifier. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database and rerun the application.

If sufficient memory resources exist and the problem continues,

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and object identifier
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30071

sqlstate: 58015

SQL30072N

“<parameter-identifier>” Parameter is not supported.

Cause: The remote database received data it does not recognize. The current environment command or SQL statement cannot be processed successfully, nor can any subsequent commands or SQL statements.

The command cannot be processed.. The current transaction is rolled back and the application is disconnected from the remote database.

Action: Record the message number (SQLCODE) and the parameter identifier. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database and rerun the application.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the

operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and parameter identifier
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30072

sqlstate: 58016

SQL30073N

“<parameter-identifier>” Parameter value
“<value>” is not supported.

Cause: The remote database received data it does not recognize. The current environment command or SQL statement cannot be processed successfully, nor can any subsequent commands or SQL statements.

The current transaction is rolled back and the application is disconnected from the remote database. The command cannot be processed.

Action: Record the message number (SQLCODE) and the parameter identifier. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database and rerun the application.

If sufficient memory resources exist and the problem continues,

If trace was active, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility. Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE, parameter identifier, and value
- SQLCA contents if possible
- Trace file if possible.

Some possible parameter identifiers include:

002F The target server does not support the data type requested by the application requester. For example, when DDCS is used to connect to DB2 2.3, this error will be returned unless the proper PTF is applied to DB2 2.3. Ensure that the level of the server is supported by the requester.

119C, 119D, 119E The target server does not support the CCSID requested by the application requester. Ensure the CCSID used by the requester is supported by the server.

- 119C - Verify the single-byte CCSID.
- 119D - Verify the double-byte CCSID.
- 119E - Verify the mixed-byte CCSID.

sqlcode: -30073

sqlstate: 58017

SQL30074N

“<reply-identifier>” Reply is not supported.

Cause: The client received a reply it does not recognize. The current environment command or SQL statement cannot be processed successfully, nor can any subsequent commands or SQL statements.

The current transaction is rolled back and the application is disconnected from the remote database. The statement cannot be processed.

Action: Record the message number (SQLCODE) and the reply identifier. Record all error information from the SQLCA, if possible. Attempt to connect to the remote database and rerun the application.

If sufficient memory resources exist and the problem continues, invoke the Independent Trace Facility at the operating system command prompt. Refer to the Independent Trace Facility in the *Troubleshooting Guide* for information on how to use this facility.

Contact your technical service representative with the following information:

Required information:

- Problem description
- SQLCODE and reply identifier
- SQLCA contents if possible
- Trace file if possible.

sqlcode: -30074

sqlstate: 58018

SQL30080N

A communication error "<reason-code>" occurred sending or receiving data from the remote database.

Cause:

The "<reason-code>" contains the original error codes reported by Communications Manager.

For APPC error codes, the format is *pppp-sssssss-ddddddd* where *pppp* is the primary return code, *sssssss* is the secondary return code and *ddddddd* is the sense data. Each of these error code values is represented in hexadecimal notation. Possible primary and secondary error codes include 0003-00000004 and 0003-00000005, which indicate that a conversation with the Database Server could not be allocated. Sense data will only be displayed for an APPC ALLOCATE error.

The command cannot be processed. The connection attempted to the database is unsuccessful or the current transaction to the connected database is rolled back and the application is disconnected from the remote database.

Refer to the document *IBM Communications Manager 1.0 APPC Programming Guide and Reference (SC31-6160)* for explanation of the APPC primary and secondary return codes. For details of APPC sense data, refer to the *IBM Communications Manager 1.0 Problem Determination Guide (SC31-6156)*.

Action: Ensure that both the database manager and Communications Manager are started at the Database Server and that all Communications Manager configuration parameters are correct. Also, consult the *Communications Manager/2 APPC Programming Guide & Reference* for further information.

Note: If the reason code embedded in your message is 0003-084C0001 one possible cause for this message is that you are trying to make a remote connection to a workstation that is not a server. Verify that the remote workstation is a server. If it is not a server, install the database manager as a server.

sqlcode: -30080

sqlstate: 08001

SQL30081N

A communication error has been detected.

- Communication protocol being used: <protocol>
- Communication API being used: <interface>
- Location where the error was detected: <location>
- Communication function detecting the error: <function>
- Protocol specific error code(s): <rc1>, <rc2>, <rc3>

Cause: An error has been detected by the communication subsystem.

If the connection has already been established, possible causes include the following:

- A communication subsystem error at the client node or server node has caused the connection to go down.
- A communication subsystem error at the SOCKS server, if one is being used, has caused the connection to go down.
- A network error has caused the connection to go down.
- The database agent at the server was forced off by the system administrator.
- The database agent at the server was terminated due to an abnormal termination of a key database manager process.

If you are trying to establish a new connection, possible causes include the following:

- The remote database server has not been cataloged correctly at the client.
- The database manager configuration file at the server has not been configured with the proper communication parameters.
- The communication subsystem at the client node or server node has not been configured correctly, or has not been started successfully.
- The communication subsystem at the SOCKS server, if one is being used, has not been configured correctly, or has not been started successfully.
- The DB2COMM environment variable at the server doesn't specify the communication protocol used by the client.
- The database manager at the server has not been started, or has not been started successfully. One or more of the communication protocols specified by DB2COMM may not have been successfully started.

Refer to the token values for details. Depending on the protocol being used and the communication function

invoked, some tokens may not be applicable. The following is the explanation of the token values:

<protocol> The actual communication protocol being used. Valid token values are:

- TCP/IP
- APPC
- NETBIOS
- IPX/SPX

<interface> The application programming interface used to invoke the above communication protocol services. Valid token values are:

- SOCKETS
- SOCKS
- CPI-C
- DLR or DD
- TLI or Connection/Bindery

<location> This is a protocol specific ID which uniquely identifies the node that detected the error. If the protocol being used is:

- TCP/IP
The format of the ID is the Internet address in dot notation.
- APPC
The format of the ID is the fully qualified LU name (networkID.LUname).
- NETBIOS
The format of the ID is the Workstation name (nname).
- IPX/SPX
The format of the ID is the network address and node address in hexadecimal notation (network.node).

If the location information is not available at the time that the error occurred, this token is not filled in.

<function> The name of the communication subsystem function that returned the error code(s).

<rc1>, <rc2>, <rc3> The list of the available error codes and subcodes that are specific to each protocol being used. Tokens that are not applicable contain "**".

If the protocol being used is:

- TCP/IP
 - If present, <rc1> contains the global *errno* value from the TCP/IP sockets function call. When using Windows Sockets, if present, <rc1> contains the error from the TCP/IP

sockets function call returned by WSAGetLastError().

- If present, <rc2> contains the global *h_errno* value from the TCP/IP database function call. When using Windows Sockets, if present, <rc2> contains the error from the TCP/IP database function call returned by WSAGetLastError().
- If <rc3> is present and contains "0", it means that the TCP/IP connection has been closed. This could be caused by one of the following:
 - The database agent at the server was forced off by the system administrator.
 - A database agent could not be started at the server because the *maxagents* database manager configuration parameter has been exceeded. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if an error message has been logged.
 - The database agent at the server was terminated due to an abnormal termination of a key database manager process.

Note: When using Windows Sockets, if the <function> is WSASStartup, and <rc1> is 0, then <rc2> contains the Windows Sockets Specification version level requested by DB2, and <rc3> contains the Windows Sockets Specification version level supported by the Windows Sockets DLL.

- APPC
<rc1> contains the return code from the CPI-C function. If present, <rc2> contains the global *errno* value from the CPI-C function call. <rc3> is not applicable.
- NETBIOS
<rc1> contains the return code from the call to NetBIOS. <rc2> and <rc3> are not applicable.
- IPX/SPX
<rc1> contains the global *t_errno* value from the call to TLI Services, or the return code from the call to NetWare Connection or Bindery Services. If the <rc1> *t_errno* is TLOOK, <rc2> contains the TLI event that has occurred. If the <rc2> event is T_DISCONNECT, <rc3> contains the disconnect reason code. On AIX, if the <rc1> *t_errno* is TSYSERR, <rc3> contains the system *errno* (defined in *sys/errno.h*). If <rc1> contains the error return code from a call to AIX NetWare

Connection or Bindery Services, <rc2> contains the error generator.

See the Communications Errors appendix of the Messages Reference for more information on specific communication error codes.

Action:

If the connection has already been established, check if:

1. The database agent at the server has been forced off.
2. The database manager at the server has abnormally terminated.
3. A communication subsystem or network error has occurred. See the Messages Reference for more information on specific communication error codes.

If you are trying to establish a new connection, check if:

1. The remote database server is cataloged properly on the client node.
2. The database manager configuration file at the server is configured with the proper communication related parameters. If the database manager configuration parameters have been updated at the server, ensure that you stop and then re-start the database manager, for the changes to take effect.
3. The communication subsystems on both client and server nodes are configured and started up properly.
4. The DB2COMM environment variable at the server specifies the communication protocol used by the client.
5. The database manager at the server is successfully started. Start database manager processing at the server should have returned SQL1063, and not SQL5043. If SQL5043 is returned, check the First Failure Service Log (DB2DIAG.LOG) for more information.
6. A communication subsystem or network error has occurred.

If the problem persists, consult with your network administrator and/or communication expert to determine the cause of the problem using the set of tokens provided.

sqlcode: -30081

sqlstate: 08001

SQL30082N

Attempt to establish connection failed with security reason "<reason-code>" ("<reason-string>").

Cause: The attempt to connect to the 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 corresponding <reason-string> value.

The following is a list of reason codes and corresponding reason strings:

0 (NOT SPECIFIED)

The specific security error is not specified.

1 (PASSWORD EXPIRED)

The password specified in the request has expired.

2 (PASSWORD INVALID)

The password specified in the request is not valid.

3 (PASSWORD MISSING)

The request did not include a password.

4 (PROTOCOL VIOLATION)

The request violated security protocols.

5 (USERID MISSING)

The request did not include a userid.

6 (USERID INVALID)

The userid specified in the request is not valid.

7 (USERID REVOKED)

The userid specified in the request has been revoked.

8 (GROUP INVALID)

The group specified in the request is not valid.

9 (USERID REVOKED IN GROUP)

The userid specified in the request has been revoked in the group.

10 (USERID NOT IN GROUP)

The userid specified in the request is not in the group.

11 (USERID NOT AUTHORIZED AT REMOTE LU)

The userid specified in the request is not authorized at the remote Logical Unit.

12 (USERID NOT AUTHORIZED FROM LOCAL LU)

The userid specified in the request is not authorized at the remote Logical Unit when coming from the local Logical Unit.

13 (USERID NOT AUTHORIZED TO TP)

The userid specified in the request is not authorized to access the Transaction Program.

14 (INSTALLATION EXIT FAILED)

The installation exit failed.

15 (PROCESSING FAILURE)

Security processing at the server failed.

16 (NEW PASSWORD INVALID)

the password specified on a change password request did not meet the server's requirements.

17 (UNSUPPORTED FUNCTION)

the security mechanism specified by the client is invalid for this server. Some typical examples:

- The client sent a new password value to a server that does not support the DRDA change password function.
- The client sent DCE authentication information to a server that does not support DCE.

18 (NAMED PIPE ACCESS DENIED)

The named pipe is inaccessible due to a security violation.

19 (USERID DISABLED or RESTRICTED)

The userid has been disabled, or the userid has been restricted from accessing the operating environment at this time.

20 (MUTUAL AUTHENTICATION FAILED)

The server being contacted failed to pass a mutual authentication check. The server is either an imposter, or the ticket sent back was damaged.

Action: Ensure that the proper userid and/or password is supplied. For reason code 20, make sure the authentication mechanism for the server is started, and retry.

The userid may be disabled, the userid may be restricted to accessing specific workstations, or the userid may be restricted to certain hours of operation.

sqlcode: -30082

sqlstate: 08001

SQL30090N

Operation invalid for application execution environment. Reason code = "<reason-code>"

Cause: The operation is invalid for the application execution environment. Applications operating in an XA Distributed Transaction Processing environment (such as CICS), applications operating with CONNECT type 2 connection settings, and applications updating multiple data sources in a DataJoiner database have special restrictions on statements or APIs. The operation was rejected.

Possible reason codes are:

- 01 - an SQL request that changes data (such as an INSERT or a CREATE) was issued against a read-only database; or, a stored procedure was invoked against a read-only database. Read-only databases include the following types:
 - Databases accessed using DRDA when operating in a unit of work which has connection setting SYNCPOINT TWOPHASE and executing in a non-XA/DTP environment when either a Synchpoint Manager is not being used or the remote DRDA database does not support level 2 DRDA protocol.
 - Databases accessed by DRDA in an XA/DTP environment when either a Synchpoint Manager gateway is unavailable or the remote DRDA database does not support level 2 DRDA protocol.
 - Databases which were not the first database updated when the SYNCPOINT ONEPHASE connection setting is in effect for the unit of work.
- 02 - an API such as Precompile, Bind, or Reorganize Table which causes internal commits was issued in an application which has the setting CONNECT type 2 or is operating in an XA/DTP environment.
- 03 - an SQL OPEN for a held cursor was issued while in an XA/DTP environment when using an ENCINA or TUXEDO transaction processing monitor.
- 04 - a DISCONNECT statement was issued while in an XA/DTP environment.
- 05 - A compound SQL statement which contains a COMMIT statement was issued in a CONNECT type 2 or XA/DTP environment.
- 06 - The SET CLIENT API was issued in an XA/DTP environment.

- 07 - A second database is being accessed within a unit of work for which two-phase commit coordination is not being supplied by the transaction manager. To ensure data integrity, the operation has been disallowed.
- 08 - An attempt was made to access a database for use of commit coordination from a source different from a concurrently connected database. The two types of coordination cannot be mixed, and operations against the current database are rejected.
- 09 - An attempt was made to execute an XA/DTP local transaction against a database accessed under Synchpoint Manager coordination.
- 10 - An SQL OPEN for a held cursor was issued in either of these cases:
 - XA/DTP environment, or
 - DataJoiner accessing a nickname defined on a two phase commit datasource

Cursor hold is not supported in these environments.

- 11 - An operation is not supported for pass-through.
- 12 - The update/delete operation requires the existence of a timestamp column and a unique index due to the restriction on the data source.

For an update/delete operation accessing data sources:

- Sybase requires the existence of a timestamp column and a unique index if the protocol column in SYSCAT.SERVERS is 'dblib'
- Fujitsu RDB2 requires the existence of a unique index.
- 13 - A positioned UPDATE or DELETE operation requires the existence of a column in the SELECT list of the cursor, but that column does not exist in the SELECT list of the cursor.
- 14 - An illegal combination of updatable cursors, cursor hold, and isolation level of Repeatable Read exists. Invalid combinations are:
 - Isolation level Repeatable Read and a WITH HOLD cursor
 - A WITH HOLD cursor with FOR UPDATE
- 15 - Reserved for future use
- 16 - Illegal type column and protocol column value combination in SYSCAT.SERVERS.
- 17 - The REORG utility cannot be issued against a nickname.

- 18 - An update request has been issued that would result in multiple data sources being updated when one or more of the data sources in the unit of work only supports one-phase commit. Possible causes are:
 - An attempt was made to update a data source that only supports one-phase commit, but a different data source has already been updated in the same unit of work.
 - An attempt was made to update a data source that supports two-phase commit, but a different data source that only supports one-phase commit has already been updated in the same unit of work.
 - An attempt was made to update a local DataJoiner table, but a data source that only supports one-phase commit has already been updated in the same unit of work.
- 19 - The application host variable data type is not supported by the data source in a pass-through session.

Action:

Correct the problem by doing one of the following steps:

- For reasons 01, 02, 03, 04, 06, or 19, remove the statement or API which is not supported.
- Alternately, for reasons 01, 02, 03, 04, or 06, execute the application in a different environment which supports the failing statement or API.
- For reason 05 move the COMMIT request outside of the compound statement.
- For reason 07, ensure that only one database is accessed within a unit of work for which EXEC SQL COMMIT or EXEC SQL ROLLBACK will be issued in place of syncpoint requests to an external transaction manager. If multiple databases must be accessed within the unit of work, utilize the commitment control interface provided by the external transaction manager product.
- For reason 08, ensure that all databases being accessed within a unit of work are under the commitment control of the same type of request: external transaction processing monitor (such as CICS SYNCPOINT) or local COMMIT and ROLLBACK EXEC SQL.
- For reason 09, do one of the following steps:
 - Execute the transaction as an XA/DTP global transaction.
 - Access the database in a non-XA/DTP environment.

- Do not use the services of the Synchpoint Manager for the database connection if the transaction is read-only.
- For reasons 10 through 17 (DataJoiner users), isolate the problem to the data source failing the request (see the *Problem Determination Guide*) and examine the restrictions for that data source.
- For reason 18, do one of the following steps:
 - Submit a COMMIT or ROLLBACK before issuing an update to a different data source.
 - If multiple data sources need to be updated within a unit of work, make sure the 'two_phase_commit' server option has been set to 'Y' for all the data sources that need to be updated.

sqlcode: -30090

sqlstate: 25000

SQL30100 - SQL30199

SQL30101W

Bind options specified on REBIND request are ignored.

Cause: Bind options were specified on the REBIND request however the database server does not support respecification of any bind options. The bind options specified will be ignored and the options from the original BIND request will be used.

Action: No action is required. This is a warning situation only.

If the database server returned an additional warning SQLCA, the "sqlerrmc" tokens will indicate the following information about this additional SQLCA in this order:

- sqlcode (SQL return code)
- sqlstate (universal SQL return code)
- sqlerrp (product name)
- sqlerrmc (SQL message tokens)

sqlcode: +30101

sqlstate: 01599

Chapter 10. SQLSTATE Messages

Table 1. SQLSTATE Class Codes

Class Code	Meaning	For subcodes, refer to...
00	Unqualified Successful Completion	Table 2 on page 486
01	Warning	Table 3 on page 486
02	No Data	Table 4 on page 488
07	Dynamic SQL Error	Table 5 on page 488
08	Connection Exception	Table 6 on page 488
09	Triggered Action Exception	Table 7 on page 489
0A	Feature Not Supported	Table 8 on page 489
0F	Invalid Token	Table 9 on page 489
21	Cardinality Violation	Table 10 on page 489
22	Data Exception	Table 11 on page 489
23	Constraint Violation	Table 12 on page 490
24	Invalid Cursor State	Table 13 on page 491
25	Invalid Transaction State	Table 14 on page 491
26	Invalid SQL Statement Identifier	Table 15 on page 491
28	Invalid Authorization Specification	Table 16 on page 492
2D	Invalid Transaction Termination	Table 17 on page 492
2E	Invalid Connection Name	Table 18 on page 492
34	Invalid Cursor Name	Table 19 on page 492
38	External Function Exception	Table 20 on page 492
39	External Function Call Exception	Table 21 on page 493
40	Transaction Rollback	Table 22 on page 493
42	Syntax Error or Access Rule Violation	Table 23 on page 493
44	WITH CHECK OPTION Violation	Table 24 on page 499
51	Invalid Application State	Table 25 on page 499
54	SQL or Product Limit Exceeded	Table 26 on page 500
55	Object Not in Prerequisite State	Table 27 on page 500
56	Miscellaneous SQL or Product Error	Table 28 on page 501
57	Resource Not Available or Operator Intervention	Table 29 on page 502
58	System Error	Table 30 on page 502

Table 2. Class Code 00: Unqualified Successful Completion

SQLSTATE	
Value	Meaning
00000	Execution of the SQL statement was successful and did not result in any type of warning or exception condition.

Table 3 (Page 1 of 3). Class Code 01: Warning

SQLSTATE	
Value	Meaning
01002	A DISCONNECT error occurred.
01003	Null values were eliminated from the argument of a column function.
01004	The value of a string was truncated when assigned to a host variable.
01005	Insufficient number of entries in an SQLDA.
01007	A privilege was not granted.
01503	The number of result columns is larger than the number of host variables provided.
01504	The UPDATE or DELETE statement does not include a WHERE clause.
01506	An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.
01509	Blocking was cancelled for a cursor because there is insufficient storage in the user virtual machine.
01515	The null value has been assigned to a host variable, because the non-null value of the column is not within the range of the host variable.
01516	An inapplicable WITH GRANT OPTION has been ignored.
01517	A character that could not be converted was replaced with a substitute character.
01519	The null value has been assigned to a host variable, because a numeric value is out of range.
01524	The result of a column function does not include the null values that were caused by evaluating an arithmetic expression.
01526	Isolation level has been escalated.
01539	Connection is successful but only SBCS characters should be used.
01543	A duplicate constraint has been ignored.
01545	An unqualified column name has been interpreted as a correlated reference.
01550	The index was not created, because an index with the specified description already exists.
01560	A redundant GRANT has been ignored.
01562	The new path to the log (newlogpath) in the database configuration file is invalid.
01563	The current path to the log file (logpath) is invalid. The log file path is reset to the default.

Table 3 (Page 2 of 3). Class Code 01: Warning

SQLSTATE	
Value	Meaning
01564	The null value has been assigned to a host variable, because division by zero occurred.
01586	Setting OFF the constraints for a parent table in a referential structure has resulted in one or more descendent tables being automatically placed into a check-pending state
01589	A statement contains redundant specifications.
01592	In a CREATE FUNCTION statement that references a SOURCE function, either: <ul style="list-style-type: none"> • an input parameter has a larger length, precision, or scale than that of the corresponding parameter of the source function; or • the RETURNS or CAST FROM parameter has a smaller length, precision, or scale than that of the source function; or • the CAST FROM parameter in the CREATE FUNCTION statement has a larger length, precision, or scale than that of the RETURNS parameter. Truncation may occur at run time (and may result in an error at that time).
01594	Insufficient number of entries in an SQLDA for ALL information (i.e. not enough descriptors to return the distinct name).
01595	The view has replaced an existing, invalidated view.
01596	Comparison functions were not created for a distinct type based on a long string data type.
01598	An attempt has been made to activate an active event monitor or deactivate an inactive event monitor.
01599	Bind options were ignored on REBIND.
01602	The optimization level has been reduced.
01603	CHECK DATA processing found constraint violations and moved them to exception tables.
01604	The SQL statement was explained and not executed.
01605	A recursive common table expression may contain an infinite loop.
01606	The node or system database directory is empty.
01607	The difference between the times on nodes in a read-only transactions exceed the defined threshold.
01610	One or more ad hoc result sets were returned from the procedure.
01611	The cursor that was closed has been re-opened on the next result set within the chain.
01618	Redistribute nodegroup is required to change data partitioning.
01620	Some base tables of UNION ALL may be the same table.
01621	The retrieved LOB value may have been changed.
01622	Statement completed successfully but a system error occurred after the statement completed.
01623	Value of DEGREE is ignored.

Table 3 (Page 3 of 3). Class Code 01: Warning

SQLSTATE	
Value	Meaning
01626	The database has only one active bufferpool.
01Hxx	Valid warning SQLSTATEs returned by a user-defined function or external procedure CALL.

Table 4. Class Code 02: No Data

SQLSTATE	
Value	Meaning
02000	One of the following exceptions occurred: <ul style="list-style-type: none">• 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.

Table 5. Class Code 07: Dynamic SQL Error

SQLSTATE	
Value	Meaning
07001	The number of host variables is not the same as the number of parameter markers.
07002	The call parameter list or control block is invalid.
07003	The statement identified in the EXECUTE statement is a select-statement, or is not in a prepared state.
07004	The USING clause is required for dynamic parameters.
07005	The statement name of the cursor identifies a prepared statement that cannot be associated with a cursor.
07006	An input host variable cannot be used, because of its data type.

Table 6 (Page 1 of 2). Class Code 08: Connection Exception

SQLSTATE	
Value	Meaning
08001	The application requester is unable to establish the connection.
08002	The connection already exists.
08003	The connection does not exist.
08004	The application server rejected establishment of the connection.
08007	Transaction resolution unknown.

Table 6 (Page 2 of 2). Class Code 08: Connection Exception

SQLSTATE

Value	Meaning
08502	The CONNECT statement issued by an application process running with a SYNCPOINT of TWOPHASE has failed, because no transaction manager is available.

Table 7. Class Code 09: Triggered Action Exception

SQLSTATE

Value	Meaning
09000	A triggered SQL statement failed.

Table 8. Class Code 0A: Feature Not Supported

SQLSTATE

Value	Meaning
0A001	The CONNECT statement is invalid, because the process is not in the connectable state.

Table 9. Class Code 0F: Invalid Token

SQLSTATE

Value	Meaning
0F001	The LOB token variable does not currently represent any value.

Table 10. Class Code 21: Cardinality Violation

SQLSTATE

Value	Meaning
21000	The result of a SELECT INTO is a result table of more than one row, or the result of the subquery of a basic predicate is more than one value.
21501	A multiple-row INSERT into a self-referencing table is invalid.
21502	A multiple-row UPDATE of a primary key is invalid.
21504	A multiple-row DELETE from a self-referencing table with a delete rule of RESTRICT or SET NULL is invalid.

Table 11 (Page 1 of 2). Class Code 22: Data Exception

SQLSTATE

Value	Meaning
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.

Table 11 (Page 2 of 2). Class Code 22: Data Exception

SQLSTATE	
Value	Meaning
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.
22003	A numeric value is out of range.
22007	An invalid datetime format was detected; that is, an invalid string representation or value was specified.
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.
22011	A substrings error occurred; for example, an argument of SUBSTR is out of range.
22012	Division by zero is invalid.
22018	The character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid.
22019	The LIKE predicate has an invalid escape character.
22021	A character is not in the coded character set.
22024	A NUL-terminated input host variable or parameter did not contain a NUL.
22025	The LIKE predicate string pattern contains an invalid occurrence of an escape character.
22501	The length control field of a variable length string is negative or greater than the maximum.
22504	A mixed data value is invalid.
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.
22522	A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.

Table 12 (Page 1 of 2). Class Code 23: Constraint Violation

SQLSTATE	
Value	Meaning
23001	The update or delete of a parent key is prevented by a RESTRICT update or delete rule.
23502	An insert or update value is null, but the column cannot contain null values.
23503	The insert or update value of a foreign key is invalid.
23504	The update or delete of a parent key is prevented by a NO ACTION update or delete rule.
23505	A violation of the constraint imposed by a unique index or a unique constraint occurred.
23510	A violation of a constraint on the use of the command imposed by the RLST table occurred.

Table 12 (Page 2 of 2). Class Code 23: Constraint Violation

SQLSTATE Value	Meaning
23511	A parent row cannot be deleted, because the check constraint restricts the deletion.
23512	The check constraint cannot be added, because the table contains rows that do not satisfy the constraint definition.
23513	The resulting row of the INSERT or UPDATE does not conform to the check constraint definition.
23514	Check data processing has found constraint violations.
23515	The unique index could not be created or unique constraint added, because the table contains duplicate values of the specified key.
23520	The foreign key cannot be defined, because all of its values are not equal to a parent key of the parent table.
23521	The update of a catalog table violates an internal constraint.

Table 13. Class Code 24: Invalid Cursor State

SQLSTATE Value	Meaning
24501	The identified cursor is not open.
24502	The cursor identified in an OPEN statement is already open.
24504	The cursor identified in the UPDATE, DELETE, SET, or GET statement is not positioned on a row.
24506	The statement identified in the PREPARE is the statement of an open cursor.
24514	A previous error has disabled this cursor.

Table 14. Class Code 25: Invalid Transaction State

SQLSTATE Value	Meaning
25000	An update operation is invalid for the application execution environment.
25501	The statement is only allowed as the first statement in a unit of work.

Table 15. Class Code 26: Invalid SQL Statement Identifier

SQLSTATE Value	Meaning
26501	The statement identified does not exist.

Table 16. Class Code 28: Invalid Authorization Specification

SQLSTATE	
Value	Meaning
28000	Authorization name is invalid.

Table 17. Class Code 2D: Invalid Transaction Termination

SQLSTATE	
Value	Meaning
2D521	SQL COMMIT or ROLLBACK are invalid in the current operating environment.
2D528	Dynamic COMMIT is invalid for the application execution environment.
2D529	Dynamic ROLLBACK is invalid for the application execution environment.

Table 18. Class Code 2E: Invalid Connection Name

SQLSTATE	
Value	Meaning
2E000	Connection name is invalid.

Table 19. Class Code 34: Invalid Cursor Name

SQLSTATE	
Value	Meaning
34000	Cursor name is invalid.

Table 20 (Page 1 of 2). Class Code 38: External Function Exception

SQLSTATE	
Value	Meaning
38xxx	Valid error SQLSTATEs returned by a user-defined function, external procedure, or trigger.
38501	Error occurred while calling a user-defined function, external procedure, or trigger (using the SIMPLE CALL or SIMPLE CALL WITH NULLS calling convention).
38502	The external function is not allowed to execute SQL statements.
38503	A user-defined function has abnormally terminated (abend).
38504	A user-defined function has been interrupted by the user to stop a probable looping condition.

Table 20 (Page 2 of 2). Class Code 38: External Function Exception

SQLSTATE	
Value	Meaning
38552	A function in the SYSFUN schema (supplied by IBM) has abnormally terminated. One of the following reason codes can be found in the message text: 01 Numeric value out of range 02 Division by zero 03 Arithmetic overflow or underflow 04 Invalid date format 05 Invalid time format 06 Invalid timestamp format 07 Invalid character representation of a timestamp duration 08 Invalid interval type (must be one of 1, 2, 4, 8, 16, 32, 64, 128, 256) 09 String too long 10 Length or position in string function out of range 11 Invalid character representation of a floating point number

Table 21. Class Code 39: External Function Call Exception

SQLSTATE	
Value	Meaning
39001	A user-defined function has returned an invalid SQLSTATE.
39501	The eye-catcher associated with an argument was modified.

Table 22. Class Code 40: Transaction Rollback

SQLSTATE	
Value	Meaning
40001	Deadlock or timeout with automatic rollback occurred.
40003	The statement completion is unknown.
40504	A system error has caused the unit of work to be rolled back.
40506	The current transaction was rolled back because of an SQL error.

Table 23 (Page 1 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42501	The authorization ID does not have the privilege to perform the specified operation on the identified object.
42502	The authorization ID does not have the privilege to perform the operation as specified.
42504	A specified privilege cannot be revoked from a specified authorization-name.
42506	Owner authorization failure occurred.
42508	The specified database privileges cannot be granted to PUBLIC.
42601	A character, token, or clause is invalid or missing.

Table 23 (Page 2 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42602	A character that is invalid in a name has been detected.
42603	An unterminated string constant has been detected.
42604	An invalid numeric or string constant has been detected.
42605	The number of arguments specified for a scalar function is invalid.
42606	An invalid hexadecimal constant has been detected.
42607	An operand of a column function is invalid.
42608	The use of NULL or DEFAULT in VALUES is invalid.
42609	All operands of an operator or predicate are parameter markers.
42610	A parameter marker is not allowed.
42611	The column or argument definition is invalid.
42612	The statement string is an SQL statement that is not acceptable in the context in which it is presented.
42613	Clauses are mutually exclusive.
42614	A duplicate keyword is invalid.
42615	An invalid alternative was detected.
42617	The statement string is blank or empty.
42618	A host variable is not allowed.
42621	The check constraint is invalid.
42622	A name or label is too long.
42625	A CASE expression is invalid.
42701	A duplicate column name in an INSERT or UPDATE statement was detected.
42702	A column reference is ambiguous, because of duplicate names.
42703	An undefined column name was detected.
42704	An undefined object or constraint name was detected.
42705	An undefined server-name was detected.
42707	A column name in ORDER BY does not identify a column of the result table.
42709	A duplicate column name in a PRIMARY, UNIQUE, or FOREIGN KEY clause was detected.
42710	A duplicate object or constraint name was detected.
42711	A duplicate column name was detected in the object definition or ALTER TABLE statement.
42712	A duplicate table designator was detected in the FROM clause.
42720	The nodename for the remote database was not found in the node directory.
42723	A function with the same signature already exists in the schema.

Table 23 (Page 3 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42724	Unable to access an external program used for a user-defined function or a procedure.
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 function.
42726	Duplicate names for named derived tables were detected.
42727	No default primary tablespace exists for the new table.
42728	A duplicate node was detected in the nodegroup definition.
42729	The node is not defined.
42730	The container name is already used by another tablespace.
42731	The container name is already used by this tablespace.
42732	A duplicate schema name in the SET CURRENT PATH statement was detected.
42735	Nodegroup for the table space is not defined for the buffer pool.
42802	The number of insert or update values is not the same as the number of columns.
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.
42804	The result expressions in a CASE expression are not compatible.
42805	An integer in the ORDER BY clause does not identify a column of the result table.
42806	A value cannot be assigned to a host variable, because the data types are not compatible.
42807	The INSERT, UPDATE, or DELETE is not permitted on this object.
42808	A column identified in the INSERT or UPDATE statement is not updateable.
42809	The identified object is not the type of object to which the statement applies.
42810	A view is identified in a FOREIGN KEY clause.
42811	The number of columns specified is not the same as the number of columns in the SELECT clause.
42813	WITH CHECK OPTION cannot be used for the specified view.
42815	The data type, length, scale, value, or CCSID is invalid.
42816	A datetime value or duration in an expression is invalid.
42818	The operands of an operator or function are not compatible.
42819	An operand of an arithmetic operation or an operand of a function that requires a number is not a number.
42820	A numeric constant is too long, or it has a value that is not within the range of its data type.
42821	An update or insert value is not compatible with the column.
42823	The SELECT clause of a subquery specifies multiple columns.
42824	An operand of LIKE is not a string, or the first operand is not a column.

Table 23 (Page 4 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42825	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have compatible columns.
42826	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have the same number of columns.
42827	The table identified in the UPDATE or DELETE is not the same table designated by the cursor.
42828	The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.
42829	FOR UPDATE OF is invalid, because the result table designated by the cursor cannot be modified.
42830	The foreign key does not conform to the description of the parent key.
42831	A column of a primary or unique key cannot allow null values.
42832	The operation is not allowed on system objects.
42834	SET NULL cannot be specified, because the foreign key does not allow null values.
42835	Cyclic references cannot be specified between named derived tables.
42836	The specification of a recursive, named derived table is invalid.
42838	An invalid use of a tablespace was detected.
42839	Indexes and long columns cannot be in separate tablespaces from the table.
42840	An invalid use of the AS CAST option was detected.
42841	A parameter marker can not be a user-defined type.
42842	A column definition is invalid, because a specified option is inconsistent with the column description.
42845	An invalid use of a VARIANT or EXTERNAL ACTION function was detected.
42846	Cast from source type to target type is not supported.
42852	The privileges specified in GRANT or REVOKE are invalid or inconsistent. (For example, GRANT ALTER on a view.)
42863	An undefined host variable in REXX has been detected.
42866	The data type in either the RETURNS clause of the CAST FROM clause in the CREATE FUNCTION statement is not appropriate for the data type returned by the source function.
42875	The object to create within CREATE SCHEMA must have the same qualifier as the schema name.
42877	The column name cannot be qualified.
42878	An invalid function or procedure name was used with the EXTERNAL keyword.
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.

Table 23 (Page 5 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42880	The CAST TO and CAST FROM data types are incompatible, or would always result in truncation of a fixed string.
42882	The specific instance name qualifier is not equal to the function name qualifier.
42883	No function was found with a matching signature.
42884	No function or procedure was found with the specified name and compatible arguments.
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.
42888	The table does not have a primary key.
42889	The table already has a primary key.
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.
42891	A duplicate UNIQUE constraint already exists.
42893	The object or constraint cannot be dropped, because other objects are dependent on it.
42894	The DEFAULT value is invalid.
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.
428A0	An error occurred with the sourced function on which the user-defined function is based.
428A1	Unable to access a file referenced by a host file variable.
428A2	A table cannot be assigned to a multi-node node group, because it does not have a partition key.
428A3	An invalid path has been specified for an event monitor.
428A4	An invalid value has been specified for an event monitor option.
428A5	An exception table named in a SET CONSTRAINTS statement either does not have the proper structure, or it has been defined with constraints or triggers.
428A6	An exception table named in a SET CONSTRAINTS statement cannot be the same as one of the tables being checked.
428A7	There is a mismatch in the number of tables being checked and in the number of exception tables specified in the SET CONSTRAINTS statement.
428A8	Cannot reset the check-pending state using the SET CONSTRAINTS statement on a descendent table while a parent table is in the check-pending state.
428A9	The node range is invalid.
428B0	Illegal nesting inside ROLLUP, CUBE, or GROUPING SETS.
428B1	Incorrect number of table space container specifications that are not designated for specific nodes.

Table 23 (Page 6 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
428B2	The path name for the container is not valid.
428B3	An invalid SQLSTATE was specified on RAISE_ERROR.
428C0	The node cannot be dropped, because it is the only node in the nodegroup.
428C4	The number of elements on each side of the predicate operator is not the same.
428C5	No data type mapping was found for a data type from the data source.
42901	A column function does not include a column name.
42903	A WHERE clause or SET clause includes an invalid reference, such as a column function.
42907	The string is too long.
42908	The statement does not include a required column list.
42911	A decimal divide operation is invalid, because the result would have a negative scale.
42912	A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.
42914	The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.
42915	An invalid referential constraint has been detected.
42916	The alias cannot be created, because it would result in a repetitive chain of aliases.
42917	The object cannot be explicitly dropped.
42918	A user-defined data type cannot be created with a system-defined data type name (for example, INTEGER).
42921	Containers cannot be added to the tablespace.
42925	Recursive named derived tables cannot specify SELECT DISTINCT and must specify UNION ALL.
42932	The program preparation assumptions are incorrect.
42939	The object cannot be created, because the specified identifier is reserved for system use.
42962	A long column or a LOB column cannot be used in an index, a key, or a constraint.
42968	The connection failed, because there is no current software license.
42969	The package was not created and the current unit of work was rolled back, because of internal limitations or an invalid section number.
42972	An expression in a join-condition references columns in more than one of the operand tables.
42987	The statement is not allowed in a procedure or trigger.
42991	The BOOLEAN data type is currently only supported internally.

Table 23 (Page 7 of 7). Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE	
Value	Meaning
42993	The column, as defined, is too large to be logged.
42994	Raw device containers are not currently supported on this system.
42997	A unique index or unique constraint is not allowed because the key columns are not a superset of the partitioned key columns.
429A0	A foreign key cannot reference a parent table defined as not logged initially.
429A1	Nodegroup is not valid for the table space.
429A9	SQL statement cannot be processed by DataJoiner.

Table 24. Class Code 44: WITH CHECK OPTION Violation

SQLSTATE	
Value	Meaning
44000	The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition.

Table 25 (Page 1 of 2). Class Code 51: Invalid Application State

SQLSTATE	
Value	Meaning
51002	The package corresponding to an SQL statement execution request was not found.
51003	Consistency tokens do not match.
51004	An address in the SQLDA is invalid.
51005	The previous system error has disabled this function.
51008	The release number of the precompiled program is not valid.
51017	The user is not logged on.
51021	SQL statements cannot be executed until the application process executes a rollback operation.
51022	A CONNECT that specifies an authorization name is invalid when a connection (either current or dormant) already exists to the server named in that CONNECT statement.
51023	The database is already in use by another instance of the database manager.
51024	A view cannot be used, because it has been marked inoperative.
51025	An application in the XA transaction processing environment is not bound with SYNCPOINT TWOPHASE.
51026	An event monitor cannot be turned on, because its target path is already in use by another event monitor.
51027	The IMMEDIATE CHECKED option of the SET CONSTRAINTS statement is not valid since a table is not in the check-pending state.

Table 25 (Page 2 of 2). Class Code 51: Invalid Application State

SQLSTATE	
Value	Meaning
51028	A package cannot be used, because it is marked inoperative.

Table 26. Class Code 54: SQL or Product Limit Exceeded

SQLSTATE	
Value	Meaning
54001	The statement is too long or too complex.
54002	A string constant is too long.
54004	The statement has too many table names or too many items in a SELECT or INSERT list.
54006	The result of concatenation is too long.
54008	The key is too long, or has too many columns.
54010	The record length of the table is too long.
54011	Too many columns were specified for a table or view.
54023	The limit for the number of parameters or arguments for a function or a procedure has been exceeded.
54028	The maximum number of concurrent LOB handles has been reached.
54029	The maximum number of open directory scans has been reached.
54030	The maximum number of event monitors are already active.
54031	The maximum number of files have already been assigned the event monitor.
54032	The maximum size of a table has been reached.
54033	The maximum number of partitioning maps has been reached.
54034	The combined length of all container names for the tablespace is too long.
54035	An internal object limit exceeded.
54036	The path name for the container is too long.
54037	The container map for the tablespace is too complicated.
54038	Maximum depth of cascaded triggers exceeded.

Table 27 (Page 1 of 2). Class Code 55: Object Not in Prerequisite State

SQLSTATE	
Value	Meaning
55001	The database must be migrated.
55002	The explanation table is not defined properly.
55006	The object cannot be dropped, because it is currently in use by the same application process.
55007	The object cannot be altered, because it is currently in use by the same application process.

Table 27 (Page 2 of 2). Class Code 55: Object Not in Prerequisite State

SQLSTATE	
Value	Meaning
55009	The system attempted to write to a read-only file or a write-protected diskette.
55019	The table is in an invalid state for the operation.
55024	The tablespace cannot be dropped, because data related to a table is also in another tablespace.
55025	The database must be restarted.
55026	A temporary tablespace cannot be dropped.
55031	The format of the error mapping file is incorrect.
55032	The CONNECT statement is invalid, because the database manager was stopped after this application was started.
55033	An event monitor cannot be activated in the same unit of work in which it is created or modified.
55034	An active event monitor cannot be dropped.
55036	The node cannot be dropped, because it has not been removed from the partitioning map.
55037	The partitioning key cannot be dropped, because the table is in a multi-node nodegroup.
55038	The nodegroup cannot be used, because it is being rebalanced.
55039	The access or state transition is not allowed, because the tablespace is not in an appropriate state.
55041	Containers cannot be added to a tablespace while a rebalance is in progress.

Table 28. Class Code 56: Miscellaneous SQL or Product Error

SQLSTATE	
Value	Meaning
56031	The clause or scalar function is invalid, because mixed and DBCS data are not supported on this system.
56084	LOB data is not supported in DRDA.
56091	Multiple errors occurred as a result of executing a compound SQL statement.
56092	The type of authorization cannot be determined, because the authorization name is both a user id and group id.
56097	LONG VARCHAR and LONG VARGRAPHIC fields are not permitted in TABLESPACEs which are built on DEVICES.
56098	An error occurred during implicit rebind or prepare.
56099	The REAL data type is not supported by the target database.
560A0	Action on a LOB value failed.

Table 29. Class Code 57: Resource Not Available or Operator Intervention

SQLSTATE	
Value	Meaning
57007	The object cannot be used, because a DROP or ALTER is pending.
57009	Virtual storage or database resource is temporarily unavailable.
57011	Virtual storage or database resource is not available.
57012	A non-database resource is not available. This will not affect the successful execution of subsequent statements.
57013	A non-database resource is not available. This will affect the successful execution of subsequent statements.
57014	Processing was canceled as requested.
57016	The table cannot be accessed, because it is inactive.
57017	Character conversion is not defined.
57019	The statement was not successful, because of a problem with a resource.
57020	The drive containing the database is locked.
57021	The diskette drive door is open.
57030	Connection to application server would exceed the installation-defined limit.
57032	The maximum number of concurrent databases have already been started.
57033	Deadlock or timeout occurred without automatic rollback.
57036	The transaction log does not belong to the current database.
57046	A new transaction cannot start because the database or instance is quiesced.
57047	An internal database file cannot be created, because the directory is not accessible.
57048	An error occurred while accessing a container for a tablespace.
57049	The operating system process limit has been reached.
57052	Node is unavailable, because it does not have containers for all temporary table spaces.

Table 30 (Page 1 of 2). Class Code 58: System Error

SQLSTATE	
Value	Meaning
58004	A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.
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.
58009	Execution failed due to a distribution protocol error that caused deallocation of the conversation.

Table 30 (Page 2 of 2). Class Code 58: System Error

SQLSTATE	
Value	Meaning
58010	Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.
58011	The DDM command is invalid while the bind process in progress.
58012	The bind process with the specified package name and consistency token is not active.
58014	The DDM command is not supported.
58015	The DDM object is not supported.
58016	The DDM parameter is not supported.
58017	The DDM parameter value is not supported.
58018	The DDM reply message is not supported.
58023	A system error has caused the current program to be canceled.
58030	An I/O error has occurred.
58031	The connection was unsuccessful, because of a system error.
58032	Unable to use the process for a fenced mode user-defined function.
58034	An error was detected while attempting to find pages for an object in a DMS tablespace.
58035	An error was detected while attempting to free pages for an object in a DMS tablespace.
58036	The internal tablespace ID specified does not exist.

Appendix A. Communications Errors

If your application returns an sqlcode of -30081, it means that a communications error has been detected. The actual error encountered by the communication subsystem is returned in the list of error tokens for the 30081 error message. The following lists possible communications errors that can be returned.

The error codes are grouped by protocol as follows:

- “TCP/IP”
- “APPC” on page 509
- “NETBIOS” on page 511
- “IPX/SPX” on page 513

TCP/IP

When using TCP/IP in a Unix environment, the following table lists some of the *errno*s which the user may encounter most frequently. It is NOT a complete list of errors. *Errnos* can be found in the file `/usr/include/sys/errno.h`. The *errno* number itself is indicated for each operating system.

Table 31 (Page 1 of 2). Unix TCP/IP *errno*s.

Errno	Errno Number			Description
	AIX	HP-UX	Solaris	
EINTR	4	4	4	Interrupted system call.
EAGAIN	11	11	11	Resource temporarily unavailable.
EBUSY	16	16	16	Resource busy.
EMFILE	24	24	24	The per-process file descriptor table is full.
EPIPE	32	32	32	Broken pipe.
EADDRINUSE	67	226	125	The specified address is already in use.
ENETDOWN	69	228	127	The network is down.
ENETUNREACH	70	229	128	No route to the network is available.
ENETRESET	71	230	129	The network has dropped the connection on reset.
ECONNRESET	73	232	131	Connection has been reset by the partner.
ENOBUFS	74	233	132	Insufficient buffer space resources were available in the system to complete the call.
ENOTCONN	76	235	134	The socket is not connected.
ETIMEDOUT	78	238	145	The connection timed out.

Table 31 (Page 2 of 2). Unix TCP/IP *errno*s.

Errno	Errno Number			Description
	AIX	HP-UX	Solaris	
ECONNREFUSED	79	239	146	The connection has been refused. If you are trying to connect to the database, check that the database manager and TCP/IP protocol support at the server have been started successfully. If using SOCKS protocol support, also ensure that TCP/IP protocol support at the SOCKS server has been started successfully.
EHOSTDOWN	80	241	147	The host is down.
EHOSTUNREACH	81	242	148	No route to the host is available.

For more information on Unix TCP/IP communication errors, refer to the technical reference manuals for the appropriate operating system.

When using OS/2 TCP/IP, the following is a list of *errno*s which the user may encounter most frequently. It is NOT a complete list of errors. *Errnos* can be found in the file **nerrno.h**. The *errno* number itself is in parentheses.

- SOCEINTR (10003): Interrupted system call.
- SOCEMFILE (10024): Too many open files.
- SOCEPIPE (10032): Broken pipe.
- EADDRINUSE (10048): The specified address is already in use.
- ENETDOWN (10050): The network is down.
- ENETUNREACH (10051): No route to the network is available.
- ENETRESET (10052): The network has dropped the connection on reset.
- SOCECONNABORTED (10053): The software caused a connection abort.
- ECONNRESET (10054): Connection has been reset by the partner.
- ENOBUFS (10055): No buffer space available.
- ENOTCONN (10057): The socket is not connected.
- ETIMEDOUT (10060): The establishment of a connection timed out before a connection was made.
- ECONNREFUSED (10061): The connection has been refused. If you are trying to connect to the database, check that the database manager and TCP/IP protocol support at the server has been started successfully.

If using SOCKS protocol support, also ensure that TCP/IP protocol support at the SOCKS server has been started successfully.

- EHOSTDOWN (10064): The host is down.
- EHOSTUNREACH (10065): No route to the host is available.
- SOCEOS2ERR (10100): OS/2 error.

For more information on OS/2 TCP/IP communication errors, refer to the OS/2 TCP/IP documentation.

When using a DOS TCP/IP product (IBM TCP/IP for DOS, FTP TCP/IP for DOS, Novell TCP/IP for DOS), the following is a list of *errno*s which the user may encounter most frequently. It is NOT a complete list of errors. The *errno* number itself is in parentheses.

- EPIPE (32): Broken pipe.
- EADDRINUSE (48): The specified address is already in use.
- ENETDOWN (50): The network is down.
- ENETUNREACH (51): No route to the network or host is available.
- ENETRESET (52): The network has dropped the connection on reset.
- ECONNRESET (54): Connection has been reset by the partner.
- ENOBUFS (55): No buffer space available.
- ENOTCONN (57): The socket is not connected.
- ETIMEDOUT (60): The establishment of a connection timed out before a connection was made.
- ECONNREFUSED (61): The connection has been refused. If you are trying to connect to the database, check that the database manager and TCP/IP protocol support at the server has been started successfully.
- EHOSTDOWN (64): The host is down.
- EHOSTUNREACH (65): No route to the host is available.
- ENOTINSTLD (66): Protocol stack not installed.

For more information on DOS TCP/IP communication errors, refer to the documentation for your DOS TCP/IP product.

When using TCP/IP or IPX/SPX under Windows 3.1, Windows 95, or Windows NT, the following is a list of error codes which the user may encounter most frequently. It is NOT a complete list of errors. Errors returned by WSAGetLastError() can be found in the file **winsock.h**.

- WSAEINVAL (10022): If this error is received on function WSASTARTUP, then the Windows Sockets version supported by the application is not supported by this DLL.

- WSAEMFILE (10024): There are no file descriptors available.
- WSAEWOULDLOCK (10035): The socket is marked as non-blocking and the operation would block.
- WSAEINPROGRESS (10036): A blocking Windows Sockets operation is in progress.
- WSAENOPROTOOPT (10042): The option is unknown or unsupported.
- WSAEADDRINUSE (10048): The specified address is already in use.
- WSAENETDOWN (10050): The network subsystem has failed.
- WSAENETUNREACH (10051): The network can't be reached from this host at this time.
- WSAENETRESET (10052): The connection has been broken due to remote host resetting.
- WSAECONNABORTED (10053): The virtual circuit was aborted due to timeout or other failure. The network has dropped the connection on reset.
- WSAECONNRESET (10054): Connection has been reset by the partner.
- WSAENOBUFS (10055): No buffer space available, too many connections.
- WSAENOTCONN (10057): The socket is not connected.
- WSAETIMEDOUT (10060): The establishment of a connection timed out before a connection was made.
- WSAECONNREFUSED (10061): The connection has been refused. If you are trying to connect to the database, check that the database manager and TCP/IP protocol support at the server has been started successfully.
- WSAEHOSTUNREACH (10065): The network can't be reached from this host at this time.
- WSASYSNOTREADY (10091): The underlying network subsystem is not ready for network communication.
- WSAVERNOTSUPPORTED (10092): The version of Windows Sockets API support requested is not provided by this particular Windows Sockets implementation.
- WSAHOST_NOT_FOUND (11001): Host not found.
- WSATRY_AGAIN (11002): Host not found. Request to retrieve the hostname's IP address from the name server failed.
- WSANO_DATA (11004): Valid name, no data record of requested type. The name server or hosts file does not recognize the hostname, or the service name is not specified in the services file.

For more information on TCP/IP communication errors under Windows, refer to the Windows Sockets documentation.

APPC

Below is a list of CPI-C function return codes which the user may encounter most frequently. It is NOT a complete list of return codes. The number in parentheses indicates the defined number corresponding to the return code.

- **CM_ALLOCATE_FAILURE_NO_RETRY (1):** Allocation failed because of a non-temporary condition. For example, the session cannot be activated due to a system definition error or session-activation protocol error. This return code is also returned when the session is deactivated because of a session protocol error before the conversation can be allocated.
- **CM_ALLOCATE_FAILURE_RETRY (2):** Allocation failed because of a temporary condition. For example, the session cannot be activated due to a temporary lack of resources at the local system or remote system.
- **CM_CONVERSATION_TYPE_MISMATCH (3):** Allocation failed because the remote program does not support the conversation type in the allocation request. This is likely a problem with the TP at the server. Ensure that the TP at the server is configured to support a conversation type of *basic*.
- **CM_TPN_NOT_RECOGNIZED (9):** This error occurs when the allocate request is sent to the remote system. It indicates that the remote system does not recognize the transaction program name specified in the request. If you are not using global directory services, ensure that the TP name specified in the CPI-C Side Information profile at the client, matches the TP name specified at the server. If you are using global directory services, request your database administrator's help to ensure that the TP name specified in the global directory entry matches the TP name specified at the server.
- **CM_TP_NOT_AVAILABLE_NO_RETRY (10):** This error occurs when the allocate request is sent to the remote system. It indicates that the remote LU recognizes the TP name sent, but cannot start the program. If you are trying to connect to DB2 for AIX, ensure that the path to the executable, specified at the server, is correct. Also check that the userid specified in the TPN profile at the server is valid.
- **CM_TP_NOT_AVAILABLE_RETRY (11):** This error occurs when the allocate request is sent to the remote system. It indicates that the remote LU recognizes the TP name sent, but for some reason which may be temporary, it cannot start the program. If you are trying to connect to DB2 for OS/2, check that the database manager and APPC protocol support at the server have been started successfully.
- **CM_DEALLOCATED_ABEND (17):** This error occurs when the remote program deallocates the conversation. This can occur if the remote program has abnormally terminated, or has encountered a fatal error condition. If you are trying to connect to DB2 for AIX, check that the database manager and APPC protocol support at the server have been started successfully. For an AIX server, this error could also be caused by one of the following:
 - The database agent at the server was forced off by the system administrator.

- A database agent could not be started at the server because the *maxagents* database manager configuration parameter has been exceeded. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if an error message has been logged.
- The database agent at the server was terminated due to an abnormal termination of a key database manager process.
- CM_PRODUCT_SPECIFIC_ERROR (20): A product-specific error has been detected, and a description of the error has been stored in the product's system error log. Check that the local APPC subsystem has been started successfully. For AIX SNA Server/6000, to get more information about a product-specific error, it is necessary to check the value of the global variable *errno*. See the section below for more information on possible *errno*s that can be returned. Communications Manager/2 records errors in the OS/2 system error log.
- CM_RESOURCE_FAILURE_NO_RETRY (26): This error occurs when the conversation terminates prematurely (on either the remote or local end) from an error related to resources (such as sessions or links). For an OS/2 server, this error could also be caused by one of the following:
 - The database agent at the server was forced off by the system administrator.
 - A database agent could not be started at the server because the *maxagents* database manager configuration parameter has been exceeded. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if an error message has been logged.
 - The database agent at the server was terminated due to an abnormal termination of a key database manager process.
- CM_RESOURCE_FAILURE_RETRY (27): This error occurs when the conversation terminates prematurely (on either the remote or local end) for about the same reason as the NO_RETRY condition described above. The only difference is that the error may not be permanent.

For the most part, CPI Communications return codes are enough to deduce the cause of the error. But when CM_PRODUCT_SPECIFIC_ERROR is returned, additional information is provided.

For AIX SNA Server/6000, the *errno* provides additional information. Below is a list of some of the more common *errno*s. It is NOT a complete list. *Errnos* numbered 101 and higher can be found in the file **/usr/include/luxsna.h**, which contains the SNA Server/6000 specific *errno*s. Most of these *errno*s are translated to CPI-C return codes. Lower-numbered *errno*s are related to AIX problems and can be found in the file **/usr/include/sys/errno.h**. The *errno* number itself is in parentheses.

- EBADF (9): This is a "bad file descriptor" error. If this error occurs when trying to connect to the database, it usually means that the SNA subsystem at the server has not been started, or that there is some problem with the SNA configuration profiles. Check that the SNA subsystem at the server has been started. Check that the link station to the server node can be activated.

- **EACCESS (13):** This is a "permission denied" error. If this error occurs when trying to connect to the database, it usually means that there is some problem with the SNA configuration profiles.

For more information on SNA Server/6000 problem resolution, including how to run traces to diagnose problems, refer to *AIX SNA Server/6000 Diagnosis Guide and Messages*.

On HP-UX, for SNAPPlus, please refer to the `/usr/include/sys/errno.h` file for a description of the error.

For OS/2, when CPI Communications returns `CM_PRODUCT_SPECIFIC_ERROR`, an entry is created in the error log. Information in the error log entry identifies CPIC as the originator. If Communications Manager/2 is installed, Communications Manager records the error in the OS/2 system error log. Refer to the problem determination guide for the specific product, for a complete description of the error, and the recommended action to take.

For more information on CPI Communications errors, refer to *Systems Application Architecture Common Programming Interface Communications Reference*.

NETBIOS

When using NetBIOS, the following is a list of hexadecimal return codes that the user may encounter most frequently. It is NOT a complete list of return codes.

- 01** Invalid buffer length
- 03** Invalid command
- 05** Command timed out
- 06** Message incomplete
- 07** Data not received
- 08** Invalid local session number
- 09** No resource available
- 0A** Session closed

This error could be caused by one of the following:

- The database agent at the server was forced off by the system administrator.
- A database agent could not be started at the server because the *maxagents* database manager configuration parameter has been exceeded. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if an error message has been logged.
- The database agent at the server was terminated due to an abnormal termination of a key database manager process.

- 0B** Command cancelled
- 0D** Duplicate name used on the network
- 0E** Name table full
- 0F** Command completed (name has active sessions and is now deregistered)
- 11** Local session table full

- 12** Session open rejected
- 13** Invalid name number
- 14** Remote name not found

If this error occurs when trying to connect to the database, ensure that:

- The database manager has been successfully started at the server, and NetBIOS support has also been successfully started.
- The server nname specified in the NETBIOS node entry at the client, matches the workstation name specified in the database manager configuration file at the server.

- 15** Local name not found
- 16** Name in use on remote node
- 17** Name deleted
- 18** Session ended abnormally
- 19** Name conflict detected
- 21** Interface busy
- 22** Too many commands outstanding
- 23** Invalid adapter
- 24** Command already completed
- 26** Command invalid to cancel
- 30** Name defined by another environment
- 34** Environment not defined, RESET must be issued
- 35** Required operating system resources exhausted, retry later
- 36** Max applications exceeded
- 37** No SAPs available
- 38** Requested resources not available
- 39** Invalid NCB address
- 3A** Invalid reset
- 3B** Invalid NCB DD ID
- 3C** Segment lock unsuccessful
- 3F** Device driver open error.
- 40** OS error detected
- 4F** Perm ring status
- F6** Unexpected CCB error
- F8** Adapter open error
- F9** Adapter support software internal error
- FA** Adapter check
- FB** NetBIOS not operational
- FC** Open failures
- FD** Unexpected adapter close
- FF** Command in process

For more information on NetBIOS return codes, refer to the Local Area Network technical reference.

IPX/SPX

When using IPX/SPX on DOS, OS/2, or Unix systems, the following is a list of *t_errnos* which the user may encounter most frequently. It is NOT a complete list of errors. *Error values* can be found in the file *tiuser.h*. The *t_errno* number itself is in parentheses.

- TBADF (4): Specified file handle does not refer to a transport endpoint.
- TNOADDR (5): Transport provider could not allocate an address.
- TOUTSTATE (6): A function was issued in the wrong sequence.
- TSYSERR (8): A system error occurred during execution of this function.
- TLOOK (9): An asynchronous event has occurred on this connection.
- TNODATA (13): No data is currently available from the transport provider.
- TADDRBUSY (23): Specified address is in use and the transport provider could not allocate a new address.

When the first error token specifies *t_errno* = TLOOK, the second error token specifies an event. Below is a list of *events* which the user may encounter most frequently. It is NOT a complete list of *events*. *Events* can be found in the file *tiuser.h*. The *event* value is in parentheses.

- T_DISCONNECT (0x0010): Disconnect received.

This error could be caused by one of the following:

- The server was not started, or IPX/SPX support on the server was not started. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if messages have been logged.
- The node directory information specified on the client is incorrect.
- The client or server IPX/SPX communications stack was not installed and/or configured properly.
- The database agent at the server was forced off by the system administrator.
- A database agent could not be started at the server because the *maxagents* database manager configuration parameter has been exceeded. Check the First Failure Service Log (DB2DIAG.LOG) at the server to see if an error message has been logged.
- The database agent at the server was terminated due to an abnormal termination of a key database manager process.

When the first error token specifies *t_errno* = TLOOK, and the second error token specifies the event T_DISCONNECT, the third error token specifies a disconnect *reason code*. Below is a list of disconnect *reason codes* which the user may encounter most

frequently. It is NOT a complete list of *reason codes*. Disconnect *reason codes* can be found in the file `tispix.h`. The *reason code* value is in parentheses.

- TLI_SPX_CONNECTION_TERMINATED (0xEC): Disconnect received from remote peer.
- TLI_SPX_CONNECTION_FAILED (0xED): Connection failure.

For more information on TLI IPX/SPX communication errors, refer to the Transport Layer Interface documentation.

When using DOS, OS/2, or Windows IPX/SPX file server addressing mode, the following is a list of *return values* which the user may encounter most frequently. It is NOT a complete list of errors. *Return values* can be found in the file `nwerror.h`.

0x880F - This is a "NO CONNECTION TO SERVER" error. Ensure that the file server specified is up and running, and can be accessed by the client and server workstations.

0x88FF - If this error occurs when trying to connect to the database, and the function is *NWAttachToFileServer*, ensure that the IPX/SPX protocol support at the client has been installed correctly, and is started.

0x89EF - This is an "INVALID NAME" error. Illegal characters were specified in the file server or object name. Control characters, the comma, semicolon, slash, backslash, question mark, asterisk, and tilde are invalid.

0x89F2 This is a "NO OBJECT READ PRIVILEGE" error. The client does not have access to read the DB2 server's object registered at the Netware file server.

0x89F4 This is a "NO OBJECT DELETE PRIVILEGE" error. Ensure that the userid/password specified during deregister has sufficient authority to delete an object and its properties, on the file server.

0x89F5 This is a "NO OBJECT CREATE PRIVILEGE" error. Ensure that the userid/password specified during register has sufficient authority to create an object and its properties, on the file server.

0x89F6 This is a "NO PROPERTY DELETE PRIVILEGE" error. Ensure that the userid/password specified during deregister has sufficient authority to delete an object and its properties, on the file server.

0x89F7 This is a "NO PROPERTY CREATE PRIVILEGE" error. Ensure that the userid/password specified during register has sufficient authority to create an object and its properties, on the file server.

0x89F8 This is a "NO PROPERTY WRITE PRIVILEGE" error. Ensure that the userid/password specified during register has sufficient authority to write object property values, on the file server.

0x89FC - This is an "UNKNOWN FILE SERVER" or "NO SUCH OBJECT" error.

If this error occurs when running the REGISTER/DEREGISTER command, ensure that:

- An object name has been specified in the database manager configuration file, and the name contains valid characters.
- A file server name has been specified in the database manager configuration file, and the name contains valid characters.

If this error occurs when trying to connect to the database, and the function is *NWScanProperty*, ensure that:

- The network address of the database manager has been successfully registered at the NetWare file server. This is done by running the REGISTER command at the server.
- The object name specified in the IPXSPX node directory entry at the client, matches the object name specified in the database manager configuration file at the server.
- The file server name specified in the IPXSPX node directory entry at the client, matches the file server name specified in the database manager configuration file at the server.

If this error occurs on function *NWAttachToFileServer*, ensure that the files server name was configured correctly in the database manager configuration file.

If this error occurs on function *NWLoginToFileServer*, ensure that the userid specified on the register/deregister is valid for logging into the file server.

0x89FF - This is a "NO SUCH OBJECT OR BAD PASSWORD" error. Ensure that the password you have specified is defined, and has not expired.

For more information on IPX/SPX file server addressing mode errors, refer to the NetWare Client API for C documentation.

When using Unix IPX/SPX file server addressing mode, the following is a list of *error generators* that identify what location generated the error.

- 0x00 - File server
- 0x10 - API
- 0x20 - API

When using Unix IPX/SPX file server addressing mode, the following is a list of *error codes* which the user may encounter most frequently. It is NOT a complete list of errors. On AIX, *error codes* can be found in the file *nwerrors.h*.

0x02 - This is a "TRANSPORT OPEN" error. Ensure that IPX/SPX communications was installed and configured correctly.

0xDE - This is a "BAD PASSWORD" error. Ensure that the password specified on register/deregister is valid for logging into the file server.

0xEF - This is an "INVALID NAME" error. Ensure that the file server and object name specified in the database manager configuration file is valid. Check that the name does not contain illegal characters.

0xF2 - This is a "NO OBJECT READ PRIVILEGE" error. The client does not have access to read the DB2 server's object registered at the Netware file server.

0xF4 - This is a "NO OBJECT DELETE PRIVILEGE" error. Ensure that the userid/password specified during deregister has sufficient authority to delete an object and its properties, on the file server.

0xF5 - This is a "NO OBJECT CREATE PRIVILEGE" error. Ensure that the userid/password specified during register has sufficient authority to create an object and its properties, on the file server.

0xF6 - This is a "NO PROPERTY DELETE PRIVILEGE" error. Ensure that the userid/password specified during deregister has sufficient authority to delete an object and its properties.

0xF7 This is a "NO PROPERTY CREATE PRIVILEGE" error. Ensure that the userid/password specified during register has sufficient authority to create an object and its properties.

0xF8 - This is a "NO PROPERTY WRITE PRIVILEGE" error. Ensure the that the userid/password specified during register has sufficient authority to write object property values, on the file server.

0xFC - This is a "UNKNOWN FILE SERVER" or "NO SUCH OBJECT" error.

If this error occurs when running the REGISTER/DEREGISTER command, ensure that:

- An object name has been specified in the database manager configuration file, and the name contains valid characters.
- A file server name has been specified in the database manager configuration file, and the name contains valid characters.

If this error occurs when trying to connect to the database, and the function is *NWScanProperty*, ensure that:

- The network address of the database manager has been successfully registered at the NetWare file server. This is done by running the REGISTER command at the server.
- The object name specified in the IPXSPX node directory entry at the client, matches the object name specified in the database manager configuration file at the server.
- The file server name specified in the IPXSPX node directory entry at the client, matches the file server name specified in the database manager configuration file at the server.

If this error occurs on function *NWAttachToServerPlatform*, ensure that the files server name was configured correctly in the database manager configuration file.

If this error occurs on function *NWLoginToServerPlatform*, ensure that the userid specified on the register/deregister is valid for logging into the file server.

0xFF - This is a "NO RESPONSE FROM FILE SERVER". Ensure that the file server is up and running and accessible by the DB2 server and client.

For more information on IPX/SPX file server addressing mode errors, refer to the NetWare C Interface for UNIX API reference.

Appendix B. SPM Protocol Violation Records

This section shows the Protocol Violation records generated by the DB2 SPM. These records will be directed to the first failure service log (db2diag.log) and will follow the corresponding message.

Resync Protocol Violation Record

```
/******  
* SQLCSPM_RESYNC_PROTOCOL_VIOLATION_206 - Resync Protocol error.          *  
*                                                                           *  
* This trace is produced when a protocol error occurs during a Resync Compare *  
* States (CS) exchange with a remote LU. The following are examples of SNA   *  
* Compare States protocol errors:                                           *  
*   * an unknown STATE was found in the SNA CS message                     *  
*   * an invalid data message was received from the remote site            *  
*   * an invalid LU6.2 verb sequence was detected                          *  
*                                                                           *  
*****/  
#define SQLCSPM_RPV_206_T "SQLCSPM_RESYNC_PROTOCOL_VIOLATION_206" /* Title.*/  
typedef struct sqlcspm_resync_protocol_violation_206  
{  
    /*                                                                           */  
    SQLCSPM_LUNAME luname;           /* Site involved in violation.      */  
    SQLCSPM_LUWID  luwid;           /* LUWID for the unit of work.     */  
    SQLXA_XID     xid;             /* XID of the thread.             */  
    char          role;            /* Role of DB2 in LUW -- C or P.  */  
                                /* C for coordinator.             */  
                                /* P for participant.             */  
    char          status;          /* Local thread status -- C, A or I */  
                                /* C for COMMIT.                  */  
                                /* A for ABORT.                   */  
                                /* I for INDOUBT.                 */  
    SQLCSPS_TRACE comm_trace;      /* Communication trace of violation.*/  
} SQLCSPM_RESYNC_PROTOCOL_VIOLATION_206;
```

Syncpoint Protocol Violation Record

```
/*
 * SQLCSPM_2PHASE_PROTOCOL_VIOLATION_208 - SNA syncpoint protocol error.
 *
 * This trace is produced when a protocol error occurs during the SNA
 * syncpoint process with a remote LU. The following are examples of SNA
 * syncpoint protocol errors:
 * * an unknown SNA PS header was received.
 * * an SNA PS header was received in the wrong sequence.
 * * an invalid LU6.2 verb sequence was detected.
 * * the remote site issued DEALLOCATE TYPE(ABEND_SVC).
 */
#define SQLCSPM_2PPV_208_T "SQLCSPM_2PHASE_PROTOCOL_VIOLATION_208" /* Title.*/
typedef struct sqlcspm_2phase_protocol_violation_208
{
    SQLCSPM_LUNAME luname; /* Site involved in violation. */
    SQLCSPM_LUWID luwid; /* LUWID for the unit of work. */
    SQLXA_XID xid; /* XID of the thread. */
    char role; /* Role of DB2 in LUW -- C or P.
                C for coordinator.
                P for participant.
    char local_status; /* Local thread status -- C, A or I
                        C for COMMIT.
                        A for ABORT.
                        I for INDOUBT.
    char partner_status; /* Partner thread status -- C, A or I
                        C for COMMIT.
                        A for ABORT.
                        I for INDOUBT.
    SQLCSPS_TRACE comm_trace; /* Communication trace of violation. */
} SQLCSPM_2PHASE_PROTOCOL_VIOLATION_208;
```

XLN Protocol Violation Record

```
/*
 * SQLCSPM_XLN_PROTOCOL_VIOLATION_236 - SNA XLN protocol error.
 *
 * This trace is produced when a protocol error occurs during the SNA
 * syncpoint process with a remote LU. The following are examples of SNA
 * syncpoint protocol errors:
 * * an unknown SNA PS header was received.
 * * an SNA PS header was received in the wrong sequence.
 * * an invalid LU6.2 verb sequence was detected.
 * * the remote site issued DEALLOCATE TYPE(ABEND_SVC).
 */
#define SQLCSPM_XPV_236_T "SQLCSPM_XLN_PROTOCOL_VIOLATION_236" /* Title.*/
typedef struct sqlcspm_xln_protocol_violation_236
{
    SQLCSPM_LUNAME luname; /* Site involved in violation. */
    SQLCSPX_XLN_INF xln_inf; /* Current XLN information
                              in LUB. */
}
```

```
SQLCSPX_XLN_INF txln_inf;      /* Temporary XLN information
                               in LUB. */
SQLCSPM_GDSAREA xln;          /* Current XLN GDS being
                               processed. */
SQLCSPS_TRACE comm_trace;     /* Communication trace of violation. */
} SQLCSPM_XLN_PROTOCOL_VIOLATION_236;
```

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World Wide Web

<http://www.software.ibm.com/data/>
<http://www.software.ibm.com/data/db2/library/>

The DB2 World Wide Web pages provide current DB2 information about news, product descriptions, education schedules, and more. The DB2 Product and Service Technical Library provides access to frequently asked questions, fixes, books, and up-to-date DB2 technical information. (Note that this information may be in English only.)

Anonymous FTP Sites

<ftp.software.ibm.com>

Log on as anonymous. In the directory `/ps/products/db2`, you can find demos, fixes, information, and tools concerning DB2 and many related products.

Internet Newsgroups

`comp.databases.ibm-db2`, `bit.listserv.db2-l`

These newsgroups are available for users to discuss their experiences with DB2 products.

CompuServe

GO IBMDB2 to access the IBM DB2 Family forums

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To find out about the IBM Professional Certification Program for DB2 Universal Database, go to http://www.software.ibm.com/data/db2/db2tech/db2cert.html
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