

DB2 Server for VSE



Messages and Codes

Version 7 Release 3

DB2 Server for VSE



Messages and Codes

Version 7 Release 3

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 381.

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About This Manual

This manual lists the messages and codes issued by the DB2 Server for VSE system. This reference manual is for users, operators, programmers, and maintainers of this product. This manual explains the messages you see on your display terminal.

The manual contains messages with the prefix ARI and ASN. The Data Propagator Relational Capture for VSE & VM messages are included in the manual and contain the ASN prefix.

The messages and codes, where appropriate, consist of:

- An expanded explanation of the message text
- The action taken by the system
- The response required of the user, operator, programmer, database administrator, and system programmer.

The codes section contains information for:

- CICS/VSE[®] Transaction Abend Codes
- DBSS return codes
- SQLCODEs
- SQLSTATEs
- Reason codes, including:
 - System service return codes
 - System abend codes
 - System communication codes
- Sequential file errors
- Include file access errors
- Limit errors
- System errors
- Hardware errors.

The “Summary of Changes” section summarizes the technical and library changes made for the DB2 Server for VSE Version 7 Release 3 product.

Chapters 15 through 19 explain the various codes and SQLSTATEs that can be returned to a DB2 Server for VSE user or application program. Most of the codes and SQLSTATEs report error conditions. The codes are presented in groups, according to the source of the codes. The codes can come from the DB2 Server for VSE system itself, or from various other programs with which the DB2 Server for VSE system works.

If you are the system programmer or the database administrator, see the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for information on reporting a problem whenever you are asked in **System Programmer Response** or **Database Administrator Response** to contact your designated support group for your installation.

Throughout this manual, the DB2 Server for VSE Version 7 Release 3 product is referred to as DB2 Server for VSE, the database system, database manager or

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application server, unless otherwise noted. In some cases, the online help may use different terminology to that found in the manual.

For a list of related publications, see "Bibliography" on page 385.

Conventions Used in This Manual

In this manual, the following terms are used:

Term **Meaning**

CICS® Customer Information Control System (CICS/VSE 2.1 and later) The terms CICS and CICS/VSE are used interchangeably throughout this manual.

DBS utility

Database Services Utility

ISQL Interactive Structured Query Language

LUW Logical unit of work

LUW ID

Logical unit of work identifier

DB2 Server for VSE

DB2 Server for VSE Version 7 Release 3

user ID

User identification

VSE VSE/ESA Release 2.2 and later

Online HELP Text

Most of the information in this manual is also available as online HELP text. Installation of the online HELP text is optional. To use the online HELP text, when installed, enter the ISQL command HELP followed by a space and the message number or SQLCODE, or enter HELP SQLSTATE followed by the 5-digit SQLSTATE number.

Note: The online HELP text for messages, codes, and SQLSTATE information is not serviced by the IBM Support Center. The online HELP text is similar to this manual. You can use the Readers' Comment Form in the back of this manual to comment on the online HELP text. If you want to submit an Authorized Program Analysis Report (APAR) against documentation, it must be written against this manual, not the online HELP text.

Components of the Relational Database Management System

Figure 1 on page vii depicts a typical configuration with one database, one batch partition user, and a CICS® partition with several interactive users.

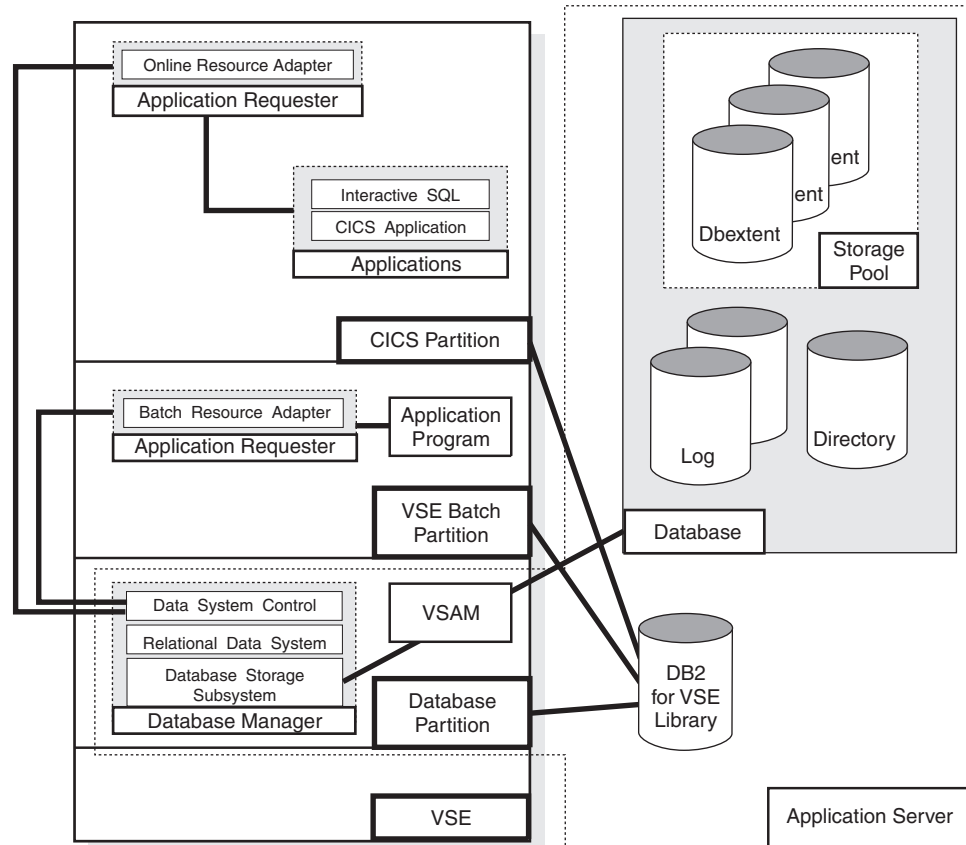


Figure 1. Basic Components of the RDBMS

The **database** is composed of:

- A collection of data contained in one or more *storage pools*, each of which in turn is composed of one or more *database extents (dbextents)*.
- A *directory* that identifies data locations in the storage pools. There is only one directory per database.
- A *log* that contains a record of operations performed on the database. A database can have either one or two logs.

The **database manager** is the program that provides access to the data in the database. It is loaded into the database partition from the DB2 Server for VSE library.

The **application server** is the facility that responds to requests for information from and updates to the database. It is composed of the database and the database manager.

The **application requester** is the facility that transforms a request from an application into a form suitable for communication with an application server.

SQL Reserved Words

The following words are reserved in the SQL language. They cannot be used in SQL statements except for their defined meaning in the SQL syntax or as host variables, preceded by a colon.

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In particular, they cannot be used as names for tables, indexes, columns, views, or dbspaces unless they are enclosed in double quotation marks ("").

ACQUIRE	GRANT	RESOURCE
ADD	GRAPHIC	REVOKE
ALL	GROUP	ROLLBACK
ALTER		ROW
AND	HAVING	RUN
ANY		
AS	IDENTIFIED	SCHEDULE
ASC	IN	SELECT
AVG	INDEX	SET
	INSERT	SHARE
BETWEEN	INTO	SOME
BY	IS	STATISTICS
		STORPOOL
CALL	LIKE	SUM
CHAR	LOCK	SYNONYM
CHARACTER	LONG	
COLUMN		TABLE
COMMENT	MAX	TO
COMMIT	MIN	
CONCAT	MODE	UNION
CONNECT		UNIQUE
COUNT	NAMED	UPDATE
CREATE	NHEADER	USER
CURRENT	NOT	
	NULL	VALUES
DBA		VIEW
DBSPACE	OF	
DELETE	ON	WHERE
DESC	OPTION	WITH
DISTINCT	OR	WORK
DOUBLE	ORDER	
DROP		
	PACKAGE	
EXCLUSIVE	PAGE	
EXECUTE	PAGES	
EXISTS	PCTFREE	
EXPLAIN	PCTINDEX	
	PRIVATE	
FIELDPROC	PRIVILEGES	
FOR	PROGRAM	
FROM	PUBLIC	

Summary of Changes

This is a summary of the technical changes to the DB2 Server for VSE & VM database management system for this edition of the book. Several manuals are affected by some or all of the changes discussed here. For your convenience, the changes made in this edition are identified in the text by a vertical bar (|) in the left margin. This edition may also include minor corrections and editorial changes that are not identified.

This summary does not list incompatibilities between releases of the DB2 Server for VSE & VM product; see either the *DB2 Server for VSE & VM SQL Reference*, *DB2 Server for VM System Administration*, or the *DB2 Server for VSE System Administration* manuals for a discussion of incompatibilities.

Summary of Changes for DB2 Version 7 Release 3

Version 7 Release 3 of the DB2 Server for VSE & VM database management system is intended to run on the VM/ESA Version 2 Release 4 or later environment and on the Virtual Storage Extended/Enterprise Systems Architecture (VSE/ESA[®]) Version 2 Release 5 Modification 1 or later environment.

Enhancements, New Functions, and New Capabilities

The following have been added to DB2 Version 7 Release 3:

Cancel TCP/IP Agent in VM

With this new functionality, if the client is connected to a DB2 for VM application server via TCP/IP, and the client disconnects from the application server, the DB2 for VM application server will detect that the client has disconnected and will immediately release the resources that it had held.

Force Inactive Users

This function introduces a new DB2 Server for VM operator command, FORCE INACTIVE. The FORCE INACTIVE command will disconnect inactive users on DB2 Server for VM. Also, when SQLEND is issued on DB2 Server for VM, inactive users will be automatically disconnected so that they do not delay database shutdown. This will make the behavior of SQLEND consistent on DB2 Server for VM and on DB2 Server for VSE.

See the *DB2 Server for VSE & VM Operation* manual for further details.

CLI/JDBC V8 Redesign

If you would like to use DB2 Server for VSE & VM as a server with access by CLI/ODBC/JDBC/OLE clients, you need the support of schema functions on the DB2/VSE&VM database servers. These schema functions allow applications to get catalog information in a way that is database vendor independent. The schema functions return a standard result set to the user. In DB2 Universal Database V8.1, these functions are implemented with views and stored procedures if the views rely on SQL that is not supported on the VSE & VM platforms.

There is now a set of stored procedures that will generate the schema functions results sets without views. The result sets returned by these stored procedures correspond to the results obtained from other servers when SELECTing from the schema views.

The schema stored procedures created on VM and VSE servers are invoked internally by CLI/JDBC drivers.

See the *DB2 Server for VSE & VM Database Administration* manual for additional information.

Control Center for VSE Enhancements

The Control Center for VSE restriction of a hard coded user name and password for connecting to a database has been removed. When a Control Center for VSE transaction is initiated in CICS, Control Center will request the user ID and the password from the terminal user. A parameter card will be used for batch programs to input the user ID and password.

Control Center for VM Enhancements

Control Center enhancements include support for new operator commands, enhancements to existing operator functions, and enhancements to current initialization parameters.

Reliability, Availability, and Serviceability Improvements

Alternate Logging

A new inactive log can now take over when the active log reaches the ARCHPCT value and alternate logging is enabled, instead of immediately forcing a log archive to be taken. A log archive can then be taken at a later time, as determined by the operator. If an attempt to switch to the inactive log occurs and that inactive log has not already been archived, the operator is forced to take an archive of the inactive and active logs.

For more information, see the following DB2 Server for VSE & VM documentation:

- *DB2 Server for VSE System Administration*
- *DB2 Server for VM System Administration*
- *DB2 Server for VSE & VM Diagnosis Guide and Reference*
- *DB2 Server for VSE & VM Operation*
- *DB2 Server for VSE Program Directory*
- *DB2 Server for VM Program Directory*

Data Restore Changes

Data Restore now allows users to use the RELOAD function with RECOVERY=YES, even if an event such as a COLDLOG has broken the logical continuity of the log files. In this case, the log can now be applied until this event is reached. Alternate logging is fully supported with Data Restore for VSE & VM V7.3.

Release Empty Pages

You can now release empty pages in any dbspace on VM without having to issue DROP DBSPACE, by using a new single user mode utility called SQLRELEP. A new single user mode startup option, STARTUP=P, is introduced to enable you to release empty pages on VSE. For more information, see the *DB2 Server for VSE & VM Database Administration* manual.

More Information on TCP/IP Messages

In the event of a TCP/IP server-side error, new messages will now be displayed with more information pertaining to the TCP/IP error. This information will include the input parameters of the service causing the error.

Migration Considerations

Migration is supported from SQL/DS[®] Version 3 and DB2 Server for VSE & VM Versions 5 and 6. Migration from SQL/DS Version 2 Release 2 or earlier releases is not supported. Refer to the *DB2 Server for VM System Administration* manual or the *DB2 Server for VSE System Administration* manual for migration considerations.

Chapter 1. Introduction

Using This Manual

If you use this manual regularly, you should read this section along with the following section “Message Format and Associated Text”. They provide information that is helpful when you use this manual for reference.

All messages have four digits following the ARI or ASN prefix. Old 3-digit messages are now preceded by a zero. For example, ARI201E is now ARI0201E.

The table of contents can help you in looking up a particular message, code, or error because headings are provided to show the numeric sections and page locations. You can also use the index at the back of the book to find the page or pages of any particular message or code.

Message Format and Associated Text

In this book, the conventions for showing messages are:

- All the letters, numbers, and punctuation marks (periods, commas, underscores, dashes, and so on) following the message identifier in bold show the actual message text. The exceptions to this convention are brackets [], braces { }, logical OR symbols |, blank lines, and format numbers.
- Letters, words, and numbers in the text of the message that are not bold represent variables. Hyphenated words that are not bold also represent variables. The database manager substitutes specific values for the variables when it displays the message.
In the explanation following the message text, the variables are in bold or italics.
- Brackets [] enclose optional message text. Depending on the circumstances, an item or group of items in brackets might appear when the message is displayed.
- Braces { } enclose alternative items, which are separated by a logical OR | symbol. Depending on the circumstances, one of the alternative items appears when the message is displayed.

All DB2 Server for VSE messages have a message identifier in the form of **XXXnnnnt**, where:

XXX	Identifies the major component generating the message:
ARI	shows the message is from the database manager component of the DB2 Server
ASN	shows the message is from the DPROPR component
DSQ	see <i>QMF Messages and Codes</i> manual
XTS	shows the message is from the Data Restore Feature.
nnnn	Identifies the particular message number.
t	Is the action indicator:
A	Action required
D	Decision required
E	Error
I	Information only
W	System wait.

For messages beginning with:

XTS	See the <i>DB2 Server for VSE & VM Data Restore</i> manual
SQM	See the <i>DB2 for VSE Control Center Operations Guide</i> .
ELO	See the <i>DB2 REXX SQL for VM/ESA Installation and Reference</i> manual

Explanation contains information about the message. This includes the following:

- Definitions for variable fields in the message text
- Possible reasons why the message occurred
- Additional descriptive information about the condition that caused the message to occur.

System Action describes the resulting action that was or will be taken by the database manager.

User Response, Operator Response, Programmer Response, Database Administrator Response, and **System Programmer Response** describe the responses that might be required of those persons.

Introduction

Chapter 2. ARI0001–ARI0199 DB2 Server for VSE Control Messages

ARI0001E An error occurred while attempting to obtain storage.

Explanation: Either:

- All available GETVIS storage has been exhausted; the reason code, normally displayed at end-of-job, will be 12 (X'0C')
- A hardware error occurred while attempting to get storage; the reason code will be 32 (X'20')
- An internal error occurred while attempting to get storage; the reason code will be 8 (X'08').

Note: The DB2 Server for VSE reason code is the VSE/Advanced Functions GETVIS macro return code. It is displayed in message ARI0042I.

System Action: If SQLCODE -930 accompanies this message, the database manager continues and additional requests to obtain storage may result in the message being issued again. If the message is issued without SQLCODE -930, the database manager is ended.

Operator Response: If GETVIS storage has been exhausted (reason code = 12), restart the database manager after allocating a larger partition.

System Programmer Response: You may have to assist the operator in determining what partition size will be required if storage is exhausted. Contact the appropriate personnel for hardware service or the designated support group.

ARI0002E Unable to open the *xxxxxxx* parameter data set. Reason Code = *nn*. Return Code=*nn*.

Explanation: *xxxxxxx* is the name of the parameter data set as specified in the PARMID parameter.

This parameter is specified in the job control to identify a library source statement member (in the "A" sublibrary).

The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Either:

- Catalog the parameter data set in the library as a source member (the A sublibrary), or
- Correct the PARMID parameter in the job control.

If the problem persists, for corrective action, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365 or "INCLUDE FILE ERRORS" in the HELP text.

ARI0003E An error occurred reading the *xxxxxxx* parameter data set. Reason Code = *nn*
Return Code = *nn*.

Explanation: *xxxxxxx* is the name of the parameter data set as specified in the PARMID parameter. This parameter is specified in the job control to identify a library source statement member (in the "A" sublibrary).

The REASON value is the Primary Error Code. The CODE value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

System Action: The database manager ends.

Operator Response: For further explanation, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

ARI0004I *xxxxxxx* - The database manager ignores PARMID within a parameter data set.

Explanation: *xxxxxxx* is the name of the parameter data set which contains the PARMID initialization parameter. The PARMID parameter is ignored in a parameter data set.

System Action: Processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the parameter data set specification to eliminate this message.

ARI0005E {JCL|*xxxxxxx*} - *yyyyyyyyy* parameter is specified more than once.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which

DB2 Server for VSE System Control – ARI0001-ARI0199

contains the parameter in error.

yyyyyyyy is the parameter keyword that was specified more than once in the initialization parameter input.

Note: The same parameter keyword can be specified once in the job control and once in the parameter data set.

System Action: If this error occurs in the job control parameter processing, the database manager ends.

If this error occurs during parameter data set processing, the database manager ends unless the *yyyyyyyy* parameter is correctly specified in the job control. See System Programmer Response.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Remove the extra occurrences of the initialization parameter from either the job control or the parameter data set. If this parameter was specified more than once in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0006E {JCL | *xxxxxxx*} - *yyyyyyyy* is an invalid parameter specification.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

yyyyyyyy is the initialization parameter keyword which is invalid (or misspelled). If the parameter keyword in error was greater than eight characters, only the first nine characters are printed.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid initialization parameter specification in either the job control or the parameter data set.

ARI0007E {JCL | *xxxxxxx*} error. A keyword is missing.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

System Action: The database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid

initialization parameter specification in either the job control or the parameter data set. This error would be caused by coding *...=value,...*

ARI0008E {JCL | OPER | *xxxxxxx*} - *yyyyyyyy* = *c* is invalid. It must be *d*.

Explanation: JCL indicates that the parameter in error was specified in the job control.

OPER indicates that the parameter in error was specified during run time using the SET operator command.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

yyyyyyyy is the initialization parameter keyword which has the invalid parameter value. It must be one of the following keywords: ACCOUNT, ALTLOG, ARCHTAPE, DSPLYDEV, DSPSTATS, DUALLOG, DUMPTYPE, EXPAND, EXTEND, LOGMODE, STARTUP, SECALVER, SECTYPE, SYNCNT, SYSMODE, TAPEMGR or TCPRETRY.

c is the first (or only) character of the invalid parameter value. If no value was specified, a comma is substituted for the missing value. If more than one character is given for the parameter value, it will not be accepted even if the first character is valid.

d is a character string indicating the correct parameter value as follows:

<i>yyyyyyyy</i>	<i>d</i>	(default)
ACCOUNT	D, T, E, or N	N
ALTLOG	N or Y	N
ARCHTAPE	REW or UNL	REW
DSPLYDEV	L, C, or B	L
DSPSTATS	0, 1, or 2	0
DUALLOG	N or Y	N
DUMPTYPE	P, F, or N	F
EXPAND	DBSPACE or ALL	DBSPACE
EXTEND	Y or N	N
LOGMODE	Y, A, L, or N	Y
SECALVER	N or Y	N
SECTYPE	DB2 or ESM	DB2
STARTUP	C, E, F, I, L, M, P, R, S, U, or W	W
SYNCNT	Y or N	Y
SYSMODE	M or S	M
TAPEMGR	Y or N	N
TCPRETRY	Y or N	Y

System Action: If this error occurs in the job control parameter processing, the database manager ends.

If this error occurs during parameter data set processing, the database manager ends unless the *yyyyyyyy* parameter is correctly specified in the job control. See System Programmer Response.

If this error occurs while processing the SET command, the command is ignored and processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid parameter value in the job control, the parameter data set, or the operator console. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0009E **Format 1:**
 {JCL | OPER | xxxxxxxx} - yyyyyyyyy = c is invalid. It must be in the range from n1 to n2.
Format 2:
 {JCL | OPER | xxxxxxxx} - yyyyyyyyy = c is invalid. It must be in the range from n1 to n2 or d.

Explanation: JCL indicates that the parameter in error was specified in the job control.

OPER indicates that the parameter in error was specified during run time using the SET operator command.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

yyyyyyyyy is the parameter keyword which has the invalid parameter value. It must be one of the following keywords: ARCHPCT, CHKINTVL, DBSPNUM, DISPBIAS, LTIMEOUT, NCSCANS, NCUSERS, NDIRBUF, NLRBS, NLRBU, NPACKAGE, NPACKPCT, NPAGBUF, PROCMXAB, PTIMEOUT, RMTUSERS, SLOGCUSH, SOSLEVEL, TCPDISPB, TCPMAXRT, TCPPOINT, or TRACEBUF.

c is the invalid parameter value. If no value was specified, a comma is substituted for the missing value. If the parameter is longer than eight characters, only the first eight characters are displayed. The parameter value can be up to eight characters. Leading zeros are suppressed.

n1 is the lower limit (or minimum) for the correct parameter value.

n2 is the upper limit (or maximum) for the correct parameter value.

d is the non-numeric value that can also be used for the parameter value.

yyyyyyyy	n1	n2	d (default)
-----	--	-----	--
ARCHPCT	10	99	80
CHKINTVL	1	99999999	10
DBSPNUM	1	32000	*
DISPBIAS	1	10	7
LTIMEOUT	0	99999	0
NCSCANS	1	655	30
NCUSERS	1	252	5
NDIRBUF	10	400000	NPAGBUF
NLRBS	Larger of 50 or	583333	(2 x NCUSERS) + (NLRBU x NCUSERS)/2 +10

	(2 x NCUSERS)		
NLRBU	10	583233	1000
NPACKAGE	1	32766/NCUSERS	10
NPACKPCT	0	100	30
NPAGBUF	10	400000	(4 x NCUSERS) + 10
PROCMXAB	0	255	0
PTIMEOUT	0	99999	180
RMTUSERS	0	65535	0
SLOGCUSH	11	100	90
SOSLEVEL	1	100	10
TCPDISPB	1	100	1
TCPMAXRT	1	9999	158
TCPPOINT	0	65535	446
TRACEBUF	0	99999	0

System Action: If this error occurs in the job control parameter processing or during parameter data set processing, the database manager ends.

If this error occurs while processing the SET operator command, the command is ignored and processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid parameter value in the job control, the parameter data set, or the operator console. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0010E {JCL | xxxxxxxx} - {TRACDBSS | TRACCONV | TRACRDS | TRACDSC | TRACWUM | TRACDRRM | TRACSTG} is invalid. The parameter value must be either {0, 1, or 2 | 0 or 1}.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

Specifying a parameter value other than 0, 1, or 2 for the TRACDBSS, TRACCONV, TRACRDS, TRACDSC, TRACWUM, or TRACDRRM initialization parameter is invalid. Specifying a parameter value other than 0 or 1 for the TRACSTG initialization parameter is invalid.

System Action: If this error occurs in the job control parameter processing, the database manager ends. If this error occurs during parameter data set processing, the database manager ends unless the TRACDBSS, TRACCONV, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG parameter is correctly specified in the job control. See System Programmer Response.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid

DB2 Server for VSE System Control – ARI0001-ARI0199

initialization parameter value in either the job control or the parameter data set. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0011E {JCL|xxxxxxx} - yyyyyyyyy is invalid.
The parameter string must be from 1 to n characters.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

yyyyyyyyy is the initialization parameter keyword which has the invalid parameter string length. It must be one of the following keywords: CHARNAME, DBNAME, DBPSWD, DSPSTATS, PARMID, PROGNAME, TRACCONV, TRACDBSS, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG.

n is the maximum character string length of the value.

yyyyyyyyy	n
CHARNAME	18
DBNAME	18
DBPSWD	8
DSPSTATS	2
PARMID	8
PROGNAME	8
TRACCONV	1
TRACDBSS	11
TRACRDS	6
TRACDSC	2
TRACWUM	1
TRACDRRM	4
TRACSTG	1

System Action: If this error occurs in the job control parameter processing, the database manager ends.

If this error occurs during parameter data set processing, the database manager ends unless the yyyyyyyyy parameter is correctly specified in the job control. See System Programmer Response.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid initialization parameter value in either the job control or the parameter data set. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing. PARMID is valid only on the job control and, therefore, must always be corrected.

ARI0012I The database manager ignores yyyyyyyyy = c when zzzzzzzz = d.

Explanation: yyyyyyyyy is the initialization parameter keyword of the value that is ignored.

c is the parameter value that was specified.

zzzzzzzz is the initialization parameter keyword that is used and causes the yyyyyyyyy parameter to be ignored.

d is the parameter value specified for zzzzzzzz.

yyyyyyyyy	c	zzzzzzzz	d
ACCOUNT	T, D, or E	STARTUP	C, E, I, L, M, P, or S
ACCOUNT	D, T, or E	PROGNAME	ARISEGB
ACCOUNT	D, T, or E	PROGNAME	ARISRMG
ALTLOG	N or Y	SYSMODE	M
ALTLOG	N or Y	STARTUP	E, I, M, R, S, U, or W
ARCHPCT	value	LOGMODE	Y or N
DISPBIAS	value	SYSMODE	S
DBSPNUM	value	STARTUP	C, E, I, L, M, S, U, or W
DUALLOG	N or Y	SYSMODE	M
DUALLOG	N or Y	STARTUP	E, F, I, M, P, R, S, U, or W
NCUSERS	value > 1	SYSMODE	S
PROCMXAB	non-zero value	SYSMODE	S
PROGNAME	program-name	SYSMODE	M
PROGNAME	program-name	STARTUP	C, E, I, L, M, P, or S
PTIMEOUT	non-zero value	SYSMODE	S
RMTUSERS	non-zero value	SYSMODE	S
TCPDISPB	value > 1	RMTUSERS	0
TCPMAXRT	value	TCPPORT	0
TCPPORT	non-zero value	SYSMODE	S
TCPRETRY	Y	TCPPORT	0
TRACDRRM	non-zero value	RMTUSERS	0
TRACWUM	1 or 2	RMTUSERS	0
SECALVER	N or Y	SYSMODE	S
SECTYPE	DB2 or ESM	SYSMODE	S
SYNCPNT	Y	RMTUSERS	0
LTIMEOUT	non-zero value	SYSMODE	S

Notes:

1. The database manager ignores the PROCMXAB and PTIMEOUT parameters when SYSMODE=S because they have no significance in single user mode. They are supported only in multiple-user mode.

System Action: Processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Remove the initialization parameter specification causing the message.

ARI0013E yyyyyyyyy must be c when zzzzzzzz = d .

Explanation: yyyyyyyyy is the initialization parameter keyword of the value that is in conflict.

c is the parameter value that was specified.

zzzzzzzz is the initialization parameter keyword that is used and causes the yyyyyyyy parameter specification to be invalid.

d is the parameter value specified for zzzzzzzz.

yyyyyyy	c	zzzzzzz	d
LOGMODE	Y	STARTUP	L
LOGMODE	Y, A, or L	SYSMODE	M
STARTUP	W, R, U, or F	EXTEND	Y
STARTUP	W, R, U, or F	SYSMODE	M

System Action: If this error occurs in the job control parameter processing, the database manager ends.

If this error occurs during parameter data set processing, the database manager ends unless the yyyyyyyy parameter is correctly specified in the job control. See System Programmer Response.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid initialization parameter value in either the job control or the parameter data set. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0014E The database manager requires
PROGNAME when SYSMODE = S
AND STARTUP = {W|R}.

Explanation: When SYSMODE=S and STARTUP=W (or STARTUP=R) is specified, the PROGNAME initialization parameter must be specified.

System Action: If this error occurs in the job control parameter processing, the database manager ends. If this error occurs during parameter data set processing, the database manager ends unless the PROGNAME or SYSMODE or STARTUP parameter is correctly specified in the job control. See System Programmer Response.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Either specify the PROGNAME initialization parameter or correct the invalid parameter value (SYSMODE or STARTUP) in either the job control or the parameter data set that is causing this message. If this parameter was specified more than once in the parameter data set, it may be overridden by a correct specification in the job control. However, the message will still be issued but may be ignored and the database manager will continue processing.

ARI0015I yyyyyyyy parameter value is c.

Explanation: This message displays the final values used by the database manager as a result of the merging of job control, default parameter values.

yyyyyyy is the initialization parameter keyword.

c is the parameter value to be used by the database manager.

yyyyyyy	c
ACCOUNT	D, T, E, or N
ALTLOG	N or Y
ARCHTAPE	REW or UNL
CHARNAME	character-set-name
DBNAME	database name, up to 18 characters
DSPLYDEV	L, B, or C
DSPSTATS	0, 1, or 2
DUALLOG	N or Y
DUMPTYPE	P, F, or N
EXTEND	Y or N
LOGMODE	Y, A, L, or N
PARMID	parameter-data-set-name
PROGNAME	program-name
SECALVER	Y or N
SECTYPE	DB2 or ESM
STARTUP	C, E, F, I, L, M, P, R, S, U, or W
SYSMODE	M or S
TAPEMGR	Y or N
TCPRETRY	Y or N
TRACCONV	0, 1, or 2
RMTUSERS	0 - 65535
TRACDBSS	0, 1, or 2
TRACRDS	0, 1, or 2
TRACDSC	0, 1, or 2
TRACWUM	0, 1, or 2
TRACDRRM	0, 1, or 2
TRACSTG	0 or 1

System Action: Processing continues.

Notes:

1. The DBPSWD parameter value will not be displayed.
2. DUALLOG and ALTLOG will be displayed only if STARTUP=C or STARTUP=L.
3. PARMID will be displayed only when specified.
4. PROGNAME will be displayed only when SYSMODE=S and STARTUP=W, R, F, or U.

System Programmer Response: You may want to verify that the initialization parameter values are correct.

ARI0016I yyyyyyyy parameter value is n.

Explanation: This is an information message that displays the final values used by the database manager as a result of the merging of job control, parameter data set, and default parameter values.

yyyyyyy is the initialization parameter keyword.

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n is the parameter value to be used by the database manager.

YYYYYYY	n
ARCHPCT	10 to 99
CHKINTVL	1 to 99999999
DBSPNUM	1 to 32000 or *
DISPBIAS	1 to 10
LTIMEOUT	0 to 99999
NCSCANS	1 to 655
NCUSERS	1 to 252
NDIRBUF	10 to 400000
NLRBS	50 to 583333
NLRBU	10 to 583233
NPACKAGE	1 to 32766/NCUSERS
NPACKPCT	0 to 100
NPAGBUF	10 to 400000
PROCMXAB	0 to 255
PTIMEOUT	0 to 99999
SLOGCUSH	11 to 100
SOSLEVEL	1 to 100
TCPDISPB	1 to 100
TCPMAXRT	1 to 9999
TCPPORT	0 to 65535
TRACEBUF	0 to 99999

System Action: Processing continues.

Note: The ARCHPCT parameter is displayed only if LOGMODE=A.

System Programmer Response: You may want to verify that the initialization parameter values are correct.

ARI0017E An error occurred in the parameter specification.

Explanation: One or more errors were found while processing the initialization parameters. Previous messages indicate the parameter in error and the correction.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid initialization parameter value in either the job control or the parameter data set. If the invalid parameter was specified in the parameter data set, it may be overridden by a correct specification in the job control.

ARI0018I {JCL|xxxxxxx} - DBNAME parameter is ignored for VSE/AF.

Explanation: JCL indicates that the parameter in error was specified in the job control.

xxxxxxx is the name of the parameter data set which contains the parameter in error.

System Action: Processing continues. The specified keyword is ignored.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Remove the DBNAME specification.

ARI0022E Field procedure *fieldproc-name* has abnormally terminated. Please remove it from your installation.

Explanation: The field procedure *fieldproc-name* has abended. You must remove the procedure from the system before restarting the system. Executing field procedures that contain errors can affect the security and integrity of the database. Thoroughly test the field procedure before reinstalling it on your system.

System Action: The application server will produce a mini-dump. When possible, processing will continue.

Operator Response: Save the console output for the system programmer.

System Programmer Response: Remove the field procedure from your system before restarting the database manager. Ensure that the field procedure is thoroughly tested before reinstalling it.

ARI0023I The *program-name* program will be invoked in AMODE *amode*.

Explanation: The *program-name* program will be started in the addressing mode *amode* specified. This could be either 24-bit or 31-bit addressing. Note that this addressing mode corresponds to the addressing mode of the application program. If the application program is a DBS utility or a DB2 Server for VSE preprocessor, the addressing mode will always be AMODE 24. This message is issued before invoking the single-user-mode application *program-name*.

System Action: Processing continues.

System Programmer Response: If the *amode* is not what you want, refer to the appropriate application programming language manual.

ARI0024E DBCS conversion procedure *transproc-name* has abnormally terminated. Please remove it from your installation.

Explanation: The DBCS conversion procedure *transproc-name* has abended. Thoroughly test the procedure before re-installing it on your system. If you want to replace or remove this procedure from your system, contact your system programmer.

System Action: The application server will produce a mini-dump. When possible, processing will continue.

Operator Response: Save the console output for the system programmer.

System Programmer Response: Determine the CCSID

conversions that use this DBCS conversion procedure by checking the TRANSPROC column of the catalog table SYSTEM.SYSSTRINGS. Refer to the *DB2 Server for VSE System Administration* manual for information on updating these CCSID conversions to make use of another DBCS conversion routine.

ARI0025I The program *program-name* is loaded at *load-address*.

Explanation: *program-name* is the name of the phase loaded by the database manager.

load-address is the storage address (expressed in hexadecimal) where the phase was loaded.

System Action: Processing continues.

System Programmer Response: You may want to note the address for use in any potential problem determination.

ARI0026E An error occurred in the attempt to load program *xxxxxxx*.

Explanation: *xxxxxxx* is the name of the phase that the application server attempted to load.

The reason code is the system return code (from the CDLOAD macro):

- If an internal VSE system error occurred while attempting to get storage, the reason code is 8 (X'08').
- If all available GETVIS storage has been exhausted, the reason code, normally displayed at end-of-job, is 12 (X'0C').
- If the partition CDLOAD directory (anchor table) is full, the reason code is 16 (X'10').
- If the phase does not exist in the library core image member, the reason code is 20 (X'14').
- If a hardware error occurred while attempting to get storage for the phase, the reason code is 32 (X'20').

Note: The reason codes are the VSE/Advanced Functions CDLOAD return codes.

System Action: The database manager is ended.

Operator Response: If the reason code indicates insufficient storage, restart the application server after allocating a larger partition. For all other reason codes, notify your system programmer.

System Programmer Response: Catalog the phase in the library core image member if not found. You may have to assist the operator in determining what partition size will be needed if insufficient GETVIS storage is the problem.

If the problem is a hardware error, contact your installation hardware service representative. If a database system error occurred, make a record of what

went wrong and contact the designated support group for your installation.

ARI0027E A communication link error has occurred.

Explanation: The database manager has violated the use of the CPC services. The most probable causes may be:

- Control blocks related to the use of communication services were damaged.
- Registers or register save areas used by the database manager in performing communication functions may have had their contents altered.

(See Chapter 20, "DB2 Server for VSE Reason Codes" on page 355.)

System Action: The database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0028I The database manager is terminating.

Explanation: This informational message is issued as acknowledgment when an SLENDD command (other than SLENDD QUICK) is first entered.

Note: SHUTDOWN is a valid synonym for SLENDD.

System Action: The database manager will start termination procedures; all active users (DB2 Server for VSE agent structures) will be allowed to complete their processing. No new users will be allowed access to database services. After all active users have completed their processing, the database manager will perform any optional functions specified on the SLENDD command and end.

ARI0029I *n* communication links are still connected.

Explanation: This informational message tells the operator how many users are active when the SLENDD command was entered. This number is the number of agent structures containing connected users.

This message is issued when an SLENDD command (other than SLENDD QUICK) is first issued. It is also issued with an updated number as each communication link is disconnected. This may allow the operator to determine how long it might take to complete the SLENDD process.

Note: SHUTDOWN is a valid synonym for SLENDD.

System Action: Processing continues.

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ARI0030I Database manager termination is already in progress.

Explanation: This informational message is issued in response to a subsequent SQLEND command (other than SQLEND QUICK).

System Action: Processing continues and the command is ignored.

Operator Response: None unless an immediate shutdown is required, in which case an SQLEND QUICK command can be issued. If that command is issued, any logical units of work in progress will be resolved (either committed or backed out) the next time the database manager is brought up.

Note: SHUTDOWN is a valid synonym for SQLEND.

ARI0031E Invalid SQLEND parameter.

Explanation: The SQLEND command was entered with an invalid parameter. The operator should specify only a valid SQLEND command. For more information, refer to the *DB2 Server for VSE & VM Operation* manual.

Note: SHUTDOWN is a valid synonym for SQLEND.

System Action: Operator command processing ends.

Operator Response: Reenter the command correctly.

ARI0032I The database manager has terminated.

Explanation: This informational message is issued prior to closing any data sets and ending.

Note: The operator should not enter a CANCEL command after this message has been displayed. It will cause immediate termination of the database manager with the message ARI0034E being displayed.

Note: If the database manager has ended abnormally, a DB2 Server for VSE mini-dump will be displayed. These dumps are described in the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual.

System Action: The database manager is ended.

ARI0033E An error occurred while attempting to close SYSLST.

Explanation: Termination could not properly close the printer file used for error and informational messages.

System Action: Database manager termination continues.

Operator Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred,

make a record of what went wrong and contact the designated support group for your installation.

ARI0034E An error occurred during termination.

Explanation: This message is issued whenever database manager termination is in progress and an error (for example: a program check) occurs which causes the termination process to be invoked. This message is also issued if the operator enters a CANCEL command after message ARI0032I has been displayed.

Note: Tape files may not have been closed and may be missing the last buffer contents and have no tape mark (EOF indicator).

System Action: The database manager ends immediately.

Operator Response: Notify your system programmer. You may wish to write a tapemark on any open tape files.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0035I Application server cancel has been requested.

Explanation: The operator has issued a CANCEL command or an I/O cancel has been issued by another VSE system component. The operator is allowed to request a dump if desired. See message ARI0044D.

System Action: The database manager ends.

ARI0036E No SAVEAREA found for ARIXRDS.

Explanation: A program check interrupt occurred in the package. The database manager attempted to recover, but could not find the save area for the RDS recovery routine (ARIXEBR).

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0037E The entry point for ARIXEBR1 cannot be found.

Explanation: A program check interrupt occurred in the package. The database manager attempted to recover, but could not find the entry point to the RDS recovery routine (ARIXEBR1).

System Action: The database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0038E Invalid return code from ARIxxxx.

Explanation: An internal error has occurred.

ARIxxxx is the name of the module which returned an unexpected or invalid return code to the caller.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0039E Application server limit error occurred - ARIxxxx nm.

Explanation: This message is usually due to causes such as:

- Insufficient partition GETVIS storage.
- Phase not found.
- Insufficient external storage space for functions such as DB2 Server for VSE logging.

Other messages issued prior to this message will identify the error condition and aid in the corrective action to be taken.

ARIxxxx is the name of the module which detected the limit error.

nm is the error detection point within that module. See Chapter 23, "Limit Errors" on page 367 for a list of critical detection points and their related error conditions.

No DB2 Server for VSE dump or mini-dump will be displayed because a limit error occurred.

System Action: The database manager is ended.

Operator Response: If the error is due to insufficient GETVIS storage, restart the database manager after allocating a larger partition.

System Programmer Response: You may have to reallocate external storage space, catalog missing phases into the library core image member, or assist the operator in allocating a larger partition size.

ARI0040E A database manager system error occurred - ARIxxxx nm.

Explanation: An internal error occurred within the database manager system. Usually a "should not occur" condition has occurred. A dump will be taken according to the DUMPTYPE initialization parameter. This is a system error.

ARIxxxx is the name of the module that detected the error.

nm is the error detection point within the module. See Chapter 24, "System Errors" on page 371 for a list of communication link errors.

Notes:

1. If the database manager has ended abnormally, a mini-dump will be displayed. These dumps are described in the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual. Refer also to message ARI0042I for additional diagnostic information.
2. If this message is preceded by a VSAM ERROR display, refer to the topic about VSAM errors in the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0041E System hardware error occurred - ARIxxxx nm.

Explanation: A hardware error was detected during a GETVIS, CDLOAD, I/O, etc. operation.

ARIxxxx is the name of the module that detected the error.

nm is the error detection point in the module.

A preceding message describes the cause of the hardware error. A dump or mini-dump will not be taken if a hardware error occurs.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem determination. If a hardware error is indicated, report this problem to the hardware service person at your installation. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

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ARI0042I Database manager reason code is *n1* - *X'n2'*.

Explanation: This code is a VSE system return code returned to the database manager. It can be used for problem determination.

n1 is the decimal representation of the reason code.

n2 is the hexadecimal representation of the reason code.

Note: A previous message should have been displayed related to the reason code. See Chapter 20, "DB2 Server for VSE Reason Codes" on page 355 and Chapter 17, "DBSS Return Codes" on page 231 for additional information about the reason codes.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Note the reason code for problem determination.

ARI0043I Database manager return code is *n*.

Explanation: This return code is for informational purposes. Except for return code 0, it is related to any earlier DB2 Server for VSE messages that have been displayed. This return code is also returned to VSE upon return by the database manager.

n is one of the following:

- 0 The database manager ended normally.
- 24 An error exists while processing the JCL job that starts the database manager software. Contact the designated database manager support group for your installation.
- 256 An error exists while processing the JCL job that starts the database manager software. Contact the designated database manager support group for your installation.
- 504 The database manager ended, but a problem occurred. Possible problems are a printer close error, VSAM close error, etc. The next job step can usually proceed.
- 506 An XPCC IDENT failed. If this message is preceded by ARI0042I, the reason code 36 (X'24') displayed in ARI0042I indicates that a duplicate subsystem name already exists. This will happen if a DB2 Server for VSE partition is being brought up while the same default subsystem name has been used to logon for an application server under VM in a Guest Sharing environment, or vice versa.
- 508 The database manager ended. This return code is returned when an SQLEND QUICK (SHUTDOWN QUICK) has been issued or

when a problem such as a trace file close error occurred. The next job step, if processing the trace file, probably will not be able to proceed.

512 The database manager ended, but a limit error occurred (see message ARI0039E). Execution of any subsequent job steps will probably result in a failure.

516 The database manager ended, but an error occurred. (See message ARI0040E). This code is also returned if the operator enters a CANCEL command. Execution of any subsequent job steps will probably result in a failure.

520 The database manager ended but a hardware error occurred. (See message ARI0041E). Execution of any subsequent job steps will probably result in a failure.

For nonzero return codes, see previous database manager error messages.

Note: When the database manager is operating in single user mode: If this message is accompanied by message ARI0046I, the return code passed back to the system will be the code from the database system.

System Action: Database manager termination continues.

ARI0044D If you want a dump, enter 1(Yes). Otherwise enter 0(No).

Explanation: The abnormal termination routine has been entered due to an operator or I/O cancel request. If a dump is required, the operator must reply with a 1 or YES to the message. If 0 or NO is entered, no dump will be taken. Any other reply will cause message ARI0052E to be displayed. The dump to be taken is determined by the DUMPTYPE initialization parameter (DUMPTYPE=P, F, or N). If DUMPTYPE=N was specified, the default DUMPTYPE=F is assumed.

System Action: Processing continues as determined by the operator reply.

Operator Response: Reply 1 or YES if a dump is required. Reply 0 or NO if no dump is required.

ARI0045I Ready for operator communications.

Explanation: This informational message is issued only in multiple user mode. It informs the system operator that the database manager is ready to accept DB2 Server for VSE operator commands.

Operator Response: Enter any operator commands desired.

ARI0046I xxxxxxxx return code is n1 - X'n2'.

Explanation: This message occurs only when the database manager is operating in single user mode. It reports a nonzero application return code (passed back in register 15) when the application program returns to the database manager.

xxxxxxx is the name of the application program (specified in the PROGNAME initialization parameter).

n1 is the decimal representation of the return code.

n2 is the hexadecimal representation of the return code.

Some application programs (such as those written in COBOL or FORTRAN) do not pass back a zero return code upon successful completion. If the application program does not make the return code zero, whatever value is in register 15 will be displayed as the return code. This value is normally the entry point address of the application program; it is typically a large value.

IBM-supplied DB2 Server for VSE programs (for example, a preprocessor or the DBS utility) that run in single user mode will also have their return codes displayed in this message.

If the name of the application program given in the message is one of the preprocessors:

ARIPRPA	Assembler Preprocessor
ARIPRPB	C Preprocessor
ARIPRPC	COBOL Preprocessor
ARIPRPF	FORTRAN Preprocessor
ARIPRPP	PL/I Preprocessor

the following return codes apply:

- 0** No errors and no warnings.
- 1** The preprocessor BLOCK option was specified and
 - One or more cursor operations are ineligible for blocking, or
 - One or more SELECT statements were encountered (SELECT statements cannot be blocked).
- 4** Preprocessor or SQL warning. Either:
 - A preprocessor warning message was issued.
 - An SQL warning message was issued during the processing of an SQL command.
- 8** Preprocessor or SQL error. Either:
 - A preprocessor error message was issued.
 - An SQL error message was issued during the processing of an SQL command; a negative SQLCODE was returned. Preprocessing continues.
- 12** Preprocessor or SQL error. Preprocessor cannot continue. Probable causes are:

- File I/O error (on a GET, PUT, OPEN, or CLOSE).
- Get/release virtual storage failure.
- Preprocessor invocation parameter error.
- SQL error, such as preprocessor cannot connect to the database manager using the user ID or password provided to it (either explicitly or implicitly), or preprocessor experienced an internal SQL error during preprocessor initialization or shutdown.

- 16** Severe SQL error. Preprocessor cannot continue. Probable causes are:
 - Package was not in the catalog or was not usable when an attempt was made to use it.
 - Communication path to the database manager has been disabled.
 - Error occurred while trying to free dynamically allocated virtual storage.
 - Unrecoverable system error occurred.
 - Attempt to process an SQL command before the database manager was started or ready.
 - Error during attempt to open or write to a FORTRAN list file.

Return codes 12 and 16 are called preprocessor terminating errors. The preprocessor halts at the point of the error and performs its cleanup processing:

- Flushes the input source file.
- Frees any previously allocated virtual storage.
- Merges workfiles into output files (for COBOL only).
- Closes any open files.
- Restores the previous state of the package.
- Handles the preprocessor return code.

If the name of the application program given in the message is the DBS utility (**ARIDBS**), the following return codes apply:

- 0** All commands processed successfully.
- 4** An error occurred during DBS utility termination. However, all requested processing completed successfully. All changes were committed to the database. No SQL or DBS utility commands need to be reprocessed.
- 6** Errors have occurred during ERRORMODE CONTINUE processing. Some commands issued while SET ERRORMODE CONTINUE was in effect were not processed successfully.
- 8** DBS utility processing error occurred. From the point of the error, no further commands were executed, but later DBS utility commands were checked for syntax errors.
- 12** DBS control command file open error occurred. No commands were processed.

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- 16 DBS message file open error occurred. No commands were processed.
- 20 Initialization error occurred. Not enough virtual storage was available for DBS utility working storage areas. No commands were processed.

When the database manager is started for database generation (STARTUP=C is specified), the program name is always ARIGCAT.

When the database manager is started for log reconfiguration (STARTUP=L is specified), the program name is always ARISEGB.

Unless the return code is 512 or greater, the application return code is passed back to the system.

System Action: Database manager termination continues.

Operator Response: None, unless otherwise requested by the application programmer.

System Programmer Response: None, unless otherwise requested by the application programmer or by preceding messages if the application program is the DB2 Server for VSE program.

ARI0047E CDLOAD - Reason Code = *nnn*.

Explanation: This message only occurs with message ARI0026E. It is issued when an error other than "not found" or "insufficient storage" occurs while the database manager is trying to load the program indicated in message ARI0026E.

CDLOAD is the type of load operation being tried by the database manager when the error occurred.

nnn is the return code indicating the cause of the failure. Refer to the VSE manual that documents the load operation in question.

This message is accompanied by a DB2 Server for VSE dump (as specified by the DUMPTYPE initialization parameter) and message ARI0040E, except when the program identified is ARICMOD. The return code in message ARI0043I is 516.

System Action: The database manager ends.

Operator Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0051E Accounting support specified, but VSE job accounting support is not provided.

Explanation: The DB2 Server for VSE accounting support uses the VSE GETFLD macro to collect CPU time on a user basis. This macro is supported only

when the VSE job accounting support (JA) is provided. This means that the JA option is specified on the IPL SYS command.

System Action: If this condition occurs, DB2 Server for VSE accounting support is shut off, and the database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Re-IPL the system with the JA option specified on the IPL SYS command. Then restart the database manager.

ARI0052E *response* is incorrect. Please reenter the correct response.

Explanation: An incorrect value (*response* in text) was entered in response to the previous message. If *response* is blank, a null response (no response or blanks) was entered.

System Action: The previous message will be re-displayed.

Operator Response: Determine the valid response to the previous message, and enter the valid response when the prompting message is re-displayed.

ARI0053E An unexpected error occurred accessing the application server at initialization. DBSS Return Code = *code*.

Explanation: During the database manager startup, the RDS module ARIXERO encountered unexpected problems when attempting to access the application server.

code is the DBSS return code from the open. Refer to Chapter 17, "DBSS Return Codes" on page 231.

System Action: The database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Note the DBSS return code, make a record of what went wrong, and contact the designated support group for your installation.

ARI0054E Unable to do COMMIT. DBSS Return Code = *return-code*.

Explanation: During the database manager startup, ARIXERO was unable to issue a COMMIT after opening the record catalog table RIDs, TIDs, and IIDs.

return-code is the DBSS return code from the open. Refer to Chapter 17, "DBSS Return Codes" on page 231.

System Action: The database manager is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Perform problem

determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0056I Tracing terminates because of operator request.

Explanation: During database initialization, you specified the parameters TRACCONV, TRACDBSS, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG (or any combination). The initialization dialog prompted the operator for the tape unit cuu or the reply DISK (output to disk) for the trace output file (message ARI0092A) and the operator responded with CANCEL to the prompting message. This message indicates that database initialization is continuing but with trace inactive ("output disabled").

System Action: Database initialization continues, but with the trace inactive, the TRACCONV, TRACDBSS, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG parameters are overridden.

Note: Since trace is "output disabled", the TRACE OFF operator command must be entered before the TRACE ON operator command can be entered.

ARI0057E Message ARInnnn has formatting error.

Explanation: This is a database error. The message identified by *nnnn* (that is, message prefix ARI) either:

- Was too long to fit into the internal message buffer (20 lines and 68 bytes per line for the database manager or 79 bytes per line for ISQL). Part of the message was truncated and not displayed.
- Had one or more variable substitution requests which could not be performed. Either the variable was not supplied by the requesting module or the variable had an invalid length. The message line contains *&n.* or *&na.* (where *n* is the variable number in the internal structure VARLIST and *a* is an optional conversion alphabetic character). These values identify the unresolved variables.

For a multi-line message, the error may have occurred on any (or all) lines. The message in error precedes this message on the display terminal or printer.

System Action: Normal processing continues.

Operator Response: Save the message output (this message and the message identified by *nnnn*) and notify your system programmer.

Programmer Response: Same as Operator Response.

System Programmer Response: Save the message output and report this problem to the designated support group for your installation. If the application program using the database manager is known, save information about it so that the problem can be recreated if necessary.

ARI0058E Message editing error {MSG ID = *nnnn* | SQLCODE = *nnnn*}. Reason Code = *nn*.

Explanation: This is a system error. A database component requested that a message be edited and displayed. If **SQLCODE** appears in the message text, the request was for the **SQLCODE** message associated with **SQLCODE** *nnn*. If **MSG ID** appears in the message text, the request was for the database message **ARI***nnnn* (*nnnn* from message text).

The exact cause of the message editing error is identified by the **Reason Code**=*nn* value in the message text where:

- | | |
|----|---|
| 01 | A message number is outside a valid range. |
| 02 | SQL code number is out of range. |
| 03 | This is an invalid DBCS substitution string. |
| 04 | Message is not found in the repository. |
| 05 | The repository is not found. |
| 06 | Sequence number contains wrong or non-existing message line number. |
| 07 | Invalid buffer length. |

You may be able to identify the lost message from the displayed message number or **SQLCODE** and take appropriate action.

System Action: Processing continues as though the lost message had been displayed. Subsequent messages may clarify system activity.

User Response: If the reason code is 04 and the database machine is operating at a later release than your user machine, use the message number or **SQLCODE** in the message text to help you determine the release level of the database machine.

Operator Response: Save this message and, if possible, any additional information about the application program or the database manager program which was running and notify your system programmer.

Programmer Response: See Operator Response.

System Programmer Response: Save the message output and any other information given to you by the operator or programmer and report this problem to the designated support group for your installation. If the application program using the database manager is known, save information about it so that the problem can be recreated if necessary.

ARI0059E Program cancelled due to insufficient virtual storage.

Explanation: An attempt to acquire partition virtual storage (using the VSE GETVIS macro) failed.

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System Action: The program will be canceled because of insufficient virtual storage.

Operator Response: If the return code of 32 (X'20') from the GETVIS macro is displayed (see *Note*), a main storage hardware error was detected. Report this problem to your installation hardware service person.

Otherwise, assume that there is not enough virtual storage and proceed as follows. Either run the failing program in a larger partition or change the program parameters so that it requires less virtual storage. If you are running a program with the database manager in single user mode, you may be able to run it in a smaller partition while the database manager is running in multiple user mode. Consult with your database or VSE system programmer to help you.

Note: An attempt is made to provide information about:

- Calling module name (or address).
- Requested virtual storage size (in bytes).
- Reason code containing the operating system return code (from the GETVIS macro). (See message ARI0042I.)
- Database return code. (See message ARI0043I.)

A dump of the partition is issued if this attempt fails because of a lack of storage. The dump is displayed on SYSLST.

System Programmer Response: See Operator Response.

ARI0060I Database manager initialization complete.

Explanation: The database manager has completed the initialization process in multiple user mode. It is ready to accept work requests from other partitions.

System Action: The database manager enters wait state, waiting for work requests from other partitions and for system operator requests to enter operator commands.

Operator Response: Database application programs including preprocessors, ISQL, and the Database Services Utility program may be started in other partitions.

Database operator commands may be entered from the system operator console.

ARI0061E The operator command value *value* is too long.

Explanation: The system operator or ISQL terminal user has entered a database operator command which has a command name or parameter which exceeds eighteen characters in length. Database operator command names and parameters may not exceed

eighteen characters. The first eighteen characters of the invalid value are displayed in the message. This error may be caused by misspelling an operator command name or parameter or by omitting the blank required between the parameters of the command or between the command name and the first parameter.

System Action: Operator command processing ends.

Operator Response: Use the VSE Attention routine to initiate communication with the database manager. Reenter the command with the correct value. For a description of the database operator commands, see the *DB2 Server for VSE & VM Operation* manual.

User Response: Reenter the command with the correct value. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual.

ARI0062A *dbname* : Enter a DB2 Server for VSE operator command.

Explanation: The *dbname* is the name of the application server started in the partition. The system operator has requested (using the VSE Attention facility) communication with the database manager. The database manager is prompting the operator to enter a database operator command.

System Action: The database manager will process the database operator command entered in response to this prompting message.

Operator Response: Enter the desired database operator command.

Note: If you do not wish to enter a command, respond to message ARI0062A by pressing only the Enter key. This will cause the database manager to end command processing until you again request communication with the database manager.

ARI0063I You did not enter an operator command.

Explanation: The system operator has entered a null line in response to a request to enter a database operator command, or ISQL has transmitted a blank line for database operator command processing. This should not occur for ISQL (ISQL internal error).

System Action: Operator command processing ends. To enter another database operator command, you must use the VSE Attention routine to initiate communication with the database manager.

User Response: You may enter a database operator command or an ISQL or SQL command. If you are in ISQL, this message indicates an internal error in ISQL. In this case, notify your system programmer.

System Programmer Response: If message ARI0063I is received by an ISQL terminal user, ISQL is malfunctioning. Determine the service level of the database manager and report this problem to the

designated support group for your installation.

ARI0064E You entered an invalid operator command.

Explanation: The operator or the ISQL terminal user has entered an operator command. Either:

- The command name is not a valid operator command, or
- The command name is a name other than COUNTER or SHOW (ISQL command input only), or
- The ARCHIVE operator command was entered with operands or LARCHIVE operator command was entered with an operand besides INACTIVE.

Notes:

1. ISQL should process only COUNTER and SHOW as operator commands. Therefore, ISQL has an internal error.

System Action: Operator command processing ends.

Operator Response: Initiate communication with the database manager (use the VSE Attention routine) and reenter the command with the correct name and operands. For the descriptions of the database operator commands, see the *DB2 Server for VSE & VM Operation* manual.

User Response: You may enter a database operator command or an ISQL or SQL command. This message indicates an internal error in ISQL. Notify your system programmer.

System Programmer Response: If message ARI0064E is received by an ISQL terminal user, ISQL is malfunctioning. Determine the service level of the database manager and report this problem to the designated support group for your installation.

ARI0065I Operator command processing is complete.

Explanation: This message notifies the operator or the ISQL terminal user that a database operator command has successfully completed processing.

System Action: Normal processing continues. You can use the VSE Attention routine to start further communication with the database manager.

User Response: You may enter another database operator command or an ISQL or SQL command.

ARI0066E An error occurred processing the operator command.

Explanation: A database operator command was routed to the module which processes the command. The module detected an error and ended command processing. If the error was an invalid command parameter, the module issued a message identifying the error. If the module invoked database services which

detected an error (for example, I/O error), then the operator received an error message due to the error. Note that in the last case, the operator command may have come from an ISQL terminal but the specific error message is displayed to the operator.

System Action: Operator command processing ends.

Operator Response: Refer to the previous error message for the cause of the error and for corrective action.

User Response: If there is a previous error message indicating the cause of command failure, take the corrective action indicated by that message. If there is no previous error message, the command was not executed due to some error detected by the database manager (such as an I/O error) and the operator has been notified of the error. If the problem persists, you may wish to notify the system programmer of your problem.

System Programmer Response: Obtain the ISQL terminal user and operator error message output and take the corrective action recommended or suggested by the error messages.

ARI0067E Invalid SHOW command entered.

Explanation: This message was caused by the operator or ISQL terminal entering:

- The operator SHOW command with an invalid or omitted first operand
- A SHOW command with an incorrect number of operands.

System Action: Operator command processing ends.

Operator Response: Reenter the SHOW command with the correct operands. For a description of this command, refer to the *DB2 Server for VSE & VM Operation* manual.

User Response: Reenter the SHOW command with the correct operands. For the description of SHOW commands, refer to the *DB2 Server for VSE & VM Operation* manual. You may alternatively enter an ISQL or SQL command.

ARI0068E Invalid SET command entered.

Explanation: The operator SET command operand was invalid or omitted.

System Action: Operator command processing ends.

Operator Response: Reenter the SET command with the correct operand. For the description of this command, refer to the *DB2 Server for VSE & VM Operation* manual.

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ARI0069E **READ MEMBER**
sublibrary.membername FAILED,
REASON=*nm* CODE=*nm*

Explanation: During reading of the SYSIPT file, a READ MEMBER statement was encountered. (The READ MEMBER statement is described in the *CHANGE TO PROGRAM DIRECTORY OR BOOK INFO WENT TO.*) While attempting to access and read the VSE library source statement member specified in that statement, an error occurred.

sublibrary identifies the sublibrary containing the member.

membername identifies the library source statement member to be read. REASON is the Primary Error Code, and CODE is the Secondary Error Code.

For further explanation, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

System Action: See subsequent database messages. Normally this error condition causes the job to end.

User Response: Save this error message and give it to the job submitter or the system programmer for problem resolution.

System Programmer Response: Take action based on the REASON and CODE values.

ARI0073E **Ready *filename* accounting output**
volume. Enter CUU or CANCEL.

Explanation: The database manager is requesting the system operator to ready a tape unit for accounting output and to supply its cuu. The database accounting file will have the filename indicated by *filename*, which is either ARIACC1 or ARIACC2.

If this message is redisplayed after message ARI0075E (indicating an accounting file open error), the database manager is requesting corrective action for that message, plus the operator action for ARI0073E.

System Action: If the operator enters a cuu, the indicated tape unit is dynamically assigned and opened.

If the operator enters CANCEL, accounting support is shut off, and the database manager ends.

Operator Response: The database manager is requesting the system operator to:

1. Select a tape unit for the accounting output.

Note: The selected tape unit must be currently unassigned.

2. Make the tape unit ready, with a labeled scratch tape mounted and properly positioned.
3. Enter the cuu of the selected tape unit.

Reply CANCEL if no tape is available, or if accounting is not desired, or if the ARI0075E error condition cannot be corrected.

ARI0074E **Invalid response {BLANK | *value*} to**
prompt message.

Explanation: An incorrect value (*value* in message text) or no value (BLANK in message text) was entered in response to message ARI0073A.

System Action: The accounting prompting message ARI0073A (to which the invalid response was entered) is redisplayed.

Operator Response: Determine the valid response to the accounting prompting message, and enter the valid response when the prompting message is redisplayed.

ARI0075E **{OPEN | CLOSE | GENCB} error on**
accounting file *filename* [*cuu*].
Reason Code = *reason-code*.
Return Code = *return-code*.
[Error Code = *error-code*.]

Explanation: In attempting to open or close the database accounting output file, or to generate the ACB/RPL for a VSAM ESDS accounting file, an error occurred. If accounting data is being written to tape, the *cuu* of the tape is provided in the message.

The file has the name indicated by *filename*, which is either ARIACC1 or ARIACC2.

If an error code is not displayed, the *reason-code* value is the primary error code and the *return-code* value is the secondary error code. For further explanation, look up the displayed reason code and return code under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

If an error code is displayed, the *return-code* is the contents of register 15 after VSAM processed the request macro. See the *VSE/VSAM Messages and Codes* manual for the possible cause of this error.

System Action: If the error condition is a dynamic assignment error on OPEN, message ARI0073A displays to allow the accounting output volume to be respecified. If the error condition is something other than a dynamic assignment error on an OPEN, the accounting support is shut off and the database manager ends.

Operator Response: Report the message to your system programmer. For corrective action, look up the displayed reason and return codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text. For VSAM errors, see the *VSE/VSAM Messages and Codes* manual for the possible cause of this error.

ARI0076D Write error on accounting file *filename* [*cuu*].

Reason Code = code **Return Code = code**
[**Error Code = code**]

Do you want to continue?
No = terminate,
Yes = continue without accounting,
Alt = continue but use alternate file.
Enter 0(No), 1(Yes), or 2(Alt).

Explanation: In attempting to write database accounting data to the accounting output file, an access error occurred. All application server activity is halted until the reply to the prompt is given. If accounting data is being written to tape, the *cuu* is provided in the message. The database accounting file has the file name indicated by *filename*. This name will either be ARIACC1 or ARIACC2. If an error code is not displayed, the Reason Code value is the primary error code and the Return Code value is the secondary error code. See Chapter 21, “Sequential File Errors” on page 361 for reason code and return code displayed. If an error code is displayed, the return code is the contents of register 15 after VSAM processed the request macro. See the *VSE/VSAM Messages and Codes* manual for the possible cause of this error.

The database manager is now asking whether you wish to: continue execution with the accounting support disabled, switch to the alternate accounting file, or terminate the database manager. The operator can reply No(0), Yes(1), or Alt(2).

System Action: All application server activity is halted until the operator replies to the prompt. If the operator replies Yes or No, accounting support is immediately disabled. This error condition prevents the accounting output file from being closed.

If the reply is Yes, execution continues with the accounting support disabled.

If the response is Alt, the database manager issues an OPEN for the alternate accounting file, and continues executing with accounting support enabled.

If the reply is No, the database manager immediately terminates. The condition is treated as a limit error.

If accounting is to tape, the tape unit identified in this error message will be dynamically unassigned. Therefore the tape unit will be available for any use, including the alternate accounting file (unless error message ARI112E is displayed). If this unit is used for the alternate accounting file, a new tape volume must be mounted.

Operator Response: Reply Yes(1), No(0), or Alt(2). Save this message and give it to your system programmer. Do not try to process the output file.

If accounting data is being written to tape, you can try to salvage the accounting data on the output tape by using the VSE job control MTC WTM,*cuu* statement.

System Programmer Response: For corrective action, see Chapter 21, “Sequential File Errors” on page 361 for the reason code and return code displayed. For VSAM errors, refer to the *VSE/VSAM Messages and Codes* manual for the possible cause of this error.

Note: Although you may have partial accounting output, it may not be cleanly processed because the file was not closed.

ARI0077D End of extents encountered on accounting file *filename*.

No = terminate,
Yes = continue without accounting,
Alt = continue but use alternate file.
Enter 0(No), 1(Yes), or 2(Alt).

Explanation: In attempting to write database accounting data to the accounting output DASD file, an end-of-extents condition occurred. The accounting DASD file is now full. Note that some accounting data has already been lost. All application server activity is halted until the reply to the prompting message is given. The database accounting file has the file name indicated by *filename*. This name will either be ARIACC1 or ARIACC2.

The database manager is now asking whether you wish to: continue execution with the accounting support disabled, switch to the alternate accounting file, or terminate the database manager. The operator can reply No(0), Yes(1), or Alt(2).

System Action: All application server activity is halted until the operator replies to the prompt. If the response is Yes or No, accounting support is immediately disabled.

If the reply is Yes(1), the database manager execution continues with accounting support disabled. Eventually, the actions described under **System Programmer Response** should be done.

If the response is Alt(2), the database manager issues an OPEN for the alternate accounting file and continues executing with accounting support enabled.

If the response is No(0), the database manager terminates immediately. The condition is treated as a limit error.

Operator Response: Reply Yes(1), Alt(2), or No(0). Save this message and give it to your system programmer.

System Programmer Response: You may need to allocate a larger space for the accounting file. Update the DLBL/EXTENT information accordingly in the job control for the accounting file. Ensure that the full accounting file is saved for later processing. If you are using database tables to store the accounting data, the full accounting file should be loaded (using DATALOAD) into the tables at the earliest opportunity.

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ARI0078E Invalid response to accounting file error prompt message.

Explanation: An invalid response was given to accounting file error prompt message ARI0076D.

System Action: Message ARI0076D is redisplayed.

User Response: Determine the valid response to message ARI0076D, and enter the valid response when the prompting message is redisplayed.

ARI0079I Accounting file *filename* {OPENED | CLOSED}.

Explanation: The database accounting file has been opened or closed. This file has the name indicated by *filename*, which is either ARIACC1 or ARIACC2.

System Action: If the accounting file was opened, the system is writing accounting records to the opened file. If the accounting file was closed, it is available for any other processing.

User Response: None required.

ARI0080E Trace file end of extents encountered. Trace output is disabled.

Explanation: In attempting to write database trace data to the trace output DASD file, an end-of-extents condition occurred. The trace DASD file is now full. Tracing is disabled.

System Action: The database manager continues without any further database trace output. This error condition prevents closing the trace output file during TRACE OFF command processing, database manager shutdown, or application termination.

User Response: Save this message and give it to your system programmer. Do not try to process the trace output file.

See the Operator Response for message ARI0097I for possible action to take to salvage the accumulated trace output data.

Operator Response: See User Response.

System Programmer Response: You may need to allocate a larger space for the trace file. Update the DLBL/EXTENT information accordingly in the job control for the trace file.

ARI0081E Write error trace file. Reason Code = *nm*. Error Code = *nm*.

Explanation: When the system attempted to write trace data to the trace output file, an access error occurred. Trace status is now "output disabled". The trace file has the file name ARITRAC. The Reason Code value is the Primary Error Code. The Error Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either

Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: Any further database trace output is disabled. This error condition prevents closing the trace output file during TRACE OFF command processing, database manager shutdown, or application termination.

User Response: Save this message and give it to your system programmer. If a 0Pnn message was received for the trace tape or disk unit, also give a copy of this message to the system programmer. Do not try to process the trace output file.

See Operator Response for message ARI0097I for possible action to salvage the accumulated trace output data.

Operator Response: See User Response.

System Programmer Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text. Note that although you may have partial trace output, it cannot be cleanly processed because the trace file has not been closed.

ARI0082E TRACE command parameter *n* [*parameter*] invalid or missing.

Explanation: The TRACE operator command was entered and is being processed. One of the following conditions was detected:

- A required parameter contains an invalid value.
- A required parameter was omitted.
- An optional parameter contains an invalid value.
- An undefined extra parameter was entered.

Parameter *n* identifies which parameter was omitted or contains the invalid value. *parameter*, if present in the message text, identifies the invalid parameter value. If not present, it indicates that a required parameter was omitted.

System Action: TRACE command processing ends. There is no change in the status of the database trace facility.

Operator Response: Consult the TRACE command section of the *DB2 Server for VSE & VM Operation* manual, and compare the TRACE command description with the TRACE command that you entered and the text of this message. Determine which parameter was erroneously specified or omitted and reenter the TRACE command.

ARI0083I Trace command specified {ON | OFF}, but trace already {ON | OFF CLOSED}.

Explanation: One of the following occurred:

- The TRACE ON command was specified and the database trace facility is already active (ON) or

"output disabled" due to successful processing of a previous TRACE ON operator command (and no subsequent successful TRACE OFF operator command).

- The TRACE ON command was specified and the database trace facility is already active (ON) or "output disabled" due to successful processing of trace parameters (TRACCONV=, TRACDBSS=, TRACRDS=, TRACDSC=, TRACWUM=, TRACDRRM=, TRACSTG=) specified with the initialization parameters (and no subsequent successful TRACE OFF operator command).
- The TRACE OFF command was specified and the database trace facility is already inactive (OFF) and no trace file is open (trace is in OFF CLOSE state). The message text specifies OFF and OFF CLOSED.

TRACE ON cannot be validly specified unless trace is inactive (OFF). TRACE OFF cannot be validly specified unless trace is active (ON) or inactive but with the trace file open (OFF NOCLOSE).

System Action: TRACE command processing ends. There is no change in status of the database trace facility.

Operator Response: None is required since trace is already in the state specified by the TRACE command. If you want to specify new tracing (TRACE ON) parameters, you must first successfully enter the TRACE OFF command (the NOCLOSE option allows the trace file to be kept open for further output in the same trace file).

ARI0084D Enter one of userid, AGENT n, * (for all), or CANCEL.

Explanation: The TRACE ON operator command is being processed. The database manager is prompting the operator to specify which database user ID or agent number (or * for all agent numbers) is to be traced.

System Action:

- If a user ID is entered, trace output will occur only for the database Agents processing on behalf of the specified user ID.
- If AGENT n is entered, trace output will occur only for processing within the specified Agent number.
- If * is entered, trace output will occur for processing in all DB2 Server for VSE Agents.
- If CANCEL is entered, TRACE command processing ends.

Operator Response: Enter one of the following:

User ID

Indicates tracing by database user ID. Although lower case characters may be entered, they are translated to upper case by the database manager. Also, imbedded blanks may not be entered since the blank (space) character is the database parameter delimiter

character. You should attempt to trace by a user ID only if the user ID consists entirely of numeric and uppercase alphabetic characters with no imbedded blanks (low order blanks are no problem).

AGENT n

AGENT indicates trace by agent number; n is a valid database Agent number (blank between AGENT and n).

AGENT 1 Operator Agent.

AGENT 2 Checkpoint/Archive Agent.

AGENT 3 In single user mode is General Purpose User Agent.

In multiple user mode is Ready/Recovery Agent.

AGENTS 4-n In multiple user mode are General Purpose User Agents.

Note: On SHOW commands, user agents 4 through n are displayed as agents 1, 2, ..., NCUSERS initialization parameter value.

* Indicates that all database Agents are to be traced.

CANCEL

Ends TRACE command processing.

ARI0085E Agent number [value] invalid or missing.

Explanation: An incorrect or null (blank) agent number value was entered in response to TRACE ON command prompting message ARI0084D.

- If value is missing from the message text, the keyword AGENT was entered but the agent number value was omitted.
- If value is present in the message text, an agent number value was entered which was not an unsigned number, was a zero, or exceeded the number of agents present in the database manager. The number of agents can be determined by the SHOW ACTIVE operator command.

System Action: TRACE ON prompting message ARI0084D is re-displayed to allow the correct response to be entered.

Operator Response: Determine the valid agent number value you will enter in response to prompting message ARI0084D, and enter the valid response when the prompting message is re-displayed.

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ARI0086E Invalid response {**BLANK** | *value*} to prompt.

Explanation: An incorrect value (*value* in message text) or no value (**BLANK** in message text) was entered in response to a TRACE ON command or trace initialization prompting message.

- For message ARI0092A, a blank or null response was entered (**BLANK** in text), an incorrect cuu value was entered (not three characters or not valid hex characters), or the response DISK or CANCEL was misspelled.
- For message ARI0084D, a blank or null response was entered.
- For message ARI0087D, either only a blank or null response was entered (**BLANK** in text), or a value other than CONV, DBSS, RDS, WUM, DRRM, DSC, or STG was entered (*value* in text).
- For message ARI0088D, either only a blank or null response was entered (**BLANK** in text), or a value for function name other than *, EXEC, PA, OPT, AG, INT, or AU was entered (*value* in text).
- For message ARI0090D, either only a blank or null response was entered (**BLANK** in text), or a value for function name other than *, ENTRY, EXIT, LOG, LOCK, LUW, DC, DM, STOR, SORT, INDEX, or STAT was entered (*value* in text).
- For message ARI0091D, either only a blank or null response was entered (**BLANK** in text), or a value that was not an unsigned numeric, or that was not in the range 0 to 14999 or 20000 to 24999, was entered (*value* in text).
- For message ARI0140D, a blank or null response was entered (**BLANK** in text), or a value for function name other than *, DICT, GEN, PARSE, or RDIIN was entered (*value* in text).
- For message ARI0141D, either only a blank or null response was entered (**BLANK** in text).
- For message ARI0142D, either only a blank or null response was entered (**BLANK** in text), or a value for function name other than *, AGENT, or COM was entered (*value* in text).
- For message ARI0160D, a blank or null response was entered (**BLANK** in text).
- For message ARI0162D, a blank or null response was entered (**BLANK** in text).

System Action: The TRACE prompting message (to which the invalid response was entered) is redisplayed.

Operator Response: Determine the valid response to the trace prompting message, and enter the valid response when the prompting message is re-displayed.

ARI0087D Enter one or more component names or CANCEL. Valid component names are DBSS, RDS, [WUM, DRRM,] DSC, CONV, and STG.

Explanation: The TRACE ON operator command is being processed. The database manager is prompting the operator to specify the major components (DBSS, RDS, WUM, DRRM, DSC, CONV, or STG) that are to be traced.

System Action:

- If the operator enters DBSS, message ARI0090D appears and prompts the operator for the functions of DBSS to trace.
- If the operator enters RDS, message ARI0088D appears and prompts the operator for the functions of RDS to trace.
- If the operator enters WUM, message ARI0141D appears and prompts the operator for the trace level.
- If the operator enters DRRM, message ARI0140D appears and prompts the operator for the functions of DRRM to trace.
- If the operator enters DSC, message ARI0142D appears and prompts the operator for the functions of DSC to trace.
- If the operator enters CONV, message ARI0160D appears and prompts the operator for the trace level.
- If the operator enters STG, message ARI0162D appears and prompts the operator for the trace level.
- If the operator enters CANCEL, TRACE command processing ends.

Operator Response:

- If you want DBSS tracing, enter DBSS.
- If you want RDS tracing, enter RDS.
- If you want WUM tracing, enter WUM.
- If you want DRRM tracing, enter DRRM.
- If you want DSC tracing, enter DSC.
- If you want CONV tracing, enter CONV.
- If you want STG tracing, enter STG.
- If you want to end the TRACE command, enter CANCEL.

Enter any of DBSS, RDS, WUM, DRRM, DSC, CONV, or STG (with one or more blanks between them). You can enter them in any order.

Note: You can see this message in all environments. In environments where components are not active, however, the components tracing does not take place, even if the operator specifies them.

ARI0088D Enter RDS function name and trace-level pairs.

Valid function names are *, EXEC, PA, OPT, AG, INT, AU, SG, and CANCEL.

Valid trace-level values are 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator has responded RDS to prompting message ARI0087D. The database manager is prompting the operator to specify which functions of RDS to be traced and the desired trace level for each function.

System Action:

- If * n is entered, all RDS functions will be traced at trace level n.
- If EXEC n, or PA n, or OPT n, or AG n, or INT n, or AU n, or SG n are entered, the specified functions of RDS will be traced at the specified trace level (n).
- If CANCEL is entered, TRACE command processing ends.

Note: If trace level 0 is entered for a function, it will not be traced (equivalent to not entering the function at all). Therefore, if you want to trace all RDS functions (at level 2, for example) except INT, you can enter * 2 INT 0. Since INT appears after the * specification, it overrides the implicit INT 2 implied by * 2. Likewise, entering : * 1 EXEC 2 will cause all RDS functions except EXEC to be traced at level 1 and EXEC to be traced at level 2.

Operator Response:

- If all RDS functions are to be traced, enter * plus 1 or 2 for desired trace level (with blank between * and number).
- If only selected RDS functions are to be traced, enter first function name, then its trace level value, then, if desired, second function name, then its trace level value, etc. Note that one or more blanks must appear between each function name and each trace level value entered. Note also that if you enter a function name more than once, the last entry is effective.
- If TRACE command termination is desired, enter CANCEL.
- See *Note* in the System Action section of this message for possible use of * in combination with other function names.

ARI0089E Trace-level [*value*] for {RDS | CONV | DBSS | DSC | WUM | DRRM | STG} {* | *function name*} invalid or missing.

Explanation: You entered one of the following:

- An incorrect trace-level value (*value*) displayed in message text)
- No trace-level value (*value*) omitted from message text).

Your entry was in response to one of the following TRACE ON command prompting messages:

- ARI0088D (RDS in message text)
- ARI0160D (CONV in message text)
- ARI0090D (DBSS in message text)

- ARI0140D (DRRM in message text)
- ARI0141D (WUM in message text)
- ARI0142D (DSC in message text)
- ARI0162D (STG in message text).

{* | *function name*} in message text identifies the valid RDS, DBSS, DSC, or DRRM function name that precedes the omitted or incorrect trace-level value.

System Action: The TRACE ON prompting message (to which the incorrect response was entered) is re-displayed.

Operator Response: Determine the valid response to the trace prompting message (each function name must be followed by a valid trace-level value of 0, 1, or 2 with a blank between them) and enter the valid response when the prompting message is re-displayed.

ARI0090D Enter DBSS function name and trace-level pairs.

Valid function names are
 *, ENTRY, EXIT, LOG, LOCK, LUW, DC, DM, STOR, SORT, INDEX, STAT, and CANCEL.
Valid trace-level values are
 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator has responded DBSS to prompting message ARI0087D. The database manager is prompting the operator to specify which functions of DBSS are to be traced and the desired trace level for each function.

System Action:

- If * n is entered, all DBSS functions will be traced at trace level n.
- If ENTRY n, or EXIT n, or LOG n, or LOCK n, or LUW n, or DC n, or DM n, or STOR n, or SORT n, or INDEX n, or STAT n are entered, the specified functions of DBSS will be traced at the specified trace level (n).
- If CANCEL is entered, TRACE command processing ends.

Note: If trace level 0 is entered for a function, it will not be traced (equivalent to not entering the function at all). Therefore, if you want to trace all DBSS functions (at level 2, for example) except INDEX, you can enter: * 2 INDEX 0. Since INDEX appears after the * specification, it overrides the implicit INDEX 2 implied by * 2. Likewise, entering: * 1 ENTRY 2 will cause all DBSS functions except ENTRY to be traced at level 1 and ENTRY to be traced at level 2.

Operator Response:

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- If all DBSS functions are to be traced, enter * plus 1 or 2 for desired trace level (with blank between * and number).
- If only selected DBSS functions are to be traced, enter first function name, then its trace level value, then, if desired, second function name, then its trace level value, etc. Note that one or more blanks must appear between each function name and each trace level value entered. Note also that if you enter a function name more than once, the last entry is effective.
- If TRACE command termination is desired, enter CANCEL.
- See the note in the SYSTEM ACTION section of this message for possible use of * in combination with other function names.

ARI0091D Enter the dump trace point number, or CANCEL to terminate trace command processing.

Explanation: The TRACE ON command is being processed. The operator specified the DUMP parameter in the TRACE ON command. The database manager is prompting the operator to specify the CONV, DBSS, RDS, DSC, WUM, DRRM, or STG trace point number that is to cause a database snap dump to occur when the trace point is first activated. The snap dump will dump either all of the database partition (full dump), or only that part of the partition which does not contain database load modules (partial dump). The database initialization parameter DUMPTYPE will control whether a full dump is given (DUMPTYPE=F) or a partial dump is given (DUMPTYPE=P or N).

System Action: The entered trace point number is stored. When that trace point is first activated for tracing, a snap dump is produced on SYSLST. After the first activation, no more snap dumps are produced.

If CANCEL is entered, TRACE command processing ends.

Operator Response:

- Enter the CONV, DBSS, RDS, DSC, WUM, DRRM, or STG trace point number that you want. The number must be unsigned and in the range of 0 to 14999 or 20000 to 24999.
- If TRACE command termination is desired, enter CANCEL.

ARI0092A Ready trace output volume. Enter CUU, DISK, or CANCEL.

Explanation: The operator specified one or more of the initialization parameters TRACCONV, TRACDBSS, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG. The initialization is requesting the system operator to:

- Ready a tape unit for trace output and supply its cuu, or

- Reply DISK if the trace output file is a disk file.

If this message is redisplayed after message ARI0094E (indicating a trace file open error), the database manager is requesting corrective action for that message plus the operator action indicated above.

System Action: If the operator enters cuu, the indicated tape unit is dynamically assigned and opened. DB2 Server for VSE initialization continues with database trace active.

If the operator enters DISK, the trace disk file is opened. DB2 Server for VSE initialization continues with database trace active.

If the operator enters CANCEL, message ARI0056I is displayed. DB2 Server for VSE initialization continues with database trace inactive ("output disabled").

Operator Response: Database initialization is requesting the system operator to supply one of the following:

- The cuu of a selected tape unit if tracing to tape, or
- The reply DISK if tracing is to a disk file.

If trace output is to tape:

1. Select a tape unit for trace output.

Note: The selected tape unit must be currently unassigned.

2. Make the tape unit ready with a labeled scratch tape mounted and properly positioned.
3. Enter the cuu of the selected tape unit.

You can reply CANCEL if no tape or disk file is available or tracing is not desired.

If this message is redisplayed after message ARI0094E (indicating a trace file open error), the database manager is requesting corrective action for that message plus the operator action indicated above. Reply CANCEL if the error condition cannot be corrected.

ARI0093I TRACE command terminated by request.

Explanation: The TRACE ON command was being processed. The operator responded CANCEL to a prompting message.

System Action: TRACE command processing ends. There is no change in status to the database trace facility.

Operator Response: The operator may reenter the TRACE ON command.

ARI0094E Trace file {*cuu* | **DISK**} assign or open failed. Reason Code = *nm*. Return Code = *nm*.

Explanation: The database manager is processing the TRACE ON command or initializing a database trace during database or Resource Adapter initialization. An error occurred while the Resource Adapter was attempting to dynamically assign (tape only) and open the trace output file on tape unit *cuu* (*cuu* is in the message text) or on a disk file (**DISK** is in the message text). The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: If this error occurs in the database machine, then either:

- TRACE command processing ends (For TRACE command processing, the trace facility remains inactive.), or
- Database initialization reissues message ARI0092A. This allows the system operator to correct the problem indicated by this error message, ready the trace output volume, and retry the trace file open processing.

If this error occurs in a user virtual machine, the application abends.

Note: If output is to tape, the tape volume has not been accessed.

User Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

Operator Response: See User Response.

System Programmer Response: See User Response.

ARI0095I Trace now on with output on unit {*cuu* | **DISK**}.

Explanation: The TRACE ON command has been successfully processed, or database initialization has successfully initialized trace ON. Database trace is now active with trace output on tape unit *cuu* (*cuu* is in the message text) or to a disk file (**DISK** is in the message text).

System Action:

- Trace is active.
TRACE ON command processing is completed. Trace is active as specified by the values entered for the various TRACE ON command prompting messages, or initialization trace initialization is completed. The TRACCONV, TRACDBSS, TRACRDS, TRACDSC,

TRACWUM, TRACDRRM, or TRACSTG initialization parameters specify how TRACE is active.

- Trace output is directed to tape unit *cuu* (*cuu* is in the message text) or to a disk file (**DISK** is in the message text).
-

ARI0096I TRACE now OFF. Trace file remains open on unit {*cuu* | **DISK**}.

Explanation: The TRACE OFF NOCLOSE command was successfully processed. Trace is inactive and the trace output file remains open for subsequent trace output (after using a TRACE ON command). If *cuu* is in the message text, it identifies the trace output file tape unit. If **DISK** is in the message text, the trace output file is a disk file. This message will occur if trace was active when the command was entered or if trace was already inactive but with the trace output file open (due to a prior TRACE OFF NOCLOSE command).

System Action: TRACE OFF command processing has completed. Trace is completely inactive.

Operator Response: None required. A TRACE ON command may now be entered. Note that a TRACE OFF command with the NOCLOSE parameter omitted (or database manager termination which closes the tape or disk file) must be executed before the trace output file can be processed.

ARI0097I TRACE was output disabled. TRACE is now OFF. It did not close unit {*cuu* | **DISK** | **UA**}.

Explanation: The database manager is being normally or abnormally terminated, or the TRACE OFF command (with or without the CLOSE or NOCLOSE parameters) was processed. Trace was previously ON (active) due to the TRACE ON operator command or the initialization parameters TRACCONV, TRACDBSS, TRACRDS, TRACDSC, TRACWUM, TRACDRRM, or TRACSTG.

Trace became "output disabled" (trace output suppressed) because of either:

- A failure to assign and open the trace output file during database initialization (CANCEL reply to message ARI0092A); or
- A trace output file write error (message ARI0081E).

The TRACE OFF command or database manager termination caused trace to be turned off (fully disabled), but the trace output file was not closed due to the previous problem (assign failure, open failure, or write error).

If *cuu* is in the message text, the trace output tape file was assigned and opened and may contain trace output data, but due to the write error and failure to close the

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file, the file may not be usable. Also, tape unit *cuu* remains assigned to the database partition until the partition goes to end of job step.

If **DISK** is in the message text, one of the following occurred:

- The disk trace output file was not successfully opened for Trace output during database initialization (message ARI0094E was displayed).
- The disk trace output file was opened successfully, but an error occurred in writing data to the file (message ARI0081E was displayed). The file may contain trace data, but because of the write error and the failure to close the file, the file may not be usable.

If **UA** is in the message text, the trace output tape file was not successfully assigned and opened during database initialization.

System Action: Trace has been turned off (disabled).

Note: If *cuu* is in the message text, the tape unit *cuu* is no longer the trace output file. (A later TRACE ON command to another *cuu* will be accepted).

Operator Response: None required. If the message was in response to the TRACE OFF command and output was to tape, a TRACE ON command may be entered (with a different *cuu*). If output was to tape, you may attempt to salvage the trace data on the output tape by using the VSE job control MTC WTM,*cuu* statement. In any case, you can attempt to run the DB2 Server for VSE Trace Formatter Utility Program (ARIMTRA). It will format and output all trace data or selected trace data up to the point of failure. At that point it will probably end due to invalid data or an I/O error on the tape.

Note: If output was to tape, tape unit *cuu* remains assigned to the database partition and cannot be used until the database manager ends. Therefore, if this condition occurred during the TRACE OFF command, you may have to shut down the database manager to unassign the tape unit.

ARI0098E Trace file {*cuu*|DISK} unassigned or CLOSE failed. Reason Code = *nn*. Return Code = *nn*. TRACE OFF. Processing completed.

Explanation: The TRACE OFF command (CLOSE is the default) is being processed or the database manager is being normally or abnormally ended. If *cuu* is in the message text, a terminating error occurred while trying to close and unassign the trace output tape file. If **DISK** is in the message text, a terminating error occurred while trying to close the trace output disk file. The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes

under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: TRACE OFF command processing or trace shutdown is completed. Trace is in the OFF state. Assume that the trace tape or disk file was not closed and is not fully processable (see below).

Note: If output was to tape, tape unit *cuu* remains assigned to the database partition and cannot be used until the database manager ends. Therefore, if this condition occurred during the TRACE OFF command, you may have to shut down the database manager to unassign the tape unit.

Operator Response: Report the problem (message) to your system programmer.

You may attempt to run the DB2 Server for VSE Trace Formatter Utility Program (ARIMTRA). It will format and output all trace data up to the point of failure. At that point it may end due to lack of tape/disk CLOSE recording or an unreadable record on the tape/disk.

Notes:

1. If the output was to tape and if the message is in response to the TRACE OFF command, you can restart the database trace using the TRACE ON command with a different tape unit *cuu* specified.
2. If the output was to tape and you require the use of the tape unit *cuu* by this or any other partition (before planned shutdown of the database manager), you must shut down the database manager (and restart it) to unassign the tape unit.

System Programmer Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

ARI0099I TRACE OFF. Output file closed on unit {*cuu*|DISK}.

Explanation: Database trace has been successfully ended due to entry of the TRACE OFF CLOSE (CLOSE is the default) operator command or due to database manager normal or abnormal termination. Trace is off and the trace output file has been successfully closed. If *cuu* is in the message text, the trace file is on tape *cuu* and the tape unit has been unassigned. If **DISK** is in the message text, the trace file is a disk file.

System Action: TRACE OFF command processing or trace shutdown is completed. The trace file is closed.

Operator Response: None required. The trace output file is now available for print display by the DB2 Server for VSE Trace Formatter Utility Program (ARIMTRA).

Note for tracing to tape: Because the database manager does not rewind the tape, the operator should manually rewind the tape (unless more files are to be written on the tape) and, if desired, demount it.

ARI0100E Agent/user ID {*agent-id* | *user-id*} is not assigned.

Explanation: A SHOW LOCK operator command could not be processed. Sources of the problem include:

- An invalid user ID was entered
- An invalid agent number was entered (not numeric or not in the range 1 through NCUSERS)
- The user, identified by *user-id*, was not assigned to an agent at the instant the SHOW command was entered.

System Action: The SHOW command processing is ended.

Operator Response: Be sure that the specified *agent-id* or *user-id* is valid and reenter the SHOW command.

Note: You may get the same result if the requested user-id does not occupy an agent at the time the command is reentered.

ARI0101E DBSPACE *dbspace-number* does not exist.

Explanation: The *dbspace-number* entered on the SHOW LOCK DBSPACE operator command or used to release empty pages (STARTUP=P) was invalid:

- Not numeric or
- Not in the range of 1 to n where n is the number of PUBLIC and PRIVATE DBSPACES defined in the database (and with rows in catalog table SYSTEM.SYSDBSPACES).

System Action: The SHOW command processing or release empty pages processing is ended.

Operator Response: Correct the DBSPACE number (be sure that the DBSPACE number is between 1 and the maximum valid value for DBSPACE numbers) and reenter the command.

ARI0102E There is no lock contention for {any | this} {DBSPACE | agent/user}.

Explanation: The database manager could not find a DBSPACE or an *agent/user* that had locking contention at the instant the SHOW command was entered. This message occurred as a result of entering a SHOW LOCK DBSPACE, SHOW LOCK USER, SHOW LOCK WANTLOCK, SHOW LOCK ACTIVE, or SHOW LOCK GRAPH command.

System Action: The SHOW command processing is ended.

Operator Response: Reenter the command.

Note: You may get the same result if the requested agent, user, or DBSPACE has no lock contention at the time the command is reentered.

ARI0103E A column named *name1* does not exist in the system catalog table named *name2*.

Explanation: The row for the column name (*name1*) was not found in the system table *name2*. *name1* is either TLABEL or CLABEL. The TLABEL column resides in SYSTEM.SYSCATALOG and contains correlation names. *name2* is either SYSTEM.SYSCATALOG or SYSTEM.SYSCOLUMNS. The CLABEL column resides in SYSTEM.SYSCOLUMNS and contains column labels.

The database manager expects there to be a column named TLABEL in SYSTEM.SYSCATALOG and CLABEL in SYSTEM.SYSCOLUMNS when looking for a row describing those columns. It could find neither of them.

System Action: Processing continues.

Operator Response: Refer this message to your database administrator.

Database Administrator Response:

1. Determine why the row was deleted, or why it was updated with invalid values, and what values should be inserted.
2. Insert or update a row for TLABEL or CLABEL in SYSTEM.SYSCOLUMNS with the appropriate values.
3. Restart the database manager.

ARI0104I The row, where SQLOPTION = *option1* does not exist, or has incorrect data in the VALUE column in the catalog table named SYSOPTIONS. The database manager will assume a value of *option2*.

Explanation: You omitted a data type value or gave an incorrect value. The system assumed a value instead.

The SQLOPTION = *option1* possibilities are:

SQLOPTION = DBCS

The row for DBCS option in SYSTEM.SYSOPTIONS (where SQLOPTION = DBCS) is missing or contains an invalid value. The correct value is either YES or NO.

SQLOPTION = CHARSUB

The row for the CHARSUB option in SYSTEM.SYSOPTIONS (where SQLOPTION = CHARSUB) is missing or contains an invalid value. The correct values are SBCS or MIXED.

SQLOPTION = CCSIDSBCS

The row for the CCSIDSBCS option in SYSTEM.SYSOPTIONS (where SQLOPTION = CCSIDSBCS) is missing or contains an invalid CCSID value. The correct values are recorded in the SYSTEM.SYSCCSIDS catalog table.

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SQLOPTION = CCSIDMIXED

The row for the CCSIDMIXED option in SYSTEM.SYSOPTIONS (where SQLOPTION = CCSIDMIXED) is missing or contains an invalid CCSID value. The correct values are recorded in the SYSTEM.SYSCCSIDS catalog table.

SQLOPTION = CCSIDGRAPHIC

The row for the CCSIDGRAPHIC option in SYSTEM.SYSOPTIONS (where SQLOPTION = CCSIDGRAPHIC is missing or contains an invalid CCSID value. The correct values are recorded in the SYSTEM.SYSCCSIDS catalog table.

SQLOPTION = MCCSIDSBCS

The row for the MCCSIDSBCS option in SYSTEM.SYSOPTIONS (where SQLOPTION = MCCSIDSBCS) is missing or contains an invalid CCSID value.

SQLOPTION = MCCSIDMIXED

The row for the MCCSIDMIXED option in SYSTEM.SYSOPTIONS (where SQLOPTION = MCCSIDMIXED) is missing or contains an invalid CCSID value.

SQLOPTION = MCCSIDGRAPHIC

The row for the MCCSIDGRAPHIC option in SYSTEM.SYSOPTIONS (where SQLOPTION = MCCSIDGRAPHIC) is missing or contains an invalid CCSID value.

System Action: Processing continues. The implied value of *option2* is:

- For SQLOPTION = DBCS, DBCS option will be NO.
- For SQLOPTION = CHARSUB, CHARSUB option will be SBCS.
- For SQLOPTION = CCSIDSBCS, the CCSIDSBCS option will be determined from the current CHARNAME value.
- For SQLOPTION = CCSIDMIXED, the CCSIDMIXED option will be determined from the current CHARNAME value.
- For SQLOPTION = CCSIDGRAPHIC, the CCSIDGRAPHIC option will be determined from the current CHARNAME value.
- For SQLOPTION = MCCSIDSBCS, the MCCSIDSBCS option will be 37.
- For SQLOPTION = MCCSIDMIXED, the MCCSIDMIXED option will be 0.
- For SQLOPTION = MCCSIDGRAPHIC, the MCCSIDGRAPHIC option will be 0.

Operator Response: Refer this message to your database administrator.

Database Administrator Response: Display the SYSTEM.SYSOPTIONS catalog table and find out whether:

- The DBCS option row is missing or contains a value other than YES or NO. If the row is missing, insert a

row with the correct value. If the row is invalid, update the row with the appropriate DBCS option.

- The CHARSUB option row is missing or contains a value other than SBCS or MIXED. If the row is missing, insert a row with the correct value. If the row is invalid, update the row with the appropriate CHARSUB option.
- One or more of the CCSID option rows (CCSIDSBCS, CCSIDMIXED, CCSIDGRAPHIC, MCCSIDSBCS, MCCSIDMIXED, or MCCSIDGRAPHIC) is missing or contains an invalid CCSID value. Insert a row or update the row with the correct CCSID value. The CCSID values appropriate for this installation should be planned and implemented at the time of installation or migration.

ARI0105I **The row, where *column = name*, does not exist in the system catalog table *table-name*. The database manager assumes the internal default of *charname*.**

Explanation: The row for the character set, where *column = name* does not exist in the catalog table *table-name*. The character set specified in the CHARNAME parameter on SQLSTART is not correctly defined in all catalog tables.

System Action: Processing continues. The database manager uses the *charname* character set, which is usually be the last CHARNAME correctly specified.

Operator Response: Refer this message to your database administrator.

Database Administrator Response: Determine whether a wrong character set name is specified as the CHARNAME initialization parameter.

- If the initialization parameter is incorrect, restart the database system with a correct initialization parameter value.
- If the row is missing from the specified catalog table *table-name*, insert a row with the correct values into the table.

After inserting the row, restart the database manager, because some application programs may not run correctly when using another character set.

For more information, see the *DB2 Server for VSE System Administration* manual.

ARI0106E **The database manager found an incompatibility in the application server at initialization. The expected FORMAT ID is *format-id1*. The FORMAT ID found in the application server is *format-id2*.**

Explanation: The code running on the database manager is incompatible with the release level of the database. *format-id1* is the expected format ID, and *format-id2* is the format ID of the current application server.

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Level of Code	Application Server Format ID
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Version 7 Release 3	9
Version 7 Release 2	9
Version 7 Release 1	9
Version 6 Release 1	9
Version 5 Release 1	8
Version 3 Release 5	7
Version 3 Release 4	7
Version 3 Release 3	7
Version 3 Release 2	7
Version 3 Release 1	6
Version 2 Release 2	5

System Action: The database manager is terminated.

Operator Response: Refer this message to your system programmer.

System Programmer Response: The procedures for installing the database manager code and updating application servers are described in the *DB2 Server for VSE Program Directory*. Installations that are simultaneously using multiple application servers and different database manager releases may accidentally pair a release of the database manager with an incompatible application server.

Operator Response: Refer this message to your database administrator.

Database Administrator Response: Display the row for the specified EBCDIC character set in the SYSTEM.SYSCHARSETS catalog table. Determine the correct values and update the row with correct values.

After correcting the row, restart the database manager because some application programs may not run correctly using another character set.

ARI0109E DB2 Server for VSE accounting is not active.

Explanation: The ALTACCT operator command was entered, but the database accounting support is not active.

System Action: The ALTACCT operator command processing ends.

Operator Response: None is required. Do not enter the ALTACCT operator command when DB2 Server for VSE accounting support is not active. If you were instructed to enter this command, notify your database system programmer.

System Programmer Response: Ensure that the ACCOUNT initialization parameter is properly specified and that the system operator is properly instructed when to enter the ALTACCT operator command.

ARI0107E The ROW, where the NAME = name, contains incorrect data in the column column in the system catalog table SYSCHARSETS. Data positions that are in error are indicated by the letter E in the strings that follow. Either the current system CHARNAME or INTERNATIONAL will be used.

Explanation: For the character set specified in the CHARNAME initialization parameter, the EBCDIC character set classification table or the EBCDIC character set translation table in SYSTEM.SYSCHARSETS contains invalid values.

In the strings following the message, the positions in error are marked by an E. These positions are represented in hexadecimal numbers.

System Action: Processing continues. If the application server default CHARNAME is being changed and the new CHARNAME is in error, the value of the current application server default CHARNAME is used. If the current application server default CHARNAME is in error, then INTERNATIONAL will be used as the CHARNAME value. Message ARI0143I indicates the value of the application server default CHARNAME.

ARI0111I Accounting disabled.

Explanation: The DB2 Server for VSE accounting support has been disabled. This message is issued whenever the YES response is given in reply to either message ARI0076D or message ARI0077D.

System Action: Processing continues with accounting support disabled.

ARI0112E Dynamic UNASSIGN of accounting file filename cuu failed. Reason Code = X'nn'.

Explanation: In attempting to dynamically unassign the tape unit identified in this error message, an error occurred. The Reason Code value is the return code (in hexadecimal) from the VSE ASSIGN macro. Refer to the *IBM VSE/ESA System Macros Reference* manual for an explanation of this code.

System Action: Processing continues. The tape unit identified in this error message remains assigned to the database partition until the database manager terminates and cannot be used until that time.

Operator Response: Save this message and give it to your system programmer.

System Programmer Response: Refer to the *IBM VSE/ESA System Macros Reference* manual for an

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explanation of the error code displayed.

ARI0113I {LUWID *luwid-value* | DBSPACE *dbspace-number* | USERID *userid*} has already been specified.

Explanation: The specified LUWID, DBSPACE, or USERID was entered in a previous command of the same type (duplicate command) in the EXTEND input file.

System Action: The duplicate specification is ignored. Processing continues.

ARI0114E *keyword* was specified more than once in the same statement.

Explanation: A single EXTEND input file command specified a control keyword more than once.

keyword is a control keyword—ALL, TO, DBSPACE, USERID, or LUWID.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Remove duplicate keywords in the EXTEND input file command, then restart extended database initialization.

ARI0115E Unexpected string *string* was found.

Explanation: A line of an EXTEND input file command contains unrecognizable keywords, more than one control keyword, or extra input on a record.

string is an unrecognizable string, a keyword, or a control keyword found while parsing an EXTEND input file command.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file command. Restart extended database initialization.

ARI0116E *string1* was expected but *string2* was found.

Explanation: While parsing EXTEND input file commands, one of the following caused an error:

- An unexpected string was found where a keyword, option, or reserved word should have been found.
- An end of record was expected and a string was found.
- An invalid keyword-option combination was found.

For example, TIME or DATE was specified in a BYPASS UNDO WORK command, or ALL was specified in a ROLLBACK COMMITTED WORK command.

string1 is:

KEYWORD One of the following keywords was expected: BYPASS, ROLLBACK, DISABLE, or ENABLE.

OPTION One of the following options was expected: ALL, LUWID, TIME, DATE, DBSPACE, or USERID.

VALUE One of the following values was expected: LUWID value, TIME value, DATE value, DBSPACE value, or USERID value.

reserved word One of the following reserved words was expected: WHERE, UNDO, WORK, COMMITTED, DBSPACE.

If *string1* was either VALUE, UNDO, WORK, COMMITTED, or DBSPACE, *string2* may be END OF RECORD because an incomplete command was entered. If *string1* is either OPTION or WHERE, *string2* may be END OF FILE because an incomplete command was entered.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0117E Range error: *number* is greater than the maximum number of possible *condition* (*max*).

Explanation: While parsing EXTEND input file commands, one of two conditions existed. *condition* identifies the condition.

- *condition* is LUWIDS. The total number of logical units of work included in the EXTEND input file (a composite of all commands) exceeded the maximum. Since BYPASS UNDO WORK affects log recovery, only 252 logical units of work are allowed.

number is the number of logical units of work included in the EXTEND input file.

max is 252, the maximum number of active logical units of work permitted at any one time.

- *condition* is DBSPACES. The number of DBSPACES exceeded the maximum number of PUBLIC and PRIVATE DBSPACES in the database.

number is the number of a DBSPACE.

max is the number of PUBLIC and PRIVATE DBSPACES defined in the database.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0118E {LUWID *luwid-value* | DBSPACE *dbspace-number* | USERID *userid*} contains invalid {HEX CHARACTERS | NUMBERS | ALPHANUMERICS} or is too long.

Explanation: While parsing EXTEND input file commands, one of the following conditions occurred:

- A logical unit of work (*luwid-value* is the logical unit of work identifier) contains invalid hexadecimal characters.
- A DBSPACE value contains characters other than positive numbers or zero.
- The logical unit of work, DBSPACE, or user ID value was too long.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0119E Cannot {bypass | disable} DBSPACE 1.

Explanation: DBSPACE 1 can be neither disabled nor bypassed. The database manager must be able to use the database catalog located in DBSPACE 1.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Modify the EXTEND input file so that DBSPACE 1 is not disabled or bypassed. Restart extended database initialization.

ARI0120I DBSPACE *dbspace-number* is already {ENABLED | DISABLED}.

Explanation: A DISABLE or ENABLE DBSPACE command was specified for a DBSPACE that was previously disabled or enabled.

System Action: Initialization continues. The status of the specified DBSPACE is not changed.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Take note of the message.

ARI0121I DBSPACE *nnn* is disabled.

Explanation: This message is issued for each disabled DBSPACE in the database. DBSPACES are disabled by the DISABLE DBSPACE command.

System Action: Processing continues.

System Programmer Response: You may wish to take note of which DBSPACES are disabled.

ARI0122E The time *time-string* and date *date-string* specified are later than the current time.

Explanation: The starting date and time specified (or defaulted to) in the ROLLBACK COMMITTED WORK command are later than the current date and time. There can be nothing in the database log with such a date and time.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Determine the correct time and date. Correct the EXTEND input file. Restart extended database initialization.

ARI0123E The TO time and date combination is earlier than the FROM time and date combination.

Explanation: In a ROLLBACK COMMITTED WORK command, the TO time and date (taken in combination) must be greater than the FROM time and date (taken in combination).

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0124E {OPEN | GET | CLOSE} error *input-file*
Reason Code = nn. Return Code = cc.

Explanation: An error occurred in an attempt to access or close the EXTEND input file. The Reason Code value is the primary error code; the Return Code value is the secondary error code. For further explanation, look up the displayed err Chapter 21, "Sequential File Errors" on page 361 in this manual or SEQ FILE ERRORS in the HELP text.

input-file is SYSIPT, is the file with ddname ARIEXTND, the input file associated with the use of the EXTEND initialization parameter during database initialization.

System Action: For OPEN or GET errors, the database manager ends. For CLOSE errors, processing continues.

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Operator Response: For OPEN or GET errors, look up displayed error codes to take corrective action. For CLOSE errors, no action is required.

System Programmer Response: Same as Operator Response.

ARI0125E The extend file is empty.

Explanation: The input file, SYSIPT, associated with the use of the EXTEND initialization parameter during database initialization contains no commands.

System Action: The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: You must either provide the required file commands or restart database initialization with EXTEND=N.

ARI0126E DBSS termination during {FORWARD|ROLLBACK|UNDO|REDO} processing.

Explanation:

- If FORWARD appears in the message, the database manager failed in the DBSS while accessing data in the database (DBSPACE data). The database manager was performing normal database activity for an application program or a terminal user. The following display output provides more information about the failing DBSS operation and identifies the database user who requested the operation.
- If ROLLBACK appears in the message, the database manager failed in the DBSS while trying to undo a database update previously made by the logical unit of work identified in the following display output. The database manager is performing log recovery for a logical unit of work that failed because the application, the terminal user, or the database manager initiated the ROLLBACK WORK process. The following display output provides more information about the failing DBSS operation and identifies the database user who requested the operation.
- If UNDO appears in the message, the database manager has failed in the DBSS during log recovery phase of warm start or restore from archive while trying to undo a database update previously made by the uncommitted logical unit of work identified in the following display output. The following display output provides more information about the failing DBSS operation and identifies the database user who requested the operation.

Note: This failure can occur if a committed logical unit of work is rolled back by the ROLLBACK COMMITTED WORK command (refer to the *DB2 Server for VSE & VM Diagnosis Guide and*

Reference manual for information about recovering from DBSS errors).

- If REDO appears in the message, the database manager has failed in the DBSS during the log recovery phase of warm start or restore from archive while trying to “redo” a database update previously made by the committed logical unit of work identified in the following display output. The following display output provides more information about the failing DBSS operation and identifies the database user who requested the operation.

Note: This message and its display output will always appear on the operator console. It will also appear in SYSLST output if the DSPLYDEV initialization parameter requests (or defaults to) SYSLST output.

System Action: The database manager ends.

Operator Response: Save this message and the subsequent display output and contact your system programmer immediately.

System Programmer Response: Make note of the information given in the message and the following display output, and refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference manual* for information about recovery procedures for DBSS errors.

ARI0127E The {TIME | DATE} parameter string contains a syntax error.

Explanation: The TIME or DATE parameter specified in a ROLLBACK COMMITTED WORK command contained a syntax error.

TIME Must be a total of 8 characters (hh:mm:ss). You must have two digits each for hour, minutes, and seconds with a delimiter (:) between each. Add leading zeros if necessary.

DATE Must be a total of 8 characters (mm-dd-yy or dd-mm-yy). The correct format is specified when VSE is IPLed. You must have two digits each for month, day, and year with a delimiter (-) between each. Add leading zeros if necessary.

string is the incorrect time or date character string.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0128E A nonnumeric or invalid character was found in the {TIME | DATE} parameter string.

Explanation: An invalid character was found in the TIME or DATE parameter specified in a ROLLBACK COMMITTED WORK command.

TIME A non-numeric value for the hour, minutes, or seconds was specified. Or, an incorrect numeric value was specified. Valid numeric ranges for time are:

hh 00-23 mm 00-59 ss 00-59

DATE A non-numeric value for the month, day, or year was specified. Or, an incorrect numeric value was specified. Valid numeric ranges for date are:

mm 01-12 dd 01-31 yy 00-99

Note: Value for day must be valid for the month or year specified.

string is the invalid time or date string.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0129E The combination of the ALL option with any other option is not valid.

Explanation: One of two conditions occurred:

- The ALL option and some other option (LUWID, USERID, or DBSPACE), were specified in the same BYPASS UNDO WORK command. No other option can be specified with ALL.
- More than one BYPASS UNDO WORK command was specified in the same EXTEND input file and one of these commands specified the ALL option. If ALL is used, only one BYPASS UNDO WORK command is allowed in the EXTEND input file.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the BYPASS UNDO WORK command. Restart extended database initialization.

ARI0130I The parameters specified are a subset of those used in a previous statement of the same type.

Explanation: The parameters ANDed together in a BYPASS UNDO WORK or ROLLBACK COMMITTED WORK command are a subset of parameters specified in previous commands of the same type. For example, the following duplicate commands will cause this message to be issued:

```
BYPASS UNDO WORK WHERE
USERID SMITH JONES
DBSPACE 2 4 5
```

```
.
```

```
BYPASS UNDO WORK WHERE
USERID JONES
DBSPACE 4
```

System Action: The duplicate specification is ignored. Processing continues.

ARI0131E The TO option was found but no starting time or date was specified.

Explanation: A ROLLBACK COMMITTED WORK command was entered and the TO option was specified. No starting (from) TIME or DATE was specified.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0132E DBSPACE *dbspace-number* has been selected for both enabling and disabling.

Explanation: The EXTEND input file contained conflicting commands to enable and disable the same DBSPACE.

System Action: EXTEND input file parsing completes. The database manager ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the EXTEND input file. Restart extended database initialization.

ARI0137I Invalid installation defined date/time defaults on name.

Explanation: The specified date/time default *name* contains an invalid value. During installation, four date/time values were stored into the SYSTEM.SYSOPTIONS table. Their names and

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supported values are as follows:

DATE

The date format. One of the following must be used: ISO, JIS, USA, EUR, LOCAL.

TIME

The time format. One of the following must be used: ISO, JIS, USA, EUR, LOCAL.

LDATELEN

The local date length. It must be 0, or a number greater than 9 and less than 255.

LTIMELEN

The local time length. It must be 0, or a number greater than 7 and less than 255.

System Action: Processing continues with the default datetime values.

The default values supplied by the system are:

DATE	ISO
TIME	ISO
LDATELEN	0
LTIMELEN	0

Operator Response: Refer this message to your system programmer.

System Programmer Response: Update the SYSTEM.SYSOPTIONS table with the correct datetime values.

ARI0138E Application Identifier *SYSARIOx* for the application server *dbname* has already been used by another database.

Explanation: Another application server has been identified to XPCC with the same APPLID. Either there was an attempt to start the same application server in more than one partition, or the DBNAME Directory has more than one DBNAME mapping to the same APPLID.

System Action: Initialization of the database manager ends. The application server is not operational.

Operator Response: Ensure that the database name is correct, and that an application server with the same name has not been started in another partition. If the server name is correct, refer the problem to the system programmer.

System Programmer Response: Make sure that the DBNAME Directory entries are correct. An APPLID mapped onto by more than one DBNAME can result in this error. Also check the VSE IPL procedure to make sure that an XPCC SET command has not been issued for the same APPLID, as for VSE Guest Sharing.

ARI0140D Enter DRRM function name and trace-level pair. Valid function names are *, DICT, GEN, PARSE, RDIIN, and CANCEL. Valid trace-level values are 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator responded DRRM to prompting message ARI0087D. The database manager is prompting the operator to specify the functions of DRRM to be traced and the trace level for each function.

System Action:

- If * *n* is entered, where *n* is one of 0, 1, or 2, all DRRM functions will be traced at trace-level *n*.
- If any or all of DICT *n*, GEN *n*, PARSE *n*, RDIIN *n* are entered, the specified functions of DRRM will be traced at the specified trace-level *n* (where *n* is 1 or 2).
- If trace-level 0 is entered for a function it will not be traced (equivalent to not entering the function at all).
- If CANCEL is entered, TRACE command processing ends.

Note: This message is displayed in all environments. In environments in which the DRRM component is not active, however, the operator's response to this message is ignored.

Operator Response:

- If all DRRM functions are to be traced, enter * plus 1 or 2 for the trace level that you want (with a blank between * and number). For example, enter * 1 PARSE 2 to trace all DRRM functions except PARSE at level 1 and traces PARSE at level 2.
- If only selected DRRM functions are to be traced, enter first a function name followed by its trace-level value, and then a second function name, if you want one, with its trace-level value. One or more blanks must be keyed between each function name and each trace-level value entered. If you enter a function name more than once, only the last entry is effective. If you want to terminate the TRACE command, enter CANCEL.

ARI0141D Enter WUM trace-level or CANCEL. Valid trace-level values are 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator has responded WUM to prompting message ARI0087D. The database manager is prompting the operator to specify the desired trace level for WUM.

System Action:

- If *n* is entered, where *n* is 1 or 2, the WUM component will be traced at trace-level *n*.
- If CANCEL is entered, TRACE command processing ends.

Notes:

1. This message is displayed in all environments. In environments where the WUM component is inactive, however, the operator's response to this message is not used.
2. If trace level 0 is added for this component, it will not be traced (equivalent to not entering the function at all). For example, to trace the WUM component at level 2, enter 2.

Operator Response:

- Enter the desired trace level.
- If all WUM functions are to be traced, enter * plus 1 or 2 for the trace level (with blank between * and number).
- If only selected WUM functions are to be traced, enter a function name, its trace-level value, and then optionally a second function name, with its trace-level value. One or more blanks must be between each function name and each trace level value entered. If you enter a function name more than once, the last entry is effective.
- See "Notes" for this message for the use of the * symbol with other function names.
- If TRACE command termination is desired, enter CANCEL.

ARI0142D Enter DSC function name and trace-level pair. Valid function names are *, AGENT, COM, and CANCEL. Valid trace-level values are 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator responded DSC to prompting message ARI0087D. The database manager prompts the operator to specify the DSC function to trace and the desired trace level.

System Action:

- If you enter AGENT, the agent handling function of the database manager is traced at the specified trace level (n).
- If you enter COM, the communications function of the database manager is traced at the specified trace level (n).
- If you enter CANCEL, TRACE command processing ends.

Note: If you enter trace level 0 for a function, the function is not traced. Entering trace level 0 is equivalent to not specifying the function at all.

Operator Response: If you want to terminate the TRACE command, enter CANCEL.

ARI0143I The application server has been initialized with the following values: CHARNAME = *option1*, DBCS = *option2*, CHARSUB = *option3*, CCSIDSBCS = *option4*, CCSIDMIXED = *option5*, and CCSIDGRAPHIC = *option6*.

Explanation: The CHARNAME startup parameter (if specified) or the CHARNAME value used previously, and the values in SYSTEM.SYSOPTIONS for DBCS and CHARSUB, are used to initialize the values reported by this message. The values in SYSTEM.SYSOPTIONS are updated so that the next time the application server is started and the CHARNAME startup parameter is not specified, the values reported by this message are then similar to those received now.

System Action: Initialization continues.

ARI0145E Format 1: DBSPACE *dbspace-number* does not exist or is invalid.
Format 2: DBSPACE *dbspace-name* does not exist or is invalid.

Explanation: The user failed to provide a valid DBSPACE name or number.

System Action: Processing ends.

User Response: Verify the name or number of the dbspace that you want to process, and run the utility again.

ARI0146I Warning: The command line was truncated at column 80.

Explanation: ARIYE04 only parses 80 characters. An operator command can only be 80 characters in VSE.

System Action: Process the truncated command.

Operator Response: Shorten the command line if valid data appears beyond column 80.

ARI0150E There is no connection for showid.

Explanation: A connection to the application server for the specified *showid* that is an agent, user ID, or LUWID cannot be found. Sources of the problem include:

- An incorrect user ID was entered.
- An incorrect agent number was entered (not numeric or not in the range 1 through NCUSERS).
- An incorrect LUWID was entered.
- The agent, user ID, or LUWID is not connected to the application server at the instant the SHOW CONNECT command was entered.

System Action: The SHOW command processing is ended.

Operator Response: Be sure that the specified agent, user ID, or LUWID is correct and then reenter the

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SHOW CONNECT command.

Note: You may receive the same result if the requested agent, user ID, or LUWID is not connected to the application server when the command is reentered.

ARI0153I **The database manager ignores TRACEBUF = size parameter when trace is not activated.**

Explanation: A nonzero *size* for the TRACEBUF startup parameter has been specified, and no subcomponent have been chosen to be traced (TRACxxxx startup parameters must indicate 1 or 2 for a specific subcomponent to be traced).

System Action: The system does not use the TRACEBUF parameter, and no trace buffer is allocated. The startup continues.

Operator Response: No response is required if the operator does not want any trace output. If trace output is expected, then the database manager must be restarted with the proper values of the TRACxxxx startup parameters. Alternatively, the **TRACEBUF n** parameter in the *TRACE ON* operator command can be used to start the trace in MUM.

ARI0154I **A size kilobyte trace buffer has been allocated. Maximum contiguous memory left = amount kilobytes.**

Explanation: The trace buffer of the *size* as shown has been created.

System Action: The trace is started. Trace records are stored into the trace buffer.

Operator Response: If the *amount* maximum contiguous memory left is too small (see the note below) then the operator can consider one of the following actions:

- Turn the trace off using the TRACE OFF command and then reissue the TRACE ON with a smaller amount of storage specified for the TRACEBUF parameter.
- Turn the trace off using the TRACE OFF command and then reissue the TRACE ON with TRACEBUF = 0 or without TRACEBUF (the trace buffer is not used and the trace records are written directly into the trace file).
- Start the database manager with more memory available.

Note: Even after the database manager has been started, the storage requirements are dynamic and workload dependent. See the *DB2 Server for VSE System Administration* manual for virtual storage requirements of the DB2 Server for VSE system.

ARI0155E **There is not enough memory for trace buffer allocation. Contiguous memory requested = needed_storage kilobytes. Maximum contiguous memory available at this time = available_storage kilobytes. Trace is not started.**

Explanation: The memory *needed_storage* required for the trace buffer allocation is not available.

System Action: If TRACEBUF was specified in the TRACE ON operator command, the trace is not started.

If TRACEBUF was specified as a database startup parameter, the database manager is ended.

Operator Response: There are several possible actions:

- Reissue the TRACE ON command with smaller amount of storage specified for the TRACEBUF parameter.
- Reissue the TRACE ON command with TRACEBUF = 0 (the trace buffer is not used and the trace records are written directly into the trace file).
- Start the database manager with more memory available.
- If TRACEBUF was specified as a database startup parameter, start the database manager with a smaller amount of storage specified for TRACEBUF, or remove TRACEBUF from the parameter list.

ARI0156I **The trace buffer was written to the trace file.**

Explanation: The contents of the trace buffer was flushed out to the trace file. This can happen as a result of the TRACE OFF operator command or during a database system shutdown.

ARI0157I **The trace buffer is empty.**

Explanation: An attempt to write the trace buffer into the trace file failed. The trace buffer is empty, because an incorrect TRACE specification (component, subcomponent, authorization ID, agent number or a level) was entered, or the workload that was run did not hit an activated trace point.

Operator Response: Reissue the TRACE ON command in MUM, or restart the database manager with the correct values of startup parameters. Repeat the workload to be traced.

ARI0159D **The specified CHARNAME is different than the current system CHARNAME. This will force the system CCSID values to be changed. Do you wish to change the system CHARNAME?**

Enter 0(No) to continue using the current CHARNAME of old-charname, or

1(Yes) to change the system CHARNAME to new-charname, or 111(Quit) to cancel your request and end SQLSTART processing.

Explanation: The value of the CHARNAME parameter specified in SQLSTART is different from the current CHARNAME value. Changing the current CHARNAME will change the current default CCSID values. Also, the CCSID attribute of the character columns of the system catalog tables will be updated to the new default CCSID. The actual data stored in the system catalog tables will *not* be converted from the current default CCSID to the new default CCSID. Only the attribute of the character columns will change. The CCSID attribute of the character columns of any user tables will *not* be updated to the new default CCSID.

The default CHARNAME of a system should be changed only once: at installation or migration. If it is changed after system objects have been created in the system catalog tables, object names not conforming to the rules for ordinary identifiers may contain characters that do not have the same hexadecimal representation in the new CCSID and some data may be displayed incorrectly. For the rules about ordinary identifiers, see the *DB2 Server for VSE & VM SQL Reference* manual. For more information on the CHARNAME parameter, see the *DB2 Server for VSE System Administration* manual.

System Action:

- If you answer 0 (No), the current default CHARNAME and CCSID values are used and SQLSTART processing continues.
- If you answer 1 (Yes), the default CHARNAME will change. CCSID values associated with the new CHARNAME will:
 - Become the new default CCSID values for the database manager
 - Replace the current CCSID attribute for the character columns in the system catalog tables.
- If you answer 111(Quit), SQLSTART processing ends, and no changes are made.

Database Administrator Response: Unless you are installing or migrating a database or reconfiguring the database to work with different CCSIDs, enter 0(No) to continue database initialization using the current CHARNAME.

ARI0160D Enter CONV trace-level or CANCEL. Valid trace-level values are 0, 1, and 2.

Explanation: The TRACE ON command is being processed. The operator has responded CONV to prompting message ARI0087D. The database manager is prompting the operator to specify the desired trace level for CONV.

System Action:

- If *n* is entered, where *n* is 1 or 2, the CONV component will be traced at trace-level *n*.
- If trace-level 0 is entered for the component, it will not be traced (equivalent to not entering CONV in response to the message ARI0087D).
- If CANCEL is entered, TRACE command processing ends.

Operator Response: Enter the desired trace level. If TRACE command termination is desired, enter CANCEL.

ARI0161E RMTUSERS = value cannot be specified because the DRDA facility has not been installed for the application server.

Explanation: RMTUSERS = *value* was specified as a database startup parameter. The DRDA facility was not installed for the application server, and it cannot process requests from DRDA application requesters.

System Action: The database manager is ended.

Operator Response: Refer this message to your database administrator.

Database Administrator Response: Determine whether or not you require your application server to service DRDA requesters. If so, install the DRDA facility following the steps in the *DB2 Server for VSE System Administration* manual.

ARI0162D Enter STG trace-level or CANCEL. Valid trace level values are 0 and 1.

Explanation: The TRACE ON command is being processed. The operator responded STG to prompting message ARI0087D. The database manager is prompting the operator to specify the trace level for STG.

System Action:

- If 1 is entered, the STG component is traced at level 1.
- If 0 is entered, the STG component is not traced.
- If CANCEL is entered, TRACE command processing ends.

Operator Response: Choose your response from "System Action", and enter 1 or 0 or CANCEL.

ARI0163E {SHOW CONNECT WAITING | DRDA facility} is not supported in this environment.

Explanation:

- If it says SHOW CONNECT WAITING, the SHOW CONNECT WAITING command cannot be used in this operating system environment.

System Action:

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- If it says SHOW CONNECT WAITING, the command processing is ended.
- If it says DRDA facility, the database manager is ended.

Operator Response:

- If it says SHOW CONNECT WAITING, check the correctness of the syntax of the SHOW CONNECT command in this operating environment.
- If it says DRDA facility, refer this message to your Database Administrator.

Database Administrator Response: If your application server needs to service DRDA requesters, install the required VSE operating environment. If you do not need to service DRDA requesters, do not install the DRDA facility.

ARI0165I All parameters are ignored for *string*.

Explanation: The command, statement, or operation that you entered, such as SHOW DBCONFIG, contained parameters, but none were required. The system does not use the parameters.

System Action: Processing continues, and all parameters are ignored.

ARI0172E A Sync Point Manager is not available.

Explanation: The parameter "SYNCPNT=Y" was specified at startup; however, the CICS/VSE Sync Point Manager was not available. This message is following by message ARI0176I.

System Action: The database manager is unable to use CICS/VSE sync point manager for handling DRDA sync point operations. As a result, this database may not be a participant in DRDA logical units of work that update multiple remote databases. However, the database manager is **still** able to process SQLDS protocol requests and DRDA requests that do not involve a sync point manager (for example, DRDA logical units of work that only update a single remote database).

System Programmer Response: If this database manager is to be a participant in DRDA logical units of work that update multiple remote databases, the AXE transaction must be allowed to successfully autostart the DRDA TRUE support for this database, and the CICS Restart Resynchronization support must be installed. In addition, refer to System Programmer Response and Database Administrator Action of message ARI0190E.

ARI0176I The SYNCPNT parameter has been reset to N.

Explanation: The AXE transaction was autostarting DRDA TRUE support and encountered an error. As a result, the AXE transaction instructed the database

manager to change the SYNCPNT parameter from "Y" to "N".

System Action: The database manager is unable to use CICS/VSE sync point manager for handling DRDA sync point operations. As a result, this database may not be a participant in DRDA logical units of work that update multiple remote databases. However, the database manager is **still** able to process SQLDS protocol requests and DRDA requests that do not involve a sync point manager (for example, DRDA logical units of work that only update a single remote database).

System Programmer Response: This message is preceded by a message on the VSE console indicating the error that occurred. Fix the problem indicated in this prior message and restart the database.

ARI0183E The Sync Point Manager has asked to {COMMIT | ROLLBACK} this LUW but the database manager has no memory of it.

Explanation: The CICS/VSE sync point manager is attempting to resynchronize the status of a logical unit of work with the database manager. It is asking the database to either commit or rollback this LUW. However the database manager could not find any indication that this unit of work needs resynchronization. This can happen when the operator used the database manager FORCE command and RESET INDBOUT command on this unit of work while the CICS/VSE sync point manager is resynchronizing with the database manager.

This message is followed by message ARI4019I to identify the unit of work.

System Action: The database manager sends back a normal completion reply to the CICS/VSE sync point manager.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Manual intervention is necessary to ensure that the LUW is in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers. Manual intervention could mean manually fixing the data or possibly restoring an archive.

ARI0184A The Sync Point Manager has asked to {COMMIT | ROLLBACK} this LUW but the FORCE command was previously used to {ROLLBACK | COMMIT} it.

Explanation: The CICS/VSE sync point manager is attempting to resynchronize the status of a logical unit of work with the database manager. It is asking the database to either commit or rollback this LUW. However the operator had previously used the

database manager FORCE command to force the LUW into the opposite state.

This message is followed by message ARI0196I to identify the unit of work.

System Action: The LUW remains unsynchronized with the sync point manager. The LUW still appears when the SHOW INDOUBT command is issued.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: In order to clear out this LUW from the SHOW INDOUBT display, it is necessary to use the RESET INDOUBT command.

In addition, manual intervention is necessary, before RESET INDOUBT is issued, to ensure that the LUW is in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers. Manual intervention could mean manually fixing the data or possibly restoring an archive.

ARI0185I *TRUE-name* task-related user exit resynchronization between CICS and the database manager has started.

Explanation: While autostarting DRDA TRUE support *TRUE-name*, the AXE transaction started resynchronization with the CICS/VSE sync point manager. Resynchronization occurs after two-phase commit processing has been interrupted by a resource failure. It involves passing a list of all in-doubt logical units of work to the CICS/VSE sync point manager. Using information stored in its log, the CICS/VSE sync point manager determines how the in-doubt logical units of work should be resolved and instructs the database manager to process each in-doubt logical unit of work accordingly.

TRUE-name is the name of the DRDA TRUE where resynchronization is taking place.

System Action: Resynchronization processing continues.

Database Administrator Action: Watch to make sure that no error messages appear between message ARI0185I and message ARI0186I.

ARI0186I *TRUE-name* task-related user exit resynchronization between CICS and the database manager has ended.

Explanation: This is a signal to the database manager operator that the database manager has completed resynchronization of all in-doubt logical units of work with the CICS/VSE sync point manager.

TRUE-name is the name of the DRDA TRUE where resynchronization is taking place.

System Action: The CICS/VSE sync point manager

and the database manager have resynchronized all possible in-doubt LUWs. In-doubt LUWs which have been resynchronized will no longer be displayed when the SHOW INDOUBT command is issued. In-doubt LUWs that remain unsynchronized will still be displayed.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Use the database manager SHOW INDOUBT command to find out if heuristic damage had occurred for any logical units of work. Manual intervention is necessary to ensure that these LUWs are in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers. Manual intervention could mean manually fixing the data.

It is necessary to use the database manager RESET INDOUBT command to clear out these LUWs from the SHOW INDOUBT display. However, use the RESET INDOUBT command only after these logical units of work have been resolved.

ARI0187I *TRUE-name* is enabled for DRDA support.

Explanation: The AXE transaction successfully completed autostarting DRDA TRUE support *TRUE-name*. This message is followed by message ARI0188I.

TRUE-name is the name of the DRDA TRUE support that was enabled.

System Action: The AXE transaction processing continues. The application server for which the DRDA TRUE support was autostarted can now be a participant in DRDA logical units of work that update multiple remote databases.

ARI0188I *TRUE-name* has an entry point of *entry-point*.

Explanation: The AXE transaction successfully completed autostarting the DRDA TRUE *TRUE-name*.

TRUE-name is the name of the DRDA TRUE.

entry-point is the entry point of the DRDA TRUE.

System Action: The AXE transaction processing continues.

ARI0189E CICS restart resynchronization is not available.

Explanation: While autostarting DRDA TRUE support, the AXE transaction detected that the CICS restart resynchronization transaction CRSY is not enabled.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

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Operator Response: Enable the CICS restart resynchronization transaction CRSY.

System Programmer Response: Ensure that CICS restart resynchronization support has been installed properly. See the *DB2 Server for VSE Program Directory* for more details.

ARI0190E *TRUE-name cannot be enabled for DRDA support. There is no DRDA TRUE support and processing will continue as if SYNCNT=N is specified.*

Explanation: The AXE transaction failed in its attempt to autostart the DRDA TRUE support *TRUE-name*. An error message will have been displayed earlier that indicated the error that caused the failure.

TRUE-name is the name of the DRDA TRUE support the AXE transaction was autostarting.

System Action: This message is followed by messages ARI0172E and ARI0176I on the DB2 Server for VSE operator console. AXE transaction processing continues but the SYNCNT parameter is reset from "Y" to "N". As a result, the database manager is unable to use the CICS/VSE sync point manager for handling DRDA sync point operations and this database may not be a participant in DRDA logical units of work that update multiple remote databases. However, the database manager is **still** able to process SQLDS protocol requests and DRDA requests that do not involve a sync point manager (for example, DRDA logical units of work that only update a single remote database).

Operator Response: Refer this message to your system programmer and database administrator.

System Programmer Response: An error message will have been displayed before this message that indicated the error. See the explanation for that message and resolve the error.

Database Administrator Action: After the error indicated by the error message displayed before this message has been resolved, restart the database with SYNCNT = "Y". This will allow the next AXE transaction that is started by a DRDA2 application requester to autostart the DRDA TRUE support for this application server and will make this application server a participant in DRDA logical units of work that update multiple remote databases.

ARI0191I *TRUE-name is disabled.*

Explanation: The DAXT transaction successfully completed the termination of the DRDA TRUE *TRUE-name*.

TRUE-name is the name of the DRDA TRUE support being terminated.

System Action: The DAXT transaction ends.

The DRDA TRUE *TRUE-name* will be autostarted when

a DRDA2 application requester initiates a connection to a DB2 Server for VSE application server whose DRDA TRUE support is *TRUE-name*.

ARI0192I *TRUE-name is not currently enabled for DRDA support.*

Explanation: The DAXT transaction was entered to disable the DRDA TRUE *TRUE-name*. However, the DRDA TRUE was not enabled. Either the DRDA TRUE was not enabled or a previous execution of DAXT terminated the DRDA TRUE.

TRUE-name is the name of the DRDA TRUE support being terminated.

System Action: The DAXT transaction ends.

ARI0193E *The CICS log does not contain information for an in-doubt logical unit of work belonging to server server-name.*

Explanation: While autostarting DRDA TRUE support, the AXE transaction started TRUE resynchronization. During TRUE resynchronization, CICS/VSE was given a logical unit of work that the database manager indicated to be resolved. However, the information needed to resolve the logical unit of work was not on the CICS/VSE log. This generally results from a CICS/VSE coldstart following a system failure. If a CICS/VSE coldstart did not occur after the last system failure, the CICS/VSE log or the DB2 Server for VSE log data has been damaged.

This message is followed by messages ARI4018A and ARI4019I or messages ARI0195A and ARI0196I.

ARI4018A and ARI4019I identify the in-doubt logical units of work (agents) that need to be resolved. These agents must be resolved (with the database manager FORCE command). ARI0195A identifies the in-doubt logical units of work (CICS/VSE recovery token) that had been FORCED by the database manager FORCE command but had not been resolved with the CICS/VSE sync point manager.

server-name is the name of the application server which owns the in-doubt logical unit of work.

System Action: The logical unit of work remains unresolved. That is, it remains INDOUBT.

Resynchronization processing continues for other in-doubt LUWs.

Operator Response: If the message is followed by ARI4018A and ARI4019I, refer to the OPERATOR RESPONSE for messages ARI4018A and ARI4019I. If the message is followed by ARI0195A and ARI0196I, refer to the OPERATOR RESPONSE for messages ARI0195A and ARI0196I.

Database Administrator Action: If the message is followed by ARI4018A and ARI4019I, refer to the DATABASE ADMINISTRATOR ACTION for messages ARI4018A and ARI4019I. If the message is followed by

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ARI0195A and ARI0196I, refer to the DATABASE ADMINISTRATOR ACTION for messages ARI0195A and ARI0196I.

ARI0194E A logical unit of work that the database manager for server *server-name* indicated needed to be resolved was not identified by the CICS/VSE log as needing resolution.

Explanation: While autostarting DRDA TRUE support, the AXE transaction started TRUE resynchronization. During TRUE resynchronization, CICS/VSE was given a logical unit of work that the database manager indicated needed to be resolved. However, information in the CICS/VSE log indicated that the logical unit of work did not need to be resolved. CICS/VSE cannot resolve the logical unit of work.

This condition can occur when an application program overlays a CICS/VSE log buffer, or when a DB2 Server for VSE log buffer is destroyed. Or, the CICS/VSE log or the DB2 Server for VSE log may have been damaged.

This message is followed by messages ARI4018A and ARI4019I or messages ARI0195A and ARI0196I. ARI4018A and ARI4019I identify the in-doubt logical units of work (agents) that need to be resolved. These agents must be resolved (with the database manager FORCE command). ARI0195A identifies the in-doubt logical units of work (CICS/VSE recovery token) that had been FORCED by the database manager FORCE command but had not been resolved with the CICS/VSE sync point manager.

server-name is the name of the application server which owns the in-doubt logical unit of work.

System Action: The logical unit of work remains unresolved. That is, it remains INDOUBT.

Resynchronization processing continues for other in-doubt LUWs.

Operator Response: If the message is followed by ARI4018A and ARI4019I, refer to the OPERATOR RESPONSE for messages ARI4018A and ARI4019I. If the message is followed by ARI0195A and ARI0196I, refer to the OPERATOR RESPONSE for messages ARI0195A and ARI0196I.

System Programmer Response: Ensure that any newly installed application program are not overlaying CICS/VSE or DB2 Server for VSE storage. If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

Database Administrator Action: If the message is followed by ARI4018A and ARI4019I, refer to the DATABASE ADMINISTRATOR ACTION for messages ARI4018A and ARI4019I. If the message is followed by ARI0195A and ARI0196I, refer to the DATABASE

ADMINISTRATOR ACTION for messages ARI0195A and ARI0196I.

ARI0195A Use the database manager SHOW INDOUBT operator command to find the following units of work:

ARI0196I SERVER_NAME = *server-name*.
RECOVERY TOKEN = *rectok*.

Explanation: While autostarting DRDA TRUE support and performing TRUE resynchronization, the AXE transaction was informed by CICS/VSE that a logical unit of work it is trying to resynchronize is lost due to CICS cold start or that a logical unit of work should not be resynchronized because it should not be in-doubt.

server-name is the name of the application server that owns the logical unit of work.

rectok is the unique CICS recovery token assigned to the logical unit of work.

System Action: The LUW remains unsynchronized with the sync point manager. The LUW still appears when SHOW INDOUBT command is issued.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Use the database manager SHOW INDOUBT command to obtain more information about the logical units of work. In order to clear this LUW from SHOW INDOUBT display, it is necessary to use the RESET INDOUBT command.

Manual intervention is necessary before the RESET INDOUBT command is issued to ensure that the LUW is in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers.

ARI0199I DRDA TRUE *TRUE-name* is enabling for server *server-name*.

Explanation: A DRDA2 application requester initiated a connection to a DB2 Server for VSE application server. The AXE transaction detected that the DRDA TRUE support for the application server was not enabled and so it autostarted the DRDA TRUE support for the application server.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

server-name is the name of the application server for which the DRDA TRUE support was being autostarted.

System Action: The AXE transaction continues with the process of enabling the DRDA TRUE support.

Database Administrator Action: Watch to make sure that no error messages appear after ARI0199I.

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Chapter 3. ARI0200–ARI0299, ARI2000– ARI2069 DBSS Messages

ARI0200E Sizes of logs are unequal.

Explanation: During database generation (invoking the application server with initialization parameter STARTUP=C) or during log file redefinition/reformatting (invoking the application server with initialization parameter STARTUP=L), dual logging was defined (initialization parameter DUALLOG=Y) or alternate logging (initialization parameter ALTLOG=Y) was defined. The database manager has determined that the log data sets are not the same size. This is not permitted.

System Action: The application server is ended.

Operator Response: Return the console output with the output listing.

System Programmer Response: You can circumvent this problem by invoking the application server with a single log. To do so, either omit the DUALLOG and ALTLOG parameters or specify DUALLOG=N and ALTLOG=N.

You can correct this problem by proceeding as follows:

Redefine the VSAM clusters (ESDSs) for the logs so that they are equal in size. They are always equal in size if they are on the same device type and you specify the same primary allocation (CYLINDERS, TRACKS, or BLOCKS). Then reexecute the job.

ARI0201E Storage pool *n* is full.

Explanation: The physical storage in storage pool *n* has reached a level at which the system cannot function. If this error was the result of a DROP TABLE or DBSPACE command, then the storage pool did not contain enough shadow pages to process the DROP command.

System Action: In most cases, processing of the SQL statement ends. In some cases, the application server ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Define an additional VSAM cluster for a new DBEXTENT. Then run the ADD DBEXTENT function to add the DBEXTENT to the storage pool that is full.

Notes:

1. If ARI0201E occurred during DROP TABLE or DBSPACE processing and the application server ended, you need to check the catalog table SYSDROP after you warm start the application

server. If there is an entry in SYSDROP for the table or dbspace that was being dropped when the application server was terminated, any subsequent drop commands may cause the application server to be terminated with message ARI0201E.

To correct this problem, you need either to add a DBEXTENT to the storage pool in which the table's DBSPACE resides, or to reorganize the DBSPACE.

When you add a DBEXTENT to correct this problem, you should next issue an ACQUIRE and then a DROP of any size DBSPACE. This will cause the database manager to clean up any entries in SYSTEM.SYSDROP that were left over during the original DROP TABLE or DBSPACE failure.

For information on how to reorganize the DBSPACE, see the *DB2 Server for VSE & VM Database Administration* manual.

2. You may not have to enlarge the storage pool. Under certain conditions, the message ARI0201E occurs when the processing of the current operation has used only half of the storage pool.

A bypass is possible if LOGMODE is not *N* and the failing operation is one of:

CREATE INDEX	DROP TABLE
DROP DBSPACE	UPDATE
INSERT	DELETE
DATALOAD	RELOAD TABLE
RELOAD DBSPACE	RELOAD PROGRAM
RELOAD PACKAGE	REORGANIZE INDEX
SCHEMA	DROP INDEX

Try running the command in single user mode with LOGMODE=N.

ARI0202I Warning: Storage pool *n* is short of storage.

Explanation: Storage pool *n* has reached the cushion specified at startup using the database SOSLEVEL initialization parameter (SOSLEVEL x TOTAL PAGES IN POOL / 100). Either logging was inactive, or logging is active but further checkpoints will not correct this situation.

System Action: Processing continues.

Operator Response: Notify your system programmer.

System Programmer Response: Enter the SHOW DBEXTENT command to determine the amount of space left in the storage pool. You may need to add more DBEXTENTs to the storage pool specified in the

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message. (If needed, use the ADD DBEXTENT function.)

ARI0203E {PAGE|DIRECTORY} buffer pool is full.

Explanation: When running the database manager, more pages of data or DIRECTORY blocks were simultaneously required in the buffers than there were buffers in the pool.

System Action: The application server is ended.

Operator Response: Save the console output for the system programmer.

System Programmer Response: Increase the number specified for the initialization parameter NPAGBUF (for page buffers) or NDIRBUF (for directory buffers), and restart the application server.

ARI0204D Restore from archive has been invoked. Current database will be destroyed.

Enter **RESTORE** - to continue,
or **CANCEL** - to cancel.

Explanation: The application server was started with STARTUP=R or F. This causes the contents of the database to be replaced (restored) by the database copy on a database manager archive file. The restored database is then updated for any logging which has occurred since the last database archive.

Note: The database directory will be reformatted (and thus destroyed) before the restore process starts.

System Action: The system waits for your reply.

If the reply is RESTORE, the database manager continues and replaces the database with the database copy on the archive file.

If the reply is CANCEL, the application server is ended without modification to the database.

Any other reply causes the message to be reissued.

Operator Response: If the database is to be restored from a database manager archive file, reply RESTORE.

If the database is not to be restored from a database manager archive file, reply CANCEL to end the application server.

System Programmer Response: Inform the operator of your intentions when restoring a database, including any mounting of database manager archive tapes.

ARI0205I You must user-archive the directory and *n* DBEXTENT(S) but not the logs!

Explanation: The database operator has issued an SQLEND UARCHIVE command. This tells the database manager that you are shutting down normally and then

backing up your database with the backup facility of your choosing.

n is the number of DBEXTENTs in your database. You are also warned not to backup your logs. Backing up and then restoring your logs would make it impossible to restore your database changes since the user-archive was taken.

System Action: The database manager will write a record on the log indicating that a user-archive is being attempted and then shut down normally.

Operator Response: After the application server terminates, backup your directory and *n* DBEXTENTs with any suitable backup facility. Take special care to note whether you have backed up successfully or not as you will be prompted with message ARI0206D at the next database startup.

ARI0206D Did the user-archive of the directory and *n* DBEXTENT(S) execute successfully? Enter 0(No) or 1(Yes).

Explanation: The SQLEND UARCHIVE command was used the last time the application server was shut down. You must tell the database manager if you have successfully archived your database. *n* is the number of DBEXTENTs in your database.

System Action: If you reply 1 for YES, the database manager records on the log that a user-archive was successfully done, and it frees log space. If you reply 0 for NO, the database manager will prompt you with message ARI0207D. If you do not reply 1 or 0, message ARI0052E will be displayed and message ARI0206D will be redisplayed.

Operator Response: Reply 1 if you are sure that you backed up your directory and *n* DBEXTENTs. Reply 0 if you are unsure about your archive and you will then be prompted with message ARI0207D.

ARI0207D Do you want to continue (without user-archive) or cancel (redo the user-archive)? Enter CONTINUE or CANCEL.

Explanation: You replied 0 to message ARI0206D. You may terminate the application server if you wish to redo your user-archive.

System Action: If you reply CONTINUE, the database manager will write a record to the log indicating that no user-archive was done and processing will continue.

If you reply CANCEL, the database manager will not write any record to the log. The last user-archive log record is still in effect. The application server will terminate to allow you to redo your user-archive. At the next application server startup, you will be prompted with message ARI0206D.

If you do not reply CONTINUE or CANCEL, message

ARI0052E is displayed and message ARI0207D is redisplayed.

Operator Response: Reply CONTINUE if you wish to continue using the database manager without user-archiving the database. Reply CANCEL if you wish to terminate and redo the user-archive.

ARI0208D Did the user-restore of the directory and *n* DBEXTENT(S) execute successfully? Enter 0(No) or 1(Yes).

Explanation: The application server was started with STARTUP=U to indicate that a user-restore of the database was done before startup. This message is issued to verify that you performed the restore.

System Action: If you reply 1, the database manager will reapply the log activity since the user-archive was taken. All committed logical units of work will be reflected in the database.

If you reply 0, the application server will terminate to allow you to redo the user-restore or startup with the correct STARTUP parameter.

If you do not reply 1 or 0, message ARI0052E is displayed and message ARI0208D is redisplayed.

Operator Response: Reply 1 if you are sure that your user-restore was successful. Otherwise, reply 0. If the STARTUP parameter was incorrectly set to U, simply restart the application server with the correct STARTUP parameter. If you are unsure of the user-restore, you may redo it after the application server ends and then restart the application server with STARTUP=U.

ARI0209E Since database archive was created, the size of the logs has changed. You must perform COLDLOG.

Explanation: The database restore has completed successfully. However, the size of the database logs has changed since the database archive was created. You must perform the COLDLOG process to:

- Reflect the current size of the logs in the database directory, and
- To create the log history area in a location known to the database manager. Refer to the information on "History Area" in the *DB2 Server for VSE System Administration* manual.

The database is at the level which existed when the database archive (just restored) was created.

System Action: The application server ends.

Operator Response: You must perform the following procedures:

1. You must COLDLOG the database manager using initialization parameters STARTUP=L, SYSMODE=S,

DUALLOG=Y or N, ALTLOG=Y or N, and LOGMODE=A (or LOGMODE=Y if you do not plan to use archiving).

2. You should immediately startup the application server (using STARTUP=W and LOGMODE=A) and take a database archive using the SQLEND ARCHIVE or SQLEND UARCHIVE commands.
3. If you are using log archiving, you can then start the application server with LOGMODE=L. Otherwise, start the application server with LOGMODE=A.

ARI0210I The extend file input did not generate summary statistics.

Explanation: Either the control keywords specified in the EXTEND input file had no match in the log or the control keywords were matched but the logical units of work found were read-only (queries).

System Action: The database manager displays message ARI0213D.

Operator Response: Respond CANCEL to ARI0213D. Refer this message to your system programmer.

System Programmer Response: Check the control keywords in the EXTEND input file and adjust as needed. Restart extended database initialization.

ARI0211I The requested BYPASS or ROLLBACK operation may affect the following logical units of work:

Explanation: If the ROLLBACK COMMITTED WORK or BYPASS UNDO WORK operation completes, the specified logical units of work may operate on the same tables as did the rolled back or bypassed logical unit of work. Depending on which operation is performed on the DBSPACE or the table, this may lead to other problems such as updating a table or row which no longer exists.

System Action: The database manager displays message ARI0214I (impacted summary) and message ARI0213D (pause). Refer this message to your system programmer.

System Programmer Response: Use the summary information to determine if the specified action is to be done. Instruct the operator whether to reply CONTINUE or CANCEL to message ARI0213D.

Sample Output Sequence:

```
ARI0211I The requested BYPASS or ROLLBACK
         operation may affect the
         following logical units of work:
ARI0214I LUWID=7BA USER ID=JONES
         DBSPACE=8 TABLE ID=-32765(8003)
```

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ARI0212I Summary information of the records to
(be bypassed | roll back):

LUWID = &2B. User ID = &3.
Date = &4. Time = &5.

Explanation: Summary information will be displayed for each logical unit of work bypassed or rolled back due to a BYPASS UNDO WORK or ROLLBACK COMMITTED WORK command. This message displays statistics for this logical unit of work. It is followed by message ARI0237I which displays the operations and the number of their occurrences which will be rolled back or bypassed if instructed to continue.

However, summary information will not be displayed for the logical units of work which have already been rolled back or bypassed due to a previous BYPASS UNDO WORK or ROLLBACK COMMITTED WORK command.

Note: The format of the displayed date is either mm-dd-yy or dd-mm-yy. The format is chosen when VSE is IPLed. The default format is mm-dd-yy.

System Action: The database manager issues:

- Messages ARI0237I (operations performed), ARI0214I (affected logical units of work), and ARI0213D (operator decisions), or
- Messages ARI0237I (operations performed) and ARI0213D (operator decisions).

Operator Response: Refer this message to your system programmer.

System Programmer Response: Use the summary information to determine if the specified action is to be done. Instruct the operator whether to reply CONTINUE or CANCEL to message ARI0213D.

Sample Output:

```
ARI0212I Summary information of the
records to roll back:
LUWID=7B9      User ID=SMITH
Date=12-01-85  Time=13:12:45
```

ARI0213D Enter CONTINUE to continue
initializing or CANCEL to end.

Explanation: Summary information, if any, has been displayed on the console concerning the logical units of work that will be bypassed or rolled back due to a BYPASS UNDO WORK or ROLLBACK COMMITTED WORK command if the database manager is instructed to continue.

System Action: The database manager waits for the operator reply. Message ARI0052E is displayed if you do not reply CONTINUE or CANCEL. This message displays the first 8 characters of the reply and states that the response was not valid. Message ARI0213D

will be repeatedly displayed until CONTINUE or CANCEL is entered.

Operator Response: Analyze the summary information and respond accordingly. The response CONTINUE causes database initialization to continue with the specified EXTEND input file commands carried out. The effects of the commands will be written into the log before applying the records. They will remain in the log even if a failure occurs while applying the records. The response CANCEL causes application server termination, leaving the database as it was before startup.

If no summary information was displayed and an EXTEND input file was included, the EXTEND input file commands will *not* be executed. Something may be wrong with the EXTEND input file commands. In this case, respond CANCEL to bring down the application server and check the EXTEND input file commands. Refer the summary messages to your system programmer.

System Programmer Response: Analyze summary messages and decide whether the actions are what was expected. Determine whether to continue or cancel initialization.

ARI0214I LUWID=&1B. User ID=&2.
DBSPACE=&3. TABLE ID=&4A. (&5B.)

Explanation: This message is displayed immediately after message ARI0211I. It displays the logical unit of work value, the user ID value, the DBSPACE number, and the table identification number (if applicable) of a logical unit of work which may be affected if the specified BYPASS UNDO WORK or ROLLBACK COMMITTED WORK command operation is continued.

The user ID value can be blank. For example, a logical unit of work was started after a system checkpoint. A second logical unit of work begins and commits before the first logical unit of work does. The first logical unit of work acts on the changes done by the second logical unit of work and commits. If the second logical unit of work is rolled back for any reason, the first logical unit of work will be affected and USERID will be blank because the logical unit of work started after the checkpoint.

&1B. is a logical unit of work value.

&2. is a user ID value or blank.

&3. is a DBSPACE number.

&4A. is a table identification number or 0 if the table identification number is not applicable (no table updated).

&5B. is a hexadecimal table identification number or 0 if the table identification number is not applicable (no table updated).

System Action: Message ARI0213D (operator decision) is displayed.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Use the summary information to determine if the specified action is to be done. Instruct the operator whether to reply CONTINUE or CANCEL to message ARI0213D.

ARI0215E Operator command attempts to access a disabled DBSPACE.

Explanation: The operator or an ISQL user is issuing an operator command which is attempting to access a disabled DBSPACE. Disabled DBSPACES cannot be accessed. The operator command that might cause this message is SHOW DBSPACE. DBSPACES are disabled by DISABLE DBSPACE commands in an EXTEND input file.

System Action: Operator command processing ends.

Operator Response: Change the command so it does not attempt to access a disabled DBSPACE.

User Response: Same as Operator Response.

ARI0216I Directory verify function completed {with | without} discrepancies.

Explanation: This message is issued after the completion of the directory verify function (an SQLEND command option). This message will be preceded by specific error messages for each discrepancy found (if any).

System Action: Termination process continues.

Operator Response: If the directory verify function ended with discrepancies, refer this message and the preceding messages to your system programmer. If it completed without discrepancies, termination will continue and you will be prompted for operator action as needed.

Note: If ARCHIVE was specified and discrepancies were found, no database archive will be taken. If UARCHIVE was specified and discrepancies were found, a user-archive should not be taken. Any implicit log archives will be performed due to ARCHIVE or UARCHIVE. If LARCHIVE was specified, log archiving will be performed, but you should correct the discrepancies as soon as possible.

System Programmer Response: If the database directory verify function completed with discrepancies, note the information in the messages preceding this message and refer to directory verification in *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures. If it completed without discrepancies, no action is required of the system programmer.

ARI0217E Physical page X'n1' assigned to DBSPACE n2. Page X'n3' was not allocated in the allocation bit map.

Explanation: The directory verify function has detected that the physical page number identified by X'n1' that has been allocated to logical page X'n3' of DBSPACE number n2 is reflected as not being allocated in the allocation bit map. This is an internal database error.

Note: The DBSPACE number n2 corresponds to the DBSPACENO column in the catalog table SYSTEM.SYSDBSPACES.

System Action: The database manager will continue verifying all PUBLIC and PRIVATE DBSPACES and end normally.

Operator Response: Refer this message to your system programmer.

Note: If ARCHIVE was specified, the DB2 Server for VSE database archive function will not be invoked. If UARCHIVE was specified, a user-archive should not be taken. Any implicit log archives will be performed due to ARCHIVE or UARCHIVE. If LARCHIVE was specified, the log will be archived, but you should correct the discrepancies as soon as possible.

System Programmer Response: Make note of the information given in this message and refer to directory verification in *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures.

ARI0218E DBSPACE n1, page X'n2' is allocated to physical page X'n3' of storage pool n4 instead of storage pool n5.

Explanation: The directory verify function has detected that physical page X'n3' of storage pool n4 was allocated to physical page X'n2' of DBSPACE n1, which belongs to storage pool n5. This is an internal database error.

Note: The DBSPACE number n1 corresponds to the DBSPACENO column in the catalog table SYSTEM.SYSDBSPACES.

System Action: The database manager will continue verifying all PUBLIC and PRIVATE DBSPACES and end normally.

Operator Response: Refer this message to your system programmer.

Note: If ARCHIVE was specified, the archive function will not be invoked. If UARCHIVE was specified, a user-archive should not be taken. Any implicit log archives will be performed due to ARCHIVE or UARCHIVE. If LARCHIVE was

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specified, the log will be archived, but you should correct the discrepancies as soon as possible.

System Programmer Response: Make note of the information given in this message and refer to directory verification in *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures.

ARI0219E An unexpected internal error occurred during SYSDROP processing.

Explanation: The process which cleans up entries on the SYSDROP catalog table has been invoked. An unexpected error has occurred during this process, most likely a database error. This message is displayed on the system console.

Note: In addition to this error, ARI0504I and ARI0505I are also displayed to report error information in the SQLCA. See Chapter 17, “DBSS Return Codes” on page 231 for definitions of the DBSS return codes.

System Action: The application server terminates the SYSDROP processing but continues executing.

Operator Response: Refer this message and its contents to your system programmer.

System Programmer Response: The SYSDROP process can be FORCED by another logical unit of work which attempts to commit a DROP TABLE or DROP DBSPACE. If this failed to release the resources, report this message and its contents to the designated support group for your installation.

ARI0220E FORCE command has insufficient number of parameters.

Explanation: The database FORCE operator command was entered without parameters.

System Action: The command processing is ended.

Operator Response: Reenter the FORCE operator command with the appropriate operands.

ARI0221E {Agent|Rmtuser} identifier *n* in FORCE command is invalid.

Explanation: The identifier *n* is incorrect. It must both (1) be an integer value in the range 1 to the database initialization parameter NCUSERS or RMTUSERS, and (2) represent a valid user.

System Action: The command processing is ended.

Operator Response: Verify the agent or rmtuser identifier by using the SHOW ACTIVE or SHOW CONNECT operator command output. Then reenter the FORCE operator command with the correct agent or rmtuser identifier.

ARI0222E Parameter *parm value* in FORCE command is invalid.

Explanation: The parameter value identified by *parm value* specified in the FORCE operator command is not valid. Acceptable parameters are:

COMMIT
ROLLBACK
DISABLE

The DISABLE parameter is optional, but, if used, it must follow the ROLLBACK parameter (that is, ROLLBACK DISABLE).

System Action: The command processing is ended.

Operator Response: Check the specified parameter, and reenter the FORCE operator command with correct values.

For more information about the FORCE operator command, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0223I Agent *n* in FORCE command has no work to force.

Explanation: The agent identified by *n* does not now have any work to be forced off the system.

Note: The SHOW ACTIVE operator command may have indicated that there was work to force. However, the work ended before the FORCE operator command.

System Action: The command processing is ended.

Operator Response: Do a SHOW ACTIVE to verify the status of agent *n*. The agent will be either not in work (NIW) or active with a new logical unit of work.

ARI0224E FORCE COMMIT is not valid for agent *n*.

Explanation: The agent identified by *n* is not in a correct state for the COMMIT option. Only those agents which have been prepared for commit or rollback by a subsystem (such as CICS) and which are no longer connected to the subsystem may have the COMMIT option applied.

System Action: The command processing is ended.

ARI0225E System operator must issue SHOW ACTIVE, SHOW CONNECT or SHOW SYSTEM command prior to FORCE command.

Explanation: This message is issued for one of these reasons:

- The database FORCE command was entered without first doing a SHOW ACTIVE, SHOW CONNECT or SHOW SYSTEM from the database operator console.

One of these operator commands must be issued to obtain the correct agent numbers to specify in the FORCE command.

- The FORCE command specified an agent that completed its LUW after the SHOW ACTIVE, SHOW CONNECT or SHOW SYSTEM command was entered.

Note that if parameters are used on the SHOW CONNECT command, they must result in the display of active agents to enable the FORCE command to work for the displayed agents.

System Action: The command processing is ended.

Operator Response: Enter the SHOW ACTIVE, SHOW CONNECT or SHOW SYSTEM command from the operator console to obtain the correct agent numbers, then reenter the FORCE command for those agents desired.

ARI0226I **FORCE {ROLLBACK | COMMIT} is already scheduled for {agent | Rmtuser} *n*.**

Explanation: The agent or Rmtuser identified by *n* is being rolled back or committed by the system. This action may have been scheduled because of an application request, a previous FORCE command, or system action.

System Action: The command processing is ended.

ARI0227E **Agent *n* cannot be disabled because it is connected to the DB2 Server for VSE online support.**

Explanation: The agent identified by *n* is now connected to a subsystem (for example, the DB2 Server for VSE Online Resource Adapter). The agent's resources cannot be freed up using the DISABLE option while connected to this subsystem. To disable the connection between agents and a subsystem, request the subsystem to disconnect. For the DB2 Server for VSE Online Resource Adapter, this may be done by executing the CICS transaction CIRT.

System Action: Command processing ends.

Operator Response: Reenter the FORCE command without the DISABLE option or request a CICS terminal operator to enter the CIRT transaction.

ARI0228E **DISABLE option not valid with COMMIT request.**

Explanation: The FORCE command DISABLE option is only valid with ROLLBACK.

Note: The COMMIT option requires that there is no connection to be disabled. The COMMIT option is valid only for those agents that have been

prepared for commit or rollback by a subsystem (such as CICS) and that are no longer connected to the subsystem.

System Action: The command processing is ended.

Operator Response: Reenter the FORCE command without the DISABLE option.

ARI0229E **Too many FORCE command input parameters.**

Explanation: The FORCE command was entered with more than three parameters.

System Action: The command processing is ended.

Operator Response: Reenter the FORCE command with correct number of parameters.

ARI0230I **FORCE {ROLLBACK | COMMIT} {with | without} disable scheduled for agent *n* because of {log full | operator request | resynchronization recovery}.**

Explanation: The database manager FORCE command was initiated for the agent identified by *n* due to the condition indicated by the message ("log full," "operator request," or "resynchronization recovery"). If the agent was in-doubt, the action could be COMMIT or ROLLBACK. Otherwise the action is ROLLBACK.

System Action: The COMMIT or ROLLBACK is scheduled. The actual COMMIT or ROLLBACK may not occur immediately. When the agent begins processing and detects that the FORCE was scheduled, it will then begin the requested process. DISABLE, if specified on the FORCE command, will cause the link to the application to be disconnected after the COMMIT or ROLLBACK process completes.

ARI0231E **The database log contains unresolved units. Please start the database manager with NCUSERS = &1..**

Explanation: The database recovery process detected some logical units of work which were prepared for COMMIT or ROLLBACK by a subsystem (for example, the DB2 Server for VSE Online Resource Adapter). Because of a system or subsystem failure, the subsystem did not COMMIT or ROLLBACK the logical units of work. These logical units of work cannot be recovered (committed or rolled back) because either:

- The application server has been started in single user mode, or
- The application server has been started in multiple user mode but the number of logical units of work is greater than the number of concurrent users (specified by the database initialization parameter NCUSERS).

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&1. is the number of logical units of work prepared for COMMIT or ROLLBACK and is the minimum value required for initialization parameter NCUSERS.

System Action: The system ends with a limit error (message ARI0039E).

Operator Response: Restart the application server in multiple user mode (SYSMODE=M) and NCUSERS greater than or equal to &1..

ARI0232E The log contains unresolved work for user ID &1..

Explanation: The database recovery process detected that a logical unit of work for user ID &1. was prepared by a subsystem for COMMIT or ROLLBACK (for example, the DB2 Server for VSE Online Resource Adapter). The COMMIT or ROLLBACK request did not occur because of a system or subsystem failure. Operator intervention may be required to resolve the logical unit of work.

&1. is the user ID which was established for the logical unit of work.

System Action: The database manager rebuilds the agent as it was prior to the system or subsystem failure. The agent is ready to be resolved by the FORCE command or by the DB2 Server for VSE online resource adapter restart resynchronization support. After the agent is resolved, it is made available for general use by applications or subsystems.

Operator Response: The agents requiring resolution will be resolved during the next execution of the DB2 Server for VSE online resource manager CIRA or CIRB transactions.

If restart resynchronization fails to resolve the agent, use the SHOW ACTIVE command to obtain more information about the logical unit of work. Check with the installation database administrator to determine whether a FORCE n COMMIT command or a FORCE n ROLLBACK command should be entered.

System Programmer Response: In general, a FORCE n COMMIT command should be entered. This is because the application declared its intent as commit either by an SQL COMMIT WORK or by a CICS/VSE SYNCPOINT (no ROLLBACK). The only exception to the general rule is if the application was updating multiple resources (for example, the DB2 Server for VSE database and a DL/I database). In that case, the ROLLBACK option is available for when the update was not committed by another subsystem like DL/I.

To determine the nature of the application, the SHOW ACTIVE command displays the following information:

- USERID = &1. is prepared for COMMIT OR ROLLBACK.
- COORDINATOR is the CICS/VSE subsystem id.
- RESOURCE ADAPTER is the DB2 Server for VSE resource adapter id.

- TRANSACTION is the CICS/VSE TRANSID for the application.
- CICS SIGNON is the CICS/VSE signon userid (if any).
- TERMINAL is the CICS/VSE terminal id (if any).

If the TRANSACTION identifier is ISQL, only the DB2 Server for VSE database was being updated. Thus, FORCE COMMIT should be entered because the ISQL user requested COMMIT and ISQL updates only the DB2 Server for VSE database.

ARI0233E Invalid FREECLASS for page X'n1' of DBSPACE n2 (Block X'n3').

Explanation: The database manager has detected that the FREECLASS setting for page X'n1' of DBSPACE n2 is not within the valid range. This is an internal database error.

Note: The DBSPACE number n2 corresponds to the DBSPACENO column in catalog table SYSTEM.SYSDBSPACES.

Note: The BLOCK number n3 refers to the Page Map Table block that is being processed.

System Action: The database manager will continue verifying all PUBLIC and PRIVATE DBSPACES and end normally.

Operator Response: Refer this message to your system programmer.

Note: If ARCHIVE was specified, the archive function will not be invoked. If UARCHIVE was specified, a user-archive should not be taken. Any implicit log archives are performed due to ARCHIVE or UARCHIVE. If LARCHIVE was specified, the log will be archived, but you should correct the discrepancies as soon as possible.

System Programmer Response: Make note of the information given in this message and refer to directory verification in *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures.

ARI0234E Invalid physical page X'n1' for page X'n2' of DBSPACE n3.

Explanation: The database manager has detected that physical page value X'n1' for logical page X'n2' of DBSPACE n3 is outside the currently defined physical pages of the database. This is an internal database error.

Note: The DBSPACE number n3 corresponds to the DBSPACENO column in catalog table SYSTEM.SYSDBSPACES.

System Action: The database manager will continue

verifying all PUBLIC and PRIVATE DBSPACES and end normally.

Operator Response: Refer this message to your system programmer.

Note: If ARCHIVE was specified, the archive function will not be invoked. If UARCHIVE was specified, a user-archive should not be taken. Any implicit log archives are performed due to ARCHIVE or UARCHIVE. If LARCHIVE was specified, the log will be archived, but you should correct the discrepancies as soon as possible.

System Programmer Response: Make note of the information given in this message and refer to directory verification in *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures.

ARI0235I LARCHIVE command rejected because a {log | database} archive is being taken.

Explanation: An LARCHIVE command was entered by the database operator while either a log archive or a database archive was being taken.

System Action: The log archive or database archive is completed and the LARCHIVE command is ignored.

ARI0236I The database manager rejects log archive request because log archiving is not enabled.

Explanation: An SQLEND LARCHIVE or an LARCHIVE command was entered by the operator, but the database manager is not running with LOGMODE=L.

Note: Although it is valid to enter SQLEND ARCHIVE if database archiving is not enabled (LOGMODE=Y), it is not valid to enter SQLEND LARCHIVE if log archiving is not enabled.

Note: SHUTDOWN is a valid synonym for SQLEND.

System Action: The database manager will process the SQLEND command ignoring the LARCHIVE request. If the LARCHIVE command was entered, command processing ends.

Operator Response: If you were instructed to enter the LARCHIVE command or SQLEND LARCHIVE, notify your system programmer. Otherwise, no action is required.

System Programmer Response: Ensure that the operator is not requested to log archive when LOGMODE is not L.

ARI0237I &1. &2.

Explanation: This message is issued after message ARI0212I. It specifies the affected DBSPACES and the operations which will be bypassed or rolled back.

Sample Output:

```
ARI0237I DBSPACE 7
ARI0237I 5 INSERTS
ARI0237I 2 CREATE TABLES
ARI0237I DBSPACE 12
ARI0237I 10 UPDATES
```

System Action: Message ARI0214I (affected logical units) or message ARI0213D (operator decision) will be issued.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Use the summary information to determine if the specified action is to be done. Instruct the operator whether to reply CONTINUE or CANCEL to message ARI0213D.

ARI0238I database archive mm-dd-yy hh:mm:ss

Explanation: The database manager is listing the restore set you should apply to the current database archive file. The message identifies the external labeling of the database archive file for the restore set.

Message ARI0239I displayed this information when the database archive file was created.

Note: The format of the displayed date is either mm-dd-yy or dd-mm-yy. The format is chosen when VSE is IPLed. The default format is mm-dd-yy.

System Action: ARI0261I is issued for each log archive to be applied to this database.

ARI0239I External labeling of this archive is:
Type: {database | log} archive **Timestamp:**
 mm-dd-yy hh:mm:ss

Explanation: Because there are three different kinds of archives, and each may require multiple tape volumes, you should externally label the tapes for use in restoring the database. When the database manager requests the operator to mount the tapes to contain the archive, this message is displayed to help in this external labeling.

The database manager also uses the label internally to determine the log archives which follow a database archive.

This message is displayed at the following times:

- When the database manager creates a database archive file
- When the database manager creates a log archive file

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- When the application server is ending to allow the user to create a database archive (using the `SQLEND UARCHIVE` operator command)
- When the database manager is ready to read the next log archive file during the restore process.

The database manager will display this same information to identify the database archive file and the required log archive files during the restore process. See messages ARI0238I and ARI0261I.

Note: The format of the displayed date is either mm-dd-yy or dd-mm-yy. The format is chosen when VSE is IPLed. The default format is mm-dd-yy.

System Action: The archive or restore process continues.

Operator Response: When creating archives, use the displayed information to externally label the archive tapes. If you are doing a `LOG ARCHIVE TO DISK`, you may want to record the archive details in an operational record book.

When restoring the database, use the displayed information to assist you in mounting the correct log archive tape. (This step is unnecessary if restoring a `LOG ARCHIVE FROM DISK`.)

ARI0240I Restoring log disk.

Explanation: The application server has been started with `STARTUP=R`, `STARTUP=F`, or `STARTUP=U`; the log archive input volume has been readied; and the log files are being restored.

System Action: The database manager proceeds with the restore process.

ARI0241E The log archive being read is not the log archive requested.

Explanation: The volume mounted after message ARI0239I was displayed is not the log archive tape file requested. Possible causes include:

- The mounted (and opened) volume for file name ARILARC does not
- The mounted (and opened) volume for file name ARILARC is a log

System Action:

The mounted (and opened) volume is closed. If the close fails, message ARI0298E is displayed and the application server is terminated. Otherwise, message ARI0295A is redisplayed to allow the operator to mount the required log archive file and continue the restore process.

Operator Response:

1. Determine why the correct volume was not mounted.

2. Ensure that the information given in message ARI0239I matches the information used to externally label the log archive volume at log archive creation time.

Note: This only applies if the operator labeled the archive tapes with the information displayed at archive creation time.

3. Ensure that the correct log archive volume is mounted. This is the log archive file identified by the previous message ARI0239I.
4. Reply with the correct cuu to message ARI0295A to continue the log archive restore process.

System Programmer Response: Ensure that your system operator follows procedures that allow proper identification of the log archive volume at creation time and proper log archive volume mounting at log archive restore time.

ARI0242E Previously LOGMODE was L and now LOGMODE is {Y|N}. To start with LOGMODE = {Y|N}, perform `SQLEND` with `LARCHIVE`, perform `COLDLOG`, and restart with LOGMODE = {Y|N}.
Note: Only in a restore process do log archives taken up to the switch in LOGMODE from L to {Y|N} remain useful.

Explanation: If the operator wants to change from LOGMODE=L to LOGMODE=Y or N, this message outlines the procedure to follow. In this case, the message also alerts the operator that after `SQLEND LARCHIVE` archives the active log (and the inactive log if alternate logging is enabled and it was not archived before) and the operator does a `COLDLOG`, a restore process that restores a database archive (which may include the log archive just taken in its restore set) cannot restore log archives taken past this log archive.

If the operator wants to continue running the database manager with LOGMODE=L, the operator can ignore the procedure outlined in this message and restart the application server with LOGMODE=L.

System Action: The application server is ended.

Operator Response: Either restart the application server with LOGMODE=L so that log archives continue to be useful in a restore process, or restart the application server with LOGMODE=Y or LOGMODE=N after performing the procedure outlined in the message. Note that `COLDLOG` is performed with the database initialization parameter `STARTUP=L`.

ARI0243I Previously LOGMODE was L and now LOGMODE=A. Note that log archives taken up to this point are useful until another database archive is taken.

Explanation: If the LOGMODE switch from L to A is desired, this message alerts the operator that once a database archive is taken with LOGMODE=A, a restore from a back-level database archive may only apply log archives up to the last log archive before this switch to LOGMODE=A.

System Action: Database initialization continues.

Operator Response: No action is required if the LOGMODE switch from L to A is desired. Otherwise, end the application server and restart it with the desired LOGMODE.

ARI0244E To continue with LOGMODE=L, you must first perform an initial database archive.

Explanation: You have been running with a LOGMODE other than L. If you want LOGMODE=L, you must first perform an initial database archive since the log indicates that there is no database archive upon which a log archive can be based. A cold log resets LOGMODE to Y because a COLDLOG ends all current restore sets.

System Action: The application server ends.

Operator Response: Start the application server with LOGMODE=Y and take a database archive. Then, restart the application server with LOGMODE=L.

ARI0245E Warning: Do not do a user-archive until you correct discrepancies in the directory.

Explanation: The SQLEND UARCHIVE command was entered with the DVERIFY parameter. The preceding messages display the discrepancies found in the directory.

System Action: The application server ends.

Operator Response: Refer the message to your system programmer.

System Programmer Response: Make note of the information given in the preceding messages and refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* for recovery procedures for directory verification errors.

ARI0247D You are in the restore process. There are log archives that you could use in this process but LOGMODE=A. Do you want LOGMODE=L instead? Enter 1(Yes) to change LOGMODE to L, or 0(No) to keep LOGMODE=A.

Explanation: You have started the application server with STARTUP equal to R, U, or F and LOGMODE equal A. The database has been restored. There are log archives which could be applied to the database. The database manager is giving you the chance to switch the LOGMODE value to L so that the log archives may be applied.

System Action: If you reply 1(YES), the database manager will switch the LOGMODE to L and apply all applicable log archives as if you had started the application server with LOGMODE=L. If you reply 0(No), the database manager will issue message ARI0264D.

Operator Response: Reply 1(YES) if you want any log archives applied to the database just restored. Reply 0(No) if you do not want these log archives applied.

ARI0248E No operand on command.

Explanation: The operator or ISQL terminal user entered a COUNTER or RESET command without specifying either * or the counter names.

System Action: The command processing is ended.

User Response: Reenter the command and specify either * for all counters or specific counter names for the desired counters.

Operator Response: See User Response.

ARI0249E parameter is an invalid RESET or COUNTER parameter.

Explanation: The operator or ISQL terminal user entered a COUNTER command or RESET command with an operand value that was not a system counter name or a valid reset parameter.

System Action: The name is bypassed by the command processor. Any valid counters following the invalid name will be displayed or reset.

User Response: Check the spelling of the submitted name. Reenter the command with the correctly spelled counter name or reset parameter. Issue COUNTER * for a list of all acceptable counter names.

You cannot reset the DASDIO, DASDREAD, and DASDWRT counters because they are sums of other counters.

To reset the values displayed by the SHOW STORAGE command, enter RESET HIGHSTOR. (HIGHSTOR is not a counter and is not reset by RESET *.)

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Operator Response: See User Response.

ARI0250D The above information describes the next log archive to be used in the restore process. Enter either: CONTINUE to restore this log archive, STOP SYSTEM to interrupt this restore process or END RESTORE to end this restore process.

Explanation: Messages ARI0239I and ARI0252I contain a description of the next log archive file to be applied. This is the same information given at the time the log archive file was created. You are given three options with this message:

1. Reply CONTINUE: The log archive identified in message ARI0239I will be applied to the database. If the archive is on tape, and ARI0252I specifies a tape cuu, mount the tape before replying.
2. Reply STOP SYSTEM: The restore process is suspended and the application server stops. The restore process will start where it left off if you warm start the application server with STARTUP=W and LOGMODE=L.
3. Reply END RESTORE: The restore process is ended. Also, you will never be able to restore the remaining log archives to the database archive you have just restored. This is because the remaining log archives are no longer a part of the restore set for this database archive in the history area. However, if you go to a back level database archive, these log archives may be applied as usual.

System Action: One of the following actions will occur:

- Reply was CONTINUE: The restore process continues.
- Reply was STOP SYSTEM: The restore process is suspended. The application server stops.
- Reply was END RESTORE: If you have not applied the first log archive file to your database archive file, you will receive message ARI0264D. If you have applied at least one log archive file to your database archive file, the database manager will complete initialization and begin application processing.

Operator Response: In all but very special cases, you will reply CONTINUE. As mentioned in the Explanation, you may need to mount a tape before making this reply. You may want to reply STOP SYSTEM if you are using an EXTEND input file and need to change the EXTEND commands. There is no danger in using STOP SYSTEM. The only case in which you may want to use END RESTORE is if you want to use the log archives up to a certain point and never restore the remaining log archives. END RESTORE should only be used in extreme cases as it could result in a permanent loss of data. Do not reply END RESTORE without consulting your system programmer.

System Programmer Response: Be sure that you

understand the consequences of replying END RESTORE.

ARI0251D The database archive currently mounted is not the most recent database archive known to the database manager. Enter either: IGNORE to continue, or CANCEL to restart the restore process with the most recent database archive.

Explanation: The database archive that was just restored is not the latest database archive record in the history area. This prompt gives you the chance to terminate the database manager if you wish to mount a different database archive.

System Action: If you reply IGNORE and there are no log archive files that go with this database archive file, message ARI0264D is issued. If you reply IGNORE and there are log archive files to go with this database archive file, these log archive files are applied. If you reply CANCEL, the application server terminates to allow you to mount a different database archive file. Any other reply causes message ARI0052E to be displayed and message ARI0251D to be redisplayed.

Note: At this time, the database archive mounted has replaced your database files.

Operator Response: Reply IGNORE if you wish to continue with the restore of the database archive volume currently mounted. Reply CANCEL if you wish to terminate the application server and mount a different database archive to be used in the restore process.

ARI0252I Medium: Tape cuu

Explanation: ARI0252I follows ARI0239I. A log or database archive is about to be created, or the next log archive file is about to be read during the restore process.

During a log archive:

The address shown is the most recent tape address specified for ARILARC or ARILALT at startup, log restore, or log archive; if unspecified so far, it is "???".

During a log restore:

The address shown if the most recent tape address specified for ARILARC or ARILALT at startup, log restore, or log archive. If unspecified so far, it is "???".

System Action: The archive or restore process continues.

Operator Response: Respond to the messages following ARI0252I.

ARI0253D The database archive mounted is not known to the database manager. Enter either: IGNORE to continue, or CANCEL to restart the restore process.

Explanation: The database archive that was just restored does not have a record in the history area. This could be caused by:

1. The record of this database archive was written over. If it was your most current database archive, you should have gotten message ARI0258E as a warning of this. If it was a back level database archive, you would get no warning.
2. You did a COLDLOG (STARTUP=L) sometime after taking this database archive which destroyed the history area for this database.

This message gives you the chance to terminate the application server if you wish to mount a different database archive file.

System Action: If you reply IGNORE, message ARI0264D is issued. If you reply CANCEL, the application server terminates.

Operator Response: Reply IGNORE if you wish to continue with the restore of the database archive volume currently mounted. Reply CANCEL if you wish to terminate the application server and mount a different database archive to be used in the restore process.

ARI0254I The database manager is initiating a log archive of the active log. When the log archive is complete, the database manager will process the database archive request.

Explanation: A database archive has been requested and LOGMODE=L but the active log has not been archived. Therefore, the database manager has initiated a log archive to ensure that log archives will remain useful in recovering to this point.

Note: This log archive will become the last archive in the restore set for the database archive taken prior to this database archive request.

System Action: The database manager has automatically initiated an on-line log archive operation. It will then process the database archive request.

ARI0255I The database manager is initiating a log archive of the active log. When it is completed, the restore process will continue.

Explanation: A database restore has been requested and LOGMODE=L but the active log has not been archived. Therefore, the database manager has initiated a log archive.

Note: This log archive will become the last log archive in the current restore set.

System Action: The database manager will automatically initiate an on-line log archive operation. The database manager will then resume restore processing.

ARI0256E You must specify ROLLBACK by DBSPACE *dbspace-number* in the extend file.

Explanation: A ROLLBACK COMMITTED WORK command was specified for a logical unit of work containing one or more DROP DBSPACE or DROP TABLE commands and one or more of the following occurred:

- The DBSPACE control keyword was submitted but did not specify all of the DBSPACES which are affected by the DROP commands.
- The DBSPACE control keyword was not submitted with the command.
- The ROLLBACK COMMITTED WORK command contained the DBSPACE control keyword with other ANDed control keywords (USERID, TIME, or DATE).

This message may be issued more than once for the same DBSPACE.

Note: DBSPACE 1 (catalog DBSPACE) need not be specified on the command although the DROP commands update the catalog.

dbspace-number is a DBSPACE number of the DBSPACE affected by a DROP DBSPACE or DROP TABLE command.

System Action: Processing of the log is completed and summary statistics are displayed. Message ARI0213D is not displayed and processing is ended.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Use the summary information to determine if the specified actions are to be done. If so, include each DBSPACE specified in this message (ARI0256E) in a ROLLBACK COMMITTED WORK command. Then, restart extended database initialization.

ARI0257I **Format 1:**
New LUWs and the log archive of the active log cannot continue until n non-R/O active LUWs are completed.
Format 2:
New LUWs and the switch to the inactive log cannot continue until n non-R/O active LUWs are completed.

Explanation: Format 1 is displayed when a log archive of the active log has been requested either through a

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command or due to the ARCHPCT value being exceeded. Format 2 is displayed when alternate logging is enabled and the ARCHPCT value is exceeded. Both the log archive of the active log and the switch to the inactive log require that there be no logical units of work active at the time that the log archive or the switch to the inactive log completes. This is so that the logical units of work do not span log archives. The database manager displays this message to inform the operator of how many logical units of work are active at the time of the log archive or log switch request.

System Action: When a log archive of the active log is requested, or when an attempt is made to switch to the inactive log, the database manager prevents new logical units of work from starting. Users that try to start a new logical unit of work will be in a lock wait until the log archive begins or until the switch to the inactive log is completed. Logical units of work that are active when the log archive is requested or when an attempt is made to switch to the alternate log are allowed to complete. In most cases, there is only a slight delay before the log archive begins or the switch to the inactive log begins. If, however, there are long running logical units of work, the delay will be longer. A logical unit of work may be long enough so that the SLOGCUSH value is reached. In this case, the database manager will start log overflow processing and rollback the longest-running logical units of work to free log space.

Operator Response: If you find that a long running logical unit of work is holding up the log archive or switch to the inactive log, you can use the SHOW operator commands to determine which user is delaying the start of the log archive. You may wish to use the FORCE command to end those logical units of work.

ARI0258E **The log indicates that you are in danger of losing the record of your latest database archive. To prevent this, you must do a database archive.**

Explanation: The database manager keeps track of information such as database archives, log archives, logmode switches, coldlogs, switching from an active to inactive log, and restores. This is so that the database manager can be sure that the database and log archive files used for restore are valid and in the correct order. However, there is a limit on the number of records the database manager can store at any one time. When the limit is reached, the oldest records are lost. This is not a problem unless the record of the last database archive taken is lost. This message is issued when the latest database archive is within 10 records of being written over and every time a record is stored after that until the record of the latest database archive is actually written over. At this point, message ARI0262E is issued.

System Action: Processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Be sure to take a database archive before receiving this message a total of 10 times. After a record of your latest database archive is lost, you will not be able to restore your database to its current state until you have taken a database archive.

ARI0259I **No logical unit of work started at or after the time specified in the ROLLBACK command.**

Explanation: This information message may be displayed when TIME is used as a control keyword in the EXTEND input file. It will be followed by message ARI0210I or message ARI0212I.

System Action: Processing continues.

System Programmer Response: Check the control keywords in the EXTEND input file and adjust if necessary. See message explanations for the accompanying messages.

ARI0260I **The restore set for this database archive is as follows:**

Explanation: This message is displayed every time a database restore completes. It is followed by messages ARI0238I and ARI0261I which identify the set of database archives and log archives to be used with the database archive just restored.

System Action: Message ARI0238I follows.

ARI0261I **[-->] log archive - {tape file-ID mm-dd-yy hh:mm:ss}**

Explanation: The message identifies the next log archive file in the restore set.

Message ARI0252I displayed this information when the log archive file was created. The information displayed should have been recorded externally on the tape. Message ARI0252I will display this information again when the restoration process is ready to read this log archive file.

Note: The format of the displayed date is either mm-dd-yy or dd-mm-yy. The format is chosen when VSE is IPLed. The default format is mm-dd-yy.

System Action: ARI0261I is issued for each log archive file to be applied to this database.

ARI0262E **The record of your latest database archive has just been lost. You must archive the database to restore your database to its current state.**

Explanation: The database manager keeps track of information such as database archives, log archives, logmode switches, coldlogs, switching from an active to inactive log, and restores. This is so that the database manager can be sure that the database and log archive files used for restore are valid and in the correct order. However, there is a limit on the number of records the database manager can store at any one time. When the limit is reached, the oldest records are lost. This is not a problem unless the record of the last database archive taken is lost. This message is issued when the latest database archive has been written over.

System Action: Processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Take a database archive as soon as possible to ensure that if you need to restore the database that you will be able to.

ARI0263D **To direct the log archive to tape, enter TAPE followed by the tape address and the catalog filename. (CAT.FILE-ID = catalog-file-ID).**

Explanation: A log archive is being created and the operator is prompted to change, or has indicated a change is necessary, to the destination of the archive specified in ARI0252I. ARI0263D requests that this new destination be specified. The format of this identifier is described under ARI0252I.

System Action: If the operator response is valid, the database manager displays it in ARI0252I (preceded by ARI0239I), allowing the operator to confirm that this is the intended destination. If the response was invalid, an error message is displayed and ARI0263D is redisplayed.

Operator Response: To have the log archive written to tape, enter TAPE followed by the tape address (*cuu*).

The file identifier cannot have been used already for a log archive. It is recommended that you use the default naming convention.

ARI0264D **If a COLDLOG was not performed immediately preceding this restore process, enter CANCEL, perform COLDLOG, and start the database manager with STARTUP=W. Otherwise, enter IGNORE.**

Explanation:

- You replied IGNORE to message ARI0251D or message ARI0253D, or

- You replied END RESTORE to message ARI0250D before applying the first log archive file in your restore set, or
- An end of restore set was found before the end of the active log.

Unless you executed a COLDLOG immediately preceding the STARTUP=R, your current log is out of synchronization with the database just restored. This message gives you a chance to COLDLOG before the log is applied to the database.

System Action: If you reply IGNORE, the database manager will assume that you have performed a COLDLOG prior to restore and log recovery, and the restore process will continue.

If you reply CANCEL, the application server will terminate.

Operator Response: If you have performed a COLDLOG immediately preceding the restore, then reply IGNORE. If you have not, then reply CANCEL, execute the COLDLOG function (STARTUP=L) and then start the application server with STARTUP=W. The COLDLOG function is performed by the SQLLOG EXEC. See the *DB2 Server for VSE System Administration* manual for more information on the SQLLOG EXEC.

ARI0273I **Formatting directory disk.**

Explanation: The application server has been started with *STARTUP=R*, and the directory disk is being formatted.

System Action: The restore process continues.

ARI0274I **Implicit COMMIT failed for userid to avoid deadlock or because of system request. A ROLLBACK of the LUW will occur.**

Explanation: User *userid* did not issue a commit work command before ending, and the database manager started implicit commit processing for that user. During this processing, it was found that the work performed by the user had to be rolled back due to a system request (such as log full, out of lock request blocks, etc.) or to avoid a deadlock situation.

System Action: All database changes for this logical unit of work have been rolled back.

Operator Response: Inform user *user-id* that the work has not been committed, but rolled back. User *user-id* should inform the application developer that this condition occurred.

User Response: Recover the work that had been rolled back. Also, it is strongly recommended that a commit work command be issued by applications prior to application termination. If this is done, the application could indicate to the user when a COMMIT WORK is actually completed.

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ARI0276E Log is full.

Explanation: The database log is full. Overflow procedures, designed to prevent this from happening, have failed.

System Action: The application server is ended with a limit error. Logical units of work in progress at the time of the termination will be undone when the application server is warm started.

Operator Response: Notify your system programmer concerning the size of the log. Also, it is possible that one logical unit of work has been started and has not been committed or rolled back; that is, it inadvertently remains active. This active logical unit of work prevents reuse of database log space.

You must always warm start the application server (initialization parameter STARTUP=W) to recover the logical units of work in progress when the system terminated. You can then, after a "clean" application server shutdown, redefine the logs and start the application server with the new log file definitions (initialization parameter STARTUP=L) to run with the larger logs.

System Programmer Response: You can minimize the space required in the log by running with LOGMODE=N or LOGMODE=Y (rather than LOGMODE=A). This is especially appropriate when loading or reloading the database (including DBS utility DATALOAD and RELOAD operations) and when running other applications that make mass updates to the database. If you are already doing this and are encountering this problem, consider redefining the logs with a larger size.

Switching log modes and redefining the logs are described in the *DB2 Server for VSE System Administration* manual.

ARI0277E Archive input file *cuu* does not contain a DB2 Server for VSE identifier.

Explanation: The volume mounted on tape unit *cuu* in response to message ARI0295A is not a DB2 Server for VSE database archive tape.

Possible causes include:

- The mounted (and opened) volume for file name ARIARCH does not contain a DB2 Server for VSE database archive file.
- The mounted (and opened) volume for file name ARIARCH is a DB2 Server for VSE database archive volume, but is not the first volume of a multi-volume archive file. This can occur only if you do not request VSE SAM open processing to check the file's volume sequence number.

Note: The database directory file has been reformatted. The database can only be recovered by a

successful archive restoration or by rebuilding the database using the database generation process.

System Action: The archive file is closed and dynamically unassigned. Message ARI0295A is displayed again to allow the operator to mount the correct volume and continue the restore process. If the dynamic unassign fails, message ARI0298E is displayed and the application server terminates.

Note: The operator can mount the correct volume on the same or another tape unit and reply with its *cuu* to message ARI0295A.

Operator Response: Determine why the correct volume was not mounted, mount the correct volume, and reply to message ARI0295A with the tape unit *cuu*.

If you are unable to determine the cause of the problem, contact your system programmer.

System Programmer Response: Ensure that archive file volumes are properly identified so that you know which volumes belong to a database archive and the order in which they must be mounted. Ensure that your system operator follows procedures that allow proper identification at archive creation time and proper volume mounting at archive restore time. You should use extensive standard volume and file label checking and creation procedures to assist in this identification and verification process.

ARI0278E Unexpected EOF on archive input file [*cuu*].

Explanation: During a restore from archive, one of the following occurred:

- The database manager encountered end-of-file on the database archive file before all data required to restore the database directory and DBEXTENTS was read.
- The database manager encountered end-of-file on a log archive before all data required to restore the archived DB2 Server for VSE log was read.

cuu identifies the tape unit containing the database or log archive file. No *cuu* is specified for a log archive file being restored from disk. Possible causes include:

- A DB2 Server for VSE or VSE system error occurred that caused database or log archive file records to be lost.
- In mounting the volumes of a multi-volume archive file, the operator mounted the first volume correctly, but then mounted the last volume before mounting one or more of the intermediate volumes. This error can occur only if you omit the volume-sequence-number parameter from the ARIARCH (database archive) or ARILARC/ARILALT (log archive) TLBL Job Control statement, or if the operator was notified of a volume sequence number error and chose to ignore it.

System Action: The database or log archive file is closed and dynamically unassigned, and the application server stops. Note that the database has been only partially restored and is not usable.

Operator Response: If the error occurred while restoring a database archive file and you can determine the cause of the error, restart the application server with the STARTUP=R or F initialization parameter to redo the database restore process.

If the error occurred while restoring a log archive file and you can determine the cause of the error, warm start the application server (STARTUP=W). It will resume the restore process with the current log archive file (the one which encountered this error).

Otherwise, contact your system programmer.

System Programmer Response: Ensure that the system operator knows which database archive file volumes and log archive file volumes (if using log archiving) to mount and the order to mount them.

If the error occurred on a database archive file, ensure that the ARIARCH TLBL job control statement contains the volume-sequence-number parameter (to ensure that the volumes are not mounted out of sequence). Also ensure that the operator does not ignore volume sequence number error messages. You should retry the restore process. If the error persists, you will not be able to use this database archive file.

If the error occurred on a log archive file, ensure that the ARILARC and ARILALT TBL job control statement contains the volume-sequence-number parameter (to ensure that volumes are not mounted out of sequence). Also, ensure that the operator does not ignore volume sequence number error messages. You should try to resume the restore process with the current log archive file by warm starting the application server (STARTUP=W). If the error persists, you will not be able to use this log archive file.

Refer to the information about how to restart from a database restore operation in the *DB2 Server for VSE System Administration* manual for recovery procedures when a database or log archive file cannot be processed.

ARI0279E **Archive input file is not current. No COLDLOG is issued.**

Explanation: During a database restore from archive, the database manager determined from its log that:

- The archive copy was not the most recent archive copy of the database, and
- The COLDLOG function was not performed (COLDLOG is performed by starting the application server with the SYSMODE=S and STARTUP=L initialization parameters).

You cannot restore a database from an archive copy that is not the most recent archive copy of the database

unless you immediately precede this task with the COLDLOG function. Refer to the *DB2 Server for VSE System Administration* manual for information on restoring a database.

System Action: The application server terminates. The database has been updated to reflect the contents of the archive file, but it may not be in a “current and consistent state” because the updates in the DB2 Server for VSE log have not been applied to the database.

Operator Response: Refer this message to your system programmer.

System Programmer Response: You have either:

- Accidentally attempted to restore a database from an archive copy that is not the most recent archive copy, or
- You have failed to execute the COLDLOG function before attempting to restore the database using a back-level archive copy.

You must either:

- Rerun the database restore process using the most recent archive copy of the database, or
- Run the COLDLOG function before running the database restore process using the back-level archive copy. If you intended to restore the database from a back level archive copy and forgot to perform the COLDLOG function, you can now perform the COLDLOG function and then restart the application server for normal processing (if you are sure that you have applied the correct back level archive copy).

ARI0280A **Previously LOGMODE was A(ARCHIVE) and now LOGMODE=&1. To restart with LOGMODE=&1, perform shutdown with ARCHIVE unless an archive has just been taken, perform COLDLOG, and restart with LOGMODE=&1.**

Explanation: This message is issued to protect against making a previous DB2 Server for VSE (or any type) of user archive useless. To run with LOGMODE=N or LOGMODE=Y, after running with LOGMODE=A, follow the procedure given in the message.

Note: This message can occur if:

1. You last ran the database manager with LOGMODE=Y and you issued an SLEND ARCHIVE or SLEND UARCHIVE command. These commands internally change the current LOGMODE to A if the current LOGMODE is Y.

Or

You last ran the database manager with LOGMODE=Y, issued an SLEND, then ran SQLADBEX, specifying ARCHIVE or

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UARCHIVE, which internally changes the current LOGMODE to A if the current LOGMODE is Y.

2. You then restarted the application server with LOGMODE set to Y or N. Note that LOGMODE=Y is the default.

In both of the above circumstances, performing a shutdown with archive is not required to continue with LOGMODE=Y, since an archive has just been performed.

System Action: The application server is ended.

Operator Response: If you have started the application server with an incorrect LOGMODE value, correct the LOGMODE value and restart the application server. Otherwise, restart the database manager with LOGMODE=N or LOGMODE=Y after performing the procedure outlined in the message. The archive step may be skipped if this message is caused by either of the two scenarios described in the above note. COLDLOG is performed by starting the database manager with the database initialization parameter STARTUP=L.

ARI0281I LUW REDO is completed.

Explanation: The logical units of work in the current log which required redoing at startup time have been redone by the recovery procedure.

System Action: Initialization continues.

ARI0282I LUW UNDO is completed.

Explanation: The logical units of work in the current log which required undoing at startup time have been undone by the recovery procedure.

System Action: Initialization continues.

ARI0283I Log analysis is complete.

Explanation: The current log has been scanned successfully by the recovery procedure to determine those logical units of work which require redoing or undoing at startup time.

System Action: Initialization continues.

ARI0284I SHOW LOG command is rejected because LOGMODE = N.

Explanation: A SHOW LOG command was entered by the system operator or the ISQL terminal user while running with LOGMODE=N.

System Action: The command is ignored.

ARI0285I Checkpoint interval is reduced to *n*.

Explanation: The checkpoint interval is the number of log pages which will be written between automatic checkpoints. This interval is specified by the database initialization parameter CHKINTVL. At database initialization, an analysis of the checkpoint interval and the size of the log is made to determine if at least one checkpoint will be taken before end of log or log wrap. If CHKINTVL will not cause one checkpoint, it is reduced by the required amount to cause one checkpoint to be taken.

System Action: Processing continues. The value *n* (in pages) is used to cause a checkpoint to be taken.

Operator Response: Unless this message is expected, give it to your system programmer.

System Programmer Response: You may wish to change the CHKINTVL database initialization parameter to avoid this message.

ARI0286I RESTORE cancelled by operator request.

Explanation: The operator replied CANCEL to message ARI0295A while restoring the database. Message ARI0295A is displayed (to ensure that the tape is mounted) before opening the database archive file or before opening a log archive file (restoring with LOGMODE=L) when the tape cuu to be used is unknown.

Unless STARTUP=F was specified and the database archive file cancelled, the database has been partially restored (or reformatted).

System Action: The application server ends.

Operator Response: Refer to message ARI0295A (where you replied CANCEL).

ARI0287I ARCHIVE command rejected because a {database | log} ARCHIVE is being performed.

Explanation: An ARCHIVE command was entered by the DB2 Server for VSE operator while either a log archive or a database archive was being taken.

System Action: The log archive or the database archive that is being taken will be completed, and the ARCHIVE command is ignored.

ARI0288I ARCHIVE command rejected because archiving is not enabled.

Explanation: An ARCHIVE command was entered by the system operator, but the database manager is not running with LOGMODE=A or LOGMODE=L.

Note: It is valid to enter SQLEND ARCHIVE if archiving is not enabled (LOGMODE=Y).

Note: SHUTDOWN is a valid synonym for SLEND.

The ARCHIVE command requires a LOGMODE of A or L.

System Action: The database manager ignores the ARCHIVE command.

Operator Response: If you were instructed to enter the ARCHIVE command, notify your system programmer. Otherwise, no action is required.

System Programmer Response: Tell the operator not to enter the ARCHIVE command if LOGMODE is not A or L and do not enter the SLEND ARCHIVE command if the LOGMODE is not Y, A, or L.

ARI0289I Restoring directory disk.

Explanation: This message occurs when the application server has been started with STARTUP=R, or F, the archive input volume has been readied, and the directory file is being restored.

System Action: The restore process continues.

ARI0290I **Format 1:**
Restoring data disk.
Format 2:
Restoring dbextent <extent-number> of
<total-extents>.
Format 3:
Extent <extent-number> of <total-extents>
is a deleted dbextent. No action taken.

Explanation: The application server has been started with STARTUP=R or F, the archive input volume has been readied, the directory disk has been restored, and:

- **FORMAT 1:** the restoring of the data disks (DBEXTENTS) is in process.
- **FORMAT 2:** the restoring of DBEXTENT <extent-number> of <max-extent> is in progress.
- **FORMAT 3:** dbextent <extent-number> of <max-extents> was previously deleted and will not be restored.

System Action: The database manager proceeds with the restore process.

ARI0291I System restore from directory and data disk(s) of database archive is completed.

Explanation: The application server has been started with STARTUP=R or F and the database disks restore process is complete. The database archive tape unit is now available for other purposes.

System Action: The database manager continues with initialization. The archive volumes can be removed from the system and stored until needed.

ARI0292I Archive is completed.

Explanation: A database or log archive has completed. If the archive was to tape, the archive tape unit is now available for other purposes.

System Action: Processing continues.

Operator Response: If the archive was to tape, the archive volumes can be removed from the system and stored until required for the restore process (or until they are no longer required).

ARI0293I Archive is starting.

Explanation: A database or log archive is beginning.

System Action: The database manager continues the archive process.

ARI0294A Archive file [cuu] {read|write} failed.
Reason Code = nm. Return Code = nm.

Explanation: While attempting to read or write a DB2 Server for VSE database or log archive file, an access error occurred. *cuu* is the address of the tape device on which the error occurred; it is not displayed for an error on a disk device.

If the message text specifies WRITE, the database or log archive file has not been completed; it cannot be used. After the I/O error condition is corrected:

- If this error occurred while creating a log archive during the database restore process, restart the restore process with the same STARTUP parameter value. If you user-restored the database, you do not have to repeat that process but you must restart with STARTUP=U.
- If this error occurred while creating a log archive file with the LARCHIVE operator command, reenter the LARCHIVE operator command.
- Otherwise, restart the application server and if applicable, reinitiate the archive process.

If the message text specifies READ, a database or log archive file was being used to restore the database. (The application server had been started with the initialization parameter STARTUP=R, F, or U for database recovery) The database is only partially restored; it can only be recovered by a successful archive restoration (described below) or by rebuilding the database (except for file definition) using the database generation process.

The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: If this error occurred due to a log archive initiated using the LARCHIVE operator

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command, the log archive process ends, but the database manager continues normal operation. For all other cases, the application server ends.

Operator Response: For corrective action, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

If an archive file was being written, restart the application server or the LARCHIVE operator command according to the situation described under **Explanation**. This recovery action is described in the *DB2 Server for VSE System Administration* manual.

If an error occurred when reading a database archive file and if you are able to use the archive file which previously failed, start the application server with the initialization parameter STARTUP=R or F to restore the database and continue normal processing.

If an error occurred while reading a log archive file, warm start the application server. It will resume the restore process with the log archive that failed.

If a database or log archive file cannot be read (for example, uncorrectable media error), refer to the *DB2 Server for VSE System Administration* manual.

System Programmer Response: See Operator Response.

ARI0295A Ready archive input volume. Enter CANCEL or the cuu.

Explanation: Restoring a database from archive files has been begun by starting the application server with STARTUP=R, F, or U.

The database manager is prompting the operator to ensure that the correct database or log archive tape is mounted and readied on tape unit **cuu**. The operator is being requested to respond by entering the **cuu** on which the tape has been mounted or CANCEL to terminate.

If the archive file could not be dynamically assigned and opened successfully, message ARI0296A was displayed to indicate the error condition. This message was redisplayed to give the operator the opportunity to correct the error and restart the archive restore process.

If the **cuu** value entered in response to this message was not valid, message ARI0297A was displayed to indicate the error condition. This message was redisplayed to give the operator the opportunity to enter a valid **cuu**.

If the database archive file did not contain a DB2 Server for VSE database archive, message ARI0277E was displayed and the file was closed and dynamically unassigned. This message was redisplayed to correct the error and restart the database restore process.

Note: Unless STARTUP=F was specified and the request was for a database archive file, the database has been partially restored (or reformatted).

System Action: If the operator responds with CANCEL, the restore is canceled and the application server is ended.

If the operator responds with **cuu**, tape unit **cuu** is dynamically assigned to the archive input file; it is opened (with rewind) for archive restore input and the restore process proceeds.

Operator Response: If this message was redisplayed after message ARI0277E, ARI0296A, or ARI0297A, take the corrective action suggested by that error message.

Select an available unassigned tape unit. Mount and ready the first (or only) volume of the archive file. Enter the **cuu** of the selected tape unit.

If a tape unit is not available or if the error condition from message ARI0277E or ARI0296A cannot be corrected, enter CANCEL to end the restore process and the application server.

If you reply CANCEL for a database archive file, you must restart with STARTUP= R or F for database recovery.

If you reply CANCEL for a log archive file, you should warm start the application server (STARTUP=W) and continue the restore process with the current log archive file. The current log archive file is the one you were requested to mount.

ARI0296A Archive file [cuu] ASSIGN or OPEN failed. Reason Code = nm. Return Code = nm.

Explanation: A DB2 Server for VSE database archive or restore from archive is in progress. An error occurred while attempting to dynamically assign and open the archive output file or restore input file on tape unit **cuu**.

The Reason Code value is the primary error code. The Return Code value is the secondary error code. For further explanation, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

Note: Unless STARTUP=F was specified and the request was for a database archive file, the database has been partially restored (or reformatted).

System Action:

- If REASON = 36 and CODE = 8, 12, 16, 48, or 52: Message ARI0297A is displayed. The system reissues the archive or restore mount message (either ARI0295A or ARI0299A).

- All other REASON and CODE combinations: For restore, message ARI0295A is reissued. For a log archive initiated by the LARCHIVE operator command, the log archive ends and the database manager continues normal operation. For all other archive output files, the application server ends.

Operator Response: For corrective action, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

If the application server stops while creating a log archive during the restore process, restart the process after taking corrective action for the error.

If the application server stops while creating a normal database or log archive, warm start the application server (STARTUP=W) after taking corrective action for the error. Then, take the action you took previously to initiate the database or log archive. If the archive was initiated by the database manager, it will be initiated again.

If an LARCHIVE operator command request failed and the database manager continued operating, you can retry the LARCHIVE command after correcting the cause of this error message.

ARI0297A Response to archive prompt is not valid.

Explanation: An archive prompt message has been issued, but the operator’s reply was not valid.

If ARI0263D has been issued, the response has a syntax error. Possible causes:

- No reply was entered.
- For ARI0246D, CHANGE or CONTINUE was misspelled.
- For ARI0263D, TAPE was misspelled.

System Action: The database manager issues the prompt message again and asks for valid input.

Operator Response: Ensure that the input being entered is valid, and enter it in response to the prompt message.

ARI0298E Archive file [cuu] CLOSE failed. Reason Code = nm. Return Code = nm.

Explanation: The database manager was creating or reading a database or log archive file. An error occurred when the database manager attempted to close the database or log archive file.

cuu is the address of the tape device on which the error occurred; the address will not be displayed for an error on a disk device.

Note: Due to this error, tape unit *cuu* has not been dynamically unassigned. The tape unit cannot be used by the database manager or any other

partition until the system ends. You may want to shutdown the application server if you need to re-use the tape unit.

System Action: If a log archive file was being created with the LARCHIVE operator command, the log archive ends and the database manager continues normal operation. If a database or log archive file was being created for any other reason, the application server ends. The database or log archive file cannot be used. The system log indicates that the archive was not successful.

If the database was being restored from a database archive and message ARI0277E precedes this message, the application server stops. The database directory file has been reformatted (the database is not usable).

If the entire database was being restored from a database archive and message ARI0277E was not displayed, normal processing continues.

If a log archive was being read during the restore process, normal processing continues.

Operator Response: For corrective action, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

Then, if a log archive was being created during the restore process, restart the process.

Then, if this error occurred due to a log archive initiated by the LARCHIVE operator command, reenter the LARCHIVE operator command to re-initiate the log archive process.

Then, if a database or log archive was being created, warm start the application server. If desired, reschedule the archive creation by using the ARCHIVE, LARCHIVE, SQLEND ARCHIVE, SQLEND LARCHIVE, or SQLEND UARCHIVE operator command. This recovery action is described in the *DB2 Server for VSE System Administration* manual. If the database manager implicitly initiated the database or log archive due to the ARCHPCT initialization parameter, it will do so again when you warm start the application server.

Note: SHUTDOWN is a valid synonym for SQLEND.

If the database was being restored from a database archive and message ARI0277E precedes this message, take the corrective action as implied by these two messages. Restart the database archive process.

If the database was being restored from a database archive and message ARI0277E does not precede this message, you can proceed with whatever activity you had planned. The database has been successfully restored from the archive copy.

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No further action is required if the error occurred while closing a database or log archive input file during the restore process. If there are subsequent log archives to be read, you will have to use a different tape unit because this tape unit has not been dynamically unassigned. Alternatively, you can reply STOP SYSTEM to subsequent message ARI0250D for the next log archive to stop the application server (and get the tape unit unassigned) and then warm start the application server to resume the restore process with the next log archive.

System Programmer Response: See Operator Response.

ARI0299A Ready archive output volume. Enter the cuu for dynamic or 1 for static tape device.

Explanation: A database or log archive is being created for one of the following reasons:

- You entered the ARCHIVE operator command.
- You entered the SQUEND ARCHIVE operator command.
- The database manager has implicitly initiated the creation of a database archive due to the ARCHPCT initialization parameter.

The database manager is prompting the operator to ensure that a tape is mounted and readied on tape unit cuu, or on the tape unit assigned to SYS005. The operator is being requested to respond by entering either the cuu number or 1.

If the cuu entered in response to this message was not valid, message ARI0297A was displayed to indicate the error condition.

If 1 was specified, and the logical device SYS005 was not assigned, message ARI2036I was displayed to indicate the error condition.

System Action: When the operator responds with cuu, tape unit cuu is dynamically assigned to the archive output file; it is opened (with rewind) for archive output and the archive process proceeds.

If the operator responds with 1, logical device SYS005 is opened (with rewind) for archive output and the archive process proceeds.

Operator Response: If the archive is to be written to logical device SYS005, mount and ready a scratch tape volume on SYS005 and respond 1 to this message. Otherwise, select an available unassigned tape unit. Mount and ready a scratch tape volume. Enter the cuu of the selected tape unit.

If you have one or more tape units assigned to SYS005 for this purpose, mount and ready the required scratch tape volumes, and enter *SYS005*.

If SYS005 has no tape unit assigned to it, use the CUU option.

ARI2000E Index *index-id* in DBSPACE *dbspace-no* has been marked invalid.

Explanation: One of the following may have happened during ROLLBACK, UNDO, or REDO processing:

- The system cannot obtain a logical index page. This can result from the ROLLBACK or UNDO of either a DROP INDEX, a REORGANIZE INDEX, a deletion of a row, or an update of a row. It can also result from the REDO of either a CREATE INDEX, an insertion of a row, or an update of a row.
- The system cannot obtain a physical index page. This can result from the ROLLBACK or UNDO of a DROP INDEX, a REORGANIZE INDEX, a deletion of a row, or an update of a row. It can also result from the REDO of either a CREATE INDEX, an insertion of a row, or an update of a row.
- Not enough virtual storage or room in a temporary DBSPACE exists to recreate an index. The shortage can result from the ROLLBACK or UNDO of either a DROP INDEX or REORGANIZE INDEX, or from the REDO of a CREATE INDEX or REORGANIZE INDEX.

System Action: The database manager continues to process the ROLLBACK, UNDO, or REDO command without updating the index and marks the index invalid.

Operator Response: Notify your system programmer.

System Programmer Response: Contact the owner of the invalid index. The owner must drop and recreate the index. The system has a limit of 16 invalid indexes. You can find the index name by using the following SELECT statement:

```
SELECT A.DBSPACENO, B.IID, B.INAME, B.ICREATOR,
       A.TNAME FROM SYSTEM.SYSCATALOG A,
       SYSTEM.SYSINDEXES B
WHERE A.TNAME = B.TNAME AND
       A.CREATOR = B.CREATOR
       AND A.DBSPACENO = dbspace-no
       AND B.IID = index-id
ORDER BY A.DBSPACENO, B.IID ;
```

ARI2001I Warning: The following entities are invalid.

Explanation: This is a message heading for a list of invalid entities found during system start up. It is followed by the output of the SHOW INVALID command. For more information refer to the SHOW INVALID operator command.

System Action: Processing continues.

Operator Response: Notify and give your console output to your system programmer.

System Programmer Response: Notify the owners of the invalid indexes and have them drop and recreate the indexes.

ARI2002I Index pages are being reclaimed for DBSPACE &1.

Explanation: A free index page is required for a ROLLBACK, UNDO, or REDO work, but there are no free pages available. An attempt is being made to reclaim empty or partially empty pages from existing indexes.

System Action: If pages are reclaimed successfully processing will continue. If no pages are reclaimed the index will be marked invalid and processing will continue. Message ARI2003I will be issued when the page reclaim processing is complete.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Refer to message ARI2003I.

ARI2003I The index page reclaim processing is finished.

Explanation: A free index page was required for a ROLLBACK, UNDO, or REDO work, but there were no free pages available. An attempt to reclaim empty or partially empty index pages has completed.

System Action: If pages were reclaimed successfully processing will continue. If no pages were reclaimed the index will be marked invalid and processing will continue.

Operator Response: Refer this message to your system programmer.

System Programmer Response: This message indicates that the DBSPACE specified is running short of index pages. Index page reclaiming may adversely affect performance. At this time the SHOW DBSPACE command should be issued to monitor index page consumption. If there are still relatively few free index pages, then action should be taken to free some pages.

For more information, refer to the *DB2 Server for VSE & VM Database Administration* manual.

ARI2008I Archive is about to be started.

Explanation: The operator or database administrator requested a database or log archive with one of the following commands:

```
LARCHIVE
SQLEND LARCHIVE
ARCHIVE
SQLEND ARCHIVE
```

This message follows message ARI0065I. It informs the user that although the operator or database administrator requested an archive, the actual archive process has not started.

System Action: As soon as the system is ready, the database or log archive begins.

ARI2009E To continue with LOGMODE=A, you must first perform an initial database archive.

Explanation: You have been running with LOGMODE Y or N. If you want LOGMODE=A, you must first perform an initial database archive because the log indicates that no database archive exists.

System Action: The application server ends.

Operator Response: Start the application server with LOGMODE=Y and take a database archive. Next, restart the application server with LOGMODE=A.

ARI2010I WARNING: The database manager terminated abnormally. The log contents is required for recovery. Continuing with the COLDLOG will erase all log records and may cause the next startup to terminate during UNDO/REDO processing.

Explanation: The last time the application server started up, it terminated abnormally. The current log is required to recover the system to the point of failure, either by warmstarting the database or by restoring the last database archive.

System Action: Processing continues. The user will be given an opportunity to cancel the COLDLOG by message ARI0920D.

User Response: If you have not redefined the log datasets, cancel the coldlog in response to message ARI0920D. Warm start the database to recover up to the point of failure, or restore the database from a previous archive.

ARI2011I Formatting data disk(s).

Explanation: The application server has been started with STARTUP=R and the directory has been restored. The DB2 Server for VSE data disks are being formatted.

System Action: The restore process continues.

ARI2036I Logical device has not been statically assigned for a DB2 Server for VSE archive.

Explanation: The operator entered 1 in response to message ARI0299A. Logical device SYS005 is either not assigned or assigned to a non-tape device. It cannot be used for a database manager archive.

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System Action: Message ARI0299A will be redisplayed.

Operator Response: Respond to message ARI0299A.

ARI2037D Restoring the database with LOGMODE=Y or N. Enter 0 to CANCEL and restart with logmode A or L, or enter 1 to CONTINUE.

Explanation: The restore process is started with LOGMODE=Y or N. You can enter 0 to cancel the restore process and restart with logmode A or L. If you enter 1 to continue, the restore process will continue to restore the Directory and the DBEXTENTS. The restore set for this database archive will also be displayed if there are log archives to be restored. Message ARI0280A will then be issued and the application server terminated. Also, the active log could be lost, and the inactive log could be lost if it was not previously archived.

System Action: Processing continues.

Operator Response: Enter 0 to cancel the restore, and restart the restore process with logmode A or L, or enter 1 to continue.

Attention: The active log could be lost, and the inactive log could be lost if it was not previously archived.

ARI2038E Archive being restored is from a different release of DB2 Server for VSE. The restore has failed.

Explanation: The system has determined that the archive being restored was not taken with the current release of DB2 Server for VSE.

System Action: The restore process ends. Note that the directory has been restored and the database is unusable.

Operator Response: Restore an archive taken with the current release of DB2 Server for VSE.

ARI2039E CHKINTVL = *newval* is invalid. Maximum valid CHKINTVL value is *maxval*.

Explanation: The checkpoint interval is the number of log pages which will be written between automatic checkpoints. When this value is changed during run time, an analysis of the checkpoint interval and the size of the log is made to determine if at least one checkpoint will be taken before end of log or log wrap. This message is generated if the **CHKINTVL** specified will not cause at least one checkpoint to be taken.

System Action: The checkpoint interval is not changed and processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the invalid **CHKINTVL** value. *maxval* represents the highest allowable checkpoint interval value based on the size of the log.

ARI2040E Pool Recovery is in progress, STARTUP=*startup* is not allowed.

Explanation: The Data Restore storage pool recovery process was initiated, but has not yet been completed by starting the database manager with STARTUP=U. Storage Pool recovery must be completed before the database can be started with STARTUP=*startup*.

System Action: The requested function is not performed.

Operator Response: Complete the storage pool recovery process by starting the database with STARTUP=U.

ARI2041I Pool Recovery processing continues.

Explanation: The Data Restore storage pool recovery process was initiated and completed successfully. The database is being started with STARTUP=U, which will complete the storage pool recovery process.

System Action: Storage pool recovery processing continues.

ARI2042E Pool Recovery cannot continue.

Explanation: The Data Restore storage pool recovery process was initiated, but did not complete successfully. The database cannot be started with STARTUP=U to complete the storage pool recovery process until the Data Restore pool recovery process is successfully completed. The database is currently in an inconsistent state. One of the following must be done before the database can be restarted.

- Use the RESTORE POOL command of the Data Restore feature to complete the initial phase of storage pool recovery successfully. Then, start the database with STARTUP=U to complete storage pool recovery.
- Restore the entire database from a database archive. This can be either a database manager archive or a user archive.

System Action: Processing terminates.

ARI2043E During Pool Recovery, END RESTORE will not be accepted.

Explanation: The message displayed before ARI2043E indicates that END RESTORE is an acceptable reply to the message. However, during Pool Recovery, END RESTORE will be rejected as an invalid response.

System Action: The system is waiting for an operator response.

Operator Response: Enter a response to the previous message. If END RESTORE is entered, it will not be accepted as a valid response.

ARI2044D Agent identifier *n* in the FORCE command was using DRDA Two Phase Commit protocol. Forcing this agent may lead to heuristic damage. Do you want to force this agent? Enter 0(No) or 1(Yes).

Explanation: The in-doubt agent *n* was using the DRDA two phase commit protocol. Forcing this agent's work could cause data on other databases to be inconsistent with data at this database.

System Action: If you reply 1 for YES, the agent will be forced to commit or rollback its work as indicated on the FORCE command. If you reply 0 for NO, the in-doubt agent will not be forced and will remain in-doubt. If you do not reply 1 or 0, message ARI0052E will be displayed and message ARI2044D will be redisplayed.

Operator Response: Reply 1 if you are sure that you want to force this in-doubt agent. Reply 0 if you are unsure. If you need to force the in-doubt agent, the FORCE command can be reentered.

Database Administrator Action:

The database administrator must understand the application and the status of this unit of work on all of the involved application servers before forcing an in-doubt agent that was using DRDA two phase commit protocol. It is most desirable to let the systems resolve the in-doubt agents automatically during resynchronization recovery. The database administrator of the DRDA2 requester should be contacted to help determine the impact of forcing the in-doubt agent.

ARI2045E RESET INDOUBT command has insufficient number of parameters.

Explanation: The RESET INDOUBT operator command was entered without parameters.

System Action: The command processing is ended.

Operator Response: Reenter the RESET INDOUBT operator command with the appropriate operands.

ARI2046E Too many RESET INDOUBT command input parameters.

Explanation: The RESET INDOUBT * operator command was entered with extra parameters. When * is specified, no other parameters are allowed.

System Action: The command processing is ended.

Operator Response: Reenter the RESET INDOUBT operator command with the appropriate operands.

ARI2047E Transaction identifier *n* in RESET INDOUBT command is invalid.

Explanation: The transaction identifier *n* does not exist in the system.

System Action: The command processing is ended.

Operator Response: Enter the SHOW INDOUBT operator command to find out the valid, existing transaction identifiers. Then reenter the RESET INDOUBT operator command with the appropriate operands.

ARI2048D In-doubt *n* was forced. Are you sure you want to reset this in-doubt? Enter 0(No) or 1(Yes).

Explanation: The transaction identifier *n* was in-doubt and was resolved by using the FORCE operator command. The action taken by the FORCE command could be different than the action that resynchronization recovery would have done. This unit of work might still be in-doubt on the other participating application servers.

System Action: If you reply 1 for YES, the in-doubt entry will be removed from the system. If you reply 0 for NO, the in-doubt entry will not be removed from the system. If you do not reply 1 or 0, message ARI0052E will be displayed and message ARI2048D will be redisplayed.

Operator Response: Reply 1 if you are sure that you want to remove this in-doubt entry. Reply 0 if you are unsure. If you need to remove the in-doubt entry, the RESET INDOUBT command can be reentered.

Database Administrator Action:

The database administrator must understand the application and the status of this unit of work on all of the involved application servers before removing an in-doubt entry that was forced. It is most desirable to let the systems resolve the in-doubt agents automatically during resynchronization recovery. The database administrator of the DRDA2 requester should be contacted to help determine the impact of forcing the in-doubt agent.

ARI2052I FORMAT 1
A checkpoint was taken.
Scheduled: *sctime*
Started: *stime*
Ended: *etime*
FORMAT 2
A checkpoint was taken.
Type = *type*.
Scheduled: *sctime*
Started: *stime*
Ended: *etime*
DIRREAD = *drd*
DIRWRITE = *dwr*

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PAGEREAD = *prd*
PAGWRITE = *pwr*
DSREAD = *dsw*
DSWRITE = *dsw*
Time spent waiting to
start: *wst* seconds
Time spent executing: *ext* seconds
Log pages filled since last
checkpoint: *logused*

Explanation: Format 1 of the message is displayed if DSPSTATS=1. Format 2 of the message is displayed if DSPSTATS=2. The DSREAD and DSWRITE values are only displayed if the VM data spaces feature is installed and is being used.

type is the reason the checkpoint was performed. The type is only displayed if DSPSTATS=2. Valid types are:

COLDLOG

Log just formatted.

Warm Start

System just recovered (that is, warm start).

Periodic

Periodic system checkpoint taken. Periodic checkpoints can occur for various reasons, including, CHKINTVL was reached, SLOGCUSH was reached, SOSLEVEL was reached, and a DROP DBSPACE was issued. See the *DB2 Server for VSE & VM Performance Tuning Handbook* manual for more details.

Database Archive Started

Archive of the database started.

Database Archive Completed

Archive of database completed.

Log Archive Started

Archive of the log started.

Log Archive Completed

Archive of the log completed.

Shutdown

System being shutdown.

Shutdown with User archive

Shutdown with user archive.

User Archive Done

User archive done and verified.

Logmode=N

System checkpoint when LOGMODE=N.

sctime is the time of day the checkpoint was scheduled.

stime is the time of day the checkpoint started execution.

etime is the time of day the checkpoint ended execution.

drd is the number of directory buffer reads that were done by the checkpoint processing.

dwr is the number of directory buffer writes that were done by the checkpoint processing.

prd is the number of page buffer reads that were done by the checkpoint processing.

pwr is the number of page buffer writes that were done by the checkpoint processing.

dsw is the number of data space reads that were done by the checkpoint processing. This is only displayed if the VM data spaces feature is being used.

dsw is the number of data space writes that were done by the checkpoint processing. This is only displayed if the VM data spaces feature is being used.

wst is the time that the checkpoint was waiting to begin processing. This is only displayed if DSPSTATS=2.

ext is the time that the checkpoint was processing. This is only displayed if DSPSTATS=2.

logused is the number of log pages filled since the last checkpoint was taken.

System Action: System processing continues.

User Response: Use the SET DSPSTATS command to disable these messages if they are not desired, or to change which format of the message appears.

ARI2053E The mandatory COLDLOG during migration was not done. A COLDLOG must be performed before continuing.

Explanation: The database startup has detected that a COLDLOG was not performed during migration. Failure to COLDLOG the database will prevent restoring database archives. The database cannot be started until a COLDLOG has been performed.

System Action: Database startup has terminated.

Operator Response: Refer this message to your system programmer.

System Programmer Response: You must perform a COLDLOG before the database manager will allow the database to finish startup.

ARI2054I Database manager has taken a FULL archive.

Explanation: The database manager has completed taken a FULL archive. Either an implicit archive was initiated by the database manager, or the ARCHIVE operator command was used with the FULL parameter.

System Action: Processing continues.

ARI2055I **Tape manager ASSIGN and OPEN failed. TAPEMGR=Y changed to TAPEMGR=N.**

Explanation: A DB2 Server for VSE log or database archive is in progress. The database parameter TAPEMGR is set to Y. An error occurred when the tape manager performed the ASSIGN and OPEN. Message ARI0296A is displayed prior to this message and includes the Reason Code and Return Code. Please refer to message ARI0296A for an explanation of the problem.

System Action: The database manager changes the TAPEMGR initialization parameter from Y to N and issues message ARI0299A to prompt for the tape address. The database manager then performs the ASSIGN and OPEN without using a tape manager.

Operator Response: The current archive will be taken manually. Determine whether a tape manager is being used and whether there is a problem with the tape manager. If there is no longer a problem with the tape manager, set TAPEMGR to Y. If a tape manager does not exist, do not change the TAPEMGR value of N.

ARI2056I **SYS005 is statically assigned. TAPEMGR=Y changed to TAPEMGR=N.**

Explanation: A DB2 Server for VSE log or database archive is in progress. The database parameter, TAPEMGR, is set to Y. SYS005 is already statically assigned to a tape device.

System Action: The tape manager changes the TAPEMGR initialization parameter from Y to N and issues message ARI0299A to prompt the operator to enter 1 for a static tape device. The ASSIGN and OPEN is performed without the tape manager.

Operator Response: Refer to *DB2 Server for VSE System Administration* for information on choosing dynamic or static tape devices.

ARI2057E **LARCHIVE INACTIVE command rejected because ALTLOG=N.**

Explanation: An LARCHIVE INACTIVE command was entered by the operator while running with ALTLOG=N.

System Action: The command is ignored.

Operator Response: If you were instructed to enter the LARCHIVE INACTIVE command, notify your system programmer. Otherwise, no action is required.

System Programmer Response: Ensure that the operator is not requested to issue LARCHIVE INACTIVE when ALTLOG is N.

ARI2058I **Inactive log has already been archived.**

Explanation: An LARCHIVE INACTIVE was entered by the operator but the inactive log was previously archived.

Note: To see whether the inactive log was archived, issue SHOW LOG or SHOW LOGHIST.

System Action: Command processing ends.

ARI2059I **Switching the active log from &a to &b has begun.**

Explanation: When LOGMODE=L, ALTLOG=Y, and ARCHPCT is reached, an attempt is made to make the active log &b rather than &a.

System Action: The database manager continues the switching process.

ARI2060I **Switching the active log from &a to &b completed.**

Explanation: The active log for the database is &b and the inactive log is &a.

Note: The SHOW LOG command can be used to see which is the active and inactive log.

System Action: Processing continues.

ARI2061E **Switch to inactive log cannot occur - inactive log has not been archived.**

Explanation: When LOGMODE=L, ALTLOG=Y, and ARCHPCT is reached, an attempt is made to switch to the inactive log disk. However, the inactive log disk has not been archived so the switch cannot occur.

System Action: The inactive log will be archived followed by the archiving of the active log.

System Programmer Response: To prevent log archiving when ARCHPCT is reached, issue LARCHIVE INACTIVE before the ARCHPCT is reached. This will archive the inactive log.

ARI2062I **The database manager is initiating a log archive of the inactive log.**

Explanation: A database archive or log archive has been initiated, LOGMODE=L, and ALTLOG=Y but the inactive log has not been archived. Therefore, the database manager has to initiate a log archive of the inactive log to ensure that log archives will remain useful in recovering to this point.

System Action: Processing continues.

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ARI2063I The database manager is initiating a log archive of the active log.

Explanation: A database archive or log archive has been initiated and LOGMODE=L but the active log has not been archived. Therefore, the database manager has to initiate a log archive of the active log to ensure that log archives will remain useful in recovering to this point.

System Action: Processing continues.

ARI2064E DBSPACE *dbspace-number* is unacquired.

Explanation: The *dbspace-number* used for release empty pages processing (STARTUP=P) is found in the catalog table SYSTEM.SYSDBSPACES but has not been acquired.

System Action: Release empty pages processing ends.

Operator Response: Correct the DBSPACE number (be sure that the DBSPACE number has been acquired) and reenter the command.

ARI2065D Do you want to do a database archive (ARCHIVE), user archive (UARCHIVE), or no archive (NOARCHIVE) at the end of the run? (Warning: Database may not be restorable if you choose NOARCHIVE.) Enter one of the values or enter a null response to use the default (ARCHIVE).

Explanation: If an archive is not taken after release empty pages processing (STARTUP=P) is run, a subsequent database restore will not have the empty pages released. This can lead to storage pool full conditions when log archives are applied to the system. Choosing NOARCHIVE is not recommended.

System Action: The system waits for you to enter a reply

System Programmer Response: Enter the option desired.

ARI2066E Invalid response: &1.

Explanation: You did not provide an acceptable response to a question.

System Action: The system waits for you to enter an acceptable response.

System Programmer Response: Review the question, and provide an acceptable response.

ARI2067D The inactive log has not been archived. If log reformatting is required, enter ARCHIVE to archive the inactive log. If log reconfiguration is required, enter END, archive the database, and then run the COLDLOG again.

Explanation: The inactive log was not archived before the coldlog operation. If the coldlog was issued to reformat the logs, issuing ARCHIVE will archive the inactive log before the logs are reformatted. If the coldlog was issued to reconfigure the logs, a database archive must be taken before the coldlog is run.

System Action: The system waits for you to enter a reply.

System Programmer Response: Enter the option desired.

ARI2068E Previously LOGMODE was L, inactive log was not archived, and now LOGMODE is A. To start with LOGMODE = A, restart with LOGMODE = L, perform SQLEND with LARCHIVE, and then restart with LOGMODE = A.

Explanation: The database manager was started with LOGMODE = A, but the previous LOGMODE was L and the inactive log is not archived.

System Action: The application server is ended.

Operator Response: If LOGMODE = L is desired, restart the database manager with LOGMODE=L. If LOGMODE = A is desired, restart the database manager with LOGMODE = L, perform SQLEND LARCHIVE to archive the inactive and active log and then start the database manager with LOGMODE = A.

ARI2069D You are in the restore process. The inactive log has not been archived but LOGMODE = {A|Y|N}. You must either end the restore, issue SQLEND LARCHIVE, and restart the restore with LOGMODE={A|Y|N} or you can use LOGMODE=L during the restore.

Enter 0 to end the restore, or
1 to restore with LOGMODE= L

Explanation: The database manager was started with LOGMODE=A, Y, or N but the previous LOGMODE was L and the inactive log is not archived.

System Action: If you reply 0, the application server is ended. If you reply 1, the database manager will switch the LOGMODE to L and apply all applicable log archives as if you had started the application server with LOGMODE=L.

Operator Response: If restore with LOGMODE=A, Y, or N is desired, reply 0 to end the restore, restart the

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| database manager with LOGMODE=L. Perform
| SQLEND LARCHIVE to archive the inactive and active
| log and start the database restore with LOGMODE=A,
| Y, or N. Reply 1 if you wish to restore with
| LOGMODE=L.

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Chapter 4. ARI2900–ARI2942 Common Messages

ARI2900E Language &1. cannot be accessed.
Reason Code = *nm*.

Explanation: Either the national language name has been misspelled, or the language specified on the SET LANGUAGE command cannot be accessed because of one of the following reasons:

- 01 Message file not found.
- 02 Storage problem.
- 04 Language cannot be installed because:
 - Language ID is not in table SYSLANGUAGE.
 - Language ID is in SYSLANGUAGE but was inserted into SYSLANGUAGE during a DB2 Server for VSE session.

&1. is the language identifier.

System Action: An attempt to set language &1. failed, because the language specified could not be found.

User Response: Make sure that the language identifier is correct and the requested language is supported on your system.

An INSERT may have been made into table SYSLANGUAGE during a DB2 Server for VSE session. You must bring the DB2 Server for VSE machine down and bring it up again in order for the inserted language IDs in SYSLANGUAGE to be recognized.

ARI2901I Warning: The database manager cannot access the default language &1.. English will be used instead. Reason Code = *nm*.

Explanation: The message file for the language currently set in VM could not be loaded and the attempt to set the DB2 Server for VSE default language also failed. The English message repository is used instead. Reason codes have the following meaning:

- 01 Message file not found
- 02 Storage problem
- 04 Language not installed.

ARI2902E There is no message file that the database manager can access.

Explanation: This message appears when all of the following conditions have been met:

- The repository phase corresponding to the LANGID parameter could not be CICS LOAded.
- The repository phase corresponding to the default language defined as the first entry in the link-edited LANGBLK table, could not be CICS LOAded.

- The phase corresponding to American English (LANGID: AMENG, LANKEY: S001) repository could not be CICS LOAded.

The failure was due to one of the following reasons:

- Message phase not found
- Language not installed

This message is always issued in English.

System Action: Subcomponent initialization is cancelled.

User Response: Notify your system programmer.

System Programmer Response: Ensure that the phase corresponding to the LANGID parameter is available, or the phase corresponding to the default language is available, or the phase corresponding to AMENG is available (Phase name: ARIMS001). Refer to the *DB2 Server for VSE Program Directory* and *DB2 Server for VSE System Administration* manual for more information on installing a language on your system.

ARI2903E Error loading Resource Adapter.
SQLCODE = &1A

Explanation: Resource adapter could not be loaded. This message is always issued in English.

System Action: Subcomponent initialization is cancelled.

User Response: Notify your System Programmer.

Programmer Response: Correct the problem indicated by the SQLCODE value. For more information, see Chapter 18, "SQLCODEs" on page 237.

ARI2904I Warning: DBCS language &1. is not supported on the VSE operator console. The database manager uses English or the previous language.

Explanation: The operator console cannot use a double-byte character set (DBCS). &1. is the language identifier.

User Response: Check that the correct language is specified and that the requested language is supported on your system. For more information on "National Languages" see either the *DB2 Server for VSE System Administration* manual or the *DB2 Server for VSE & VM Operation* manual.

Common Messages – ARI2900-ARI2942

ARI2905E **The *command* command is not supported when using the DRDA protocol.**

Explanation: You are accessing a remote application server and have attempted to use the specified command against this application server. The command is available only against a local application server.

System Action: Command processing failed.

User Response: Enter another command.

ARI2906I **The only valid isolation level is CS when the DRDA protocol is used. Isolation level of CS is now in effect.**

Explanation: If the DRDA protocol is used, the isolation level defaults to cursor stability (CS). The SET ISOLATION command cannot be used to change the isolation level.

System Action: The SET ISOLATION command is ignored.

User Response: You may continue with another command.

ARI2908I **XPCCB, IJBXRUSR = *aabbcccddeeeee***

Explanation: For VSE Guest-Sharing users, this message displays secondary return codes captured in the IJBXRUSR field within the XPCCB control block. These return codes can be used to diagnose XPCC communication problems while communicating with APPC/VM in a Guest-Sharing environment. Refer to the *VM/ESA: Connectivity Planning, Administration, and Operation* manual for an explanation of the APPC/VM return codes.

aabbcccddeeeee is a 16-byte hexadecimal string with the following formats:

Format 1 When SQLERRD2 = 38, only the first 4 bytes are significant, where:
 aa = APPC/VM Function Code
 bb = APPC/VM Return Code.

Format 2 For all other cases:
 aa = APPC/VM Function Code
 The next 14 bytes are APPC/VM error data, external interrupt information:
 bb = 'IPTYPE'
 ccc = 'IPCODE'
 dd = 'IPWHATRC'
 eeee = 'IPAUDIT'

System Programmer Response: Ensure that the VSE Guest system is properly installed for Guest-Sharing. Refer to *IBM VSE/ESA Installation*, or for a brief description, refer to the *DB2 Server for VSE Program Directory*.

ARI2909I **Warning: An error in the conversation has been detected. Please wait for the data capture completion message to appear before taking further action. DUMPID = *&1*.**

Explanation: An error has been detected in either the communication partner's datastream or internally in DB2 Server for VSE distributed flow processing.

System Action: System information is dumped to SYSLST. The dump identifier may be used to correlate this message to the SYSLST dump file.

User Response: Wait until completion message ARI2910I is displayed, and then notify your system programmer.

CAUTION:

Do not erase any SYSLST files that may exist.

System Programmer Response: This message indicates that an error has occurred during distributed flow processing, and diagnostic error information has been dumped to SYSLST. Save the SYSLST file containing the dump identified by the dump identifier in the message and contact the designated support group for your installation.

ARI2910I **Data capture process completed successfully. Please notify your system programmer.**

[Job Name = *jobname*
Job Number = *jobnumber*]

Explanation: The data capture process referred to in message ARI2909I is completed.

ARI2911E **An internal error has occurred in the data capture process. Notify your system programmer. [DUMPID =*dumpid*.] [IPWSEGM =*code*.]**

Explanation: An error has occurred during the data capture process. This indicates a serious system problem.

System Action: Process of data capture is interrupted. A SYSLST file containing partial data may or may not exist.

User Response: Notify your system programmer. Do NOT erase any SYSLST files that may exist.

System Programmer Response: This message indicated that a DB2 Server for VSE internal error has occurred during data capture. There may or may not be a SYSLST file containing a partial dump identified by the dump identifier in the message. Save this file if it exists. Contact the designated support group for your installation.

ARI2912E Error reading NETID from SNA NETID file.

Explanation: You have specified PROTOCOL=AUTO which requires a NETID value. An error occurred when the SQLSTART EXEC tried to retrieve the NETID value from the SNA NETID file on the production disk.

System Action: Database startup is terminated because the NETID is a required parameter for DRDA protocol.

User Response: Check the existence of the SNA NETID file on the production disk. If it is not found or corrupted, then recreate the file with the correct NETID value and rerun the EXEC.

ARI2913I Character translation table for CHARNAME = charname cannot be found. The character translation table for INTERNATIONAL will be used.

Explanation: If this message is displayed by ISQL, DBSU, or the Preprocessors: the row with the CHARNAME value cannot be found in the ARISSCRD phase, or the phase cannot be accessed, or the phase does not exist or is empty. If the CHARNAME value is 'unknown', an error has occurred while retrieving the GLOBAL variable CHARNAME from the SQLGLOB file.

If this message is not displayed by ISQL, DBSU, or the Preprocessors: if the CHARNAME value is 'unknown', the row where SQLOPTION=CHARNAME cannot be found in the SYSTEM.SYSOPTIONS catalog table. Otherwise, the row where NAME=charname cannot be found in the SYSTEM.SYSCHARSETS catalog table.

System Action: Processing continues. The character translation table for INTERNATIONAL will be used.

User Response: If the CHARNAME value is 'unknown', and this message is issued by ISQL, DBSU, or the Preprocessors, use the DSQU transaction to create a new user record with the desired SQLGLOB values. If the SQLGLOB file is not found, or cannot be accessed, notify your system programmer.

Contact your system programmer if the specified CHARNAME cannot be found in the ARISSCRD phase, or the phase does not exist, or the phase cannot be accessed, or if this message is not issued by ISQL, DBSU, or the Preprocessors.

System Programmer Response: If the SQLGLOB file is not found, or cannot be accessed, recreate the SQLGLOB file using the IBM-supplied ARISGDEF job control program.

Check that the row corresponding to the CHARNAME value exists in the ARISSCRD phase, or in the system catalog table SYSTEM.SYSCHARSETS. If the row is in SYSTEM.SYSCHARSETS but does not exist in the phase, or the phase does not exist or is empty, recreate the ARISSCRD phase. If the row does not exist in the

SYSCHARSETS table, add the row to the table and then recreate the ARISSCRD phase. Refer to the *DB2 Server for VSE Program Directory*.

If this message is issued other than by ISQL, DBSU, or the Preprocessors, and the row is missing from the system catalog table, insert a row with the correct values into the table. If the catalog table that needs updating is SYSTEM.SYSCHARSETS, refer to the *DB2 Server for VSE System Administration* manual for information on updating this catalog table.

ARI2914E An error occurred with the MACRO name while accessing the file file. Return code = rc.

Explanation: An error occurred with the MACRO while accessing the file *file* that is required for character translation support or for CCSID support. *file* may have one of the following values: ARISCCSD PHASE, ARISSTRD PHASE or ARISSCRD PHASE. The return code value is the MACRO return code.

System Action: Processing terminates.

User Response: Contact your system programmer.

System Programmer Response: Refer to the *VSE/ESA System Macros Reference* for an explanation of the return code and correct the problem. If the problem cannot be corrected, contact the designated support group for your installation.

ARI2920E Application Identifier resolution error. Detection point = &1.. Return Code = &2A..

Explanation: An error was detected when trying to resolve the Application Identifier of the application server. The error is related to a specific operation or entity of the DBNAME Directory service.

&1. is the function or entity in which the error was found.

&2A. is the error code returned from the DBNAME Directory Service or set by the service caller.

This message is displayed by the caller of the DBNAME Directory Service. For more information, see the *DB2 Server for VSE Messages and Codes* manual.

Detection Point	Return Code	Explanation
(&1.)	(&2A.)	
LOAD	CDLOAD RC	CDLOAD of DBNAME Directory Service failed. Refer to VSE CDLOAD return codes for corrective actions.
SEARCH	4	The search with DBNAME or TPN does not have a match.

Common Messages – ARI2900-ARI2942

Detection Point (&1.)	Return Code (&2A.)	Explanation
SEARCH	8	The parameter list was incorrectly set up. Report this error to the designated support group for your installation.
SEARCH	12	The DBNAME Directory is invalid. The DBNAME Directory could have been corrupted. <ul style="list-style-type: none"> • Make sure that ARISDIRD.A is correctly set up and catalog ed. • Regenerate the DBNAME Directory using the ARISBDID JCL supplied. If the error persists, report the error to the designated support group for your installation.
APPLID	8	The APPLID in the DBNAME Directory is invalid for a DB2 Server for VSE server. The database manager startup failed. <ul style="list-style-type: none"> • Valid APPLIDs for DB2 Server for VSE servers are: SYSARI0x where x = 0..9 and A..Z. • Make sure that ARISDIRD.A is correctly set up and cataloged. • Regenerate the DBNAME Directory using the ARISBDID JCL supplied. If the error persists, report it to the designated support group for your installation.

System Action: If this message is issued from the database manager, the initialization of the database manager ends. Otherwise, the issuer of this message terminates itself.

Operator Response: Record the error detection point, the return code, and the issuing partition for problem determination.

System Programmer Response: Refer to the specific error explanation above for corrective actions.

ARI2921I **The SQLDBDEF utility was invoked as follows:** *Command and parameters used to invoke SQLDBDEF utility*

Explanation: This message appears in the listing file of the SQLDBDEF utility. It shows the command and parameters that were used to invoke the utility.

System Action: Processing continues.

ARI2922I **Using the following parameter values:**
parameter(value)

Explanation: This message appears in the listing file of the SQLDBDEF utility. It shows the value of each parameter, including parameters that were not specified when the utility was invoked.

System Action: Processing continues.

ARI2923I **FORMAT 1**
Running ARIDBDEF to generate:
FORMAT 2
- GRANT statements for user authorities
FORMAT 3
- CREATE statements for stored procedures
FORMAT 4
- CREATE statements for stored procedures and stored procedure servers
FORMAT 5
- SQL statements to re-create all objects
FORMAT 6
- SQL statements to re-create all *objtypes*
FORMAT 7
- SQL statements to re-create all objects in *dbspace dbspace*
FORMAT 8
- SQL statements to re-create all tables and table and column privileges

Explanation: This message appears in the output listing created by the SQLDBDEF utility. It indicates what type of statements were generated by that invocation of the utility.

System Action: Processing continues.

ARI2924I **Processing *object-type*.**

Explanation: This message is displayed by the SQLDBDEF utility, as an indication of the progress of the utility.

System Action: Processing continues.

ARI2925I **There are no *objects* defined.**

Explanation: The SQLDBDEF utility is attempting to extract SQL definitions for all objects of a specified type. The type is specified as *objects*, but there are no objects of that type defined in the database.

System Action: Processing ends.

ARI2926E **Unable to connect to database *dbname*.**

Explanation: The SQLDBDEF utility is attempting to extract SQL object definitions from database *dbname*, but is unable to connect to the database. This message is followed by messages containing the SQLCODE and other diagnostic information.

The database to which the SQLDBDEF utility is attempting to connect is the one specified for the DB parameter on the invocation of the utility. If the DB parameter was not specified, the utility attempts to use the default database, which is the one listed as the default in the DBname directory.

System Action: Processing ends.

ARI2927E **User *userid* does not have DBA authority.**

Explanation: The SQLDBDEF utility must be run from an ID that has DBA authority in the database from which the SQL definitions will be extracted.

System Action: Processing ends.

User Response: Run the utility again, specifying a user ID that has DBA authority.

ARI2928I **All ARIDBDEF processing completed successfully.**

Explanation: This message appears in the output listing created by the SQLDBDEF utility.

System Action: Control returns to the SQLDBDEF EXEC.

ARI2929I **Errors occurred during ARIDBDEF processing.**

Explanation: This message appears in the output listing created by the SQLDBDEF utility. It is accompanied by messages that provide information about the error that occurred.

System Action: Control returns to the SQLDBDEF EXEC.

ARI2930W **SQL that was used on the source database is not valid on the target database.**

Explanation: This message is generated by the SQLDBDEF utility. It indicates that when the object being processed was created on the source DB2 Server for VM & VSE database, options were specified that are not applicable on the platform on which the generated DBSU job is to run.

System Action: Processing continues.

User Response: The listing and/or the DBSU job contain further information about the object and the option that is not valid on the target database. Review these files to determine whether further action is necessary.

ARI2931W **Column *colname* uses field procedure *fname* in the source table.**

Explanation: This message is produced by the SQLDBDEF utility when generating a CREATE TABLE statement. It appears if a field procedure is defined on a column in the source table, when the target database on which the DBSU job will be run does not support field procedures.

System Action: Processing continues.

ARI2932I **Column *colname* uses CCSID *CCSID* and subtype *subtype* in the source table.**

Explanation: This message is written to the SQLDBDEF utility listing, when the utility is generating a CREATE TABLE statement.

System Action: Processing continues.

ARI2933I **SYSOPTIONS *option* option has value *value* in the source table.**

Explanation: This message is written to the SQLDBDEF utility listing.

System Action: Processing continues.

ARI2934W **Primary key *keyname* is defined with PCTFREE= *pctfree* in the source table.**

Explanation: This message is written to the SQLDBDEF utility listing, if a primary key defined in the source table uses a value other than the default for PCTFREE.

System Action: Processing continues.

ARI2935W **Column *colname* is in descending order in primary key *keyname* in the source table.**

Explanation: This message is written to the SQLDBDEF utility listing, if a column in a primary key is specified to be in descending order.

System Action: Processing continues.

ARI2936W **The DBSU job does not contain SQL to create key *keyname* because it is inactive in the source table.**

Explanation: This message is written to the SQLDBDEF utility listing, if a key in the source database has been deactivated.

System Action: Processing continues. If you want the generated DBSU job to recreate the key *keyname*, use the ALTER TABLE command to reactivate the key in the source table, and run the SQLDBDEF utility again.

Common Messages – ARI2900-ARI2942

ARI2937W Acquire dbspace has no equivalent on OS/400. However a schema must exist before objects can be created in that schema. For example, schema A must exist before table A.tabname can be created. Review the generated DBSU job and ensure that you have created any necessary schemas on the target database prior to running the DBSU job.

Explanation: This message is generated by the SQLDBDEF utility, to indicate action that must be taken before tables can be recreated on a target DB2 database on OS/400.

System Action: Processing continues.

User Response: Before running the generated DBSU job against the target database, create any schemas that will be required for the CREATE TABLE statements in the DBSU.

ARI2938I Grants of user authorities are not performed on OS/400.

Explanation: This message is generated by the SQLDBDEF utility. It indicates that the generated DBSU job does not contain GRANT statements for user authorities, since these are not relevant on the target database.

System Action: Processing continues.

ARI2939I User *userid* has *auth* authority in the source database.

Explanation: This message is generated by the SQLDBDEF utility, if *userid* has a level of authority that is not supported on the target database.

System Action: Processing continues.

User Response: Determine whether *userid* needs to be authorized to the target database, and if so, issue the appropriate GRANT command or take the appropriate system action.

ARI2940I User *userid* has SCHEDULE authority in the source database, and is granted CONNECT authority by the DBSU job.

Explanation: SCHEDULE authority is relevant only on a VSE or VM database. The SQLDBDEF utility grants CONNECT authority to any users who have SCHEDULE authority in the source database.

System Action: Processing continues.

User Response: If *userid* does not need CONNECT authority on the target database, remove the GRANT statement from the generated DBSU job.

ARI2941I Index *indexname* is the clustering index in the source database.

Explanation: In the DBSU job generated by the SQLDBDEF utility, CREATE INDEX statements will not necessarily appear in the order in which they were issued on the source database. This message is generated so that the DBSU job can be modified to maintain the clustering index if necessary.

System Action: Processing continues.

User Response: If you want *indexname* to be a clustering index in the target database, ensure that the generated DBSU job creates index *indexname* before it creates any other indexes on the same table.

ARI2942W Warnings occurred during ARIDBDEF processing.

Explanation: This message appears in the output listing created by the SQLDBDEF utility.

System Action: Control returns to the SQLDBDEF EXEC.

User Response: Review the warning messages in the output listing, and take appropriate action.

Chapter 5. ARI0400–ARI0498 Resource Adapter Messages

ARI0400E Invalid input parameter entered.
Parameter = parm

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Termination transaction (CIRT) or the Resource Adapter Add Connections Transaction (CIRA) or the Resource Adapter Remove Connections Transaction (CIRR) or the Resource Adapter Display Transaction (CIRD) or the Resource Adapter Change Default Server Transaction (CIRC) detected an incorrect input parameter.

parm is the parameter which was not valid. For CIRB, *parm* may be PASSWORD, NOLINKS, DEFUID, RMID, LANGID, or DBNAME. For CIRT, *parm* may be PASSWORD, MODE, or INTERVAL. For CIRA, *parm* may be PASSWORD, NOLINKS, DEFUID, OR DBNAME. For CIRR, *parm* may be PASSWORD, MODE, INTERVAL, OR DBNAME. For CIRC, *parm* may be DBNAME.

PASSWORD and DEFUID must be character strings from 1 to 8 characters with no imbedded blanks. The character string for PASSWORD which is input to CIRT or CIRR must match the password of at least one server enabled by CIRB or CIRA. PASSWORD must be preceded by one or more blanks.

NOLINKS must be a decimal value between 0 and 64.

RMID must be a decimal value between 0 and 63.

MODE must be either the character string NORMAL or the character string QUICK.

INTERVAL must be a decimal value between 0 and 3 600.

LANGID must be one of AMENG, UCENG, FRANC, GER, KANJI, or HANZI.

DBNAME must be 1 to 18 characters.

The delimiter between parameters is a comma or one or more blanks.

System Action: The transaction ends.

Operator Response: Reissue the transaction with the correct input parameters. Refer to the *DB2 Server for VSE & VM Operation* manual for more information about the input parameters.

ARI0401I DB2 Server for VSE Online Resource Adapter is already present in this partition.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) was entered to initialize the DB2 Server for VSE Online Resource Adapter. The CIRB transaction detected that the

Resource Adapter was already initialized and active or is being initialized within the partition. Only one Resource Adapter may be active within a CICS/VSE partition.

Operator Response: In general, do nothing. If CIRB was entered to modify the initialization parameter (for example, increase the number of paths to the database manager), first enter the DB2 Server for VSE Resource Adapter Termination transaction (CIRT) to terminate the active resource adapter. After CIRT disables the resource adapter (message ARI0413I is displayed), reenter CIRB with the new input parameters.

If CIRB was entered to add connections to another application server, use the CIRA transaction to do this.

ARI0402E CICS/VSE load of &1. failed.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) attempted to load one of the phase/load modules ARI0OLRM or ARICMOD. In this message &1. will be either ARI0OLRM or ARICMOD. CICS/VSE was not able to locate either ARI0OLRM or ARICMOD.

System Action: The CIRB transaction ends.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Verify that the program named ARI0OLRM or ARICMOD is correctly defined to CICS/VSE and is in an accessible library phase member. See the *DB2 Server for VSE Program Directory*.

ARI0403E Error attempting to use CICS/VSE service. CICS/VSE service = service.
EIBRCODE = return-code. [TS queue name = queue-name.] [Target database = db-name.]

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Terminate transaction (CIRT) or the Resource Adapter Add Connections transaction (CIRA) or the Resource Adapter Remove Connections transaction (CIRR) or the Resource Adapter Display transaction (CIRD) or the Resource Adapter Change Default Server transaction (CIRC) or the DB2 Server for VSE Bind transaction (CBND) or the DSQx transaction (DSQG, DSQU, DSQQ, DSQD) encountered the error while using the EXEC CICS interface.

service defines the service/command which was executed. Use the CICS/VSE manuals listed in the **System Programmer Response** to map the value for

Resource Adapter Messages – ARI0400-ARI0498

service to the CICS/VSE EIBFN code. The EIBFN code may be used as an aid in interpreting the value for *return-code*.

return-code is the CICS/VSE return code (EIBRCODE).

queue-name is the CICS/VSE temporary storage queue that the CICS/VSE service was trying to work with for the CBND, DSQQ, DSQG, DSQU, and DSQD transactions.

db-name is the name of the target database server for the CBND process.

System Action: The transaction continues if the CICS/VSE service is DELAY, RELEASE or DISABLE. Otherwise, the transaction ends.

User Response: If the CICS/VSE service is 'READQTS', the EIBRCODE is X'020000000000' and the TS queue name is 'NLSLKEY', run CIRB before reissuing the failing transaction.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the CICS/VSE problem and reissue the failing transaction. See the *CICS/VSE Application Programming Reference* manual for a description of the EIBRCODE. If the CICS/VSE service was EXTRACT, ENABLE, or DISABLE, refer to the *CICS/VSE System Programming Reference* manual.

ARI0404E Unable to allocate storage in the CICS/VSE partition. Requested size = size.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections Transaction (CIRA) or the Resource Adapter Remove Connections Transaction (CIRR) or the Resource Adapter Termination Transaction (CIRT) was not able to obtain the storage required for execution.

size defines the number of bytes which were required.

System Action: The transaction ends.

Operator Response: Either reissue the CIRB or CIRA transaction after providing CICS/VSE with a larger partition or reissue the CIRB or CIRA transaction with a smaller value for the NOLINKS input parameter or fewer server names. For CIRR or CIRT, reissue the transaction when fewer transactions are running.

Note: For details on the storage requirements, refer to the *DB2 Server for VSE System Administration* manual.

ARI0405E RMID input parameter is not unique.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) attempted to log on to the system communication facility with the name ARIxOLRM, where x was the RMID input parameter. The communications facility returned a code indicating that ARIxOLRM was not unique in the system. This condition will occur for an installation which executes multiple CICS/VSE partitions, each with access to the database manager, and does not specify a unique RMID input parameter to CIRB.

System Action: The CIRB transaction ends.

Operator Response: Reenter the CIRB transaction with a unique RMID.

ARI0406E Error in using system communications facility. Request = request. Return Code = return-code. Reason Code = reason-code..

Explanation: The DB2 Server for VSE Resource Adapter Begin Transaction (CIRB) or the Resource Adapter Terminate Transaction (CIRT) or the Resource Adapter Add Connections Transaction (CIRA) or the Resource Adapter Remove Connections Transaction (CIRR) encountered an error condition while using the system communication facility. Additionally, the online support may encounter this error.

request identifies the VSE XPCC request code.

return-code identifies the DB2 Server for VSE return code.

reason-code identifies the reason code from the system communication facilities of the operating system.

See Chapter 20, "DB2 Server for VSE Reason Codes" on page 355 for a description of the codes provided with this message.

System Action: The CIRB or CIRA transaction ends. The CIRT or CIRR transaction attempts to continue the shutdown process and then ends. If the DB2 Server for VSE online support encountered the communications error, it internally activates CIRR for termination in QUICK mode. CIRR generates the error message.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the communication error.

Note: If the communication error was because of a problem in the database manager partition and a dump was written to SYSLSST or SYSLOG, the dump contains information necessary for correcting the problem.

ARI0407E Error in attempting to execute SQL. SQLCODE = sqlcode. SQLERRD1 = errd1. SQLERRD2 = errd2.

Explanation: The DB2 Server for VSE Resource Adapter Begin Transaction (CIRB) or the Resource Adapter Add Connections Transaction (CIRA) encountered an error attempting to execute SQL.

sqlcode, *errd1*, and *errd2* is the return code information. Refer to Chapter 18, “SQLCODEs” on page 237 for an explanation of the error.

System Action: The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the SQL error and reissue the CIRB or CIRA transaction.

Note: If the SQLCODE is -560 or -561, the CICS/VSE APPLID, which defaults to DBDCCICS, does not have the proper authorization. See the *DB2 Server for VSE Program Directory*.

ARI0408E Insufficient number of links specified. NOLINKS = *links* SERVER = *server-name*.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections Transaction (CIRA) was executed with a NOLINKS input parameter that was too small.

links specifies the minimum number of links required for recovery.

server-name specifies the server that was being accessed.

System Action: The CIRB transaction or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: Reexecute the CIRB or CIRA transaction with NOLINKS greater than or equal to *links*.

ARI0410I Resource Adapter ARI0OLRM is enabled.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) successfully completed the initialization process. Online access is now allowed to the database manager.

System Action: The CIRB transaction ends.

Operator Response: Do nothing unless it is necessary to terminate online access to the database manager. When termination is necessary, enter the CIRT transaction.

ARI0411I Resource Adapter is not enabled.

Explanation: The DB2 Server for VSE Resource Adapter Termination transaction (CIRT) or the Resource Adapter Display Transaction (CIRD) or the Resource Adapter Add Connections Transaction (CIRA) or the Resource Adapter Remove Connections Transaction (CIRR) was entered. It was determined that the Resource Adapter was not initialized. Either the Resource Adapter was not initialized or a previous execution of CIRT or CIRR terminated the Resource Adapter.

System Action: The CIRT or CIRD or CIRA or CIRR transaction ends.

ARI0412I Resource Adapter ARI0OLRM is disabling.

Explanation: The DB2 Server for VSE Resource Adapter Remove Connections Transaction (CIRR) determined that the termination process was already active because of a previous invocation of CIRT or CIRR.

System Action: The CIRR transaction ends. The termination process continues to execute under the original invocation of CIRT or CIRR.

ARI0413I Resource Adapter ARI0OLRM is disabled.

Explanation: The DB2 Server for VSE Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections Transaction (CIRR) successfully completed the termination process.

System Action: The CIRT or CIRR transaction ends.

Operator Response: Do nothing unless it is necessary to initialize online access to the database manager. In that case, enter the CIRB transaction.

ARI0414A Retry the disable transaction *tran*. Application transactions are accessing the Resource Adapter. [SERVER = *server-name*.]

Explanation: The DB2 Server for VSE Resource Adapter Termination transaction (CIRT) or the DB2 Server for VSE Resource Adapter Remove Connections transaction (CIRR) was not able to continue because applications were accessing the database manager or because the applications which previously accessed the database manager were still active. This causes the resource adapter to delay for a time interval (INTERVAL input parameter to CIRT or CIRR) as had been indicated by either message ARI0425I, ARI0465I, ARI0426I, or ARI0469I. The delay interval has completed and the conditions indicated by ARI0425I, ARI0465I, ARI0426I, or ARI0469I still exist.

tran is the transaction identifier CIRT or CIRR.

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server-name is the server that is still being accessed or transactions which accessed it before are still active.

System Action: The CIRT or CIRR transaction terminates thus freeing the terminal for system programmer action. Other servers in the list which did not display this message are disabled.

Operator Response: After all transactions which are or were accessing the database manager have terminated, the CIRT or CIRR transaction should be reentered. You may do one of the following:

- Wait for the active transactions to terminate normally.
- Use CSMT to terminate the active transactions.
- If the retry of CIRT or CIRR was requested because one or more logical units of work are still active (as was indicated by message ARI0425I), immediately reissue CIRT or CIRR with the input parameter QUICK.
- If the retry of CIRT or CIRR was requested because one or more APPC conversations are still active (as was indicated by message ARI0469I), terminate the APPC conversation before reissuing CIRT or CIRR.

ARI0415D Database server &1. is not ready. Enter &2. or CANCEL.

Explanation: The database manager was not started in multiple user mode before the application issued an SQL request. &2. is either WAIT or RETRY.

Operator Response: If a DB2 Server for VSE partition is to be accessed, reply with either WAIT or CANCEL. A reply of WAIT implies that you will be starting a DB2 Server for VSE partition and that the resource adapter should wait until the database manager is ready. Reply with CANCEL if a DB2 Server for VSE partition cannot be started.

For Guest Sharing, reply with RETRY after the database server has been started. If RETRY is entered and the server is not ready, this message is displayed again. Reply with CANCEL if the database server cannot be started.

ARI0416E Invalid input. Enter WAIT or CANCEL.

Explanation: You replied to message ARI0415D with other than WAIT or CANCEL. A maximum of five attempts to reply WAIT or CANCEL will be allowed. After five attempts the system will cancel the request.

Operator Response: Reply with either WAIT or CANCEL.

ARI0417I Application is waiting for cross-partition link.

Explanation: The DB2 Server for VSE Batch Resource Adapter tried to connect to a cross-partition communications link but a link was not available.

Note: If this message occurs frequently, it indicates a high degree of contention for the cross-partition links established for the partition. This contention could be reduced by increasing the number of available links when the database manager is restarted.

ARI0418A Application server *server-name* is not ready. Retry the enable transaction *tran* after the application server starts.

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections Transaction (CIRA) is not able to access the server *server-name*. Either the database manager has not been started or it has not yet completed its initialization process.

tran is the transaction identifier CIRB or CIRA.

System Action: The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: Reenter the CIRB transaction or CIRA for the servers that were not started after the database manager has completed its initialization. If the CIRB transaction was used and it established connections to at least one server then the CIRA transaction must be used to establish the connections to the servers that failed.

ARI0419A The database manager does not have enough cross-partition links. The enable transaction *tran* requires *num-links* more links to server *server-name*.

Explanation: The NOLINKS input parameter to the DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) is too large. The database manager, *server-name*, either was not started with enough links or the links are now allocated to other applications or subsystems.

tran is the transaction identifier CIRB or CIRA.

num-links indicates additional number of links required.

server-name indicates the server that had the insufficient number of links.

System Action: The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: Either reenter CIRB or CIRA when more links become available, or reenter CIRB or CIRA with a smaller NOLINKS input parameter for the server that had the error.

ARI0420E **Operating System storage management failure. Operating System Return Code = *return-code***

Explanation: The DB2 Server for VSE Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) or the Resource Adapter Remove Connections transaction (CIRR) or the Resource Adapter Termination transaction (CIRT) encountered a storage error.

return-code is the return code from the operating system.

System Action: If the storage request was to GET storage, the transaction ends. If the storage request was to FREE storage, the transaction continues.

Operator Response: Correct the storage management error and reissue the transaction. The VSE/ESA System Services return codes are in the *IBM VSE/ESA System Macros Reference* manual under the discussion of the GETVIS/FREEVIS macro instructions.

ARI0421I **DISABLE escalated from NORMAL to QUICK for server *server-name*.**

Explanation: The DB2 Server for VSE Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) was entered with the input parameter QUICK. A previous activation of CIRT or CIRR was with the NORMAL option.

System Action: The termination process continues in QUICK mode.

ARI0422E **DB2 Server for VSE online support had a storage failure. Return Code = *return-code*. Storage Length = *length*. Storage Location = *X'location*.**

Explanation: While terminating a logical unit of work, the DB2 Server for VSE online support encountered a storage error attempting to free storage used for the application's messages to the database manager. (In this case, the message exceeded 1028 bytes in length and could not fit into the normal message buffer which was allocated, thus causing the temporary need for a larger storage requirement.) The Return Code value *return-code* is the return code from the VSE FREEVIS macro. *length* is the length of storage represented as a decimal value. *location* is the storage location represented as a hexadecimal value.

System Action: The DB2 Server for VSE online support internally activates the Resource Adapter Remove Connections transaction (CIRR). CIRR writes the above message. If the server that had the error in the only one that has connections, then the online support is disabled when the server is disabled. If there are connections to other servers, then the online

support remains active and only the server with the error is disabled.

Operator Response: Correct the storage error. Re-establish connections to the server with the CIRB transaction if the online support was disabled or with the CIRA transaction if the online support is still active.

ARI0423A **Use the SHOW and FORCE commands to COMMIT or ROLLBACK the following units of work:**

ARI0424I **User ID = *userid* Agent Identifier = *agent* Server = *server-name*.**

Explanation: This message can be displayed in the CICS partition or in the database manager partition.

CICS Partition

After a system or subsystem failure, the Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) detected that the indicated logical units of work must be committed or rolled back.

Database Manager Partition

After a system or subsystem failure, the database manager detected logical units of work that must be committed or rolled back. These units of work cannot be resolved automatically by the Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA).

userid is the established DB2 Server for VSE user ID for the logical unit of work.

agent is the agent identifier which should be used with the FORCE command.

server-name is the server that the agent belongs to.

System Action:

CICS Partition

The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Database Manager Partition

The Database manager comes up and an in-doubt agent has been created.

Operator Response: Use the SHOW CONNECT command to obtain more information about the logical units of work. Then use the FORCE command to commit or rollback the logical units of work.

In general, the logical units of work should be committed because the application had attempted a COMMIT which was interrupted by the system or subsystem failure. However, if the application was updating multiple resources (for example, DB2 Server for VSE resources, DL/I resources, and CICS resources),

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the installation database administrator should be consulted to determine the action. (See message ARI0232E for more information.)

After all logical units of work are resolved with a COMMIT or a ROLLBACK, reenter the CIRB or CIRA transaction, if this message was issued in the CICS partition.

ARI0425I **Online LUWs are still active for server**
server-name.

Explanation: The Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) was executed with the input parameter NORMAL. Since some online applications are still accessing the database manager, the termination process must be delayed.

server-name is the server that is still being accessed.

System Action: The CIRT or CIRR transaction will delay for a time interval, as specified by the INTERVAL input parameter. After the delay, the process will again attempt to terminate. If it finds that transactions are still accessing the database manager or transactions which previously accessed the database manager are still active, CIRT or CIRR will issue a retry message (see ARI0414A), and terminate in order to free the terminal.

Operator Response: Do nothing until the retry message ARI0414A is displayed.

ARI0426I **The disable transaction *tran* must delay for a *interval*-second time interval before it retries the EXEC CICS DISABLE interface.**

Explanation: The Resource Adapter Termination transaction (CIRT) or Resource Adapter Remove Connections transaction (CIRR) has terminated all communications to the database manager and had attempted to disable the online support. However, the EXEC CICS DISABLE interface has returned a code indicating that transactions which had previously accessed the database manager are still active.

tran is the transaction identifier CIRT or CIRR.

interval is the delay time interval in seconds (INTERVAL input parameter).

System Action: The CIRT or CIRR transaction uses the EXEC CICS DELAY interface with the keyword INTERVAL equal to the value specified as an input parameter. After the delay, it will again attempt to use the EXEC CICS DISABLE interface to disable the resource adapter. If the disable attempt fails, the transaction will issue a retry message (see ARI0414A), and terminate in order to free the terminal.

Operator Response: Do nothing until the retry message ARI0414A is displayed.

ARI0427A **DB2 Server for VSE online support detected an error during synchronization. SQLCODE = *sqlcode*
SQLERRD1 = *errd1* SQLERRD2 = *errd2*
SERVER = *server-name***

Explanation: After encountering the conditions indicated by *sqlcode*, *errd1*, and *errd2*, the DB2 Server for VSE online support internally activated the Resource Adapter Remove Connections transaction (CIRR) for the named server in QUICK mode. CIRR wrote the above message.

sqlcode, *errd1*, and *errd2* is the SQL return information. Refer to Chapter 18, "SQLCODEs" on page 237 for an explanation of the error. *server-name* is the application server that reported the problem.

Operator Response: Use the SHOW CONNECT and FORCE commands to COMMIT or ROLLBACK any units which are prepared for COMMIT or ROLLBACK. Then, enter the CIRB or CIRA transaction to reactivate the connections to the server.

ARI0430I **No transaction timing displayed because of the state of TOD clock.**

Explanation: The Resource Adapter display information transaction (CIRD) encountered an error during a STORE CLOCK operation. The clock is not set.

System Action: The internal timer in the CIRD transaction is set to 0. CIRD display output will not display the time value until the Online Resource Adapter is restarted with the Time-Of-Day clock working properly.

ARI0431E **Unable to allocate storage in the CICS/VSE partition. Transaction = CIRD. Return Code = *nn*. The CIRD transaction is terminated.**

Explanation: The Resource Adapter display information transaction (CIRD) encountered an error while requesting virtual storage. The meanings of the Return Code values (*nn*) are:

- 12 No more virtual storage available
- 32 Hardware storage error

Any other
Internal error

System Action: The CIRD transaction ends.

User Response: Notify your system programmer.

System Programmer Response: Take action according to the Return Code value:

- 12 A larger partition is required for the DB2 Server for VSE Online Resource Adapter; in

particular, the GETVIS area of the CICS/VSE partition must be increased.

- 32 Report this hardware storage error to your hardware service representative.

Any other

Make a record of what went wrong and contact the designated support group for your installation.

ARI0432E Unable to free the storage in the CICS/VSE partition. Transaction = CIRD. Return Code = nn.

Explanation: The Resource Adapter display information transaction (CIRD) encountered an error while trying to free virtual storage. Any Return Code value (*nn*) indicates an internal error and is the return code from the VSE FREEVIS macro.

System Action: The CIRD transaction ends.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0433E CICS/VSE end-of-task exit is not supported. The CIRD transaction is terminated.

Explanation: The Resource Adapter display information transaction (CIRD) needs the CICS/VSE End of Task Exit support, which is not now supported in your installation.

System Action: The CIRD transaction ends.

Operator Response: Notify your system programmer.

System Programmer Response: If CIRD display information is desired, you must install the CICS/VSE restart resynchronization transactions. Refer to the *DB2 Server for VSE Program Directory* for details.

ARI0434E Local task storage (RMLO) identified by CICS/VSE was not found on chain for server *server-name*.

Explanation: During the process of unchaining a task local control block (RMLO), the RMLO passed by CICS/VSE to be deleted from the active task chain was not found in the chain. This condition can result when an application program overlays CICS/VSE storage or DB2 Server for VSE storage.

System Action: The CIRR transaction is invoked internally to remove the connections to *server-name*. If connections to other servers exist, they remain active.

Operator Response: Use the appropriate transaction, CIRB or CIRA, to re-establish connections to the server. If the problem persists, make a record of what went

wrong and notify your system programmer.

System Programmer Response: Ensure that any newly installed application programs are not overlaying CICS/VSE or DB2 Server for VSE storage. If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

ARI0435I *tran* transaction WRITEQ of *queue-name* failed. WRITEQ return code = *return-code*.

Explanation: The Resource Adapter Begin transaction (CIRB) unsuccessfully wrote the DBNAME or NLSKEY to the temporary storage queue ARIDBNAM or NLSLKEY and ended with a WRITEQ error, or the Resource Add Connections transaction (CIRA) or Resource Adapter Remove Connections transaction (CIRR) failed to write the DBNAME to the temporary storage queue ARIDBNAM and ended with a WRITEQ error. *queue-name* is the queue id and *return-code* is the WRITEQ error code. *tran* is the transaction identifier CIRB or CIRA.

System Action: If the WRITEQ is for NLSLKEY, CIRB terminates. If it is for DBNAME, CIRB or CIRA or CIRR continues to enable the Online Resource Adapter. The ARIDBNAM queue is used by ISQL to identify the default target application server on the ISQL sign-on screen.

Operator Response: Report this message to the system programmer for further investigation.

System Programmer Response: Investigate the WRITEQ error by analyzing the WRITEQ return code, and perform corrective action.

ARI0436E Automatic restart resynchronization failed. The CICS log does not contain information for an in-doubt logical unit of work. Connections to server *server-name* are not established.

Explanation: During automatic restart resynchronization processing, CICS/VSE encountered a logical unit of work that the database manager indicated needed to be resolved. However, the information needed to resolve the logical unit of work was not on the CICS/VSE log. This generally results from a CICS/VSE coldstart following a system failure. If a CICS/VSE coldstart did not occur after the last system failure, the CICS/VSE log or the DB2 Server for VSE log data has been damaged. This could be the result of an application that inadvertently overlaid the DB2 Server for VSE resource adapter in CICS/VSE storage.

This message is followed by messages ARI0423A and ARI0424I, which identify the logical units of work (agents) that need to be resolved. These agents must be resolved (with the FORCE command) before the CIRB

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or CIRA transaction can be run successfully.

System Action: The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: Refer to the OPERATOR ACTION for messages ARI0423A and ARI0424I.

ARI0438E Automatic restart resynchronization failed. A logical unit of work that DB2 Server for VSE indicated needed to be resolved was not identified by the CICS/VSE log as needing resolution.

Explanation: During automatic restart resynchronization processing, CICS/VSE encountered a logical unit of work that the database manager indicated needed to be resolved. However, information in the CICS/VSE log indicated that the logical unit of work did not need to be resolved. CICS/VSE cannot resolve the logical unit of work; it treats this condition as an error condition.

This condition can occur when an application program overlays a CICS/VSE log buffer, or when a DB2 Server for VSE log buffer is destroyed. Or, the CICS/VSE log or the DB2 Server for VSE log may have been damaged.

This condition also occurs when the automatic restart synchronization is invoked more than once. If CIRB or CIRA is used to start connections to a server that had in-doubt units of work, those in-doubt units of work are resolved and CICS destroys the log buffer. If CIRA is invoked again for another server that has in-doubt units of work, there is no more record of them in the CICS/VSE log buffer and this message is displayed.

This message follows messages ARI0423A and ARI0424I which identify the logical units of work (agents) that need to be resolved. These agents must be resolved before the CIRB or CIRA transaction can be run successfully.

System Action: The CIRB or CIRA transaction bypasses the server that had the error without establishing connections to it and continues processing the next server in the server name list.

Operator Response: Refer to the OPERATOR ACTION for messages ARI0423A and ARI0424I.

System Programmer Response: Ensure that any newly installed application programs are not overlaying CICS/VSE or DB2 Server for VSE storage. If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

ARI0442E A non-DB2 Server for VSE message has been received. The Resource Adapter has severed the communication path.

Explanation: The resource adapter received a non-DB2 Server for VSE message.

System Action: The resource adapter terminated the communication path.

Operator Response: If you are unable to determine the cause of the problem, retry the application program. If the problem repeats, collect pertinent information and notify the system programmer.

Programmer Response: Make a record of the error and contact the designated support group for your installation.

ARI0444E &1 transaction DELETEQ of &2. failed. DELETEQ return code = &3A.

Explanation: The transaction &1 tried to delete the ARIDBNAM temporary storage queue and ended with a DELETEQ error. &2. is the queue ID and &3A. is the DELETEQ error code.

System Action: The transaction &1 continues to disable the Online Resource Adapter regardless of the DELETEQ error.

Operator Response: Report this message to the system programmer for further investigation.

System Programmer Response: Investigate the DELETEQ error by analyzing the DELETEQ return code. If the ARIDBNAM queue still exists, try deleting the queue again by using the CICS-supplied transaction.

ARI0445E Storage failure occurred while attempting to free storage acquired to support a blocked request.

**Identifier = &1
FREEVIS Return Code = &2
Storage Length = &3
Storage Location = &4**

Explanation: The database manager encountered an error when attempting to free storage used in support of a BLOCK request.

- &1. identifies the location within the database manager where the storage error occurred.
- &2. is the return code from the VSE FREEVIS macro.
- &3. is the length of the storage represented as a decimal value.
- &4. is the storage location represented as a hexadecimal value.

System Action: The Resource Adapter Remove Connections transaction (CIRR) is internally activated which terminates connections to the current server.

CIRR writes the above message. The current server is identified by messages issued from the Resource Adapter Display transaction (CIRD) which is internally activated by CIRR.

Operator Response: Correct the storage error and then reinitialize connections to the server with the CIRA transaction. If online support was terminated as a result of the storage error, use the CIRB transaction to reinitialize connections to the server.

ARI0446E Error in attempting to execute *function*.
Modname = *modname*. Return code =
retcode.

Explanation: A Resource Adapter Begin transaction (CIRB) or a Resource Adapter Add Connections transaction (CIRA) was entered to allow access to a remote server. An attempt was made to load the phase *modname*, but the load failed.

function is the action that failed.

modname

is the name of the phase on which the action *function* is performed.

retcode is the return code of the *function*.

System Action: The Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) bypasses all remote application servers. Online access to remote application servers is not enabled.

User Response: Refer this message to your DB2 Server for VSE Database Administrator.

Database Administrator Action: Determine whether or not you require your application requester to initiate DRDA conversation. If so, recreate the phase *modname*. Refer to the *DB2 Server for VSE System Administration* manual.

ARI0450I DB2 Server for VSE online support has an entry point of *entry-point*. RMGL at *pointer*. [DRDA online support entry point at *entry-point2*.]

Explanation: The Resource Adapter Begin transaction (CIRB) has completed and online access to the database manager is activated. This message is displayed as a debug aid.

entry-point is the entry point of the DB2 Server for VSE Online Support.

pointer is the pointer to the global control block RMGL.

entry-point2 is the entry point of the DB2 Server for VSE Online DRDA Router.

System Action: The CIRB transaction ends.

ARI0452I EXTNAME = external name.
RDBMS = dbname server version
STATUS = status
TIME = time
LU = luname
TPN = tpn

Explanation: This is the normal DB2 Server for VSE response to SQLQRY.

ARI0453I The *transaction name* transaction cannot be started at this time. Please try later.

Explanation: A CICS resource used by the Online Resource Adapter is currently held by either the Begin transaction (CIRB), the Termination transaction (CIRT), the Add Connections transaction (CIRA), the Remove Connections transaction (CIRR) or the Display Information transaction (CIRD).

System Action: The invoked transaction is cancelled. The transaction holding the resource continues to execute.

User Response: Try the transaction again at a later time. Usually the resource is held for a few moments.

Operator Response: Try the transaction again at a later time. Usually the resource is held for a few moments. During the initialization process, if you suspect a problem and the CIRT transaction failed to terminate the process, then the CIRB transaction can be purged by using a CICS command. After purging the CIRB transaction, the CIRT transaction must be issued to perform the Online Resource Adapter final cleanup.

ARI0454I Connections to *server-name* established. RMCV at *address*.

Explanation: The Resource Adapter Begin transaction (CIRB) was entered to initialize the DB2 Server for VSE Online Resource Adapter or the Resource Add Connections transaction (CIRA) was entered. The CIRB or CIRA transaction completed successfully and online access is now allowed to the application server.

System Action: The CIRB or CIRA transaction continues processing the next server in the server name list.

Operator Response: Do nothing unless it is necessary to terminate online access to the application server. When termination is necessary, enter the CIRT transaction.

If CIRB was entered to modify the initialization parameter (for example, increase the number of paths to the DB2 Server for VSE system), first enter the DB2 Server for VSE Resource Adapter Termination transaction (CIRT) to terminate the active resource adapter. After CIRT disables the resource adapter (message ARI0413I is displayed), reenter CIRB with the new input parameters.

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ARI0455I {Connections | Online access} to *server-name* {are | is} disabled.

Explanation: The Resource Adapter Termination transaction (CIRT) was entered to disable the DB2 Server for VSE Online Resource Adapter or the Resource Adapter Remove Connections transaction (CIRR) was entered to disable the connections to a local application server or to disable online access to a remote application server.

System Action: The CIRT or CIRR transaction continues processing the next server in the server name list.

Operator Response: Do nothing unless it is necessary to re-establish online access to the application server. Use the CIRB transaction to re-establish online access if the online resource adapter has been terminated. If the online resource adapter is still active, use the CIRA transaction to re-establish online access to the application server.

ARI0456I Connections to *server-name* do not exist.

Explanation: Three scenarios are possible.

1. The Resource Adapter Change transaction (CIRC) was entered to change the default application server to *server-name*. The default server could not be changed because connections to the requested server do not exist.
2. The Resource Adapter Remove Connections transaction (CIRR) was entered to disable the connections to an application server but the connections to the specified server do not exist. If no server was specified then the default server is used.
3. The Resource Adapter Display transaction (CIRD) was entered to display active transactions for *server-name*. Nothing could be displayed because connections to the specified server do not exist.

System Action: If the CIRC transaction was entered it ends and the default server is not changed. If the CIRR transaction was entered it bypasses the server that had the error and continues processing the next server in the server name list. If the CIRD transaction was entered it ends.

Operator Response: If the CIRC transaction was entered, the CIRA transaction can be used to establish connections to the desired server. When the connections have been successfully established the CIRC transaction can be run to change the default server.

If the CIRR transaction was entered, determine the correct server name and retry the CIRR transaction.

If the CIRD transaction was entered, determine the correct server name and retry the CIRD transaction.

ARI0457W Connections to *server-name* already exist.

Explanation: The Resource Adapter Begin transaction (CIRB) or the Resource Add Connections transaction (CIRA) was entered to establish connections to an application server. Connections to that server already existed because of a previous invocation of CIRB or CIRA or because the *server-name* was listed more than once in the server-name list of the CIRB or CIRA transaction.

System Action: The existing connections remain. The CIRB or CIRA transaction bypasses the server that had the error and continues processing the next server in the server name list.

Operator Response: No action is required. If the connections to that server need to be changed they must first be removed using CIRR or CIRT and then re-established using CIRA or CIRB.

ARI0458I The default server is *server-name*.

Explanation: The Resource Adapter Begin transaction (CIRB) was entered to initialize the DB2 Server for VSE Online Resource Adapter. This message identifies the name of the default application server.

System Action: The CIRB transaction continues processing the next server in the server name list.

ARI0459I The new default server is *server-name*.
The previous default server was *server-name*.

Explanation: The Resource Adapter Change transaction (CIRC) was entered to change the default application server to *server-name*. The default server was successfully changed to the new value. The previous value is displayed for information only.

System Action: The CIRC transaction ends. The default server is changed.

ARI0460W {Connections | Online access} to the default server *server-name* {have | has} been disabled.

Explanation: The Resource Adapter Termination transaction (CIRT) was entered or the Resource Adapter Remove Connections transaction (CIRR) was entered to terminate the connections to the default local server or to terminate the online access to the default remote server.

System Action: The CIRR or CIRT transaction continues processing the next server in the server name list. The default server is inaccessible.

Operator Response: The CIRB transaction can be used to re-establish the connections if the online resource adapter is not active or the CIRA transaction can be used to re-establish the connections if the online resource adapter is still active or the CIRC transaction

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can be used to specify a new default server if the online resource adapter is still active.

If the lost connections were the last ones, then the online resource adapter has been disabled. In this case the CIRB transaction must be used to start the online resource adapter.

ARI0461E **Connections to *server-name* are already being disabled.**

Explanation: The Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) was entered to terminate the connections to *server-name* but a previous invocation of CIRT or CIRR was already entered for *server-name*.

System Action: The CIRT or CIRR transaction continues to process any remaining servers before ending.

ARI0462E **Connections to server *server-name* could not be established.**

Explanation: The Resource Add Connections transaction (CIRA) or the Resource Adapter Begin transaction (CIRB) was entered to establish connections to server *server-name* but was unsuccessful.

System Action: If a server name list was specified, the CIRB or CIRA transaction continues processing the other servers in the list until it is finished if the error was not severe. If the error was severe so that processing cannot continue, the remaining servers in the server name list will not be processed and the CIRB or CIRA transaction ends.

This message is also issued for the remaining servers in the list which were not processed because a previous server encountered a severe error.

If no server name list was specified or the failing server was the last one in the list then the CIRB or CIRA transaction ends.

Operator Response: Previous messages issued should indicate what error occurred that prevented the connections from being established. Refer these messages to your system programmer.

System Programmer Response: Correct the error and reissue the CIRB or CIRA command.

ARI0463I **The DISABLE transaction *tran* must delay for a *interval-second* interval before attempting the disable.**

Explanation: The Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) was entered to disable connections but was unsuccessful. Check previously displayed messages ARI0425I, ARI0465I, or ARI0469I to determine which servers could not be disabled.

tran is the transaction identifier CIRT or CIRR.

interval is the delay interval in seconds (INTERVAL input parameter).

System Action: The CIRT or CIRR transaction will delay for the time interval specified. After the delay, the process will again attempt to terminate. If it finds that transactions are still accessing at least one of the servers to be disabled, or that transactions which previously accessed at least one of the servers to be disabled are still active, CIRT or CIRR will issue a retry message (see ARI0414A) and terminate in order to free the terminal.

Operator Response: Do nothing until the retry message ARI0414A is displayed.

ARI0464E **Connections to *server-name* could not be disabled because the password is invalid.**

Explanation: The Resource Adapter Remove Connections transaction (CIRR) or the Resource Adapter Termination transaction (CIRT) attempted to disable the connections to *server-name* but could not because the password supplied was not the same as the password that was used to initially enable the connections to *server-name*.

System Action: The CIRR or CIRT transaction continues processing the next server in the server-name list.

Operator Response: Reissue the CIRR or CIRT transaction with the correct password.

ARI0465I **Transactions are still active for server *server-name*.**

Explanation: The Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) has terminated all communications to the server *server-name*. However, transactions which had previously accessed the server are still active.

server-name is the server that is still being accessed.

System Action: The CIRT or CIRR transaction will delay for a time interval as specified by the INTERVAL input parameter. After the delay, it will again attempt to terminate. If transactions are still active, CIRT or CIRR will issue a retry message (see ARI0414A), and terminate in order to free the terminal.

Operator Response: Do nothing until the retry message ARI0414A is displayed.

ARI0466E **CICS restart resynchronization is not available. The *tran* transaction is ended.**

Explanation: The Resource Add Connections transaction (CIRA) or Resource Adapter Begin

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transaction (CIRB) detected that the CICS restart resynchronization transaction CRSY is not enabled.

tran is the CIRA or CIRB transaction.

System Action: The CIRA or CIRB transaction ends.

Operator Response: Enable the CICS restart resynchronization transaction CRSY. Then reissue the CIRA or CIRB transaction.

System Programmer Response: Ensure that CICS restart resynchronization support has been installed properly. See the *DB2 Server for VSE Program Directory* for more details.

ARI0467I RMCV for remote server *server_name* established. RMCV at XXXXXXXX.

Explanation: The Resource Adapter Begin transaction (CIRB) was entered to initialize the DB2 Server for VSE Online Resource Adapter or the Resource Adapter Add Connections transaction (CIRA) was entered. The CIRB or CIRA transaction completed successfully and online access is now allowed to the remote application server.

System Action: The CIRB or CIRA transaction continues processing the next server in the server name list.

Operator Response: Do nothing unless it is necessary to terminate online access to the remote application server. When termination is necessary, enter the CIRT transaction.

ARI0468I DISABLE changed from QUICK to NORMAL for remote server *server-name*.

Explanation: A Resource Adapter Terminate transaction (CIRT) or a Resource Adapter Remove Connections transaction (CIRR) was entered using QUICK mode, but QUICK mode is not supported for a remote server. The transaction has converted the QUICK mode to NORMAL, and will process the shutdown in a NORMAL mode.

System Action: Shutdown continues. NORMAL shutdown will complete only when all the conversations to the remote server are deallocated.

ARI0469I APPC conversations are still active for server *server_name*.

Explanation: A Resource Adapter Terminate transaction (CIRT) or a Resource Adapter Remove Connections transaction (CIRR) was entered to terminate online access to a remote server, but there are still active conversations for the server.

System Action: The CIRT or CIRR transaction will delay for a time interval as specified by the INTERVAL input parameter. After the delay, it will again attempt to terminate. If conversations are still active, CIRT or CIRR will issue a retry message (see ARI0414A), and

terminate in order to free the terminal.

Operator Response: Do nothing until the retry message ARI0414A is displayed.

ARI0470E Trace file OPEN failed. Reason Code = nn. Return Code = nn.

Explanation: The Resource Adapter trace is being initialized before application execution. An error occurred when the database manager attempted to open the trace output file on tape unit or CMS minidisk. The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: The trace facility remains inactive and the application continues to execute.

Operator Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Programmer Response: See the Operator Response.

ARI0471I Trace is ON.

Explanation: The Resource Adapter trace parameters have been successfully processed. The trace is now active with trace output going to a tape unit or a CMS minidisk.

System Action:

- Trace is active. Resource Adapter trace is active as specified by the TRACERM, TRACECONV, initialization parameters to the SQLINIT EXEC.
- Trace output is directed to tape unit or CMS minidisk.

ARI0472E Trace file CLOSE failed. Reason Code = nn. Return Code = nn.

Explanation: The Resource Adapter Trace is being turned off during application termination. When the system attempted to close the trace output file on a tape unit or a CMS minidisk, a termination error occurred. The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: Trace shutdown is completed. DB2 Server for VSE Resource Adapter trace is in the OFF state. Assume that the trace tape or minidisk file was not closed and is not fully processable (see below).

Operator Response: Report the problem (message) to your system programmer. Include any CMS minidisk or tape unit error messages displayed by CMS.

You can run the DB2 Server for VSE Trace Formatter Utility Program (ARIMTRA). It will format and output all trace data up to the point of failure. At that point, it may end because of a lack of tape/minidisk CLOSE recording or an unreadable record on the tape/minidisk.

System Programmer Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

ARI0473I Trace is OFF.

Explanation: The Resource Adapter Trace is inactive and the trace output file is closed on a tape unit or a CMS minidisk.

System Action: The trace output file is closed.

Operator Response: None required.

ARI0480I The user has not signed on.

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or a Delete SQLGLOB Parameters transaction (DSQD) was entered, but the signed-on userid is not available, or the update was not successful. If message ARI0486E is displayed, the update failed.

System Action: Processing ends. The SQLGLOB parameters are not updated.

User Response: Retry the transaction from a valid userid.

ARI0481I The following {user | global} SQLGLOB parameters have been replaced [for user userid]:

CHARNAME = *charname*.
QRYBLKSIZE = *qryblksize*.
DBCS = *dbcs*.
SYNCPPOINT = *syncpoint*.
CCSIDSBSCS = *ccsidsbcs*.
CCSIDMIXED = *ccsidmixed*.
CCSIDDBCS = *ccsiddbcs*.
TRACERA = *tracera*.
TRACEDRRM = *tracedrrm*.
TRACECONV = *traceconv*.
COMMPROTO = *commproto*.

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or an Update Global SQLGLOB Parameters transaction (DSQG) was entered, and the update completed successfully. The displayed SQLGLOB parameter values have been replaced with the new values.

System Action: The user or global SQLGLOB parameters are replaced with the new values. The new values will remain in effect until:

explicitly changed through:

1. the SQLGLOB File Batch Update/Query Program (ARIRBGUD), or
2. a subsequent DSQU or DSQG transaction or

explicitly deleted through:

1. the SQLGLOB File Batch Update/Query Program (ARIRBGUD), or
2. a subsequent DSQD transaction.

Any subsequent DRDA connections will use the new values.

ARI0482I The following {user | global} SQLGLOB parameters have been saved [for user userid]:

CHARNAME = *charname*.
QRYBLKSIZE = *qryblksize*.
DBCS = *dbcs*.
SYNCPPOINT = *syncpoint*.
CCSIDSBSCS = *ccsidsbcs*.
CCSIDMIXED = *ccsidmixed*.
CCSIDDBCS = *ccsiddbcs*.
TRACERA = *tracera*.
TRACEDRRM = *tracedrrm*.
TRACECONV = *traceconv*.
COMMPROTO = *commproto*.

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or an Update Global SQLGLOB Parameters transaction (DSQG) was entered, and the update completed successfully. The displayed SQLGLOB parameter values have been saved in the SQLGLOB file.

System Action: The user or global SQLGLOB parameters are replaced with the new values. The new values will remain in effect until:

explicitly changed through:

1. the SQLGLOB File Batch Update/Query Program (ARIRBGUD), or
2. a subsequent DSQU or DSQG transaction or

explicitly deleted through:

1. the SQLGLOB File Batch Update/Query Program (ARIRBGUD), or
2. a subsequent DSQD transaction.

Any subsequent DRDA connections will use the new values.

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ARI0483I The *{user | global}* SQLGLOB parameters [for user *userid*] are:

CHARNAME = *charname*.
QRYBLKSIZE = *qryblksize*.
DBCS = *dbcs*.
SYNCPOINT = *syncpoint*.
CCSIDSBCS = *ccsidsbcs*.
CCSIDMIXED = *ccsidmixed*.
CCSIDDBCS = *ccsiddbcs*.
TRACERA = *tracera*.
TRACEDRRM = *tracedrrm*.
TRACECONV = *traceconv*.
COMMPROTO = *commproto*.

Explanation: A Query SQLGLOB Parameters transaction (DSQQ) was entered. If the *userid* parameter was specified, and user SQLGLOB parameters exist for the specified *userid*, then the user SQLGLOB parameters are displayed. Otherwise, the global SQLGLOB parameters are displayed.

System Action: The SQLGLOB parameters are displayed.

ARI0484I The user SQLGLOB parameters for user *userid* were deleted. The following global SQLGLOB parameters are now in effect for user *userid*:

CHARNAME = *charname*.
QRYBLKSIZE = *qryblksize*.
DBCS = *dbcs*.
SYNCPOINT = *syncpoint*.
CCSIDSBCS = *ccsidsbcs*.
CCSIDMIXED = *ccsidmixed*.
CCSIDDBCS = *ccsiddbcs*.
TRACERA = *tracera*.
TRACEDRRM = *tracedrrm*.
TRACECONV = *traceconv*.
COMMPROTO = *commproto*.

Explanation: A Delete User SQLGLOB Parameters transaction (DSQD) was entered, and completed successfully.

System Action: The user SQLGLOB parameters for the signed-on *userid* are deleted. Any subsequent DRDA connections done on behalf of this signed-on *userid* will use the global SQLGLOB parameters.

ARI0485I The *{global | user}* SQLGLOB parameters [for user *userid*] do not exist.

Explanation: A Query SQLGLOB Parameters transaction (DSQQ) was entered for a specified *userid*, but the user SQLGLOB parameters for the specified *userid* do not exist. Either a previous DSQU transaction was not executed to create the user SQLGLOB parameters, or a previous DSQD transaction deleted the user SQLGLOB parameters. Alternatively, an Update User SQLGLOB Parameters transaction (DSQU) was

entered without all parameters specified, or a Delete User SQLGLOB Parameters transaction (DSQD) was entered, and the global SQLGLOB record does not exist.

System Action: Processing ends.

User Response: Retry the transaction without the *userid* parameter to display the global SQLGLOB parameters. If user SQLGLOB parameters are desired, use the DSQU transaction to create them.

ARI0486E {DSQG | DSQU | DSQD | DSQQ} cannot be completed successfully.

Explanation: An Update Global SQLGLOB Parameters transaction (DSQG) or an Update User SQLGLOB Parameters transaction (DSQU) or a Delete User SQLGLOB Parameters transaction (DSQD) or a Query SQLGLOB Parameters transaction (DSQQ) was entered, but could not complete successfully.

System Action: Processing ends.

User Response: Refer to previous error messages for the cause of the error. If the problem persists, notify your System Programmer.

System Programmer Response: Refer to the previously displayed error messages for the cause of the error.

ARI0487E The SQLGLOB file does not exist.

Explanation: An Update Global SQLGLOB Parameters transaction (DSQG) or an Update User SQLGLOB Parameters transaction (DSQU) or a Delete User SQLGLOB Parameters transaction (DSQD) or a Query SQLGLOB Parameters transaction (DSQQ) was entered, but failed because the SQLGLOB file could not be found.

System Action: Processing ends.

User Response: Notify your System Programmer.

System Programmer Response: Recreate the SQLGLOB file using the IBM-supplied job control program ARISGDEF.

ARI0488D The global SQLGLOB parameters will be used when the user SQLGLOB parameters are deleted.

Are you sure you want to delete the user SQLGLOB parameters for user *userid*?
Enter 0(No) or 1(Yes).

Explanation: A Delete User SQLGLOB Parameters transaction (DSQD) was entered. Confirmation of the delete is required.

System Action: Processing is halted until a response is entered. If a 1 is entered, the delete continues. If a 0 is entered, processing ends.

User Response: Reply with 1 (Yes) to confirm the delete, or 0 (No) to cancel the operation.

ARI0489E The {CCSIDS | CCSIDM | CCSIDG} of CHARNAME = *charname* in the ARISCCSD phase is not in the expected format.

Explanation: A record was found in the ARISCCSD phase for the *charname* value, but the record does not contain valid data.

System Action: Processing ends.

User Response: Notify your system programmer.

System Programmer Response: Recreate the ARISCCSD phase using the IBM-supplied job control program ARISCNVD. Refer to the *DB2 Server for VSE Program Directory*.

ARI0490E An unauthorized change has been made to the SQLGLOB file, which may have altered the {*user* | *global*} SQLGLOB parameters [for user *userid*].

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or an Update Global SQLGLOB Parameters transaction (DSQG) or a Query SQLGLOB Parameters transaction (DSQQ) or a Delete User SQLGLOB Parameters transaction (DSQD) was entered or the SQLGLOB File Batch Update/Query Program (ARIRBGUD) was executed. The transaction found that the SQLGLOB VSAM file had been changed, but not through DSQU or DSQG or the batch update/query program. The SQLGLOB values may have been altered, and should not be used.

System Action: Processing ends.

User Response: Use the DSQU transaction (for user SQLGLOB parameters) or the DSQG transaction (for global SQLGLOB parameters) or execute the job ARIRBGUD (for batch update for both global and user SQLGLOB parameters) specifying all parameters to replace all of the entries in the SQLGLOB file.

ARI0491E You have not entered any parameters for the {*DSQG* | *DSQU*} transaction. Please try again.

Explanation: The Update Global SQLGLOB Parameters transaction (DSQG) or the Update User SQLGLOB Parameters transaction (DSQU) was entered with no parameters specified. You must specify at least one parameter.

System Action: Processing ends.

User Response: Reenter the desired transaction with the proper parameters.

ARI0492I An unauthorized change has been made to the SQLGLOB file, which may have altered the {*user* | *global*} SQLGLOB parameters [for user *userid*]. These parameters will be replaced.

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or an Update Global SQLGLOB Parameters transaction (DSQG) was entered with all parameters specified. The transaction found that the SQLGLOB VSAM file had been changed, but not through DSQU, DSQG or the SQLGLOB File Batch Update/Query Program (ARIRBGUD). The SQLGLOB values may have been altered. This message is displayed for information purposes only, since all the SQLGLOB values will be replaced by the transaction.

System Action: Processing continues.

User Response: No action required.

ARI0493I DSQD operation has been cancelled.

Explanation: You entered 0 (NO) when DSQD prompted you to confirm the delete request.

System Action: No action is taken.

ARI0494E Invalid input parameter entered. Parameter = *parm*.

Explanation: An Update User SQLGLOB Parameters transaction (DSQU) or an Update Global SQLGLOB Parameters transaction (DSQG) or a Query SQLGLOB Parameters transaction (DSQQ) was entered with an incorrect parameter, or a Delete User SQLGLOB Parameters transaction (DSQD) was entered with a parameter. This message can also be received from the SQLGLOB File Batch Update program (ARICBGUD).

System Action: Processing ends.

User Response: Correct or remove the parameter and retry the transaction.

ARI0495E Write error trace file. Reason Code = *response code*.

Explanation: When the DB2 for VSE Online Resource Adapter attempted to write trace data to the trace output file, an access error occurred. The Reason Code value is the CICS/VSE response code (EIBRCODE) returned after the Online Resource Adapter attempted to write trace data to a transient data queue.

System Action: Any further Online Resource Adapter trace output is disabled.

User Response: Save this message and give it to your system programmer.

System Programmer Response: Refer to the *CICS/VSE Application Programming Reference* manual for a description of the EIBRCODE.

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ARI0496I An unauthorized change has been made to the SQLGLOB file, which may have altered the user SQLGLOB parameters for user *userid*.

Explanation: A Delete User SQLGLOB Parameters transaction (DSQD) was entered. The transaction found that the SQLGLOB VSAM file had been changed, but not through DSQU, DSQG or the SQLGLOB File Batch Update/Query Program (ARIRBGUD). The SQLGLOB values may have been altered. This message is displayed for information purposes only, since all the user SQLGLOB values will be deleted by the transaction.

System Action: Processing continues.

User Response: No action required.

ARI0497E The DRDA facility has not been installed. Processing of server *server_name* is bypassed.

Explanation: A Resource Adapter Begin transaction (CIRB) or a Resource Adapter Add Connections transaction (CIRA) was entered to allow online access to a remote server, but the DRDA AR support has not been enabled.

System Action: The Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) bypasses all remote application servers. Online access to remote application servers are not enabled.

User Response: Contact your database administrator to enable the DRDA AR support.

Database Administrator Action: Determine whether or not you require your application requester to initiate DRDA conversation. If so, enable the DRDA facility by running the job ARIS715D. Refer to the *DB2 Server for VSE System Administration* manual for complete details. If this message was preceded by message ARI0446E or ARI0498E, recreate the phase mentioned in these messages. Refer to the *DB2 Server for VSE System Administration* manual for complete details.

ARI0498E The phase *phase* is empty.

Explanation: A Resource Adapter Begin transaction (CIRB) or a Resource Adapter Add Connections transaction (CIRA) was entered to allow online access to a remote server. An attempt was made to access the *phase* phase, but the phase contains no records.

System Action: Processing ends. The Resource Adapter Begin transaction (CIRB) or the Resource Adapter Add Connections transaction (CIRA) bypasses all remote application servers. Online access to remote application servers are not enabled.

User Response: Notify your system programmer.

System Programmer Response: Recreate the *phase*

phase. Refer to the *DB2 Server for VSE System Administration* manual.

Chapter 6. ARI4000–ARI4599 DB2 Server for VSE Control Messages

ARI4000E Invalid input parameter entered.
Parameter = *parm*.

Explanation: The DAXP or the DAXT transaction detected an incorrect input parameter.

parm is the parameter which was not valid. For DAXP, *parm* may be PASSWORD, LANGID, or SERVER_NAME. For DAXT, *parm* may be PASSWORD, MODE, INTERVAL, or SERVER_NAME.

PASSWORD must be a character string of 1 to 8 characters with no imbedded blanks. The character string for PASSWORD, which is input to DAXT, must be the same string that the AXE transaction used to autostart the DRDA TRUE which the DAXT transaction is disabling. PASSWORD must be preceded by one or more blanks.

LANGID must be a character string of 1 to 5 characters with no imbedded blanks. It must be one of AMENG, UCENG, FRANCO, GER, KANJI, or HANZI.

SERVER_NAME must be a character string of 1 to 18 characters with no imbedded blanks. The server APPLID corresponding to SERVER_NAME (found in the DBNAME directory) must be within the range 'SYSARI00' to 'SYSARI09' or 'SYSARI0A' to 'SYSARI0Z'.

MODE must be either the character string NORMAL or the character string QUICK.

INTERVAL must be a decimal value between 0 and 3600.

The delimiter between parameters is a comma or one or more blanks. Commas must be used for null parms.

System Action: The DAXP or DAXT transaction ends.

Operator Response: Reissue the DAXP or DAXT transaction with the correct input parameters. Refer to the *DB2 Server for VSE System Administration* manual for more information about the input parameters.

ARI4001E DRDA TRUE *TRUE-name* is already present in this partition.

Explanation: The AXE transaction was autostarting DRDA TRUE support *TRUE-name*, but detected that the DRDA TRUE is already enabled and active within the partition. Only one DRDA TRUE with the name *TRUE-name* may be active within a CICS/VSE partition.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Stop and restart CICS.

ARI4002E CICS/VSE load of *module-name* failed [for DRDA TRUE *TRUE-name*]. Resp = *resp1*. Resp2 = *resp2*.

Explanation: CICS/VSE was not able to load *module-name* in one of the following situations:

- The DAXP transaction attempted to load the phase/load module ARICDR2 or the message repository.
- The DAXT transaction attempted to load the phase ARICDR2.
- While autostarting DRDA TRUE support *TRUE-name*, the AXE transaction attempted to load one of the phase/load modules ARICDRAD, ARICDR2 or the message repository.

module-name will be either ARICDRAD, ARICDR2, or the name of a DB2 Server for VSE message repository.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

resp is the CICS/VSE EIBRESP number.

resp2 is the CICS/VSE EIBRESP2 number.

System Action: The DAXP or DAXT transaction ends. The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Verify that the program named ARICDRAD or ARICDR2 or the DB2 Server for VSE message repository is correctly defined to CICS/VSE and that its phase is in an accessible library. See the *DB2 Server for VSE System Administration* manual.

ARI4003E Error in attempting to use CICS/VSE service [for DRDA TRUE *TRUE-name*]. CICS/VSE service = *service*. EIBRCODE = *return-code*.

Explanation: The DAXP transaction, the DAXT transaction, or the AXE transaction while autostarting DRDA TRUE support *TRUE-name*, encountered an error while using the EXEC CICS interface.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

DB2 Server for VSE Control Messages –ARI4000-ARI4599

service defines the CICS/VSE service/command which was executed. Use the CICS/VSE manuals listed in the System Programmer Response below for this message to map the value for *service* to the CICS/VSE EIBFN code. The EIBFN code may be used as an aid in interpreting the value for *return-code*.

return-code is the CICS/VSE return (EIBRCODE).

System Action: The DAXP or DAXT transaction ends. The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the CICS/VSE problem and reissue the DAXP or DAXT transaction. See the *CICS/VSE Application Programming Reference*, SC33-0713, for a description of the EIBRCODE. If the CICS/VSE service was EXTRACT, ENABLE, START, or DISABLE refer to "System commands" in the *CICS/VSE System Programming Reference*, SC33-0711.

ARI4004E Unable to allocate storage in the CICS/VSE partition [for DRDA TRUE *TRUE-name*]. Requested size = *size*.

Explanation: The DAXP transaction, the DAXT transaction, or the AXE transaction while autostarting DRDA TRUE support *TRUE-name*, was not able to obtain the storage required for execution.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

size defines the number of bytes which were required.

System Action: The DAXP or DAXT transaction ends. The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Provide CICS/VSE with a larger partition.

ARI4005E The attempt to log on to the system communication facility failed. The name *name* is not unique in the system.

Explanation: While autostarting the DRDA TRUE support, the AXE transaction attempted to log on to the system communication facility with the name *name*. The system communication facility returned a code indicating that the name *name* was not unique in the system.

name is the name of the application identified to the system communication facility.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Determine why *name* is not unique in the system communications facility and correct it.

It may be necessary to stop and restart CICS.

ARI4006E Error in using system communications facility for DRDA TRUE *TRUE-name*. Request=*request*. Return Code = *return-code*. Reason Code = *reason-code*.

Explanation: One of the following situations has occurred:

- While autostarting DRDA TRUE support *TRUE-name*, the AXE transaction encountered an error condition using the system communication facility.
- While the DRDA TRUE *TRUE-name* was executing, it encountered an error condition using the system communication facility.

TRUE-name is the name of the DRDA TRUE support.

request identifies the VSE XPCC request code.

return-code identifies the DB2 Server for VSE return code.

reason-code identifies the reason code from the system communication facilities of the operating system.

See Chapter 20, "DB2 Server for VSE Reason Codes" on page 355 for a description of the codes provided with this message.

System Action: If the AXE transaction encountered the communications error, it ends the enabling of the DRDA TRUE. If the DRDA TRUE support encountered the communications error, it internally activates DAXT for termination. DAXT generates the error message.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Correct the communication error.

Note: If the communication error was because of a problem in the DB2 Server for VSE partition and a dump was written to SYSLST or SYSLOG, the dump contains information necessary for correcting the problem.

ARI4007E Error attempting to execute SQL by DRDA TRUE *TRUE-name*. SQL = *sql request*. SQLCODE = *sqlcode*. SQLERRD1 = *errd1*. SQLERRD2 = *errd2*.

Explanation: While autostarting DRDA TRUE support *TRUE-name*, the AXE transaction encountered an error attempting to execute SQL.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

sql request is the SQL request being executed.

sqlcode, *errd1*, and *errd2* are the return code information.

Refer to Chapter 18, “SQLCODEs” on page 237 for an explanation of the error.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Refer this message to your DB2 Server for VSE system programmer.

System Programmer Response: Correct the SQL error.

ARI4008E Server *server-name* is not ready.

Explanation: While autostarting DRDA TRUE support, the AXE transaction could not connect to the application server for which the DRDA TRUE support was being autostarted. Either the application server has not been started or it has not yet completed its initialization process.

server-name is the name of the application server for which the DRDA TRUE support was being autostarted.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Start the application server with SYNCPNT = "Y".

ARI4009E VSE EXTRACT macro failed for DRDA TRUE *TRUE-name*. Operating system return code = *return-code*.

Explanation: While autostarting DRDA TRUE support, the AXE transaction issued a VSE EXTRACT request to obtain the partition start and end addresses. The EXTRACT request failed.

TRUE-name is the name of the DRDA TRUE support the AXE transaction is autostarting.

return-code is the return code from the operating system.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Save this message and report this problem to the designated support group for your installation.

ARI4010I The following DRDA TRUE support enabling parameters have been saved: LANGID = *langid*. SERVER_NAME = *server-name*. SERVER_APPLID = *server-applid*. These parameters will be used by the AXE transaction when it autostarts DRDA TRUE support.

Explanation: The DAXP transaction has saved the default settings for the DRDA TRUE of application server *server-name*.

langid is the DAXP LANGID parameter.

server-name is the DAXP SERVER_NAME parameter.

server-applid is the server APPLID of the DAXP SERVER_NAME parameter.

System Action: The default settings will be used by the AXE transaction the next time it autostarts the DRDA TRUE support for this server.

ARI4011I The *tran* transaction cannot be started at this time. The resource *res* is not available. Please try later.

Explanation: A CICS resource used by DB2 Server for VSE for the DRDA TRUE is currently held by either the AXE transaction while autostarting DRDA TRUE support or the DAXT transaction.

tran is the transaction identifier of the invoked transaction.

res is the name of the resource to be enqueued.

System Action: The invoked transaction is cancelled. The transaction holding the resource continues to execute.

Operator Response: Try the transaction again at a later time. Usually the resource is held for a few moments.

ARI4012I The disable transaction *tran* must delay for a *interval*- second interval before it retries EXEC CICS DISABLE for DRDA TRUE *TRUE-name*.

Explanation: The DAXT transaction was disabling a DRDA TRUE. However, EXEC CICS DISABLE has returned a code indicating that AXE transactions are still active.

tran is the transaction identifier DAXT.

interval is the delay time interval in seconds (INTERVAL input parameter).

TRUE-name is the name of the DRDA TRUE to be disabled.

System Action: The DAXT transaction issues EXEC CICS DELAY with the keyword INTERVAL equal to the value specified as an input parameter. After the delay,

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it will again attempt to issue EXEC CICS DISABLE. If the disable attempt fails, DAXT will issue a retry message (see message ARI4013A) and terminate in order to free the terminal. If the disable attempts succeeds, DAXT will issue a disable done message (see message ARI0191I) and terminate.

Operator Response: Do nothing until the retry message ARI4013A is displayed, or the disable done message ARI0191I is displayed.

ARI4013A **Retry the disable transaction *tran*. Application transactions are accessing the DRDA TRUE for *server-name*.**

Explanation: The DAXT transaction was not able to continue because the EXEC CICS DISABLE interface indicated that AXE transactions which previously accessed DB2 Server for VSE were still active. This causes the DAXT transaction to delay for a time interval (INTERVAL input parameter to DAXT) as had been indicated by message ARI4012I. The delay interval has completed but the condition still exists.

tran is the transaction identifier DAXT.

server-name is the name of the application server for which we are disabling the DRDA TRUE support.

System Action: The DAXT transaction ends.

Operator Response: After all AXE transactions which are or were accessing DB2 Server for VSE have terminated, the DAXT transaction should be reentered.

ARI4014E **System error occurred in the DRDA TRUE *TRUE-name*. Internal shutdown of the DRDA TRUE is starting. Errnum = *enum*.**

Explanation: An internal system error occurred within the DRDA TRUE *TRUE-name*.

TRUE-name is the name of the DRDA TRUE which encountered an internal system error.

enum is the error number used to identify what error had occurred in the DRDA TRUE support.

System Action: The DRDA TRUE began to terminate itself by internally activating the DAXT transaction. DAXT wrote the message.

Operator Response: Refer this message to your DB2 Server for VSE system programmer.

ARI4015E **A DAXP entry was found for server name *server-name* but its APPLID does not match the AXE transaction APPLID. DAXP server APPLID = *dapplid*. AXE server APPLID = *aapplid*.**

Explanation: While enabling the DRDA TRUE support for application server *server-name*, the AXE transaction detected an error when it was using the DRDA TRUE

defaults set by the DAXP transaction for this application server. The server APPLID determined by the DAXP transaction is different from the server APPLID determined by the AXE transaction. This situation will happen when the DB2 Server for VSE DBNAME Directory and the DAXP parameters are out of sync.

server-name is the name of the application server for whom the AXE transaction is autostarting the DRDA TRUE support.

dapplid is the APPLID of the application server as determined by the DAXP transaction.

aapplid is the APPLID of the application server as determined by the AXE transaction.

System Action: The AXE transaction ends the enabling of the DRDA TRUE.

Operator Response: Reissue the DAXP transaction.

ARI4016I **The following DRDA TRUE support enabling parameters have been replaced: LANGID = *langid*. SERVER_NAME = *server-name*. SERVER_APPLID = *server-applid*.**

Explanation: The DAXP transaction was issued for an application server for which a previous DAXP transaction had been issued. The new DAXP parameters override the previous DAXP parameters. This message is followed by message ARI4010I.

langid is the previous DAXP LANGID parameter.

server-name is the previous DAXP SERVER_NAME parameter.

server-applid is the server APPLID of the previous DAXP SERVER_NAME parameter.

System Action: The new DAXP parameters will be used by the AXE transaction the next time it autostarts the DRDA TRUE support for the application server.

ARI4017E **Guest sharing is not allowed in a DRDA 2 environment. Server APPLID = *server-applid*.**

Explanation: The DAXP transaction was issued for an application server whose APPLID is not within the range 'SYSARI00' to 'SYSARI09' or 'SYSARI0A' to 'SYSARI0Z'. A DRDA2 application requester can only request access to a DB2 Server for VSE application server. Requests for connection to a VM application server (via Guest Sharing) will be rejected.

server-applid is the server APPLID of the DAXP SERVER_NAME parameter.

System Action: The DAXP transaction ends.

ARI4018A Use the database manager SHOW and FORCE commands to commit or rollback the following units of work:

ARI4019I SERVER_NAME = *server-name*. USER ID = *user id*. AGENT IDENTIFIER = *N*.

Explanation: This message can be displayed in the CICS partition or in the database manager partition.

CICS Partition

While autostarting DRDA TRUE support and performing TRUE resynchronization, the AXE transaction was informed by CICS/VSE that a logical unit of work it is trying to resynchronize is lost due to CICS cold start or that a logical unit of work should not be resynchronized because it should not be in-doubt.

Database Manager Partition

After a system or subsystem failure, the database manager detected logical units of work that must be committed or rolled back. These units of work are DRDA2 in-doubt units of work and cannot be resolved automatically by the DRDA TRUE resynchronization support.

server-name is the name of the application server that owns the logical unit of work.

user id is the established DB2 Server for VSE user ID for the logical unit of work.

N is the agent identifier which should be used with the FORCE command.

System Action: The LUW remains unsynchronized with the sync point manager. The LUW still appears when SHOW INDOUBT command is issued.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Use the database manager SHOW CONNECT command to obtain more information about the logical units of work. Then use the database manager FORCE command to commit or rollback the logical units of work.

In order to clear each LUW from SHOW INDOUBT display, it is necessary to use the RESET INDOUBT command.

Manual intervention is necessary, before RESET INDOUBT is issued, to ensure that the LUW is in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers.

ARI4020E The DRDA TRUE *TRUE-name* detected an error during synchronization. SQLCODE = *sqlcode*. SQLERRD1 = *errd1*. SQLERRD2 = *errd2*.

Explanation: The DRDA TRUE support detected an error while processing a rollback request or phase 2 of a 2-phase commit request.

TRUE-name is the name of the DRDA TRUE that detected the synchronization error.

sqlcode, *errd1*, and *errd2* is the SQL return information. Refer to Chapter 18, "SQLCODEs" on page 237 for an explanation of the error.

System Action: The DRDA TRUE is not terminated. CICS/VSE communicates the error back to the DRDA2 application requester's sync point manager.

Operator Response: Refer this message to your DB2 Server for VSE database administrator.

Database Administrator Action: Manual intervention is necessary to ensure that the LUW is in a consistent state at all sites where the LUW has been distributed. This may require intervention at this database manager, or possibly at other database managers.

ARI4024I DRDA TRUE is disabling for server *server-name*.

Explanation: The DAXT transaction started to disable the DRDA TRUE support for an application server.

server-name is the name of the application server for which Distributed Unit of Work support is to be disabled.

System Action: The DAXT transaction continues with the process of disabling the DRDA TRUE support.

Database Administrator Action: Watch to make sure that no error messages appear after ARI4024I.

ARI4025E DAXP table overflow encountered. The new DRDA TRUE support enabling parameters have not been saved.

Explanation: The DAXT transaction was trying to save the new DRDA TRUE enabling parameters in a table, but detected an overflow condition.

System Action: The DAXP transaction terminates and the new DRDA TRUE enabling parameters are not saved.

Operator Response: Refer this message to your DB2 Server for VSE system programmer.

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ARI4026E Product key validation failed. Return code = *rc*.

Explanation: A valid product license key is not found or is invalid. A valid key is required to run DB2 Server for VSE. The possible values for the return code are:

- 8 The key is not found or the key that was found is invalid.
- 20 The key validation routine is not loaded.

System Action: The system is not started.

User Response: Report this error to your system programmer.

System Programmer Response: Obtain and install a valid key for the product. A valid key can be obtained by contacting your IBM representative. Instructions for installing the key are found in the *DB2 Server for VSE Program Directory*.

ARI4027W There are *n* day(s) left in the evaluation period for the product DB2/VSE.

Explanation: A valid license key has not been installed for this product. The evaluation period will expire after the specified number of days. The product is enabled for a limited period of time. When the evaluation period has expired, it will not execute until a license key for the product is installed.

System Action: Processing continues.

User Response: Report this error to your system programmer.

System Programmer Response: Obtain and install a valid key for the product. A valid key can be obtained by contacting your IBM representative. Instructions for installing the key are found in the *DB2 Server for VSE Program Directory*.

ARI4028I DB2 Server for VSE Version *N1* Release *N2* Modification *N3*

Explanation: This message reports the current version, release and modification level of the database manager.

System Action: Processing continues.

ARI4029I Alternate logging is not enabled because LOGMODE is not L.

Explanation: The database manager detected an inactive log is defined in the system. However, the inactive log can only be used when LOGMODE=L.

System Action: Processing continues.

Operator Response: Refer this message to your system programmer.

System Programmer Response: If alternate logging is to be enabled, ensure the operator is requested to start

the application server with LOGMODE=L.

ARI4100I TCP/IP service initialized from {*DBNAME DIRECTORY*/*TCPPORT*/*WELL KNOWN PORT*}. TCP/IP Port is *port-number*.

Explanation: The TCP/IP service was successfully initialized by the application server.

TCP/IP service can be initialized from the Dbname Directory, TCPPORT, or the Well Known Port, 446. If it is Dbname Directory, then the port number was determined by a lookup in the Dbname Directory. If it is TCPPORT, then the port number was taken from the TCPPORT parameter specified during database startup or in the START TCPIP operator command. If it is WELL KNOWN PORT, it means TCPPORT is not specified either during startup or in the Dbname Directory. The predefined well known port number, 446, is used.

System Action: The application server listens for TCP/IP connect requests on the port identified in *port-number*. The application server is able to handle both SNA connections and TCP/IP connections.

ARI4102I Unable to initialize TCP/IP service.

Explanation: The application was unable to initialize TCP/IP services because access to TCP/IP for VSE was not available.

System Action: The application system continues, but it can only accept SNA connections.

Operator Response: Report this error to your system programmer.

System Programmer Response: If TCP/IP services are required, make sure that TCP/IP for VSE is available and running, and the two-digit ID number specified for the SYSPARM= parameter in the OPTION statement of the application server startup job control is correct. Once the error condition is resolved, issue the START TCPIP operator command to restart TCP/IP support. If TCP/IP services are not required, ignore this message or start the application server with the TCPPORT=0 parameter to bypass the TCP/IP initialization.

ARI4103I TCP/IP service *service-name* failed. Return code = *n*.

Explanation: A TCP/IP function was performed but an error occurred during the execution of the function. *service-name* identifies the function and *n* is the return code that was received.

System Action: The system continues.

Operator Response: Report this error to your system programmer.

System Programmer Response: Take corrective action,

if necessary, based on the function and return code received.

The description of the function and the explanation of the return code reported by this message can be found in the *VSE/ESA Version 2 Release 3 Enhancement manual*.

ARI4109E While trying to process an external security manager request through the RACROUTE macro, an error occurred.

Function = *function*
SAF Return Code = *X'return code'*
ESM Return Code = *X'return code'*
ESM Reason Code = *X'reason code'*

Explanation: The application server issued the RACROUTE macro to authenticate a userid. The RACROUTE macro responded with the information described in the message.

System Action: Authentication of the userid failed. For REQUEST=VERIFY, SECTYPE remains at ESM and processing continues. For REQUEST=STAT, SECTYPE is changed to DB2.

System Programmer Response: Correct the problem with the external security manager. For more information about the return codes and reason codes, see *Workbook for External Security Managers/Resource Managers*.

ARI4110E ESM function *ESM function* failed.
Return code = *return code*

Explanation: The application server was performing function *ESM function* and encountered an error. *return code* indicates the error that occurred.

System Action: Processing continues.

System Programmer Response: Report this error to the designated support group for your installation.

ARI4111I Unable to find *host-name* in IPINIT*nn* file.

Explanation: The application server attempted to search the IPINIT*nn* file for the value identified by *host-name*.

System Action: The system continues, the application server will discontinue TCP/IP Only initialization. The application server will only be able to accept SNA connections.

Programmer Response: Report this message to your system programmer.

System Programmer Response: Determine if an entry for *host-name* should be defined to the IPINIT*nn* file. Add the entry if it is required.

ARI4112I TCPSPORT *nnnnn* is invalid. It must be in the range from *n1* to *n2*.

Explanation: An invalid port number was specified in the START TCPIP TCPSPORT operator command, *nnnnn* is the port number specified.

n1 is the lower limit (or minimum) for the correct parameter value.

n2 is the upper limit (or maximum) for the correct parameter value.

System Action: The system continues, the application server ignores the restart TCP/IP request. The application server will only be able to accept SNA connections.

Operator Response: Retry the command by specifying a valid port number.

ARI4113I TCP/IP support for the database manager was never enabled. Start request is ignored.

Explanation: The START TCPIP operator command was issued while the TCP/IP support initialization process was never invoked during application server startup. The restart process is relying on the TCP/IP agent structure previously created during application server initialization. Without the agent structure, restart process cannot be performed. This is the case where either TCPSPORT = 0 was specified or RMTUSERS = 0 was specified.

System Action: The system continues, the application server ignores the restart TCP/IP request. The application server will only be able to accept SNA connections.

Operator Response: Report this error to your system programmer.

System Programmer Response: Restart the application server by specifying a valid TCPSPORT parameter if TCP/IP support is desired.

ARI4114I TCP/IP support for the database manager is still active. Start request is ignored.

Explanation: The START TCPIP operator command was issued, but the TCP/IP support for the application server is still active.

System Action: The system continues, the application server ignores the restart TCP/IP request.

Operator Response: Issue the START TCPIP command only after TCP/IP support for the application server went down abnormally.

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ARI4115I TCP/IP support for the database server is disabled.

Explanation: TCP/IP support for the application server is disabled. This could be the result of a severe error detected during the execution of a TCP/IP function. The listener socket of the application server is closed and no new TCP/IP connect request can be accepted. The application server will only be able to accept SNA connections.

For the error situation encountered, there should be a preceding message that describes the error. Refer to the corresponding message and take action accordingly.

System Action: The system continues, but no TCP/IP support is available.

Operator Response: Report this error to your system programmer.

System Programmer Response: Take correction action, if necessary, based on the function and return code received in the preceding error message. Once the error condition is resolved, issue the START TCPIP operator command to restart TCP/IP support if TCP/IP communication for the application server is desired.

ARI4116I TCP/IP automatic restart begins. Attempt = *number*.

Explanation: The database manager has detected that TCP/IP support has been disabled and is attempting to re-enable TCP/IP support. *Number* indicates how many times the database manager has attempted to re-enable TCP/IP support. Refer to *DB2 Server for VSE System Administration* for information on the strategy used by the database manager to re-enable TCP/IP support.

System Action: The system attempts to re-enable TCP/IP support. All other processing continues.

Operator Response: Automatic restart can be disabled by issuing the operator command SET TCPRETRY N.

ARI4117E TCP/IP automatic restart attempt *number* failed. Attempts remaining.

Explanation: The database manager has attempted to re-enable TCP/IP support. The attempt was unsuccessful. *Number* indicates how many times the database manager has attempted to re-enable TCP/IP support. *Attempts* indicates how many more times the database manager will attempt to re-enable TCP/IP support. It is calculated as TCPMAXRT minus *number*.

System Action: The system will continue to attempt to re-enable TCP/IP support until support has been re-enabled, or the maximum number of attempts has been reached, or the operator disables the automatic restart support by issuing the command SET TCPRETRY N. All other processing continues.

Operator Response: Automatic restart can be disabled by issuing the operator command SET TCPRETRY N.

The maximum number of attempts can be increased by issuing the operator command SET TCPMAXRT *n*.

ARI4118I The TCP/IP automatic restart is disabled.

Explanation: The database manager or the operator has disabled automatic restart of TCP/IP support.

System Action: The system processing continues. If TCP/IP support becomes disabled, it must be restarted manually.

Operator Response: Automatic restart can be enabled by issuing the operator command SET TCPRETRY Y.

ARI4119I The TCP/IP automatic restart is enabled.

Explanation: The database manager or the operator has enabled automatic restart of TCP/IP support.

System Action: The system processing continues. If TCP/IP support becomes disabled, the database manager will attempt to restart it automatically.

Operator Response: Automatic restart can be disabled by issuing the operator command SET TCPRETRY N.

ARI4120I Maximum number of automatic TCP/IP restart attempts has been reached.

Explanation: The maximum number of automatic TCP/IP restart attempts, as defined by the TCPMAXRT initialization parameter, has been reached.

System Action: The database manager disables automatic TCP/IP restart and sets the value of TCPRETRY to N.

Operator Response: Automatic restart can be enabled again by issuing the operator command SET TCPRETRY Y. If the maximum number of attempts is too small, it can be changed by issuing the operator command SET TCPMAXRT *n*.

ARI4121E TCP/IP restart is in progress. The SET *option* command is not allowed at this time.

Explanation: TCP/IP restart is in progress and an attempt was made to change the value of TCPRETRY or TCPMAXRT. These values cannot be changed when TCP/IP restart is in progress.

System Action: The SET command is ignored. The database manager continues with the TCP/IP restart that is already in progress.

Operator Response: The SET command can be entered again when the TCP/IP restart attempt ends.

ARI4122I TCP/IP automatic restart disabled and cannot be enabled.

Explanation: The database manager disabled TCP/IP automatic restart because of a system error. The SET TCPRETRY Y command cannot be used to enable TCP/IP automatic restart.

System Action: The system continues.

Operator Response: TCP/IP can be re-enabled manually with the START TCPIP operator command. Automatic TCP/IP restart can be enabled by stopping the database manager with the SQLEND command and starting it again.

ARI4123E TCP/IP support has used all available sockets and cannot be started.

Explanation: TCP/IP support has been disabled because the VSE limit of 8000 sockets was reached. The START TCPIP command and automatic TCP/IP restart cannot be used to re-enable TCP/IP support.

System Action: The system continues without TCP/IP support available.

Operator Response: Stop the database manager with the SQLEND command and restart it to enable TCP/IP support.

ARI4124I TCP/IP service input parameters

```
<input parameter 1> = value_1
<input parameter 2> = value_2
...
<input parameter n> = value_n
```

Explanation: This message is an extension of ARI4103I and lists the input parameters for a TCP/IP service. The number and value of the input parameters varies depending on which TCP/IP service caused the error. An example of the message's appearance (using the SOCKET TCP/IP service) would be:

```
ARI4124I  TCP/IP service input parameters
          TCP/IP blocking = x
```

The TCP/IP service causing the error is indicated by message ARI4103I which is displayed immediately before this message.

System Action: The system continues.

Operator Response: Report this error to your system programmer.

System Programmer Response: Take corrective action, if necessary, based on the function input.

ARI4150E Stored Procedure *proc-name* failed. Stored procedure server *serv-name* returned the following information:

```
Stored Procedure SQLCODE = sql-code
Module and failure point = failure-point
CEEPIPI return code = ce-rc
LE enclave return code = le-rc
LE enclave reason code = le-reason-code
```

Explanation: An error occurred while executing a CALL request. The stored procedure server *server-name* terminated abnormally. Only error information returned by the stored procedure server is displayed. User will receive SQLCODE -471 as a result of the same failure.

System Action: Processing of the SQL statement has ended.

System Programmer Response: Use error information displayed, and SQLCODE -471 reason code received by user to determine the cause of the problem.

ARI4151I FORMAT 1
START PROC successful for *proc-name*.
FORMAT 2
START PROC successful for *proc-name* for AUTHID *authid*.

Explanation: The stored procedure referenced has been started successfully.

System Action: Processing of the operator command has completed.

ARI4152E FORMAT 1
START PROC failed for *proc-name*.
Reason Code *reason-code*.
FORMAT 2
START PROC failed for *proc-name* for AUTHID *authid*.
Reason Code *reason-code*.

Explanation: Processing of the command failed. Possible reason codes are:

- 1 The procedure is not found.
- 2 A wildcard is used improperly in the procedure name.
- 3 A wildcard is found in the *authid*.
- 4 The procedure name specified is a keyword.
- 5 The *authid* specified is a keyword.

System Action: The operator command is not processed.

Operator Response: Correct the error and issue the command again.

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ARI4153I **FORMAT 1**
Stored procedure *proc-name* is
already started.
FORMAT 2
Stored procedure *proc-name* for
AUTHID *authid* is already
started.

Explanation: The stored procedure referenced was started by a previous START PROC command.

System Action: Processing of the operator command has ended.

ARI4154I **FORMAT 1**
Stored procedure *proc-name* is not
found.
FORMAT 2
Stored procedure *proc-name* for
AUTHID *authid* is not
found.
FORMAT 3
Wildcard is used improperly in stored
procedure name *proc-name*.
FORMAT 4
Wildcard is used improperly in
AUTHID *authid* for stored procedure
proc-name.
FORMAT 5
Stored procedure
name *proc-name* is
a keyword.
FORMAT 6
AUTHID *authid* for
stored procedure
name *proc-name* is a keyword.
FORMAT 7
ACTION *action* specified is invalid.
Only QUEUE and REJECT are valid.

Explanation: This message provides information about an error that occurred when an operator command was issued. It indicates that either

1. The procedure specified was not found in the cached information from SYSTEM.SYSROUTINES
2. Invalid information was entered.

System Action: Processing of the operator command has ended.

Operator Response: Correct the source of the error and issue the command again.

ARI4155I **FORMAT 1**
STOP PROC successful for
proc-name.
FORMAT 2
STOP PROC successful for *proc-name*
for AUTHID *authid*.

Explanation: The stored procedure referenced has been stopped successfully.

System Action: Processing of the operator command has completed.

ARI4156I **FORMAT 1**
New calls to stored procedure
proc-name will
be *action-code*.
FORMAT 2
New calls to stored procedure
proc-name with AUTHID *authid*
will be *action-code*.

Explanation: This message is displayed when a stored procedure is stopped. It indicates how subsequent CALLs to that procedure will be handled.

proc-name

The name of the stored procedure

authid

The authorization ID associated with the stored procedure

action-code

Either QUEUED or REJECTED

System Action: The STOP PROC command has completed successfully for the procedure indicated.

ARI4157E **FORMAT 1**
STOP PROC failed for *proc-name*.
Reason code *reason-code*.
FORMAT 2
STOP PROC failed for *proc-name*
for AUTHID *authid*.
Reason code *reason-code*.

Explanation: Processing of the command failed. Possible reason codes are:

- 1 The procedure is not found.
- 2 A wildcard is used improperly in the procedure name.
- 3 A wildcard is found in *authid*.
- 4 The procedure name specified is a keyword.
- 5 The *authid* specified is a keyword.
- 6 *Action* specified is invalid. Only QUEUE and REJECT are valid.

System Action: Processing of the operator command has ended.

Operator Response: Correct the error and issue the command again.

ARI4158E **Error in operator command** *oper-cmd*.
Reason code *reason-code*.

Explanation: Processing of the command failed. Possible reason codes are:

- 1 The stored procedure is not found.

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- 2 A wildcard is used improperly in the procedure name.
- 3 A wildcard is found in *authid*.
- 4 The procedure name specified is a keyword.
- 5 The *authid* specified is a keyword.
- 6 Stored procedure server is not defined.
- 7 Stored procedure server group is not defined.
- 8 A wildcard is used improperly in the stored procedure server name.
- 9 A wildcard is used improperly in the stored procedure server group name.
- 10 The stored procedure server name specified is a keyword.
- 11 The stored procedure server group name specified is a keyword.

oper-cmd The operator command issued.

System Action: Processing of the operator command has ended.

Operator Response: Correct the error and issue the command again.

ARI4159I **FORMAT 1**
Stored procedure *proc-name* is already stopped.
FORMAT 2
Stored procedure *proc-name* for AUTHID *authid* is already stopped.

Explanation: The stored procedure referenced was stopped by a previous STOP PROC command.

System Action: Processing of the operator command continues.

ARI4160E **Operator command *oper-cmd* has insufficient number of input parameters.**

Explanation: The command entered did not use the correct syntax.

oper-cmd The operator command issued.

Operator Response: Refer to the *DB2 Server for VSE & VM Operation* manual for the syntax diagram for the command.

ARI4161E **Operator command *oper-cmd* has too many input parameters.**

Explanation: The command entered did not use the correct syntax.

oper-cmd The operator command issued.

System Action: Processing of the operator command has terminated.

Operator Response: Refer to the *DB2 Server for VSE & VM Operation* manual for the syntax diagram for the command.

ARI4162I **Stored procedure server *serv-name* has been started.**

Explanation: The stored procedure server *serv-name* is able to accept SQL CALL statements to run stored procedures associated with this server.

System Action: Operator command complete successfully. Processing continues.

ARI4163I **FORMAT 1**
Stored procedure server *serv-name* is not defined.
FORMAT 2
Stored procedure server group *serv-group-name* is not defined.
FORMAT 3
Wildcard is used improperly in stored procedure server name *serv-name*.
FORMAT 4
Wildcard is used improperly in stored procedure server group name *serv-group-name*.
FORMAT 5
Stored procedure server name *serv-name* is a keyword.
FORMAT 6
Stored procedure server group name *serv-group-name* is a keyword.

Explanation: This message provides information about an error that occurred when an operator command was issued. It indicates that either

1. The stored procedure server specified was not found in the cached information from SYSTEM.SYSPSERVERS
2. Invalid information was entered.

System Action: Processing of the operator command terminates.

Operator Response: Correct the error and issue the command again.

ARI4164I **Stored procedure server *serv-name* is already started.**

Explanation: The stored procedure server *serv-name* was started by a previous START PSERVER command.

System Action: Processing of the operator command has ended.

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ARI4165I **START PSERVER cannot be processed for *server-name* because it has a status of *status*.**

Explanation: Only a stored procedure server that is currently stopped can be started. Possible values for *status* are:

- STARTING
- STOPPING

System Action: Processing of the operator command terminates.

Operator Response:

- If the current status is STARTING, no action is necessary.
- If the current status is STOPPING, the stored procedure server is waiting for a stored procedure to complete. When the stored procedure finishes, the stored procedure server will be terminate, and then the START PSERVER command can be issued for that stored procedure server.

If you need to stop and start the stored procedure immediately, you can use the STOP PSERVER command with the QUICK option, and then issue the START PSERVER command.

ARI4166I **FORMAT 1
Unable to acquire storage for a pseudoagent for server *server-name*.
FORMAT 2
Unable to acquire storage for an XPCC control block for server *server-name*.**

Explanation: In VM, when START PSERVER is issued, the database manager allocates the pseudoagent structure to be used for the connection between the database manager and the stored procedure server. In VSE, when START PSERVER is issued, the database manager allocates an XPCC control block to be used for the connection between the database manager and the stored procedure server. In either case, if storage for the structure is not available, the START PSERVER command cannot complete.

System Action: Processing of the operator command terminates.

Operator Response: Try the command again later. Since storage utilization on the database manager varies depending on the number of active agents and their activities, storage may become available, enabling the command to complete.

Database Administrator Action:

Consider whether the amount of storage available to the database manager needs to be increased.

ARI4167E **FORMAT 1
START PSERVER for *servo-name* failed.
Reason code *reason-code*.
FORMAT 2
START PSERVER GROUP for *servo-group-name* failed.
Reason code *reason-code*.**

Explanation: Processing of the command failed. Possible reason codes are:

- 1 Stored procedure server *servo-name* is not defined.
- 2 Stored procedure server group *servo-group-name* is not defined.
- 3 The database manager is not able to acquire a pseudoagent for the stored procedure server.
- 4 The database manager is not able to allocate an XPCC control block for the stored procedure server.
- 5 START PSERVER cannot be issued for a stored procedure server that has a status of STARTING.
- 6 START PSERVER cannot be issued for a stored procedure server that has a status of STOPPING.
- 7 Wildcard is used improperly in stored procedure server name *servo-name*.
- 8 Wildcard is used improperly in stored procedure server group name *servo-group-name*.
- 9 Stored procedure server name *servo-name* specified is a keyword.
- 10 Stored procedure server group name *servo-group-name* specified is a keyword.

System Action: Processing of the operator command has ended.

Operator Response: This message is preceded by an informational message that indicates the reason for the error. Follow the instructions given in the Operator Response for the informational message.

ARI4168I **START PSERVER operator command timed out.**

Explanation: The START PSERVER command did not complete in the amount of time specified by the initialization parameter PTIMEOUT. Either:

- the PTIMEOUT value is too short
- the database manager was not able to connect to the stored procedure server

System Action: Processing of the operator command terminates.

System Programmer Response: If the connection

failed, use the diagnostic information displayed to determine the source of the problem and correct the error.

Database Administrator Action:

If no error occurred during the attempt to connect to the stored procedure server, consider whether the PTIMEOUT value should be increased.

ARI4169E **FORMAT 1**
Stored Procedure *proc-name* has exceeded the maximum number of abends allowed. It has been stopped successfully. New calls will be rejected.
FORMAT 2
Stored Procedure *proc-name* for AUTHID *authid* has exceeded the maximum number of abends allowed. It has been stopped successfully. New calls will be rejected.

Explanation: A stored procedure has exceeded the number of allowed abnormal terminations as defined by PROCMXAB init parameter.

System Action: Processing of the SQL statement has ended.

Operator Response: Issue START PROC command to restart the procedure.

Programmer Response: Determine the reason for stored procedure abend.

ARI4170E **FORMAT 1**
Cannot *action* stored procedure *proc-name* The cache structure is currently being updated by another agent.
FORMAT 2
Cannot *action* stored procedure *proc-name* for AUTHID *authid* The cache structure is currently being updated by another agent.
FORMAT 3
Cannot *action* stored procedure server *serv-name* The cache structure is currently being updated by another agent.

Explanation: The cache structure is currently being updated by another agent.

System Action: Processing of the operator command has ended.

Operator Response: Issue the command again at a later time

ARI4171I **FORMAT 1**
Stored procedure server *serv-name* has been stopped. It can be implicitly started.
FORMAT 2
Stored procedure server *serv-name* has been stopped. It cannot be implicitly started.

Explanation: Stored procedure server *serv-name* has been deactivated as requested by a STOP PSERVER or SQLEND command.

System Action: Processing of the operator command is complete.

ARI4172I **Stored procedure server *serv-name* is already stopped.**

Explanation: The stored procedure server *serv-name* was stopped by a previous STOP PSERVER command.

System Action: Processing of the operator command terminates.

ARI4173I **FORMAT 1**
Stored procedure server *serv-name* is waiting for stored procedure *proc-name* to finish.
FORMAT 2
Stored procedure server *serv-name* is waiting for stored procedure *proc-name* with AUTHID *authid* to finish.

Explanation: The STOP PSERVER command was issued for a stored procedure server that is currently running a stored procedure.

System Action: When the stored procedure finishes, the database manager will stop the stored procedure server.

Operator Response: If you must stop the stored procedure server immediately, issue the STOP PSERVER command again, specifying the QUICK option.

ARI4174E **FORMAT 1**
STOP PSERVER for *serv-name* failed. Reason code *reason-code*.
FORMAT 2
STOP PSERVER GROUP for *serv-group-name* failed. Reason code *reason-code*.

Explanation: Processing of the command failed. Possible reason codes are:

- 1 The definition of the stored procedure server *serv-name* is not found.
- 2 The definition of the stored procedure server group *serv-group-name* is not found.

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- 3 A wildcard is used improperly in stored procedure server name *serv-name*.
- 4 A wildcard is used improperly in stored procedure server group name *serv-group-name*.
- 5 The stored procedure server name *serv-name* specified is a keyword.
- 6 The stored procedure server group name *serv-group-name* specified is a keyword.

System Action: Processing of the operator command has ended.

Operator Response: Correct the error and issue the command again.

ARI4175I **The *cach-name* cache is loaded at *load-address*.**

Explanation: *cach-name* is the name of the cache loaded by the database manager.

load-address is the storage address (expressed in hexadecimal) where the cache was loaded.

System Action: Processing continues.

System Programmer Response: You may want to note the address for use in any potential problem determination.

ARI4598E **You cannot DELETE the system default record from the SQLGLOB file.**

Explanation: The ARICBGUD Batch Program has been requested to delete the system default record (userid=*SYSDEF*). This is not allowed. It can only be queried or updated.

System Action: The input record is ignored. The program will process the next input record.

ARI4599E **Invalid COMMAND given, must be 'Q'(Query), 'U'(Update), or 'D'(Delete).**

Explanation: The ARICBGUD Batch Program to update the SQLGLOB file has been given an invalid command code. The code must be either 'Q', 'U', or 'D', for Query, Update, or Delete, respectively.

System Action: The input record is ignored. The program will process the next input record.

Programmer Response: Correct the invalid command code and resubmit the input record.

Chapter 7. ARI0500–ARI0511 SQL Messages

The SQL messages are associated with the SQLCODEs. These messages provide general information; they do not give detailed descriptions of the cause of the error. The SQLCODE appears in message ARI0505I. The text following messages ARI0501 and ARI0503 is the SQLCODE descriptive text. To find the explanation and related action, refer to Chapter 18, “SQLCODEs” on page 237 of this manual.

ARI0500I SQL processing was successful.

Explanation: The processing of the SQL statement was successful. This message occurs only when SQLCODE = 0 and no SQL warning conditions occurred during SQL statement processing. This message is followed by message ARI0505I, which indicates the SQLCODE and ROWCOUNT information.

System Action: Normal completion.

ARI0501I An SQL warning has occurred. *SQLCODE descriptive text*

Explanation: This message occurs when either:

- The SQLCODE is greater than zero, or
- The SQLCODE is zero and SQL warning conditions occurred during SQL statement processing, or
- The SQLCODE is negative, but the preprocessor is treating it as a warning at preprocessing time.

This message is followed by message ARI0505I, which provides the SQLCODE and ROWCOUNT information, and in the first two conditions, the ARI0502I message that indicates the specific warning conditions.

The SQLCODE descriptive text describes the SQLCODE error condition.

System Action: SQL statement processing completed successfully.

User Response: For an SQLCODE greater than zero, take action based upon the SQLCODE descriptive text. For the SQLCODE of zero, take action defined for message ARI0502I. For an SQL code of less than zero, correct the problem described in the SQLCODE descriptive text before the application program is executed.

ARI0502I Following SQL warning conditions encountered: {truncation | NULLIGNORED | mismatch | NULLWHERE | performance | implicit rollback | adjustment | ineligible | no storage | can't fit 2}.

Explanation: Each of the SQL processing warning condition keywords is directly associated with an SQLCA SQLWARN indicator. The applicable SQLWARN indicator is identified in the explanation of each keyword.

TRUNCATION (SQLWARN1) - one or more of the requested data items was truncated due to insufficient space in the declared program variable. By examining the null indicator variables of the data items returned, you can find which data items were truncated. A positive value in the null indicator denotes actual length before truncation.

Set to W, if the value of a string column was truncated when it was assigned to a host variable.

Set to Z, if mixed character data was truncated and the resulting data does not follow the proper rules regarding mixed data.

Set to Z, if both W and Z truncations occur.

NULLIGNORED (SQLWARN2) - set to W, if null values were ignored in the computation of a column function such as AVG, SUM, MAX, MIN, or COUNT.

MISMATCH (SQLWARN3) - set to W, if the number of target variables in the INTO clause is less than the number of items in the SELECT list.

If the number of target variables in the INTO clause is greater than the number of items in the SELECT list, then the warning flag will not be set.

NULLWHERE (SQLWARN4) - set to W, if an UPDATE or DELETE command has been used without a WHERE clause. The user should verify that the update or deletion was intended unconditionally on the entire table.

PERFORMANCE (SQLWARN5) - set to W, if a WHERE clause, represented internally by one or more search arguments, associated with a SELECT statement has exceeded a DB2 Server for VSE internal limitation. This means that a performance degradation will result because the database manager will not internally convert eligible predicates to search arguments. The database manager may still choose to use indexes for eligible predicates, but if not, degradation may further be increased since a DBSPACE scan would be used to retrieve query data. Decreasing the number of predicates, such as by removing unnecessary conditions

SQL Messages – ARI0500-ARI0511

which may exist in the WHERE clause of the SELECT statement, may alleviate this condition.

IMPLICIT ROLLBACK (SQLWARN6) - the logical unit of work is no longer active. It has been rolled back due to a system failure.

Set to W, when the database manager is forced to terminate a logical unit of work.

Set to S, when the database manager issues a severe SQLCODE.

ADJUSTMENT (SQLWARN7) - set to W, when an adjustment has been made to a derived date or timestamp value for the last day of the month.

Set to Z, when the divisor or dividend of a DECIMAL divide operation requires readjustment in order to complete the divide operation. This may affect the accuracy of the quotient (result).

INELIGIBLE (SQLWARN8) - set to W, if the statement is disqualified for blocking for reasons other than storage, such as use of long fields.

Set to Z, if a character that could not be converted was replaced with a substitute character.

NO STORAGE (SQLWARN9) - set to W, if there was insufficient storage for blocking and therefore blocking is cancelled for the subject cursor.

CAN'T FIT 2 (SQLWARNA) - set to W, if blocking factor of at least two rows cannot be maintained and therefore blocking is cancelled for the subject cursor.

System Action: Normal completion; SQL statement processed successfully.

User Response: Take appropriate action based upon warning condition.

ARI0503E **An SQL error has occurred.** *SQLCODE*
descriptive text

Explanation: Processing of the SQL statement was not successful. This message is followed by message ARI0505I, which provides the SQLCODE and ROWCOUNT information, and message ARI0504I, which indicates the condition that caused the error message.

SQLCODE descriptive text is derived from SQLCODE descriptive text modules. Multiple lines of SQLCODE descriptive text may appear.

System Action: SQL statement was not processed.

User Response: Take action based on the SQLCODE descriptive text. For additional information on the specific problem, refer to the appropriate SQLCODE in the section Chapter 18, "SQLCODEs" on page 237, or use the SQLCODE number as the topic for the ISQL HELP command (for example: enter HELP -105).

ARI0504I **SQLERRP:** *ppppppppp* **SQLERRD1:** *nnn*
SQLERRD2: *nnn*.

Explanation:

SQLERRP RDS module name, preprocessor module name, Resource Adapter module name, or RUN-TIME that set either the warning flag or the SQLCODE.

RUN-TIME means that an error occurred while a DB2 Server for VSE data manipulation statement was being executed.

If an error occurs while the statement is being preprocessed, the RDS module name is displayed. If the error occurs in the run-time access generator (when the statement is being executed), the message text may contain either the RDS module name or the literal string RUN-TIME. The RUN-TIME message is issued when the error is one that cannot be trapped by the access generator run-time modules and is handled by the DB2 Server for VSEabend handler. For example, division by zero or an arithmetic overflow.

SQLERRD1 Secondary return code value set by module *ppppppppp*. This value, along with the module name, can be used by persons responsible for locating problems within the database manager itself. This information is not usually of interest to others. However, if the SQLCODE is -314, the SQLERRD1 value denotes the reason why a host variable was incorrectly declared. Refer to SQLCODE -314 for more information.

SQLERRD2 Return code value set by DBSS or the Resource Adapter. The definition of the Resource Adapter return codes can be found under Chapter 20, "DB2 Server for VSE Reason Codes" on page 355. See Chapter 17, "DBSS Return Codes" on page 231 for definitions of the DBSS return codes.

This message follows messages ARI0503E (or ARI0533E) and ARI0505I.

System Action: See System Action for the associated ARI0503E (or ARI0533E) message.

User Response: See User Response for the associated ARI0503E (or ARI0533E) message.

ARI0505I **SQLCODE = nnn [SQLSTATE = nnnnn]**
ROWCOUNT = nnn

Explanation: This message follows messages ARI0500I, ARI0501I, and ARI0503E (or ARI0533E). In the case of DELETE statements, it only appears when the number of dependent rows affected is greater than zero.

SQLCODE= nnn:

- nnn < 0** SQL statement processing has not been completed because an error occurred.
- nnn = 0** SQL statement processing completed. Warning may or may not indicate an error.
- nnn > 0** This indicates a warning. SQL statement processing completed but one or more unusual conditions occurred.

The text following message ARI0501I or ARI0503E is the SQLCODE descriptive text. To find the explanation and related action, either refer to the section Chapter 18, "SQLCODEs" on page 237 in this manual or enter a HELP command for the SQLCODE indicated.

SQLSTATE=nnnnn, where nnnnn is a 5-digit number associated with an SQLCODE. See Chapter 19, "SQLSTATEs" on page 335 for a list of SQLSTATE values.

Note: The application server does not issue an SQLSTATE value if the error occurs during DB2 Server for VSE preprocessing.

ROWCOUNT = nnn, where nnn is a value that indicates:

- UPDATE** the number of rows updated.
- INSERT** the number of rows inserted.
- DELETE** the number of rows deleted.

For any other SQL statement or catalog migration, the value of ROWCOUNT is not applicable.

System Action: See System Action for the associated SQLCODE.

User Response: See User Response for the associated SQLCODE.

ARI0506I **Dependent rows affected = n.**

Explanation: This message appears only for DELETE statements when the number of dependent rows affected is greater than zero. The command caused changes to dependent tables because of referential constraints with a rule of SET NULL or CASCADE. The number (n) of dependent rows affected is reported.

System Action: Processing of the command continues.

ARI0511E **SQL message formatter error. Reason Code = nn.**

Explanation: The SQL Message Formatter Routine has encountered incorrect parameter values being passed to it by some system internal calling routine.

REASON CODE = nn:

- nn = 10**
The MSGID SQLTEXT flag is set ON but the SQLMSGNO field does not contain either of the valid values, 501 or 503.
- nn = 20**
The MSGID SQLTEXT flag is set OFF with one or more of the MSGID fields nonzero and either the MSGNO field is not equal to the SQLMSGNO field, or the SEQNO field is not greater than 1.

System Action: Processing of the current SQL statement has ended. A return code value of 20 is returned to the calling routine in register 15.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

SQL Messages – ARI0500-ARI0511

Chapter 8. ARI0520–ARI0535, ARI5806-AR5810 Catalog Maintenance Messages

All messages written during catalog generation, catalog migration, and catalog index reorganization are written to the SYSLST file. These include any error messages as well as status messages. If an error occurs while trying to write to SYSLST, message ARI0527A is written to the operator console.

ARI0520E Storage allocation failure. Reason Code = nn.

Explanation: In allocating virtual storage during catalog generation, a GETVIS macro failure occurred. the return code from the GETVIS macro:

- 12 No more GETVIS storage available.
- 32 Hardware storage error.

any other value

DB2 Server for VSE system error.

System Action: Database generation ends.

System Programmer Response: Take action based on the REASON value:

- 12 The database manager partition does not have enough virtual storage. Either modify DB2 Server for VSE initialization parameters so that less storage is required, or reconfigure the system so you have a larger database manager partition. Restart the database generation.
- 32 You have a main storage hardware error. Report this to your installation hardware service person. When the problem is corrected, restart the database generation.

Any other reason

Make a record of what went wrong and contact the designated support group for your installation. When the problem is corrected, restart database generation.

ARI0521E ACCESS error &1C. MACRO &2., input file. Reason Code = nn. Return Code = nn.

Explanation: An error occurred while the system was trying to access the ARISCAT file. This file is a member in the library source statement member (in the A sublibrary). The Reason Code is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 22, "Include File

Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

System Action: If &1C. is ARISCAT, database generation ends unsuccessfully.

Programmer Response: If &1C. is ARISCAT, take action based on the Reason Code and Return Code values.

ARI0522E Catalog generation control record error catalog generation control record.

Explanation: An error occurred while trying to process a catalog generation control record from the ARISCAT file. This file is a library source statement member (in the A sublibrary). One of the following conditions was detected:

- A missing or invalid keyword
- A missing or invalid parameter
- An invalid numeric field
- An invalid record format.

The invalid record is printed as the second line of the message.

System Action: Database generation ends.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation. Restart the database generation after the problem is corrected.

ARI0523E DBSS error occurred while processing the system catalog. Reason Code = nn.

Explanation: In an attempt to update the database during the catalog generation stage of database generation, or the catalog update phase of ADD DBSPACE, or while catalog migration was processing the catalog, a DBSS error occurred. The cause is described by the Reason Code=nn value in the message text. The Reason Code values are DBSS return codes. Refer to the description of the DBSS return codes under Chapter 17, "DBSS Return Codes" on page 231.

System Action: Processing is terminated.

Operator Response: Refer this message to your system programmer.

System Programmer Response: Refer to the description of the DBSS return codes under Chapter 17, "DBSS Return Codes" on page 231. Make a record of what went wrong and contact the designated support group for your installation.

ARI0520-ARI0535, ARI5806-ARI5810 Catalog Maintenance Messages

If the problem occurred during database generation, restart database generation when the problem is corrected.

If the problem occurred during ADD DBSPACE, execute the DB2 Server for VSE start up procedure with the following parameters:

```
STARTUP=W
SYSMODE=S
PROGNAME=ARISEGB
```

This is necessary because the information about the DBSPACES is already recorded in the database. By specifying the above parameters only the catalog update phase of ADD DBSPACE will be executed.

ARI0524E Required objecttype objectname not found in catalogname.

Explanation: In an attempt to locate the DB2 Server for VSE *objecttype objectname*, an error occurred. *objecttype* can be index, link, column, catalog or package. If *objecttype* is an index, link, or column, the associated *catalogname* is displayed in the message text.

System Action: The DB2 Server for VSE database maintenance is terminated.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation. Restart the database maintenance function when the problem is corrected.

ARI0525E Number of columns is incorrect in catalog catalogname.

Explanation: This is a DB2 Server for VSE programming error. An inconsistency was found in the required number of columns for *catalogname* and the actual number of columns which the database manager defined for this catalog during database generation. The catalog generation stage determined that internal data areas were incorrect.

System Action: Database generation is terminated.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation. Restart database generation when the problem is corrected.

ARI0526A Error on user ID record. user ID record

Explanation: A user-supplied user ID record was being processed during the catalog generation stage of database generation and a syntax error or missing/invalid keyword/parameter was detected. The incorrect record is displayed as the second line of the message.

System Action: The user ID record is ignored and database generation continues.

System Programmer Response: The database has been

successfully created without the user ID on this user ID record defined in the catalog table SYSTEM.SYSUSERAUTH. You may either:

- Enter a GRANT command for the user specifying the appropriate authority and password. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual.
- Compare the invalid record with the description of the NAME column in the SYSTEM.SYSUSERAUTH catalog table as discussed in the *DB2 Server for VSE System Administration* manual.

ARI0527E access error filename. Reason Code = nn. Return Code = cc [nnnn].

Explanation: An error occurred in an attempt to access SYSLST or SYSIPT.

If the *nnnn* value is included in the message, it reflects an attempt to display message **ARI***nnnn*.

The Reason Code value is the Primary Error Code. The Return Code value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: If *access* is GET or CLOSE for file name SYSIPT, the system was trying to read an INSERT record during the catalog generation. The record and any additional records will be ignored by the system; the database generation continues.

If *access* is OPEN for file name SYSLST, database generation, index reorganization, or release empty pages processing ends, but catalog migration continues.

If *access* is PUT or CLOSE for file name SYSLST, processing continues.

Operator Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Programmer Response: See Operator Response.

Refer to message **ARI***nnnn* (where *nnnn* is the value identified in the message text) to determine what system condition caused the message to be displayed.

ARI0528I User userid defined with password password auth.

Explanation: User *userid* has been defined to the database with password *password* and authorization *auth* (where *auth* may be any combination of DBA, SCHED, and RES) and inserted into the catalog table SYSTEM.SYSUSERAUTH.

System Action: Database generation continues.

ARI0520-ARI0535, ARI5806-ARI5810 Catalog Maintenance Messages

ARI0529I &1. is completed.

Explanation: This is the expected response from the database manager. The function is successfully completed. &1. can be:

- CATALOG GENERATION
- INDEX REORGANIZATION
- FORWARD MIGRATION
- RELEASE EMPTY PAGES

System Action: The program continues processing until the end.

ARI0530E An error occurred while attempting to free storage. Reason Code = nn.

Explanation: In freeing virtual storage during catalog generation, a VSE FREEVIS macro failure occurred. The Reason Code value *nn* is the return code from the FREEVIS macro. This condition is a VSE

System Action: Processing continues.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0531E DBSS error. Return Code = &1A..
Reason Code = &2A., &3.=&4..

Explanation: An error occurred during catalog index reorganization when the database manager attempted to perform a DBSS action.

The DBSS returns an error code shown in the Return Code value. (See Chapter 17, "DBSS Return Codes" on page 231 for an explanation of DBSS return codes.)

The Reason Code value describes the type of DBSS operation that was in progress when the error occurred.

- | | |
|----|--|
| 10 | Opening a scan |
| 20 | Closing a scan |
| 30 | Deleting (either a row or an Index Control Record) |
| 40 | Next |
| 50 | Fetch (either a row or an Index Control Record) |
| 60 | Update |
| 70 | Insert (applies only to the Index Control Record) |
| 80 | Acquiring an internal DBSPACE |
| 90 | Releasing an internal DBSPACE |

&3. is either INDEX or CATALOG.

&4. is either index name or catalog name.

System Action: Utility execution stops. All changes to the database are rolled back.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0532I Package &1. has been marked invalid.

Explanation: Catalog index reorganization processing has marked a package invalid.

&1. is owner.packagename.

User Response: You can use this message to determine which packages catalog index reorganization has marked invalid.

Note: If an error occurs that causes catalog index reorganization to fail, these messages no longer apply.

ARI0533E Catalog migration error processing object.

Explanation: An error occurred during forward migration while modifying the SYSTEM CATALOG. The object can be a SYSTEM CATALOG table, column, or index. This message is followed by message ARI0504I, which indicates the condition that caused the error and message ARI0505I. Message ARI0505I provides the SQLCODE information.

Note: The SQLCODE information in the accompanying ARI0505I message should be less than 0 (zero).

System Action: The catalog migration is terminated.

System Programmer Response: If this error occurs during forward migration processing (STARTUP=M), make a record of what went wrong and contact the designated support group for your installation.

ARI0534E A column named &1. already exists in &2..

Explanation: A column name &1. was found in &2. that was not created by the database manager. The forward migration process cannot continue.

System Action: The program is terminated.

System Programmer Response: If you are migrating from SQL/DS™ 2.2.0, you must change the column name from &1. to another name.

The recommended procedure is:

1. Drop any indexes that have been created on the named column and any programs that reference or use it.
2. Drop the &1. column by deleting the row in SYSCOLUMNS where &1. = CNAME. Recreate the column in &2. with a different name.
3. Recode and reprocess the programs that were dropped in step 1.

ARI0520-ARI0535, ARI5806-ARI5810 Catalog Maintenance Messages

4. Rerun forward catalog migration. (This step can be performed before step 3.)

If you are migrating from SQL/DS 3.1.0 or later, contact the support group for your installation.

ARI0535E This catalog is not a release n catalog.

Explanation: If you are performing forward migration, this error occurred because the catalog information indicates that the catalog is not at a release level supported by migration.

System Action: The program terminates with no catalog updates performed.

System Programmer Response: If you are certain that the catalog is at the proper release level, contact the designated support group for your installation.

ARI5806E There is insufficient space in the server directory for migration.

Explanation: The invalid entities table cannot be migrated to the new format because there is not enough space in the database directory. There must be at least four DBSPACE blocks remaining in the database directory for this migration step.

System Action: Database migration ends.

System Programmer Response: Increase the size of the directory and rerun this migration step. Refer to the *DB2 Server for VSE System Administration* manual for more information on increasing the size of the directory.

ARI5810I Release empty pages processing for dbspace &1 is complete.

Explanation: The release empty pages utility was invoked for all dbspaces in the system. This message is displayed after release empty pages processing is complete for dbspace &1.

System Action: Processing continues.

Chapter 9. ARI0536–ARI0599, ARI5361–ARI5427 Preprocessor Messages

Messages from a preprocessor are written to the SYSLST and SYSPCH files. In addition, an expanded SQLCA structure will be placed in the modified source for all SQL errors found by the preprocessors or the database manager.

Preprocessing can result in messages from the preprocessor and other components of the database manager.

ARI0536I Internal error *n1*. Records remaining *n2*.

Explanation: An error occurred during the merging of system internal files or closing system files. The *n1* value indicates the type of error; the *n2* value gives additional data, as follows:

<i>n1</i>	Meaning and <i>n2</i> Value
10	Unexpected end of file on SYS002 workfile; <i>n2</i> = 0.
20	Unexpected end of file on SYS001 workfile; <i>n2</i> = 0.
30	Records not all merged for SYS001 workfile; <i>n2</i> = number of records remaining.
40	Records not all merged for SYS002 workfile; <i>n2</i> = number of records remaining.
50	Error while closing SYSIPT; <i>n2</i> = 0.
60	Error while closing SYS001; <i>n2</i> = 0.
70	Error while closing SYS002; <i>n2</i> = 0.
80	Error while closing SYSPCH; <i>n2</i> = 0.
90	Error while closing SYSLST; <i>n2</i> = 0.

System Action: Processing continues; however, if the value *n1* is 10, 20, 30, 40, or 80, the results may not be what you expected.

System Programmer Response: This condition is a DB2 Server for VSE error. If problems persist, contact the designated support group for your installation.

ARI0537E operation failure on secondary input source *textname*. Return Code = *n1*. Reason Code = *n2*.

Explanation: During processing of an INCLUDE statement, the specified operation (FIND or GET) for the secondary source identified by *textname* failed. *textname* identifies a library source member.

The Return Code value *n1* is the Primary Error Code.

The Reason Code value *n2* is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 22, "Include File Access Errors" on page 365, or "INCLUDE FILE ERRORS" in the HELP text.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Take action based on the Return Code and Reason Code values.

ARI0538E The following is incorrect or missing: [value] was found for *keyword*.

Explanation: The value supplied for the indicated preprocessor or CBND option *keyword* was either invalid or missing.

Probable causes of the error are:

- You did not specify a value, or you specified an incorrect value for the ISOLation keyword. Allowed values are CS, RR, UR, and USER.
- You did not specify a value or you specified an incorrect value for the DATE or TIME keyword. Allowed values are ISO, JIS, USA, EUR, LOCAL.
- You did not specify a value or you specified an incorrect value for the STDSQL keyword. Allowed values are NO, 86, and 89.
- You did not specify a value or you specified an incorrect value for the CHARSUB keyword. Allowed values are SBCS, MIXED, and BIT.
- You did not specify a value or you specified an incorrect value for the CTOKEN keyword. Allowed values are YES and NO.
- You did not specify a value or you specified an incorrect value for the LABEL keyword. The label-text can be a maximum of 30 characters in length.
- You did not specify a value or you specified an incorrect value for the CCSIDSBCS, CCSIDMIXED, or CCSIDGRAPHIC keywords. Allowed values fall in the range from 1 to 65534 inclusively, and must be allowed in the database system.

Note: Only the first eight characters appear in the message text.

- You did not specify a value, or you specified an incorrect value for the DBList keyword. Server names can be a maximum of 18 characters in length.
- There are misplaced commas in the server name list specified for the DBList keyword.

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- There are duplicate server names in the server name list specified for the DBList keyword.
- You did not specify a value, or you specified an incorrect value for the QUALifier keyword. Qualifier names can be a maximum of 8 characters in length.
- You did not specify a value, or you specified an incorrect value for the OWner keyword. Owner names can be a maximum of 8 characters in length.
- You did not specify a value, or you specified an incorrect value for the MSGQueue keyword.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package previously existed, it is restored.

User Response: Supply the valid preprocessor or CBND option and rerun the preprocessor.

ARI0539I description was expected, but string was found for option.

Explanation: During preprocessing, the database manager discovered that a DB2 Server for VSE Preprocessor parameter contained an unidentifiable string.

description is a phrase indicating what was expected.

string is a string that could not be identified.

option is a preprocessor parameter containing the string in question.

For example: For the LINECOUNT option, a number is required. If the character string 6P was somehow entered as the LINECOUNT value, this message would read:

NUMERIC VALUE was expected
but (6P) was found for LINECOUNT.

System Action: Preprocessing continues. For LINECOUNT, the value is set to 60.

User Response: If the default value of LINECOUNT is not acceptable, correct the string and rerun the preprocessor.

ARI0540E The secondary input file named in an INCLUDE statement was not found.

Explanation: A preprocessor SQL INCLUDE statement specified a textname that could not be found.

System Action: Processing continues, but the INCLUDE statement that is in error is not processed further. A new package will not be produced. If the package existed previously, it will be restored.

User Response: Check the spelling of the specified textname for accuracy. Ensure that the textname specified exists and is a library source member with the correct sublibrary value.

ARI0541E You have incorrectly specified the TEXTNAME portion of an SQL INCLUDE statement.

Explanation: A preprocessor SQL INCLUDE statement was specified with an incorrect string. One of the following may be the cause of the error:

- Text-file-name is longer than 8 characters.
- Text-file-name contents do not follow the rules for SQL identifiers:
 - First character of identifier must be a letter (A to Z), @, #, or \$.
 - Identifier must contain only letters (A to Z), @, #, \$, numbers (0 to 9), or underscores (_).
- Text-file-name was omitted.
- Additional statements may not appear on the same line after an INCLUDE (except in COBOL programs).
- The INCLUDE statement for text inclusion must be specified entirely on one line in PL/I and Assembler programs.

System Action: Processing continues, but the INCLUDE statement in error is not processed further. A new package will not be produced. If the package existed previously, it will be restored.

User Response: Correct the text-file-name in the INCLUDE statement. Rerun the preprocessor.

ARI0542E An INCLUDE statement was specified within the extended include source *text-file-name*.

Explanation: Secondary input containing an SQL INCLUDE statement other than an INCLUDE SQLCA or INCLUDE SQLDA was found in the *text-file-name* specified. This is not allowed.

text-file-name is the name of a library source member. The sublibrary depends on the host language:

A sublibrary - Assembler
B sublibrary - C
C sublibrary - COBOL
G sublibrary - FORTRAN
P sublibrary - PL/I

System Action: Processing continues, but the INCLUDE statement in error is not processed further. A new package will not be produced. If the package existed previously, it will be restored.

User Response: Delete all invalid INCLUDE statements from the secondary input specified by *text-file-name*. Rerun the preprocessor.

ARI0543I INCLUDE SQLCA is not permitted when you request NOSQLCA support.

Explanation: When preprocessing an application program with the NOSQLCA support, you cannot include the SQLCA structure in the source program.

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System Action: The database manager ignores the INCLUDE SQLCA statement. Preprocessing continues.

User Response: Remove the INCLUDE SQLCA statement.

ARI0544E **A graphic string is either too long, incorrectly terminated, or contains bytes that are not correctly paired for a graphic string.**

Explanation: A graphic string cannot cross input record boundaries. It must also contain an even number of bytes between the opening SO (X'0E') and the closing SI (X'0F').

System Action: Preprocessing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response:

1. Provide the correct pairing of bytes in the graphic string or decrease the size of the graphic string.
2. Repreprocess the program.

ARI0545E **You have not declared cursor cursorname.**

Explanation: During an OPEN, FETCH, PUT, or CLOSE cursor statement, the database manager discovered that the cursor being referenced had not been declared.

System Action: Processing of the SQL statement has ended.

User Response: Define the cursor by means of a DECLARE cursor statement.

ARI0546I **The preprocessor did not process the package.**

Explanation: The FORTRAN preprocessor performs initialization processing before any package changes are made. If one of the initialization processing items fails, the preprocessor ends with a nonzero return code.

Preprocessor message ARI0598I is incomplete because no processing has been done against a package. If a package existed prior to the preprocessor run that gave this message, the preprocessor performed no operations against the package and it is in the same state it was before the preprocessing. Similarly, if a preprocessor run receives this message and no package existed previously, a package will not exist after the preprocessing is complete.

User Response: Take appropriate action for the error messages that precede this message.

ARI0547I **You did not declare any host variables in progname.**

Explanation: The preprocessor detects valid host variable declarations. At the end of each program, or FORTRAN program unit, the preprocessor writes messages ARI0560I and ARI0561I, which list the valid host variable declarations that it found. If the preprocessor found no host variable declarations, message ARI0547I is issued.

progname is the name of the program or program unit (as specified in a FORTRAN SUBROUTINE, FUNCTION, PROGRAM, or BLOCK DATA statement).

User Response: If you did not have any host variable declarations in the specified program, then take no action. If you meant to have host variable declarations, be sure that you did not incorrectly specify any of them, and check that you placed all host variable declarations in an SQL DECLARE section.

ARI0548E **The cursor cursorname has already been declared.**

Explanation: During an SQL DECLARE statement, the database manager discovered that the cursor being referenced had already been declared.

System Action: Processing of the SQL statement has ended.

User Response: Ensure that the cursor being declared has a unique name.

ARI0549E **You have declared more than 512 cursors in this program.**

Explanation: During preprocessing, the database manager discovered that more than 512 cursors were declared for the current program unit. This exceeds a DB2 Server for VSE preprocessor limit.

System Action: Processing of the SQL statement has ended.

User Response: Rewrite the program to contain fewer DECLARE cursor statements.

ARI0550E **Host variable *variable* is declared with attribute that is incorrect for its use in the SQL statement.**

Explanation: During preprocessing, the database manager discovered that *variable* was declared using an incorrect attribute.

The contents of *variable* can be any of:

- The name of the variable with the declaration error
- **user-id**, indicating that the user ID host variable has a declaration error
- **password**, indicating that the password host variable has a declaration error

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- **database**, indicating that the application server-name host variable has a declaration error.

The contents of *attribute* can be any of:

- **data type**, indicating that the data type attribute of the variable referenced in *variable* is incorrect
- **length**, indicating that the length attribute of the variable referenced in *variable* is incorrect
- **an attribute**, indicating that the structure or array attribute of the variable referenced in *variable* is incorrect.

Some examples of incorrect attributes are:

- The user ID or the password host variable is not fixed character length 8.
- The server-name host variable is not a character string with a length between 1 and 18.
- The host variable that is used to contain an SQL statement is not a fixed length character string in FORTRAN.
- The indicator variable is not a small integer variable.
- The structure is not a valid host structure.
- Use of a host structure is not permitted.
- An indicator array used in place of a host variable or main variable.

System Action: Processing of the SQL statement has ended.

User Response: Correct the declaration of the attribute for the host variable.

ARI0551I **LINECOUNT specified incorrectly. The database manager set it to 60.**

Explanation: During the checking of the preprocessor options, an error was found in the specification of the LINECOUNT option. The error is noted here and the default value of 60 for the LINECOUNT option is set.

System Action: The LINECOUNT value is set to 60. Preprocessing continues.

User Response: If you want a LINECOUNT value other than 60, correct the error in the LINECOUNT option specification and rerun the preprocessor.

ARI0552I **LINECOUNT value > 32767 or < 10. The database manager set it to 60.**

Explanation: The value specified for LINECOUNT is outside the range of valid values (from 10 to 32767).

System Action: The LINECOUNT value is set to 60. Preprocessing continues.

User Response: If you want a LINECOUNT value other than 60, correct the error in the LINECOUNT option specification and rerun the preprocessor.

ARI0553E **identifier name either missing, or greater than nn bytes.**

Explanation: During preprocessing, the database manager discovered an identifier greater than the number of bytes **nn**, the maximum allowable for that type of identifier.

- *identifier* is the host variable name, user ID, password, program name, file name, statement name, statement, label, cursor name, or database name.
- *nn* is the maximum length of the *identifier* name.

System Action: Preprocessing of the SQL statement ends.

User Response: Correct the length of the identifier name.

For more information about the correct lengths of identifier names, refer to the identifiers description in the *DB2 Server for VSE & VM SQL Reference* manual.

ARI0554E **SQL statement contains more than 256 host variables.**

Explanation: During preprocessing, the database manager discovered more than 256 host variables referenced in a single SQL statement. This exceeds a DB2 Server for VSE limit.

System Action: Processing of the SQL statement has ended.

User Response: Change the SQL statement to contain fewer than 256 host variables.

ARI0555E **You did not follow the colon marker with a host identifier.**

Explanation: During preprocessing, the database manager identified a colon marker that was not followed by a host identifier. The host identifier must be the name of a host variable or indicator variable. In those languages that support host structures, the host identifier can be a host structure or host structure field. The indicator variable can be an indicator array.

System Action: Processing of the SQL statement has ended.

User Response: Change the SQL statement so that a host identifier follows the colon marker. Rerun the preprocessor.

ARI0556E **ident-type contains incorrect characters.**

Explanation: During preprocessing, the database manager discovered that *ident-type* contained characters that are not valid.

System Action: Processing of the SQL statement has ended.

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User Response: Change the SQL statement so that all characters are valid.

ARI0558I A statement label is not allowed on this SQL statement. The label has been removed: &1..

Explanation: During preprocessing, the database manager discovered a label on a BEGIN DECLARE SECTION, END DECLARE SECTION, WHENEVER, or INCLUDE statement.

System Action: The identified label is blanked out.

ARI0559E The language preprocessor does not allow function.

Explanation: The specified language preprocessor does not permit the function identified in the message.

System Action: Processing of the SQL statement has ended.

User Response: Change the SQL statement to eliminate the disallowed function.

ARI0560I The DB2 Server for VSE language preprocessor recognized the following host variable declarations: (* before the level number indicates a structure which may be used as a host structure)

LVL NAME SQL TYPE LENGTH

Explanation: This message always appears together with message ARI0561I. The explanation for message ARI0561I covers both messages.

ARI0561I *lvl varname vartype varlength*

Explanation: During preprocessing, the preprocessor identifies and keeps track of declarations of valid host and indicator variables, host structures, and indicator arrays. Messages ARI0560I and ARI0561I list all of these declarations. These messages are issued at the end of each program unit that contains these declarations.

language identifies the preprocessor (assembler, C, COBOL, FORTRAN, or PL/I).

lvl is the logical level of a field within a structure. The logical level of a field is always one unit deeper than that of its immediate containing structure. All fields of a structure are reported together and listed sequentially in this message.

Scalar variables have a logical level of one (1).

If *lvl* begins with an asterisk (**lvl*), *varname* is the name of a host structure. If *lvl* is a structure, but it does not conform to the rules for a host structure, then *lvl* does not begin with an '*'.

varname is the declared name of a valid host variable, structure, structure field, indicator variable, or indicator array.

If *varname* is "OCCURRENCES *nn*", *varname* on the line immediately above it is the name of an indicator array with *nn* occurrences.

vartype is the SQL data type of the variable identified in *varname*.

If *vartype* is empty, *varname* is a structure.

varlength is the number of bytes of storage required to store the host variable, structure field, or indicator array element.

If *varlength* is empty, *varname* is a structure.

User Response: You can use this message and error and warning messages to find errors in the declarations of host variables, structures, and indicator arrays. Review the variables, structures, and arrays listed in these messages to ensure that the specifications are being recognized.

ARI0562I The following SQL error and/or warning conditions occurred for the language preprocessor initiated SQL statement type statement.

Explanation: During preprocessing, the execution of an SQL statement by the named preprocessor resulted in a nonzero SQLCODE or a warning flag in the SQLCA.

language identifies the ASSEMBLER, COBOL, C, PL/I, or FORTRAN preprocessor.

statement type identifies the type of SQL statement tried.

Following this message will be SQL message lines that describe the SQL conditions encountered.

System Action: If the SQL condition encountered was an error (negative SQLCODE for example), then processing of the statement specified in the message ends. The ASSEMBLER, COBOL, C, PL/I, or FORTRAN preprocessor issues a ROLLBACK WORK statement. Preprocessing ends.

If the SQL condition encountered was a warning (positive SQLCODE for example), preprocessing continues.

User Response: Analyze the SQL problem described in the messages that follow this message.

If an error has occurred, correct the error and rerun the preprocessor.

If this is a warning, check that the warning is acceptable. If it is not, attempt to correct the warning condition, and rerun the preprocessor.

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ARI0563I *jjj* records read from source input file.
 kkk records written to source output
 file.

Explanation: This message tells the number of records that the preprocessor read from the input file and the number of records written to the output file. The first number (*jjj*) is the count of all records read from the input file, including records read from any secondary input file specified in an SQL INCLUDE statement. The number of records written (*kkk*) is a count of the records written to the modified source output file. This number is not the number of records written to the preprocessor listing file.

ARI0564E **Source input file is empty.**

Explanation: The input file which the preprocessor tried to read is empty.

System Action: A new package will not be produced. If the package existed previously, it will be restored.

User Response: Ensure that the source program to be preprocessed is in the input file.

ARI0565I **The input source contains either no SQL
statements, or no SQL statements that
will create a package.**

Explanation: One of the following occurred:

- The EXEC SQL prefix was not found on any statements in the input source program.
- The EXEC SQL prefix was found only on statements that do not create a package (for example: CONNECT, COMMIT, or ROLLBACK). COMMIT and ROLLBACK apply only to the FORTRAN preprocessor.

This condition may cause an empty package to be stored in the database for this program.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Check the preprocessor input file to determine if errors were made in the SQL statements embedded in the source program. Correct all errors. Rerun the preprocessor.

ARI0566E **You did not declare host variable
varname.**

Explanation: The host variable *varname* is used in an SQL statement, but it was not recognized as a valid host variable declare in the current program or subprogram unit. For a FORTRAN program, a host variable used in an SQL statement must be declared in an SQL DECLARE section in the same program or subprogram unit in which the SQL statement occurs.

System Action: Processing of the SQL statement ends.

User Response: Ensure that the *varname* specified in the message is correctly declared. Messages ARI0560I and ARI0561I of the preprocessor listing output may be helpful in resolving the problem.

ARI0567E **You have already declared host
identifier *ident-name*.**

Explanation: The host identifier *ident-name* is declared more than once in an SQL DECLARE section, in this program or subprogram unit. The host identifier is the name of a host variable or indicator variable. In those languages that support host structures, the host identifier can be a host structure or host structure field. The indicator variable can be an indicator array.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Remove the duplicate declaration. Rerun the preprocessor.

ARI0568E **The SQL statement or IF statement
exceeds the limit of 125 lines.**

Explanation: The SQL statement or FORTRAN IF statement is longer than 125 lines (1 plus 124 continuation lines). This number of lines exceeds a FORTRAN preprocessor limitation.

This message may also result from having a large number of comment lines or blank lines in or immediately following the statement mentioned above.

System Action: The statement that caused the message is treated as a comment in the modified source output and is not used. Preprocessing continues. A new access module is not produced. If the access module existed previously, it is restored.

User Response: Compress the statement to fit on not more than 125 lines (embedded comment lines and blank lines included). If this is not possible, break the statement into two or more separate statements. Rerun the preprocessor. If the error is caused by comment lines or blank lines immediately following the statement, precede the comment lines or blank lines with a FORTRAN CONTINUE statement and rerun the preprocessor.

ARI0569E ***string1* was expected, but *string2* was
found.**

Explanation: During processing of an SQL statement, the database manager expected *string1* but discovered *string2*. For example, if the preprocessor encountered only a fragment of a command, such as EXEC SQL FETCH, this message would be displayed as:

CURSOR NAME was expected
but END OF STATEMENT was found.

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System Action: Processing of the SQL statement has ended.

User Response: Correct the syntax of the SQL statement.

ARI0570I **User username not authorized to perform action on object object.**

Explanation: During preprocessing, an SQL statement was found which, when executed, would perform action *action* on object *object*. The user *username* who is preprocessing this program is not authorized to perform this action on this object. However, the preprocessor will treat this as a warning and assumes that the user will be properly authorized by the time the program is executed.

User Response: Ensure that the user is authorized before executing the program.

Note: This condition will cause additional system overhead when the program is executed. If it is a frequently executed SQL statement and if performance is important, the user should consider preprocessing the program once the user has been properly authorized.

ARI0571I **User username not authorized to action.**

Explanation: During preprocessing, an SQL statement was found which, when executed, would perform the action *action*. The user *username* who is preprocessing this program is not authorized to perform this action. However, the preprocessor will treat this as a warning and assumes that the user will be properly authorized by the time the program is executed.

User Response: Ensure that the user is authorized before executing the program.

Note: This condition will cause additional system overhead when the program is executed. If it is a frequently executed SQL statement and if performance is important, the user should preprocess the program again after being properly authorized.

ARI0572E **Cursor cursorname is not valid.**

Explanation: This error occurs when preprocessing an OPEN, FETCH, PUT or CLOSE cursor statement. It means that an error was discovered while processing the DECLARE CURSOR or associated PREPARE statement. The cursor has been marked invalid.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the error in the DECLARE CURSOR or associated PREPARE statement. Rerun the preprocessor. If you specify ERROR as a preprocessing

parameter, the cursor may not be marked invalid when the error is detected, and the OPEN, FETCH, PUT, or CLOSE CURSOR statement is processed as if the cursor is valid.

ARI0573E **An SQL statement was found in a program other than the first program or the main program.**

Explanation: This message is issued only by the COBOL preprocessor. A DB2 Server for VSE statement was found in the source after the end of the main program of a nested program, or after the end of the first program in a batch compilation.

System Action: Preprocessing ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Move the DB2 Server for VSE statements and host variable declarations to the main program or first program and rerun the preprocessor.

ARI0574E **Label is greater than number characters.**

Explanation: While preprocessing an application program, a label was found on an SQL statement or host variable which was greater than the number of characters allowed by the host language.

For Assembler, C, COBOL, COBOL II, and PL/I, the maximum number of characters allowed in an SQL statement is 256.

For FORTRAN, this message refers to the label used in an SQL WHENEVER statement with the GOTO action specified:

- If the first character of the specified label is numeric, it is assumed that the label is numeric and refers to a statement number in the FORTRAN program. These labels can have no more than 5 characters.
- If the first character of the specified label is alphabetic, it is assumed that the label is a variable name to be used in a FORTRAN assignment statement. These labels can have no more than 6 characters.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the label. Rerun the preprocessor.

ARI0575E **Comma delimiter between host variables not found.**

Explanation: While processing an OPEN, FETCH, PUT, or EXECUTE SQL statement, the preprocessor found a *host-variable-list* that does not have comma delimiters between the *host-variables*. A comma is required between *host-variables*.

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System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Add commas between host identifier pairs. Rerun the preprocessor.

ARI0576E **The preceding source program lines contain a string of nonblank characters that exceeds 256 characters. This exceeds a preprocessor limitation.**

Explanation: The preprocessor encountered a string of characters of length greater than 256. This will cause an overflow of preprocessor internal storage areas.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Break the statement into smaller pieces by separating the pieces by blanks.

ARI0577E **Unable to release storage. Reason Code = nn.**

Explanation: During preprocessing, the preprocessor was unable to release storage. The reason code is the return code from a VSE FREEVIS macro. This is a DB2 Server for VSE preprocessor error.

System Action: This error may occur after the preprocessor has attempted to store the package in the database. The preprocessor tries to continue after the point of this error to complete termination processing.

User Response: This message should be followed by message ARI0598I which will tell you the state of your package. Final preprocessor results may be incorrect or in an inconsistent state. Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0578I **INCLUDE SQLCA ignored. It has already been found.**

Explanation: An SQL INCLUDE SQLCA statement was encountered, but an INCLUDE SQLCA statement was already found in the current program/subprogram unit.

System Action: The SQL statement that caused the error is commented out in the modified source output and ignored. Preprocessing will continue. The preprocessor warning count will be incremented. A nonzero return code will be returned by the preprocessor.

User Response: Remove the extra SQL INCLUDE statement from the input source.

ARI0579I **The preprocessor encountered the following SQL error or warning conditions on return from a call to store the package:**

Explanation: The database manager returned a nonzero SQLCODE or a warning flag in the SQLCA during an attempt to store the package in the database. The SQL message describing the SQL error or warning follows this message.

System Action: If an error occurred, preprocessing ends. Message ARI0598I (which follows the SQL error messages) indicates that the package was not produced or that it was restored if the package previously existed.

If a warning occurred, preprocessing continues and message ARI0598I indicates that the package was produced or replaced if it previously existed.

User Response: Check the SQL message lines that follow this message for a description of the SQL error or warning.

If this was a warning, check that the warning is acceptable. If it is not, attempt to correct the warning condition and rerun the preprocessor. Correct the problem and rerun the preprocessor.

ARI0580E **Required preprocessor option name not specified.**

Explanation: The identified option keyword is required in the parameters passed to the preprocessor or to the CBND transaction, but it was not provided.

For the preprocessor, *name* is either 'USERID=' or 'PREPNAME='. For CBND, *name* is 'PACKAGE(collection_id.package_id)'.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Include the missing keyword in the preprocessor or CBND options and retry the operation.

ARI0581E **Incorrect or missing parameter on name keyword.**

Explanation: The information supplied on the indicated preprocessor or CBND option keyword was either not valid or missing.

Probable reasons for error are:

- No program name or incorrect program name specified on 'PREPNAME=' keyword. The program name must be a character string of up to 8 characters.
- No user ID or password, or incorrect user ID or password specified on 'USERID=' keyword. User ID and password must be a character string of up to 8 characters.

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- No preprocessor file was specified or the format is incorrect. The correct format is 'PREPFILE=(*membername*)' or 'PREPFILE=(*membername.membertype*)', as documented in the *DB2 Server for VSE & VM Application Programming* manual.
- No server names, or incorrect server names, were specified on the 'DBLIST' keyword. Server names must be character strings of up to 18 characters.
- No package name, or incorrect package name or collection id, was specified on the 'PACKAGE' keyword. Collection is and package name must be character strings of up to 8 characters.
- No file name, or incorrect file name, was specified on the 'INfile' keyword.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Supply valid parameter and retry the operation.

ARI0582E Terminating error occurred during preprocessing.

Explanation: An SQL return code caused termination of the preprocessor.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Check the previous error message to determine the cause of the terminating error. Correct the problem. Rerun the preprocessor.

ARI0583E Keywords *option* and *option* were both found. Specify only one.

Explanation: The keywords specified are mutually exclusive, yet both were specified as preprocessor or CBND options. Probable reasons for error:

- Two of KEEP, REVOKE, and NEW were specified.
- Both PRINT (PR) and NOPRINT (NOPR) were specified.
- Two of CHECK, NOCHECK, and ERROR were specified.
- Both PACKAGE and NOPACKAGE were specified.
- Both BIND and NOBIND were specified.
- Both QUOTE (Q) and APOST were specified.
- Both GRAPHIC (GR) and NOGRAPHIC (NOGR) were specified.
- The ISOLATION preprocessor option was specified more than once with conflicting values.

Note: The allowed values are CS, RR, and USER.

- The DATE keyword was specified with different format values, such as DATE (USA) and DATE (ISO).

- The TIME keyword was specified with different format values, such as TIME(USA) and TIME(EUR).

Note: Allowed formats for each of DATE and TIME are: ISO, JIS, USA, EUR, LOCAL.

- Both STDSQL(89) and STDSQL(NO) were specified.

Note: STDSQL(86) is a synonym for STDSQL(89).

- Conflicting options of EXPLAIN were specified.
- The CCSIDSBBCS preprocessor option was specified more than once with different numeric values. Allowed values for these options must be in the range 1 through 65534 and be allowed in the database manager.
- The CCSIDMIXED preprocessor option was specified more than once with different numeric values. Allowed values for these options must be in the range 1 through 65534 and be allowed in the database manager.
- The CCSIDGRAPHIC preprocessor option was specified more than once with different numeric values. Allowed values for these options must be in the range 1 through 65534 and be allowed in the database manager.
- The USERid option was specified more than once with different values.
- The PASSWORD option was specified more than once with different values.
- The DBList option was specified more than once.
- The PACKAGE option was specified more than once with different values.
- The QUALifier option was specified more than once with different values.
- The OWner option was specified more than once with different values.
- The INfile option was specified more than once with different values.
- The MSGQueue option was specified more than once with different values.
- Both REPLACE and NEW were specified.
- Here are some other conflicts that can cause this message:
 - REPLACE and NEW
 - PUNCH (PU) and NOPUNCH (NOPU)
 - SEQUENCE (SEQ) and NOSEQUENCE (NOSEQ)
 - BLOCK (BLK) and NOBLOCK (NOBLK)
 - EXIST and NOEXIST

Check the descriptions in the *DB2 Server for VSE & VM Application Programming* manual to resolve conflicts in options or values for CHARSUB, SQLFLAG, or CTOKEN.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

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User Response: Specify only one of the keywords and retry the operation.

ARI0584E Unable to allocate storage of n1 bytes.
Return Code = n2.

Explanation: During preprocessing, the preprocessor was unable to allocate storage of the specified size needed for processing. The Return Code value is the return code from a VSE GETVIS macro.

System Action: Preprocessing ends. A new package is not produced. If the package existed previously, it is restored.

User Response: For Return Code = 12, increase the partition size or change some DB2 Server for VSE initialization parameters to reduce virtual storage requirements.

For all other Return Code values, notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0585E operation failed on dname. Reason = n1.
Return = n1.

Explanation: During preprocessing, the indicated operation (OPEN, CLOSE, GET, or PUT) failed on the indicated file. The *dname* is specified in the job control.

The Return value is the Primary Error Code. The Reason value is the Secondary Error Code. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

ARI0586I Preprocessing ended with n1 errors and n2 warnings.

Explanation: The preprocessor ended with the specified number of SQL errors or SQL warnings.

System Action: Processing ends.

User Response: If errors or warnings occurred, look through the SYSLST output for the specific error or warning message. Correct the problem, if necessary, and rerun the preprocessor.

ARI0587I Object name owned by owner was not found.

Explanation: During preprocessing, an SQL statement was found which referenced the named object (for example a table) owned by the specified owner. This object could not be found. However, the preprocessor treats this as a warning condition; it assumes that the object will have been created by the time the program is executed.

name is the name of the object.

owner is the owner of the object.

System Action: Preprocessing continues.

User Response: Ensure that the owner name and object name are correct. If they are correct, ensure that the object is created before executing the program.

Note: This condition will cause additional system overhead when the program is executed. If it is a frequently executed SQL statement and if performance is important, consider preprocessing the program after the object has been created.

ARI0588E Incorrect string string in preprocessor options.

Explanation: The preprocessor found the specified 1- to 26-character string in the preprocessor options, but it has no meaning to the preprocessor. Using a preprocessor option file and specifying two preprocessor options on the same input record, or including a comment not beginning with an asterisk (*) may have caused the error.

Note: The option DYNALC is not valid for the FORTRAN preprocessor.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the preprocessor options. Rerun the preprocessor.

ARI0589E Error in message formatter, R.C. > 16.

Explanation: The preprocessor message handler was called to format a message and received a return code greater than 16. The DB2 Server for VSE message may not be completely generated.

System Action: Preprocessing continues.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0590E **No valid END DECLARE SECTION found.**

Explanation: A BEGIN DECLARE SECTION was found in the user's source program, but no corresponding END DECLARE SECTION was found before the end of the source program was reached.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Check the program and ensure that a valid END DECLARE SECTION is present after the last valid BEGIN DECLARE SECTION.

ARI0591E **No valid BEGIN DECLARE SECTION found.**

Explanation: An END DECLARE SECTION was found in the source program, but no corresponding BEGIN DECLARE SECTION was found.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Check the program and ensure that a valid BEGIN DECLARE SECTION is present.

ARI0592E **Incorrect continuation during language preprocessing.**

Explanation: For an SQL statement embedded in an Assembler application program, columns 1 to 15 of a continuation of an SQL statement or a host variable declaration contained nonblanks.

language identifies that the application program is being preprocessed by the Assembler preprocessor.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: For an Assembler program, ensure that columns 1 to 15 of continuation lines are blank.

ARI0593E **FROM clause of PREPARE or EXECUTE IMMEDIATE statement does not contain the name of a variable.**

Explanation: A quoted string is not allowed for the PREPARE or EXECUTE statement.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Specify only a variable name in the FROM clause of a PREPARE or EXECUTE IMMEDIATE statement.

ARI0594E **Incorrect scan mode in COBOL preprocessing.**

Explanation: An incorrect SCAN Mode was found in COBOL preprocessing.

System Action: This is a DB2 Server for VSE error. Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Give the output listing to your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

ARI0595E **Incorrect condition of a literal.**

Explanation: An alphanumeric literal in COBOL has been improperly ended.

condition is either LENGTH (>120 in COBOL or >160 in COBOL II) or CONTINUATION.

Either:

- Continuation line does not begin with a quote mark, or a beginning quote mark was detected, but an ending quote mark was not found on the same or subsequent line.
- Length of the literal is greater than 120 characters (the maximum allowed by COBOL) or is greater than 160 characters (the maximum allowed by COBOL II).

System Action: The COBOL preprocessor ends processing of the program where the error occurred.

User Response: Correct the literal. Rerun the preprocessor.

ARI0596E **End of source file found without finding either a procedure division, a working storage section, or an END EXEC for the last SQL statement.**

Explanation: During preprocessing of a COBOL program, one of the following conditions has been detected:

- The end of the source program was found without finding a WORKING-STORAGE SECTION.
- The end of the source program was found without finding a PROCEDURE DIVISION.
- The end of the source program was found without finding the END-EXEC terminator to end the last EXEC SQL indicator encountered.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Add the missing item to the source program. Rerun the preprocessor.

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ARI0597E SQL statements other than the INCLUDE statement are not allowed in the declare section.

Explanation: The SQL statement identifier EXEC SQL was found in a DECLARE SECTION (for example, after a BEGIN DECLARE SECTION and before a valid END DECLARE SECTION). Only the extended INCLUDE statement is allowed in a DECLARE SECTION. No other SQL statement is allowed in a DECLARE SECTION. A possible explanation for this error is that the END DECLARE SECTION statement was inadvertently omitted, or was incorrectly declared.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Ensure that the DECLARE SECTION contains no SQL statements other than an extended INCLUDE statement. Rerun the preprocessor.

ARI0598I The application server [*server*] status the package for *program name*.

[DATE: *yyyy-mm-dd*
TIME: *hh:mm:ss*]

Explanation: Preprocessing of *program name* is completed and the *status* of the package is one of the following:

replaced, or produced if it did not already exist
The program was successfully preprocessed, and the package replaced the package for this program from a previous preprocess.

produced
This program was preprocessed successfully for the first time. The preprocessor produced a package.

restored or did not produce
Either:

- The program failed during preprocessing and the previous package for this program is restored.
- A failure did not occur, but no SQL statement encountered in the program required the creation of a package. The previous package for this program is restored.

did not produce
Either:

- The program failed in the preprocessing step and no package exists for it.
- A failure did not occur, but no SQL statement encountered required the creation of a package.

The following SQL statements do not require a package:

CONNECT
COMMIT WORK [RELEASE]
ROLLBACK WORK [RELEASE]
DROP PACKAGE/PROGRAM using host variables
Extended PREPARE
Extended DECLARE CURSOR
Extended OPEN, FETCH, PUT, CLOSE
Extended DESCRIBE
Extended EXECUTE
DROP STATEMENT
CREATE PROGRAM

System Action: The status is as specified in the explanation.

User Response: Refer to other ARI05xx messages produced for this program.

ARI0599E The preprocessor termination processing encountered a serious error. The results of the preprocessing are unreliable.

Explanation: An error occurred during normal or error termination processing of the preprocessor. This error may seriously affect the results of the preprocessor. A specific error message precedes this message. This and other error messages may be issued as write-to-operator messages if both SYSLST and SYSPCH are disabled.

System Action: The preprocessor tries to complete termination processing. A new package may or may not be produced (or an existing one may or may not be replaced or restored), depending on when the system error occurred.

User Response: The actual problem is usually found in the error messages preceding this one. Follow the USER RESPONSE for those messages.

ARI5361E Statement name *statementname* has not been prepared.

Explanation: During preprocessing of a DECLARE or EXECUTE statement, the database manager discovered that the statement name being referenced has not been prepared.

System Action: Processing of the SQL statement has ended.

User Response: Define the statement name by means of the PREPARE statement.

ARI5362E Statement name *statementname* is not valid because of an error in the PREPARE statement.

Explanation: The DECLARE or EXECUTE statement in the application cannot be preprocessed because an error was discovered during the processing of the PREPARE statement. The EXECUTE or DECLARE

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statement references the PREPARE statement by the statement name.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the error in the PREPARE statement. Rerun the preprocessor.

ARI5363E **Cursor name cursorname is not valid because the prepared statement, named statementname, was a character constant which contained a command other than an INSERT or SELECT.**

Explanation: During processing of a DECLARE statement, an error was encountered involving the statement identified by the *statementname*. That SQL statement was a string spec and PREPARED as a result of the previous execution of a PREPARE statement. The only SQL statements that can be used in a string spec for subsequent cursor operations are INSERT and SELECT. The cursor has been marked as invalid.

System Action: Processing of the SQL command has ended.

User Response: Correct the PREPARE statement to process either a SELECT or INSERT statement.

ARI5365E **More than 512 unique statement names have been used in this program.**

Explanation: During preprocessing, the database manager discovered that more than 512 unique statement names were specified in PREPARE statements within the current program unit. This number exceeds a DB2 Server for VSE preprocessor limit.

System Action: Processing of the SQL statement has ended.

User Response: Rewrite the program to contain fewer PREPARE statements.

ARI5366E **Statement name statementname has already been used in a previous PREPARE statement.**

Explanation: During the preprocessing of an SQL PREPARE statement, the database manager discovered that the statement name *statementname* has already been used in a previously preprocessed PREPARE statement.

System Action: Processing of the SQL statement has ended.

User Response: Ensure that the statement name being PREPARED has a unique name.

ARI5367E **You cannot use the SQL EXECUTE statement to perform a COMMIT or ROLLBACK.**

Explanation: The commands that control logical units of work cannot be the object of dynamic SQL commands: PREPARE, EXECUTE, or EXECUTE IMMEDIATE.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

ARI5368E **A package name consisting of more than two parts is not supported.**

Explanation: In a DROP PACKAGE statement, a package name of more than two parts was used. This is not supported.

System Action: Processing of the SQL statement ends.

User Response: Correct the statement. Try again.

ARI5370E **The following host identifier reference is ambiguous: *varname***

Explanation: The host variable *varname* is declared as a field of more than one structure. The preprocessor cannot determine the occurrence of the variable that is referenced in this SQL statement.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Fully qualify the host variable reference. Rerun the preprocessor.

ARI5375E **More than one cursor is declared for statement name *statement-name***

Explanation: You can only declare one cursor for statement name *statement-name*.

System Action: Preprocessing of the command ends.

User Response: Correct your application program such that there exists only one cursor per statement name.

Note: This message is issued in all environments of the database manager system.

ARI5376E **Preprocessor parameter file filename not found.**

Explanation: The preprocessor cannot find the preprocessor option input file.

System Action: Preprocessing ends. The preprocessor does not create a new package nor change the existing package.

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User Response: Check the spelling of the specified file name for accuracy. Ensure that the preprocessor parameter file specified exists, and is a library source member with the correct sublibrary value.

ARI5377E Invalid specification of preprocessor parameters and PREPFILE parameter.

Explanation: The preprocess request contained both preprocessor parameters (other than the PREPNAME, USERID, and DBNAME parameters) directly in the preprocess request and a PREPFILE parameter.

System Action: Preprocessing ends. The preprocessor does not create a new package nor change the existing package.

User Response: In single user mode, specify either one of the following (but not both) after the preprocessor name, and the PREPNAME, USERID, and DBNAME parameters in the PARM field of the EXEC job control statement:

- The individual preprocessor parameters (excluding the PREPFILE parameter)
- The PREPFILE parameter alone.

The preprocessor name can be ARIPRPA, ARIPRPB, ARIPRPC, ARIPRPF, or ARIPRPP.

In multiple user mode, specify either one of the following (but not both) after the PREPNAME, USERID, and DBNAME parameters in the PARM field of the EXEC job control statement:

- The individual preprocessor parameters (excluding the PREPFILE parameter)
- The PREPFILE parameter alone.

ARI5382E Incorrect option specified in preprocessor option file.

Explanation: The preprocessor option file contains either the PREPNAME, USERID, or DBNAME parameters. Specifying these parameters through the preprocessor option file is invalid.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Remove the invalid parameters from the preprocessor option file. Specify these parameters in the preprocess request directly.

ARI5383I Warning: *statement-type* is not supported.

Explanation: The database manager system does not support the SQL command shown (*statement-type*). The *statement-type* can be DECLARE TABLE, DECLARE STATEMENT, or DISCONNECT. In other IBM SQL products, these statements cause code expansions to occur. Because the database manager system does not support these statements, the preprocessors did not

perform these code expansions. Your program is preprocessed successfully, however, unless other errors occurred.

System Action: Preprocessing continues.

User Response: If your program depends on the code expansion, you should change your application so that it does not depend on the above statements.

Note: All environments of the database manager receive this message.

ARI5387E The SQL statement length exceeds 8192 positions.

Explanation: The maximum length of an SQL statement is 8192 bytes. This statement exceeds the maximum. The possible causes are:

- The SQL statement is too long.
- The end of statement delimiter is missing.
- A FOR UPDATE OF clause is added to the end of a static cursor query statement.
- The expansion of a host structure reference has increased the size of the SQL statement.

System Action: Preprocessing of the SQL statement ends.

User Response: Either break the SQL statement into smaller statements or remove unnecessary conditions that may exist in the statement.

ARI5390E *statement-type* statement not referencing *cursor-type* cursor.

Explanation: The FETCH, DELETE, and UPDATE statements must reference a SELECT cursor. PUT statements must reference an INSERT cursor. The *statement-type* identified in the message references a cursor with an incorrect *cursor-type*.

System Action: Preprocessing of the SQL statement ends.

User Response: Change the cursor reference in the FETCH or PUT statement to reference the correct cursor and rerun the preprocessor.

ARI5391E Preprocessor module modname encountered an internal error. Internal Error Code = code-num

Explanation: The preprocessor module specified failed due to an internal program problem.

System Action: Preprocessing or CBND ends. A new package is not produced. If the package existed previously, it is restored.

User Response: Make a record of the problem and notify your system programmer.

System Programmer Response: Document the

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problem and contact the designated support group for your installation.

ARI5392E An error occurred while retrieving the *value* value due to a CDLOAD failure. Return code = X'*return_code*'.

Explanation: A severe error occurred while the preprocessor retrieved the *value* value. For CHARTRANS value, the value is retrieved from the ARISSCRD phase.

System Action: Processing terminated and the package was not created.

User Response: Notify your system programmer.

System Programmer Response: Correct the CDLOAD error. Refer to the message text for the return code from the CDLOAD.

ARI5395E String beginning with *string* is invalid or incorrectly placed in this statement.

Explanation: The portion of the SQL statement that has or begins with the string *string* is incorrect. Possibly a host variable is required, but *string* was found.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Remove or correct the invalid *string* and rerun the preprocessor.

ARI5396E The preprocessor options file is too large.

Explanation: The preprocessor options file contains too many parameters. This situation occurs when parameters are duplicated or when parameters that are not permitted in the preprocessor options file are found.

System Action: Preprocessing ends. A new package is not produced. If the package existed previously, it is restored.

User Response: If parameters are duplicated remove the duplicates. If parameters that are not permitted in the preprocessor options file (for example, PREPNAME) have been included, remove them. Rerun the preprocessor.

ARI5397E Statement *statement-name* is not valid because an error occurred while processing the associated DECLARE CURSOR statement.

Explanation: During processing of the DECLARE CURSOR statement, an error occurred while storing the statement in the package. Because the DECLARE CURSOR and the PREPARE statements are related, processing of the first statement in the pair must be

successful before continuing the processing of the second statement.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the problem in the DECLARE CURSOR statement and rerun the preprocessor.

ARI5398E End of string found before the SQL statement ended. Statement is incomplete.

Explanation: The end of the SQL statement string was reached before all required segments of the statement were found. This may be caused by an incorrectly placed statement delimiter or by the presence of an open-ended literal in the statement.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Supply the required missing statement segments or correct the problem with the string or statement delimiter. Rerun the preprocessor.

ARI5399I The preprocessor found errors. [Return Code 8 was changed to 4 | The error statements were accepted] because the preprocessor parameter, ERROR, was specified.

Explanation: When the preprocessor parameter ERROR is specified, the preprocessor tolerates most statement-parsing errors. The error message is inserted into the modified source and listing files in comment form, and processing continues. The program can be compiled and executed, but the erroneous statement cannot be executed on the application server that issued the error. See the *DB2 Server for VSE & VM Application Programming* manual for a discussion of the ERROR parameter.

System Action: Preprocessing continues. The modified source code is generated and package functions are performed.

User Response: If you intend to execute the erroneous statement on the application server that issued the error, correct the statement and rerun the preprocessor. If you do not intend to execute the statement on that application server, ignore the message.

ARI5400I Warning: *statement-type* is not supported.

Explanation: The SQL statement shown (*statement-type*) is not supported by the database manager. Examples of *statement-type* values are DECLARE TABLE, DECLARE STATEMENT, etc. In other IBM SQL products, these statements cause code expansions to occur. As the database manager does not support these statements, these code expansions have

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not been done by the preprocessors. However, your program will be preprocessed successfully unless errors occur and you did not specify ERROR as a preprocessing parameter.

System Action: Preprocessing continues.

User Response: If your program depends on the code expansion, change your application so that it does not depend on either of the above statements.

ARI5401E Cursor name, cursorname, was declared before this statement was prepared.

Explanation: Your application has a DECLARE for a statement from a quoted literal. The PREPARE for this statement must appear in the application before the DECLARE CURSOR for this statement.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Change your program so that the PREPARE appears before the DECLARE cursor statement. Alternatively, you can assign the quoted literal to a host variable, and use the host variable in the PREPARE statement in place of the quoted literal. In this case, the DECLARE statement can precede the PREPARE statement.

ARI5402I Preprocessor failed to retrieve the DBCS option. The DBCS option is set to NO.

Explanation: A DB2 Server for VSE error occurred when the preprocessor retrieved the DBCS option from the SQLGLOB file.

System Action: Processing continued and DBCS defaulted to NO.

User Response: Check the SQLGLOB file for valid DBCS options. If the option does not exist, or is invalid, use the DSQU transaction to create it, or notify your system programmer.

Programmer Response: Use the DSQG transaction to create a valid DBCS option in the SQLGLOB file.

ARI5403E You cannot submit an SQL statement containing host variables by way of a PREPARE statement.

Explanation: During the preprocessing of an SQL PREPARE statement, a host variable was found in the SQL statement being prepared. The SQL statement must not contain input or output host variables.

System Action: Preprocessing continues. A new package is not produced. If the package existed previously, it is restored.

User Response: Correct the SQL PREPARE statement.

ARI5404E The preprocessor version and the application server version are incompatible. Preprocessing failed.

Explanation: The release level of the preprocessor is incompatible with the target application server release level. Preprocessing is terminated and the portable package is not created.

System Action: None.

System Programmer Response: Make sure that the target application server release level supports the preprocessor release level, or preprocess the program to a application server at a compatible release level, and then unload or reload the package to the target application server.

ARI5406I The C preprocessor ignored all input after the semicolon in the SQL external INCLUDE statement.

Explanation: The preprocessor found input after the semicolon in the SQL external INCLUDE statement and on the same line as the statement.

System Action: The preprocessor ignored the input after the semicolon and did not copy it to the modified source file. Preprocessing continues.

User Response: If the ignored input is not a comment starting and ending on the same line, move everything after the semicolon to a separate line.

ARI5407I The application server *status* the bind file *file name*.

Explanation: Bind process of *file name* is completed and the *status* of bind file creation is one of the following:

replaced, or produced if it did not already exist

The program was successfully preprocessed, and the bind file replaced the bind file for this program from a previous preprocess.

produced

This program was preprocessed successfully for the first time. The preprocessor produced a bind file.

restored or did not produce

A failure did not occur, but no SQL statement encountered in the program required the creation of a package. The previous bind file for this program is restored.

did not produce

A failure did not occur, but no SQL statement encountered in the program required the creation of a package.

System Action: The *status* is as specified in the explanation.

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User Response: Refer to other ARI05xx messages produced for this program.

information for the file. Refer to the message text for the return code from the label verification.

ARI5408E Error reading bind file *file_id*.

Record key:
Collection id: *collection_id*
Package id: *package_id*
Sequence number: *sequence_number*
EIBRCODE = *X'return-code'*.

Explanation: A CBND transaction was entered for *collection_id.package_id*, but an error occurred while reading the VSAM file *file_id*. Refer to the EIBRCODE for the cause of the error.

System Action: Processing ends.

User Response: Refer to the EIBRCODE and fix the error. If the problem persists, notify your system programmer.

System Programmer Response: Refer to the error message text for the cause of the problem.

ARI5409I *option* option [in the bind file] overridden by *option* option.

Explanation: The bind option NOCHECK, CHECK, or ERROR was specified on the Bind transaction (CBND). This value will override the NOCHECK, CHECK or ERROR parameter specified during the preprocess of this program.

System Action: The options specified on the CBND replace the options specified on the preprocess.

ARI5411E Keywords NOBIND, NOCHECK and NOPACKAGE are specified. No preprocess will be done for this operation.

Explanation: The preprocessing parameters NOBIND, NOCHECK, and NOPACKAGE were all specified. No action will be taken for this preprocessing operation.

System Action: Processing ends. No package or bind file is created.

User Response: Retry the operation with a valid combination of preprocessing parameters.

ARI5413E Incorrect label information:

Filename= *filename*
Return Code= *X'return code'*

Explanation: An error was detected in the label information for file *filename*.

System Action: Processing ends.

User Response: Notify your system programmer.

System Programmer Response: Check the label

ARI5415E Unexpected VSAM error:

Procedure= *procedure*
Filename= *filename*
Operation= *operation*
Return Code= *X'return code'*
Error Code= *X'error code'*
Reason Code= *X'reason code'*

Explanation: An error was detected while performing the *operation* on the file *filename*. The *procedure* will contain the name of the DB2 Server for VSE module that detected the error.

System Action: Processing ends.

User Response: Notify your system programmer.

System Programmer Response: Check the VSE messages for the cause of the error.

ARI5417E The *collection_id.package_id* bind file records are invalid. Preprocess the program again to regenerate the bind file records.

Explanation: A Bind transaction (CBND) was entered, and detected a problem with the bind file header record.

System Action: Processing ends.

User Response: Repreprocess the program to recreate the bind file records.

ARI5418I The bind options currently in effect for package *collection_id.package_id* are:

```
{NOCHECK | CHECK | ERROR}
{KEEP | REVOKE}
{BLOCK | NOBLOCK}
ISOL(value)
{DATE(value) | APPLICATION
  SERVER DEFAULT DATE}
EXPLAIN(value)
{TIME(value) | APPLICATION
  SERVER DEFAULT TIME}
{EXIT | NOEXIT}
{REPLACE | NEW}
{APOST | QUOTE}
CTOKEN(value)
CCSIDSBCS(value)
CCSIDMIXED(value)
CCSIDGRAPHIC(value)
{CHARSUB(value) | APPLICATION
  SERVER DEFAULT CHARSUB}
{LABEL(value) | DEFAULT PACKAGE
  LABEL}
```

Explanation: A CBND transaction was entered for the

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package *collection_id.package_id* with the QRY option. The values displayed are the options that were specified when the package was preprocessed.

System Action: No connection to any application server is established. The options that were specified when the package was preprocessed are displayed.

ARI5419E BIND process is not supported by FORTRAN preprocessor.

Explanation: The BIND option was specified while preprocessing a FORTRAN program. This function is not supported by the DB2 Server for VSE preprocessor.

System Action: Processing ends.

User Response: Preprocess the FORTRAN program without the BIND option.

ARI5420I CBND process for *collection_id.package_id* against *server* application server started.

Date: *yyyy-mm-dd*

TIME: *hh:mm:ss*

Explanation: The CBND transaction has been started on the target database.

System Action: Processing continues.

User Response: No action required.

ARI5421E Keyword *keyword* is not allowed with keywords already specified.

Explanation: The CBND transaction has multiple keywords that are in conflict with each other. Only one of the keywords or sets of keywords can be specified.

System Action: Processing ends.

User Response: Try the CBND without the keyword specified.

ARI5424E *option* option invalid. It is a VSE only parameter.

Explanation: The preprocessing parameter *option* was specified, but this parameter is not applicable in the VM environment.

System Action: Processing ends.

User Response: Retry the preprocess without the *option* parameter.

ARI5425E Message output error occurred during the *process* process.

Message number = *number*

CICS/VSE service = *service*

TS queue name = *queue-name*

EIBRCODE = *X'return-code'*

[Target database = *db_name*]

Explanation: The *process* encountered an error trying to display a message.

System Action: Processing ends.

User Response: Refer to the message text to fix the cause of the error, and then retry the process.

ARI5426I *process* process successful. [Target database: *db-name*]

Explanation: The *process* has completed successfully.

System Action: Processing is completed.

User Response: No action required.

ARI5427E *process* process unsuccessful. Target database: *db-name* [CB2D abend code: *abend-code*]

Explanation: The *process* did not complete successfully.

System Action: Processing ends.

User Response: Refer to previous messages for the reason of the failure. If necessary, notify your system programmer.

System Programmer Response: Refer to previous messages for the cause of the error.

Chapter 10. ARI5500–ARI5593 FLAGGER Messages

The FLAGGER messages use both SQL and ANSI terms. The ANSI terms are defined below. For a definition of the SQL terms, refer to the *DB2 Server for VSE & VM SQL Reference* manual.

These terms are in uppercase letters in both this manual and the *DB2 Server for VSE & VM SQL Reference* manual.

ALL SET FUNCTION

ALL column function. Any column function where ALL is implicitly or explicitly specified. (In other words, duplicate values are not eliminated.)

AUTHORIZATION IDENTIFIER

The name of the owner or creator of an object, such as a table.

COLUMN DEFINITION

The definition of a column of a table.

COLUMN SPECIFICATION

Reference to a named column.

COMPARISON PREDICATE

A basic predicate. A predicate that compares two values.

DEGREE

The number of columns or expressions selected in an SQL statement.

DISTINCT SET FUNCTION

DISTINCT column function. Any column function with which DISTINCT has been specified. (In other words, duplicate values are to be eliminated.)

GROUPed view or GROUPed table

A view or table that is a result of a GROUP BY clause, a HAVING clause or both of these clauses. A view can also be GROUPed view if any view referenced in the FROM clause is a GROUPed view.

GROUPing column

A column referenced in a GROUP BY clause.

IDENTIFIER

An alphameric token used to form a name.

OUTER REFERENCE

A correlated reference.

QUERY EXPRESSION

A fullselect.

QUERY TERM

A subselect or a fullselect that is surrounded by parentheses.

QUERY SPECIFICATION

A subselect.

RESULT SPECIFICATION

The columns to be searched for in a subquery.

SEARCH CONDITION

One or more Boolean terms.

SELECT LIST

List of columns or expressions, or * specified in the SELECT statement.

SELECT TARGET LIST

One or more TARGET SPECIFICATIONS.

SET FUNCTION SPECIFICATION

One of the following column functions:

- COUNT (*)
- A column function with DISTINCT explicitly specified
- A column function with ALL implicitly or explicitly specified.

SORT SPECIFICATION

The clause comprised of column names, integers, ASC, and DESC that follows the keywords in an ORDER BY clause. For example, in the clause ORDER BY COL1 DESC, COL1 DESC would be the SORT SPECIFICATION.

TABLE EXPRESSION

A FROM clause optionally followed by a WHERE clause, a GROUP BY clause, or a HAVING clause.

TARGET SPECIFICATION

Specification of a parameter or variable that can be assigned a value.

VALUE EXPRESSION

A value specified as the value itself, through a variable name, or as an arithmetic expression.

FLAGGER Messages – ARI5500-ARI5593

VIEW COLUMN LIST

A list of column names provided on the CREATE VIEW statement.

ARI5500I FLAGGER Message: The FIPS standard is used for syntax flagging.

Explanation: Information message to identify the standard used for flagging during preprocessing.

System Action: Processing continues.

ARI5501I FLAGGER Message: The SAA standard is used for syntax flagging.

Explanation: Information message to identify the standard used for flagging during preprocessing.

System Action: Processing continues.

ARI5502I FLAGGER Message: The statement deviates from the SQL standard syntax at the token starting with the text text.

Explanation: A syntax deviation from the standard named in the earlier message (FIPS or SAA) was encountered in the SQL statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5503I FLAGGER Message: A data definition statement is not within a CREATE SCHEMA statement.

Explanation: The FIPS standard requires that all data definition statements are contained within a CREATE SCHEMA statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5504I FLAGGER Message: There is a nonstandard embedded comment.

Explanation: A comment embedded in an SQL statement does not meet the requirements of the standard being flagged:

- The SAA standard is being checked and the comment is not introduced as required by the host language.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5505I FLAGGER Message: An SQL syntax deviation occurred. The statement is not complete.

Explanation: The SQL statement terminated before all required elements were found.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5506I FLAGGER Message: Identifier *identifiername* is more than 18 characters.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5507I FLAGGER Message: Column column has an invalid length, precision, or scale attribute.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5508I FLAGGER Message: The data type of *datatype* should be an exact numeric with a scale of zero.

Explanation: Data type of an indicator variable should be exact numeric with a scale of zero.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5509I FLAGGER Message: The SET FUNCTION SPECIFICATION references column column.

Explanation: One of the following conditions has not been met:

- The COLUMN SPECIFICATION of a DISTINCT SET FUNCTION cannot reference a column derived from a SET FUNCTION SPECIFICATION.

- COLUMN SPECIFICATIONS in the VALUE EXPRESSION of an ALL SET FUNCTION cannot reference a column derived from a SET FUNCTION SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5510I FLAGGER Message: A VALUE EXPRESSION containing column cannot include operators.

Explanation: A VALUE EXPRESSION cannot include operators in an OUTER REFERENCE COLUMN SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5511I FLAGGER Message: The COLUMN SPECIFICATION is missing or is invalid for the ALL SET FUNCTION function.

Explanation: The VALUE EXPRESSION of an ALL SET FUNCTION SPECIFICATION should include a COLUMN SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5512I FLAGGER Message: Column column is not unique and requires qualification.

Explanation: The specified column is not unique with the current scope. Qualification must be given to uniquely identify the required column.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5513I FLAGGER Message: A VALUE EXPRESSION may not contain a SET FUNCTION SPECIFICATION.

Explanation: The VALUE EXPRESSION of an ALL SET FUNCTION must not contain a SET FUNCTION SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5514I FLAGGER Message: Column column does not identify a column of a table within the current scope.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5515I FLAGGER Message: A column function that contains the OUTER REFERENCED column column is not in the subquery of a HAVING clause.

Explanation: A column function must be contained in a subquery of a HAVING clause if it contains an OUTER REFERENCE COLUMN SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5516I FLAGGER Message: The result of a SUM or AVG function cannot be a character string.

Explanation: Character string is not valid for the result of a SUM or AVG SET FUNCTION SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5517I FLAGGER Message: Operator operator is invalid in this context.

Explanation: One of the following conditions has not been met:

- A VALUE EXPRESSION containing a DISTINCT SET FUNCTION cannot include dyadic operators.
- The first character following a monadic operator cannot be a plus or minus sign.
- A VALUE EXPRESSION should not contain operators if primary is of type character string.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

FLAGGER Messages – ARI5500-ARI5593

ARI5518I FLAGGER Message: The *exptype* EXPRESSION is comparing incompatible data types.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5519I FLAGGER Message: The operand in the LIKE predicate is not a character string.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5520I FLAGGER Message: The ESCAPE character must be a one-byte character string.

Explanation: Escape character in a LIKE predicate must have the data type of character string with the length of 1.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5521I FLAGGER Message: The WHERE clause, GROUP BY clause, or HAVING clause is invalid for the GROUPed view view.

Explanation: If the table identified in the FROM clause is a GROUPed view, then the TABLE EXPRESSION must not contain a WHERE clause, GROUP BY clause, or HAVING clause.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5522I FLAGGER Message: Name occurs more than once in a FROM clause.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5523I FLAGGER Message: Only one table reference is allowed in the FROM clause for a GROUPed view.

Explanation: If the table identified by table name is a GROUPed view, then the FROM clause must contain exactly one table reference.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5524I FLAGGER Message: A reference to column column derived from a column function is invalid in a WHERE clause.

Explanation: A VALUE EXPRESSION directly contained in the SEARCH CONDITION of a WHERE clause must not include a reference to a column derived from a column function.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5525I FLAGGER Message: A HAVING clause must contain the WHERE clause when the WHERE clause has a column function.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5526I FLAGGER Message: The COLUMN SPECIFICATION for column must be an OUTER REFERENCE.

Explanation: If a VALUE EXPRESSION directly contained in the SEARCH CONDITION is a function, then the COLUMN SPECIFICATION in the column

function expression must be an OUTER REFERENCE.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5527I FLAGGER Message: Column column is duplicated within the current scope.

Explanation: The specified column is duplicated within the current scope.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5528I FLAGGER Message: The COLUMN SPECIFICATION for table should be a GROUPing column or should be specified within a column function.

Explanation: Each COLUMN SPECIFICATION contained in a subquery in the SEARCH CONDITION of a HAVING clause must reference a GROUPing column or be specified within a column function.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5529I FLAGGER Message: DEGREE of table table should be 1 when using a RESULT SPECIFICATION of *.

Explanation: The DEGREE of the TABLE EXPRESSION must be 1 if the RESULT SPECIFICATION * is specified in a subquery of any predicate other than an EXISTS predicate.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5530I FLAGGER Message: The column function is not valid for the TABLE EXPRESSION beginning with table.

Explanation: One of the following conditions has not been met:

- If the TABLE EXPRESSION is a GROUPed view, the RESULT SPECIFICATION of a subquery cannot contain a SET FUNCTION SPECIFICATION.
- If the TABLE EXPRESSION is a GROUPed view, the SELECT LIST of a QUERY SPECIFICATION cannot contain a column function.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5531I FLAGGER Message: The COLUMN SPECIFICATION for column is invalid.

Explanation: One of the following conditions has not been met:

- For a GROUPed table, the COLUMN SPECIFICATION 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 SPECIFICATION must be specified within a SET FUNCTION SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5532I FLAGGER Message: DISTINCT is specified more than once.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5533I FLAGGER Message: The COMPARISON PREDICATE subquery cannot contain a GROUP BY or HAVING clause.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5534I FLAGGER Message: The COMPARISON PREDICATE subquery cannot identify a GROUPed view.

Explanation: 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.

System Action: Processing continues.

FLAGGER Messages – ARI5500-ARI5593

User Response: Correct the SQL statement to meet installation standards.

ARI5535I FLAGGER Message: Invalid AUTHORIZATION IDENTIFIER authid.

Explanation: The AUTHORIZATION IDENTIFIER prefixed to the table name is invalid.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5536I FLAGGER Message: Table or view name already exists.

Explanation: The table *name* or view *name* specified already exists in the catalogue.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5537I FLAGGER Message: The COLUMN DEFINITION is missing.

Explanation: At least one COLUMN DEFINITION should be specified for a CREATE TABLE.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5538I FLAGGER Message: The data type type1 of the target is not compatible with the data type type2 of the source.

Explanation: Data types should match between both the target and source:

- In a FETCH statement
- In a SELECT statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5539I FLAGGER Message: You must specify a VIEW COLUMN LIST for table.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5540I Warning: There is not enough memory for the FLAGGER. Flagging is suspended for this statement.

Explanation: The FLAGGER has run out of stack space.

System Action: Flagging continued for subsequent statements.

User Response: Notify the system programmer.

System Programmer Response: Check whether the memory allocation for the preprocessor can be expanded. Allocate more memory for the FLAGGER operation if possible. Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5541I Warning: An error occurred when attempting to load the FLAGGER modulename. Flagging capability is affected.

Explanation: The FLAGGER data or load module used to describe the syntax for the standard being flagged was not found during FLAGGER initialization.

System Action: If the module that failed to load was a syntax module (ARIFF00 or ARIFS00), then flagging is discontinued. If the module was a semantics module, then semantics checking stops, and only syntax checking continues.

User Response: Notify the system programmer.

System Programmer Response: Refer to the message produced by the operating system for details of causes and proceed as instructed for that message. Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5542I Warning: An error occurred when initializing the FLAGGER. Flagging is discontinued.

Explanation: An internal error occurred during FLAGGER initialization.

System Action: Preprocessing continues but FLAGGER operation is discontinued.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

FLAGGER Messages – ARI5500-ARI5593

ARI5543I **Warning: The FLAGGER could not process the SQL statement. Flagging is discontinued.**

Explanation: An SQL statement passed to the FLAGGER caused an internal error within it.

System Action: Preprocessing continues but FLAGGER operation is discontinued.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5544I **Warning: An error occurred when terminating the FLAGGER.**

Explanation: An internal error occurred during FLAGGER termination.

System Action: Preprocessing continues but FLAGGER operation is discontinued.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5545I **Warning: Error during FLAGGER access to the system catalog. Flagging continues to check syntax only.**
SQLCODE = nnn SQLERRP = modname
SQLERRD1 = nnn Creator = creatorname
Table = tablename

Explanation: An internal error occurred during FLAGGER access to the system catalog.

System Action: Flagging continues for syntax checking only.

User Response: Notify your system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5546I **Warning: An error occurred when processing FLAGGER internal memory blocks.**

Explanation: The FLAGGER could not find an internal memory block.

System Action: Preprocessing continues but FLAGGER operation is discontinued.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2*

Server for VSE & VM Diagnosis Guide and Reference manual for more information on failure analysis procedures.

ARI5547I **Warning: Not enough memory for FLAGGER operation.**

Return Code = nn.

Explanation: The FLAGGER does not have enough memory available to operate.

System Action: Preprocessing continues but FLAGGER operation is discontinued.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5548I **Warning: Error releasing FLAGGER memory during termination.**

Explanation: The FLAGGER could not release memory back to the operating system.

System Action: Flagging termination stops.

User Response: Notify the system programmer.

System Programmer Response: Refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for more information on failure analysis procedures.

ARI5570I **FLAGGER Message: You must declare column column as NOT NULL.**

Explanation: All columns identified as UNIQUE must be defined with the NOT NULL option.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5571I **FLAGGER Message: The viewed table table must be updateable.**

Explanation: When the WITH CHECK OPTION is specified then the viewed table must be updateable.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5572I **FLAGGER Message: Invalid number of column names.**

Explanation: The number of column names in the VIEW COLUMN LIST should be the same as the

FLAGGER Messages – ARI5500-ARI5593

DEGREE of the table specified by the QUERY SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5573I FLAGGER Message: You must declare cursor cursor before using it.

Explanation: The cursor specified has not been declared in a DECLARE CURSOR statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5574I FLAGGER Message: Cursor cursor is already declared.

Explanation: The cursor specified has already been declared in a DECLARE CURSOR statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5575I FLAGGER Message: Only * or column names are valid in this context.

Explanation: 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 SPECIFICATIONs.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5576I FLAGGER Message: The descriptions of tables identified by the QUERY EXPRESSION beginning with table table1 and the QUERY TERM beginning with table2 should be identical.

Explanation: When UNION is specified, the descriptions of the two tables should be identical, except for the column names.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5577I FLAGGER Message: The SORT SPECIFICATION number is outside the DEGREE of cursor cursor.

Explanation: 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5578I FLAGGER Message: Table table is a read-only table.

Explanation: A DELETE, an INSERT, or an UPDATE statement was specified for a read-only table.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5579I FLAGGER Message: Table table must not be identified in a FROM clause of any subquery contained in a SEARCH CONDITION.

Explanation: A table specified in a DELETE or an UPDATE cannot be used in a FROM clause of any subquery contained in its SEARCH CONDITION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5580I FLAGGER Message: Table table1 is not the first table table2 specified in the DECLARE CURSOR statement.

Explanation: The table specified in a DELETE or an UPDATE statement should be the first table specified in the FROM clause of the DECLARE CURSOR statement.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5581I FLAGGER Message: The number of TARGET SPECIFICATIONs does not match the DEGREE of cursor cursor.

Explanation: The number of TARGET SPECIFICATIONs in the FETCH statement does not match the DEGREE of the table specified.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5582I FLAGGER Message: The target table table of the INSERT statement is also in the FROM clause or in the subquery.

Explanation: The named table must not be identified in a FROM clause of a QUERY SPECIFICATION or of

any subquery contained in the QUERY SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5583I FLAGGER Message: The number of columns specified does not match the number of values specified.

Explanation: In an INSERT statement, the number of columns specified does not match the number of values specified.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5584I FLAGGER Message: The number of columns specified does not match the DEGREE of the QUERY SPECIFICATION beginning with table.

Explanation: In an INSERT statement, the number of columns specified does not match the DEGREE of the table specified in the QUERY SPECIFICATION.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5585I FLAGGER Message: There is a data type or length mismatch between column column and the INSERT or UPDATE item.

Explanation: One of the following conditions has not been met:

- If the data type of the column name is a character string, then the corresponding item in the INSERT or UPDATE statement should be a 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.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5586I FLAGGER Message: You cannot use a GROUP BY or HAVING clause or identify a GROUPed view in this context.

Explanation: The table identified in the FROM clause of the TABLE EXPRESSION in a SELECT statement should not include a GROUP BY or HAVING clause and should not identify a GROUPed view.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5587I FLAGGER Message: The number of elements specified in the SELECT LIST should match the number in the SELECT TARGET LIST.

Explanation: In the SELECT statement, the number of elements specified in the SELECT LIST should match the number of elements in the SELECT TARGET LIST.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5588I FLAGGER Message: Column function function is not allowed in an UPDATE statement.

Explanation: A VALUE EXPRESSION in a SET clause of an UPDATE statement should not include a column function.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5589I FLAGGER Message: You cannot specify NULL for NOT NULL column column.

Explanation: If NULL is specified in the SET clause of the UPDATE statement, then the corresponding column should allow nulls.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5590I FLAGGER Message: Invalid SQL terminator for host language.

Explanation: The SQL statement was not terminated by the correct construct for the host language being processed.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

FLAGGER Messages – ARI5500-ARI5593

ARI5591I FLAGGER Message: You must define the host variable identifier.

Explanation: The host variable named was either:

- Not defined within the program
- Defined outside the SQL Declare Section.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5592I FLAGGER Message: Table table not found in the catalog.

Explanation: The named table or view does not exist in the system catalog.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

ARI5593I FLAGGER Message: For the host language language, there is an invalid IDENTIFIER or LABEL name.

Explanation: The format of the IDENTIFIER *name* or LABEL *name* displayed does not meet the requirements of the host language.

System Action: Processing continues.

User Response: Correct the SQL statement to meet installation standards.

Chapter 11. ARI0600–ARI0699, ARI6000–ARI6299, ARI0700–ARI0799 EXEC Messages

ARI0613E You did not specify the required EXEC parameter &1.

Explanation: The named keyword parameter (&1) is needed for correct execution of the EXEC.

System Action: Processing ends.

User Response: Reenter the command with the parameter specified.

ARI0629E Keyword &1 is invalid or has a value that is invalid or a value not properly enclosed within parentheses.

Explanation: The specified keyword is either not valid, or it needs a parameter value.

System Action: Processing ends.

User Response: Reenter the command with a correct keyword and parameter value, if needed.

ARI0661E Duplicate keyword &1 specified.

Explanation: EXEC processing was not successful. This EXEC keyword parameter &1 has been specified more than once.

System Action: EXEC processing ends.

User Response: Rerun the EXEC without duplicate keyword parameters.

ARI6203I **FORMAT 1:**
GRANT statements for user authorities will be generated.
FORMAT 2:
CREATE statements for stored procedures will be generated.
FORMAT 3:
CREATE statements for stored procedures and stored procedure servers will be generated.
FORMAT 4:
SQL statements to create all objects will be generated.
FORMAT 5:
SQL statements to create all objects in dbspace *dbspace* will be generated.
FORMAT 6:
SQL statements to create all *object-types* will be generated.
FORMAT 7:
SQL statements to create all tables, and

table and column privileges will be generated.

Explanation: The SQLDBDEF utility is indicating the output that is to be generated.

System Action: Processing continues.

ARI6204I The *output-file* will be written to *device*.

Explanation: This message is generated by the SQLDBDEF utility. *Output-file* value is either SYSPCH or SYSLST.

System Action: Processing continues.

ARI6205I Invoking ARIDBDEF to generate SQL statements.

Explanation: The SQLDBDEF EXEC is about to invoke the phase that generates SQL statements to recreate database objects.

System Action: Processing continues.

ARI6206I No SQL statements will be generated.

Explanation: The SQLDBDEF EXEC can generate any of the following:

- GRANT statements for user authorities
- CREATE statements for stored procedures and, if the output DBSU job will run against a DB2 Server for VSE & VM database, CREATE statements for stored procedure servers
- SQL object definitions

You have indicated that the SQLDBDEF utility should not generate any of the above types of statements.

System Action: Processing ends.

ARI6209E Phase *name* not found.

Explanation: The SQLDBDEF utility calls the phase ARIDBDEF to extract the SQL object definitions and generate SQL statements to re-create those objects. This phase should have been installed into a library in the search path.

System Action: Processing ends.

User Response: Refer to the description of the SQLDBDEF utility in *DB2 Server for VSE System Administration*, Appendix G: *Service and Maintenance Utilities* for instructions to create the ARIDBDEF phase.

EXEC Messages—ARI0600–ARI0699, ARI6000–ARI6702, ARI0700–ARI0799

ARI6210E **Errors or warnings occurred during SQLDBDEF EXEC processing. Refer to the listing file for more information.**

Explanation: Processing of the SQLDBDEF utility failed. Error information is contained in the listing file.

System Action: Processing ends.

Operator Response: Correct the errors identified in the listing file and run the utility again.

ARI6212E *Keyword1 and keyword2 cannot be both specified.*

Explanation: This message is displayed if conflicting keywords are provided for the SQLDBDEF utility. Keywords that cannot both be specified include DBSpaces and Objects, and SYSPUnch and NOPUnch.

System Action: Processing ends.

User Response: Correct the specification of the keywords, and run the utility again.

ARI6213I *Parameter is ignored in VSE.*

Explanation: This message is displayed if SYSPrint or SYSPUnch is specified for the SQLDBDEF utility in VSE. Parameter is SYSPrint or SYSPUnch. In VSE, the generated DBSU job always goes to SYSPCH, and the output listing goes to SYSLST if NOPUnch is not specified.

System Action: Processing continues.

ARI0708I **All *exec-name* EXEC processing completed successfully.**

Explanation: This is the expected response from the database manager.

ARI0709I **Warning: Warnings occurred during *exec-name* EXEC processing.**

Explanation: This message indicates that the highest level of error from processing this EXEC was WARNING.

Programmer Response: Inspect the LISTPREP file produced to verify that the warning does not require additional action.

ARI0710E **Errors occurred during &1 EXEC processing.**

Explanation: This message indicates that at least one error has occurred during execution.

If this message was issued at the end of the SQLPREP EXEC, either a previous message has been issued or the LISTPREP listing contains an error message. If this message was not issued at the end of the SQLPREP EXEC, refer to the previous message issued.

Programmer Response: Take appropriate action based on the previous messages.

ARI0717I **Start &1 EXEC: &2 &3 &4.**

Explanation: This is the expected response from the database manager.

&1 is the EXEC name.

&2 is the date.

&3 is the time.

&4 is the time zone.

ARI0796I **End &1 EXEC: &2 &3 &4.**

Explanation: This is the expected response from the database manager.

Chapter 12. ARI7001–ARI7970 ISQL Messages

ARI7001E ISQL is not supported on this terminal.

Explanation: You tried to run ISQL on a terminal which is not supported. ISQL supports IBM 3270 terminals or 3270-compatible display devices having a 24 X 80 or larger mode (a line size of at least 80 characters and 24 lines on the screen).

System Action: ISQL ends.

User Response: Run ISQL only on terminals which are supported. Ensure that you are using a supported terminal type for your operation.

ARI7020E System problem. The message normally displayed giving the result of the SQL command just entered cannot be printed. The SQL statement ended with an SQLCODE of *code*. Report this message to your system programmer.

Explanation: ISQL tried to display message ARI0500I, ARI0501I, ARI0502I, ARI0503E, ARI0504I, or ARI0505I, but the system had problems getting it.

System Action: ISQL printed this message instead of the one it normally would. The system waits for you to enter the next statement.

User Response: Look up the text for the SQLCODE indicated in the message. Notify your system programmer.

System Programmer Response: There is a problem with the DB2 Server for VSE language message text module ARIMS001 or equivalent. Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7021E The application server has issued a ROLLBACK statement. All work entered for processing since the last COMMIT statement was rolled back. You may have to reenter some statements.

Explanation: During DB2 Server for VSE error processing, it was discovered that the database manager issued a ROLLBACK command for the user. The reason is stated in the DB2 Server for VSE message immediately preceding this one. If SET AUTOCOMMIT was:

ON Any work entered for this command was rolled back.

OFF Any work entered for the database manager since the beginning of the logical unit of work was rolled back.

System Action: The system issued a ROLLBACK command. The system waits for you to enter the next statement.

User Response: Read the SQL error message for the message preceding this one, its system and user action. If the problem is still not clear, notify your system programmer. If you want to reenter the work that was rolled back when SET AUTOCOMMIT was:

ON Reenter the last command you had entered.

OFF Reenter all commands entered since you began your logical unit of work.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7022E System message error. Notify your system programmer.

Explanation: An internal error occurred while ISQL was trying to display a message.

System Action: The system waits for you to enter the next statement.

User Response: Notify your system programmer. You can continue your ISQL session.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7040I CANCEL processing complete.

Explanation: CANCEL processing has completed.

System Action: The system waits for you to enter the next statement.

ARI7041D AUTOCOMMIT is OFF. Do you still want to CANCEL? Enter 0(No) or 1(Yes).

Explanation: You entered CANCEL while autocommit is off. If the cancel process is done, not only will the command running now be cancelled, but all the work you did since you set autocommit off or since the last COMMIT WORK will be rolled back. You are asked if the cancel should still be done.

System Action: The system waits for your reply.

ISQL Messages – ARI7001-ARI7970

User Response: Enter YES if the cancel should still be done. Enter NO if the cancel should not be done.

ARI7042E **Routine ended. It was cancelled because of your request or an error detected by ISQL.**

Explanation: A routine was executing at the time a CANCEL command was entered. The command could have been entered from the terminal or it could have been read from a routine. The CANCEL command could also have been entered by ISQL if an error was detected while processing a routine. Additional messages will be displayed when ISQL finds an error condition.

System Action: A ROLLBACK WORK is performed. The routine is ended immediately. The system waits for you to enter the next statement.

User Response: If additional error messages are displayed, correct the error and rerun the routine.

ARI7043I **CANCEL processing caused a ROLLBACK. The ROLLBACK was successful.**

Explanation: The specified ROLLBACK operation was performed because a CANCEL command had been entered previously. The command could have been entered from the terminal or it could have been read from a routine. The CANCEL command could also have been entered by ISQL if an error was detected while processing a routine. The ROLLBACK processing was successful.

System Action: The system waits for you to enter the next statement.

ARI7044I **Command in progress, terminal is now free.**

Explanation: The terminal is now available for other CICS transactions while ISQL processes your SQL command. If you execute another CICS transaction and ISQL completes processing your SQL command before the other CICS transaction completes, display of the output from the SQL command is delayed until the other CICS transaction completes execution. If you do nothing, ISQL will display the output from the SQL command when the SQL command is complete. If you wish to cancel the SQL command, enter the ISQL transaction identifier followed by the word CANCEL; for example, ISQL CANCEL.

The new transaction must not be See "Pseudo-conversational Transaction Considerations" in the *DB2 Server for VSE System Administration* manual for more information.

System Action: The system waits for you to enter another CICS transaction, to cancel the SQL command, or to complete the SQL command.

User Response: You may enter another CICS transaction. You may enter ISQL CANCEL. You may wait for the output from the SQL command being processed.

ARI7045E **CANCEL processing caused a ROLLBACK. The ROLLBACK was unsuccessful. See previous messages for more details.**

Explanation: The specified ROLLBACK operation was performed because a CANCEL command had been entered previously. The ROLLBACK processing was not successful. Additional messages are displayed to indicate why the ROLLBACK processing failed.

System Action: ROLLBACK processing is always performed when a CANCEL command is entered. Additional messages are displayed to indicate the reason for the failure.

User Response: See the other messages for the reason for the failure.

ARI7046D **Do you want to CANCEL? Enter 0(No) or 1(Yes).**

Explanation: While the terminal is free during processing of a SQL command, you entered the ISQL transaction identifier followed by blanks or something other than CANCEL. The only valid input with the transaction identifier at this time is CANCEL. You are asked if the cancel processing should be done.

System Action: The system waits for your reply.

User Response: Enter YES if the cancel should still be done. Enter NO if the cancel should not be done.

ARI7047I **CANCEL request accepted.**

Explanation: You entered a CANCEL request with AUTOCOMMIT on, or you entered YES when asked if a CANCEL request should be done. This message indicates that the request has been accepted and the system will do the necessary cancel processing.

System Action: The system continues to process the cancel request.

ARI7048I **CANCEL request ignored.**

Explanation: You entered NO when asked if a CANCEL request should be done. This message indicates that the request will be ignored.

System Action: The system waits for you to enter the next statement.

ARI7050I CANCEL already in progress.

Explanation: You entered the CANCEL command while your command was already being cancelled.

System Action: This CANCEL command is ignored. Your original CANCEL command processing continues.

ARI7051E Routine or EXEC processing ended. It was cancelled as you requested or because ISQL detected an error.

Explanation: A routine was executing when a CANCEL command was entered. The command could have been entered by the user from the terminal or it could have been read from a routine. The CANCEL command could also have been entered by ISQL if an error was detected while processing a routine. Additional messages will be displayed when ISQL finds an error condition.

System Action: A ROLLBACK WORK is performed. The routine is ended immediately. The system waits for you to enter the next statement.

User Response: If additional error messages are displayed, correct the error and rerun the routine.

ARI7060I Maximum input length of 2048 characters has been reached. Remainder of input is lost.

Explanation: You entered too many continuation lines. Your input must not be longer than 2 048 characters. The first 2048 characters of your input have been accepted, but the rest is lost.

System Action: The system will try to process your command anyway. More messages will be displayed to let you know whether or not the command was processed successfully.

User Response: If the command you entered was an SQL command, you can shorten it with the CHANGE command so that it is not longer than 2 048 characters. Then enter the START command to process it again.

ARI7061I Previous input ignored.

Explanation: An IGNORE command was entered on a multi-line input.

System Action: All lines for this multi-line input are ignored. The system waits for you to enter the next statement.

ARI7062E Report the following error to your system programmer. Invalid call to ARIIRWI. Length=0.

Explanation: An ISQL module has called module ARIIRWI, but the length of the information to be displayed is given as 0.

System Action: The error message is displayed and module ARIIRWI returns to the caller. Processing continues.

User Response: Notify your system programmer. Give the system programmer a list of the five previous commands entered.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7063I Continuation character detected and ignored. Make sure your input is correct and without the continuation character.

Explanation: You entered a continuation character on a message reply. The continuation is ignored.

System Action: The system uses the reply without the continuation character as the full reply. If the reply is not valid, the original message will be issued again.

ARI7064I Routine processing cancelled. The error indicated by a previous message cancelled the processing of your routine, as you requested with the SET RUNMODE command.

Explanation: While a routine was running, an error was detected by ISQL. ISQL cancelled the routine processing because you requested that routines should be cancelled when errors are detected. See the SET RUNMODE command for additional information.

System Action: ISQL issues a ROLLBACK WORK command to undo all work done since the last COMMIT WORK. Routine processing ends. The system waits for you to enter the next statement.

User Response: Correct the cause of the error as indicated by previous error messages, and rerun the routine.

ARI7065I Routine processing stopped. The error indicated by a previous message has caused processing of your routine to be stopped, as you requested with the SET RUNMODE command.

Explanation: While a routine was running, an error was detected by ISQL. ISQL stopped the routine processing because you requested that routines should be stopped when errors are detected. See the SET RUNMODE command for additional information.

System Action: Routine processing ends. ROLLBACK WORK is not issued. The system waits for you to enter the next statement.

User Response: Correct the cause of the error as indicated by previous error messages, and rerun the routine.

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ARI7066I Your input is being held.

Explanation: You entered a HOLD command or pressed the PF9 key. Your command is being held and may be continued.

System Action: The system waits for you to enter the rest of the command, unless the command was complete. If the command was complete, the HOLD command will be processed.

User Response: Press ENTER if the command is complete. If the command is not complete, you may enter the rest of the command, or IGNORE, or CANCEL.

ARI7068I Your input is continued. Enter more input or press Enter.

Explanation: You entered an input line with a continuation character or used PF9. Continue the input and press enter.

System Action: The system waits for you to enter additional input lines.

User Response: Enter additional input lines, IGNORE to have the input ignored, CANCEL to have the command cancelled, or press the ENTER key to have the command processed.

ARI7069I Your input has been held. Use the START command to process your input.

Explanation: You requested that an SQL statement be held by pressing the PF9 key or by entering the HOLD command. The SQL statement is held in the current command buffer. The SQL statement will be processed if you enter a START command or press the PF2 key.

System Action: The system waits for you to enter the next statement.

User Response: Enter another command: START - to start the held statement, CHANGE - to change the held statement, or another command.

ARI7070I Routine or EXEC processing cancelled. The error indicated by a previous message cancelled the processing of your routine or EXEC, as you requested with the SET RUNMODE command.

Explanation: While a routine was running, an error was detected by ISQL. ISQL cancelled the routine processing because you requested routines be cancelled when errors are detected. See the SET RUNMODE command for additional information.

System Action: ISQL issues a ROLLBACK WORK to undo all the work done since the last COMMIT WORK. The routine processing will be terminated. The system waits for you to enter the next statement.

User Response: Correct the cause of the error as indicated by previous error messages, and rerun the routine.

ARI7071I Routine or EXEC processing stopped. The error indicated by a previous message cancelled the processing of your routine or EXEC, as you requested with the SET RUNMODE command.

Explanation: While a routine was running, an error was detected by ISQL. ISQL stopped the routine processing because you requested routines be stopped when errors are detected. See the SET RUNMODE command for additional information.

System Action: The routine processing ends. ROLLBACK WORK is not issued. The system waits for you to enter the next statement.

User Response: Correct the cause of the error as indicated by previous error messages, and rerun the routine.

ARI7079I ISQL initialization complete.

Explanation: ISQL initialization has completed.

System Action: System waits for you to enter an ISQL or SQL command.

User Response: Enter an ISQL or SQL command.

ARI7080A Please enter an ISQL command or an SQL statement.

Explanation: You must enter a command. A null line will not be accepted.

System Action: The system waits for you to enter a command.

User Response: Enter an ISQL or SQL command.

ARI7081A Invalid user ID. Please reenter your user ID. Your user ID must start with a letter and must contain only letters and numbers.

Explanation: Your user ID must start with a letter and must contain only letters and numbers.

System Action: You are given two tries to correct the user ID and then this signon will end.

User Response: Enter a valid user ID.

ARI7082A User ID is not authorized to use the application server. Enter an authorized user ID.

Explanation: You have entered a user ID that is not authorized to use the database manager. Users must be defined to the DB2 Server for VSE system by the

system programmer before they can use the DB2 Server for VSE system. You may have typed your user ID incorrectly.

System Action: You are given two tries to enter a valid user ID and then this signon will end.

User Response: Enter a valid user ID. If you do not have a valid user ID, notify your system programmer.

System Programmer Response: Define the user to the database manager if not already defined.

ARI7083A Invalid password. Please reenter your password.

Explanation: The password that you entered does not match the DB2 Server for VSE password for the user ID that you entered.

System Action: You are given two tries to enter a valid password and then this signon will end.

User Response: Enter your correct password.

System Programmer Response: Verify that the password entered by the user matches the DB2 Server for VSE password for the user ID.

ARI7084I SIGNON unsuccessful. User ID or password or target database are invalid. This SIGNON ended.

Explanation: You have not supplied a valid user ID and/or password and/or target database.

System Action: This signon ends if a valid user ID, password, and target database are not supplied.

User Response: Notify your system programmer if you do not have a valid user ID, password, or target database. When you have a valid user ID and password you may signon to ISQL.

System Programmer Response: Define the user to ISQL if not already defined. Give the user the correct password if an incorrect password was used. Give the user the correct target database if an incorrect target database was used.

ARI7085E There is not enough system storage available. [This SIGNON ended.] Try again later.

Explanation: There is not enough system storage available to support another ISQL user. More storage will become available as other users signoff.

System Action: Your signon ends.

User Response: Try again later. If you still can not signon, notify your system programmer.

System Programmer Response: If this condition persists, increase the SIZE parameter on the EXEC CICS job control statement and the CICS partition size.

ARI7086E The connection between ISQL and the application server is not operational. [Notify your system programmer. This sign-on ended.]

Explanation: The link between ISQL and the database manager has not been enabled. Your signon cannot continue until the link has been enabled.

System Action: Your signon ends.

User Response: Try again later. If you can still not signon, notify your system programmer.

System Programmer Response: Enable the link between ISQL and the database manager.

ARI7087E ISQL has abnormally terminated with CICS Abend Code *code*.

Explanation: ISQL has abended with the CICS abend code shown in the message.

System Action: Your signon ends.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7101E Internal processing error. Invalid call to ARIITIO.

Explanation: An internal processing error occurred in ISQL. Module ARIITIO was called to display data, but the length of the data was zero.

System Action: Control is returned to the module that called module ARIITIO. Processing continues.

ARI7120E ISQL could not process your command because of a system problem. Your command is too large. Report this problem to your system programmer.

Explanation: One of the following conditions occurred:

- The length of the current SQL command was greater than 2048 characters.
- The length of the formatting information may be calculated as follows:

$$\text{FORMAT BLOCK SIZE} = x + (n * y)$$

where x is the size of the format block header (504 bytes), n is the number of columns in the select-list for the stored query (not to exceed 45 columns), and y is the size of the format information stored for each column (44 bytes).

System Action: No substitutions were performed. The system waits for you to enter the next statement.

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User Response: Notify your system programmer.

System Programmer Response: Determine which length was exceeded and why. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7121E Command failed. ISQL could not process your SQL statement because it is too large. Substitutions would make the command line longer than 2048 characters.

Explanation: When substitutions made for the placeholders (&1., &2., etc.), your command was longer than 2048 characters.

System Action: The system waits for you to enter the next statement.

User Response: Change the SQL command so that its total length, including substitutions, is less than 2048 characters.

ARI7123E Command failed. You entered an invalid character after the &. Reenter the command with a number between 1 and 9999 following the &.

Explanation: A nonnumeric character was found after &.

System Action: Parameter substitutions were performed until the invalid character was found. The system waits for you to enter the next statement.

User Response: Replace the invalid character after &, to a number between 1 and 9999 and reenter the command.

ARI7124E Command failed. You entered a 0 after the &. Reenter the command with a number between 1 and 9999 following the &.

Explanation: The first number after the & is a zero, which is not valid.

System Action: Parameter substitutions were performed until the zero was found.

User Response: Change the SQL command so that it no longer has a 0 after the &. The system waits for you to enter the next statement.

ARI7125E Command failed. You entered a number greater than 9999 after the &. Reenter the command with a number between 1 and 9999 following the &.

Explanation: The only valid numbers which can be substituted for a parameter are between 1 and 9999. A number greater than 9999 was found after an &.

System Action: Parameter substitutions are done until the invalid number was found. The system waits for you to enter the next statement.

User Response: Change invalid number to a number between 1 and 9999.

ARI7126E Command failed. The command line was null after ISQL made substitutions. Change your command or routine and try again.

Explanation: When substitutions made for the placeholders (&1., &2., etc.), your command was null.

System Action: No action is taken. The system waits for you to enter the next statement.

User Response: Change your command or routine and try again.

ARI7127I Your command contains unpaired quotation marks.

Explanation: The command you entered contained either an unpaired single quote (') or an unpaired double quote (").

System Action: The system finishes processing the command with the unpaired quotation mark. The system waits for you to enter the next statement.

User Response: Check the results of the command. If they are not what you wanted, reenter the command.

ARI7128E Run command failed. A command line or data line in your routine is too large. Substitutions would make the line more than 254 characters long.

Explanation: Substitutions made for the placeholders (&1., &2., etc.) would cause a line in your routine to exceed 254 characters. The line is displayed after the message.

System Action: Substitutions were performed until the line would have exceeded 254 characters with the next substitution. The system waits for you to enter the next statement.

User Response: Change the routine so that each line, including substitutions, has fewer than 254 characters.

ARI7180E Command failed. The ISQLTRACE command has a missing or invalid parameter. Reenter the command specifying DUMP, DISPLAY, or N, where N is the desired number of entries in the trace table. N must be between 50 and 1000.

Explanation: You entered an incorrect option on the ISQLTRACE command.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command, specifying the option you want.

ARI7181I ISQL trace table display

First entry: address1
Current entry: address2
Last entry: address3

Explanation: You entered an ISQLTRACE DISPLAY command.

address1 is the address of the start of the trace table.

address2 is the address of the current entry in the table.

address3 is the address of the last entry in the table (not necessarily the last entry used in the table).

System Action: Trace table entries will be displayed following the heading. They will be displayed in reverse order, starting with the latest entry placed in the table.

ARI7182E Command failed. The number you specified on the ISQLTRACE command is not between 50 and 1000. Reenter the command specifying a number between 50 and 1000.

Explanation: You did not enter a number between 50 and 1000. When changing the number of entries in the trace table, only the numbers between 50 and 1000 are accepted.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with a number from 50 to 1000.

ARI7183E Command failed. The number you specified on the ISQLTRACE command has more than 4 digits. Reenter the command specifying a number between 50 and 1000.

Explanation: You entered a number that has more than four digits. When changing the number of entries in the trace table, only the numbers between 50 and 1000 are accepted.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with a number from 50 to 1000.

ARI7184I ISQLTRACE processing complete.

Explanation: The ISQLTRACE command processing you requested is complete.

System Action: The system waits for you to enter the next statement.

ARI7185I There is not enough storage available to change the number of trace entries in the trace table. The number of entries is unchanged.

Explanation: There was not enough storage available to obtain a new trace table. The size of the trace table remains unchanged.

System Action: The system waits for you to enter the next statement.

User Response: Retry the command later.

ARI7186I The trace table can now hold *number* entries.

Explanation: The size of the trace table has been changed to hold the number of entries you specified on the ISQLTRACE command.

number is the number of entries you specified.

System Action: The system waits for you to enter the next statement.

ARI7300E Command ended. The input command could not be processed because of system problems. You may enter another command.

Explanation: INPUT could not get the storage it needed for processing. INPUT processing ends.

System Action: The INPUT command ended. The system waits for you to enter the next statement.

User Response: You are free to enter another command or INPUT can be tried again. If you enter the INPUT command again and continue to receive this message, notify your system programmer.

System Programmer Response: If this condition persists, increase the SIZE parameter on the CICS EXEC job control statement and the CICS partition size.

ARI7301E Command failed. Specify the table name on the input command.

Explanation: No table name was specified after INPUT.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No SQL COMMIT WORK or ROLLBACK WORK has been issued.

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User Response: Reenter the INPUT command specifying table name and optionally (column names).

ARI7302E **Command failed. Table name is incorrect. You must use double quotation marks in pairs.**

Explanation: During the checking of the table name a double quote was encountered. However, another double quote was not found. They must be specified in pairs.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No SQL COMMIT WORK or ROLLBACK WORK has been issued.

User Response: Reenter the INPUT command making sure that the double quotes around the table name are specified in pairs.

ARI7303E **Command failed. Table name is incorrect. You must specify the table name after the creator name.**

Explanation: During checking of the {owner.}table name, no table name was found after owner.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No SQL COMMIT WORK or ROLLBACK WORK has been issued.

User Response: Reenter the INPUT command specifying table name after owner.

ARI7304E **Command failed. Column names are specified incorrectly. A left parenthesis must come before column names.**

Explanation: During checking of the INPUT command, it was discovered that the column names did not start with a left parenthesis.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No SQL COMMIT WORK or ROLLBACK WORK has been issued.

User Response: Reenter the INPUT command. Make sure that any column names specified begin with a left parenthesis "(" and end with a right parenthesis ")" as required.

ARI7305E **Command failed. Column names are specified incorrectly. A right parenthesis must follow column names.**

Explanation: During checking of the INPUT command it was discovered that the column names did not end with a right parenthesis.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No

SQL COMMIT WORK or ROLLBACK WORK has been issued.

User Response: Reenter the INPUT command. Make sure that any column names specified begin with a left parenthesis "(" and end with a right parenthesis ")" as required.

ARI7306E **The input command is ending. Read the previous SQL error message and its action for the reason.**

Explanation: INPUT cannot continue processing for reasons described by the SQL error message printed prior to this one.

System Action: INPUT is ending. A ROLLBACK WORK will be issued for a user-entered or system-entered CANCEL, or if SET AUTOCOMMIT is ON. If SET AUTOCOMMIT is OFF and INPUT is not being ended because of a CANCEL, a ROLLBACK WORK will not be performed. INPUT ends. The system waits for you to enter the next statement.

User Response: Read the SQL error message and its action. If the problem is still unclear, notify your system programmer. Otherwise, take action to correct the problem and enter the INPUT command again.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7307A **Enter data values, separated by commas, for the following columns. Enclose character data in single quotation marks.**

Explanation: Enter data for the columns specified after this message. The character data must be enclosed in single quotes.

System Action: Immediately following this message the system writes the names of the columns for which you are to enter data, the data type, and whether null values are allowed in this field. The keyboard is then unlocked and you are requested to enter data or an INPUT command.

User Response: You should note this carefully. You will be asked to enter data soon. Data must be entered in the order specified and must be separated by commas.

ARI7308A **Data not accepted. Reenter data row.**

Explanation: INPUT encountered a problem as described by the SQL error message printed prior to this one. The data could not be processed.

System Action: The data just entered was not accepted. No other data has been lost. You are asked to enter data or another INPUT command.

User Response: Read the SQL error message and its action. If the problem is still unclear, notify your system programmer. Otherwise, if you want this data entered into the table, correct the problem and enter it again.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7309E Command failed. At least one space must separate table name and column names.

Explanation: During checking of the INPUT command, a left parenthesis "(" was found as the next character after table name. There must be at least one blank between the table name and the start of the column names.

System Action: The INPUT command has ended. The system waits for you to enter the next statement. No SQL COMMIT WORK or ROLLBACK WORK has been issued.

User Response: Reenter the INPUT command. Put at least one blank between table name and the left parenthesis "(" which starts the specification of column names.

ARI7310E Command ignored. Input cannot process this ISQL command. Reenter this command after you finish using the INPUT command.

Explanation: The ISQL command entered was not valid at this time.

System Action: The command is ignored. You are asked to enter more data or an INPUT command.

User Response: If you want the command to be processed, bypass the INPUT command by typing END or CANCEL. Otherwise, enter more data or an INPUT command.

ARI7311E Command ignored. You entered neither data nor a valid input command. Try again.

Explanation: You entered neither data nor a valid INPUT command.

System Action: The command is ignored. The system waits for you to enter either data or an INPUT command.

User Response: Enter either data or an INPUT command.

ARI7312I Since AUTOCOMMIT is OFF, SAVE was ignored. To commit data, enter an END command and then a COMMIT statement.

Explanation: Normally, INPUT will commit the data you entered into the table when you enter SAVE. Because you entered SET AUTOCOMMIT OFF before you entered INPUT, you will have to commit data into the table yourself with the COMMIT statement.

System Action: No action is taken. The system asks you to enter more data or an INPUT command.

User Response: If you want to commit your data now, leave INPUT by entering the END command. To commit your data, enter a COMMIT statement. Otherwise, enter either more data or an INPUT command.

ARI7313I Command processing continuing. Excess parameters on command are ignored.

Explanation: During checking of the command (where command is SAVE, BACKOUT, or END) a parameter was discovered. Parameters are not valid.

System Action: The parameter is ignored. Processing of the command continues.

ARI7314I SAVE processing is complete.

Explanation: The data which you had previously entered was committed to a DB2 Server for VSE table.

System Action: The system waits for you to enter data or another INPUT command.

ARI7315E SAVE command failed. No data was committed to the table. The INPUT command has ended. Notify your system programmer.

Explanation: ISQL tried to save your input data by issuing a COMMIT WORK command. An error occurred as described in the SQL error message above.

System Action: The system will issue a ROLLBACK WORK. INPUT processing has ended.

User Response: Read the SQL error message and its action. Notify your system programmer. You are free to enter another ISQL command. You will not be able to enter another SQL command during this session.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

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ARI7316E Since AUTOCOMMIT is OFF, BACKOUT was ignored. To ROLLBACK data, enter an END command and then a ROLLBACK statement.

Explanation: Normally, INPUT will roll back the data you entered into the table when you enter BACKOUT. Because you entered SET AUTOCOMMIT OFF before you entered INPUT, you will have to roll back data yourself with the ROLLBACK statement.

System Action: No action is taken. The system asks you to enter more data or an INPUT command.

User Response: If you want to roll back your data now, leave INPUT mode by entering the END command. To roll back your data, enter a ROLLBACK statement. Otherwise, enter either more data or an INPUT command.

ARI7317I BACKOUT processing is complete.

Explanation: The data which you had previously entered was rolled back from the table.

System Action: The system waits for you to enter the next statement.

ARI7318E BACKOUT command failed. The INPUT command has ended. Notify your system programmer.

Explanation: ISQL tried to backout the data by issuing an SQL ROLLBACK WORK command. This command encountered an error specified by the SQL error message above.

System Action: The database manager will roll back your input during error processing. INPUT processing has ended. The system waits for you to enter the next statement.

User Response: Read the SQL error message and its action and notify your system programmer. You are free to enter another ISQL command. You cannot enter another SQL command during this session.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7319I Since AUTOCOMMIT is OFF, END does not commit data into the table. Enter a COMMIT statement to save your data.

Explanation: Normally, INPUT will commit the data you entered into the table when you enter END. Because you entered SET AUTOCOMMIT OFF before you entered INPUT, you will have to commit data into the table yourself with the COMMIT statement.

System Action: No action is taken. The INPUT

command has ended. The system waits for you to enter the next statement.

User Response: If you want to commit data now, enter a COMMIT statement. Otherwise, you are free to enter another command.

ARI7320I END committed data to the table.

Explanation: The data which you had previously entered was committed to the DB2 Server for VSE table.

System Action: INPUT is ending. The system waits for you to enter the next statement.

ARI7321E An error occurred during END command processing. Read the previous SQL error message and its action. The database manager issued a ROLLBACK statement.

Explanation: ISQL tried to save the input data by issuing a COMMIT statement. This statement encountered an error specified by the SQL error message above.

System Action: The system issued a ROLLBACK statement. Input will end. The system waits for you to enter the next statement.

User Response: Read the SQL error message and its action. Notify your system programmer. You are free to enter another ISQL command. You cannot enter another SQL statement during this session.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7322I The INPUT command completed.

Explanation: INPUT processing has completed.

System Action: The system waits for you to enter the next statement.

ARI7323I You ended the INPUT command by entering a CANCEL command.

Explanation: INPUT processing has completed as a result of entering the CANCEL command.

System Action: The system waits for you to enter the next statement.

ARI7324E The INPUT command rolled back all your data.

Explanation: ISQL tried to insert data into the table you specified. An error occurred as described in the SQL error message above.

System Action: INPUT processing cannot continue. ISQL has issued a ROLLBACK WORK command. INPUT processing has ended. The system waits for you to enter the next statement.

User Response: Read the SQL error message and its action. If the problem is still unclear, notify your system programmer. Otherwise, you are free to enter another command.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7325I **The system completed the INPUT command.**

Explanation: INPUT processing completed as a result of system problems encountered during INPUT command processing.

System Action: The system waits for you to enter the next statement.

User Response: Read the SQL error message and its action. If the problem is still unclear, notify your system programmer. Otherwise, you are free to enter another command.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7326A **No data was entered. Enter data or an INPUT command.**

Explanation: You pressed the ENTER key with nothing or a line of blanks on the input line.

System Action: No action is taken. The system waits for you to enter data or another INPUT command.

User Response: Enter either data or an INPUT command.

ARI7327E **The INPUT command failed. INPUT was entered from a routine, but was not complete. Insert an END command after the last DATA or INPUT command.**

Explanation: Because INPUT was started from a routine, all data or INPUT commands must be entered from the routine also. INPUT is trying to process more data or an INPUT command, but there were no more records in the routine.

System Action: The system has issued a CANCEL command and a ROLLBACK WORK command. INPUT processing has ended. The system waits for you to enter the next statement.

User Response: Examine the routine just executed. For INPUT to finish properly, an END command should be

inserted where you want the INPUT command to end. You are also free to enter another command.

ARI7328E **Command failed. You specified the column names incorrectly. Column names must be specified between parentheses.**

Explanation: During checking of the INPUT command, it was discovered that parentheses were coded after the table name. However, no column names were written between the parentheses.

System Action: The INPUT command has ended. The system waits for you to enter the next statement.

User Response: Resubmit the INPUT command. If you want all columns, type just the table name. If you want specific columns, type them between the parentheses.

ARI7329E **Command failed. You specified the column names incorrectly. They must begin with a letter, \$, #, or @ unless they are enclosed in double quotation marks.**

Explanation: During checking of the INPUT command, it was discovered that one or more of the column names began with a character other than a letter, \$, #, or @. This is not valid.

System Action: The INPUT command has ended. The system waits for you to enter the next statement.

User Response: Resubmit the INPUT command. If all column name or names in error begin with a character other than a letter, \$, #, or @, you must enclose the name in double quotes (""). Otherwise, find the correct column name or names. The column name or names in error do not exist.

ARI7330E **The INPUT command failed. A routine or an EXEC issued an incomplete INPUT command. Insert an END command after the last DATA or INPUT command.**

Explanation: Since input was initiated from a routine, all data or INPUT commands must also be entered from the routine. Input is trying to process more data or an INPUT command, but there were no more records in the routine.

System Action: The system has issued a CANCEL command and a ROLLBACK WORK RELEASE command. INPUT processing has ended. The system waits for you to enter the next statement.

User Response: Examine the routine just executed. For input to finish properly, an END command should be inserted where you want the INPUT command to end. You are also free to enter another command.

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ARI7350E RUN processing cancelled. You have a RUN command in your routine. Remove the RUN command from the routine.

Explanation: RUN is not a valid command in a routine.

System Action: An internal cancel is issued. The system waits for you to enter the next statement.

User Response: Take the RUN command out of the routine.

ARI7351E RUN command failed. You did not specify a routine name. Reenter the RUN command with a routine name.

Explanation: You must specify the name of the routine to be executed on the RUN command. The format is: RUN userid.routine name parameters.

System Action: Command processing failed. The system waits for you to enter the next statement.

User Response: Reenter the RUN command with a routine name.

ARI7354E RUN command failed. The RUN command cannot find the userid.ROUTINE table. Reenter the RUN command using a valid user ID or create the routine table.

Explanation: The specified ROUTINE table does not exist.

System Action: The RUN command failed. The system waits for you to enter the next statement.

User Response: Reenter the RUN command specifying the proper user ID; or, if the ROUTINE table does not exist, it must be created using the CREATE TABLE command. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual for information on creating and using routines.

ARI7355E RUN command failed. The RUN command cannot find the named routine. Reenter the RUN command with a valid routine name.

Explanation: The named routine could not be found.

System Action: The RUN command failed. The system waits for you to enter the next statement.

User Response: Reenter the RUN command using a valid routine name.

ARI7357E RUN command failed. The RUN command cannot finish because of a system error. Notify your system programmer.

Explanation: While the system was trying to process the routine an internal error occurred. The messages preceding this message describe the internal error.

System Action: The RUN command failed. The system waits for you to enter the next statement.

User Response: Save the associated error messages and notify your system programmer. Enter another command.

System Programmer Response: Use the SQL error code specified in the previously issued error message to determine the proper course of action. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7358E RUN command failed. The {userid | name} must be 8 characters or less. Reenter the RUN command.

Explanation: The user ID or name specified on the RUN command was larger than 8 characters. The maximum size of the user ID or name field is 8.

System Action: RUN processing failed. The system waits for you to enter the next statement.

User Response: Reenter the RUN command specifying a user ID or name of not more than 8 characters.

ARI7359E RUN command failed. Rebuild the routine table with the SEQNO column defined as SMALLINT or INTEGER, and NOT NULL.

Explanation: The ROUTINE table must be created with a SEQNO column defined with a data type of SMALLINT or INTEGER, and NOT NULL.

System Action: The system waits for you to enter the next statement.

User Response: Enter a DROP TABLE command for the ROUTINE table, and a CREATE TABLE command to rebuild it. Specify SMALLINT or INTEGER as the data type for the SEQNO column. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual for information on creating and using routines.

ARI7360E RUN command failed. You cannot use the userid.ROUTINE table again in this session. Enter another command.

Explanation: The system was not successful in closing the cursor for this table.

System Action: RUN processing failed. The system

waits for you to enter the next statement.

User Response: Save the associated error messages and notify your system programmer.

System Programmer Response: Use the SQL error code specified in the previously issued error message to determine the proper course of action. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7361I **RUN command is processing normally. However, an empty command line was encountered in the routine. The empty line is ignored.**

Explanation: While the system was processing the commands in the specified routine a null line was encountered.

System Action: The line is ignored and normal processing continues.

User Response: Remove the null line from the routine if you do not want to get this message.

ARI7362E **RUN command ended abnormally because of a parameter substitution error. Correct the error and reenter the RUN command.**

Explanation: During RUN command parameter substitution, an error occurred which caused substitution to end. The message which precedes this message states the cause of the error.

System Action: The RUN command failed. The system waits for you to enter the next statement.

User Response: Use the message which precedes this message to correct the parameter substitution error. Reenter the RUN command.

ARI7363E **RUN command failed. Rebuild the routine table with the command column defined as VARCHAR.**

Explanation: The ROUTINE table must be created with the COMMAND column as VARCHAR.

System Action: The system waits for you to enter the next statement.

User Response: Enter a DROP TABLE command to delete the ROUTINE table and a CREATE TABLE command to rebuild it. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual for information on creating and using routines.

ARI7364E **RUN processing cancelled. You have a RUN command in your routine or EXEC. Remove the RUN command from the routine or EXEC.**

Explanation: RUN is not a valid command in a routine.

System Action: An internal CANCEL is issued.

User Response: Take the RUN command out of the routine.

ARI7398I **Profile processing is starting.**

Explanation: ISQL initialization found either a master, user, or signon PROFILE routine and is processing it.

System Action: The appropriate routines are run.

ARI7399I **The ISQL default profile values are in effect.**

Explanation: A PROFILE routine did not exist in the SQLDBA.ROUTINE table or in the userid.ROUTINE table. A routine was not specified as a parameter on the signon.

System Action: ISQL signon processing continues using system values.

User Response: If you want to know what values are in effect, enter the LIST SET command.

ARI7500E **Command failed. You can only issue a FORMAT command during a query result. Enter an SQL SELECT before issuing a FORMAT command.**

Explanation: You tried to format the screen when there was no SELECT command active.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Enter a SELECT command or start a SELECT command before you enter the FORMAT command.

ARI7501E **Command processing stopped. You entered an incorrect keyword token on the FORMAT command. Reenter the FORMAT command with one or more of the following keywords: ON, OFF, SUBTOTAL, TOTAL, GROUP, OUTLINE, SEPARATOR, VARCHAR, NULL, TTITLE, BTITLE, COLUMN, EXCLUDE, or INCLUDE.**

Explanation: You entered an incorrect keyword on the FORMAT command. One or more of the following keywords must be specified after the FORMAT command: ON, OFF, SUBTOTAL, TOTAL, GROUP, OUTLINE, SEPARATOR, VARCHAR, NULL, TTITLE,

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BTITLE, COLUMN, EXCLUDE, or INCLUDE.

token is the incorrect keyword you entered.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Enter FORMAT with one or more of the correct keywords.

ARI7502I **The keyword indicator was previously old setting. It is now new setting.**

Explanation: This message shows the setting of the FORMAT keyword that you have just changed.

keyword is the keyword you entered on the FORMAT command.

old setting is the previous setting of the FORMAT keyword.

new setting is the new setting of the FORMAT keyword.

System Action: The system sets the indicator as specified by the command.

ARI7503I **ISQL erased the bottom title for this query.**

Explanation: The bottom title for this query has been erased.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7504E **Command processing stopped. You entered an incorrect option token for the FORMAT keyword command. Reenter FORMAT keyword command with ON or OFF.**

Explanation: You entered an incorrect option on the FORMAT command.

token is the incorrect option you entered.

keyword is the keyword you entered after the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the command with a valid option. The valid options are ON and OFF.

ARI7505E **Command processing stopped. The number after the keyword keyword cannot be more than 8 digits long. Try again.**

Explanation: A number you entered was too large. The field allows 8 digits, including leading zeros.

keyword is the keyword you entered.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with a number from 1 to 254.

ARI7506I **The width you specified for column column id is too large. WIDTH has been changed to 254 bytes.**

Explanation: You entered a width greater than 254. The system has set the width of the column to the maximum of 254.

column id is the column id you entered.

System Action: The command is processed as if the command FORMAT COLUMN column id WIDTH 254 had been entered.

User Response: If you do not want a width of 254, reenter the command with a width less than 254.

ARI7507E **Command processing stopped. Enter a number after the keyword keyword. Try again.**

Explanation: A nonnumeric value was specified for a numeric option.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the command using a number as the option.

ARI7508E **Command processing stopped. You must enter an option after the keyword keyword. Try again.**

Explanation: You did not enter any option for the keyword specified in the message. No default action is taken.

keyword is the keyword you entered.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the command, specifying the desired option.

ARI7509I You entered a null string longer than 20 characters. Only the first 20 characters were used.

Explanation: You entered a null string specification that is too long. The first 20 characters are accepted as the string; the rest are ignored.

System Action: The command is processed with first 20 characters.

User Response: If you do not want the shortened string as your null string, reenter the command with a new string. The new string must not be longer than 20 characters.

ARI7510I You have not defined a bottom title.

Explanation: No bottom title (BTITLE) is defined now.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: If you want a bottom title, use the FORMAT BTITLE command to define one.

ARI7511I keyword value is greater than the page width. Information will be truncated if printed.

Explanation: WARNING: Because the keyword value is greater than the page width, it will be truncated when printed.

keyword value is the keyword value you entered.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: To avoid truncating the data, specify a number smaller than the page size.

ARI7512I You entered a top or bottom title longer than 100 characters. Only the first 100 characters will be used.

Explanation: A top or bottom title can be at most 100 characters. The first 100 characters are accepted; the rest are ignored.

System Action: Title is set to the first 100 characters you entered.

User Response: If you do not want the shortened title, reenter the FORMAT TTITLE or FORMAT BTITLE command with a different title. The new title must not be longer than 100 characters.

ARI7513E Command processing stopped. You entered an incorrect column ID token after the FORMAT keyword command. Reenter the command with a correct column ID. Only the first 45 columns can be formatted.

Explanation: You entered an incorrect column id after the FORMAT command.

token is the column id you entered.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the FORMAT command with one or more column ids. Column id must be either a column name or a column number. If you enter more than one column id, they must be enclosed in parentheses.

ARI7514E Command processing stopped. You can only enter a FORMAT SUBTOTAL command after you enter a FORMAT GROUP command.

Explanation: To enter a subtotal command, a FORMAT GROUP command must have been previously entered. The command is ignored.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Enter FORMAT GROUP; then reenter the FORMAT SUBTOTAL command.

ARI7515E Command processing stopped. Column column id is not a numeric column. Reenter the FORMAT keyword command using a numeric column.

Explanation: You tried to enter a FORMAT DECIMAL or FORMAT ZEROS command on a nonnumeric column.

column id is the column id you entered.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the FORMAT command using a numeric column.

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ARI7516I You entered a column name longer than 30 characters on the **FORMAT** keyword command. Only the first 30 characters were used.

Explanation: A column name can be at most 30 characters. The first 30 characters are accepted; the rest are ignored.

keyword is the keyword you entered on the **FORMAT** command.

System Action: The column name is set to or used as the first 30 characters you entered.

User Response: If you do not want the shortened name, reenter the **FORMAT** command with a new name. The new name must not be longer than 30 characters.

ARI7517E Command processing stopped. You entered an incorrect column width for column *column id*. Reenter the **FORMAT** command with a column width from 1 to 254 characters.

Explanation: The column width must be a number from 1 to 254.

column id is the column id you entered.

System Action: Command processing has been stopped at the column id indicated in the message. Any keywords before the keyword associated with this column id have been processed; all other keywords are ignored.

User Response: Reenter the **FORMAT** command with a column width from 1 to 254.

ARI7518E Command processing stopped. The **DPLACES** value for column *column id* is too large. The number of decimal places must be less than the column width. Try again.

Explanation: The width of a column must be at least one larger than the number of decimal places specified for that column.

column id is the column id you entered.

System Action: The command is ignored. Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: You can either increase the column width so that it is larger than the number of decimal places, or decrease the number of decimal places so that a smaller column size can be specified.

ARI7519E Command processing stopped. Specify a number for the number of decimal places. Try again.

Explanation: The **FORMAT COLUMN** column id **DPLACES** command must be followed by a number. The number of decimal places must also be less than the width of the column.

System Action: Command processing has been stopped at the **DPLACES** keyword in error. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the **FORMAT COLUMN** column id **DPLACES** command with a valid number.

ARI7520E Command processing stopped. You entered an incorrect option token on the **FORMAT COLUMN** column id command. Reenter the command with one or more of the following options: **WIDTH**, **ZEROS**, **DPLACES**, or **NAME**.

Explanation: You entered an incorrect option on the **FORMAT COLUMN** command.

token is the incorrect option you entered.

column id is the column id you entered.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the **FORMAT** command with one or more of the options listed in the message.

ARI7521I All columns are included.

Explanation: If the **FORMAT INCLUDE** command is entered without any column ids being specified, all columns are included.

System Action: All columns are included in the display.

User Response: None if this is the desired result. Otherwise, exclude the columns you do not want included.

ARI7522I Because you did not specify any column IDs, all columns will be displayed.

Explanation: You entered a **FORMAT EXCLUDE ALL** **BUT** or **FORMAT INCLUDE ONLY** command without any column ids. Therefore, all columns are included in the display.

System Action: All columns are included in the display. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: You can enter a FORMAT INCLUDE command for the columns you want included.

ARI7523E Command processing stopped. Column ID column id is not one of the first 45 columns. ISQL can only format the first 45 columns.

Explanation: You tried to format a column that is not one of the first 45 columns.

column id is the column id you entered.

System Action: Command processing has been stopped at the column id indicated in the message. Any keywords before the keyword associated with this column id have been processed; all other keywords are ignored.

User Response: Enter a new SELECT command that will make this column one of the first 45 columns. Then reenter the FORMAT command.

ARI7524I Bottom title is *btitle*.

Explanation: The bottom title is now the value *btitle*.

btitle is the current bottom title.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7525I Top title is *ttitle*.

Explanation: The top title is now the value *ttitle*.

ttitle is the current top title.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7526E Command processing stopped. Zero is not a valid value for keyword. Reenter the command with a value greater than zero.

Explanation: You entered 0. Zero is not an acceptable value for this keyword.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the FORMAT command with a value greater than zero.

ARI7527I {Top | Bottom} title is too long to print on one line. When you print your report, part of the title may not appear.

Explanation: The title will not fit on one line. The last part of the title may be cut off when your report is printed.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: None, if you don't mind the shortened title. Otherwise, enter a shorter title, using the FORMAT command.

ARI7528I You did not enter the keyword BLANKS on your FORMAT SEPARATOR command. The number itself is used as your column separator.

Explanation: The number you entered will be used as the column separator, not as the number of blanks between your columns.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: None, unless you want blanks between your columns. In that case, you must reenter the FORMAT SEPARATOR command with the keyword BLANKS.

ARI7529I The top title has been erased. The first 100 characters of the SQL SELECT statement will be used as the top title.

Explanation: Your top title has been erased. The first 100 characters of the SELECT command will be used as the top title on your report.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7530E Command processing stopped. A right parenthesis is missing on the FORMAT keyword command. Reenter the command with matching parentheses.

Explanation: You entered a left parenthesis without a matching right parenthesis.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

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User Response: Reenter the FORMAT command with matching parentheses.

ARI7531I **The separator you entered was too long. The separator length has been shortened to 254 bytes.**

Explanation: The length of the separator cannot be greater than 254.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: None, if you do not mind the shortened separator. Otherwise, enter a shorter separator, using the FORMAT command.

ARI7532I **You cannot do the GROUP and SUBTOTAL on the same column. Column column id has been ignored in the FORMAT keyword command, but processing continues.**

Explanation: You tried to group and subtotal on the same column. Only one will be done. The message states which keyword will not be processed.

column id is the column id you entered.

keyword is the keyword you entered on the FORMAT command.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: If you don't want this result, reformat your display. See the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual.

ARI7533I **Because there are no columns to group, subtotalling will no longer be done.**

Explanation: You entered a FORMAT GROUP ERASE command, so there are no more columns to group by. Therefore, subtotalling can no longer be done.

System Action: All subtotals are erased. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: If you want subtotals, enter a FORMAT GROUP command followed by a FORMAT SUBTOTAL command.

ARI7534E **Command processing stopped. You entered an incorrect column ID token on the FORMAT keyword command. All columns will be displayed. Reenter the command with a correct column ID.**

Explanation: You entered either FORMAT EXCLUDE ALL BUT or FORMAT INCLUDE ONLY with an incorrect column id. All columns will be included in the display.

token is the incorrect column id you entered.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the FORMAT command with one or more column ids. Column id must be either a column name or a column number. If you enter more than one column id, they must be enclosed in parentheses.

ARI7535E **Command processing stopped. You did not enter any column IDs between the parentheses on the FORMAT keyword command. All columns will be included in the display. Reenter the FORMAT keyword command with a list of column IDs.**

Explanation: You did not enter any column ids between the parentheses on your FORMAT command.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Reenter the FORMAT command with a list of column ids between the parentheses.

ARI7537E **Command processing stopped. You did not enter any column IDs between the parentheses on the FORMAT keyword command. Reenter the FORMAT keyword command with a list of column IDs.**

Explanation: You did not enter any column ids between the parentheses on the FORMAT command.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all

other keywords are ignored.

User Response: Reenter the FORMAT command with a list of column ids between the parentheses.

ARI7539I The VARCHAR value you entered was too large. The VARCHAR size has been changed to 254 bytes.

Explanation: You entered a FORMAT VARCHAR command with a value greater than 254.

System Action: The command was processed with a VARCHAR size of 254.

ARI7543I Your display data exceeds 45 columns. When using ISQL, no more than 45 columns can be displayed or formatted. Only the first 45 columns you selected will be displayed.

Explanation: ISQL allows a maximum of 45 columns to be displayed or formatted. Any additional columns will not be displayed.

System Action: The command is processed normally. Only the first 45 columns will be displayed.

User Response: If you want to display columns beyond the first 45, enter a SELECT command specifically requesting those columns.

ARI7544I More than one data row was affected by the previous statement. If you do not want the work committed, issue CANCEL or ROLLBACK. If you want the work committed, enter any other statement.

Explanation: An INSERT, DELETE, or UPDATE command affected more than one row and the AUTOCOMMIT is delayed.

If referential constraints exist with a rule of SET NULL or CASCADE then some of the affected rows may be in dependent tables.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: You can either continue with work (thereby committing the previous work), or enter CANCEL or ROLLBACK.

ARI7545E Command processing stopped. Your FORMAT command needs a keyword. Enter FORMAT with one or more of the following keywords: ON, OFF, SUBTOTAL, TOTAL, GROUP, OUTLINE, SEPARATOR, VARCHAR, NULL, TTITLE, BTITLE, COLUMN, EXCLUDE, or INCLUDE.

Explanation: You entered a FORMAT command without any keywords.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Enter the command with one or more valid keywords.

ARI7546E Command processing stopped. Your FORMAT keyword command needs an option. Reenter the FORMAT keyword command with ON or OFF.

Explanation: You entered an incomplete FORMAT command. The keyword must be followed by a value of ON or OFF.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Enter the command with a valid option, either ON or OFF.

ARI7547E Command processing stopped. Your FORMAT keyword command needs a column ID. Reenter FORMAT keyword command with a column ID. Only the first 45 columns can be formatted.

Explanation: You entered an incomplete FORMAT command. The keyword must be followed with a column id.

keyword is the keyword you entered on the FORMAT command.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed; all other keywords are ignored.

User Response: Enter the command with a column id.

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ARI7550D **Warning: A logical unit of work is in progress. If an SQL error occurs, a ROLLBACK may result that will undo all the work you have done since the start of the logical unit of work. Do you want to process the statement anyway? Enter 0(No) or 1(Yes).**

Explanation: AUTOCOMMIT is OFF. Therefore, if an SQL error occurs while processing your statement, everything in this logical unit of work will be rolled back.

System Action: The system waits for you to enter 0 (NO) or 1 (YES).

User Response: If you are not worried about losing any work you have done, enter 1. To save the work you have done before processing this statement, enter 0. Then you can enter COMMIT or SET AUTOCOMMIT ON. Then you can reenter your statement.

ARI7551I **Statement cancelled as requested.**

Explanation: You entered CANCEL.

System Action: The command in process is cancelled, and a ROLLBACK is done. The system waits for you to enter the next statement.

ARI7552E **Command failed. You did not enter the name on the cmd command.**

Explanation: You did not enter the name parameter required by the command specified in the message.

cmd is the command you entered.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with the name of the stored SQL statement you want.

ARI7553E **Command failed. Name entered is longer than 8 characters. Reenter the command with a name that is 8 or less characters long.**

Explanation: You entered a stored query name that was longer than 8 characters.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with an alphanumeric name of up to 8 characters.

ARI7554I **There is no previous SQL statement to recall.**

Explanation: You tried to do a RECALL PREVIOUS, but there is no previous SQL statement to recall.

System Action: The system waits for you to enter the next statement.

ARI7555I **There is no current SQL statement to recall.**

Explanation: You tried to do a RECALL, but there is no current SQL statement to recall.

System Action: The system waits for you to enter the next statement.

ARI7556E **Command failed. There is no current SQL statement to store.**

Explanation: You tried to store an SQL statement, but there is no SQL statement to store.

System Action: The system waits for you to enter the next statement.

ARI7557I **Excess keywords after the ISQL command command are ignored.**

Explanation: There are extra keywords on the ISQL command. They are ignored.

ISQL command is the name of the command you entered.

System Action: The command is processed. The extra data is ignored.

ARI7558E **Command failed. Stored query table not found. Notify your system programmer.**

Explanation: SQLDBA.STORED QUERIES table was either not created at installation, or was dropped.

System Action: The command is not processed.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7559I **Command ended as requested.**

Explanation: You asked for the command to be ended.

System Action: The system waits for you to enter the next statement.

ARI7560E **Command failed. The SQL statement you wanted to ISQL command was not found. Try again.**

Explanation: You entered an ISQL command with an SQL statement name that was not found.

ISQL command is the ISQL command you entered.

System Action: The system waits for you to enter the next statement.

User Response: Check the spelling of the SQL statement name you entered, or enter LIST SQL * to see the names of your stored SQL statements. Then reenter your ISQL command.

ARI7561E **Command failed. You entered a RENAME command without a new name for your stored SQL statement. Reenter the RENAME command with the old name followed by the new name.**

Explanation: You tried to rename a stored SQL statement, but you did not enter a new name for the command.

System Action: The system waits for you to enter the next statement.

User Response: To rename your stored SQL statement, reenter the RENAME command with the old name followed by the new name.

ARI7563E **Command failed. A stored SQL statement named name already exists. Choose another name and try again.**

Explanation: You tried to rename a stored SQL statement. The new name you chose already exists, so you must choose another name.

name is the name you entered as the new name for the SQL statement.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the RENAME command with a different new name. To see the names of the SQL statements you have already stored, enter LIST SQL *.

ARI7564E **Command failed because of an SQL error. Notify your system programmer.**

Explanation: AUTOCOMMIT is ON. An SQL error has occurred while trying to commit work for your ISQL command.

System Action: The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem

determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7568E **Command failed because of an SQL error. A ROLLBACK statement has been issued.**

Explanation: An SQL error has occurred that forced a ROLLBACK to be issued. All work in this logical unit of work has been rolled back.

System Action: A ROLLBACK has been issued. The system waits for you to enter the next statement.

User Response: Read the previous SQL error message and, if necessary, notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7569E **Command failed because of an SQL error.**

Explanation: An SQL error occurred which caused the system to stop processing your command.

System Action: The system waits for you to enter the next statement.

User Response: Read the previous SQL error message and, if necessary, notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7570I **Processing for the ISQL command command is complete.**

Explanation: Processing is done for the indicated command.

ISQL command is the name of the command you entered.

System Action: The system waits for you to enter the next statement.

ARI7572E **Command failed. You cannot use the word PREVIOUS. Reenter the command with a different name.**

Explanation: PREVIOUS is a reserved word used to refer to the previous SQL statement. You cannot STORE, ERASE, or RENAME an SQL statement with a name of PREVIOUS. You can RECALL PREVIOUS.

System Action: The command is ignored; no processing is done. The system waits for you to enter the next statement.

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User Response: Reenter the command with a different name.

ARI7574E **Command failed. No SQL statement found on the HOLD command.**

Explanation: You entered a HOLD command without including an SQL statement.

System Action: The command is ignored; no processing is done. The system waits for you to enter the next statement.

User Response: Reenter the HOLD command, including the SQL statement.

ARI7575E **Command failed. An invalid SQL statement was found on the HOLD command.**

Explanation: You entered a HOLD command with an invalid SQL statement.

System Action: The command is ignored; no processing is done. The system waits for you to enter the next statement.

User Response: Reenter the HOLD command with a valid SQL statement.

ARI7576D **Enter END, REPLACE, or a new name which is 1 to 8 characters long. You cannot choose the word PREVIOUS as a name.**

Explanation: Your reply to message ARI7577D could not be used as a stored SQL statement name.

System Action: The system waits for your reply. If the reply is REPLACE, the stored SQL statement is replaced. If the reply is END, processing of the store command ends. If a name other than PREVIOUS is entered, the SQL statement is stored under the new name.

User Response: Enter REPLACE, END, or a new name for the SQL statement.

ARI7577D **A stored SQL statement named name already exists. Enter a new name to store the SQL statement, or enter one of the following keywords: REPLACE - to replace the existing stored SQL statement, or END - to end the store command processing.**

Explanation: The system cannot store the SQL statement under the name you have given it because that name is already in use.

name is the name you entered for the SQL statement.

System Action: The system waits for your reply. If the reply is REPLACE, the stored SQL statement is

replaced. If the reply is END, processing of the store command ends. If a name other than PREVIOUS is entered, the SQL statement is stored under the new name.

User Response: Enter REPLACE, END, or a new name for the SQL statement to be stored.

ARI7578I **The SQL statement named name has been stored.**

Explanation: This message indicates that the SQL statement has been stored.

name is the SQL statement name you entered.

System Action: The system waits for you to enter the next statement.

ARI7579I **The stored SQL statement named name has been replaced.**

Explanation: This messages indicates that the previous copy of the stored SQL statement has been replaced.

name is the SQL statement name you entered.

System Action: The system waits for you to enter the next statement.

ARI7580I **The processing to store the SQL statement named name has been stopped by your request. The SQL statement has not been stored.**

Explanation: This message indicates that, at your request, the storing of the SQL statement has not been done. This message is displayed when you reply END to message ARI7576D or message ARI7577D.

name is the SQL statement name you entered.

System Action: The system waits for you to enter the next statement.

ARI7581I **There was no stored SQL statement named name. Your SQL statement has been stored as a new command.**

Explanation: This message is displayed when the STORE command is entered with the REPLACE option, but there is no stored SQL statement by that name to be replaced.

name is the SQL statement name you entered.

System Action: The system stores your SQL statement as a new command. The system waits for you to enter the next statement.

ARI7582I **REPLACE is the only optional keyword on the STORE command. token has been ignored.**

Explanation: This message indicates that excess data was found on the STORE command, instead of the optional keyword REPLACE.

token is the excess data on the STORE command.

System Action: The STORE command processing continues.

ARI7583E **Command failed because of an error in STORE command processing. Notify your system programmer.**

Explanation: An error condition occurred in the processing of the STORE command.

System Action: The command is not processed.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7585I **The stored SQL statement named name has been erased.**

Explanation: This message indicates that a stored SQL statement has been erased.

name is the SQL statement name you entered.

System Action: Command processing continues if there are more SQL statement names on the command. Otherwise, the system waits for you to enter the next command.

ARI7590I **An SQL statement name must be no more than 8 characters long.**

Explanation: The name under which an SQL statement is stored cannot exceed 8 characters. You must choose a shorter name.

System Action: Command processing continues if there are more SQL statement names on the command. Otherwise, the system waits for you to enter the next command.

ARI7591I **PREVIOUS cannot be used as a name for a stored SQL statement.**

Explanation: The name PREVIOUS is reserved for use by the system. You must choose a different name.

System Action: Command processing continues if there are more SQL statement names on the command. Otherwise, the system waits for you to enter the next command.

ARI7592I **The stored SQL statement named name was not found.**

Explanation: A stored SQL statement specified on the LIST SQL statement or ERASE command was not found.

name is the SQL statement name you entered.

System Action: Command processing continues if there are more stored SQL statement names on the command. Otherwise, the system waits for you to enter the next command.

ARI7593I **Excess data token is ignored.**

Explanation: You entered more than a new stored SQL statement name in response to message ARI7576D or message ARI7577D.

token is the excess data that was ignored.

System Action: The STORE command processing continues.

ARI7601I **ISQL ended normally on your request.**

Explanation: ISQL ending message. This message is displayed when you enter the EXIT command and autocommit processing was on.

System Action: ISQL ends.

ARI7602D **You are in a logical unit of work. Enter COMMIT to have a COMMIT issued for you, or ROLLBACK to have a ROLLBACK issued for you.**

Explanation: This message is displayed when you enter the EXIT command and autocommit processing is off, or when you enter SET AUTOCOMMIT ON and autocommit processing is off.

System Action: The system waits for your reply. The action taken by the system for each reply is as follows:

COMMIT A COMMIT is issued and a message is generated stating whether the commit work was successful or not. If the command entered was EXIT and the commit work was successful ISQL ends. If the command entered was EXIT and the commit work was not successful, ISQL does not end. If the command entered was SET AUTOCOMMIT ON, autocommit processing is turned on only if the commit work was successful.

ROLLBACK A ROLLBACK is issued and a message is generated stating whether the rollback work was successful or not. If the command entered was EXIT and the rollback work was

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successful, ISQL ends. If the command entered was EXIT and the rollback work was not successful, ISQL does not end. If the command entered was SET AUTOCOMMIT ON, autocommit processing is turned on only if the rollback work was successful.

User Response: Give one of the specified replies.

ARI7603I {COMMIT|ROLLBACK} successful.
ISQL now ended.

Explanation: Message displayed when you exit from ISQL, and the commit work or rollback work that is performed is successful.

System Action: ISQL ends.

ARI7604E ISQL-command command failed.
{COMMIT|ROLLBACK} not successful.
See the previous SQL messages for a complete explanation. Enter the ISQL-command command again or enter another command.

Explanation: You replied COMMIT or ROLLBACK to message ARI7602D, and the COMMIT or ROLLBACK was not successful.

ISQL-command is the ISQL command you entered.

System Action: The system waits for you to enter the next statement.

User Response: Try the command again or enter another command. Notify your system programmer if the problem continues.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7607I There is nothing to ignore.

Explanation: You entered the ISQL IGNORE command when you were not continuing a command or data.

System Action: The system waits for you to enter the next statement.

ARI7611E The CHANGE command nulled out the SQL statement buffer. Enter your next SQL statement.

Explanation: You entered a CHANGE command which nulled out the current SQL buffer.

System Action: The system waits for you to enter the next statement.

User Response: Enter the desired SQL statement.

ARI7612E CHANGE command failed. character string was not found in your current SQL statement. Check the character string you want to change and try again.

Explanation: The character string you entered on the CHANGE command was not found in your current SQL statement.

character string is the character string you wanted to change. If the string is more than 20 characters long, only the first 20 characters are shown in the message.

System Action: The system waits for you to enter the next statement.

User Response: Enter RECALL to see the current SQL statement. Then enter the CHANGE command with the character string you want to change.

ARI7613I CHANGE completed.

Explanation: The change was completed by the CHANGE command.

System Action: The changed SQL statement is displayed. The system waits for you to enter the next statement.

ARI7614E ISQL command command failed. There is nothing in the SQL statement buffer. Enter your next SQL statement.

Explanation: You entered a START or CHANGE command but there was no SQL statement in the SQL statement buffer.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the desired SQL statement.

ARI7615E ISQL command command failed. The SQL statement name name on the ISQL command command is too long. Use an SQL statement name which is 8 characters long or fewer.

Explanation: An SQL statement name more than eight characters long was entered with an ISQL command.

name is the SQL statement name you entered.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with a stored SQL statement name which is not more than eight characters long.

ARI7616I ISQL command **command cancelled at your request.**

Explanation: CANCEL was entered during the processing of a command.

ISQL command is the ISQL command that was being processed.

System Action: Command processing stops. A ROLLBACK is issued. The system waits for you to enter the next statement.

ARI7617E ISQL command **command failed. A nonzero code was returned during the processing of the ISQL command command. See the previous message for the explanation and the action to take.**

Explanation: A DB2 Server for VSE error was encountered while processing the ISQL command.

ISQL command is the ISQL command that was being processed.

System Action: Command processing stops. The system waits for you to enter the next statement.

User Response: Try the command again or enter another command. Notify your system programmer if the problem continues.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7618E ISQL command **command failed. SQL statement name was not found. Enter the ISQL command command with the name of one of your stored SQL statements.**

Explanation: You tried to list or start an SQL statement that was not previously stored.

ISQL command is the ISQL command you entered.

name is the SQL statement name you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the name of a stored SQL statement on the ISQL command, or enter LIST SQL * to see all your stored SQL statements.

ARI7619E ISQL command **command failed. There was a missing parenthesis or no parentheses on the parameter list of the ISQL command command. Enter the command with parentheses around the parameter list.**

Explanation: There was no ending parenthesis on the parameter list, an uneven number of parentheses in the parameter list, or no parentheses around the parameter list of the command.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with the corrected parameter list.

ARI7620I **You have number stored SQL statements.**

Explanation: This is a count of your stored SQL statements displayed when LIST SQL * is entered.

number is the actual count.

System Action: The system waits for you to enter the next statement.

ARI7621I **The counter for the LIST SQL statement is full. Counting of stored SQL statements will stop, but listing will continue.**

Explanation: You have more than 2 million stored SQL statements.

System Action: Listing of the stored SQL statements continues.

ARI7622E ISQL command **command failed. ISQL command ISQL command not allowed at this time. Enter any command except display commands or input commands.**

Explanation: You entered an ISQL command which could not be processed now. For example, this message is generated if you enter a display command when you are not displaying the results of a SELECT.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter an allowable command.

ARI7623E token is **not an SQL or an ISQL command. Enter any command except display commands or input commands.**

Explanation: You did not enter a valid SQL or ISQL command.

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token is what was entered.

System Action: The system waits for you to enter the next statement.

User Response: Enter a command.

ARI7624E **HELP command failed. topic is not a HELP topic. Enter HELP or HELP CONTENTS for a list of topics.**

Explanation: Your entry for the topic on the HELP command is not part of the HELP documentation.

topic is the topic you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter an ISQL HELP command in one of the following forms:

HELP
HELP CONTENTS
HELP *topic*

ARI7625E **HELP command failed. The topic on the HELP command is more than 20 characters long. Enter HELP or HELP CONTENTS for a list of topics.**

Explanation: Your entry for the topic on the HELP command could not be processed because it was more than 20 characters long.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter an ISQL HELP command in one of the following forms:

HELP
HELP CONTENTS
HELP *topic*

ARI7626E **ISQL command command failed. There is not enough main storage available. Try again later.**

Explanation: The virtual storage needed for processing the command was not available.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Try the command again. If the condition continues, notify your system programmer.

System Programmer Response: If this condition persists, increase the SIZE parameter on the CICS EXEC job control statement and the CICS partition size.

ARI7627E **ISQL command command failed. The previous SQL statement cannot be used on the ISQL command command. Enter the ISQL command command with another stored SQL statement name.**

Explanation: The previous SQL statement cannot be processed by this ISQL command.

ISQL command is the ISQL command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Use another name for the SQL statement.

ARI7628I **The formatting information for your SQL statement has been erased because you changed the SELECT list or the table name. The default formatting information will be used for displaying the results of your SQL statement.**

Explanation: You entered a CHANGE command which could make the format information for the SQL statement incorrect. The format information is dropped.

System Action: Your SQL statement result will be formatted with the default formatting information that is in effect when the SQL statement is started. The system waits for you to enter the next statement.

ARI7629E **CHANGE command failed. The format of the CHANGE command is CHANGE /string1/string2/ or CHANGE /string1//. Enter the CHANGE command by using one of these formats.**

Explanation: The CHANGE command you entered was not in the right format.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with a correct format.

ARI7630E **CHANGE command failed. The change you requested cannot be made because it would make the SQL statement longer than 2048 characters. Enter the CHANGE command with string2 the same size or smaller than string1.**

Explanation: You entered a CHANGE command which would make the SQL statement in the SQL statement buffer longer than 2 048 characters.

System Action: Command processing stops. No change is made to the SQL statement in the current buffer. The system waits for you to enter the next statement.

User Response: Enter the CHANGE command with string2 the same size or smaller than string1.

ARI7631E Enter the START command with the corrected parameter list or correct the parameter in your SQL statement.

Explanation: This message is displayed when the parameter substitutions could not be performed on the SQL statement in the current buffer. Refer to the previous message to determine the cause of the problem.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Refer to the previous message for the action to take.

ARI7632E oper command **operator command failed. A system error occurred during the oper command operator command. Notify your system programmer.**

Explanation: An incorrect parameter was passed to ARIICMD from ARIIOCI (interface module to operator command processing).

oper command is the DB2 Server for VSE operator command being executed.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7633E oper command **operator command failed. Insufficient main storage is available. Try again later.**

Explanation: There is not enough virtual storage available to process the command.

oper command is the DB2 Server for VSE operator command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Try the command again. Notify your system programmer if the problem continues.

System Programmer Response: Increase the CICS partition size and the SIZE parameter on the EXEC statement of the CICS job stream.

ARI7634E oper command **operator command failed. A system error occurred during the oper command operator command. See the previous message for a complete explanation. Notify your system programmer.**

Explanation: There was a problem in the DB2 Server for VSE operator command processing modules. The message before this one is an SQL message describing the problem.

oper command is the DB2 Server for VSE operator command being executed.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7635I oper command **operator command ended.**

Explanation: The indicated operator command has ended.

oper command is the DB2 Server for VSE operator command executed.

System Action: The system waits for you to enter the next statement.

ARI7636D Enter END to end the oper command command or press the Enter key to see more information.

Explanation: Message asking if you want to end the operator command (reply END) or continue (press the ENTER key).

oper command is the DB2 Server for VSE operator command being executed.

System Action: The system waits for your reply. Command processing stops if you reply END. The next data is displayed if you just press the ENTER key. The question is asked again if your reply is not END or ENTER.

User Response: Reply END or just press the ENTER key.

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ARI7637E oper-command **operator command failed. Operator commands cannot be issued while you are in a logical unit of work. Enter COMMIT or ROLLBACK and then enter the oper-command operator command.**

Explanation: You tried to execute an operator command while in a logical unit of work.

oper-command is the DB2 Server for VSE operator command you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter a COMMIT or ROLLBACK command, and then enter the operator command again.

ARI7638I A parameter is in the SELECT list or table name in your SQL statement. Therefore, any formatting you do while viewing the query result will be erased when you end the display.

Explanation: You entered one or more parameters in the SELECT-list or table name portion of your SQL statement. Therefore, you cannot save any of the formatting information you enter while viewing the query result.

System Action: Any formatting information you enter while viewing the query result is erased when you end the display. The system waits for you to enter the next statement.

User Response: If you want to save the formatting information, use the CHANGE command to change the parameters to values, and start the SQL statement with no parameter list.

ARI7639D Last of the oper command operator command information. Enter END to end the display.

Explanation: This is the last screen of the operator command output. You must reply END when finished with the display. Command cleanup is then done and the command ends.

oper command is the DB2 Server for VSE operator command you entered.

System Action: The system waits for your reply. The display ends if your reply is END. You are asked for another reply if your reply is not END.

User Response: Reply with END when finished looking at the last screen of output.

ARI7640E SQL statement ignored. SQL statements cannot be processed while using the INPUT command. To process your SQL statement, enter END and then reenter your SQL statement.

Explanation: You entered an SQL statement while using the INPUT command. Your SQL statement was not processed.

System Action: The system waits for you to enter the next statement.

User Response: If you want to process your SQL statement now, end the INPUT command and then reenter your SQL statement. Otherwise, continue to input your data.

ARI7641D char will be used as the delimiter for the CHANGE command. Do you want to continue? Enter 0(No) or 1(Yes).

Explanation: The / was not used as the delimiter on the CHANGE command. If you forgot the slash delimiters, you can now end the CHANGE command.

char is the delimiter used if the CHANGE command continues.

System Action: The system waits for your reply. If your reply is 0, CHANGE command processing stops. If your reply is 1, the CHANGE command is processed.

User Response: Reply 0 to cancel the CHANGE command or 1 to continue the command.

ARI7642I CHANGE command cancelled. No change was made to the SQL statement buffer.

Explanation: Informative message generated when you reply NO to message ARI7641D. The CHANGE command is ended. The SQL statement in the current buffer is not changed.

System Action: The SQL statement buffer and formatting information remain the same. ROLLBACK WORK is not performed. The system waits for you to enter the next statement.

ARI7643E HELP command failed. HELP documentation table table name was not found. Notify your system programmer.

Explanation: One of the HELP documentation tables was not there.

table name is the name of the table that was not there (either SQLDBA.SYSTEXT1 or SQLDBA.SYSTEXT2).

System Action: The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Recreate the tables using the HELP text installation procedures provided in the *DB2 Server for VSE Program Directory*.

ARI7644E **HELP command failed. No documentation is in the table SQLDBA.SYSTEXT2 for the topic that was entered. Notify your system programmer.**

Explanation: The HELP text table SQLDBA.SYSTEXT2 did not contain documentation for the topic specified, but the HELP text table SQLDBA.SYSTEXT1 listed the topic.

System Action: The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Recreate the tables using the HELP text installation procedures provided in the *DB2 Server for VSE Program Directory*. If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

ARI7645E **EXIT command failed. Extra information is on the EXIT command. Enter the EXIT command with no keywords or values.**

Explanation: You entered something extra after the word EXIT.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Reenter the EXIT command with no extra data on it.

ARI7646E **HELP command failed. The HELP text is not installed. If you want to use this facility, notify your system programmer.**

Explanation: You entered the HELP command, but the HELP text table SQLDBA.SYSTEXT1 is empty.

System Action: The system waits for you to enter the next statement.

User Response: Continue your ISQL session. Notify your system programmer if you would like to use the HELP facility.

System Programmer Response: Procedures for installing the HELP text tables are provided in the *DB2 Server for VSE Program Directory*.

ARI7650E **The EXTRACT command command has been ignored because the Extract Facility is no longer supported. Enter an SQL or an ISQL command.**

Explanation: You entered an extract facility command, but the database manager no longer supports the extract facility.

command is the extract facility command you entered.

System Action: The system waits for you to enter the next statement.

User Response: Continue your ISQL session.

ARI7700I **Extra information was on the ISQL command command. token is ignored but processing will continue.**

Explanation: Extra data was found on the command you entered.

ISQL command is the ISQL command you entered.

token is the extra information that was ignored.

System Action: Normal command processing continues.

ARI7701E **ISQL command command processing stopped. The keyword keyword on the ISQL command command is not correct. The valid keywords are: keyword list.**

Explanation: The keyword you entered on the command was not valid.

keyword is the keyword you entered.

ISQL command is the ISQL command you entered.

keyword list is the list of the valid keywords.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with a valid keyword.

ARI7702E **The keyword token on the LIST SET command is not a valid choice. The valid keywords are: keyword list.**

Explanation: You entered an incorrect keyword on the LIST SET command.

token is the incorrect keyword you entered.

keyword list is the list of keywords allowed on the command.

System Action: Processing of the keyword is bypassed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

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ARI7709I AUTOCOMMIT processing is {ON|OFF}.

Explanation: This message shows the current AUTOCOMMIT setting.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7710I The continuation character is char.

Explanation: This message shows what the continuation character is.

char is the continuation character now in effect.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7711I The system default print class will be used for your reports.

Explanation: Your print class is now set to the system default.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7712I The keyword value is value.

Explanation: This message shows the value of a keyword you requested.

keyword is the keyword you entered on the LIST SET command.

value is the value of that keyword.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7713I number copies of your reports will be printed.

Explanation: This message shows how many copies of each report will be printed.

number is the number of copies that will be printed.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7714I The page size of your reports is: WIDTH: width LENGTH: length.

Explanation: This message shows the page size of your reports.

width is the width of the printed page.

length is the length of the printed page.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7715I The separator value is number blanks.

Explanation: This message indicates how many blanks will separate the columns when a query result is displayed.

System Action: Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7716I User *userid* connected to server *server-name*.

Explanation: This message shows the current user and the current application server that are accessed as a result of the last implicit or explicit CONNECT command.

System Action: The system waits for you to enter the next command.

ARI7717I One or more arithmetic exception errors occurred. Exception error &1. has occurred during &2. operation on &3. data, position &4..

Explanation: This message is issued whenever an arithmetic operation on numeric data causes an arithmetic exception error. An example of this error may be a division by zero or an overflow (exceeds maximum) during the processing of a SELECT command. The data from this error is denoted by number signs (# # #) across the width of columns of the queried table:

&1. is the type of exception error.

&2. is the arithmetic operation on data.

&3. is the data type.

&4. is position N, where N is an item in select list where applicable. Position 0 is returned if an exception error occurs in the WHERE clause of the SELECT statement.

Note: The message describes the first arithmetic exception error in the queried table.

System Action: Command processing continues.

ARI7725E The ISQL command **command** processing stopped. The command is not complete. You must specify information.

Explanation: You entered a command that did not have all the required keywords or values.

ISQL command is the ISQL command you entered.

information is a list of what you did not specify on the command.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with all needed keywords and values.

ARI7726E The ISQL command **command** processing stopped. The value you entered could not be processed. The values that can be processed are valid values.

Explanation: Something was wrong with one of the values on the command.

ISQL command is the ISQL command you entered.

valid values is the description of the valid values.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with valid values.

ARI7727I The old keyword **value** was old. The new keyword **value** is new.

Explanation: The keyword value has been changed to the value you entered on the SET command.

keyword is the keyword you entered on the SET command.

old is the old value of the keyword.

new is the new value of the keyword.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7729I The keyword **string** is more than number **characters** long. The first number **characters** will be used.

Explanation: You entered a separator string or null string with the SET command that was longer than the maximum allowed.

keyword is the type of string you entered.

number is the number of characters that will be used.

System Action: The indicated number of characters of the string is saved.

ARI7731I The SET AUTOCOMMIT command has been cancelled. The AUTOCOMMIT setting is not changed.

Explanation: You entered SET AUTOCOMMIT ON, and then cancelled that action with a CANCEL command.

System Action: Command processing stops; the AUTOCOMMIT value is not changed. The system waits for you to enter the next statement.

ARI7732I To commit work, you must enter the COMMIT statement yourself.

Explanation: You entered SET AUTOCOMMIT OFF. If you want to commit work, you must enter the COMMIT statement.

System Action: The ISQL performs COMMIT statements or ROLLBACK statements only if you request them. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

User Response: You must enter COMMIT to make the changes that you make to tables permanent, or enter ROLLBACK to back out the changes.

ARI7733E SET command processing stopped. The keyword **value** data could not be processed. The keyword **value** must be valid data.

Explanation: You entered a SET command with a value that is not valid.

keyword is the keyword you entered.

data is the data you entered.

valid data is a list of acceptable values for the keyword.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with a correct value.

ARI7734E SET command processing stopped. The keyword **value** data is too long. Enter the command with a value that is 1 character long.

Explanation: You entered a value that was too long to be a class or continuation character value.

keyword is the keyword you entered on the SET command.

data is the value you entered.

System Action: Processing of the command stops. The

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system waits for you to enter the next statement.

User Response: Enter the command with a correct value.

ARI7735I The keyword value on the SET keyword command is too large. It has been set to the maximum value number.

Explanation: You entered a SET command with a keyword value greater than the maximum for that keyword.

keyword is the keyword you entered on the SET command.

number is the maximum value for that keyword.

System Action: The value has been set to the maximum value for that keyword. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7736E SET command processing stopped. char cannot be a continuation character. The continuation character can be any character except a blank, a quote, or a semi-colon.

Explanation: You entered a continuation character that was not valid.

char is the continuation character you entered.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter any continuation character except a semicolon, a single or double quote, or a blank.

ARI7737I action is successful. All COMMIT statements and ROLLBACK statements will now be issued for you automatically.

Explanation: You replied COMMIT or ROLLBACK to message ARI7602D during the SET AUTOCOMMIT command.

action is either COMMIT or ROLLBACK.

System Action: AUTOCOMMIT has been set on. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7739E SET command processing stopped. No WIDTH or LENGTH keyword was specified with the PAGESIZE keyword. Reenter the command with the WIDTH and/or LENGTH keywords.

Explanation: You entered a SET PAGESIZE command that was not correct.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the command with the correct keywords and values.

ARI7740E SET command processing stopped. The keyword value cannot be zero. The keyword value can be valid values.

Explanation: You entered a SET command with a value of zero. This is not processed because zero is not a meaningful value for the keyword.

keyword is the keyword you entered.

valid values is the valid range for the keyword.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Reenter the command with a value in the given range.

ARI7742E SET command processing stopped. The keyword on the SET PAGESIZE command must be valid data.

Explanation: You entered a SET PAGESIZE command and the width or length was not valid.

keyword is the keyword that had a value that could not be processed.

valid data is the range of valid values for the keyword.

System Action: Processing of the command stops. The system waits for you to enter the next statement.

User Response: Enter the SET PAGESIZE command with correct values for the width and length.

ARI7743I The old column separator was separator.

Explanation: You changed the column separator. This message shows what the old separator was.

separator is the old column separator value.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7744I The new column separator is separator.

Explanation: You changed the column separator. This message shows what the new separator is.

separator is the new column separator value.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7745I The keyword value on the SET PAGESIZE command is too small. It has been set to the minimum value number.

Explanation: You entered a SET command with a keyword value that was less than the allowable minimum for that keyword.

keyword is the keyword you entered on the SET PAGESIZE command.

number is the minimum value for the keyword.

System Action: The page width or page length has been set to the minimum value for that keyword. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7746I The keyword value on the SET PAGESIZE command is too large. It has been set to the maximum value number.

Explanation: You entered a SET command with a keyword value that was greater than the allowable maximum for that keyword.

keyword is the keyword you entered on the SET PAGESIZE command.

number is the maximum value for the keyword.

System Action: The page width or page length has been set to the maximum value for that keyword. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ARI7750E SET command processing stopped. The PRINTROUTE keyword keyword is incorrect. You must specify one of the following keywords:

DESTID followed by a POWER remote workstation ID (a number from 0 to 250) or
TERMID followed by a CICS terminal ID (1 to 4 characters) or
TOUSER optionally followed by a user identifier (1 to 8 alphameric characters) or
SYSTEM to route output to the system printer.

Explanation: You entered the SET PRINTROUTE command with an incorrect keyword.

keyword is the keyword you entered.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed. All other keywords are ignored. The system waits for you to enter the next statement.

User Response: Enter the SET PRINTROUTE command with a valid keyword.

ARI7751E SET command processing stopped. The DESTID destid is incorrect. You must follow DESTID with a POWER remote workstation ID with a value from 0 to 250. Try again.

Explanation: The SET PRINTROUTE command had an incorrect printer identification.

destid is the VSE/POWER remote workstation id you entered.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed. All other keywords are ignored. The system waits for you to enter the next statement.

User Response: Reenter the SET PRINTROUTE command with a VSE/POWER remote workstation id from 0 to 250.

ARI7752I Your reports will be routed to the printer.

Explanation: This message indicates where your printed output will be routed.

printer is the printer identification you specified on the SET PRINTROUTE command.

System Action: The system waits for you to enter the next statement.

ARI7753I Because your reports will be routed to a CICS terminal printer, only one copy of your reports will be printed.

Explanation: When a CICS terminal printer is specified by the SET PRINTROUTE command, only one copy will be printed, regardless of the number set by the SET COPIES command.

System Action: The system waits for you to enter the next statement.

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ARI7754E SET command processing stopped. The **TERMID** termid is not correct. **TERMID** must be followed by a CICS terminal ID of 1 to 4 characters. Try again.

Explanation: The SET PRINTRROUTE command had an incorrect terminal printer identification.

termid is the incorrect terminal printer identification.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed. All other keywords are ignored. The system waits for you to enter the next statement.

User Response: Reenter the SET PRINTRROUTE command with a correct CICS terminal id of 1 to 4 characters.

ARI7756E SET command processing stopped. The **TOUSER** *touser* is not correct. **TOUSER** must be followed by a user identifier of 1 to 8 alphameric characters. Try again.

Explanation: The SET PRINTRROUTE command had an incorrect user identifier.

touser is the incorrect user identifier.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed. All other keywords are ignored. The system waits for you to enter the next statement.

User Response: Reenter the SET PRINTRROUTE command with a valid user identifier of 1 to 8 alphameric characters.

ARI7757I The old page size width was: old width.
The new page size width is: new width.

Explanation: The SET PAGESIZE command was entered with a WIDTH parameter only. Therefore, this message states only new and old WIDTH values.

old width is the previous page width value.

new width is the new page width value.

System Action: The system waits for you to enter the next statement.

ARI7758I The old page size length was: old length. The new page size length is: new length.

Explanation: The SET PAGESIZE command was entered with a LENGTH parameter only. Therefore, this message states only the new and old LENGTH values.

old length is the previous page length value.

new length is the new page length value.

System Action: The system waits for you to enter the next statement.

ARI7759I Your reports will be routed to the system printer.

Explanation: This message indicates that your printed output will be routed to the system printer.

System Action: Command processing continues if there are more keywords. Otherwise, the system waits for you to enter the next command.

ARI7760E SET command processing stopped. The SET PRINTRROUTE command is not complete. You must specify one of the following keywords:

DESTID followed by a POWER remote workstation ID (a number from 0 to 250) or
TERMID followed by a CICS terminal ID (1 to 4 characters) or
TOUSER optionally followed by a user identifier (1 to 8 alphameric characters) or
SYSTEM to route output to the system printer.

Explanation: You entered the SET PRINTRROUTE command without a keyword. The valid keywords are DESTID, TERMID, TOUSER, or SYSTEM.

System Action: Command processing has been stopped at the keyword indicated in the message. Any keywords before this keyword have been processed. All other keywords are ignored. The system waits for you to enter the next statement.

User Response: Enter the SET PRINTRROUTE command with a valid keyword.

ARI7761I Because you set the DESTID to zero, your reports will be routed to the system printer.

Explanation: You specified a DESTID value of 0, 00, or 000. VSE/POWER considers a value of 0 to mean the system printer.

zero is either 0, 00, or 000.

System Action: The system waits for you to enter the next statement.

User Response: If you don't want your report to be routed to the system printer, reenter the SET PRINTRROUTE command with a DESTID value from 1 to 250. Otherwise, no action is required.

ARI7865D **The printer is in use. Choose one of these options:**

0 (Retry) - to try again now, or
 1 (End) - to end your print request, or
 2 (Wait) - to wait until the printer is not in use.

Note: If you choose 2(Wait), your keyboard will lock until the PRINT is completed.

Explanation: You entered a PRINT command and the virtual printer was not available. You are given the three choices shown in the message.

System Action: The system waits for you to make a choice.

User Response: Choose one of the listed options.

ARI7866I **The system is trying to print your report.**

Explanation: You replied RETRY to message ARI7865D.

System Action: The system will try to print your report. If the printer is still in use, message ARI7865D will be displayed again.

User Response: There is nothing to do if printing is successful. If not, message ARI7865D will be displayed again, and you can reply RETRY, END, or WAIT.

ARI7867I **The system will return to displaying the query result. Continue your ISQL session.**

Explanation: You replied END to message ARI7865D.

System Action: The system will return to displaying the query result.

User Response: You can continue your ISQL session. The PRINT command can be reentered now or later.

ARI7868I **Printing will begin when the printer is available. Your keyboard is locked until the printing is complete.**

Explanation: You replied WAIT to message ARI7865D.

System Action: The system is waiting for access to the printer.

ARI7869E **The PRINT command failed. The TERMID termid is incorrect. TERMID must be followed by a CICS terminal ID of 1 to 4 characters. Try again.**

Explanation: You entered an incorrect CICS terminal id.

termid is the terminal id you entered.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a correct CICS terminal id of 1 to 4 characters. If you did enter a correct id, notify your system programmer.

System Programmer Response: Check that the terminal the user specified has an entry in the CICS Terminal Control Table (TCT).

ARI7870E **The PRINT command failed. The system does not support the terminal termid. Check the terminal ID you entered and try again.**

Explanation: You entered a CICS terminal id that is not supported by the system.

termid is the terminal id you entered.

System Action: The system will return to displaying the query result.

User Response: Check that you entered the CICS terminal id correctly. If you did, there may be a system problem. In that case, notify your system programmer.

System Programmer Response: Check that the terminal the user specified is supported under BMS. If it is, check that terminal's CICS Terminal Control Table (TCT) entry does not prevent data from being routed to it.

ARI7871E **The PRINT command failed. Your report could not be routed to the CICS terminal printer termid. Check the terminal ID you entered and try again.**

Explanation: Your report could not be routed to the CICS terminal printer you entered.

termid is the terminal id you entered.

System Action: The system will return to displaying the query result.

User Response: Check that you entered the CICS terminal id correctly. If you did, there may be a system problem. In that case, notify your system programmer.

System Programmer Response: An RTEFAIL error occurred during the CICS ROUTE command. Check for possible problems with the terminal or with BMS.

ARI7872E **The PRINT command failed. TERMID must be followed by a CICS terminal ID of 1 to 4 characters. Try again.**

Explanation: You entered the TERMID keyword without a CICS terminal id.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a

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correct CICS terminal id of 1 to 4 characters.

ARI7873E The PRINT command failed. The terminal ID you specified was more than 4 characters long. Follow TERMID by a CICS terminal ID of 1 to 4 characters. Try again.

Explanation: You entered the TERMID keyword with a TERMID value that was more than 4 characters long.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT Command with a CICS terminal id from 1 to 4 characters.

ARI7874E The PRINT command failed. The system does not accept a terminal ID of 0. Check the terminal ID you entered and try again.

Explanation: You entered the TERMID keyword with a value of 0. The system does not accept a terminal id of 0.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a CICS terminal id from 1 to 4 characters. 0 cannot be a CICS terminal id.

ARI7875E The PRINT command failed. You must follow DESTID with a POWER remote workstation ID from 0 to 250. Try again.

Explanation: You entered the DESTID keyword without a VSE/POWER remote workstation id.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a VSE/POWER remote workstation id from 0 to 250.

ARI7876E The PRINT command failed. The POWER workstation ID you entered was not a number. DESTID must be followed by a POWER remote workstation ID from 0 to 250. Try again.

Explanation: You entered the DESTID keyword with a VSE/POWER remote workstation id that is not a number.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a VSE/POWER remote workstation id from 0 to 250.

ARI7877E The PRINT command failed. You entered a POWER remote workstation ID longer than 250. Reenter the PRINT command with a POWER remote workstation ID from 0 to 250.

Explanation: You entered the DESTID keyword with a VSE/POWER remote workstation id greater than 250.

System Action: The system will return to displaying the query result.

User Response: Reenter the PRINT command with a VSE/POWER remote workstation id from 0 to 250.

ARI7878I Because your POWER remote workstation is zero, your report has been routed to the system printer.

Explanation: You specified a DESTID value of 0, 00, or 000. VSE/POWER considers a value of zero to mean the system printer.

System Action: The system will return to displaying the query result.

User Response: If you don't want your report to be routed to the system printer, reenter the PRINT command with a DESTID value from 1 to 250. Otherwise, no action is required.

ARI7879E The PRINT command failed because of a system problem. Notify your system programmer. You can continue your ISQL session.

Explanation: The PRINT command failed due to a system problem.

System Action: The system will return to displaying the query result.

User Response: Notify your system programmer. You can continue your ISQL session.

System Programmer Response: An RTESOME error occurred during the CICS ROUTE command. Perform CICS problem determination.

ARI7882I You cannot specify CLASS or COPIES for a CICS terminal. Your report has been routed to the CICS terminal termid. A single copy of your report will be printed without separator pages.

Explanation: Your report has been routed to the CICS terminal you specified. Class and copies cannot be specified for a CICS terminal. One copy of your report will be printed in the system class.

termid is the terminal id you specified.

System Action: Printing continues.

ARI7883I Your report has been routed to the POWER remote workstation *destid*.

Explanation: Your report has been routed to the VSE/POWER remote workstation you specified.

destid is the VSE/POWER remote workstation id you specified.

System Action: Printing continues.

ARI7884I Your output has been routed to the system printer.

Explanation: Your report has been routed to the system printer, not to a terminal printer.

System Action: Printing continues.

ARI7893I Your reply to message ARI7865D was not correct. The system is trying to print your report anyway.

Explanation: You entered a reply other than RETRY, END, or WAIT to message ARI7865D.

System Action: The system will try to print your report, as if you had replied RETRY. If the printer is still in use, message ARI7865D will be displayed again.

User Response: There is nothing you need to do if printing is successful. If not, message ARI7865D will be displayed again, and you can reply RETRY, END, or WAIT.

ARI7894I The width of the data to be printed is greater than the printer width. The data to be printed has been shortened to fit within the printer width.

Explanation: The width of the data to be printed is greater than the system printer width.

System Action: The data will be printed up to a width of 132 characters.

User Response: There is nothing you need to do if you are satisfied with your report. To print further data, use the COLUMN command to see the columns you want to print, and enter the PRINT command again.

ARI7901E The PRINT command failed. You cannot issue a PRINT command because you were not viewing a query result. Issue a SELECT statement.

Explanation: You entered a PRINT command while you were not viewing a query result. The PRINT command is valid only while a query result is being displayed.

System Action: The system waits for you to enter the next statement.

User Response: Enter a SELECT statement before entering the PRINT command.

ARI7902I You entered the PRINT command, but there is no data to be printed. Your report will contain only titles and column headings.

Explanation: You entered a PRINT command, but there is no data in your query result to be printed.

System Action: The system will print your report. It will contain only titles and column headings. The system waits for you to enter the next statement.

ARI7903E The PRINT command failed. You entered an incorrect keyword token on the PRINT command. Try again.

Explanation: You entered an incorrect keyword on the PRINT command.

token is the incorrect keyword you entered.

System Action: The system waits for you to enter the next statement.

User Response: Correct the keyword in error and reenter the PRINT command. The correct keywords for PRINT are CLASS, COPIES, DESTID, TERMDID, and SYSTEM.

ARI7904I The PRINT function is being scheduled.

Explanation: Access to the print capability is being scheduled. If the print capability is in use, the current request will wait until the print capability is available for use.

System Action: The system is trying to gain access to the print capability.

ARI7905I The PRINT function is in progress.

Explanation: The PRINT command is being processed.

System Action: The system fetches the data and processes the PRINT command.

ARI7906I The name of your report is *name*.
number copies of this report will be printed in class *class*.

Explanation: Your report is being printed. The print class and number of copies are shown in the message.

name is the user ID you entered when you signed on. If you did not enter a user ID, the system uses the terminal id for this value.

number is the number of copies to be printed.

class is your print class.

System Action: The system prints your report.

ISQL Messages – ARI7001-ARI7970

ARI7907I Only a single copy of your report can be printed now. It will be printed in the system print class without separator pages. If you need more than one copy, see your system programmer.

Explanation: The system print program is not operating properly.

System Action: Your report will be printed as described in the message.

User Response: Notify your system programmer if you are concerned about only receiving one copy of your report.

System Programmer Response: A nonzero return code was received when ISQL tried to invoke VSE/POWER. This could occur if VSE/POWER is not available, or if there is a problem with VSE/POWER.

ARI7908I You are trying to print a report that is wider than the page width. Only the first number characters of your report will be printed.

Explanation: You tries to print a report that is wider than the page width you set.

number is the number of characters that will be printed.

System Action: Your report will be printed, but some of the columns will be cut off.

User Response: Enter the SET PAGESIZE command if you want to make your page wider. Reenter or start your SELECT command. Then reenter the PRINT command.

ARI7910E The PRINT command failed. The CLASS keyword is specified without a following value. Reissue the PRINT command with a CLASS value of A to Z.

Explanation: You entered the CLASS keyword without a following value.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command, specifying an allowable CLASS value of A to Z.

ARI7911E The PRINT command failed. The CLASS value can only be one character long. Reissue the PRINT command with a single character CLASS value of A to Z.

Explanation: You entered a CLASS value greater than one character in length.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command, specifying a valid CLASS value of A to Z.

ARI7913E The PRINT command failed. You specified an invalid class value. Reissue the PRINT command with a CLASS value of A to Z.

Explanation: The CLASS value you specified was not valid. It must be specified as alphabetic.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command with a valid CLASS value of A to Z.

ARI7915E The PRINT command failed. You specified the COPIES keyword without a following value. Reissue the print command with a COPIES value of 1 to 99.

Explanation: You entered the COPIES keyword with no following value.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command, specifying an allowable COPIES value of 1 to 99.

ARI7916E The PRINT command failed. You specified a nonnumeric COPIES value. Reissue the PRINT command with a COPIES value of 1 to 99.

Explanation: You entered a COPIES value that was not numeric.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command with a valid COPIES value of 1 to 99.

ARI7917E The PRINT command failed. You cannot specify a COPIES value of zero. Reissue the PRINT command with a COPIES value of 1 to 99.

Explanation: You entered a COPIES value of zero.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command with a valid COPIES value of 1 to 99.

ARI7918E **The PRINT command failed. You specified too large a COPIES value. Reissue the PRINT command with a COPIES value of 1 to 99.**

Explanation: You entered a COPIES value greater than 99.

System Action: The system waits for you to enter the next statement.

User Response: Reenter the PRINT command with a valid COPIES value of 1 to 99.

ARI7920E **A system problem exists. An SQL error was encountered. The PRINT is terminated. Notify your system programmer.**

Explanation: An unexpected indication was received when closing or opening the cursor.

System Action: The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. Check the correctness of the table. Reenter the PRINT command. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7921E **An SQL error was encountered. The PRINT will continue, but you may not have your full output.**

Explanation: An unexpected indication was received when reading a row of data.

System Action: Printing continues.

User Response: Check the output to see if the full table was printed. If the full output was not obtained, notify your system programmer.

System Programmer Response: Perform problem determination. Check the output to see if the full table was printed. Check the correctness of the table. Reenter the PRINT command. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7922I **The PRINT command has been cancelled.**

Explanation: The CANCEL command was entered or you indicated you did not want to continue in response to message ARI7923D.

System Action: The system waits for you to enter the next statement.

ARI7923D **This PRINT begins in column number1 position number2. Do you want to continue? Press Enter to continue. If you do not want to continue, enter 0(No).**

Explanation: The data as displayed does not start in column 1 position 1 of the table.

number1 is the numeric value of the leftmost column in the display.

number2 is the numeric value of the left most position within the leftmost column in the display.

System Action: If you press the ENTER key, the table will be printed as displayed, starting from the top of the table. If you enter NO, the print will be ended.

User Response: Enter a response to indicate whether to print the table from its current column (or tab) position or end this print.

ARI7924I **The PRINT function is completed.**

Explanation: The print function has been completed.

System Action: The system waits for you to enter the next statement.

ARI7925E **The PRINT command failed. User identifier must be 1 to 8 alphanumeric characters.**

Explanation: You entered an invalid user identifier.

System Action: The system waits for you to enter the next statement.

User Response: Issue the PRINT command again, specifying a valid user identifier. Refer to the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* for the definition of a valid user identifier.

ARI7926I **Your report has been queued for userid.**

Explanation: The print function has been completed. Your report has been queued into the POWER print queue and destined for the user identifier you specified.

System Action: The system waits for you to enter the next statement.

ARI7932I **The COMMIT process is complete.**

Explanation: Your COMMIT statement completed normally.

System Action: Any changes made are committed to the database. The system waits for you to enter the next statement.

ISQL Messages – ARI7001-ARI7970

ARI7933I The ROLLBACK process is complete.

Explanation: Your ROLLBACK statement completed normally.

System Action: The database manager backs out any changes made since the last COMMIT or ROLLBACK. The system waits for you to enter the next statement.

ARI7934E The *action* statement failed. A portion of the statement is incorrect following or involving *token*.

Explanation: The portion of the *action* statement following or involving *token* is incorrect.

System Action: The system waits for you to enter the next statement.

User Response: Correct the error and reenter the statement.

ARI7937E You cannot use the SQL statement *sql* command in ISQL.

Explanation: You entered an SQL statement that cannot be processed by ISQL.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: For details on how to use this command, see the *DB2 Server for VSE & VM Application Programming* manual.

ARI7939E *token* is invalid. It must be either numeric or MAX for forward or backward.

Explanation: Either:

- You entered a nonnumeric value where only a numeric value can be used.
- You entered a FORWARD or BACKWARD command with a nonnumeric value other than the keyword MAX.

token is the value you entered.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command with a proper value.

ARI7940E Not enough storage is available for processing the DISPLAY command you entered. Try the command at a later time or enter a different command.

Explanation: You entered a command which requires more virtual storage than the amount now available.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Retry the command. If this condition persists, notify your system programmer.

System Programmer Response: If this condition persists, increase the SIZE parameter on the CICS EXEC job control statement and the CICS partition size.

ARI7942E The command *cmd* is not a valid ISQL command. Please enter another command.

Explanation: You entered a command that is not recognized by ISQL.

cmd is the command you entered.

System Action: The command is ignored. The system waits for you to enter the next statement.

ARI7943E The field *token* is not supported by ISQL DISPLAY processing. Reenter the SELECT statement without specifying field *token*.

Explanation: Your SQL statement explicitly or implicitly requests that a long field column is to be used. Long field data types are not supported by ISQL.

token is the name of the column.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Enter a different SQL statement or reenter the SELECT statement without retrieving the field specified in the message.

ARI7944E System error. The field *token* is of a type unknown to ISQL. Notify your system programmer.

Explanation: A column identified by *token* was retrieved from the database manager, but the data type of this column is not known to ISQL. Data types known to ISQL are: INTEGER, SMALLINT, DECIMAL, FLOAT, CHAR, VARCHAR, LONG VARCHAR, GRAPHIC, VARGRAPHIC, LONG VARGRAPHIC, DATE, TIME, and TIMESTAMP. However, long fields are not supported by ISQL display processing. A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7945I **The CONNECT statement completed successfully.**

Explanation: Your CONNECT statement completed normally.

System Action: The specified user is now connected to the database manager. The system waits for you to enter the next statement.

ARI7946E **The CONNECT statement failed. If this message is followed by an SQL error message, follow its directions. If it is not followed by an SQL error message, check the format of the CONNECT statement and reenter it.**

Explanation: Your CONNECT statement failed.

System Action: The CONNECT is not processed. If the CONNECT was issued from a CBND transaction, the CBND ends. The system waits for you to enter the next statement.

User Response: Reenter the CONNECT statement after checking the USER ID and PASSWORD for validity. If the problem persists, notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7947E **An internal processing error has occurred. An invalid call occurred to the SQL interface module. Notify your system programmer.**

Explanation: An internal call was made to the SQL processing routine with a parameter list that was not valid.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7949I **Too many parameters were on the command. They will be ignored.**

Explanation: You entered an SQL command with too many fields specified.

System Action: The extra information on the command is ignored. The system waits for you to enter the next statement.

ARI7951I **The value specified would cause the DISPLAY to be positioned before the first or after the last column. The DISPLAY will be positioned as far as possible in the direction specified.**

Explanation: You specified a value on an ISQL display command that, if used, would have resulted in an incorrect display.

System Action: The system processes as much as possible of the command. The system waits for you to enter the next statement.

ARI7952E **You cannot use zero as a value for the COLUMN or TAB command. Reenter the command with a value greater than zero.**

Explanation: You entered a COLUMN or TAB command with a value of zero. Zero is not an acceptable value.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the COLUMN or TAB command with a value greater than zero.

ARI7953E **An internal processing error has occurred within the DISPLAY processor. Notify your system programmer.**

Explanation: An internal error was encountered in the ISQL display processor, ARIIDQY.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7954E **Query failed. Full query result row length exceeded nnnn positions. Retry query by selecting fewer columns or use the SET command to decrease the VARCHAR value.**

Explanation: The query result row length exceeds the maximum length of nnnn characters allowed by ISQL for the screen size of your terminal: The maximum row length is determined by taking the screen height, subtracting 4, multiplying this by 2, because SQL retrieves 2 screens worth of data, adding 1 and dividing this into the size of the buffer, 65535. The formula is:

$$65535 / (((SCREENHT - 4) * 2) + 1) = \text{MAX ROW LENGTH.}$$

ISQL Messages – ARI7001-ARI7970

This is the maximum size that a row can be for your terminal size.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Retry your query, selecting fewer columns, or use the SET command to decrease the VARCHAR value.

ARI7955I The system ended your query result to process your command.

Explanation: You entered a command that cannot be processed while you are viewing a query result.

System Action: The system ends the query result and processes the command.

ARI7956E Command failed. This command is not valid while you view a query result from a routine.

Explanation: You entered a command that is not valid while you are viewing a query result from a routine.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Reenter the command, specifying a valid option.

ARI7957E The TAB command failed. The TAB command is valid for the CHAR and VARCHAR columns only. Tabbing into DECIMAL, FLOAT, INTEGER, and SMALLINT columns is not allowed.

Explanation: You can use the TAB command on CHAR and VARCHAR columns only.

System Action: The command is ignored. The system waits for you to enter the next statement.

User Response: Enter next command.

ARI7958I The COMMIT RELEASE process is complete.

Explanation: The COMMIT RELEASE statement you entered has completed normally.

System Action: Any changes made to the database are committed. The system waits for you to enter the next statement.

ARI7959I The ROLLBACK RELEASE process is complete.

Explanation: The ROLLBACK RELEASE statement you entered has completed normally.

System Action: Any changes made to the database are rolled back. The system waits for you to enter the next statement.

ARI7960I The query cost estimate for this SELECT statement is number.

Explanation: You entered a SELECT statement. The database manager has calculated a cost estimate for this query. The larger this number is, the longer you will have to wait to see your query result.

number is the query cost estimate, ranging from 1 to 9999. If the query cost estimate is greater than 9999, the value ">9999" is presented in the message. (The query cost estimate is calculated by adding 1 to the result of dividing the DB2 Server for VSE optimizer cost estimate by 1000.)

System Action: Command processing continues unless you enter the CANCEL command.

User Response: If you do not want to wait for the result, enter the CANCEL command.

ARI7961I The DISPLAY command is valid only from a routine. It was ignored.

Explanation: You entered a DISPLAY command from the terminal while viewing a query result. The display command is valid only from a routine.

System Action: The command is ignored. The system waits for you to enter the next statement.

ARI7962E Command failed. A severe SQL error has occurred. A CONNECT statement is required in order to continue this ISQL session. Report this message and the previous SQL error message to your system programmer.

Explanation: A severe SQL error occurred while your command was being processed.

System Action: ISQL ends.

User Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI7965I A delay has occurred during ISQL initialization. Try later.

Explanation: A delay has occurred during ISQL initialization. This delay may be caused by various reasons, for example:

- The maximum number of users allowed on ISQL has been exceeded.
- CICS is experiencing a delay due to heavy use of the system.
- CICS is experiencing a delay in obtaining storage for ISQL initialization.

System Action: The system ends the ISQL transaction.

User Response: Try again later. If this problem persists, notify your system programmer.

System Programmer Response: If this problem persists, perform problem determination and contact the designated support group for your installation.

ARI7966I **The value specified would cause the display to be positioned after the last character in the column. The display will be positioned at the rightmost character in the column.**

Explanation: You specified a value on an ISQL display command that, if used, would have resulted in an incorrect display.

System Action: The system processes as much as possible of the command. The system waits for you to enter the next statement.

ARI7967E **HELP text for language id could not be found.**

Explanation: Either the topic name has been misspelled, or the HELP text for this topic cannot be found.

System Action: The system waits for you to enter the next command.

User Response: Verify the topic name and retry the command. If the topic cannot be found, contact your system programmer.

System Programmer Response: Verify the existence of HELP text for this topic in SYSTEXT2.

ARI7968E **Invalid string of double-byte character set (DBCS) characters.**

Explanation: A string of DBCS characters is either is too long, contains bytes that are not properly paired, or improperly terminated, as in having an opening so delimiter (X'0E') without a terminating si delimiter (X'0F').

System Action: Command processing is ended.

User Response: Correct the input command and re-enter it.

ARI7969I **DISPLAY command has been processed successfully.**

Explanation: This message indicates that the display command was processed successfully. In the case of a FORMAT TTITLE title or FORMAT BTITLE title, the top title or bottom title respectively have the value of title.

System Action: The keyword is processed. Command processing continues if more keywords are on the

command. Otherwise, the system waits for you to enter the next command.

ARI7970I **This DISPLAY command cannot be processed because of graphic data present.**

Explanation: This message indicates that the display command entered was correct but because the data to be displayed has graphic data, the command cannot be processed. This is a restriction of FORMAT TTITLE and FORMAT BTITLE.

System Action: The keyword is processed. Command processing continues if there are more keywords on the command. Otherwise, the system waits for you to enter the next command.

ISQL Messages – ARI7001-ARI7970

Chapter 13. ARI0800–ARI0899, ARI8000–ARI8999 DBS Utility Messages

Common Error Action

- If the error was not a serious DB2 Server for VSE error, and the processing mode established by a SET ERRORMODE CONTINUE command is in effect, DBS Utility command processing continues.
- If the error was not a serious DB2 Server for VSE error, and the processing mode established by a SET ERRORMODE CONTINUE command is not in effect:
 1. SQL ROLLBACK statement is executed.
 2. The DBS Utility enters error mode processing (ERRORMODE=ON).
- If the error was a serious DB2 Server for VSE error, the DBS Utility enters error mode processing (ERRORMODE=ON).
- During DBS Utility error mode processing, only a DBS Utility SET ERRORMODE OFF or a SET ERRORMODE CONTINUE command will be executed.

Other SQL and DBS Utility commands are not executed. They are read from the command file and displayed in the DBS Utility message listing. The DBS Utility only performs command identification and DBS Utility command syntax checking for the commands that are ignored during error mode processing. Errors that would be detected during the execution of a command or a data file input/output operation are not detected.

Rerunning DBS Utility

If no COMMIT of database changes occurred during this execution of the DBS Utility, all commands that altered the database should be reprocessed through the DBS Utility.

If a COMMIT of database changes occurred during this execution of the DBS Utility, rerun the DBS Utility but omit all the commands from the control statement input that altered the database prior to the last COMMIT of database changes.

A COMMIT of database changes may have occurred as a result of processing a user-supplied SQL COMMIT statement or as a result of the

AUTOCOMMIT=ON processing initiated by a user-supplied DBS SET AUTOCOMMIT ON command.

If AUTOCOMMIT=ON, message ARI0811I is generated after each successful COMMIT of database changes by DBS Utility processing.

ARI0800I **...Begin COMMIT. Input Record Count**
 = *count-value*.

Explanation: This message is issued before DATALOAD or RELOAD COMMITCOUNT processing issues a COMMIT statement. The successful completion of the COMMIT will be identified by the subsequent message:

```
ARI0811I ...COMMIT of any database
           changes successful.
```

count-value is the current input record count value. After the COMMIT statement successfully completes, this value should be used as the RESTARTCOUNT value (**rcount**) if DATALOAD or RELOAD processing fails before the next COMMIT statement successfully completes.

System Action: DBS utility processing continues.

ARI0801I **DBS Utility started: &1. &2..**

AUTOCOMMIT=OFF
ERRORMODE=OFF
ISOLATION LEVEL=REPEATABLE READ.

Explanation: Identifies the start of DBS Utility processing and that AUTOCOMMIT=OFF and ERRORMODE=OFF, and ISOLATION LEVEL=REPEATABLE READ are in effect for command processing.

&1. and &2. are a 17-position date and time (mm/dd/yy hh:mm:ss) identifying when the message was issued.

System Action: Processing continues.

ARI0802I **End of command file input.**

Explanation: The last record has been read from the command file or an error has occurred that prevents further command file read processing. If a command file read error occurred, message ARI0814E will precede this message.

DBS Utility Messages – ARI0800-ARI0899, ARI8000-ARI8999

System Action: DBS Utility end of program processing is initiated.

ARI0803E Invalid command identifier.

Explanation: The last command displayed in the DBS Utility message listing cannot be identified. The command is not supported by DBS Utility processing or it does not begin with valid DBS Utility or SQL command identifier keywords.

All command file records are displayed as continuations of the invalid command up to but not including the command file record beginning the next recognizable command.

System Action: The command is not processed. See “Common Error Action” on page 191 for more information.

Programmer Response: The command is not processed. See “Common Error Action” on page 191 for more information.

ARI0804E Internal DBS error occurred: Module=&1. Reason Code=&2A.

Explanation: An internal DBS Utility error has occurred.

&1. is the name of the DBS Utility module detecting the error.

&2A. is a value that identifies the specific error detected by the module. The possible values and associated descriptions vary for each module and are described below.

After the message is generated, a storage dump is taken. Register 15 is set to a hexadecimal value unique to each module. These dump identification values (DUMP ID) are also described below.

DBS Module	Reason Code	DESCRIPTION	R15 Contents
ARIDALC	4	Invalid CALL to module. The call type parameter was not ALLOCATE (X'00') or FREE (X'08').	800
ARIDALI	4	Invalid CALL to module. The call type parameter was not ALLOCATE (X'00') or FREE (X'08').	801
ARIDALT	4	Invalid CALL to module. The call type parameter was not ALLOCATE (X'00') or FREE (X'08').	802

DBS Module	Reason Code	DESCRIPTION	R15 Contents
ARIDBS	4	Invalid pointer was passed to the module that loads the character translation table.	803
ARIDCFI	8	Invalid CALL to module. A CALL to the module was made to read the command file: <ul style="list-style-type: none"> • Before the command file was opened, • After the command file was closed, or • After a command file I/O error occurred. 	804
ARIDCSP	4	An entry to the module, the command file status, and the ARIDCSP processing control fields were in an inconsistent state.	805
ARIDCSP	8	Command build logic error. During command build processing, the last nonblank position of the command file record was less than the first nonblank position.	805
ARIDDFI	8	Invalid CALL to module. A CALL to the module was made to read the command file: <ul style="list-style-type: none"> • Before the command file was opened • After the command file was closed, or • After a command file I/O error occurred. 	806
ARIDDLO	4	The current command was not a DBS DATALOAD TABLE command when the module ARIDDLO was entered.	807

DBS Utility Messages – ARI0800-ARI0899, ARI8000-ARI8999

DBS Module	Reason Code	DESCRIPTION	R15 Contents
ARIDDLO	8	Command processing logic error. An ARIDCSP return code (R15) value > 8 was received while reading commands for actual processing (no previous errors have occurred).	807
ARIDDLO	12	A command sequence check logic error occurred during normal command sequence processing.	807
ARIDDLO	16	A logic error occurred during DATALOAD input OPEN processing. The last command processed was not an INFILE or INMOD command.	807
ARIDDLO	20	Command processing logic error. An ARIDCSP return code (R15) value > 8 was received while reading commands after an error occurred.	807
ARIDDLO	24	An input data field was not processed for a column during INSERT processing based on column nodes already matched to data fields.	807
ARIDDUL	4	The current command was not a DATAUNLOAD command when module ARIDDUL was entered.	813

DBS Module	Reason Code	DESCRIPTION	R15 Contents
ARIDDUL	8	Command processing logic error. An ARIDCSP return code (R15) value > 8 was received while reading commands for actual processing. (That is, no previous commands occurred.)	813
ARIDDUL	12	A command sequence check logic error occurred during normal command sequence processing.	813
ARIDDUL	20	Command processing logic error. An ARIDCSP return code (R15) value > 8 was received while reading commands after an error occurred.	813
ARIDEXI	4	Invalid CALL to module. The call type parameter was not OPEN (X'12'), FETCH (X'02'), or CLOSE (X'04').	808
ARIDSFA	4	Invalid CALL to module. The call type parameter was not ALLOCATE (X'00'), COMPUTE (X'02'), or FREE (X'04').	809
ARIDSQL	4	Invalid CALL to module. The call type parameter was not valid.	810
ARIDUNL	12	Internal logic error. The SQL I/O area is too small.	812

System Action: Processing of the command is terminated. A storage dump request is issued. See “Common Error Action” on page 191 for more information.

Programmer Response: Contact system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred,

DBS Utility Messages – ARI0800-ARI0899, ARI8000-ARI8999

make a record of what went wrong and contact the designated support group for your installation.

ARI0805E Command is incomplete.

Explanation: The last command displayed in the DBS Utility message listing is not complete.

All command file records were read or a command file read error occurred before the end of the command was identified.

The command file records comprising the command and any command file processing error messages appear before the ARI0805E message in the DBS Utility message listing.

Note: Unbalanced quotes in a command or command information appearing in positions 73 through 80 of a command file record may cause an erroneous end of file condition to occur.

System Action: The command is not processed. See “Common Error Action” on page 191 for more information.

Programmer Response: Refer to the previous messages in the DBS Utility message listing to identify the type of command being built and a description of any abnormal command file processing conditions.

Correct the command error or the command file problem identified and rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0806E The command length already is greater than 8192 positions.

Explanation: The last command displayed in the message listing is longer than 8192 positions. The maximum command length has already been exceeded before this control statement was read. The contents of this control statement cannot be appended to the command being built.

This message will only appear after the condition described by message ARI0810E has occurred.

System Action: Refer to message ARI0810E.

Programmer Response: Refer to message ARI0810E.

ARI0807E ...Errors occurred during command processing.

Explanation: Indicates that all user commands have not processed successfully during execution of the DBS Utility.

System Action: DBS Utility end of program processing continues.

Programmer Response: Refer to the previous messages in the DBS Utility message listing to identify the errors encountered.

ARI0808I DBS processing completed: &1.&2..

Explanation: Identifies the end of DBS Utility command processing.

&1.&2. is a 17-position date and time (mm/dd/yy hh:mm:ss) identifying when the message was issued.

System Action: DBS Utility end of program processing continues. The message file is closed and processor storage areas acquired at the start of DBS Utility processing are released before DBS Utility processing terminates.

ARI0809I ...No errors occurred during command processing.

Explanation: All commands supplied were processed successfully, or all commands since the last SET ERRORMODE OFF command were processed successfully.

System Action: DBS Utility end of program processing continues.

ARI0810E Command file record truncated after position &1A..

Explanation: The last command displayed in the DBS Utility message listing exceeds the maximum command length of 8192 positions.

&1. is the position (column in the control statement record) of last control statement displayed that was identified as position 8192 of the command.

Note: If no commands approaching the maximum command length were present in the DBS Utility command file input, reasons for the error condition prompting this message are:

- Unbalanced quotes in a command.
- Command information appearing in positions 73 through 80 of a control statement record.

System Action:

- The command is not executed.
- DBS Utility continues to read command file records until the end of the command is encountered.
- Subsequent command file records comprising the command will cause the message ARI0806E to be issued.
- Command processing is terminated.
- Also see “Common Error Action” on page 191.

Programmer Response: Analyze the previous command file records displayed in the DBS Utility message listing.

Correct the command or if necessary, reduce the length of the command by eliminating unnecessary blanks between command parameters in each control statement, then reprocess the command. (See “Rerunning DBS Utility” on page 191.)

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ARI0811I ...&1. of any database changes successful.

Explanation: The DBS Utility initiated execution of an SQL COMMIT or SQL ROLLBACK command was successful. The command was not supplied as user input, but was executed automatically by DBS Utility processing. Any database changes made since the beginning of DBS Utility processing, or since the last SQL COMMIT or SQL ROLLBACK command was executed, have been committed or rolled back.

&1. is COMMIT or ROLLBACK.

System Action: DBS Utility processing continues.

Programmer Response: If a ROLLBACK of database changes is indicated, reference the previous error messages to identify the errors that caused the ROLLBACK and the action to be taken.

If a COMMIT of database changes is indicated, DBS Utility processing committed the database changes automatically because AUTOCOMMIT=ON or because ERRORMODE=OFF was in effect when the DBS Utility end of program processing was initiated.

ARI0812I ...Resume command execution: AUTOCOMMIT=OFF ERRORMODE=OFF.

Explanation: A DBS SET ERRORMODE OFF command was successfully processed. DBS Utility will resume execution of commands at this point with AUTOCOMMIT=OFF and ERRORMODE=OFF.

System Action: Proceeds to process and execute commands with AUTOCOMMIT=OFF and ERRORMODE=OFF.

ARI0813I ...Suspend command execution: AUTOCOMMIT=OFF ERRORMODE=ON.

Explanation: This message identifies that DBS Utility error mode processing is being initiated (AUTOCOMMIT=OFF and ERRORMODE=ON).

System Action:

- Proceeds with DBS Utility error mode processing.
- Command identification and DBS Utility command syntax checking will occur but no further commands will be executed.
- Errors that would be detected during execution of a command or any associated data file input/output operations will not be detected.

ARI0814E File &1. error: DNAME=&2. Reason Code = &3A.. Return Code = &4A..

Explanation: An input/output file processing error occurred.

&1. is either OPEN, CLOSE, READ (GET), or WRITE (PUT).

&2. is DNAME identifying the file.

&3A. is the Primary Error Code describing the error.

&4A. is the Secondary Error Code describing the error.

Primary Error Code: The Reason Code = &3A. value reflects an error detected by either a DBS Utility module or the DB2 Server for VSE Operating System Dependent Service Module Generalized I/O Routine (ARISYSD5). The code values in the following list are provided by the DBS Utility:

- 91** Module ARIDMGE print message call, but the message number in the CPA field CPAMSGNO is 0.
- 92** Module ARIDMGE print line call (not a message), but the CPA field CPAMSGNO is not 0.
- 93** Module ARIDMGE print SQL message call, but the CPA field CPAMSGNO is not 0.
- 94** Module ARIDDFI detected an unsupported or incorrect record format (RECFM) after the file was successfully opened.
- 95** Module ARIDDUL detected an incorrect record format (RECFM) after the file was successfully opened. The DATAUNLOAD processing requires an output record length greater than 32760 bytes, but the output file identified is not defined with spanned records (RECFM = VS or VBS).
- 96** Module ARIDRLP detected an empty file. RELOAD PROGRAM processing requires a non-empty file and may be created by UNLOAD PROGRAM processing.
- 99** ARIDMGE detected an unknown error. The message processing status fields are in an inconsistent state.

All other Primary Error Code values are provided by ARISYSD5. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

Secondary Error Codes: The Return Code =&4A; value is an error code provided by the DB2 Server for VSE Operating System Dependent Service Module Generalized I/O Routine (ARISYSD5).

If the Primary Error Code is provided by a DBS Utility module, the Secondary Error Code is zero. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: Command processing is ended. See

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“Common Error Action” on page 191 for more information.

Programmer Response: Determine problem with the file identified by analyzing any reason code displayed in this message, and any DBS Utility messages displayed previous to this message or by operating system messages displayed on the operator console or terminal.

If possible, correct the error and reprocess the last command displayed in the DBS Utility message listing. (See “Rerunning DBS Utility” on page 191.)

If the error cannot be corrected, notify the system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0815I ...&1. Processing Mode = &2..

Explanation: This message is displayed as a result of processing a Database Services Utility SET AUTOCOMMIT or SET UPDATE STATISTICS command. It identifies whether DBS AUTOCOMMIT or UPDATE STATISTICS processing will be ON or OFF for subsequent command processing.

&1. is AUTOCOMMIT or UPDATE STATISTICS.

&2. is ON or OFF.

System Action: Processing proceeds.

ARI0816E DBS COMMENT command does not end with a single quote.

Explanation: An error has occurred in the last DBS COMMENT command displayed in the DBS Utility message listing. The terminating single quote for the comment text was not found.

System Action: See “Common Error Action” on page 191.

Programmer Response: Ensure that there are no unbalanced quotes in the command and that command information is not supplied in positions 73 through 80 of the command file records comprising the command. Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0817I ...Command file processing was interrupted.

Explanation: Command file processing was interrupted because the command file was empty or because a command file read error occurred before the first command was completed. One of the following occurred:

System Action: DBS Utility end of program processing is initiated.

Programmer Response: If the message ARI0814E precedes this message in the DBS Utility message listing, correct the command file error indicated. Rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0818E Module &1. load error: Reason Code=&2A..

Explanation: A module necessary for INMOD command processing could not be loaded into storage.

The module name (&1) was supplied by the INMOD command displayed in the DBS Utility message listing preceding this message.

The reason code (&2A) is the VSE CDLOAD macro return code value. Refer to the *IBM VSE/ESA System Macros Reference* manual for an explanation of the codes.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Take the appropriate action necessary to correct the error identified by the reason code or contact your system programmer.

System Programmer Response: Take the appropriate action necessary to correct the error identified by the reason code. Rerun the job.

ARI0819I ...Command not processed: ERRORMODE=ON.

Explanation: The command displayed preceding this message in the DBS Utility message listing was not processed because of a previous error.

System Action: DBS Utility error mode processing continues.

ARI0821E Module *module-name* interface error. Reason Code = *reason-code*

Explanation: An error has been detected by module *module-name*. The INMOD command is displayed preceding this message in the DBS Utility message listing.

The *reason-code* is the return code issued by *module-name*. The values are:

8 Processing error.

System Action: See “Common Error Action” on page 191 for more information.

Programmer Response: Refer to the previous DB2 Server for VSE messages in the message output listing to identify the error encountered and the action to be taken.

ARI0822E **Commands are out of sequence or a subcommand is missing.**

Explanation: The last command displayed is out of sequence. Either required DBS DATALOAD or DATAUNLOAD subcommands have been omitted, or the command file records are out of sequence.

System Action: The DATALOAD or DATAUNLOAD command is not executed. See “Common Error Action” on page 191 for more information.

Programmer Response: Supply all required commands and subcommands in the correct sequence and reprocess the commands. (See “Rerunning DBS Utility” on page 191.)

ARI0823E **SQL message formatting error.**
SQLCODE=&1A..

Explanation: An internal DBS Utility error has occurred. The DBS Utility module ARIDSQLE received a return code = 20 or 24 from the module ARIMSMF while attempting to format the descriptive text for the identified SQLCODE.

System Action: Processing continues.

Programmer Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0824E **&1. storage unavailable. Bytes Requested = &2A. Reason Code = &3A.**

Explanation: The identified DBS Utility module could not acquire the required amount of processor storage.

&1. is a module name.

&2A. is the amount of storage requested in bytes.

&3A. is a code describing the error (see below).

The code value (&3A.) is the return code supplied by the DB2 Server for VSE Common Service Module (ARISYSD) in response to the acquire storage request made through the entry point ARISYSD1.

The code value is the same as the return code supplied by the GETVIS macro. The GETVIS macro return codes are described in the *IBM VSE/ESA System Macros Reference* manual.

System Action: See “Common Error Action” on page 191.

Programmer Response: Correct the problem identified by the reason code (&3A.) displayed in the message text.

If the problem cannot be corrected, contact the system programmer.

System Programmer Response: If the problem identified by the reason code (&3A.) cannot be corrected, perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0825E **&1. &2. storage not released: Reason Code = &3A..**

Explanation: The identified DBS Utility module could not release processor storage.

&1. is a module name.

&2. is an area name.

&3A. is a code describing the error (see below).

The code value (&3A.) is the return code supplied by the DB2 Server for VSE Common Service Module (ARISYSD) in response to the acquire storage request made through the entry point ARISYSD2.

The code value is the same as the return code supplied by the FREEVIS macro. The FREEVIS macro return codes are described in the *IBM VSE/ESA System Macros Reference* manual.

System Action: Processing of the last command displayed in the DBS Utility message listing is terminated. Also see “Common Error Action” on page 191 for more information.

Programmer Response: Correct the problem identified by the reason code (&3A.) supplied in the message text.

If the problem cannot be corrected, contact the system programmer.

System Programmer Response: If the problem cannot be corrected, perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0827I **...Begin command execution: ERRORMODE=CONTINUE.**

Explanation: This message is generated after a DBS Utility SET ERRORMODE CONTINUE command was successfully processed. It is also generated during the DBS Utility program initialization if the control file is assigned to the terminal.

The DBS Utility will execute subsequent commands with the normal DBS Utility error processing suppressed. If a command processing error is detected, the Database Services Utility will neither execute an SQL ROLLBACK statement nor enter DBS Utility error mode processing. Subsequent commands will be executed by the DBS Utility. For a further explanation of this processing, refer to the description of the DBS Utility SET ERRORMODE command CONTINUE parameter.

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System Action:

- Command processing continues.
- If other than a serious DB2 Server for VSE error is detected, the appropriate error message or messages will be generated, but the DBS Utility will not execute an SQL ROLLBACK statement or enter DBS Utility error mode processing.
- If a serious DB2 Server for VSE error is detected, DBS Utility command processing will be suspended.

ARI0828I ...&1. reset to &2A..

Explanation: This message is generated after a DBS Utility SET LINECOUNT/LINEWIDTH command was successfully processed.

&1. LINECOUNT or LINEWIDTH.

LINECOUNT identifies the number of lines per print page to be used for the DBS Utility message file output.

LINEWIDTH identifies the number of print positions per line to be used for the DBS Utility message file output resulting from SQL SELECT command processing.

&2A. LINECOUNT or LINEWIDTH value to be used for the DBS Utility message file output.

System Action: Command processing continues.

ARI0830E User-supplied SELECT statement error encountered.

Explanation: An error was detected during SQL processing of the SQL SELECT statement supplied by the user for DATAUNLOAD processing.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Refer to the error messages in the DBS Utility message listing prior to this message for a description of the SQL error encountered. Correct the SQL SELECT statement error and rerun the command.

ARI0831I Column &1. data will not be unloaded.

Explanation: This message identifies a column in the select-list of the DATAUNLOAD command that is not referenced by the user-supplied Data-Field-Identification subcommands. The data for the column will not be unloaded.

&1. is the column name of the select-list column that will not be unloaded.

System Action: DBS Utility processing continues.

ARI0832I Column &1. data truncation or data overflow may occur.

Explanation: This message identifies one of the following conditions:

- A select-list column defined with a nonnumeric data type and a length greater than the length of the associated output record CHAR, GRAPHIC, or ZONED data field. Nonblank, trailing (low-order) positions of column values will be truncated by DATAUNLOAD processing.
- A select-list column defined with a numeric data type that may result in a value with more significant digits than the length of the associated output record CHAR, GRAPHIC, or ZONED data field allows. Asterisks will be placed in the output record data field if this numeric data value overflow condition occurs.

&1. is a column name or integer value specified in the Data-Field-Identification subcommand that identifies a select-list column in the SQL SELECT statement supplied after the DATAUNLOAD command.

System Action: DBS Utility processing continues.

ARI0833E Column &1. data overflow. Rowcount = &2A..

Explanation: This message identifies an occurrence of a numeric select-list column value that exceeds the capacity of the output record numeric data field. The significant digits of the column value cannot be contained in the output record data field.

&1. is a column name or integer value specified in the Data-Field-Identification subcommand.

&2A. is an SQL SELECT row count at the time the condition was detected. For example, if this condition was detected in the tenth row selected from the database by the SQL SELECT statement supplied for DATAUNLOAD processing, this value will be 10.

System Action: The row cannot be written to the output file. If the row is written to the output file, the data may be truncated or replaced by asterisks. DBS Utility processing will be stopped when end-of-input, SQLCODE 100 is detected.

Programmer Response: Verify that the output file contains the expected data. If it does not, correct the applicable dataunload Data-Field-Identification subcommand and rerun the command.

ARI0834E Invalid data field position for column &1..

Explanation: This message identifies that a data field for a column referenced by a DATAUNLOAD Data-Field-Identification subcommand starts or ends in an output record position exceeding the specified length of the output record. The length of the output

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record is identified in the previous ARI0868I message that appears in the DBS Utility message listing.

&1. is a column name or integer value specified in the Data-Field-Identification subcommand that identifies a select-list column in the SQL SELECT statement supplied after the DATAUNLOAD command.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the applicable DATAUNLOAD Data-Field-Identification subcommand or increase the length of the output record and rerun the command.

ARI0835I &1A. records were written to the output data file.

Explanation: Identifies the number of records written to the output data file by DATAUNLOAD processing.

&1A. is the number of records.

System Action: DBS Utility processing continues.

ARI0836I Default output record data field positions:

Explanation: This message precedes the ARI0837I messages that identify the default output record data field positions for a DATAUNLOAD command select-list.

System Action: DBS Utility processing continues. One or more ARI0837I messages will be generated after this message.

ARI0837I &1. &2A.–&3A..

Explanation: Identifies the default output record data field positions for a DATAUNLOAD command select-list column. This message follows message ARI0836I or another occurrence of message ARI0837I in the DBS Utility message listing.

&1. is the column name or integer value that identifies the source of the data.

&2A. is the default start position for the column data in the output data record.

&3A. is the default end position for the column data in the output data record.

System Action: DBS Utility processing continues.

ARI0838E Invalid SQL CONNECT statement syntax.

Explanation: The syntax of an SQL CONNECT statement is not valid. For example:

- An SQL CONNECT statement keyword or parameter is missing or misspelled.

- Extra information is specified.
- The statement is not terminated by a semicolon.

System Action: The command is not processed. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0839E LINEWIDTH is not less than message record length = &1A..

Explanation: An invalid value is specified for the LINEWIDTH parameter in the last command displayed in the DBS Utility message file listing. The value is equal to or greater than the DBS Utility message file record length.

&1A. is a DBS Utility message file record length.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command or define the DBS Utility message file with a larger record length and rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0840E Invalid data type = &1A. encountered in the SQLDA.

Explanation: While processing the last command displayed in the DBS Utility message listing, an invalid SQLDA data type value was detected after the execution of a DBS-initiated SQL DESCRIBE command. This is a DBS Utility program error or a DB2 Server for VSE system error.

&1A. is the invalid data type detected.

System Action: Processing of the current command is terminated. Also see “Common Error Action” on page 191.

Programmer Response: Notify your system programmer.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0841E End of file or read error before data record completed.

Explanation: During DATALOAD continued record processing, the last data record read indicated that the data was continued in the following data record. An end of file condition or read error occurred before the continuation record was read.

System Action: DATALOAD command processing is ended. Also see “Common Error Action” on page 191.

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Programmer Response: If a command file read error is indicated by the error message ARI0814E displayed previous to this message in the DBS Utility message listing, correct the file problem identified.

If a command file read error did not occur, correct the continuation indicator in the input data record.

Reprocess the command. (See “Rerunning DBS Utility” on page 191.)

ARI0842E COMMITCOUNT specified and DBS Utility AUTOCOMMIT = OFF.

Explanation: This message is issued when the COMMITCOUNT parameter is specified on the DATALOAD INFILE or RELOAD INFILE subcommand and Database Services Utility AUTOCOMMIT processing is OFF. A Database Services Utility SET AUTOCOMMIT command must be issued prior to running a DATALOAD or RELOAD command with COMMITCOUNT processing in effect.

System Action: DATALOAD or RELOAD command processing is ended.

Programmer Response: Rerun after supplying a SET AUTOCOMMIT ON command before the DATALOAD or RELOAD command or removing the COMMITCOUNT parameter from the DATALOAD INFILE or RELOAD INFILE subcommand.

ARI0843I Restart processing at input data record = &1A..

Explanation: This message identifies the input record count at which DATALOAD or RELOAD processing will begin after the number of records specified by the RESTARTCOUNT value (rcount) are read and skipped. The value (&1A.) is one more than RESTARTCOUNT value.

System Action: Processing continues.

ARI0844E End of data or read error occurred during RESTART processing.

Explanation: This message is issued when an input file read error or end-of-file condition occurs before the number of records specified in the RESTARTCOUNT value (rcount) are read.

System Action: Command processing is ended.

Programmer Response: Either a bad input file was used or an incorrect RESTARTCOUNT value (rcount) was specified. Rerun using a good input file or with the correct RESTARTCOUNT value.

ARI0845I Process input table data: &1..&2.

Explanation: The input table identified will be processed by the RELOAD DBSPACE or the RELOAD TABLE command.

- If NEW was specified in the RELOAD DBSPACE or the RELOAD TABLE command:
 - The input table definition was used to create a new table in the database.
 - The input table data will be loaded into the database table created.
- If PURGE was specified in the RELOAD DBSPACE command:
 - The input table exists in the DBSPACE specified in the command.
 - All rows will be deleted from the database table.
 - The input table data will be loaded into the database table.
- If PURGE was specified in the RELOAD TABLE command:
 - The output table exists in the database.
 - All rows will be deleted from the database table.
 - The input table data will be loaded into the database table.

&1. is the input table owner.

&2. is the input table name.

System Action: DBS Utility processing continues.

ARI0846I Ignore input table data: &1..&2.

Explanation: The input table identified will not be processed by the RELOAD DBSPACE command.

- If NEW was specified in the RELOAD DBSPACE command, a table cannot be created in the database using the input table definition, because that table already exists in the database.
- If PURGE was specified in the RELOAD DBSPACE command, the input table does not exist in the DBSPACE specified in the command.

&1. is the input table owner.

&2. is the input table name.

System Action: DBS Utility processing continues.

ARI0847I ...No input tables processed.

Explanation: No tables were loaded as a result of processing the last RELOAD DBSPACE command displayed in the DBS Utility message listing.

If the last command displayed is a RELOAD DBSPACE command with the NEW option, none of the tables in the input file could be created and loaded because they

already exist in the database.

If the last command displayed is a RELOAD DBSPACE command with the PURGE option, none of the tables in the input file could be loaded because they do not exist in the specified DBSPACE.

System Action: Processing continues.

Programmer Response: None if the desired results were produced.

If the desired results were not produced, review the commands displayed in the DBS Utility message listing, supply the correct command, and reprocess.

ARI0848E **Reload of system tables not allowed.**

Explanation: The last command displayed in the DBS Utility message listing is a Database Services Utility RELOAD command that attempted to load one of the DB2 Server for VSE catalog tables. Any table with an owner = SYSTEM cannot be loaded with a Database Services Utility RELOAD command.

System Action: Processing of the command is terminated. Also see “Common Error Action” on page 191.

Programmer Response: Do not attempt to load a catalog table with a Database Services Utility RELOAD command.

ARI0849E **Definition of the input table &1..&2. is not identical to the definition of the current table &3..&4..&5.**

Explanation: The last command displayed in the DBS Utility message listing requested that an existing application server table be loaded with erroneous input file data.

The definition of the table from which the input file table data originated is not identical to the definition of the target table in the application server.

System Action: Processing of the last command displayed in the DBS Utility message listing is terminated. Also see “Common Error Action” on page 191.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0850I **SQL SELECT processing successful: Rowcount = &1A..**

Explanation: Identifies that the DBS Utility processing of an SQL SELECT statement has completed without error.

&1A. is the number of rows selected.

System Action: Processing continues.

ARI0851E **SQL SELECT processing unsuccessful: Rowcount = &1A..**

Explanation: Identifies that the processing of an SQL SELECT statement by the DBS Utility was not successful.

&1A. is the number of rows retrieved by the SQL SELECT statement before the error was encountered.

System Action: See “Common Error Action” on page 191.

Programmer Response: Refer to the previous messages in the DBS Utility message listing for a description of the errors encountered.

ARI0852I *parm1 parm2* **processing started.**

Explanation: This message identifies the start of actual execution of the indicated command.

- *parm1* is the primary command name.
- *parm2* is the DBSPACE/TABLE/INDEX/blank/PACKAGE.

If no subsequent messages appear in the DBS Utility message listing, VSE or the DB2 Server for VSE system may have terminated the DBS Utility package. Check the operator console messages to determine the reason for termination.

System Action: Processing continues.

ARI0853I *parm1 parm2.parm3.parm4* **successful.**

Explanation: The indicated DBS Utility processing for a database table or DBSPACE has completed successfully.

- *parm1* is the UNLOAD or RELOAD.
- *parm2* is the application server.
- *parm3* is the owner of table/blank/DBSPACE/program.
- *parm4* is the table name/DBSPACE name/program name.

System Action: Processing continues.

ARI0854E *parm1 parm2.parm3.parm4* **unsuccessful.**

Explanation: The indicated DBS Utility processing for a database table or DBSPACE has not completed successfully:

- *parm1* is UNLOAD or RELOAD.
- *parm2* is the application server.
- *parm3* is the owner of table/blank/DBSPACE/program.
- *parm4* is the table name/DBSPACE name/program name.

System Action: See “Common Error Action” on page 191.

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Programmer Response: Correct the command errors identified by previous messages in the DBS Utility message listing and reprocess the command. (See “Rerunning DBS Utility” on page 191.)

ARI0855I &1. &2. processing successful.

Explanation: The DBS Utility processing of the identified command has completed successfully.

&1. is the primary command name.

&2. is TABLE, INDEX or blank.

System Action: Processing continues.

ARI0856E The following SQL error and/or warning conditions occurred for a DBS-initiated SQL &1. statement.

Explanation: While processing the last command displayed in the DBS Utility message listing, an SQL warning or error condition occurred for the DBS Utility initiated execution of an SQL statement.

The SQL messages that immediately follow this message describe the SQL conditions encountered.

&1. identifies the SQL statement executed by the DBS Utility that resulted in the SQL error or warning conditions.

System Action: Processing of the last command displayed in the DBS Utility message listing is terminated. Also see “Common Error Action” on page 191.

Programmer Response: Analyze the SQL problem described in the following SQL messages. If possible, correct the error and reprocess the command. (See “Rerunning DBS Utility” on page 191.)

If the SQL error indicated cannot be corrected, contact your system programmer.

System Programmer Response: If the SQL error cannot be corrected, it is a probable database manager program error. Gather all job output (include the DBS Utility generated messages, any storage dumps generated, and the operator console output related to the job), and then contact the designated support group for your installation.

ARI0857E &1. &2. processing unsuccessful.

Explanation: The DBS Utility processing of the identified command has not completed successfully.

&1. is the primary command name.

&2. is TABLE, INDEX or blank.

System Action: See “Common Error Action” on page 191.

Programmer Response: Refer to previous error messages in the DBS Utility message listing for a

description of the errors encountered and the action to take.

ARI0858E DATALOAD of more than 16 tables is not allowed.

Explanation: More than 16 DATALOAD TABLE commands were entered before an INFILE subcommand. The concurrent load of more than 16 tables through a single sequence of Database Services Utility DATALOAD TABLE commands is not allowed.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Reduce the number of DATALOAD TABLE commands preceding the INFILE subcommand to 16 and reprocess the commands. (See “Rerunning DBS Utility” on page 191.)

ARI0859E Invalid column reference.

Explanation: The last DATALOAD TABLE Table-Column-Identification (TCI) or DATAUNLOAD Data-Field-Identification (DFI) subcommand displayed in the DBS Utility message listing contains an invalid column name or column reference. The column is not in the table specified in the last DATALOAD TABLE command or in the select-list of the SQL SELECT statement for the last DATAUNLOAD command displayed in the DBS Utility message listing.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Determine the correct column name or column reference, alter the command and rerun.

ARI0860E ...ENDDATA command missing.

Explanation: An end of command file input condition occurred while reading the DATALOAD TABLE command input data records embedded within the command file. The ENDDATA command identifying the end of embedded data records was not encountered before the end of command file input condition occurred.

The end of command file input condition may have occurred because of a command file read error or because all command records were read.

System Action: DATALOAD TABLE processing is terminated unsuccessfully. Also see “Common Error Action” on page 191.

Programmer Response: If a command file read error is indicated by the error message ARI0814E displayed previous to this message in the DBS Utility message listing, correct the file problem identified.

If a command file error did not occur, supply an

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ENDDATA command after the last embedded input data record in the command file input.

Reprocess the command. (See “Rerunning DBS Utility” on page 191.)

ARI0861E NULL/CURRENT clause specified for column defined as NOT NULL or invalid data type.

Explanation: The last DATALOAD TABLE Table-Column-Identification (TCI) or DATAUNLOAD Data-Field-Identification (DFI) subcommand displayed in the DBS Utility message listing contains:

- A null-clause or set-null-clause, but the associated column does not allow null values.
- A current-clause, but the associated column is not defined as a (correct) DATETIME or CHAR data type.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0862E SQL INSERT error (table name is &1..&2..&3.).

Current input record count is &4A..

Explanation: An SQL error or warning condition occurred while processing the last or last group of DBS Utility commands displayed in the DBS Utility message listing. The input record count when the error occurred is also identified. If *insert blocking is not being used* for the table identified in the message, the record count displayed will be the record in error. If *insert blocking is being used* for the table, the record count is the count up to the end of the current block. The record in error may be a previous record in the block. Setting COMMITCOUNT to 1 will turn off blocking.

The actual table being processed when the SQL condition occurred is identified in the message:

&1. is the server-name.

&2. is the table owner.

&3. is the table name.

&4A. is the input record count.

The SQL error or warning condition is identified by the preceding SQL messages in the DBS Utility message listing.

Hexadecimal Display:

A hexadecimal display of the data record being processed when the SQL error occurred will follow the message text. If DB2 Server for VSE *insert blocking is not being used* for the table identified in the message, the

data record containing the bad data value will be displayed. If *insert blocking is being used* for the table, the data record displayed will be the current data record being processed when the DBS Utility processing detected the SQL error. The bad data value may be in the record displayed or in a previous data record.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0863E &1..&2..&3. &4. data field positions exceed input record length.

Explanation: A table column data field is not complete in an input data record. The start position or end position of the table column data field exceeds the length of an input data record.

&1. is the server-name.

&2. is the table owner.

&3. is the table name.

&4. is the column name.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the DATALOAD TABLE Table-column-identification subcommand. Rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0864E Data field is longer than the column.

Explanation: The last DATALOAD TABLE Table-Column-Identification (TCI) displayed in the DBS Utility message listing specifies:

- An input record CHAR data field length greater than the length of the target CHAR column, or
- An input record DECIMAL data field with a precision or scale greater than the precision or scale of the target DECIMAL column, or
- An input record ZONED data field with a scale greater than the scale of the target DECIMAL column.
- An input record 8-byte FLOAT data field with a length greater than the 4-byte FLOAT target column.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the command or correct the input data. Rerun the job. (See “Rerunning DBS Utility” on page 191.)

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ARI0865E Invalid data field data type for column.

Explanation: The last DATALOAD TABLE Table-Column-Identification (TCI) or DATAUNLOAD Data-Field-Identification (DFI) subcommand displayed in the DBS Utility message listing specifies an invalid input or output record field data type for the associated table or select-list column.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the command or correct the input data. Reprocess the command. (See “Rerunning DBS Utility” on page 191.)

ARI0866E Input record data field error: Column = &1.. Input Record Count = &2A..

Explanation: A data conversion error occurred.

The input data could not be converted to the table column numeric data type because the input data field contains one of the following errors:

- Nonnumeric character data.
- Blanks embedded within the character data.
- A data value that is too small or too large for the target column.

&1. is the table column name.

&2A. is the input record count at the time the error occurred.

Hexadecimal Display:

A hexadecimal display of the data record containing the incorrect data value will follow the text.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the input data. Rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0867E Invalid data field length.

Explanation: The last DATALOAD TABLE Table-Column-Identification (TCI) or DATAUNLOAD Data-Field-Identification (TFI) subcommand, displayed in the DBS Utility message listing, specifies an invalid length for a FIXED, FLOAT, REAL, DOUBLE PRECISION, GRAPHIC, TIME, DATE or TIMESTAMP data record data field:

- Data record data fields with the data type FIXED must be 1, 2, or 4 bytes in length.
- Data record data fields with the data type FLOAT must be 4 or 8 bytes in length.
- Data record data fields with the data type GRAPHIC must be an even number (2, 4, 6, .. 100 ...) of bytes in length.

- Data record data fields with the data type DATE must be at least 10 bytes in length.
- Data record data fields with the data type TIME must be long enough to accommodate the full length of the time format being used.
- Data record data fields with data type TIMESTAMP must be at least 19 bytes in length.

System Action: DATALOAD TABLE processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0868I DNAME=&1. RECFM=&2. RECSZ=&3A. BLKSIZE=&4A..

Explanation: This message contains the input or output file specifications being used by DBS Utility command processing to open the input or output data file.

The information reflects the INFILE or OUTFILE command specifications or indicates the DBS Utility defaults that are being used.

This message will be generated after an input or output data file has been successfully initialized (opened) for processing.

&1. is the INFILE or OUTFILE dname parameter.

&2. is the record format specification:

S or VS	= Variable, spanned, unblocked
SB or VBS	= Variable, spanned, blocked
F	= Fixed, unblocked
FB	= Fixed, blocked
V	= Variable, unblocked
VB	= Variable, blocked

&3A. is the logical record length specification.

Note: For input or output data files with variable-length spanned records, the actual logical record length may be greater than the record length displayed in the message.

&4A. is the block size specification.

System Action: DBS Utility processing continues.

ARI0871E Table &1..&2..&3. not found.

Explanation: The identified table was not found in SYSTEM.SYSCATALOGS.

&1. is the server-name.

&2. is the table owner.

&3. is the table name.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

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Programmer Response: Ensure the table name specified in the command is correct.

If incorrect, correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

If correct, the table must be created before it can be processed by an UNLOAD or DATALOAD command or the NEW parameter must be specified in the RELOAD TABLE command.

ARI0872E DBSPACE &1. not found.

Explanation: The identified DBSPACE is not in the database. If owner.DBSPACE name was specified in the last command displayed in the DBS Utility message listing, that specific DBSPACE was not found. If only a DBSPACE name was specified in the last command, neither a private or public DBSPACE with this name was found.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Ensure that the DBSPACE name specified in the UNLOAD DBSPACE or RELOAD DBSPACE command is correct.

If incorrect, correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

If correct, the DBSPACE must be acquired and tables created in the DBSPACE before the DBSPACE can be unloaded.

ARI0873E DBSPACE &1..&2..&3. contains no tables.

Explanation: The identified DBSPACE is empty.

&1. is the server-name.

&2. is the DBSPACE owner.

&3. is the DBSPACE name.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Do not attempt to UNLOAD the DBSPACE until tables are created in the DBSPACE.

ARI0874I &1A. rows unloaded from table &2..&3..&4..

Explanation: Identifies the number of rows unloaded from a table and written to the output file during UNLOAD command processing.

&1A. is the number of rows.

&2. is the server-name.

&3. is the table owner.

&4. is the table name.

System Action: Processing continues.

ARI0875I &1A. rows loaded into table &2..&3..&4..

Explanation: Identifies the number of rows loaded into a table.

&1A. is the number of rows.

&2. is the server-name.

&3. is the table owner.

&4. is the table name.

System Action: Processing continues.

ARI0876E Data file record error: Record Type = &1A.. Input record count = &2A.. Reason Code = &3A..

Explanation: An error has been detected in the RELOAD TABLE or RELOAD DBSPACE input data file. The format or content of the input file is incorrect. RECORD TYPE (&1A.) identifies the type of input record expected, or the type of record being processed when the error occurred.

Possible types are:

10 Unload header record

20 SQLDA table description record

60 Table row data record.

Input record count (&2A.) identifies the number of input file records read before the error was detected.

Reason Code (&3A.) identifies the particular error that was encountered.

The definition of the REASON CODE values are:

04 A premature end of file occurred. &1A. identifies the record type value expected when the end of file condition occurred.

08 An unexpected record type was read or the format of a record read is invalid. &1A. identifies the expected record type.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: If the input file was created by DBS UNLOAD processing, contact the system programmer.

If the input file was not created by DBS UNLOAD processing, correct the error and rerun the job.

System Programmer Response: Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

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ARI0877E Table &1..&2..&3. not created. It already exists.

Explanation: A table with the tablename specified in the last RELOAD TABLE command displayed in the DBS Utility message listing could not be created since a table with the same owner.tablename already exists in the database.

&1. is the name of the application server.

&2. is the owner of the table.

&3. is the name of the table.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command by specifying a different tablename or the PURGE parameter and reprocess the command. (See “Rerunning DBS Utility” on page 191.)

ARI0878E Creation of &1. &2..&3..&4. failed.

Explanation: While processing the last RELOAD command displayed in the DBS Utility message listing, an SQL CREATE TABLE or INDEX statement executed by DBS Utility resulted in an SQL error or warning condition.

&1. is TABLE or INDEX.

&2. is the server-name.

&3. is the owner of the table or index.

&4. is the name of the table or index.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Refer to the messages preceding this message in the DBS Utility message listing to identify the SQL error or warning conditions encountered. Perform the actions necessary to correct the SQL condition. Rerun the job. (See “Rerunning DBS Utility” on page 191.)

ARI0879I Table &1..&2..&3. created.

Explanation: Identifies that a table has been successfully created while processing the last RELOAD command displayed in the DBS Utility message listing.

&1. is the server-name.

&2. is the table owner.

&3. is the table name.

System Action: Processing continues.

ARI0880I &1A. rows deleted from table &2..&3..&4..

Explanation: Identifies the number of table rows deleted while processing the last RELOAD command displayed in the DBS Utility message listing.

&1A. is the number of rows in the table that were deleted.

&2. is the name of the server-name.

&3. is the owner of the table.

&4. is the name of the table.

System Action: Processing continues.

ARI0881E &1. &2..&3. was not found.

Explanation: The table name specified by the INTABLE or RESTARTTABLE parameter in the last RELOAD TABLE command displayed in the DBS Utility message listing was not found on the input data file.

&1. is a RELOAD parameter value (either INTABLE or RESTARTTABLE).

&2. is the table owner (if specified in either INTABLE or RESTARTTABLE).

&3. is the table name specified in the INTABLE or RESTARTTABLE parameter.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0882E Missing the &1. &2. parameter.

Explanation: A command parameter is missing from the last command displayed in the DBS Utility message listing.

&1. is the command or command parameter identifier.

&2. is the command parameter subidentifier (optional).

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0883E Extra command parameters.

Explanation: The last command displayed in the DBS Utility message listing contains additional information after all valid command parameters have been specified.

The message may also occur because the command file record after a DBS Utility command does not contain a

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valid command identifier, or information has been specified after the terminating semicolon in an SQL statement parsed by DBS Utility processing.

Note: Only the various forms of the SQL COMMIT, ROLLBACK, and CONNECT statements are parsed by DBS Utility processing.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0884I ...Command processed.

Explanation: The last command displayed in the DBS Utility message listing was processed.

System Action: DBS Utility processing continues.

ARI0885E Invalid &1. value length.

Explanation: The length of a command parameter value is invalid in the last command displayed in the DBS Utility message listing.

&1. identifies the command parameter.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0886E Incomplete &1. parameter.

Explanation: A command parameter is incomplete in the last command displayed in the DBS Utility message listing.

&1. identifies the command parameter.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0887E Invalid &1. &2. value.

Explanation: An invalid command parameter value is contained in the last command displayed in the DBS Utility message listing.

&1. is the command parameter identifier.

&2. is the command parameter subidentifier (optional).

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and

reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0888E Invalid &1. parameter.

Explanation: An unknown keyword parameter or an invalid parameter value was specified in the last command displayed in the DBS Utility message listing.

&1. identifies the command parameter.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0889E Second keyword in the command must be TABLE.

Explanation: The command identifier keyword TABLE is missing in the last command displayed in the DBS Utility message listing.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0890E Second keyword in the command must be either TABLE, DBSPACE, PACKAGE, or PROGRAM.

Explanation: The command identifier keyword TABLE, DBSPACE, PACKAGE or PROGRAM is missing in the last command displayed in the DBS Utility message listing.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0891E &1. &2. parameter is missing a &3..

Explanation: A command parameter is missing a required symbol or a quoted string value is empty (quoted string value length = 0) in the last command displayed in the DBS Utility message listing.

&1. is the primary command parameter identifier.

&2. is the secondary command parameter identifier (optional).

&3. Identifies the missing symbol.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and

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reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0892E &1. parameter(s) not found.

Explanation: A required command parameter is missing or a keyword parameter has been specified without parameter values in the last command displayed in the DBS Utility message listing.

&1. identifies the command parameter.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0893E &1. &2. parameter is longer than &3A. positions.

Explanation: A command parameter is too long in the last command displayed in the DBS Utility message listing.

&1. is the command parameter identification.

&2. is the command subparameter identification (optional).

&3A. is the maximum allowable parameter length.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0894I Isolation level *level* in effect.

Explanation: This message identifies the isolation level in effect for subsequent processing performed by the DBS Utility (*level* = CURSOR STABILITY, REPEATABLE READ, or UNCOMMITTED READ). The message is issued after a user-supplied DBS ISOL(CS), ISOL(RR), or ISOL(UR) control parameter or SET ISOLATION command is processed. The identified isolation level remains in effect until the next SET ISOLATION command is processed or DBS Utility processing ends.

System Action: DBS Utility processing continues.

ARI0895E Invalid SQLCODE detected. See following message.

Explanation: An invalid SQLCODE has been received after the execution of an SQL statement. The SQLCODE value is not within the value range -999 through +999. This is a serious DB2 Server for VSE error and subsequent Database Services Utility SET ERRORMODE OFF commands will be ignored.

System Action: Command processing is ended. See

“Common Error Action” on page 191 for more information.

Programmer Response: Contact your system programmer.

System Programmer Response: Probable DB2 Server for VSE system error. Perform problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

ARI0896E Duplicate or conflicting &1. parameter.

Explanation: A duplicate or conflicting command parameter is specified in the last command displayed in the DBS Utility message listing.

&1. is the command parameter identification.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0897E Unknown parameter starting at or near position &1A..

Explanation: An invalid parameter was detected in the last command displayed in the DBS Utility message listing.

&1A. is the approximate position in the command where the incorrect parameter begins.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0898I ...Command ignored because of severe system error.

Explanation: A SET ERRORMODE OFF or SET ERRORMODE CONTINUE command has been encountered after a severe DB2 Server for VSE error has occurred during DBS Utility processing.

A severe DB2 Server for VSE error is an error that does not allow further SQL processing or an error that will normally result in the failure of all subsequent SQL statements executed by DBS Utility processing. If both SQLWARN0 and SQLWARN6 are set to S after an attempt to process an SQL statement has been made, the DBS Utility assumes that a severe DB2 Server for VSE system error has occurred.

System Action: No action taken. DBS Utility error mode processing continues.

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ARI0899I ...Command ignored.

Explanation: A SET ERRORMODE OFF, SET ERRORMODE ON, or SET ERRORMODE CONTINUE command has been encountered, but the error mode processing status identified in the command is already in progress.

System Action: No action taken. DBS Utility processing continues.

ARI8000I ...Ignore previous error. Processing is continuing.

Explanation: Because a SET ERRORMODE CONTINUE command was supplied before the DATALOAD command, and the COMMITCOUNT parameter was specified on the DATALOAD INFILE subcommand, the error identified by the preceding ARI0862E or ARI0866E message is ignored.

System Action: DATALOAD processing continues.

ARI8001E Invalid graphic data starting at or near position &1A..

Explanation: If extended graphic support is in effect for the database, this message is issued after DBS Utility processing detects an SO delimiter without a terminating SI delimiter or the graphic data is not represented in paired bytes. The message refers to the last command record entered. The last command record entered is displayed immediately preceding this error message in the DBS Utility message file.

&1A. is the approximate position in the command record where the invalid graphic data begins.

System Action: Command processing is ended.

Programmer Response: Correct input command and rerun.

ARI8002I Blocked INSERT processing was suppressed for &1..&2..&3.

Explanation: Insert blocking was suppressed during DATALOAD processing for the table or view identified.

&1. is the server-name.

&2. is the owner.

&3. is the name of the table or view.

System Action: Processing continues.

ARI8003I ...Extended DBCS (DBCS=YES) processing now in effect.

Explanation: This message is issued when extended DBCS processing is in effect for the database being accessed by DBS Utility processing. The DBS Utility determines when extended DBCS processing is in effect for a database by accessing the database

SYSTEM.SYSOPTIONS catalog table. If a row with the SQLOPTION column value equal to DBCS and the VALUE column value equal to YES exists, extended DBCS processing is in effect for the database.

System Action: DBS Utility processing continues WITH EXTENDED DBCS processing in effect.

ARI8004I User *userid* connected to server *server-name*.

Explanation: This message shows the current user and the current application server accessed as the result of a CONNECT command.

If the value of *userid* in the message is UNKNOWN, no userid is established yet, as in the CONNECT TO dbname after a previous COMMIT RELEASE or ROLLBACK RELEASE statement.

System Action: No action taken.

ARI8005I One or more arithmetic exception errors occurred. Exception error &1. occurred during &2. operation on &3. data, position &4..

Explanation: This message is issued whenever an arithmetic operation on numeric data causes an arithmetic exception error. The cause may be a division by zero or overflow (exceeds maximum) during the processing of a SELECT statement or a DATAUNLOAD command. The data from this error is denoted by number signs (# # #) across the width of columns of the queried table:

&1. is the type of exception error.

&2. is the arithmetic operation on data.

&3. is the data type.

&4. is position N, where N is an item in the select-list, if applicable. Position 0 is returned if an exception error occurs in the WHERE clause of a SELECT statement.

Note: The message describes the first arithmetic exception error in the queried table.

System Action: Processing continues.

ARI8006E An arithmetic error occurred during unloading of data into a numeric field. Exception error &1. occurred during &2. operation on &3. data, position &4..

Explanation: This message is issued whenever an arithmetic exception error (indicated by number signs # # #) is being written into a numeric datatype field of an output file defined for DATAUNLOAD processing.

The user is informed about the first occurrence of an arithmetic exception error caused by the SELECT statement while processing the DATAUNLOAD command:

&1. is the type of exception error.

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&2. is the arithmetic operation on data.
&3. is the data type.
&4. is position N, where N is an item in a select-list, if applicable. Position 0 is returned if an exception error occurs in the WHERE clause of a SELECT statement.

System Action: DATAUNLOAD command processing is ended. Also see “Common Error Action” on page 191.

Programmer Response: Correct the arithmetic error or change the numeric data type to CHARacter data type in the output file.

ARI0807I Error(s) occurred during ERRORMODE CONTINUE processing.

Explanation: Some commands processed while SET ERRORMODE CONTINUE was in effect were not processed successfully.

System Action: DBS Utility end of program processing continues.

Programmer Response: Refer to previous messages during ERRORMODE CONTINUE processing in the DBS Utility message listing to identify any unexpected errors.

ARI0808E The FROM/TO parameter not valid in VSE.

Explanation: DBS Utility in VSE environment does not allow connections to different databases; therefore, the user may only UNLOAD/RELOAD PROGRAMS on initially connected database.

System Action: Command processing is ended. Also see “Common Error Action” on page 191 for more information.

ARI0809E &1. PACKAGE failed.

Explanation: &1. = UNLOAD or RELOAD. UNLOAD or RELOAD PACKAGE failed.

System Action: Command processing ends.

Programmer Response: Refer to the messages preceding this message in the DBS Utility message listing to identify the SQL error conditions encountered. Command processing ends. Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI0810E Package name *owner.package-name* is not the same as the package name in the input file.

Explanation: The package-name in the RELOAD PACKAGE command does not match the package-name in INFILE.

System Action: Command processing is ended. Also

see “Common Error Action” on page 191 for more information.

Programmer Response: Determine the correct package name, alter the command, and rerun the package.

ARI0811I Package &1.&2. was {created | replaced}.

Explanation: A package was created or replaced.

- &1. = owner
- &2. = package name

System Action: Processing continues.

ARI0812E Package name &1..&2. not found &3. &4..

Explanation:

- &1. = owner
- &2. = package-name
- &3. = in server
- &4. = application server name

The identified package was not found in SYSTEM.SYSACCESS. If you specified an UNLOAD PACKAGE FROM clause, &3. and &4. indicate the application server where the package was not found.

Programmer Response: Ensure the package-name specified in the command is correct. If incorrect, correct the command, and reprocess it. (See “Rerunning DBS Utility” on page 191.) If correct, the package must be created before it can be processed by an UNLOAD PACKAGE or a REBIND PACKAGE command.

ARI0815E *command failed.*

Explanation: Indexes are re-created and PRIMARY KEYS, FOREIGN KEYS, and UNIQUE CONSTRAINTS are reactivated, after reloading the data. The attempt to re-establish entity or Referential Integrity has failed. The *command* indicates the first command that failed.

System Action: Processing of the DBS Utility command has ended.

User Response: Correct the data and reissue the RELOAD, or manually establish the missing indices and keys.

ARI0816I *command successful.*

Explanation: Indexes are re-created and PRIMARY KEYS, FOREIGN KEYS, and UNIQUE CONSTRAINTS reactivated, after the data is reloaded. A step in this process has succeeded.

System Action: Processing of the DBS Utility command continues.

ARI8017E Second keyword in command must be PACKAGE.

Explanation: The command identifier keyword PACKAGE is missing from the last command displayed in the Database Services Utility message listing.

System Action: Command processing ends. See “Common Error Action” on page 191 for more information.

System Programmer Response: Correct the command and reprocess it. See “Rerunning DBS Utility” on page 191 for more information.

ARI8018E Command is not supported for primary or unique keys.

Explanation: Using the Database Services Utility REORGANIZE INDEX command for an index that the database manager created to enforce the uniqueness of a primary or unique key is invalid. Use the following commands instead:

- ALTER TABLE ACTIVATE PRIMARY KEY for primary keys.
- ALTER TABLE ACTIVATE UNIQUE KEY for unique keys.

System Action: The Database Services Utility ignores the command.

ARI8019I No server has been connected yet.

Explanation: A null CONNECT was issued before an application server was connected.

System Action: When a null CONNECT is issued before an application server connection is established, the resource adapter returns a blank user ID and application server name in the SQLERRMT field, with SQLCODE set to 0.

Programmer Response: Use null CONNECT only after a user ID and an application server connection are established.

ARI8020E Invalid CREATE SCHEMA statement.

Explanation: You must make the first (and only the first) statement within the schema sequential input file the CREATE SCHEMA statement.

System Action: Command processing ends.

User Response: Correct the command and reprocess it. If a COMMIT of database changes occurred during this execution of the SCHEMA command, rerun the Database Services Utility for this command, but omit all the statements within the sequential input file that altered the database prior to the last COMMIT of database changes.

ARI8021E Statement not supported within a Schema.

Explanation: The last statement displayed in the Database Services Utility message listing is not a valid schema statement.

System Action: Processing of this statement ends.

User Response: Correct the command and reprocess it. If a COMMIT of database changes occurred during this execution of the SCHEMA command, rerun the Database Services Utility for this command, but omit all the statements within the sequential input file that altered the database prior to the last COMMIT of database changes.

ARI8022E Second keyword in command must be INDEX.

Explanation: The command identifier keyword INDEX is missing in the last command displayed in the Database Services Utility message listing.

System Action: Command processing ends. See “Common Error Action” on page 191 for more information.

User Response: Correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.)

ARI8023E User *userid1* is not authorized to create a Schema for another user *userid2*.

Explanation: The AUTHORIZATION user ID *userid2* on the CREATE SCHEMA statement must be the same as the currently connected user *userid1*.

System Action: Command processing ends.

User Response: Correct the command and reprocess it.

ARI8027E Infile contents invalid.

Explanation: An error has been detected in the RELOAD PACKAGE input data file. In the input file, the format or content or both are incorrect.

System Action: Command processing is ended. See “Common Error Action” on page 191 for more information.

Programmer Response: Contact the system programmer. The system programmer should perform problem determination. If a system error occurred, make a record of what went wrong and contact the designated support group for your installation.

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ARI08031E The package &1. cannot be reloaded to a back level release server.

Explanation: The package cannot be reloaded to the target application server because of package format differences. This message will be issued when reloading an SQL/DS Version 3 Release 1 or above package to a pre-Version 3 Release 1 database. The RELOAD PACKAGE command failed.

&1. is the name of the package.

System Action: The package is not reloaded.

User Response: Issue ROLLBACK to the logical unit of work.

ARI08032I The length of the SQL CREATE TABLE statement for table &1..&2. exceeds 8192 bytes. It will not be possible to reload with the parameter NEW.

Explanation: The CREATE TABLE statement of the identified table exceeds 8192 bytes. The CREATE TABLE statement that the DBS Utility places into the unload output file may be incomplete, because of truncation.

To reload the data from this unload output file, RELOAD with the PURGE parameter must be used, and the table or tables must already exist in the database.

&1. is the owner of the table.

&2. is the name of the table.

System Action: Processing continues.

ARI08033E DBS-initiated SQL CREATE TABLE statement for table &1..&2. exceeds 8192 bytes. RELOAD with the PURGE parameter should be used.

Explanation: During reload with the parameter NEW, the CREATE TABLE statement built by the DBS utility for use in creating the table exceeds the 8192 byte maximum SQL statement length allowed by the database manager, and the table cannot be created by the DBS utility.

&1. is the owner of the table.

&2. is the name of the table.

System Action: Command processing is ended.

Programmer Response: To reload the data, use RELOAD with the PURGE parameter. The table must already exist.

ARI08034I *command*

Explanation: The DBS Utility is processing a RELOAD command that includes the COMMITCOUNT parameter, but neither the RESTARTCOUNT or RESTARTTABLE parameters. RELOAD processing will DROP all indexes and DEACTIVATE all primary and unique keys before reloading data. The COMMITCOUNT parameter indicates that these DROP statements will be committed to the database before the RELOAD process has completed. If the RELOAD process does not complete successfully, the dropped objects can no longer be recovered. To aid the user in recovering these objects, the ARI08034I messages provide the CREATE statements required to recover the dropped objects. If no error occurs reloading the data, all dropped objects will be recreated during normal RELOAD processing. Refer to ARI08035I to identify the clustering index.

System Action: Processing continues.

Programmer Response: If an error occurs during RELOAD processing, refer to the ARI08034I messages to create or activate the dropped and deactivated objects.

ARI08035I The clustering index for *table-creator.table-name* is *index-type* *index-owner.index-name*

Explanation: This message identifies the INDEX, PRIMARY KEY or UNIQUE KEY that is currently the clustering index for the table.

System Action: Processing continues.

Programmer Response: When recovering from a failed RELOAD, this object should be the first to be created or activated so that it will be used as the clustering index.

ARI8980I Statistics were generated automatically for table &1..&2..

Explanation: The database manager generated table or DBSPACE statistics while the Database Services Utility loaded the rows. The Database Services Utility does not need an SQL UPDATE STATISTICS request, and one is not issued during Database Services Utility command processing.

&1. is the owner of the table or DBSPACE.

&2. is the name of the table or DBSPACE.

System Action: Database Services Utility processing continues.

ARI8981I Dynamic statistic accumulation was disallowed for table &1. &2. Reason Code = &3..

Explanation: The database manager does not allow the automatic accumulation of table statistics while loading data for this DATALOAD command.

&1. is the owner of the table.

&2. is the name of the table.

The reason code identifies why the automatic accumulation of table statistics was disallowed:

- 01 One or more indexes exist on the table.
- 02 The ROWCOUNT in the SYSCATALOG entry for this table was greater than zero, or was -2 (indicating that a failed DATALOAD was restarted).

System Action: Database Services Utility processing continues. The Database Services Utility issues an SQL UPDATE STATISTICS request to generate the statistics.

ARI8982I Statistics for loaded rows replace statistics for table &1..&2..

Explanation: The Database Services Utility processed a DATALOAD command, and the ROWCOUNT value in the SYSCATALOG entry for the loaded table was not greater than zero. As a result, the database manager automatically generated statistics for the loaded rows, and replaced the table's current statistics.

&1. is the owner of the table.

&2. is the name of the table.

If the table was not empty prior to the DATALOAD, the generated statistics do not accurately reflect the table's contents. This prevents the DB2 Server for VSE Optimizer from selecting the most efficient access path when retrieving rows from the table.

System Action: Database Services Utility processing continues. The Database Services Utility issues an SQL UPDATE STATISTICS request to generate statistics for each table.

ARI8983I Dynamic statistic accumulation was disallowed for all tables named in the DATALOAD command.

Explanation: A DATALOAD command that loaded data into more than one table was processed. For this DATALOAD, the database manager cannot accumulate statistics while the Database Services Utility loads the rows. The database manager does not support this form of statistics collection for the concurrent loading of more than one table.

System Action: Database Services Utility processing continues. The Database Services Utility issues an SQL UPDATE STATISTICS request to generate the statistics for each table.

ARI8990I The table &1..&2..&3. is in a nonrecoverable storage pool.

Explanation: This message identifies each table in the nonrecoverable storage pool that will be loaded by DATALOAD processing.

&1. is the name of the application server.

&2. is the owner of the table.

&3. is the name of the table.

System Action: Processing continues.

ARI8991I If the database manager is executing with LOGMODE=A|Y, any rows inserted into the database will not be deleted by ROLLBACK processing.

Explanation: This message is issued before Database Services Utility RELOAD PURGE insert processing that will update a nonrecoverable storage pool is started. If a subsequent error occurs during DBS RELOAD PURGE processing, the table or tables may be partially loaded, because ROLLBACK processing will not remove the rows inserted into the database.

If running in single user mode with LOGMODE=N, ROLLBACK processing will remove the inserted rows.

If running in multiple user mode, or in single user mode with LOGMODE=A or Y, ROLLBACK processing will not remove the inserted rows; it will commit the rows to the database.

System Action: Processing continues.

Programmer Response: If RELOAD PURGE processing fails to complete successfully, rerun the DBS Utility to reload the tables.

ARI8992I If the database manager is executing with LOGMODE=A|Y, any rows inserted into the table [server-name.]owner.table-name will not be deleted by ROLLBACK processing.

Explanation: An error occurred during Database Services Utility DATALOAD processing, and rows were inserted into a table in a nonrecoverable storage pool. This message identifies that subsequent ROLLBACK processing may not remove the inserted rows.

If running in multiple user mode, or in single user mode with LOGMODE=A or Y, ROLLBACK processing will not remove the inserted rows. In fact, the rows will be committed to the database by a ROLLBACK.

If running in single user mode with LOGMODE=N, ROLLBACK processing will remove the inserted rows.

System Action: Processing continues.

Programmer Response: If running in multiple user mode, or in single user mode with LOGMODE=A or Y,

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perform the recovery actions required for a nonrecoverable storage pool before rerunning the DBS utility.

ARI8993I **If the database manager is executing with LOGMODE=A|Y, you should not use DATALOAD RESTART processing before the last &1A. rows inserted into the table &2..&3..&4. are deleted.**

Explanation: An error occurred during Database Services Utility DATALOAD processing, and rows were inserted into a table in a nonrecoverable storage pool. This message identifies that DATALOAD RESTART processing may not be applicable until special action is taken.

&1A. is the number of rows inserted into the table since the start of DATALOAD processing or since the last ARI0800I message was displayed.

&2. is the name of the application server.

&3. is the owner of the table.

&4. is the name of the table.

If running in multiple user mode, or in single user mode with LOGMODE=A or Y, ROLLBACK processing will not remove the rows inserted since the start of DATALOAD processing or since the last ARI0800I message was generated. Special action is required before rerunning the DBS Utility to load the identified tables.

If running in single user mode with LOGMODE=N, ROLLBACK processing will remove the inserted rows.

System Action: Processing continues.

Programmer Response: If running in single user mode with LOGMODE=N, the DBS Utility can be rerun to load the identified tables without taking any special action.

If running in multiple user mode, or in single user mode with LOGMODE=A or Y, ROLLBACK processing will commit (not remove) the rows inserted since the last ARI0800I message was displayed. You must perform the recovery actions required for a nonrecoverable storage pool before rerunning the DBS Utility.

ARI8994I **Blocked FETCH or INSERT processing was suppressed.**

Explanation: This message identifies that blocked fetch or insert processing was suppressed by the database manager while processing the previous command displayed in the DBS Utility message file. Possible causes include:

- The DBS Utility is running in single user mode.

- A table or view with a LONG VARCHAR or LONG VARGRAPHIC column was referenced by the command.
- There was insufficient virtual storage to support blocked fetch or insert processing.
- Two or more rows of the fetched or inserted data will not fit into an 8K block.

System Action: DBS Utility processing continues.

ARI8995I *parm1 continuing. Record Count = parm2.*

Explanation: This message is written to the operator console or user terminal after every 15000 input or output data file records are processed by a DBS Utility command.

parm1 is either DATALOAD, DATAUNLOAD, RELOAD, or UNLOAD.

parm2 value is either:

- The current data file record count (*parm1* is DATALOAD or RELOAD)
- The current output data file record count (*parm1* is DATAUNLOAD or UNLOAD).

Note: During DATALOAD command processing, the message is written only if the DBS Utility message file is not assigned to:

- A console or terminal, and
- DATALOAD COMMITCOUNT processing is not in progress.

System Action: DBS Utility processing continues.

ARI8996I **...Begin UPDATE STATISTICS for &1..&2..&3..**

Explanation: This message is written to the DBS Utility message file before an SQL UPDATE STATISTICS statement is issued for a table during DBS Utility command processing.

&1. is the name of the application server.

&2. is the owner of the table.

&3. is the name of the table.

System Action: DBS Utility processing continues.

ARI8997I **...Begin COMMIT [RELEASE] processing.**

Explanation: This message is written to the DBS Utility message file before an SQL COMMIT or SQL COMMIT RELEASE statement is issued. The successful completion of the COMMIT will be identified by the subsequent message:

ARI0811I ...COMMIT of any database changes successful.

System Action: DBS Utility processing continues.

ARI8998I **...Begin ROLLBACK [RELEASE]
processing.**

Explanation: This message is written to the DBS Utility message file before a ROLLBACK or ROLLBACK RELEASE statement is issued by DBS Utility command processing. Successful completion of the ROLLBACK will be identified by the subsequent message:

ARI0811I ...ROLLBACK of any database
changes successful.

System Action: DBS Utility processing continues.

ARI8999E **Invalid SQL statement or parameter:
&1..**

Explanation: An invalid control parameter or SQL statement was encountered in the DBS Utility invocation parameter list.

&1. is the first 20 positions of the invalid parameter string; or the phrase INVALID LENGTH OR CALL TYPE.

System Action: DBS Utility processing completes.

Programmer Response: If the phrase INVALID LENGTH OR CALL TYPE is displayed for variable &1., correct the user program. The program specified an invalid DBS Utility call type or an invalid parameter string length.

When the variable &1. contains a portion of the DBS Utility parameter string, correct the parameter string.

After the appropriate corrections are made, rerun.

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Chapter 14. ARI0900–ARI0949 Database Maintenance and Database I/O Messages

ARI0900E operation error on DDNAME = xxxxxxxx. Return Code = nn. EREASON = nn.

Explanation: An error occurred in a sequential input or output operation on the xxxxxxxx file during database generation, ADD DBSPACE processing, or ADD and DELETE DBEXTENT processing.

The Return Code value is the Primary Error Code value. The EREASON value is the Secondary Error Code value. For further explanation, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: For corrective action, look up the displayed error codes under either Chapter 21, “Sequential File Errors” on page 361, or “SEQ FILE ERRORS” in the HELP text.

ARI0901E End of file on SYSIPT before DBGEN process complete.

Explanation: End of file was encountered on SYSIPT before all required control information was received by the database generation process. Either:

- The CUREXTNT keyword was not specified, or
- The number of DBEXTENT control statements was not the same as specified by the CUREXTNT keyword control statement, or
- There were no DBSPACE control statements.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Make the appropriate correction and rerun the program.

ARI0902E Pool Recovery is in progress, expansion not allowed.

Explanation: The Data Restore storage pool recovery process was initiated, but has not yet been completed by starting the database manager with STARTUP=U. Storage Pool recovery must be completed before directory expansion may be done.

System Action: Directory expansion is cancelled. The original directory has not been changed.

Operator Response: Complete the storage pool recovery process by starting the database with STARTUP=U.

ARI0903E DBGEN keyword CUREXTNT was not specified.

Explanation: The required CUREXTNT keyword control statement was not specified as input to the database generation process.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Supply the CUREXTNT keyword control statement and rerun the program.

ARI0904E Value specified for DBGEN keyword keyword is invalid.

Explanation: The value specified for keyword was either null or exceeded eight characters in length.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Correct the value specified for the keyword and rerun the program.

ARI0905E Invalid keyword specified.

Explanation: You did not specify a valid keyword for database generation or an ADD and DELETE DBEXTENT function.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Correct the unrecognizable keyword and rerun the program.

ARI0906E Value for keyword exceeds maximum of nnnnnnn.

Explanation: The value specified for *keyword* exceeded the maximum allowed value *nnnnnnn*.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

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System Programmer Response: Correct the value specified and rerun the program.

ARI0907E Incorrect value specified on DBSPACE definition. Return Code = n.

Explanation: A value specified on a DBSPACE control statement was considered incorrect (not a valid type or number). Values of *n* can be:

- 1 Unrecognized type of DBSPACE specified (not PUBLIC, PRIVATE, or INTERNAL).
- 2 Unrecognizable number of DBSPACES specified on the INTERNAL DBSPACE control statement.
- 3 Unrecognizable number of pages specified for a PUBLIC, PRIVATE, or INTERNAL DBSPACE statement (nonnumeric value or value less than 1).
- 4 During database generation, one of the first two PUBLIC DBSPACES defined was allocated to a nonrecoverable storage pool. These are the catalog and package DBSPACES and cannot be assigned to a nonrecoverable storage pool. Nonrecoverable storage pools are defined by the POOL control statement.
- 5 During database generation, the INTERNAL DBSPACE control statement was not immediately followed by an END delimiter control statement. You may have misspelled the END delimiter control statement.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Make the appropriate change to the DBSPACE control statement and rerun the program.

ARI0908E Insufficient DBEXTENT information.

Explanation: An END delimiter control statement was encountered before the number of DBEXTENT control statements specified by the CUREXTNT keyword were processed.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Ensure that the number of DBEXTENT control statements is the same as was specified by the CUREXTNT keyword and rerun the program.

ARI0909E DBEXTENT number sequence error.

Explanation: If database generation is being performed, one of the following errors occurred:

- The DBEXTENT control statements were not ordered so that the DBEXTENT numbers were in the required sequence. The required sequence is 1, 2, ... CUREXTNT value. The CUREXTNT value is specified on the CUREXTNT control statement.
- The DBEXTENT number on a DBEXTENT control statement was entered incorrectly or was omitted.
- The POOL keyword on the POOL control statement was misspelled. The POOL control statement was assumed to be a DBEXTENT control statement (and the misspelled word was assumed to be the DBEXTENT number).

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Ensure that the DBEXTENT control statements are correctly specified and are in the proper sequence. Ensure that a POOL control statement was not misspelled. Rerun the program.

ARI0910E Incorrect storage pool specified. Return Code = n.

Explanation: A specified storage pool number or a DBEXTENT or DBSPACE control statement was not valid for the reason signified by the value of *n*:

- 1 A nonnumeric character was encountered.
- 2 A value less than one or greater than MAXPOOLS was specified.
- 3 A DBSPACE control statement specified a storage pool number for which no DBEXTENTs were assigned.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Correct the value in error and rerun the program.

ARI0911E Maximum number of DBSPACES exceeded.

Explanation: The number of DBSPACES being defined exceeded the value specified by the MAXDBSPC keyword.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Increase the value specified on the MAXDBSPC keyword or reduce the

number of DBSPACE control statements and rerun the program.

ARI0912E Insufficient space in the application server directory.

Explanation: There is not enough space in the application server directory to map the number of DBSPACES defined. You can use the output of the SHOW DBCONFIG operator command to estimate the amount of directory space available for adding DBSPACES.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Reduce either the number or the size of the DBSPACES being defined and rerun the program, or use the expand directory function to increase the size of the page map table to allow more DBSPACE pages to be added.

ARI0913E Maximum number of pages exceeded.

Explanation: When formatting the DBEXTENTS the available space defined across all DBEXTENTS exceeded the maximum number of pages.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Reduce the space defined across all DBEXTENTS and rerun the program, or use the expand directory function to increase the size of the allocation bitmaps and page map table to allow more DBEXTENT and DBSPACE pages to be added.

ARI0914E System checkpoint failed.

Explanation: System checkpoint failed while attempting to add DBSPACES to database. This may be due to a cancelled database or LOG ARCHIVE or an error found in the directory.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Perform problem determination. Make a record of what went wrong and contact the designated support group for your installation.

ARI0915I One or more DBSPACES added to database.

Explanation: The DBSPACES specified in the SYSIPT file have been added to the database by the Database Storage System (DBSS) component. Any errors

occurring after this message are in the catalog update phase of the ADD DBSPACE function.

System Action: The process continues with the catalog update.

ARI0916E Number of internal DBSPACES is zero, or number of pages specified is zero.

Explanation: One of the following conditions occurred:

- No INTERNAL DBSPACE control statement was supplied
- The number of INTERNAL DBSPACES on the INTERNAL DBSPACE control statement was specified as zero during database generation or the ADD DBSPACE process.
- The number of pages specified on the INTERNAL DBSPACE control statement was zero.

In any case, a cancel request is issued and the database changes are not made.

System Action: Processing is terminated.

Operator Response: Return the console output with the output listing.

System Programmer Response: Rerun the program, specifying the INTERNAL DBSPACE control statement (with more than zero DBSPACES) and a correct number of pages.

ARI0917E Maximum number of DBEXTENTS exceeded.

Explanation: You attempted to add more DBEXTENTS than the maximum number specified at database generation time (by the MAXEXTNTS keyword).

Note that the SHOW DBCONFIG operator command displays the MAXEXTNTS value (MAXIMUM DBEXTENTS=). The MAXEXTNTS database generation control statement defines the maximum number of DBEXTENTS that can be added to the database. The SHOW DBCONFIG operator commands displays this value.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: If more DBEXTENTS are required than are allowed by the MAXEXTNTS value, you will need to do another database generation and specify a larger value for MAXEXTNTS.

ARI0918I No input to ADD/DELETE DBEXTENT.

Explanation: You invoked the ADD or DELETE DBEXTENT function, but the input file did not supply any ADD or DELETE control statements. POOL or

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ARCHIVE control statements might not be in the input file.

System Action: The program ends normally.

Operator Response: Return the console output with the output listing.

System Programmer Response: Provide the desired respective ADD and DELETE control statements (and optionally, POOL and ARCHIVE control statements) in the input file, and rerun the program.

ARI0919D Database generation invoked. The database will be formatted and the original database destroyed. Enter either: DBGEN to continue, or CANCEL to cancel.

Explanation: The application server was started with the STARTUP=C. This invokes the database generation process, which will format the directory, DBEXTENTs, and logs of the database.

System Action: The system waits for the operator's reply.

If the reply is DBGEN, the database generation process continues.

If the reply is CANCEL, the application server is ended without modification to the database.

Any other reply causes the message to be reissued.

Operator Response: If database generation is to be performed, reply DBGEN.

If you do not want database generation to be performed, reply CANCEL.

System Programmer Response: Inform the operator of your intentions when running database generation.

ARI0920D Cold-log function invoked. Logs will be formatted and existing log data destroyed.

Enter either: COLDLOG to continue, or CANCEL to cancel.

Explanation: The application server was started with STARTUP=L. This invokes the COLDLOG function, which will format the database logs.

System Action: The system waits for the operator's reply.

If the reply is COLDLOG, the DB2 Server for VSE logs are reformatted to indicate no prior logging activity and initialization continues. (Any logging of database updates is lost.)

If the reply is CANCEL, the application server is ended without modification to the logs.

Any other reply causes this message to be reissued.

Operator Response: If COLDLOG (log reformatting) is to be performed, reply COLDLOG.

If you do not want to perform COLDLOG (log reformatting), reply CANCEL to end the application server.

System Programmer Response: Inform the operator of your intentions when running COLDLOG.

ARI0921I No input to add DBSPACE.

Explanation: The ADD DBSPACE function was invoked, but no control information was provided in the SYSIPT file.

System Action: The program ends normally.

Operator Response: Return the console output with the output listing.

System Programmer Response: If the intent was to add DBSPACES, provide the necessary control information in the SYSIPT file and rerun the program.

ARI0922I DBEXTENT(s) have been added to or deleted from the database.

Explanation: Adding or deleting DBEXTENTs to or from the database has been completed successfully.

System Action: The program continues.

ARI0923E Space allocation for filename is less than minimum.

Explanation: The space allocated for the DBEXTENT or log identified by *filename* is less than the minimum allowed by DB2 Server for VSE storage management.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Increase the space allocation for the DBEXTENT or log identified by file name and rerun the program. For the minimum space allocation for the device type on which this DBEXTENT or log is defined, refer to the *DB2 Server for VSE System Administration* manual.

ARI0924I It is recommended that a database archive be taken.

Explanation: The directory expansion process completed successfully. It is strongly recommended that a database archive be taken immediately. Any updates made to the database after the directory expansion may not be applied correctly during a restore if a database archive taken before the directory expansion is used as the starting point of the restore set.

System Action: Processing ends.

ARI0929E Incorrect pool number {BLANK | value} on POOL statement.

Explanation: During database generation or the ADD DBEXTENT function, a POOL control statement with an incorrect storage pool number was encountered. The incorrect storage pool number is identified by **BLANK** or *value* in the message text. The storage pool number was incorrect for one of the following reasons:

- It was omitted (**BLANK** in the message text).
- It was not numeric.
- Its value was less than 2 (storage pool 1 cannot be specified, and numbers less than 1 are not valid storage pool numbers).
- It was greater than the maximum number of storage pools defined for the database (by the database generation MAXPOOLS control statement). The SHOW DBCONFIG operator command will tell you how many storage pools are defined in an existing database.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Supply the correct POOL control statement information and rerun the program.

ARI0930E Incorrect keyword keyword on POOL statement.

Explanation: During database generation or ADD DBEXTENT processing, an error was detected. The second operand (*keyword* in message text) of the POOL control statement was incorrectly specified. The second operand of the POOL control statement can be either LOG or NOLOG (or can be omitted).

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Supply the correct POOL control statement information and rerun the program.

ARI0931E Pool number n is not an empty storage pool.

Explanation: During ADD DBEXTENT processing, a POOL control statement specified a storage pool number (*n* in message text) that already has either one or more DBEXTENTs, or one or more DBSPACEs assigned to it. You can specify only a storage pool that does not yet have any DBEXTENTs or DBSPACEs assigned to it. The SHOW DBEXTENT, or SHOW POOL operator command will tell you which storage pools currently have DBEXTENTs assigned to them. Query the SYSDBSPACES catalog table to determine

which storage pools currently have DBSPACEs assigned to them.

Note: You can specify an empty storage pool and then follow the POOL control statement with a DBEXTENT control statement that assigns a DBEXTENT to the storage pool.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Supply the correct POOL control statement information and rerun the program.

ARI0932E Number of DBEXTENTS exceeds CUREXTNT value value.

Explanation: During database generation one of the following errors occurred:

- The number of DBEXTENT control statements exceeded the value (*value* in the message text) specified in the CUREXTNT control statement. The CUREXTNT value specifies exactly how many DBEXTENTs you must define during database generation.
- The END delimiter control statement, which must follow the last DBEXTENT control statement (and precede the DBSPACE control statements), was omitted.

System Action: The program ends.

Operator Response: Return the console output with the output listing.

System Programmer Response: Verify that the CUREXTNT control statement was specified with the correct value. Ensure that the correct number of DBEXTENT control statements are specified and that they are followed by an END delimiter control statement. Correct the error and rerun the program.

ARI0933E DBEXTENT number extno specified as input to action. DBEXTENT is invalid. Reason Code = n.

Explanation: You have specified an invalid DBEXTENT number *extno* to add or delete. The type of action is signified by *action*. The reason is signified by the value *n*. For ADD DBEXTENT, *n* is one of the following:

1. You did not enter a value.
2. The value encountered a nonnumeric character.
3. You entered a value less than one.
4. You did not enter a value that is exactly one greater than the number of DBEXTENTs currently defined nor one of the previously deleted DBEXTENT numbers.

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5. The deleted area is not large enough to hold the new DBEXTENT. Use the SHOW POOL command to determine the size of the deleted area.
6. The free area at the end of the DBEXTENT control area in the directory is not large enough to hold the new DBEXTENT. Use the SHOW POOL command to determine the size of this free area.

For DELETE DBEXTENT, *n* is one of the following:

1. You did not enter a value.
2. The database manager encountered a nonnumeric character.
3. You entered a value less than one.
4. You entered a value that is greater than the maximum number of DBEXTENTS allowed in the database.
5. The DBEXTENT is in the database but not in the storage pool that you specified. Use the SHOW POOL command to determine the pool number or use the default value by not inputting the pool number.

System Action: The program ends.

System Programmer Response: Rerun the program with the correct values.

ARI0934E **Error occurred while deleting DBEXTENT number *extno*. Reason Code = *n*.**

Explanation: The ADD/DELETE DBEXTENT processing encountered an error. It occurred while the function was deleting DBEXTENT number *extno*. The function has added or deleted all DBEXTENT numbers in the input file prior to *extno*. The function will not process any DBEXTENT numbers in the input file after *extno*. The value of *n* signifies the error.

1. The storage pool has insufficient space to relocate occupied pages in the DBEXTENT to be deleted. The function must copy all the occupied pages in the DBEXTENT to another location before deleting the DBEXTENT. The storage pool does not have enough space to accommodate them. (Ensure you have not exceeded the SOSLEVEL and there is enough space in the storage pool.) Use the operator command SHOW POOL to determine the number of allocated pages on the DBEXTENT to be deleted.
2. The error occurred while the function was reading the allocated pages.
3. The error occurred while the function was locating a new page for relocation. This might be an I/O error if the database manager was accessing the directory blocks.

System Action: The program ends. The DBEXTENT *extno* is not changed.

System Programmer Response: Determine the cause of the error from the reason code. If the storage pool

does not have enough space, add DBEXTENTS to the same pool before invoking the deletion. (Ensure you have not exceeded the SOSLEVEL and there is enough space in the storage pool. You may have to increase the SOSLEVEL to 95%.) For other errors, follow your installation's problem determination procedure.

ARI0935E **Archopt failed. Correct the cause of error. Do a normal SQLSTART to do the archive (or user archive).**

Explanation: Processing failed during the archive. *Archopt* is the type of archive the program is taking.

System Action: The program ends. All the DBEXTENTS specified have been added or deleted successfully.

System Programmer Response: Determine and correct the cause of the error. Do a normal SQLSTART of the application server and take the archive (or user archive).

ARI0936I **Warning: DBEXTENT number *extno* is already in place. Program continues.**

Explanation: The DBEXTENT number *extno* that you wanted to add is already in the database.

System Action: The program continues.

System Programmer Response: Ensure that the DBEXTENT number is correct. If the DBEXTENT was added in a previous run, no action is required. If you want to move the DBEXTENT from one storage pool to another, delete the DBEXTENT in a separate run and rerun the program.

ARI0937I **Warning: DBEXTENT number *extno* that you want to delete is not found. Program continues.**

Explanation: The DBEXTENT to be deleted was not found in the database. A previous run of a program may have deleted it.

System Action: The program continues.

System Programmer Response: Ensure that the DBEXTENT number is correct. If the DBEXTENT was deleted in a previous run, no action is required. Otherwise, rerun the program with the correct values.

ARI0938E **You have specified DBEXTENT number *extno* for deletion more than once. Processing terminates.**

Explanation: You cannot delete a DBEXTENT more than once in a single execution of the ADD or DELETE DBEXTENT function, even though the DBEXTENT may have been added back to the database in the interim.

System Action: Processing ends.

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System Programmer Response: Rerun the program with proper input.

ARI0939E Storage pool *poolno* contains the INTERNAL DBSPACE and the DBEXTENT *extno* specified to be deleted is the only DBEXTENT in this pool. DBEXTENT *extno* cannot be deleted. Processing terminates.

Explanation: Storage pool *poolno* contains the INTERNAL DBSPACE, and the DBEXTENT *extno* that you specified for deletion is the only DBEXTENT left in this pool. You cannot delete DBEXTENT *extno*.

System Action: Processing ends.

System Programmer Response: Move the INTERNAL DBSPACE to another pool using the ADD DBSPACE function or add more DBEXTENTs to the storage pool before you delete the DBEXTENT.

ARI0940I Additional 512-byte directory blocks required: *nnnnnnnnnn*

Explanation: The directory has been expanded previously to allow more DBSPACE pages to be added. To expand the directory again to allow both DBSPACE and DBEXTENT pages to be added, the new directory must be large enough to hold both the previously expanded DBSPACE pages as well as the DBEXTENT pages to be added. The new directory is not large enough. The message displays the additional number of directory blocks that are required to expand the directory.

System Action: Processing ends.

System Programmer Response: This message indicates how much additional space is required. Specify a larger VSAM Extent and re-run the job. Refer to the *DB2 Server for VSE System Administration* manual to determine the size of the new minidisk.

ARI0941E Dataset for new directory is too small.

Explanation: The output dataset must be at least as large as the input dataset to hold the directory.

System Action: The program ends.

System Programmer Response: Specify another dataset of a larger size if one exists; otherwise, define one. Rerun the program.

ARI0942E Directory expansion failed.

Explanation: An error occurred during the processing of the directory expansion. The directory is not copied. If this message is preceded by a VSAM ERROR display, refer to the *DB2 Server for VSE & VM Diagnosis Guide and Reference* manual for information on errors from VSAM.

System Action: The program ends.

System Programmer Response: Correct the error and rerun the program.

ARI0943I Directory expansion was completed successfully.

Explanation: The directory has been expanded successfully.

System Action: The program ends.

ARI0945I Expanded space will be used for DBSPACE pages.

Explanation: You have requested to expand the directory and to use the additional space to hold more DBSPACE pages.

System Action: Processing continues.

ARI0946I Expanded space will be used for DBSPACE and DBEXTENT pages.

Explanation: EXPAND = ALL was supplied in the parameter list. The directory expansion process will expand the directory to allow more DBEXTENT and DBSPACE pages to be added.

System Action: Processing continues.

ARI0947I Current | New maximum DBEXTENT | DBSPACE pages: *nnnnnnnnnn*

Explanation: This message shows the (Current | New) maximum number of (DBEXTENT | DBSPACE) pages that the directory can hold.

System Action: Processing continues.

ARI0948I DBEXTENT | DBSPACE pages added: *nnnnnnnnnn*

Explanation: This message shows the number of additional (DBEXTENT | DBSPACE) pages that will be available in the new directory.

System Action: Processing continues.

ARI0949I (Current | New) directory size (blocks): *nnnnnnnnnn*

Explanation: This message shows the size of the (Current | New) directory in 512-byte pages.

System Action: Processing continues.

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Chapter 15. ARI0950–ARI0974 Trace Formatter Messages

ARI0950E INPUT keyword keyword is not valid.

Explanation: The submitted control statement keyword is unrecognized. The recognized trace formatter control statement keywords are: AGENTNO, COMP, DATE, DISK, DUMPALL, HEADER, RETCODE, SUBCOMP, TIME, TRACENO, and USERID.

System Action: The program ends.

Programmer Response: Select the correct control statement keyword. Each control statement can contain only one keyword.

ARI0951E Number of parameters in user ID exceeds six.

Explanation: The maximum number of parameters used with the control statement keyword USER ID is six.

System Action: The program ends.

Programmer Response: Reduce the number of parameters to six or less. For more information about USER ID parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0952E Number of parameters in AGENTNO exceeds six.

Explanation: The maximum number of parameters used with the control statement keyword AGENTNO is six.

System Action: The program ends.

Programmer Response: Reduce the number of parameters to six or less. For more information about AGENTNO parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0953E Nondigit character in one of the AGENTNO parameters.

Explanation: Syntax error. At least one of the parameters used with the control statement keyword AGENTNO contains nonnumeric characters.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct syntax. For more information about AGENTNO parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0954E Number of parameters in TRACENO exceeds six.

Explanation: The maximum number of parameters used with the control statement keyword TRACENO is six.

System Action: The program ends.

Programmer Response: Reduce the number of parameters to six or less. For more information about TRACENO parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0955E Nondigit character in one of the TRACENO parameters.

Explanation: Syntax error. At least one of the parameters used with the control statement keyword TRACENO contains nonnumeric characters.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct syntax. For more information about TRACENO parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0956E Number of parameters in COMP exceeds one.

Explanation: The maximum number of parameters used with the control statement keyword COMP is one.

System Action: The program ends.

Programmer Response: Enter only one of the allowed parameters: CONV, DBSS, DRRM DSC, RA, RDS, WUM, or STG.

ARI0957E Parameter in COMP not valid.

Explanation: The parameter specified with the control statement keyword COMP can be CONV, DBSS, DRRM DSC, RA, RDS, WUM, or STG.

System Action: The program ends.

Programmer Response: Submit the correct parameter: CONV, DBSS, DRRM, DSC, RA, RDS, WUM, or STG.

ARI0958E Number of parameters in SUBCOMP exceeds eight.

Explanation: The maximum number of parameters used with the control statement keyword SUBCOMP is eight.

System Action: The program ends.

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Programmer Response: Reduce the number of parameters to eight or less. For more information about SUBCOMP parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0959E Parameter in SUBCOMP not valid.

Explanation: At least one of the parameters used with the control statement keyword SUBCOMP is not valid. The allowable parameters for the subcomponents DBSS, DRRM, DSC, RA and RDS are:

For RDS:	For DBSS:	For DSC:	For RA:
AU	DC	AGENT	RA
AG	DM	COM	COM
EXEC	ENTRY		
INT	EXIT		
OPT	INDEX	For DRRM:	
PA	LOCK		
SG	LOG	DICT	
	LUW	GEN	
	SORT	PARSE	
	STAT	RDIIN	
	STOR		

System Action: The program ends.

Programmer Response: Submit the correct parameters. For more information about SUBCOMP parameters, refer to the *DB2 Server for VSE & VM Operation* manual.

ARI0960E Number of parameters in DATE exceeds two.

Explanation: The maximum number of parameters used with the control statement keyword DATE is two.

System Action: The program ends.

Programmer Response: Input the two parameters 'start-date' and 'end-date' or the parameter 'target-date'.

ARI0961E Syntax error in one of the DATE parameters.

Explanation: Syntax error. Each portion of the date must be specified as two digits; that is, a leading zero must be entered where needed. The delimiter must be /. The second date, if used, must be greater than the first date. An example of correctly specified dates is: DATE 01/23/85 02/08/85.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct format.

ARI0962E Nondigit character in one of the DATE parameters.

Explanation: Syntax error. At least one of the parameters used with the control statement keyword DATE contains nonnumeric characters. Each portion of

the date must be specified as two digits; that is, a leading zero must be entered where needed. The second date, if used, must be greater than the first date. An example of correctly specified dates is: DATE 01/23/85 02/08/85.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct syntax.

ARI0963E Number of parameters in TIME exceeds two.

Explanation: The maximum number of parameters used with the control statement keyword TIME is two.

System Action: The program ends.

Programmer Response: Input the two parameters 'start-time' and 'end-time' or the parameter 'target-time'.

ARI0964E Syntax error in one of the TIME parameters.

Explanation: Syntax error. Each portion of the time must be specified as two digits; that is, a leading zero must be entered where needed. The delimiter must be a colon (:).

Note: The second time specified should be greater than the first time. For example, specifying TIME 23:45:00 00:10:00 will cause no trace output to be selected (no warning message will be issued). Consequently, specifying an interval that passes through midnight must be done in two different runs of the trace formatter. An example of correctly specified times is: TIME 09:05:00 14:04:59. It is possible (but not very useful) to specify only one time with the TIME keyword. For example, TIME 12:00:00 specifies that only the trace records created during that second of time be formatted.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct syntax.

ARI0965E Nondigit character in one of the TIME parameters.

Explanation: Syntax error. At least one of the parameters used with the control statement keyword TIME contains nonnumeric characters. Each portion of the date must be specified as two digits; that is, a leading zero must be entered where needed. The delimiter must be ':

Note: The second time specified should be greater than the first time. For example, specifying TIME 23:45:00 00:10:00 will cause no trace output to be selected (no warning message will be issued). Consequently, specifying an interval that passes through midnight

Trace Formatter Messages – ARI0950-ARI0974

must be done in two different runs of the trace formatter. An example of correctly specified times is: TIME 09:05:00 14:04:59. It is possible (but not very useful) to specify only one time with the TIME keyword. For example, TIME 12:00:00 specifies that only the trace records created during that second of time be formatted.

System Action: The program ends.

Programmer Response: Submit the parameters with the correct syntax.

ARI0966E Number of parameters in RETCODE exceeds one.

Explanation: The maximum number of parameters used with the control statement keyword RETCODE is one.

System Action: The program ends.

Programmer Response: Enter only one of the allowed parameters (P, N, or *).

ARI0967E Parameter in RETCODE not valid.

Explanation: The submitted parameter used with the control statement keyword RETCODE is not valid. The parameter must be P, N, or *.

System Action: The program ends.

Programmer Response: Enter one of the following as the RETCODE parameter:

- P Positive (nonzero) return codes only
- N Negative return codes only
- * All nonzero return codes

ARI0968E The trace file does not contain trace data.

Explanation: The mounted tape or disk file does not contain the DB2 Server for VSE trace data. (The wrong tape may be mounted.)

System Action: The program ends.

Programmer Response: Ensure that the operator mounted the correct tape and that the correct JCL was submitted for the trace file. If the correct file is being accessed, it does not contain the trace data. (The tape is probably empty or rewritten.)

ARI0969I Trace file is empty.

Explanation: The DB2 Server for VSE trace formatter program has detected that the DB2 Server for VSE trace file is empty. (It contains no records.) When database manager activity was being traced, no trace output data was created.

System Action: The program ends.

Programmer Response: None required. You may want to verify that the correct file was submitted as input to the trace formatter program.

ARI0972E Storage allocation error. Return Code = nn.

Explanation: In allocating virtual storage during trace formatting, a VSE GETVIS macro failure occurred. The cause of the error is described by the Return Code value *nn* (which is the return code from GETVIS).

System Action: The program ends.

Programmer Response: Report the problem to your system programmer.

System Programmer Response:

- Return Code = 12:
- Return Code = 32: This is a hardware storage failure. Report the problem to your hardware service representative.
- For any other Return Code value: Make a record of what went wrong and contact the designated support group for your installation.

ARI0973E Error releasing storage. Return Code = nn.

Explanation: In releasing virtual storage during trace formatting, a CMS free storage macro failure occurred. The cause of the error is described by the Return Code value *nn* (which is the return code from the free storage macro).

System Action: The program ends.

Operator Response: Report the problem to your system programmer.

System Programmer Response: Make a record of the return code and contact the designed support group for your installation.

ARI0974E operation error on DDNAME xxxxxxxx. Return Code = nn. EREASON=nn.

Explanation: An error occurred during a sequential input/output operation on the xxxxxxxx file.

The Return Code value is the Primary Error Code value. The EREASON value is the Secondary Error Code value. For further explanation, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or "SEQ FILE ERRORS" in the HELP text.

System Action: The program ends.

Operator Response: Return console output with the output listing.

System Programmer Response: For corrective action, look up the displayed error codes under either Chapter 21, "Sequential File Errors" on page 361, or

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“SEQ FILE ERRORS” in the HELP text.

Chapter 16. CICS/VSE Transaction Abend Codes

Notify your system programmer whenever one of these abend conditions occurs:

Code	Meaning		
ABE	The CICS transaction abended during cleanup and termination following a previous abend.		
ADDR	An error has occurred on the EXEC CICS ADDRESS command, which is executed by the ISQL transaction to get the addresses of the TWA and the CSA.	ASGN	An error has occurred on the EXEC CICS ASSIGN command, which is executed by the ISQL transaction to get the terminal type, terminal screen dimensions, and CICS start code.
AEY9	An online application is trying to access the database manager and the online resource adapter was not enabled or is terminating. CICS has not been initialized correctly. The DFHSIT must contain the DBP parameter. In addition you must specify DTB=YES on the DFHCSDUP entries for all transactions that access the database manager. For information about the CIRB and CIRT transactions, refer to the <i>DB2 Server for VSE System Administration</i> manual.	ASP7	CICS or some subsystem failed during the CICS synchronization process. If the failing subsystem was the DB2 Server for VSE system, the DB2 Server for VSE partition has a serious problem (such as log full, media error, etc.); this problem must be corrected. The problem should be corrected in the database manager before trying online access.
AEIZ	The ISQL transaction has attempted to write to temporary storage and has exceeded the current CICS limitation for the number of items allowed in a temporary storage queue.	ASRA	A program check has occurred while running under a user TCA. The transaction that was attempting to access the application server will be abended.
ARIE	The transaction was abended because it coded EXEC SQL WHENEVER ERROR STOP, and because the resource adapter detected a negative SQLCODE.	ASRB	An ISQL print command has been issued, but when CICS was started, logical unit SYS098 was not assigned to a VSE/Power intercepted printer.
ARIS	A serious error occurred in the DB2 Server for VSE partition. Normally, no further access to the database manager is possible. The problem in the database manager should be corrected before continuing.	ATSP	Temporary storage queues have been defined as recoverable. Recoverable temporary storage queues are incompatible with ISQL.
ARIW	The transaction was abended because it coded EXEC SQL	CICE	CICDAREA eyecatcher is missing for the ISQL task common area. This is probably due to storage overlay.
		ERR1	The ISQL transaction abended before a message could be sent to the terminal.
		GCBE	Global control block eyecatcher is

CICS/VSE Transaction Abend Codes

	missing. This is probably due to a CISQ transaction abnormal termination, such as an ASP7 abend.		which is executed by the ISQL transaction to start the second transaction.
GCBP	The ISQL transaction abended because the CISQ transaction was unable to get automatic storage for the global control block.	WELC	An error has occurred on the EXEC CICS RECEIVE command, which is executed to read the input entered on the welcome screen.
INFO	The ISQL transaction has abended and the ISQL Abend Routine has been entered.	WRTQ	An error has occurred on the EXEC CICS WRITEQ command, which is executed by the ISQL transaction to write the global control block pointer to a temporary storage queue.
ISQL	The ISQL transaction has abended and the ISQL abend routine has been entered.		
ITRX	An error has occurred on the exec CICS link command, which is executed by the ISQL transaction to link phase ARIITRX. ARIITRX may not have been defined to the CICS/VSE or it may not be in the libraries that are available to CICS.	PMRP	The CBND transaction abended because the Message Repository cannot be found.
		PASG	The CBND transaction abended because an error has occurred executing the EXEC CICS ASSIGN command.
NOGV	The transaction has abended because an attempt to acquire virtual storage (by GETVIS macro) failed.	PRET	The CBND transaction abended because an error has occurred executing the EXEC CICS RETRIEVE command.
NSTG	The ISQL transaction abended because the CISQ transaction was unable to get automatic storage.	PMSG	The CBND transaction abended because an error has occurred trying to write out the message to either the user terminal or the message queue specified.
RECV	An error has occurred on the EXEC CICS RECEIVE command, which is executed by the ISQL transaction to read input from the terminal.	PBND	The CBND transaction has abended due to an error.
SCRP	The ISQL transaction abended because the CISQ transaction was unable to get automatic storage for the message screen buffer. (The pointer to the storage obtained by the second transaction for the ISQL transaction for 3270 data streams is zero.)	PB2D	The CB2D transaction (started by CBND internally) has abended due to a CICS RETRIEVE error. This is probably due to a CB2D transaction not started by CBND.
		xxxx	Where xxxx is the user-defined transaction ID for the ISQL transaction. An ABEND condition has occurred, but the ABEND code field is blank. The ISQL transaction-id in the IGCTRNID field of the global control block is used as the ABEND code.
STCD	The CICS start code is something other than TD or S. ISQL is only started either from the terminal(TD) or from a CICS START command(S).		
STRT	An error has occurred on the EXEC CICS START command,		

Chapter 17. DBSS Return Codes

DBSS return codes are generally found in SQLERRD2 (displayed by message ARI0504I). A very few error messages will also directly display the DBSS return codes (for example, ARI0523E).

Note: Many of the DBSS return codes will not be of interest or value to the end user, system programmer, etc. These will be of most use to the IBM support personnel.

The return codes are in three groups:

0	Successful. Operation executed. No unusual conditions occurred.
Positive	Warning. Operation executed, but one or more unusual conditions occurred.
Negative	Error. Operation not executed, database not changed, database only partially updated, or the logical unit of work has been backed up.

Warning Return Codes

Return Code	Name	Meaning
1	DIRTSCAN	Used in read call. For Fetch Row, Open Scan, or Get Parent, scan is 'on' a row but flagged dirty. For Get Next Row, scan is flagged dirty and may or may not be 'on' a row. Get Next Row resets the scan to 'clean' and resets the scan to 'on' (or 'EOF').
2	DOMTRUNC	Field truncation. On a read request, a requested domain is longer than the domain FREQLTH value and thus the returned domain has low order truncation.
4	EOF	End of file on a scanned set
4	TOF	Top of file on a scanned set. No operation currently sets this code.
8	KEYVIOL	Key violation on Get Next Row for an index scan. Submitted key

lower than the current key as indicated by SCAN and QUALF. Scan is positioned 'on' first offending row.

16	NFORMSEG	DBSPACE requested by CFETCH, CNEXT exists but has no SCR record or was not opened
64	FORCEND	Automatic commit work is generated on deletion of DBSPACE, master or link control records
128	BADSARG	Record does not satisfy the search arguments
4096	INCONSEG	NSEG or SEGMS(*) is inconsistent with the REL(*) supplied to STARTUS call.

Bad Return Codes

Bad DBSS Call Parameters

-1	ILOPCODE	Illegal OPCODE on DBSS call
-2	ILLEGALP	Illegal parameter (PARAMS) pointer on DBSS call (0, or not word/doubleword aligned).

Illegal parameters for BASE. Some codes also used by CBASE, SBASE.

-3	ISEGMENT	Illegal DBSPACE number, missing SCR, or type conflict with operator
-4	ILLRID	Illegal table ID or illegal operation for list
-5	NFTID	TID not found or open of an empty table or list
-6	ILLPSEGM	Illegal parent DBSPACE number
-7	ILLPRID	Illegal PRID or illegal operation for list
-8	NFPTID	PTID not found
-9	ILSCANID	Illegal scan ID

DBSS Return Codes

- 10 INKEYDOM** Illegal number of key fields
 - 11 ILLKPTR** Illegal address of KDOMAINS
 - 12 INREQDOM** Illegal number of DOMAINS fields
 - 13 ILLDPTR** Illegal address of DOMAINS
 - 14 INSARGS** Illegal number of search arguments
 - 15 ILLSPTR** Illegal address of search arguments
 - 16 ILLEGLID** Illegal link ID
 - 17 ILLEGIID** Illegal index ID
 - 18 ILLICOMP** Illegal comparison operator (ICOMP)
 - 19 ILLQUALF** Illegal call qualifier in BASE (QUALF); illegal call qualifier in CBASE (CQUALF)
- Illegal Parameters in KDOMAINS*
- 20 IKDOMPTR** Illegal key-field address
 - 21 IKDOMLTH** Illegal key-field length
- Illegal Parameters in DOMAINS*
- 22 IFLDPTR** Illegal field address
 - 23 IFACLTH** Illegal submitted field length
- Illegal Parameters in Search Arguments*
- 24 ISNUMBER** Illegal field number in search arguments
 - 25 ISPOINT** Illegal field address in search arguments
 - 26 ISLENGTH** Illegal field length in search arguments
 - 27 ISCOMP** Illegal comparison operator in search arguments
 - 28 ISBOP** Illegal boolean operator in search arguments

Exceptional Conditions on a Scan

- 29 EMPSCAN** Empty scan in SCANID
- 30 SCANOW** Too many scans are opened by RDS
- 31 UPDIRTY** Write call using a dirty scan
- 32 NOTON** Call different from NEXT, CLOSE using a scan which is not 'on'

Exceptional Conditions on an Index or on a Row

- 33 NFKEY** Submitted key not found
- 34 UNIQKEY** Violation of index key-uniqueness
- 35 LONGKEY** Submitted key is too long
- 36 LONGTPLE** Submitted row is too long
- 37 ILLTYPE2** Illegal call for a Type 2 table. (Should never occur because the database manager does not have Type 2 tables)

Exceptional Conditions on a Link

- 38 CLINKED** Delete of a row illegally disconnecting some link; also connection of a row in a link in which it is already connected
- 39 CNLINKED** Disconnect, or delete and disconnect of a non-linked child; link open on a non-linked child in a binary link; connect, insert and connect to a non-linked child in a binary link
- 40 NOPARENT** Parent does not exist (in PARENT call)
- 41 NOCHILD** Child does not exist (in OPEN call)

Invalid Index Conditions

- 42 INVENTU** Attempt made to use an index that has been marked invalid
- 43 INVENTM** An index has been marked invalid during ROLLBACK or UNDO
- 44 NOINVALD** The limit of invalid entities has

DBSS Return Codes

been reached when combining the current invalid indexes with the potentially invalid indexes due to active CREATE INDEX and REORGANIZE INDEX operations.

Illegal Parameters in CBASE and Auxiliary Control Structures

- 45 IQUALFSG** Illegal QUALFSEG
- 46 IAUXPTR** Illegal auxiliary pointer
- 47 INPAGES** Illegal NIPAGES or NHPAGES
- 48 ILLFREE** Illegal percentage of free space in SCR or ICR
- 49 ILOCKPRT** Illegal lock protocol in SCR or ICR
- 50 ILLNDOM** Illegal number of field entries in MCR or ICR
- 51 ILLDOMS** Illegal field entries (lengths in MCR, field numbers in ICR)
- 52 ILUNIQUE** Illegal unique key specification
- 53 TOOMANYC** Too many control objects as a result of a CINSERT
- 54 LISTSEGM** Operation illegal on a list DBSPACE. Only scan operations, Insert Row, and Sort are legal.

Illegal Parameter in BASE or SBASE

- 58 ILIXSARG** Illegal index page search argument specified. Index is not being used.
- 59 ILLHOLD** Illegal HOLDIND or SHOLDIND value from RDS, bad Isolation level/Hold value.

Illegal Conditions Related to Logical Unit of Work Management

- 60 NOSTART** Begin Work was not issued prior to a Save Work call.
- 61 NOTEND** COMMIT or ROLLBACK not issued prior to Begin Work call (logical unit of work active)

- 62 NOLOG** Operation requires a log, but none exists (should not occur on BEGIN WORK or COMMIT as RDS does not support user log data)
- 63 INVSCHEd** SCHEDULE opcode issued for active logical unit of work
- 64 SYABORT** System either requested logical unit of work abort, has run out of log space, or transaction reached save point limit of 2147483647. Breaking up the LUW into smaller LUWs with the COMMIT WORK statement will prevent reaching the save point limit.
- 65 INLUW** Operation not valid while agent has active logical unit of work
- 66 OPABORT** Logical unit of work rolled back due to operator FORCE command

Illegal Parameters in SBASE

- 70 ILLEGALL** Illegal length of the DBSPACE list
- 71 ILISTPTR** Illegal pointer to DBSPACE list

Exceptional Conditions on a DBSPACE

- 72 SGISOPEN** At least one DBSPACE already open
- 73 SEMPTIED** Cannot be reopened until a synchronous save because CDELETE was issued
- 74 NOAVAILS** No available temporary DBSPACE
- 75 NOTAVSEG** DBSPACE not available or write operation with *DBSPACE opened for read*
- 76 NOROOMH** No header room in DBSPACE in write call
- 77 NOROOME** No entity room in DBSPACE in write call
- 78 NOROOMI** No index room in DBSPACE in write call

DBSS Return Codes

-79 NOROOMSP
No available space in storage pool
nnn

DBSS Errors and Version Limitations

-80 RSSERROR
Error in DBSS code. Error ID in
feedback area (Should not occur
since DBSS terminates the
application server on any detected
DBSS code error)

-81 IOERROR DASD I/O error. DBSS always
abends the application server on
I/O error. (Should not occur)

-82 NOTIMPL Feature not yet implemented.
(Should not occur)

-83 NOMEMORY
Unable to allocate needed main
storage

RETURN CODES USED ONLY IN SYSTEM WITH LOG

Illegal Parameters in LUW Operators

-85 OUTSIDE Pointer to user save data that is
bad. (Should never occur because
RDS does not support user log
data)

-86 TOOLONG
User wants to log more than 64K.
(Should never occur because RDS
does not support user log data)

-87 BADSAVNO
Tried to back over non-existent
save point

-89 OKBUTMOR
Read user log data but there was
more. (Should never occur since
RDS does not support user log
data)

-90 INVIDLST
Output area too small for
INDOUBT list

-91 SYBACKUP
System requested LUW backup

RETURN CODES USED ONLY IN MULTI-USER SYSTEM

-92 CHECKING
Checkpoint in progress, try later

Illegal Parameters Related to Locking

-94 BADCLVL Consistency level not 1, 2, or 3
(should not occur as RDS always
uses consistency level 3)

-95 ILCKMODE
Lock mode not in
(SHAR,SIX,EXCL)

Exceptional Conditions Due to Locking

-97 LOCKLIM Too many locks held by this LUW

-98 PRIVSEGM
Requested private DBSPACE is
locked

*LUW Backout Due to Locking; (Reached Save Point in
FEEDBACK(1))*

-99 DEADLOCK
LUW backout due to deadlock

-100 OVERLOAD
LUW backout due to too many
locks being held system-wide

-101 DEADATSI
Deadlock backout to a DBSI
boundary...internal retry failed

RETURN CODES USED ONLY IN SINGLE-USER SYSTEM

-120 NOTMUL
Operation not allowed in
single-user system issued by
operator command OPCODE
(OPCMMD)

MORE RETURN CODES RELATED TO LUW MANAGEMENT

-123 ATTNBACK
OPCODE terminated due to
asynchronous request to terminate
LUW; caller should issue
ROLLBACK. Can occur only if
YTABLE1 flag ATTNATTN set to
Y. The database manager does not
set ATTNATTN flag to Y. Should
not occur.

RETURN CODES USED BY THE SORT SUBSYSTEM

-130 ILLSOPTR
Illegal address of SORTSPEC

- 131 INORDSPC**
Illegal number of sort order specifications
- 132 ISORTSPC**
Illegal sort order specification
- 133 NOEXDOMN**
Field number does not exist for input table-id
- 134 IDUPELIM**
Illegal duplicate elimination option
- 135 INSLDOMS**
Illegal number of SORTLIST fields
- 136 NORMTPSG**
No space in temporary DBSPACE for write call
- 137 DUPFOUND**
Duplicate found during sort/merge; stop due to user option
- 138 ILLSLPTR**
Illegal pointer to SORTLIST specification
- 139 EMPTYVRT**
Empty set of rows to sort: sort DBSPACE is unchanged
- 140 ILTIDSPC**
Illegal TID specification: input list has no TIDs
- 141 ILDOMREP**
Illegal domain repetition: output list domain in SORTSPEC specified more than once
- 142 ENCTPTLG**
Encoded row too long: does not fit in an intermediate page
- 143 ISORTERR**
Internal sort error: number of rows sorted and merged different

RETURN CODES SET BY RDS FOR DBSPACE ACCESS

- 200 DISABDB**
Attempt to access a disabled DBSPACE

RETURN CODES USED BY THE UPDATE STATISTICS COMMANDS

- 400 ILGMODE**
Illegal update statistics mode
- 401 ILNUMREL**
Illegal number of specified tables
- 402 DUPRELID**
Duplicate table-id in input list
- 403 IPATHTYP**
Illegal path type
- 404 ILPATHID**
Illegal path ID
- 405 MISMATCH**
RELID and PATHID do not correspond
- 406 NOTAROOT**
First table-id on input list is not a root
- 407 NOPARNT**
No parent specified for binary link
- 409 UNCLUSTI**
Unclustered indexes exist
- 410 INCONREL**
NREL or RELS(*) inconsistent with that previously specified with STARTUS call.

DBSS Return Codes

Chapter 18. SQLCODEs

The SQLCODEs are associated with the SQL messages (ARI0500I - ARI0513E). The SQLCODEs provide specific information about the condition of the system. For more information, refer to the descriptions of the SQL messages issued with the SQLCODE.

An SQLSTATE field as well as an SQLCODE, is returned in the SQLCA. Each SQLSTATE corresponds to an SQLCODE. See Chapter 19, "SQLSTATES" on page 335 for more information.

SQLCODEs 0, and +12 through +863

The SQLCODE descriptive text identified for these SQLCODEs is displayed as continuation lines for message ARI0501I.

SQLCODEs 0 and 100 are associated with normal conditions.

0	Database manager processing is completed. Warning may indicate a problem.
---	--

Explanation: Execution of the SQL statement has completed. Message ARI0502I should follow this text and indicate the specific warning conditions.

SQLSTATES:

00000	With no warnings
01004	SQLWARN1=W
01555	SQLWARN1=Z
01003	SQLWARN2=W
01503	SQLWARN3=W
01504	SQLWARN4=W
01511	SQLWARN5=W
01506	SQLWARN7=W
01507	SQLWARN7=Z
01508	SQLWARN8=W
01509	SQLWARN9=W
01510	SQLWARNA=W
01517	SQLWARN8=Z

System Action: Normal processing; the SQL statement

has been processed successfully.

User Response: Take action based on message ARI0502I.

+12	An unqualified column name has been interpreted as a correlated reference.
-----	---

Explanation: An unqualified column name has been interpreted as a correlated reference.

SQLSTATE 01545.

System Action: Normal completion.

User Response: Take suitable action based on the SQLCODE descriptive text.

+100	There are no (or no more) rows that satisfy the condition.
------	---

Explanation: For a query that uses a cursor, the cursor is empty or all rows have been selected. For a query that does not use a cursor, no row was found that satisfied the WHERE condition. An INSERT via SELECT statement may return this SQLCODE if the SELECT statement does not retrieve any rows.

SQLSTATE 02000.

System Action: Normal completion.

User Response: Take suitable action based on the SQLCODE descriptive text.

+114	The server name part of the <i>server-name1.creator.object</i> does not match the name of the connected application server <i>server-name2</i>.
------	--

Explanation: The code is used to report that the server name (standalone or qualifying a column) does not match the name of the connected application server. This code is returned only when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01536.

System Action: Processing of the SQL statement is ended. The statement is recorded in the package, and it will be rechecked when the program is executed. Preprocessing continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, modify the statement and preprocess the program again. If the condition is corrected before the statement is executed, execution occurs normally. If the condition persists at execution time, the execution is unsuccessful.

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In either situation, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, after the statement is corrected. If this section is not executed at the application server specified by *server-name2*, the negative version of this code will be returned.

+117 **The number of data values to be inserted does not equal the number of columns specified or implied.**

Explanation: The number of values on an INSERT statement must equal the number of columns to be updated. Either too many or too few data items were listed for the columns specified or implied. This code is returned only when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01525.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, either create or delete data items to equal the number of columns specified, before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the correct number of data items exist.

+134 **Improper use of long string.**

Explanation: The SQL statement improperly references a long string column. Long strings cannot be used to represent datetime values and cannot be referenced in:

- A CREATE INDEX statement
- A function other than SUBSTR or LENGTH
- A GROUP BY clause
- A PRIMARY KEY, FOREIGN KEY, or UNIQUE clause
- A SELECT DISTINCT statement
- A subselect of an INSERT
- A subselect of a UNION or UNION ALL
- An expression in a SET clause of an UPDATE
- An ORDER BY clause
- By itself in a predicate other than LIKE

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01582.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, check the use of the long string column before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the long string column has been checked. Refer also to the *DB2 Server for VSE & VM Application Programming* manual for details on using long strings.

+135 **The input for a long string column in an INSERT statement or UPDATE statement must be from a host variable or be the keyword NULL.**

Explanation: The UPDATE or INSERT is using constants, column names, or subqueries where it should be using NULL or a host variable.

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01584.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, check the use of the long string column before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by

preprocessing the program again, once the long string column has been checked.

Refer also to the *DB2 Server for VSE & VM Application Programming* manual for details on using long strings. Correct the statement. Try again.

+142 *statement-type is not supported.*

Explanation: The database manager does not support the SQL statement shown (**statement-type**). Examples of **statement-type** are DECLARE TABLE, or DECLARE STATEMENT. In other IBM SQL products, these statements cause code expansions to occur. Because the database manager does not support these statements, the preprocessors have not performed these code expansions. Your program is preprocessed successfully unless other errors occur, and you did not specify the ERROR option as a preprocessing parameter.

SQLSTATE Spaces.

System Action: Preprocessing continues.

User Response: If your program depends on the code expansion, you should change your application. It should not depend on any of the above statements if you want to preprocess your application using the database manager.

+149 **The view cannot be used to modify data because it is based on more than one table.**

Explanation: INSERT, DELETE, or UPDATE of a view is not permitted if the VIEW is based on more than one table. This code is returned only when a statement is being preprocessed.

SQLSTATE 01574.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, check how many tables the VIEW is based on before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the tables that the VIEW is based on have been checked.

+150 **Connect authority is still active for user IDs.**

Explanation: This message is a reminder that revoking a user ID's DBA, SCHEDULE, or RESOURCE authority does not remove the user ID's CONNECT authority.

SQLSTATE 01512.

System Action: Normal completion.

User Response: None required. If you want to remove the CONNECT authority from the user IDs, enter a REVOKE CONNECT statement for the user IDs.

+151 **A column of a view cannot be updated since it is derived from an expression.**

Explanation: A column of a view may be updated only if it is derived directly from a column of a base table. This code is returned only when a statement is being preprocessed.

SQLSTATE 01575.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, check the origin of the column of a view before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the origin of the column of a view has been checked.

+154 **View limitations do not allow one of the operations.**

Explanation: Certain limitations exist when creating views:

- INSERT, UPDATE, or DELETE of a view is not permitted if the view involves a GROUP-BY CLAUSE or the keyword DISTINCT.
- The DELETE statement is not permitted in views defined with column functions.
- An index cannot be created on a view.
- ALTER TABLE is not permitted on a view.
- No host input variables are allowed for views.
- No cursor references are allowed in views.
- Inserts are not permitted in views whose columns are derived from expressions and not directly from a column of a stored table.

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- The UNION operator is not allowed in a view.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATEs:

01576 The bind process detected a CREATE INDEX statement for a view.

01577 The bind process detected a CREATE VIEW statement that includes an operator or operand that is not valid for views.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the correct number of data items exist.

+179 **INCLUDE SQLCA is not permitted when you request NOSQLCA support.**

Explanation: When preprocessing an application program with the NOSQLCA support, you cannot include the SQLCA structure in the source program.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended. The SQLCA code is not generated into your program.

User Response: Remove the INCLUDE SQLCA statement.

+180 **The string representation of a datetime value has invalid syntax.**

Explanation: The string representation of a date or time value does not conform to the syntax of any supported format. This code is returned only when a statement is being preprocessed.

SQLSTATE 01572.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the

warning, the warning can be ignored. Otherwise, check that the date or time value conforms to the syntax of a supported format such as ISO, JIS, EUR, USA, or LOCAL before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the date or time value conforms to the syntax of a supported format such as ISO, JIS, EUR, USA, or LOCAL.

+200 **Committing the current logical unit of work revokes all existing run authority, except the creator's, for package *package-name*.**

Explanation: You used the Extended Dynamic PREPARE statement against a package that was created by using the CREATE PACKAGE statement with the MODIFY option. The current SQL statement has been added to the named package. When the logical unit of work is committed, all existing RUN authority for the named package, except its owner, is revoked. This occurs because the authorization required for the statement that has just been added is not sufficient to maintain the existing RUN authority with the GRANT option as it applies to the modified package.

SQLSTATE 01513.

System Action: Processing of the SQL statement was successfully ended.

User Response: If you do not want existing RUN authority to be revoked, roll back the current logical unit of work. To prevent this situation from occurring again, you must acquire the authority needed to execute the current SQL statement.

+202 **Column *column-name* was not found in any table referenced by the statement.**

Explanation: Since the column name was unqualified, all the columns associated with the tables or views in the SQL statement were searched and **column-name** was not among them.

This SQLCODE may result if:

- You use the single quotation character (') to mark the beginning and ending of a character string constant, instead of using the double quotation character (") required by SQL. For example, the following query generates SQLCODE +202 because the system attempts to use "STORED QUERIES" as a column name, not a character string constant:

```
SELECT * FROM SYSTEM.SYSCATALOG
WHERE TNAME='STORED QUERIES'
```

This query should be:

```
SELECT * FROM SYSTEM.SYSCATALOG
WHERE TNAME="STORED QUERIES"
```

- NOFOR support was invoked and the **column-name** in the appended FOR UPDATE OF clause was not found in the associated tables or views.
- The program is being preprocessed with the NOEXIST option.

SQLSTATE 01533.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, either create the **column-name** before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the **column-name** is created.

+204 *owner.object-name* was not found in the system catalog.

Explanation: The name (**owner.object-name**) specified in the message text is incorrect. This code is only returned when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01532.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, either create the required object before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the required object is created.

If the *object-name* is one of the EXPLAIN tables, you can use the IBM-supplied type-A source member ARISEXP to create the EXPLAIN tables. See the *DB2 Server for VSE & VM SQL Reference* manual for details about the

ARISEXP source member. The implicit EXPLAIN version of this SQLCODE is -649.

+205 Column *column-name* was not found in table *owner.table-name*.

Explanation: The PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT contained an invalid column name **column-name**. This code is only returned when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01533.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, either create the column before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the column is created.

+206 The *key-type constraint-name* on *owner.table-name* was not found.

Explanation: **Key-type** can be a PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT. For a primary key, **constraint-name** is omitted.

The SQL statement containing a primary key, foreign key constraint, or unique constraint was not found for the named table. Either you typed the **constraint-name** incorrectly, or the key or constraint does not exist for the specified table. This code is only returned when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01533.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package, and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, either create the required key or constraint before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the

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statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the required key or constraint is created.

+304 **You cannot assign a value with a data type of *data-type1* to a host variable because the value is not within the range of the host variable in position *position-number* with data type *data-type2*.**

Explanation: A FETCH or SELECT into a host variable list or structure, position number **position-number** failed because the host variable having data type **data-type2** was not large enough to hold the retrieved value having data type **data-type1**. The FETCH or SELECT does not return the data for the indicated SELECT item. The indicator variable associated with the host variable in error has been assigned a value of -2 to indicate the return of a NULL value.

SQLSTATE 01515.

System Action: Processing of the SQL statement continues.

User Response: Correct the output host variable so that it is large enough to contain the source data value. You must repeat the steps from preprocessing to execution of the program.

+331 **A null value has been assigned to a nullable host variable because at least one of the characters in the source value cannot be converted.**

Explanation: A warning occurred while converting a string value returned by the application server to the application requester. The value is incompatible with the nullable host variable because of a mismatch in data representation. The FETCH or SELECT does not return the data for the indicated SELECT-list item, the indicator variable is set to -2 to indicate the return of a NULL value, and processing continues.

SQLSTATE 01520.

System Action: Processing of the SQL statement continues.

+401 **Incompatible data types were found in an expression or compare operation.**

Explanation: The expression or compare operation violated one of the following rules:

- An arithmetic expression that does not involve datetime data types can only have operands with numeric data types.
- A datetime arithmetic expression cannot contain elements with graphic data types.
- Comparison operations can only be performed on compatible data types. The data types must both be

numeric, character, graphic, date, time, or timestamp, or one must be a datetime data type and the other a character.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01578.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the data types used before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the data types have been corrected.

+404 **A character string specified in an INSERT or UPDATE statement is too large for the target column.**

Explanation: A character string in the data items-list of an INSERT statement or one of the character strings in the SET clause of an UPDATE statement is longer than the associated target column in the database.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01570.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the character string used before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the character string has been corrected.

+405 **The numeric value, *value*, is not within the range of the data type.**

Explanation: A numeric value specified in the statement exceeds the value allowed for the associated target column in the database. Following are the limitations:

- SMALLINT: -32768 to +32767
- INTEGER: -2147483648 to +2147483647
- FLOAT: -7.2E75 to -5.4E-79, 0, +5.4E-79 to +7.2E75
- DECIMAL: precision larger than that of the target column.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01579.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the numeric value used before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the numeric values have been corrected.

+407 **Either an UPDATE statement or an INSERT statement with a null value for a column defined as NOT NULL is not allowed, or a null host variable value is not allowed in a SELECT list.**

Explanation: An attempt was made to update a column with a null value and the column does not allow nulls. The null value may be from a constant value, a host variable, an expression, or a value returned on a subquery.

This SQLCODE will also be issued if you made an attempt to SELECT a host variable in a select-list, and the select-list had an indicator variable value of <0, indicating a NULL host variable value. A NULL host variable value is not allowed in a select-list. For more information about using host indicator variables, refer to the *DB2 Server for VSE & VM Application Programming manual*.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01573.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the statement has been modified.

+408 **An UPDATE or INSERT of a data value is incompatible with the data type of the associated target column.**

Explanation: A source value was incompatible with the associated target column. This can happen when the source value was derived from:

- A subquery used in an UPDATE or INSERT statement.
- A VALUES clause in an INSERT statement.

Typical situations are:

- The source value has a numeric data type, and the target column has a character, DBCS, or datetime data type.
- The source value has a character data type, and the target column has a numeric or DBCS data type.
- The source value has a DBCS data type, and the target column has a numeric, character, or datetime data type.
- The source value has a character data type that is too short for the target datetime column.
- The source value has a datetime data type, and the target column has a numeric, DBCS, or different datetime data type.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01580.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the command before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the

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statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the command has been corrected.

+414 **The LIKE predicate was used for a numeric or datetime column type. LIKE must only be used with graphic or character columns.**

Explanation: The SQL statement uses LIKE against a numeric or datetime column. It can only be used against columns that have a data type that is compatible with the graphic data type or that have a character data type. This code is returned only when a statement is being preprocessed.

SQLSTATE 01571.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the predicate used before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the predicate has been corrected.

+415 **The corresponding columns, column-number, of the operands of a UNION or a UNION ALL do not have comparable column descriptions.**

Explanation: The SQL statement contains SELECT clauses connected by a UNION or UNION ALL, and the corresponding columns in each SELECT clause cannot be compared. Specifically, columns of ordinality **column-number** of the operands in this UNION or UNION ALL cannot be compared. For columns to be comparable, corresponding columns must be numeric, character, graphic, date, time, or timestamp. Do not mix these data types. If corresponding columns have field procedures, both must have the same field procedure, and the same column CCSID value.

Note the following default data types for constants in a SELECT list:

- Alphanumeric constant: default data type is varying character

- All numeric constant (no E or decimal point): default data type is integer.

Note: This code is returned only when a statement is being preprocessed.

SQLSTATE 01581.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the columns before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the columns have been corrected.

+416 **You cannot specify a long string column in the SELECT clause of a UNION.**

Explanation: The SQL statement contained a SELECT clause item whose data type is a long string. This is not valid.

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

Note: This code is returned only when a program is preprocessed.

SQLSTATE 01582.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, correct the long string column before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the long string column has been corrected.

+419 **The precision of the numerator and/or the scale of the denominator are too large for decimal division.**

Explanation: The internal formula used to calculate the resulting scale of decimal division is:

Scale of result = 31 - np + ns - ds

Where np = precision of numerator,
 ns = scale of numerator,
 ds = scale of denominator.

A negative resulting scale will cause incorrect results due to internal decimal constraints. This may also happen when you use the AVG() function.

Note: This code is returned only when a program is preprocessed.

SQLSTATE 01583.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the statement has been corrected.

+464 **FORMAT 1**
Procedure *proc-name* returned
***num* query result sets, which exceeds**
the defined limit *integer*
FORMAT 2
Procedure *proc-name* with AUTHID
authid* returned *num
query result sets, which exceeds the
defined limit *integer*

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

num identifies the number of query result sets returned by the stored procedure.

integer identifies the defined limit on the number of query result sets for the stored procedure

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

The possible causes are as follows:

- The stored procedure is unable to return *num* result sets due to the limit established in the RESULTSETS column of SYSTEM.SYSROUTINES.
- The stored procedure is unable to return *num* result sets due to the DRDA limitations imposed by the client. The DRDA client establishes this limit with the MAXRSLCNT DDM code point.

SQLSTATE: 01609

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

+466 **FORMAT 1**
Procedure *proc-name* returned
***num* query result sets.**
FORMAT 2
Procedure *proc-name* returned
***num* query result sets for**
AUTHID *authid*.

Explanation: The stored procedure referenced completed normally. The procedure returned the number of query result sets specified in *num*.

SQLSTATE: 01610

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

+494 **The number of result sets is greater than the number of locators.**

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

SQLSTATE: 01614

System Action: The SQL statement is successful.

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

+541 ***key-type name* contains the same column definitions as an existing *entity*.**

Explanation: The **key-type** is PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT.

name is the FOREIGN KEY or UNIQUE CONSTRAINT key name that either the user specified or the system generated. For PRIMARY KEY, **name** is omitted.

entity can be PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT.

You receive a referential constraint warning because the FOREIGN KEY clause defines the same column list and parent table as another referential constraint. You receive a UNIQUE CONSTRAINT warning because the unique constraint defines the same column list as an

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existing UNIQUE CONSTRAINT or PRIMARY KEY. You receive a PRIMARY KEY warning because the PRIMARY KEY clause defines the same column list as an existing UNIQUE CONSTRAINT.

SQLSTATE 01543.

System Action: Processing of the SQL statement ends.

User Response: If you want to define a PRIMARY KEY, drop the UNIQUE CONSTRAINT that causes the duplicate and define the PRIMARY KEY again. For the other situations, you do not have to define the FOREIGN KEY or UNIQUE CONSTRAINT again because a similar **entity** already exists.

+551 **User *user-id* does not have the *privilege-type* privilege.**

Explanation: An attempt was made to reference an object that the user is not authorized to use, or the SQL statement needs specific authority that the user does not have (for example, RUN authority). This can occur if a user with DBA authority preprocesses a program, but because of the nature of the SQL statements in the program, the DBA does not have the authority to grant RUN authority to another user. For more information, refer to the *DB2 Server for VSE & VM Application Programming* manual for information on defining privileges on packages.

When this SQLCODE results from an SQL statement in a program that an DB2 Server for VSE preprocessor is processing, the statement is flagged in the DB2 Server for VSE package for rechecking when the program is executed. Preprocessing of the program continues. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run.

When this SQLCODE results from GRANT ALL, the grantor has no privilege on the object table or view upon which he or she can grant privileges.

No error message is issued for GRANT ALL on a view if the grantor has at least one grant privilege on the view.

No error message is issued for GRANT ALL on a table as long as the grantor has at least one privilege.

Note: This code is returned only when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01548.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package, and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be

executed on the application server that returned the warning, the warning can be ignored. Otherwise, acquire the required authorization for the object before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the required authorization for the object is created.

+552 ***user-id* is not authorized to perform this statement.**

Explanation: An attempt was made to reference an object that the user is not authorized to use, or the SQL statement needs specific authority that the user does not have.

Note: This code is returned only when the program is being preprocessed with the NOEXIST option.

SQLSTATE 01542.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package, and it will be rechecked when the program is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, create the required object before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once the required object is created.

+558 **The WITH GRANT option is ignored because the GRANT is PUBLIC.**

Explanation: Granting privileges to PUBLIC with the GRANT option does not give PUBLIC the privilege to grant to other users. Grant privileges cannot be passed to PUBLIC.

If PUBLIC is specified in a user list of GRANT ... WITH GRANT OPTION, PUBLIC receives the granted privileges without the grant option, while the other users receive the granted privileges with the GRANT option.

For example, as a result of the statement:

```
GRANT SELECT ON TABLE1 TO USER1, PUBLIC, USER2
WITH GRANT OPTION
```

USER1 and USER2 have the SELECT WITH GRANT privileges on TABLE1 while PUBLIC has only the select privilege.

SQLSTATE 01516.

System Action: The statement was executed successfully. The privileges are granted to PUBLIC without the GRANT option.

+600 **Automatic statistics collection was discontinued for the loading of table**
owner.table-name.

Explanation: The Database Services Utility made a request to begin collecting statistics for table **owner.table-name** while adding rows to the table. After this request, the database manager detected that an index has been added to the table. The database manager does not support this form of statistics collection for tables that have indexes defined on them.

SQLSTATE Spaces.

System Action: The operation was executed successfully. The statistics accumulated thus far were discarded. The database manager does not accumulate statistics while the Database Services Utility loads rows into the specified table.

User Response: To get statistics for the specified table, the database manager must issue an UPDATE STATISTICS command for the table after the Database Services Utility has finished loading the table. If, instead, the Database Services Utility requests to finalize statistics collection for the table, this request fails because the database manager discarded the statistics.

+668 **Table *owner.table-name* is inactive and you cannot access it.**

Explanation: No operation can be performed on this table because at least one inactive key participates in a relationship with this table.

This may be a PRIMARY KEY, a FOREIGN KEY or a dependent FOREIGN KEY which references the PRIMARY KEY.

While an inactive key exists, only the table owner or a DBA can issue DML statements against the table. In addition, no one can issue DML statements against an active table which result in a reference to an inactive table in order to enforce Referential Constraints. This code is returned only when a statement is being preprocessed.

SQLSTATE 01585.

System Action: Processing of the SQL statement has ended. However, the statement has been recorded in the package and it will be rechecked when the package is executed. Preprocessing of the statement continues.

User Response: If this statement is not intended to be executed on the application server that returned the warning, the warning can be ignored. Otherwise, check that all the keys in which the table participates are active, before the statement is executed, or modify the statement and preprocess the program over again. If the condition is corrected before the statement is executed, execution occurs normally. However, if the condition persists at execution time, the execution fails. In either case, the statement is dynamically rebound each time the program is run. This dynamic rebinding can be avoided by preprocessing the program again, once all the keys in which the table participates have been checked.

+802 **Exception error *exception-type* has occurred during *operation-type* operation on *data-type* data, position *position-number*.**

Explanation: An arithmetic operation in the SQL statement has caused an exception condition. The arithmetic operation can be in the select-list of the SELECT statement, the search condition of a SELECT, UPDATE or DELETE statement, or the SET clause of an UPDATE statement. **exception-type**, **data-type**, **operation-type** and **position-number** may be returned in SQLCA, depending on where the error was detected.

If the user is using ISQL or DBS Utility, only the first occurrence of a +802 code on a query causes the message text to be displayed. If more +802s are encountered, no more messages will be displayed even when the error type and operation are different. The indicator variable associated with the host variable in error has been assigned a value of -2 to indicate the return of a NULL value. The associated data variable remains unchanged. The following is a list of **exception-type** values that can be tolerated by DB2 Server for VSE:

- **FIXED POINT OVERFLOW** can occur during any arithmetic operation on either INTEGER or SMALLINT fields.
- **DECIMAL OVERFLOW** exception can occur when one or more non-zero digits are lost because the destination field in any decimal operation is too short to contain the result.
- **DIVIDE EXCEPTION** can occur on a division operation on any numeric field type (DECIMAL, FLOAT, SMALLINT, or INTEGER) by zero, or on a decimal division operation when the quotient exceeds the specified data-field size.
- **EXPONENT OVERFLOW** can occur when the result characteristic of any floating point operation exceeds the maximum value supported by System/370™ architecture (approximately 7.2E+75).

You can also get an **exponent underflow** when the result characteristic of any floating-point operation

SQLCODEs

exceeds the minimum value supported by System/370 Architecture (approximately 5.4E-79).

SQLSTATE 01519.

System Action: Processing of the SQL statement continues.

User Response: Check the arithmetic operation and the columns within the command to determine what data may be causing the program exception. More information can be found in the *DB2 Server for VSE & VM Interactive SQL Guide and Reference* manual.

+825 Operator command processing has been completed successfully.

Explanation: The database operator command has completed successfully and all output has been returned.

SQLSTATE 01541.

System Action: Normal processing continues.

User Response: You may enter another database operator command or a database statement.

+863 The connection was successful but only SBCS will be supported.

Explanation: The application requester supports only the target application server's SBCS CCSID. Either the target application server's mixed CCSID or graphic CCSID (or both) is not supported by the application requester. Application requester character data sent to the target application server must be restricted to SBCS.

SQLSTATE 01539.

System Action: The CONNECT statement is successful.

User Response: Do not execute any SQL statements which use either mixed data or graphic data in the statement.

Note: You may pass mixed and graphic data in host variables.

SQLCODEs -084 through -30090

SQLCODEs -084 through -30090 are associated with error conditions. The SQLCODE descriptive text identified for these SQLCODEs is displayed as continuation lines for message ARI0503E.

-084 Unacceptable SQL statement.

Explanation: This SQL statement is unacceptable to DB2. One of the following has occurred:

- CALL statement cannot be the object of dynamic SQL statements : PREPARE, EXECUTE, or EXECUTE IMMEDIATE.
- An attempt was made to prepare an ALLOCATE CURSOR statement, but the statement identifier is already associated with a declared cursor.

SQLSTATE 42612.

System Action: Processing of the SQL statement has ended.

User Response: If the situation involves an invalid use of the SQL CALL statement, correct the statement. Try again.

If the situation involves an invalid PREPARE of an ALLOCATE CURSOR statement, change the application program to use a statement identifier that is not associated with a declared cursor.

-101 SQL statement is greater than 8192 positions or is greater than an internal limitation of the system. Separate SQL statement into smaller statements.

Explanation: The SQL statement has caused an internal limitation of the database manager to be exceeded. By examining the **SQLERRP** of the **SQLCA**, you can determine the nature of the exceeded limitation. See the following list:

SQLERRP	Explanation
ARIPBDL	Exceeded maximum SQL statement length of 8192 bytes when expanding a host structure reference.
ARIPPAR	Exceeded maximum SQL statement length of 8192 bytes when appending the FOR UPDATE OF clause.
ARIPSQA	Exceeded maximum SQL statement length of 8192 bytes.
ARIPSQB	Exceeded maximum SQL statement length of 8192 bytes.
ARIPSQC	Exceeded maximum SQL statement length of 8192 bytes.
ARIPSQP	Exceeded maximum SQL statement length of 8192 bytes.
ARITFST	Exceeded maximum SQL statement length of 8192 bytes.
ARIXECK	Exceeded maximum size of a key because of an internal sort.
ARIXEPP	The SQL statement contains an incorrect length. The length of the string should be from 0 to 8192.
ARIXESX	SQL statement is too complex. Exceeded database manager internal limitations.

ARIXIAF	Exceeded maximum number of 32767 foreign keys.
ARIXOB2	Exceeded maximum number of 40 join columns in an SQL statement. The SQLERRD1 code for this first reason is -120 or -130. Exceeded maximum number of 200 predicates in an SQL query block (WHERE or HAVING clause). The SQLERRD1 code for this second reason is -110.
ARIXOFC	Exceeded maximum number of 255 column references in an SQL statement.
ARIXOFE	Exceeded maximum number of 32 table references in an SQL statement. The maximum refers to data definition statements only (including FROM list, views, and temporary tables).
ARIXOFFP	Exceeded maximum number of 400 predicates in an SQL statement.
ARIXOFQ	Exceeded maximum number of 16 queries in an SQL statement. Each view materialized is counted as a query.
ARIXOFT	Exceeded maximum number of 15 tables in a FROM list.
ARIXOML	Exceeded maximum number of 15 table references in an SQL statement (including FROM list, views, and temporary tables).
ARIXRST	Exceeded maximum size of a key because of an internal sort.

If a SQLERRP is not shown in the preceding list, or SQLERRD1 = -199, the explanation is:

- The SQL statement is too complex, it exceeded SQL internal limitations.

When an SQL statement is found to be too complex, the complexity caused DB2 Server for VSE internal storage or table limits to be exceeded. Possible causes for such complexity are if the command:

- Contains a number of operations, especially operations involving decimal or floating point numbers.
- Involves inserting a number of constants.
- Involves a number of functions, especially those involving arithmetic functions. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.
- Involves a number of complex views.

SQLSTATE 54001.

System Action: Processing of this SQL statement ends.

User Response: Either break the SQL statement into smaller statements or try to remove unnecessary conditions in the statement.

-102 **Statement contains a string constant whose length exceeds 254 bytes. (An SBCS character counts as one byte and a DBCS character counts as two bytes. A hexadecimal constant is allowed a maximum of 254 numbers.)**

Explanation: The SQL statement contains a string constant whose length exceeds the allowed maximum of 254 bytes. When determining the length of this string constant, it is necessary to count each EBCDIC character as one byte and each graphic character as two bytes. A hexadecimal constant has a maximum of 254 numbers, which result as 127 bytes. The beginning graphic delimiter (shift-out) and the ending graphic delimiter (shift-in) each count as one byte.

SQLSTATE 54002.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Decrease the length of the constant string and rerun.

-103 **Statement contains the incorrect floating point number *number*.**

Explanation: A floating-point number did not end with a digit (exponent). For example, 12E is not correct, but 12E0 is correct.

SQLSTATE 42604.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-104 **A portion of the SQL statement is incorrect following or involving *string*.**

Explanation: The portion of the SQL statement shown in *string* is incorrect.

Some of the possible causes are:

- **Format 2:**
A portion of the SQL statement is incorrect following or involving DESCRIBE/ USING-descriptor.
- **Format 3**

SQLCODEs

A portion of the SQL statement is incorrect following or involving missing SQL statement in PREPARE/EXEC.

- **Format 4**

A portion of the SQL statement is incorrect following or involving a literal, or a host variable is too long.

- **Format 5**

A portion of the SQL statement is incorrect following or involving illegal format or length of SQL statement literal.

- **Format 6:** A portion of the SQL statement is incorrect following or involving a subquery in the SET clause.

- **Format 7**

A portion of the SQL statement is incorrect following or involving the semicolon (;).

- **Format 8**

A portion of the SQL statement is incorrect following or involving a missing semicolon (;).

- **Format 9**

A portion of the SQL statement is incorrect following or involving an integer number that is larger than the maximum allowable number.

A **string** of either :H or a question mark (?) displayed in the message refers to a host variable found within the SQL statement.

SQLSTATEs:

42617 Statement string empty or blank.

42601 Everything else.

System Action: Processing of this SQL statement has ended.

User Response: Check the SQL statement for all errors. Correct the statement and resubmit it.

-105 **Either *string1 string2* or the text that follows is an incorrect sequence of words or symbols, or *string2* is an incorrect or reserved keyword.**

Explanation: The SQL statement does not follow the rules for the statement type. The symbols printed in the message show where the error was encountered.

string2 is not allowed to appear in the statement in the position where it was found. If either **string1** or **string2** was enclosed in double quotation marks ("), the double-quote characters do not appear in the message. If the symbol is a hexadecimal literal, it is not shown. (It is replaced by "X...".) If **string1** or **string2** appears as :H or a question mark (?), that string refers to a host variable, a field of a host structure, or an element of an indicator array found within the SQL statement. Strings of more than 34 characters may be truncated in the message.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-106 **SQL statement begins properly but is incomplete.**

Explanation: The SQL statement was correct up to the point where no more input was found. This may be caused by failure to properly end a literal. String literals need a final quote mark.

SQLSTATEs:

42603 Unterminated string constant.

42601 Anything else.

System Action: Processing of this SQL statement has ended.

User Response: Check that the statement has all the necessary parts to complete the desired function and that all clauses are complete.

For PL/I: Check that the SQL statement is complete before the semicolon.

For Assembler: Check that the continuation rules are properly followed. (A nonblank character must be in column 72, and continued lines must start in column 16 or beyond.)

For COBOL: Check that the SQL statement is complete before END-EXEC.

-107 **The name *name* is too long. Maximum allowable size is *size*.**

Explanation:

One of the following has occurred:

- The SQL statement contains a name whose length exceeds the maximum size. When determining the length of this name, you must count each SBCS character as one byte and each DBCS character as two bytes. The beginning DBCS delimiter (shift-out) and the ending DBCS delimiter (shift-in) each count as one byte.
- NOFOR support was invoked and a name whose length exceeds the maximum size was found in the appended FOR UPDATE OF clause.

SQLSTATE 42622.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Shorten the length of the name and rerun.

-108 **The following user ID, password, server name, or host variable does not have the proper length: *name*.**

Explanation: If *name* was an application program host variable, the declared length of *name* was not exactly 8 bytes (or 9 bytes in C) for the user ID or password, or was longer than 18 bytes (or 19 bytes in C) for a server name. If *name* was not a host variable, either the value specified exceeded 8 bytes for a user ID or password, or exceeded 18 bytes for a server name.

SQLSTATE 42622.

System Action: Processing of the SQL statement ends.

User Response: Correct the statement. Try again.

-109 **You must provide an INTO clause on the SELECT statement or the FETCH statement.**

Explanation: An INTO clause is needed for a SELECT statement if written in an application program. The INTO clause may appear in the SELECT statement itself, or in a FETCH statement if the SELECT statement was specified within a DECLARE CURSOR statement

SQLSTATE 42601.

System Action: Processing of this SQL statement has ended.

User Response: Supply an INTO clause and re-preprocess the program.

-110 **The following incorrect function was specified: *function-type*.**

Explanation: The function specified is not known to the DB2 Server for VSE product. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-111 **A SELECT, HAVING, or WHERE clause contains a column function without an associated column name.**

Explanation: A SELECT, HAVING, or WHERE clause contains a column function that should be associated with a column name. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42901.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-112 **A column function was used incorrectly. Either a column function is nested in a column function, or DISTINCT is used with an expression.**

Explanation: One of the following has occurred:

- The statement contains one of the column functions (AVG, MAX, MIN, COUNT, SUM) which contains another column function. You cannot nest column functions.
- If DISTINCT occurs inside a column function, DISTINCT must be associated with a column name, not an expression. For example, COUNT(DISTINCT QONHAND+QONORDER) is not permitted.
- If DISTINCT occurs inside a column function, the function can only have the unary operators (+, -) applied to it. For example, -COUNT(DISTINCT PARTNO) is permitted; COUNT(DISTINCT PARTNO) + 10 is not permitted.

Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column functions.

SQLSTATE 42607.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-114 **The server name portion of *server-name1.creator.object* does not match the name of the connected application server *server-name2*.**

Explanation: The code is used to report that the server name part (standalone or qualifying a column) does not match the name of the connected application server. This code is returned either when the statement is being executed, or when the program is being preprocessed with the EXIST option.

SQLSTATE 42961.

System Action: Processing of the SQL statement has ended.

User Response: Correct *server-name2* or use the ERROR preprocessing option and try again. If the statement is an SQL CALL, an SQL CONNECT may need to be issued to the server *server-name1* before issuing the SQL CALL statement.

SQLCODEs

-115 **The comparison operator, operator, was used incorrectly. Follow SOME, ANY, or ALL with a subselect. Follow IN or NOT IN with a subselect or a list.**

Explanation: One of the following has occurred:

- A comparison operator (=, <=>, <>, <, >, <=, >=) was used with SOME, ANY, or ALL, but was not followed by a subselect.
- A comparison involved a parenthesized list but the list was not preceded by IN or NOT IN.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-116 **The length of the following label is greater than 30 bytes: label.**

Explanation: The length of the label for a column or table exceeds the maximum of 30 bytes. Only the first 30 bytes are displayed.

SQLSTATE 42622.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement and try it again.

-117 **The number of data values to be inserted does not equal the number of columns specified or implied.**

Explanation: The number of data values on an INSERT statement must equal the number of columns to be updated. Either too many or too few data values were listed for the columns specified or implied.

This SQLCODE can be produced during re-preprocessing of a package, when the number of columns that a table contained has been changed.

It can also be returned when either the statement is being executed, or when the program is being preprocessed with the EXIST option.

SQLSTATE 42802.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-118 **A table to be modified cannot be referenced in the subquery.**

Explanation: You cannot change (INSERT, DELETE or UPDATE) a table while naming it in the FROM clause of a SELECT (subquery) used in the same SQL statement.

SQLSTATE 42902.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-119 **An item in a SELECT clause or in a HAVING clause was neither a column function nor a column in the GROUP BY clause.**

Explanation: One of the following has occurred:

- The SELECT clause contains column functions which imply grouping. At least one of the items in the SELECT clause which is not a column function is not in the GROUP BY clause. The following is an example of an incorrect statement:

```
SELECT DEPTNO, DEPTNAME, AVG(SAL)
FROM EMPLOYEE GROUP BY DEPTNO
```

It should be:

```
SELECT DEPTNO, DEPTNAME, AVG(SAL)
FROM EMPLOYEE GROUP BY DEPTNO,
DEPTNAME
```

- The SQL statement contains a HAVING clause which includes a predicate which does not have a group-qualifying property. The HAVING clause is a search condition applied against each selected group. Therefore, you cannot use a column or a column function which is not a property of the selected group. The following is an example of an incorrect statement:

```
SELECT DEPTNO, AVG(SAL)
FROM EMPLOYEE GROUP BY DEPTNO
HAVING SAL > 10000
```

It should be:

```
SELECT DEPTNO, AVG(SAL)
FROM EMPLOYEE GROUP BY DEPTNO
HAVING AVG(SAL) > 10000
```

SAL > 10000 is incorrect because SAL is not part of the selected groups. Each group in the answer set only contains an AVG(SAL).

- The SQL statement contains a SELECT clause or column expression which contains a column function on one side of the expression operator and a column name on the other side. For example:
AVG(AGE) + SENIORITY.

Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42803.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-120 **The argument of a column function is not a correlated reference to a subselect which contains a HAVING clause, or a column function should not occur as the value to be assigned to a column in the SET clause of an UPDATE statement.**

Explanation: One of the following has occurred:

- The argument of a column function contains a correlated reference, but the correlated reference does not refer to a subselect that contains a HAVING clause.

The following are invalid queries:

```
SELECT ENAME FROM EMP
WHERE AGE=MAX(AGE)
SELECT * FROM T0
WHERE T0.B = (SELECT SUM(T1.D)
FROM T1 GROUP BY T1.C HAVING
SUM(T1.D) = (SELECT MIN(T2.F)
FROM T2 GROUP BY T2.E HAVING
MIN(T0.A) = T2.E))
SELECT * FROM T0
WHERE T0.B = (SELECT SUM(T1.D)
FROM T1 GROUP BY T1.C HAVING
SUM(T1.D) = (SELECT T2.F
FROM T2 WHERE
MIN(T0.A) = T2.E))
```

The following are valid queries:

```
SELECT MAX(AGE) FROM EMP GROUP BY ENAME
HAVING MAX(AGE) > 1
SELECT SUM(T1.D) FROM T1 GROUP BY T1.C
HAVING SUM(T1.D) = (SELECT MIN(T2.F) FROM
T2 GROUP BY T2.E HAVING
MIN(T1.A) = T2.E)
SELECT SUM(T1.D) FROM T1 GROUP BY T1.C
HAVING SUM(T1.D) = (SELECT T2.F FROM T2
WHERE MIN(T1.A) = T2.E))
SELECT SUM(T0.B) FROM T0 GROUP BY T0.BB
HAVING SUM(T0.B) = (SELECT SUM(T1.D)
FROM T1 GROUP BY T1.C
HAVING SUM(T1.D) = (SELECT MIN(T2.F)
FROM T2 GROUP BY T2.E
HAVING MIN(T0.A) = T2.E))
SELECT SUM(T0.B) FROM T0 GROUP BY T0.BB
HAVING SUM(T0.B) = (SELECT SUM(T1.D)
FROM T1 GROUP BY T1.C
HAVING SUM(T1.D) = (SELECT T2.F FROM T2
WHERE MIN(T0.A) = T2.E))
```

Column functions cannot be contained in the SET-CLAUSE for column updates. Thus, the following is not allowed:

```
UPDATE EMP SET SAL=MAX(SAL) (invalid)
```

Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42903.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-121 **You cannot apply an INSERT or UPDATE to the same column more than once in the same statement.**

Explanation: An attempt was made to change the same column in a table more than once in the same statement.

SQLSTATE 42701.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-124 **More than 16 columns were used in an ORDER BY clause.**

Explanation: The maximum number of columns in an ORDER BY clause is 16.

SQLSTATE 54005.

System Action: Processing of the SQL statement has ended.

User Response: Decrease the number of columns in the ORDER BY clause to sixteen or fewer and resubmit the statement.

-125 **The statement contains ORDER BY column-number. The ORDER BY clause does not correspond to a column in the SELECT clause.**

Explanation: The SQL statement contains an ORDER BY column which does not point to a valid column in the SELECT clause.

SQLSTATE 42805.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-126 **A column to be updated is specified in the ORDER BY clause.**

Explanation: The SQL query contains both a FOR UPDATE OF clause and an ORDER BY clause for the same column. The FOR UPDATE OF clause may have been appended when the NOFOR support was invoked.

SQLSTATE 42829.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

SQLCODEs

-127 **DISTINCT is specified more than once in a query or subquery.**

Explanation: The SQL statement contains the keyword DISTINCT more than once in the SELECT clause or HAVING clause.

SQLSTATE 42905.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-128 **The keyword, NULL, cannot be used as a data value in a WHERE clause.**

Explanation: The NULL predicate was used as a data value in a data items list associated with a search condition predicate. This is not allowed. For example, the following statement is incorrect:

```
SELECT * FROM SAMPLE
WHERE PARTNO IN ('SMITH',NULL,'JONES')
```

It should be:

```
SELECT * FROM SAMPLE
WHERE PARTNO IN ('SMITH','JONES')
OR PARTNO IS NULL
```

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-129 **SQL statement contains too many *string*.**

Explanation: The **string** that may appear here is listed below along with the allowed associated limits:

• **Format 1**

SQL statement contains too many input host variable names.

INPUT HOST VARIABLE NAMES - 4096
(CHARACTERS)

• **Format 2**

SQL statement contains too many output host variable names.

OUTPUT HOST VARIABLE NAMES - 4096
(CHARACTERS)

• **Format 3**

SQL statement contains too many input host variables.

INPUT HOST VARIABLES - 256

• **Format 4**

SQL statement contains too many output host variables.

OUTPUT HOST VARIABLES - 256

• **Format 5**

SQL statement contains too many table names.

TABLE NAMES - 15

• **Format 6**

SQL statement contains too many selected columns.

SELECTED COLUMNS - 255

• **Format 7**

SQL statement contains too many cursor references.

CURSOR REFERENCES - 512

• **Format 8**

SQL statement contains too many CCSID overrides.

CCSID OVERRIDES - 80

•

Format 9

SQL statement contains too many host identifiers.

HOST IDENTIFIERS - 512

Note: For Format 8, the 80 associated with CCSID OVERRIDES refers to the number of UNIQUE combinations of CCSID and data type. If you override the same data type with the same CCSID for several different host variables or table columns, this constitutes one override only.

SQLSTATEs:

54013 - Characters in host variables - Input host variables - Output host variables - Host identifiers.

54004 - Table names - Selected columns.

54019 - CCSID overrides

System Action: Processing of the SQL statement ends.

If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: For Formats 1 through 7, correct the statement and try again. For Format 8, the correct user response is determined by the cause of the error.

• This error can occur because you have overridden too many host variables in the SQLDA. Correct the situation by eliminating some of the overrides.

• This error can also occur if the columns which you have selected from the table contain too many unique combinations of CCSID and data type. Try breaking your statement into one or more queries each having no more than 80 CCSID overrides.

To determine which columns have overrides, SELECT the CCSID column from the SYSTEM.SYSCOLUMNS catalog table for each column in your query. Those that differ from the application server defaults are overrides. The CCSID information for columns can also be obtained from the SQLDA returned by a DESCRIBE operation. For

more information on CCSIDs, see the *DB2 Server for VSE System Administration* manual.

-130 **A subquery was not enclosed in parentheses.**

Explanation: A subquery in the SQL statement is not enclosed in parenthesis.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-131 **Either the LIKE predicate has an invalid escape character, or the string pattern contains an invalid occurrence of the escape character.**

Explanation: For "column-name LIKE pattern", the escape character can only appear in the character pattern if followed by itself, %, or _. You cannot use the escape character when the column is defined as mixed data, or the pattern is valid mixed data.

SQLSTATES:

22019 The LIKE predicate has an invalid escape character.

22025 The LIKE predicate string pattern contains an invalid occurrence of an escape character.

System Action: Processing of the SQL statement has ended.

Programmer Response: Correct the string pattern, or choose a different ESCAPE character and change the pattern accordingly.

-132 **LIKE or NOT LIKE is used incorrectly. You must precede it with a column name and follow it with either a quoted string, an input variable, or the special register USER.**

Explanation: LIKE or NOT LIKE is incorrectly specified. In `x [NOT] LIKE y`, `x` must be a column name and `y` must be in quotation marks.

If `x` appears in a WHERE clause when updating or deleting from a view, it must not be derived from an expression, a constant, or a scalar function in a VIEW definition.

SQLSTATE 42824.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-133 **You must use a column name, rather than an expression, as the argument of a column function when that column is a correlated reference column in a WHERE clause or HAVING clause.**

Explanation: The argument of a column function in a WHERE clause or HAVING clause cannot be an expression involving a correlated reference column; the argument must be a column only. The following example is incorrect:

```
SELECT DEPT,SUM(YEARS) FROM STAFF X
GROUP BY DEPT HAVING SUM(YEARS) >
ANY (SELECT AVG(YEARS) FROM STAFF
GROUP BY DEPT HAVING
MAX(YEARS) > MIN(1*X.YEARS))
```

The expression `(1*X.YEARS)` must not be the argument of the column function MIN. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42906.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-134 **Improper use of the long string column *column-name*.**

Explanation: The SQL statement references a long string column improperly. The following items are not allowed:

- A CREATE INDEX statement
- A function other than SUBSTR or LENGTH
- A GROUP BY clause
- A PRIMARY KEY, FOREIGN KEY, or UNIQUE clause
- A SELECT DISTINCT statement
- A subselect of an INSERT
- A subselect of a UNION or UNION ALL
- An expression in a SET clause of an UPDATE
- An ORDER BY clause
- By itself in a predicate other than LIKE.

If it is none of the items listed above, it may be a long string column that is in a base table for a view that must be materialized in order to process the SQL statement. View materialization is explained in the *DB2 Server for VSE & VM Database Administration* manual.

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

Another format for this code is:

Format 2

SQLCODEs

- Improper use of the long string input variable.

SQLSTATE 42907.

System Action: Processing of the SQL statement has ended.

User Response: The use of long strings is described in the *DB2 Server for VSE & VM Application Programming* manual. If you diagnose it as a view materialization restriction, define a view that does not include the long string column. Correct the statement. Try again.

-135 The input for a long string column in an INSERT statement or UPDATE statement must be from a host variable or be the keyword NULL.

Explanation: The UPDATE or INSERT is using constants, column names, or subqueries where it should be using NULL or a host variable.

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

SQLSTATE 56033.

User Response: Refer to the *DB2 Server for VSE & VM Application Programming* manual for information on the use of long strings. Correct the statement. Try again.

-136 A package name consisting of more than two parts is not supported.

Explanation: A name consisting of more than two parts was used for the package name of a DROP PACKAGE or an extended dynamic SQL statement. This is not supported.

SQLSTATE 56048.

System Action: Processing of the SQL statement ends.

User Response: Correct the statement. Try again.

-137 The length resulting from operation is greater than size.

Explanation: The specified scalar operation **operation** gave a result whose length was greater than the acceptable maximum, **size**.

SQLSTATE 54006.

System Action: Processing of the SQL statement has ended.

Programmer Response: Correct the statement. Try again.

-140 The WITH CHECK OPTION cannot be used for the specified view.

Explanation: The WITH CHECK OPTION cannot be used in a view definition under the following circumstances:

- The view is defined in such a way as to be read-only.
- The SELECT statement of the view contains a subselect.

SQLSTATE 42813.

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

User Response: Refer to the *DB2 Server for VSE & VM SQL Reference* manual for rules regarding the use of the WITH CHECK OPTION in the view definition.

-141 The INSERT or UPDATE is not allowed because a resulting row does not satisfy the view definition.

Explanation: The WITH CHECK OPTION was specified in the definition of the view (or on at least one of the views on which this view is based), that is the object of the INSERT or UPDATE statement. Consequently, all attempts to insert or update in that view are checked to ensure that the results conform to the view definition.

SQLSTATE 44000.

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

User Response: Examine the view definition to determine why the requested INSERT or UPDATE was rejected.

-144 Invalid section number.

Explanation: The specified section number is invalid for one of the following reasons:

- It exceeds the maximum section number supported by the database.
- The section number is already assigned to another valid SQL statement (no error detected) that is not related to the current SQL statement.
- The specified section number is less than zero.

SQLSTATE 58003.

System Action: The preprocessing of the program ends. No package is created.

User Response: Do not continue further processing. Notify your system programmer of this distribution protocol error.

-149 **The view cannot be used to modify data because it is based on more than one table.**

Explanation: INSERT, DELETE, or UPDATE of a view is not permitted if the VIEW is based on more than one table.

SQLSTATE 42807.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-151 **A column of a view cannot be updated because it is derived from an expression.**

Explanation: A column of a view may be updated only if derived directly from a column of a base table.

SQLSTATE 42808.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-153 **You must specify a COLUMN name-list in the CREATE VIEW statement because a view column name is derived from an expression or a built-in function.**

Explanation: When a view column is not derived directly from a column (for example, from an expression or function), a column name-list must be supplied in the CREATE VIEW statement.

Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42908.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-154 **View limitations do not allow you to use the following operation: *operation*.**

Explanation: Certain limitations exist when creating views:

- **Format 2:**

View limitations do not allow you to use either of the following operations: GROUP-BY or DISTINCT.

- **Format 3**

View limitations do not allow you to use the following operation: INPUT VARIABLES.

- **Format 4**

View limitations do not allow you to use the following operation: CURSOR REFERENCE.

- **Format 5:**

View limitations do not allow you to use the following operation: UNION in views.

SQLSTATEs:

42809 CREATE INDEX on a view

42909 Anything else.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-157 **View *owner.view-name* cannot be identified in a foreign key clause.**

Explanation: The indicated view 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.

SQLSTATE 42810.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-158 **The CREATE VIEW statement failed. The number of entries in the COLUMN name-list is not equal to the number of items in the SELECT clause.**

Explanation: If a column name-list is specified on a CREATE VIEW statement, the number of column name-list entries (or view column names) must be equal to the number of columns in the SELECT clause defining the view. For example, the following command is not correct:

```
CREATE VIEW SAMPLE (SAMP1) AS
SELECT SUPPNO, PARTNO FROM QUOTATIONS
```

SQLSTATE 42811.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement so that the number of columns specified in the column name-list for the view is equal to the number of columns in the SELECT clause.

-159 **The following clause, keyword, or name was expected, but not found in the SQL statement: *string*.**

Explanation: A required keyword was incorrectly specified or was omitted from the SQL statement. Some specific examples of this error are:

- **Format 1:**

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The following clause, keyword, or name was expected, but not found in the SQL statement: IN clause.

- **Format 2:**

The following clause, keyword, or name was expected, but not found in the SQL statement: USING descriptor or FROM clause.

- **Format 3:**

The following clause, keyword, or name was expected, but not found in the SQL statement: USING descriptor.

- **Format 4:**

The following clause, keyword, or name was expected, but not found in the SQL statement: SETTING clause.

- **Format 5:**

The following clause, keyword, or name was expected, but not found in the SQL statement: SETTING or FOR clause.

- **Format 6:**

The following clause, keyword, or name was expected, but not found in the SQL statement: FROM clause.

- **Format 7:**

The following clause, keyword, or name was expected, but not found in the SQL statement: DESCRIPTOR keyword.

- **Format 8:**

The following clause, keyword, or name was expected, but not found in the SQL statement: SET QUERYNO.

- **Format 9:**

The following clause, keyword, or name was expected, but not found in the SQL statement: host variable or string constant in FROM clause.

- **Format 10:**

The following clause, keyword, or name was expected, but not found in the SQL statement: LANGUAGE.

- **Format 11:**

The following clause, keyword, or name was expected, but not found in the SQL statement: EXTERNAL.

- **Format 12:**

The following clause, keyword, or name was expected, but not found in the SQL statement: SERVER GROUP.

SQLSTATE 42601.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this

error occurs in other than a preprocessing run, the function ends.

User Response: Correct the statement to use the proper form of the PREPARE statement and rerun.

-160 **Use or value of *string1* is inconsistent with the use or value of *string2* in this statement.**

Explanation: The user specification included parts of an SQL statement that are not allowed to coexist with each other. Usually this is a result of using syntax that is an incorrect mixture of two forms of an SQL statement. Some specific examples of this condition are:

- **Format 1:**

Use of FETCH is inconsistent with the use of non-SELECT statement in this statement.

Note: The following is an example of where this can occur:

```
stmt1='DROP TABLE FRED';
PREPARE STMT1 FROM :stmt1;
DECLARE CURSOR c1 CURSOR FOR STMT1;
OPEN c1;
FETCH c1 USING DESCRIPTOR :SQLDA;
```

- **Format 2:**

Use of PUT is inconsistent with the use of non-INSERT statement in this statement.

Note: PUT cannot be executed against any statement but an INSERT. This is similar to Format 1.

- **Format 3:**

Use of the USING host variable clause is inconsistent with the use of DECLARE CURSOR FOR INSERT in this statement.

Note: The USING clause cannot appear in the OPEN statement for an insert-cursor.

- **Format 4:**

Use of OPEN with cursor name host variable is inconsistent with the use of USING host variable list in this statement.

Note: An Extended OPEN must not use a host variable list (an SQLDA is needed).

```
PREPARE s1 FROM 'SELECT * FROM t1
WHERE c1=?';
DECLARE c1 CURSOR FOR s1;
OPEN :cur USING :hv1;
```

- **Format 5:**

Use of OPEN with the cursor name host variable is inconsistent with the use of the input variable in DECLARE CURSOR FOR SELECT in this statement.

- **Format 6:**

Use of statement name is inconsistent with the use of IN clause in this statement.

- Note:** An IN package-tag clause is not supported in a non-Extended EXECUTE, a non-Extended DECLARE CURSOR, or a non-Extended DESCRIBE statement. These statements are recognized as being Extended by virtue of the fact that package section is identified by a host variable.
- **Format 7:**
Use of USING with the host variable list is inconsistent with the use of Extended EXECUTE in this statement.

Note: An Extended EXECUTE must not use a host variable list (an SQLDA is needed).
 - **Format 8:**
Use of the USING clause or FROM clause is inconsistent with the use of the non-Dynamic PUT statement in this statement.

Note: A PUT statement that is linked to a static INSERT statement may not have either a FROM clause or a USING clause.
 - **Format 9:**
Use of FETCH is inconsistent with the use of DECLARE CURSOR FOR INSERT in this statement.

Note: This differs from Format 1 in that it is for static cursors, and is caught at program run time.
 - **Format 10:**
Use of FETCH with cursor name host variable is inconsistent with the use of INTO clause in this statement.

Note: An Extended FETCH must not use a host variable list (an SQLDA is needed).
 - **Format 11:**
Use of cursor for SELECT is inconsistent with the use of cursor name host variable in this statement.

Note: A static DECLARE CURSOR statement cannot exist with a host variable cursor name.

```
DECLARE :cur CURSOR FOR SELECT * FROM t1;
```
 - **Format 12:**
Use of CURSOR FOR INSERT is inconsistent with the use of cursor name host variable in this statement.

Note: A static DECLARE CURSOR cannot exist with a host variable cursor name.

```
DECLARE :cur CURSOR FOR INSERT  
INTO t1 VALUES ('a', 'b');
```
 - **Format 13:**
Use of cursor name constant is inconsistent with the use of statement ID in this statement.
 - **Format 14:**
Use of statement name is inconsistent with the use of cursor name host variable in this statement.

Note: In an Extended DECLARE CURSOR, the cursor name must be a host variable.
 - **Format 15:**
Use of NEW is inconsistent with the use of KEEP/REVOKE in this statement.

```
CREATE PROGRAM PACK1 USING OPTIONS NEW, KEEP
```
 - **Format 16:**
Use of EXECUTE is inconsistent with the use of SELECT in this statement.

Note: This is raised when a dynamic EXECUTE is issued against a SELECT section. It is not issued when an Extended EXECUTE without an OUTPUT DESCRIPTOR is issued against a SELECT section.
 - **Format 17:**
Use of FROM NULL is inconsistent with the use of PREPARE SINGLE ROW in this statement.

```
PREPARE SINGLE ROW FROM NULL
```
 - **Format 18:**
Use of FOR is inconsistent with the use of PREPARE SINGLE ROW in this statement.

```
PREPARE SINGLE ROW FROM :hv1 FOR :hv2
```
 - **Format 19:**
Use of OUTPUT descriptor is inconsistent with the use of statement name in this statement.

Note: This is issued when a non-Extended EXECUTE statement contains an OUTPUT DESCRIPTOR clause.

```
EXECUTE s1 USING OUTPUT DESCRIPTOR SQLDA
```
 - **Format 20:**
Use of *value* is inconsistent with the use of EXPLAIN in this statement.

```
value = ALL  
REFERENCE  
STRUCTURE  
COST  
PLAN
```
 - **Format 21:**
Use of PUT is inconsistent with the use of DECLARE CURSOR for SELECT in this statement.

Note: Similar to Format 9.
 - **Format 22:**
Use of CHECK/ERROR is inconsistent with the use of MODIFY in this statement.

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- **Format 23:**
Use of EXECUTE is inconsistent with the use of blocked INSERT in this statement.
- **Format 24:**
Use or value of SERVER GROUP is inconsistent with the use or value of DEFAULT SERVER GROUP in this statement.
- **Format 25:**
Use or value of COMMIT ON RETURN is inconsistent with the use or value of RESULT SETS in this statement.

SQLSTATEs:

- 24501** Format 1.
24503 Format 2.
07003 Format 16.
42601 Format 20.
42867 Format 15, Format 22, Format 24, and Format 25.
- Spaces** Format 3 through 14, Format 17 through 19, and Format 21.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Check the syntactical forms of the statement, correct the inconsistencies, and reprocess the program or repeat the function.

-161 **You specified more than one alternative of the *option* option or else you specified the option more than once.**

Explanation: When options were offered, you chose more than one. You can select only one. Specifically, the following errors cause this message:

- In CREATE PACKAGE, both possibilities of an option pair were chosen or a combination of more than one possibility was chosen. For example, you cannot specify option pairs such as REPLACE/NEW and KEEP/REVOKE, or a combination like SBLOCK/BLOCK/NOBLOCK.
- Repeating an option may also cause this error condition. For example, in CREATE PACKAGE, options such as KEEP cannot be specified more than once.

SQLSTATE 42853.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this

error occurs in other than a preprocessing run, the function ends.

User Response: Choose only one of the alternatives, or choose it only once. Repeat the run. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for information about related options.

-162 **A *name-type* name is missing, is too long, or contains incorrect characters.**

Explanation: SQL names must start with an alphabetic character (A-Z) or national character (@, #, \$) and may follow with these alphabetic characters, national characters, numbers (0-9), or underscore (_). Ordinary identifiers (table names, column names, dbspace names, etc.), cursor names, and statement names are limited to a length of 18 characters. Authorization names, passwords, and package names are limited to 8 characters. When authorization names or passwords are specified as host variables, they are fixed-length character variables of length 8 (or length 9 in C), padded on the right with blanks.

This message indicates a violation of the above rules for identifier contents or length, or the omission of an identifier of the indicated type.

Other formats of this code include:

- **Format 2**
A cursor name is missing, is too long, or contains incorrect characters.
- **Format 3**
Either a user ID or a package name is missing, is too long, or contains incorrect characters.
- **Format 4**
Either a user ID or a package name is missing, is too long, or contains incorrect characters.
- **Format 5**
A statement name is missing, is too long, or contains incorrect characters.
- **Format 6**
A user ID is missing, is too long, or contains incorrect characters.
- **Format 7**
A package name is missing, is too long, or contains incorrect characters.
- **Format 8**
A qualifier or field name is missing, is too long, or contains incorrect characters.

SQLSTATEs:

- 42601** *name-type* missing
42622 *name-type* too long
42602 *name-type* incorrect.

System Action: If this error occurs during DB2 Server

for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Correct the error in the specification of the identifier and reprocess the program or repeat the function.

-163 A host variable is not allowed in this SQL statement.

Explanation: This particular SQL statement does not support the use of a host variable specification. In particular, the DROP PACKAGE statement permits a host variable name for the specification of the target program name, but other DROP statements require that you specify a constant for the name of the entity that is to be dropped.

SQLSTATE 42618.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-164 A graphic constant was not ended correctly.

Explanation: All graphic constants must be started and ended with the proper shift-out and shift-in characters. The SQL form of graphic constant is:

```
G'so...data...si'
or
N'so...data...si'
```

This form can be used in SQL statements, COBOL programs, and DBS Utility.

If this error occurred in a COBOL program or in DBS Utility, a graphic constant was started properly with G' so or N' so and the terminating si was found, but the si was not followed by an ending quote.

In a PL/I program, a graphic constant was started properly, but was not ended properly. The correct formats for a PL/I graphic constant are (format 1):

```
soX'427D'...data...X'427D42C7'si
```

or (format 2):

```
'so...data...si'G
or
'so...data...si'N
```

SQLSTATE 42604.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this

error occurs in other than a preprocessing run, the function ends.

User Response: Correct the error in the specification of the constant and reprocess the program or repeat the function.

-165 You cannot have leading or trailing blanks in a delimited identifier.

Explanation: You have entered a delimited identifier (".....") that contains either leading blanks, trailing blanks, or all blanks within the double quotes.

SQLSTATE 42602.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Correct the statement. Try again.

-166 A graphic constant began incorrectly.

Explanation: All graphic constants must be started and ended with the proper shift-out and shift-in characters. The SQL form of graphic constant is:

```
G'so...data...si'
or
N'so...data...si'
```

This form can be used in ISQL, COBOL programs, and DBS Utility. In these situations, a graphic constant was started with G', or with N', but a so character was not found following it.

In a PL/I program, a graphic constant was started improperly. For instance, the SQL form was used (G'so...data...si' or N'so...data...si'). The correct formats for a PL/I graphic constant are (format 1):

```
soX'427D'...data...X'427D42C7'si
```

or (format 2):

```
'so...data...si'G
or
'so...data...si'N
```

SQLSTATE 42604.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Correct the statement. Try again.

SQLCODES

-167 **You specified either an odd number of hexadecimal characters or incorrect hexadecimal characters in a hexadecimal constant.**

Explanation: Characters other than 0–9 or A–F were found in a hexadecimal constant (for example, X'0F2AG4') where G is not permitted. This can also result from failure to provide an even number of hexadecimal characters (for example, X'0F429C6').

SQLSTATE 42606.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Correct the statement. Try again.

-168 **You specified an incorrect *parameter* parameter or parameter value.**

Explanation: The parameter or the value for the parameter named is not valid. For example, the value is above or below the value limit, or it is an incorrect value type.

SQLSTATE 42615.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Correct the statement. Try again.

-169 **Incorrect continuation of a graphic constant.**

Explanation: A graphic literal in an SQL statement must be contained on one line in a source program.

SQLSTATE Spaces.

System Action: Processing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response: Correct the error in the continuation and reprocess the program.

-170 **A graphic string either is too long, is improperly terminated, or contains bytes that are incorrectly paired for graphic strings.**

Explanation: All graphic strings must be started and ended with the proper shift-out and shift-in characters.

In addition to the proper shift-out and shift-in

characters, a graphic string must have properly paired bytes, and not be too long.

The SQL form of a graphic string is:

```
G'so...data...si'  
or  
N'so...data...si'
```

This form can be used in ISQL, COBOL programs, and DBS Utility. In these situations, the termination sequence for a graphic constant (a si (X'0F') character followed by an apostrophe) was detected, but it either was not found in the proper byte positions or was incomplete following the graphic constant string. The terminating sequence should follow a pair of bytes. Instead it was found following a single byte or not found.

There are two formats for a PL/I graphic constant, (format 1):

```
soX'427D'..data...X'427D42C7'
```

or (format 2):

```
'so...data...si'G  
or  
'so...data...si'N
```

In a PL/I program, the following conditions in a graphic constant in an SQL statement can cause this error:

- A DBCS apostrophe within the DBCS constant was started with only one X'427D'. The correct form requires two: X'427D427D', for both formats.
- The beginning of the ending sequence of the DBCS constant (X'427D') was not followed by X'42C7' (format 1 only).

The correct formats for inserting a graphic apostrophe within a PL/I graphic constant are (format 1):

```
soX'427D'...X'427D427D'...data...  
X'427D42C7'si
```

or (format 2):

```
'so...X'427D427D'...data...si'G  
or  
'so...X'427D427D'...data...si'N
```

- After so (X'0E'), a si (X'0F') (both formats) was not found on an even byte boundary within the length limit (18 bytes for identifiers and 254 bytes for constants) in order to terminate graphic data.

If the graphic option is YES, so/si pairings are imposed on host variable and label names, and character constants in PL/I and COBOL. A violation of this rule causes SQLCODE -170.

The scan for proper termination continued to the end of the SQL statement or to the limit of 127 graphic characters for character string constants in dynamic

SQL statements, and to the limit of the line for the SQL statements imbedded in a host language program.

SQLSTATE 42604.

System Action: If this error occurs during DB2 Server for VSE preprocessing, processing continues, but a new package is not produced, and no SQLSTATE is issued. If the package existed previously, it is restored. If this error occurs in other than a preprocessing run, the function ends.

User Response: Provide the correct termination of a graphic constant or decrease the size of a graphic constant. Try again.

-171 The data type, length, or value of argument *argument-number* of function-type is invalid.

Explanation: The above message is issued under the following circumstances:

function-type	argument number	reason	
CHAR	1	DATE or TIME	
	2	must be USA or ISO or EUR or JIS or LOCAL	
CONCATENATE		not both character or both graphic	
DATE	1	character string=7, timestamp, date or positive NUMBER	
DAY	1	date, timestamp, DECIMAL(8,0), DECIMAL(20,6)	
DAYS	1	date or timestamp	
DECIMAL	1	not numeric	
	2	less than 1 or greater than 31	
	2	not a numeric constant	
	3	less than 0 or greater than PRECISION	
	3	not a numeric constant	
DIGITS	1	not SMALLINT, INTEGER or DECIMAL	
FLOAT	1	not numeric	
		HEX 1 exceeds 127 in length and >63 DBCS for graphic	
		HOUR 1 timestamp, time, DECIMAL(6,0), DECIMAL(20,6)	
		INTEGER 1 not numeric	
		MICROSECOND 1 timestamp, DECIMAL(20,6)	
		MINUTE 1 timestamp, time, DECIMAL(6,0), DECIMAL(20,6)	
		MONTH 1 date, timestamp, DECIMAL(8,0), DECIMAL(20,6)	
		SECOND 1 timestamp, time, DECIMAL(6,0), DECIMAL(20,6)	
		STRIP 1 not short character compatible or graphic not L T or B (without quotes)	
			2 not a character or graphic constant of length 1
			3 does not match datatype of STRING
			3 not character compatible or graphic less than 0 or greater than
			2 max_length(no decimal or float less than 0 greater than max_length - START + 1 (no numeric constant=zero
			3
			1 TIME 1 TIMESTAMP or TIME
			1 TIMESTAMP 1 TIMESTAMP, CHAR STRING=8 or 14

SQLCODEs

function-type	argument number	reason
	2	TIME
TRANSLATE	1	not short character compatible or graphic
	4	not a character constant of length 1
VALUE		incompatible types
VARGRAPHIC	1	not character or character compatible
	1	exceeds 127 characters
YEAR	1	date, timestamp, DECIMAL(8,0), DECIMAL(20,6)

Note: Long strings are only allowed for LENGTH and SUBSTR. See description for limitations.

SQLSTATEs:

22011 An argument of SUBSTR is out of range

42815 Anything else.

System Action: Processing of the SQL statement has ended.

Programmer Response: Correct the statement. Try again.

-172 **The number of arguments specified for function-type is invalid.**

Explanation: A SQL statement has specified the scalar function **function-type** with either too many or too few arguments. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.

SQLSTATE 42605.

System Action: The statement cannot be executed.

User Response: Correct the statement. Try again.

-173 **UR is specified on the WITH clause but the cursor is not read-only.**

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

SQLSTATE 42801.

System Action: Statement execution fails.

User Response: Change the isolation level specified on the WITH clause.

-180 **The string representation of a date/time value has invalid syntax.**

Explanation: The string representation of a date/time value does not conform to the syntax, or does not meet the minimum length requirements of any supported formats.

SQLSTATE 22007.

System Action: The statement cannot be executed.

User Response: Check that the datetime value conforms to the syntax of a supported format such as ISO, JIS, EUR, USA, or LOCAL. Correct the value where required.

-181 **The string representation of a date/time value is not a valid date/time value.**

Explanation: The string representation of a datetime value contains a value that is out of range.

The proper ranges for datetime values are as follows:

- 0001 to 9999 for years.
- 1 to 12 for months.
- 1 to 31 for days; except when the month is 4, 6, 9, or 11 when the proper range is 1 to 30 days; or when the month is 2 when the proper range is 1 to 28 days in a non-leap year or the proper range is 1 to 29 days in a leap year.
- 0 to 24 for hours. If the hour is 24, the other parts of the time, including the microsecond part of a TIMESTAMP value, are zero.
- 0 to 59 for minutes.
- 0 to 59 for seconds.

Note: The above ranges do not apply to LOCAL format values.

SQLSTATE 22007.

System Action: The statement cannot be executed.

User Response: Provide a value within the valid range. Try again.

-182 **An arithmetic expression with a date/time value is invalid.**

Explanation: The specified arithmetic expression contains an improperly used date/time value or labeled duration.

SQLSTATE 42816.

System Action: The statement cannot be executed.

User Response: Correct the indicated arithmetic expression. Try again.

-183 **An arithmetic operation on a date or timestamp has a result that is not within the valid range of dates.**

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

SQLSTATE 22008.

System Action: The statement cannot be executed.

User Response: Examine the SQL statement to determine the cause of the problem. The problem may be data-dependent, in which case you must examine the data that was processed at the time the error occurred.

-184 **Invalid parameter in a date/time arithmetic expression or scalar function argument list.**

Explanation: The specified arithmetic expression contains a parameter marker improperly used, or the parameter marker is used as a scalar function argument.

SQLSTATE 42610.

System Action: The statement cannot be executed.

User Response: Correct the indicated arithmetic expression. Try again.

-185 **The application uses the local format option with a date or time, but the local exit has not been installed.**

Explanation: The local format option has been used with a date or time value but no date or time exit has been installed. This error may occur if the LOCAL option is used with the CHAR function, or if the SYSOPTIONS table indicated that an exit for date or time was supplied, but in fact the exit has not been installed.

SQLSTATE 57008.

System Action: The statement cannot be executed.

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

-187 **Invalid use of labeled durations.**

Explanation: Labeled durations such as 10 MONTHS can only be used in a valid datetime arithmetic context. They are not to be used as stand-alone expressions such as COL1 > 5 DAYS.

Some examples that cause this SQLCODE to be issued are:

- COL1 = 3 DAYS + 4 MONTHS
- SELECT 10 YEARS FROM TABLE1
- DAYS(4 YEARS)

SQLSTATE 42816.

System Action: The statement cannot be executed.

User Response: Correct the statement. Try again.

-189 **An invalid CCSID value *ccsid_value* was specified.**

Explanation: The *ccsid_value* was invalid for one of the following reasons:

- Not in range of 1 to 65534
- Not compatible with specified subtype.
- Not supported by the DB2 Server for VSE database management system.

SQLSTATE 22522

System Action: Processing of the SQL statement ends.

User Response: Correct the statement. Try again.

-191 **A mixed data value is improperly formed. Reason Code = *reason-code*.**

Explanation: The mixed data contained an improperly formed DBCS portion. This could be a missing X'0E'(shift-out), or X'0F'(shift-in), or a stranded half byte of a DBCS character. The *reason codes* for this message are:

1. Conversion of the input statement.
2. Conversion of the input data, either constant or host variable.
3. Conversion of internal data during a column to column move.
4. Conversion of internal data during a column to column compare.
5. Conversion of internal data during a scalar function computation.
6. Conversion of internal data during datetime arithmetic with a character operand.
7. Conversion of output data to host variable.

SQLSTATE 22504.

System Action: Processing of the SQL statement ends.

User Response: Correct the data. Try again.

-192 ***function-type* scalar function does not allow the first argument to be of MIXED subtype.**

Explanation: You used an expression (column, host variable, constant, and so on) of MIXED subtype as the first argument of the STRIP or TRANSLATE scalar function. This is not allowed.

SQLCODEs

SQLSTATE 42937.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-198 A null SQL statement has resulted.

Explanation: Only the SQL statement delimiters were found. This results in a null SQL statement. The SQL statement start delimiter is EXEC SQL. The SQL statement end delimiter depends on the host language and can be one of the following:

- Assembler - absence of a continuation marker
- C, PL/I - semi-colon
- COBOL - END-EXEC

SQLSTATE Spaces.

System Action: The empty statement is marked as incorrect. Processing of the statement ends.

User Response: Check the program to find the empty statement and determine if any SQL statements are missing. Correct the program and resubmit it.

-201 The following name was not found in the FROM clause: *name*.

Explanation: One of the following has occurred:

- Column reference table qualifier is not in the FROM clause.
- Column reference table qualifier is in the FROM clause but it is an unexpected table name.
- Correlation variable used in the SELECT clause is not in the FROM clause that follows.
- WHERE clause table name qualifier or correlation variable not found in a FROM clause. It may be any FROM clause that precedes it.
- ORDER BY clause table name qualifier or correlation variable is not found at the outer most query level.
- GROUP BY clause table name qualifier or correlation variable is not found at the outer most query level.

Note: If a table-name in a FROM clause is qualified by an owner and this table-name is used to qualify a column reference in a WHERE clause, ORDER BY clause, GROUP BY clause, or HAVING clause, the column reference qualifier must also include the owner along with the table-name. As an example, the following is incorrect:

```
SELECT DESCRIPTION FROM SQLDBA.INVENTORY,  
SQLDBA.QUOTATIONS WHERE INVENTORY.PARTNO  
= QUOTATIONS.PARTNO
```

It must be entered as:

```
SELECT DESCRIPTION FROM SQLDBA.INVENTORY,  
SQLDBA.QUOTATIONS WHERE SQLDBA.INVENTORY.  
PARTNO = SQLDBA.QUOTATIONS.PARTNO
```

Or, if you are the owner of the table, you can enter it as:

```
SELECT DESCRIPTION FROM INVENTORY,  
QUOTATIONS WHERE INVENTORY.PARTNO  
= QUOTATIONS.PARTNO
```

SQLSTATE 42703.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-202 Column *column-name* was not found in any table referenced by the statement.

Explanation: Since the column name **column-name** was unqualified, all the columns associated with the tables or views in the SQL statement were searched and **column-name** was not among them.

This SQLCODE may result if you use the double quotation character (") to mark the beginning and ending of a character string constant, instead of using the single quotation character (') required by SQL. For example, the following query generates SQLCODE -202 because the system attempts to use "STORED QUERIES" as a column name, not a character string constant:

```
SELECT * FROM SYSTEM.SYSCATALOG  
WHERE TNAME="STORED QUERIES"
```

This query should be:

```
SELECT * FROM SYSTEM.SYSCATALOG  
WHERE TNAME='STORED QUERIES'
```

Note: This code is returned when either the statement is being executed, or the program is being preprocessed with the EXIST option.

SQLSTATE 42703.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-203 The unqualified column *column-name* was found in more than one table in the FROM clause.

Explanation: The SQL statement contained a column name **column-name** which was not associated with a specific table. The column name must be qualified so that it can be associated with a table in the FROM clause.

SQLSTATE 42702.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-204 *owner.object-name* was not found in the system catalog.

Explanation: The name *owner.object-name* specified in the message text is incorrect. This code is returned when either the statement is being executed, or the program is being preprocessed with the EXIST option. The *owner.object-name* referenced may not be the direct object name being manipulated. You may need to check the system catalog tables to identify the type of object missing.

SQLSTATEs:

42809 DROP VIEW table or DROP TABLE

42704 Anything else.

System Action: Processing of the SQL statement has ended.

User Response: Create the required object or provide the correct name of the object. Try again.

If the required object is one of the EXPLAIN tables, you can use a supplied A-type source member (ARISEXP) to create the EXPLAIN tables. See the *DB2 Server for VSE & VM SQL Reference* manual for details about the ARISEXP source member. The implicit EXPLAIN version of this SQLCODE is -649.

If the specified object is a stored procedure, use the CREATE PROCEDURE statement to define the stored procedure. If the specified object is a stored procedure server, use the CREATE PSERVER statement to define the stored procedure server. Once the stored procedure or stored procedure server has been defined, issue START PSERVER or START PROC to activate the new definition.

Note: If the CREATE statement has already been issued for the PROCEDURE, ensure that it has been committed. The CALL statement searches a cache for the procedure being called, and the cache entry is not made until the unit of work in which the CREATE statement was issued has been committed.

-205 Column *column* was not found in table *creator.table*.

Explanation: The SQL command contained a column name **column** which cannot be found in the table specified in the message text.

SQLSTATE 42703.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-206 The *key-type constraint-name* on *owner.table-name* was not found.

Explanation: **Key-type** can be a PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT. For a primary key, **constraint-name** is omitted.

The SQL statement containing a primary key, foreign key constraint, or unique constraint was not found for the named table. Either you specified the **constraint-name** incorrectly, or the key or constraint does not exist for the specified table.

This code is returned when either the statement is being executed, or the program is being preprocessed with the EXIST option.

SQLSTATE 42704.

System Action: Processing of the SQL statement ends.

User Response: Create the required key or constraint, or provide the correct name for the desired key or constraint.

-207 A column name is not allowed in an ORDER BY clause of a UNION.

Explanation: The UNION involves an ORDER BY clause which contains a column name in the order-list. The order-list must contain only integers.

SQLSTATE 42706.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-208 The column *column-name* was specified in the ORDER BY clause but does not appear in the SELECT clause.

Explanation: The ORDER BY clause contains a column name **column** which is not in the SELECT clause.

SQLSTATE 42707.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-209 A column name appears more than once in the SELECT clause, but is not qualified in the ORDER BY clause.

Explanation: The column name in the ORDER BY clause should be qualified so that it can be associated with the appropriate column in the SELECT clause.

SQLSTATE 42702.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-210 **Incorrect symbol used in either a cursor name, owner name, package name, or statement name.**

Explanation: One of the following has occurred:

- A cursor name, owner name, program name, or statement name contained characters other than A-Z, 0-9, \$, @, #, or underscore.
- In a non-extended dynamic statement a cursor name, owner name, program name, or statement name started with a character other than A-Z, \$, @, or #.
- In an extended dynamic statement a cursor name, owner name, program name, or statement name started with a character other than A-Z, \$, @, #, or 0-9.

SQLSTATE 42602.

System Action: Processing of the SQL statement has ended. A package is not produced if the error occurs during preprocessing within a statement that is not an extended dynamic statement.

User Response: When the error occurs in an extended dynamic statement, rollback the logical unit of work, correct the error causing the incorrect name, and rerun the preprocessor. Otherwise, just correct the name and rerun the preprocessor.

-211 **The table name or correlation name *name* appears more than once in the FROM clause.**

Explanation: One of the following conditions was found in the FROM clause of the SQL statement:

1. You repeated a table name (or view name) **name** without associated correlation names to distinguish each occurrence.
2. You repeated a correlation name **name**.
3. You have identical correlation names **name** and table names (or view names) in the same clause, and you repeated the name as a column qualifier.

SQLSTATE 42712.

System Action: Processing of the SQL statement ends.

User Response: The actions below correspond to the numbered conditions above:

1. Use a unique correlation name with each occurrence of the replicated table name (or view name).
2. Use distinct correlation names with the same clause.
3. Use a correlation name that differs from all table names (view names) in the same clause.

Use correlation names as column qualifiers.

-301 **The data type of a host variable or parameter is not compatible with the target data type.**

Explanation: It was found that the data type of the input host variable or parameter is not compatible with the target data type:

- If the target column or parameter is CHAR, VARCHAR, or LONG VARCHAR, the input host variable or parameter must also be character data.
- If the target column or parameter is GRAPHIC, VARGRAPHIC, or LONG VARGRAPHIC, the input host variable or parameter must also be graphic data.
- If the target column or parameter is INTEGER, SMALLINT, FLOAT, or DECIMAL, the input host variable or parameter must also be numeric data. If the host variable is DECIMAL, the data passed to the database manager at execution time in the host variable must be a number in decimal format.
- If the target column or parameter is DATE, TIME, or TIMESTAMP, the input host variable or parameter must be CHAR or VARCHAR.
- If the column in a LIKE predicate is CHAR, VARCHAR, or LONG VARCHAR, the ESCAPE character must also be character data. If the column in a LIKE predicate is GRAPHIC, VARGRAPHIC, or LONG VARGRAPHIC, the ESCAPE character must also be graphic data.

The problem typically occurs on an INSERT or UPDATE statement. It also occurs on an SQL CALL statement if a host variable is specified for a parameter, and the data type of the host variable is incompatible with the expected data type of the parameter. In this case:

- If the parameter is defined correctly in SYSTEM.SYSPARMS, you must modify the calling application to provide a host variable with a data type that is compatible with the parameter. You must then repeat the steps from preprocessing to execution of the calling application.
- If the parameter is defined incorrectly in SYSTEM.SYSPARMS, then you must:
 1. Issue the STOP PROC operator command with the REJECT option to stop the procedure
 2. Use the DROP PROCEDURE statement to remove the existing definition
 3. Use the CREATE PROCEDURE statement to redefine the procedure
 4. Issue the START PROC operator command to activate the procedure

SQLSTATEs:

07006 if the statement is Dynamic

42895 if the statement is Static

System Action: Processing of the SQL statement has ended.

User Response: Check data type of column or parameter and correct the input host variable or parameter. You must repeat the steps from preprocessing to execution of the program.

-302 An input host variable or parameter is invalid for the target column or parameter.

Explanation: The problem typically occurs on an INSERT or UPDATE statement. It also occurs on an SQL CALL statement when a host variable is specified for an input parameter, and the data type of the host variable is incompatible with the expected data type of the parameter. In this case:

- If the parameter is defined correctly in SYSTEM.SYSPARMS, you must modify the calling application to provide a host variable with a data type that is compatible with the parameter. You must then repeat the steps from preprocessing to execution of the calling application.
- If the parameter is defined incorrectly in SYSTEM.SYSPARMS, then you must:
 1. Issue the STOP PROC operator command with the REJECT option to stop the procedure
 2. Use the DROP PROCEDURE statement to remove the existing definition
 3. Use the CREATE PROCEDURE statement to redefine the procedure
 4. Issue the START PROC operator command to activate the procedure

If the error occurred on an INSERT or UPDATE statement, then either the data type and length of your input host variables are not compatible with the target column, or the data type and length assigned to the parameter markers are not compatible with the target column.

DB2 Server for VSE assigns a data type and length to a parameter marker. It gets the data type and length contextually from the expression in which the parameter marker is used. As a result, a host variable can be too large if it exceeds the assumed length of the parameter marker for which it is being substituted. Or, in numeric data, a host variable can be too large if its numeric value exceeds the size that can be handled by the assumed data type (for example, greater than 32767 for SMALLINT).

If this SQLCODE is received after migration by an application that previously executed successfully, refer to the appendixes in the *DB2 Server for VSE & VM SQL Reference* manual about the incompatibilities between the DB2 Server for VSE and SQL/DS releases of software for more information about the problem. (For example, as of SQL/DS Version 3 Release 2, the

precision of decimal variables is enforced and some applications that insert data into decimal columns may receive this error.)

This problem most typically occurs on INSERT or UPDATE where the data type and length assigned to the parameter marker is that of the column being inserted into or updated.

Any one of the following size conditions may have occurred for the assumed parameter marker data type:

- CHAR or VARCHAR (including VARCHAR >254), but the host variable contains a character string that is too long.
- GRAPHIC or VARGRAPHIC (including VARGRAPHIC >127), but the host variable contains a character string that is too long.
- INTEGER, but the host variable contains decimal or float data that is too large or too small for INTEGER.
- SMALLINT, but the host variable contains decimal, float, or integer data that is too large or too small for SMALLINT.
- DECIMAL, but the host variable contains float, decimal, integer, or small integer data that is too large or too small for the assumed DECIMAL precision or scale.
- FLOAT, but the host variable contains a float value that is too large or too small in value.

See the *DB2 Server for VSE & VM SQL Reference* manual for a description of numeric data type maximums and minimums.

This problem can also occur when the assumed data type of the parameter marker in the ESCAPE clause of a LIKE predicate is:

- CHAR or VARCHAR (including VARCHAR > 245), but the length of the ESCAPE character is not 1
- GRAPHIC or VARGRAPHIC (including VARGRAPHIC > 127), but the length of the ESCAPE character is not 2.

SQLSTATEs:

- | | |
|--------------|--|
| 22001 | Character or graphic string is too long for column. |
| 22003 | Numeric overflow or underflow. |
| 22024 | NUL missing from C NUL-terminated string with length greater than 1. |

System Action: Processing of the SQL statement has ended.

User Response: Check the target column or parameter type and correct the host variable or input parameter so that the data will fit in the target column or parameter, or correct the length of the host variable or parameter. If an SQL statement is modified, you must

repeat the steps from preprocessing to execution of the program.

-303 **The data type of the output host variable is not compatible with the data type of the fetched column or expression, or the returned value from an SQL CALL statement.**

Explanation: A SQL CALL, FETCH, or SELECT into the output host variable could not be performed. The data type of an output variable is not compatible with the data type of the fetched column, expression, or returned value from an SQL CALL. The data type of the output host variable and the data type of the fetched column, expression, or returned value must both be numeric, or both be character, or both be DBCS. If the data type of the fetched column, expression, or returned value is date, time, or timestamp, the data type of output host variable must be character, or the same data type as the fetched column, expression, or returned value from SQL CALL statement.

SQLSTATE 42806.

System Action: Processing of the SQL statement has ended.

User Response: Check output data type and correct output variable. If an SQL statement is modified, you must repeat the steps from preprocessing to execution of the program.

If this error is received on an SQL CALL statement, you may need to redefine the stored procedure as follows:

1. Issue the STOP PROC operator command with the REJECT option for the procedure
2. Use the DROP PROCEDURE statement to remove the existing definition
3. Use the CREATE PROCEDURE statement to redefine the procedure
4. Issue the START PROC operator command to activate the procedure.

-304 **A value with data type *data-type1* cannot be assigned to a host variable because the value is not within the range of the host variable in position *position-number* with data type *data-type2*.**

Explanation: An SQL CALL, FETCH, or SELECT into a host variable, position number *position-number*, failed because the host variable with data type *data-type2* was not large enough to hold the retrieved value with data type *data-type1*. In the case of a datetime source data type, the datetime value was too large to fit in the character or datetime output host variable after conversion to character format. The SQL CALL, FETCH, or SELECT statement is not executed. No data is returned.

SQLSTATES:

22001 Character or datetime value too large for host variable.

22003 Numeric overflow or underflow.

System Action: Processing of the SQL statement has ended.

User Response: Correct the output host variable so that it is large enough to contain the source data value. You must repeat the steps from preprocessing to execution of the program.

Note: If the error occurred in the select-list of an outer SELECT statement, indicator variables can be added to each of the expressions, to allow you to get values not in error, and retrieve subsequent rows. In that case, the +802 SQLCODE would be issued and the indicator VARIABLEs associated with the last VARIABLE in error has been assigned a value of -2.

-305 **You did not associate an indicator variable with an output host variable. An error has occurred because a NULL data value was fetched.**

Explanation: A null value has been fetched but the output host variable has provided no indicator variable.

SQLSTATE 22002.

System Action: Processing of the SQL statement has ended.

User Response: Declare an indicator variable and connect it to the output host variable. This will allow null values to be returned. You must repeat the steps from preprocessing to execution of the program.

-306 **You did not declare the host variable *variable-name*.**

Explanation: The named host variable was not declared between the BEGIN DECLARE SECTION and the END DECLARE SECTION SQL statements, or an error occurred in the declaration of the host variable.

SQLSTATE Spaces.

System Action: Processing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response: Add a declaration for the missing host variable in the host variable declare section. You must repeat the steps from preprocessing to execution of the program.

-307 **You have already declared host identifier *ident-name*.**

Explanation: The host-identifier *ident-name* is declared more than once in a SQL DECLARE section in this program or subprogram unit. The host identifier must

be the name of a host variable or indicator variable. In those languages that support host structures, the host identifier can be a host structure or a host structure field. The indicator variable can be an indicator array.

SQLSTATE Spaces.

System Action: Processing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response: Remove the duplicate declaration. Rerun the preprocessor.

-309 You used a negative indicator variable in a predicate in an invalid context.

Explanation: A predicate uses a negative indicator variable. Negative indicator variables are not allowed in predicates (except predicates using the "=" operator) of Dynamic SQL statements. Nor are they allowed in predicates (except predicates using the "=" operator) of Extended Dynamic SQL statements that have no input SQLDA in the PREPARE statement. See the *DB2 Server for VSE & VM Application Programming* manual for information about using negative indicator variables.

SQLSTATE 22512.

System Action: Processing of the SQL statement ends.

User Response: Correct the input host variable so that it does not have a negative indicator variable or change the SQL statement so that the negative indicator variable is used in a valid context. You must repeat the steps from preprocessing to execution of the program.

-311 An invalid length was specified for an input host variable character string.

Explanation: The value contained in the length portion of the variable length host variable is either negative or greater than the length of its data portion.

SQLSTATE 22501.

System Action: Processing of the SQL statement ends. If this error occurred during an explicit connect, the logical unit of work (if any) is rolled back and the resource adapter returns to the application with SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: If this SQLCODE was issued in response to a non-CONNECT statement, correct the value in the length portion of the host variable so that it is not negative and it is not greater than the length of its data portion. You must repeat the steps from processing the program through to running the program.

If this SQLCODE was issued in response to a CONNECT statement, only a CONNECT statement will be accepted. Check the length field of the host variable used for your database name. It should be ≥ 1 and ≤ 18 .

-312 An SQL statement containing host variables cannot be submitted by way of a PREPARE, EXECUTE IMMEDIATE, or DECLARE CURSOR statement.

Explanation: Any SQL statement submitted on a PREPARE or EXECUTE IMMEDIATE statement must not contain input or output host variables. In addition, the SELECT portion of the DECLARE cursor statement must not contain input or output host variables.

SQLSTATE 42618.

System Action: Processing of the SQL statement has ended.

User Response: Replace the host variables with parameter markers. You must repeat the steps from preprocessing to execution of the program.

-313 There is a mismatch between the number of host variables declared and the number of host variables required for the SQL statement.

Explanation: The user has not supplied exactly as many input program host variables as needed by the SQL statement. SQLERRD1 contains further information about the error. The possible values are:

-100 Input program host variables are required and either no SQLDA has been provided or the number of variables is zero.

-110 The number of input program host variables is negative.

-120 The number of input program host variables does not equal the number required.

SQLSTATES:

07001 The number of host variables is not the same as the number of parameter markers.

07004 The statement contains parameter markers but the USING clause is not specified.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement or define more input host variables. You must repeat the steps from preprocessing to execution of the program.

-314 You declared a host variable incorrectly.

Explanation: An error occurred while a DB2 Server for VSE preprocessor was processing a host-identifier declaration. The host identifier must be the name of a host variable or indicator variable. In those languages that support host structures, the host identifier can be a host structure or host structure field. The indicator variable can be an indicator array.

- For the ASSEMBLER preprocessor, one of the following errors was found:

SQLERRD1:

- 403 Only reserved names are found in a declaration statement and no variable name is supplied.
- 404 Constant too long for halfword variable.
- 405 No length value on character declaration.
- 406 A character other than a blank or quote was found after 'F' or 'D'.
- 407 Length value on fixed-length character string exceeds 254.
- 408 Length value on character string exceeds 32767.
- 409 No length value on decimal declaration.
- 410 Length value on decimal declaration exceeds 31.
- 411 Constant on decimal declaration exceeds 31 characters (excluding sign and decimal point).
- 412 A character other than a blank or quote was found after the precision (p) of a decimal declaration.
- 413 Precision of constant on a decimal declaration is greater than the precision (p) specified.
- 414 Unknown operand type.
- 415 Length value of 0 specified for character or decimal declaration.

- For the C preprocessor, one of the following errors was found:

SQLERRD1:

- 402 Use of conflicting data types. Example: long short int Var1;
- 403 No name or only reserved names are found in a declaration statement. No name or only reserved names and no tags are found in a structure declaration.
- 404 Incorrect syntax in multiple declaration. Example:

```
short aa,bb,,cc;
```
- 405 Value contains nonnumeric characters. Examples:

```
SQLVARCHAR (lastname, 10-);  
projno char[3e];
```
- 406 Scale holds more than 5 places or 0. Example:

```
char var1[123456];  
char var1[0];
```

- 407 No closing bracket. Example:

```
char var1[123 ;
```
- 408 Length of C NUL-terminated string exceeds 32767 EBCDIC characters. Example:

```
char var1[32768];
```
- 409 A VARCHAR variable is declared as more than 32767 characters in length. Example:

```
struct{  
    short ll;  
    char dd[35000];  
} Var1;
```
- 410 Invalid delimiter found in declaration. Examples:

```
char empno[12]      - missing semi-colon  
short projno actno; - missing comma  
char midinit-'E';  - dash instead of '='
```
- 411 Declaration missing right parenthesis. Example:

```
long (var1;
```
- 412 Error in SQLVARCHAR declare. Examples:

```
SQLVARCHAR ABC,35); /* missing left parenthesis */  
SQLVARCHAR(ABC 35); /* missing comma */
```
- 413 Error in VARCHAR declaration. Examples:

```
struct{  
    short ll /* missing semicolon */  
    char dd[200];  
} Var1;  
struct{  
    short ll = 23; /* improper initialization */  
    char dd[200];  
} Var1;
```
- 414 The declaration contains two consecutive 'struct' keywords.
- 415 Invalid structure declaration caused by one of the following:
 - The structure name is missing.
 - The right brace is missing.
 - There is a semicolon missing after the structure element or imbedded structure declaration.
- 416 More than one structure tag found. Example:

```
struct employee auto {  
    short empno;  
    SQLVARCHAR(firstname,12);  
    SQLVARCHAR(lastname,15);  
} acct_emp;
```
- 417 Invalid data type in structure element declaration.
- 418 Invalid indicator array declaration caused by one of the following:

- The data type is not equivalent to the DB2 Server for VSE data type small integer.
 - The indicator array is declared as part of a structure.
 - The number of occurrences is greater than 65535.
 - The array is declared as a multiple occurrence structure.
- 419** Indirection operator '*' being used in a VARCHAR or structure declaration.
- 420** Indicator array or character string declared with multiple dimensions. Example:

```
short indarr[5][5];
```
- 421** Precision was not specified for decimal declaration. Example:

```
decimal Var1;  
decimal() Var2;
```
- 422** Precision specified in decimal declaration is greater than 2 digits long or has a value greater than 31. Example:

```
decimal(42) Var1;  
decimal(123,3) Var2;
```
- 423** Precision specified in decimal declaration is 0. Example:

```
decimal(0) Var1;
```
- 424** Scale of decimal declaration is greater than its precision. Example:

```
decimal(5,8) Var1;  
decimal(16,32) Var2;
```
- 425** Precision and/or scale specified in decimal declaration cannot be an octal number. Example:

```
decimal(5,02) Var1;  
decimal(05,2) Var2;  
decimal(08,03) Var3;
```
- 426** A result set locator variable has been declared incorrectly.
- For the COBOL preprocessor, one of the following errors was found:
SQLERRD1:
 - 402** Both the group or element name and the data type are missing.
 - 403** Only reserved names are found in a declaration statement and no variable name is supplied.
 - 404** VARCHAR or VARGRAPHIC length (first level 49) is declared as PIC S9(n)COMP, where n>4. The correct declaration is with 1<=n<=4.
 - 405** VARCHAR or VARGRAPHIC second level 49 is not one of these forms:

```
PIC X(n)          1 <= n <= 32767  
PIC G(n)          1 <= n <= 16383
```
- 406** The repetition factor (parenthesized value) is not preceded by 9 or X value that is to be repeated.
Examples:

```
PIC (4)           should be PIC S9(4)  
PIC S9(4)V(3)    should be  
                  PIC S9(4)V9(3)
```
- 407** Something other than 0 through 9 found:
 - in the parentheses in a PIC clause
 - in place of a level number
 - in the occurrence count of an indicator array.
Examples:

```
01 NAME PIC X(2A0)  
01 NAME PIC S9(-1)
```
- 408** Found more than one V (implied decimal place) in a PIC clause for a decimal declaration, or found one or more V in a PIC clause for an integer declaration.
Examples:

```
PIC S9(10)V99V99 COMP-3.  
PIC S9(4)V9     COMP.  
PIC S9(9)V99    COMP.
```
- 409** Invalid character in a PIC clause. Examples:

```
PIC X(3)XXIXX  
PIC Q(3)
```
- 410** Parenthesis left open in a PIC clause repetition factor. Examples:

```
PIC S9(10 COMP.  
PIC S9(8)V9(4 COMPUTATIONAL-3.
```
- 411** The declaration is incomplete.
- 412** PIC clause does not start with X, S, G or N.
Examples:

```
PIC Q(3).  
PIC Z(4).  
PIC (20).
```
- 413** A PIC clause beginning with S is required if COMPUTATIONAL or COMPUTATIONAL-3 is specified. Similarly, COMPUTATIONAL or COMPUTATIONAL-3 is required if a PIC clause beginning with S is specified.
Examples:

```
PIC X(4) COMP.  
PIC S9(4).  
PIC X(4) COMP-3.
```
- 414** A variable with COMP specified is declared as: PIC S9(n) COMP where either n<1 or n>9. The valid values for n are: 1<=n<=9.
Examples:

- PIC S9(0) COMP
PIC S9(10) COMP
- 415** No length for a DECIMAL PICTURE clause.
Example:
PIC S COMPUTATIONAL-3.
- 416** The precision of a DECIMAL variable is greater than 31.
- 417** A variable has a PIC clause with 0 length.
Example:
PIC X(0).
- 418** The following COBOL DECLARE clauses are not permitted in host variable declarations:
... BLANK WHEN ZERO.
... SIGN...
... JUSTIFIED...
- 419** A VARCHAR variable is declared as more than 32767 characters in length, or a VARGRAPHIC variable is declared as more than 16383 DBCS characters in length.
Examples:
01 DESCRIPTION.
49 DESCRIPTION-LEN PIC S9(4) COMP.
49 DESCRIPTION-VAL PIC X(33000).
- 420** A CHARACTER variable is declared as more than 254 characters in length, or a GRAPHIC variable is declared as more than 127 DBCS characters in length. Example:
01 NAME PIC X(300).
- 421** The declaration is not correctly terminated. This error usually indicates a missing period in your DECLARE statement.
Examples:
Example 1.
77 FIRST-NM PIC X(10) <- missing period
77 LAST-NM PIC X(10). <- error reported after this declaration
- Example 2.
01 DESCRIPTION.
49 DESC-LEN PIC S9(4) COMP <- missing period
49 DESC-TXT PIC X(100). <- error reported after this declaration
- 422** Invalid structure declaration caused by one of the following:
- The structure does not begin with a level 01 group.
 - The structure contains more than one level 01 group.
 - The name of a subordinate group is FILLER. FILLER is only allowed as the name of elementary items within a structure. If the name of a level 01 group or an independent elementary item is

- FILLER, the entire declaration is ignored and no message is generated.
- A subordinate group or element name is missing.
 - New level was found, but the previous level is not a group level.
 - A group level was specified but no elements are specified for the group.
 - A REDEFINES clause was found within the structure.
- 423** Invalid indicator array declaration caused by one of the following:
- The data type is missing.
 - The data type is not equivalent to the DB2 Server for VSE data type small integer.
 - The indicator array is declared as part of a structure containing other elements.
 - The number of occurrences is greater than 65535.
 - The level number of the array is 01 or 77. An indicator array must be an element of a level 01 group.
 - The TIMES is missing from the OCCURS clause of an indicator array declaration.
- 424** A level 77 element is declared within a structure, or as the level number of a major group.
- 425** A level number is outside the range 01 to 49, 66, 77, and 88. Levels 66 and 88 are ignored.
- 426** A literal string in the declaration statement contains an invalid DBCS string.
- 427** A closing quotation mark is missing.
- 428** The data type is missing from the declaration of an elementary item.
- 429** There is an incomplete or invalid attribute specification, an attribute incorrectly placed in the declaration, or some other unknown string.
- 430** A result set locator variable has been declared incorrectly.
- For the PL/I preprocessor, one of the following errors was found:
SQLERRD1:
- 403** Missing parenthesis or parenthetical phrase in the value clause of an attribute specification.
Examples:
DCL EMPNO BINARY FIXED(31) INITIAL (2500;
DCL EMPNAME CHAR (25) INITIAL;
- 404** Precision or scale specified in decimal declaration is greater than 2 digits long or has a value greater than 31.

-316 **The SQL statement prefix, EXEC SQL, was found in COBOL section A (columns 8-11). EXEC SQL should not start before column 12.**

Explanation: EXEC SQL was coded beginning in Section A of a statement in a COBOL program (columns 8-11). EXEC SQL should not start before column 12.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-317 **Valid SQL statements in the WORKING-STORAGE SECTION are BEGIN DECLARE SECTION, END DECLARE SECTION, INCLUDE SQLCA, and INCLUDE.**

Explanation: The BEGIN or END DECLARE SECTION, the INCLUDE SQLCA or the INCLUDE command has been coded improperly. Following are probable causes:

- EXEC SQL not followed by BEGIN, END, or INCLUDE when appearing in the LINKAGE, FILE, or WORKING-STORAGE SECTION of COBOL
- More than one BEGIN DECLARE SECTION before an END DECLARE SECTION found
- An END DECLARE SECTION found before a BEGIN DECLARE SECTION
- Missing END-EXEC terminator or improper SQL statement in LINKAGE, FILE, or WORKING-STORAGE SECTION.
- PROCEDURE DIVISION is missing after the WORKING-STORAGE SECTION.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-318 **INCLUDE SQLCA SQL statement is outside the WORKING-STORAGE SECTION.**

Explanation: An INCLUDE SQLCA statement must only be coded in the COBOL WORKING-STORAGE section.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Move the statement. Try again.

-319 **More than one INCLUDE SQLCA statement was in the COBOL program.**

Explanation: Only one INCLUDE SQLCA statement can appear in a COBOL program.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Remove the extra statement. Try again.

-320 **The SQL declare section did not end before the end of the containing COBOL section.**

Explanation: A BEGIN DECLARE SECTION statement was found, but a matching END DECLARE SECTION was not found before the containing WORKING-STORAGE SECTION, LINKAGE SECTION, or FILE SECTION ended.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Insert an END DECLARE SECTION statement. Try again.

-321 **An SQL statement other than an INCLUDE statement appears in the declarative section of the COBOL PROCEDURE DIVISION.**

Explanation: An SQL statement other than an Extended INCLUDE statement cannot appear in the declarative section of the PROCEDURE DIVISION in COBOL.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Move or remove the statement. Try again.

-322 **EXEC SQL was in a section other than the FILE, LINKAGE, WORKING-STORAGE SECTION, or PROCEDURE DIVISION sections.**

Explanation: An SQL statement (one beginning with EXEC SQL) must only appear in the WORKING-STORAGE, FILE, or LINKAGE sections of the DATA DIVISION or in the PROCEDURE DIVISION.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Move or remove the statement. Try again.

-323 **A new SQL statement begins before the previous one properly ended. Both statements are ignored.**

Explanation: Missing END-EXEC following EXEC SQL. Another EXEC SQL was found before the previous END-EXEC was found.

SQLSTATE Spaces.

System Action: Processing of the SQL statement ends.

User Response: Correct the statements. Try again.

-324 **Host variable *variable* is declared with an attribute that is incorrect for its use in the SQL statement.**

Explanation: The SQL statement requires a host variable of a particular data type or length that was not found. If a variable number is specified, it corresponds to the variable's position in the SQL statement. Some specific examples of this error are:

- A locator variable passed in is not declared as integer or RESULT SET LOCATOR datatype.
- Statement-id is not an integer in one of the following extended dynamic commands: DROP STATEMENT, PREPARE, DECLARE CURSOR, DESCRIBE, or EXECUTE.
- Cursor name host variable is not character or is longer than 18.
- User ID, password, or package name host variable is not a fixed character string, or, in C, is not a NUL-terminated character string.
- User ID, password, or package name host variable is not 8 in length, or, in C, is not 9 in length.
- Options host variable on a CREATE PROGRAM/PACKAGE statement is not defined in varchar format or is longer than 8192.
- The server-name host variable is not a fixed or varying length character string with a length in the range of 1-18 or, in C, a C-NUL terminated character string with a length in the range of 2-19.
- The structure is not a valid host structure.
- Use of a host structure is not permitted.
- An indicator array is used in place of a host variable or main variable.

SQLSTATE Spaces.

System Action: Processing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response: Change the host variable declaration to conform to the required type/length specification. Try again.

-325 **This preprocessor does not support the SQL statement.**

Explanation: The SQL statement used is only supported by the Assembler preprocessor of the database manager. The SQL statement was probably of the Extended Dynamic type.

SQLSTATE Spaces.

System Action: Processing continues, but a new package will not be produced. If the package existed previously, it will be restored.

User Response: Eliminate the failed statement either by moving it to an Assembler language program for preprocessing or by changing the statement to the Dynamic form as opposed to the Extended Dynamic form. Try again.

-326 **Indicator variable *variable-name* must be declared with a data type and length that equates to an SQL data type of SMALLINT.**

Explanation: The named indicator variable was not declared with a data type and length which equates to an SQL data type of SMALLINT.

System Action: Processing of the SQL statement has ended.

User Response: Correct the declaration of the indicator variable so that it has an SQL data type of SMALLINT. This information is in the *DB2 Server for VSE & VM Application Programming* manual.

SQLSTATE Spaces.

-330 **A string value cannot be used because at least one of its characters cannot be converted.**

Explanation: An error occurred when converting an application input string variable to the application server's representation. The value of the string host variable is incompatible with its use because of a mismatch in data representation. The value cannot be used as specified.

SQLSTATE 22021.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement.

-331 **A string value cannot be assigned to a non-nullable host variable because at least one of the characters in the source value cannot be converted.**

Explanation: An error occurred when converting a string value returned by the application server to the application requester. The string value cannot be

assigned to a host variable that does not have an indicator variable within a SELECT statement of an application program. The value is incompatible with the host variable because of a mismatch in data representation. The FETCH or SELECT statement is not executed. No data is returned.

SQLSTATE 22021.

System Action: Processing of the SQL statement has ended.

User Response: None.

-332 **A source string with a CCSID of *source-ccsid* cannot be assigned to its target with a CCSID of *target-ccsid* because of incompatible CCSIDs. Reason Code= *reason-code*.**

Explanation: No conversion supported for the specified pair of CCSIDs. The reason codes for this message are:

- 1 - Conversion of the input statement.
- 2 - Conversion of the data, which is either a constant or a host variable.
- 3 - Conversion of internal data during a column-to-column move.
- 4 - Conversion of internal data during a column-to-column compare.
- 5 - Conversion of internal data during a scalar function computation.
- 6 - Conversion of internal data during datetime arithmetic with a character operand.
- 7 - Conversion of output data to host variable.
- 9 - Invalid source, or target CCSID of zero. This will occur if graphic or mixed data is used when the CCSIDMIXED or CCSIDGRAPHIC value is set to zero for the application server or the application requester. It will also occur if an input or output SQLDA is used to override the CCSID value, and this override CCSID value is zero. The CCSID values are set using the CHARNAME parameter. See the *DB2 Server for VSE System Administration* manual for details.
- 10 - Invalid source, or target CCSID of zero. This will occur when a character column was created previous to SQL/DS Version 3 Release 3 with the FOR MIXED DATA clause and the MCCSIDMIXED value in SYSTEM.SYSOPTIONS is zero (or does not exist), or a graphic column was created previous to SQL/DS Version 3 Release 3 and the MCCSIDGRAPHIC value in SYSTEM.SYSOPTIONS is zero (or does not exist). See the *DB2 Server for VSE System Administration* manual for information on how to insert or update the MCCSIDMIXED and MCCSIDGRAPHIC rows.

SQLSTATE 57017.

System Action: Processing of the SQL statement has ended.

User Response: Either correct the statement so that it does not move or compare data between incompatible CCSIDs, or add support for the specified conversion.

-334 **An ASCII Mixed string could not be converted because it would exceed the length attribute of its EBCDIC target.**

Explanation: The insertion of shift-out (X'0E') and shift-in (X'0F') characters to indicate the DBCS portion of a mixed string in EBCDIC has caused the converted string to be too large for the target.

SQLSTATE 22524.

System Action: Processing of the statement ends.

User Response: Correct the statement or increase the length of the EBCDIC target and try again.

-401 **Incompatible data types were in an expression or compare operation.**

Explanation: The expression or compare operation violated one of the following rules:

- An arithmetic expression which does not involve datetime data types can only have operands with numeric data types.
- A datetime arithmetic expression cannot contain elements with graphic data types.
- Comparison operations can only be performed on compatible data types. The data types must both be numeric, character, graphic, date, time, or timestamp, or one must be a datetime data type and the other a character data type.

SQLSTATE 42818.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-402 **You cannot use nonnumeric data in the AVG or SUM column functions or as part of an arithmetic operation.**

Explanation: One of the following has occurred:

- Character or DBCS data was specified as the argument for AVG or SUM column functions such as AVG(CHARCOL) where CHARCOL is a column of CHAR data type.
Refer to the *DB2 Server for VSE & VM SQL Reference* manual for a complete list and description of column and scalar functions.
- Character or DBCS data was used in an arithmetic expression such -CHARCOL or CHARCOL+5 where CHARCOL is defined as in the first example.

Numeric data (INTEGER, SMALLINT, DECIMAL, or FLOAT) may only be used in non-datetime arithmetic operations.

- The SQL statement contains an arithmetic expression with the special register USER. For example, USER + 100 is not permitted.

SQLSTATE 42819.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-404 **A character string specified in an INSERT or UPDATE statement is too large for the target column.**

Explanation: A character string in the data items-list of an INSERT statement or one of the character strings in the SET clause of an UPDATE statement is longer than the associated target column in the database.

SQLSTATE 22001.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-405 **The numeric value, *value*, is not within the range of the data type.**

Explanation: A numeric value specified in the statement exceeds the value allowed for the associated target column in the database. Following are the limitations:

- SMALLINT: -32768 to +32767
- INTEGER: -2147483648 to +2147483647
- FLOAT: -7.2E75 to -5.4E-79, 0, +5.4E-79 to +7.2E75
- DECIMAL: precision larger than that of the target column.

SQLSTATE 42820.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-407 **Either an UPDATE statement or an INSERT statement with a null value for a column defined as NOT NULL is not allowed, or a null host variable value is not allowed in a SELECT list.**

Explanation: An attempt was made to update a column with a null value and the column does not allow nulls. The null value may be from a constant value, host variable, an expression, or from a value returned on a subquery.

This SQLCODE will also be issued if you made an

attempt to SELECT a host variable in a select-list, and the select-list had an indicator variable value of <0, indicating a NULL host variable value. A NULL host variable value is not allowed in a select-list. For more information about host indicator variables definition, refer to the *DB2 Server for VSE & VM Application Programming* manual.

SQLSTATE 23502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-408 **An UPDATE or INSERT of a data value is incompatible with the data type of the associated target column.**

Explanation: A source value was incompatible with the associated target column. This can happen when the source value:

- Was derived from a subquery used in an UPDATE or INSERT statement.
- Was derived from a VALUES clause in an INSERT statement.

Typical cases are:

- The source value has a numeric data type, and the target column has a character, DBCS, or datetime data type.
- The source value has a character data type, and the target column has a numeric or DBCS data type.
- The source value has a DBCS data type, and the target column has a numeric, character, or datetime data type.
- The source value has a character data type that is too short for the target datetime column.
- The source value has a datetime data type, and the target column has a numeric, DBCS, or different datetime data type.

SQLSTATE 42821.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-409 **An incorrect specification was used with the column function COUNT. Only * or DISTINCT with a column name is allowed.**

Explanation: The column function COUNT may only be used with * or with the keyword DISTINCT and a column name. Examples of its use are: COUNT(*) or COUNT (DISTINCT PARTNO), where PARTNO is a column name.

Refer to the *DB2 Server for VSE & VM SQL Reference*

manual for a complete list and description of column and scalar functions.

SQLSTATE 42607.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-412 You cannot specify more than one item in the SELECT clause of a subquery.

Explanation: A subquery may only contain one item in its SELECT clause. For example, the following subquery is incorrect:

```
SELECT * FROM EMP_ACT
WHERE EMPNO IN
  (SELECT EMPNO, JOB FROM EMPLOYEE
   WHERE WORKDEPT = 'E11')
```

SQLSTATE 42823.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-413 An overflow occurred while the database manager was converting a data type internally.

Explanation: A data value being converted by the database manager is too large for the data type to which it is being converted. For example, large floating point numbers will not convert to integers. This overflow is possible when using DECIMAL and INTEGER scalar functions.

SQLSTATE 22003.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-414 The LIKE predicate was used for a numeric or date/time column type. LIKE must only be used with graphic or character columns.

Explanation: The SQL statement uses LIKE against a numeric or datetime column. It can only be used against columns that have a data type that is compatible with the graphic data type or that have character data type.

SQLSTATE 42824.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-415 The corresponding columns, column-number, of the operands of a UNION or a UNION ALL do not have comparable column descriptions.

Explanation: The SQL statement contains SELECT clauses connected by a UNION or UNION ALL, and the corresponding columns in each SELECT clause cannot be compared. Specifically, columns of ordinality **column-number** of the operands in this UNION or UNION ALL cannot be compared. For columns to be comparable, corresponding columns must be numeric, character, graphic, date, time, or timestamp. Do not mix these data types. If corresponding columns have field procedures, both must have the same field procedure and the same column CCSID value.

Note the following default data types for literal constants in a SELECT list:

- Alphanumeric literal constant: default data type is varying character
- All numeric literal constant (no E or decimal point): default data type is integer.

SQLSTATE 42825.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-416 You cannot specify a long string column in the SELECT clause of a UNION.

Explanation: The SQL statement contained a SELECT clause item whose data type is a long string. This is not valid.

A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

SQLSTATE 42907.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-417 Not all the operands of an arithmetic operator or predicate can be parameter markers.

Explanation: The SQL PREPARE command contains an arithmetic operator or predicate with parameter markers used for all the operands. At least one of the operands must not be a parameter marker. Thus, the following are invalid:

```
? + ?
? < ?
? BETWEEN ? AND ?
```

? IN (?,?,?)

SQLSTATE 42609.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-418 You cannot specify a parameter marker in the SELECT clause of a SELECT statement.

Explanation: The SQL PREPARE statement contains a parameter in its SELECT clause.

SQLSTATE 42610.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-419 The precision of the numerator and/or the scale of the denominator are too large for decimal division.

Explanation: The internal formula used to calculate the resulting scale of decimal division is:

Scale of result = 31 - np + ns - ds

where np = precision of numerator,
 ns = scale of numerator,
 ds = scale of denominator.

A negative resulting scale will cause incorrect results because of internal decimal constraints. This may also happen when using the AVG() function.

SQLSTATE 42911.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-422 The operands of a UNION or UNION ALL do not have the same number of columns.

Explanation: The operands of a UNION or UNION ALL must have the same number of columns.

SQLSTATE 42826.

System Action: Processing of the SQL statement ends.

User Response: Correct the SQL statement by putting the same number of columns in each operand.

-423 Invalid result set locator value.

Explanation: The value specified in a result set locator host variable does not identify a valid result set locator.

SQLSTATE: 0F001.

System Action: Processing of the SQL statement has ended.

User Response: There are two common causes for this error:

- The host variable used as a result set locator was never assigned a valid result set locator value. Result set locator values are returned by the DESCRIBE PROCEDURE and ALLOCATE LOCATOR statements. Make sure the value in your host variable is obtained from one of these statements.
- Result set locator values are only valid as long as the underlying SQL cursor is open. If a commit or rollback operation closes an SQL cursor, the result set locator associated with the cursor is no longer valid.

-424 You specified an invalid sign digit in a decimal number.

Explanation: Decimal numbers are stored with the sign indicator in the lower half byte of the final byte. For example, +300 is stored as 300C. 300 is the digit and the C is the sign digit. The sign digit can be from hexadecimal A to hexadecimal F. The digit must be in the range from hexadecimal 0 to hexadecimal 9. SQLCODE -424 is issued if the decimal data passed to the database manager has an invalid sign or digit.

For zoned decimal or numeric data, SQLCODE -424 indicates that at least one digit contains invalid zone bits or numeric bits.

SQLSTATE 22502.

System Action: Processing of the SQL statement ends.

User Response: Correct the data to have a valid sign and decimal digit. Try again.

-425 The final result of a SUM is too large for the associated target column.

Explanation: The database manager encountered a query similar to this:

```
SELECT SUM(column1) FROM table1
```

To process the sum, the database manager maintains an internal accumulator. This SQLCODE is issued when the value in the internal accumulator is greater than the final result value can be. For example, accumulating the sum of an integer column is done in a double word accumulator but the result can only be the length of a single word.

SQLSTATE 22003.

System Action: Processing of the SQL statement has ended.

User Response: If you need to work with the data values involved, break the calculation down into smaller segments, so you do not exceed the capacity of the final result field.

-440 **FORMAT 1**
The number of parameters in the parameter list does not match the number of parameters expected for stored procedure *proc-name*.
n parameters were expected.
FORMAT 2
The number of parameters in the parameter list does not match the number of parameters expected for stored procedure *proc-name*,
AUTHID *authid*. *n* parameters were expected.

Explanation: The database manager received an SQL CALL statement for a stored procedure. The number of parameters supplied on the CALL statement does not match the number of parameters defined in SYSTEM.SYSPARMS.

proc-name

is the name of the stored procedure from the PROCEDURE field in SYSTEM.SYSROUTINES

authid is the authorization id from the AUTHID field in SYSTEM.SYSROUTINES

n is the expected number of parameters for the stored procedure with the NAME and AUTHID described above.

SQLSTATE: 42884

System Action: The statement cannot be executed.

User Response: If the SQL CALL statement is coded incorrectly, modify the SQL application to provide the correct number of parameters on the SQL CALL statement.

If SYSTEM.SYSPARMS contains incorrect information, you must redefine the stored procedure. You must do the following:

1. Use the STOP PROC operator command with the REJECT option to disallow access to the procedure
2. Use the DROP PROCEDURE statement to remove the definition of the procedure
3. Use the CREATE PROCEDURE statement to redefine the procedure
4. Issue the START PROC command to allow access to the procedure

-444 **FORMAT 1**
User program *load-module-name* could not be found for stored procedure *proc-name*.
FORMAT 2
User program *load-module-name* could not be found for stored procedure *proc-name*,
AUTHID *authid*.

Explanation: DB2 received an SQL CALL statement for a stored procedure and found the row in the SYSTEM.SYSROUTINES catalog table associated with the requested procedure name. However, the load module or phase *load-module-name* identified in the LOADMOD column of the SYSTEM.SYSROUTINES row could not be found.

load-module-name

The name of the load module or phase that was not found.

SQLSTATE: 42724

System Action: Processing of the SQL statement has ended.

User Response: If the LOADMOD value in SYSTEM.SYSROUTINES is specified incorrectly, do the following:

1. Issue the STOP PROC operator command with the REJECT option to disallow access to the procedure
2. Use the ALTER PROCEDURE command to correct the value
3. Issue the START PROC operator command to allow access to the procedure

If the LOADMOD value is correct, ensure that the load module or phase exists and can be accessed by the stored procedure server.

-449 **CREATE PROCEDURE for *name* contains an invalid format of the external name clause or is missing the external name clause.**

Explanation: An error was found in the EXTERNAL NAME clause of the CREATE PROCEDURE statement for *name*, or the clause is needed but was not specified.

The external name must be a short identifier with letters or digits. A possible cause for this error is the inclusion of a blank in the name.

If the clause is omitted, the external name defaults to the name of the stored procedure. However, if the procedure name is longer than 8 characters then EXTERNAL NAME must be explicitly specified and a valid short identifier must be provided as the external name.

SQLSTATE: 42878

System Action: The statement cannot be executed.

User Response: Correct the syntax of the SQL statement. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for information on the EXTERNAL NAME clause.

-450 **FORMAT 1**
**Stored procedure *proc-name*,
parameter number *par-number*,
overlapped storage beyond its
declared length.**
FORMAT 2
**Stored procedure *proc-name*
with AUTHID *authid*,
parameter number *par-number*,
overlapped storage beyond its
declared length.**

Explanation: While returning parameters from a stored procedure to an application, DB2 detected an overlay of one of the parameters. A stored procedure overwrote storage beyond a parameter's declared length.

proc-name

The name of the stored procedure from the PROCEDURE field in the SYSTEM.SYSROUTINES catalog table.

authid The authorization ID from the AUTHID column in SYSTEM.SYSROUTINES

par-number

The parameter position number. The parameter in error is the one for which the value of the column ORDINAL in SYSTEM.SYSPARMS matches the parameter position number provided in the error message.

SQLSTATE: 39501

System Action: The results of the stored procedure cannot be returned.

User Response: Examine the stored procedure to determine the cause of the overlay. Ensure that all parameters are declared correctly and that they match the corresponding definitions in SYSTEM.SYSPARMS.

-469 **SQL CALL statement must specify an
output host variable for parameter
par-number.**

Explanation: DB2 received an SQL CALL statement for a stored procedure. DB2 found the row in the SYSTEM.SYSROUTINES catalog table with the requested procedure name. However, parameter *par-number* was identified in SYSTEM.SYSPARMS as an OUT or INOUT parameter. A host variable must be supplied on the SQL CALL statement for parameters defined as OUT or INOUT.

par-number

The parameter position number. The

parameter in error is the one for which the value of the column ORDINAL in SYSTEM.SYSPARMS matches the parameter position number provided in the error message.

SQLSTATE: 42886

System Action: Processing of the SQL statement has ended.

User Response: If the SQL CALL statement is coded incorrectly, modify the SQL application to provide an output host variable on the SQL CALL statement.

If the parameter is defined incorrectly, you must change the procedure definition as follows:

1. Issue the STOP PROC operator command to disallow access to the stored procedure
2. Issue the DROP PROCEDURE statement to remove the procedure definition
3. Issue the CREATE PROCEDURE statement to redefine the procedure with the correct parameter definition
4. Issue the START PROC operator command to enable access to the stored procedure

-470 **SQL CALL statement specified a NULL
value for input parameter *par-number*,
but the stored procedure does not
support NULL values.**

Explanation: DB2 received an SQL CALL statement for a stored procedure and found a null value in the incoming parameter list. The DB2 stored procedure was defined in the SYSTEM.SYSROUTINES catalog table with PARAMETERSTYLE = ' ', which specifies that the DB2 stored procedure does not accept null values.

par-number

The parameter position number. The parameter in error is the one for which the value of the column ORDINAL in SYSTEM.SYSPARMS matches the parameter position number provided in the error message.

SQLSTATE: 39002

System Action: Processing of the SQL statement has ended.

User Response: If the stored procedure should not accept null values, change the calling application to provide a nonnull value.

If the stored procedure should accept null values, then:

1. Issue the STOP PROC operator command with the REJECT option to disallow access to the stored procedure
2. Use the ALTER PROCEDURE statement to change the value of PARAMETERSTYLE to 'N'
3. Issue the START PROC operator command to reactivate the procedure

-471 **FORMAT 1**
SQL CALL for stored procedure
proc-name failed due to
reason *reason-code.*
FORMAT 2
SQL CALL for stored procedure
proc-name with AUTHID
authid failed due to reason
reason-code.

Explanation: DB2 received an SQL CALL statement for a stored procedure. The CALL statement did not execute successfully.

Proc-name

The name of the stored procedure specified on the SQL CALL statement.

Authid The authorization ID associated with the stored procedure.

Reason code

The reason for the failure.

Possible reason codes are :

- 1 The load module or phase for the procedure was not found.
- 2 The procedure is STOPPED and calls to it are not being accepted.
- 3 No stored procedure server that can be used to run the stored procedure is available.
- 4 A Language Environment error occurred.
- 5 An SQL error occurred in the stored procedure.
- 6 The stored procedure server terminated abnormally.
- 7 The stored procedure handler was not able to load the load module or phase associated with the stored procedure.
- 8 An internal error has occurred.

SQLSTATE: 55023

System Action: Processing of the SQL statement has ended. A message describing the error may be displayed on the VM system console.

User Response: Correct the condition indicated by the reason code.

-478 **The stored procedure server** *pserver*
cannot be dropped because *group-name*, **a**
new *object-type*, **depends on it.**

Explanation: The stored procedure server cannot be dropped because it is the only stored procedure server in stored procedure group *group-name*, and stored procedures exist that must run in *group-name*.

SQLSTATE: 42893

System Action: Processing of the SQL statement ends.

User Response: Either define another stored procedure server in the stored procedure server group *group-name*, or modify the definition of any stored procedure that can run only in *group-name*. To modify the definition of a stored procedure, issue the ALTER PROCEDURE statement and specify the SERVER GROUP option, as follows:

1. If a default stored procedure server group exists and you want the stored procedure to run in it, do not specify a stored procedure server group name on the SERVER GROUP clause.
2. If you want the stored procedure to run in a different stored procedure server group, specify the name of that group on the SERVER GROUP clause.

-480 **The procedure** *procedure-name* **has not yet**
been called.

Explanation: The procedure identified in a DESCRIBE PROCEDURE or an ASSOCIATE LOCATORS statement has not yet been called within the application process or the procedure has been called, but an explicit or implicit commit occurred before the statement.

SQLSTATE: 51030

System Action: Processing of the SQL statement has ended.

User Response: Correct the order of the statements and rerun the application.

-482 **The procedure** *procedure-name* **returned**
no locators.

Explanation: The procedure identified in a ASSOCIATE LOCATORS statement returned no result set locators.

SQLSTATE: 51030

System Action: Processing of the SQL statement has ended.

User Response: Determine if result set locators are returned from the identified procedure by using the DESCRIBE PROCEDURE statement.

-499 **Cursor** *cursor-name* **has already been**
assigned to this or another result set
from procedure *procedure-name*.

Explanation: An attempt was made to assign a cursor to a result set using the SQL statement ALLOCATE CURSOR. One of the following applies:

- The result set locator variable specified in the ALLOCATE CURSOR statement has been previously assigned to cursor *cursor-name*.

- Cursor *cursor-name* specified in the ALLOCATE CURSOR statement has been previously assigned to a result set from stored procedure *procedure-name*.

SQLSTATE: 24516

System Action: Processing of the SQL statement has ended.

User Response: Determine if the target result set named in the ALLOCATE CURSOR statement has been previously assigned to a cursor.

If the result set has been previously assigned to cursor *cursor-name*, then either choose another target result set or call stored procedure *procedure-name* again and reissue the ASSOCIATE LOCATOR and ALLOCATE CURSOR statements.

If the result set has not been previously assigned to a cursor, the cursor *cursor-name* specified in the ALLOCATE CURSOR statement has been previously assigned to some result set from stored procedure *procedure-name*. You cannot assign cursor *cursor-name* to another result set, so you must specify a different cursor name in the ALLOCATE CURSOR statement.

-501 The cursor referenced in a FETCH, PUT, or CLOSE statement is not open.

Explanation: The cursor referenced in a CLOSE, PUT, or FETCH is not open now.

SQLSTATE 24501.

System Action: Processing has ended.

User Response: Correct the cause of the problem. Try again.

-502 The cursor referenced in an OPEN or ALLOCATE CURSOR statement is already open.

Explanation: You cannot open or allocate a cursor that is already in an open state.

SQLSTATE 24502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the cause of the problem. Try again.

-503 A column used in the SET clause of an UPDATE statement containing a WHERE CURRENT OF clause was not identified in the FOR UPDATE OF clause of the DECLARE CURSOR statement.

Explanation: One or more columns named in the SET clause were not declared in the FOR UPDATE OF clause of the query which defined the cursor.

SQLSTATE 42912.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-504 The cursor name or statement name, name, has not been properly declared or prepared.

Explanation: One of the following has occurred:

- The cursor name has not been defined with a DECLARE CURSOR statement or allocated with an ALLOCATE CURSOR statement.
- An attempt was made to define the cursor name with a DECLARE CURSOR statement or an ALLOCATE CURSOR statement, but an error was encountered on the DECLARE CURSOR or ALLOCATE CURSOR statement.
- Cursor *name* was referenced in a positioned UPDATE or DELETE statement which is not a supported operation for an allocated cursor.
- Cursor *name* was allocated, but a CLOSE cursor statement naming cursor *name* was issued and deallocated the cursory before this cursor reference.
- Cursor *name* was allocated, but a ROLLBACK operator occurred and deallocated the cursor before this cursor reference.
- Cursor *name* was allocated, but its associated stored procedure was called again since the cursor was allocated, new result sets were returned, and cursor *name* was deallocated.
- The statement name has not been defined with a PREPARE statement.
- An attempt was made to define the statement name with a PREPARE statement, but an error was encountered on the PREPARE SQL statement.

SQLSTATES:

- 34000** Cursor reference
- 07003** Statement reference
- 26505** An Extended EXECUTE, Extended DECLARE CURSOR, or Extended PREPARE against a NULL section.

System Action: Processing of the SQL statement has ended.

User Response: Define the name properly. Try again.

For an allocated cursor, if an implicit or explicit COMMIT, ROLLBACK, or CLOSE occurred after the cursor was successfully allocated, modify the application program logic so that after the COMMIT, ROLLBACK, or CLOSE operation, it calls the associated stored procedure again, and reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.

For an allocated cursor, if the associated stored

procedure was called again and new result sets were returned after the cursor was allocated, reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.

If this error was encountered while preprocessing of a FETCH statement that references a cursor allocated by a dynamic ALLOCATE CURSOR statement, the DYNALC preprocessor option must be used to allow the FETCH to be processed. For more information, refer to the *DB2 Server for VSE & VM Application Programming* manual.

-505 **A cursor has been declared or a statement has been prepared more than once.**

Explanation: The name used in a DECLARE CURSOR or PREPARE statement was incorrect. A cursor has been declared more than once or a statement name has been used in more than one PREPARE statement.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Correct the SQL statement using a different cursor or statement name. Try again.

-506 **More than one cursor is declared for statement *statement*.**

Explanation: You can only declare one cursor for **statement** shown in this message.

SQLSTATE Spaces.

System Action: Preprocessing of the statement ends.

User Response: Ensure that you have defined only one cursor per statement in your application program. Try again.

-507 **An UPDATE or DELETE statement uses a WHERE CURRENT OF clause, but no cursor is open.**

Explanation: A reference to CURRENT OF CURSOR was made but cursor was not opened.

Note: If blocking is used on the cursor, you may get a -507 even though you may not have explicitly closed the cursor in DRDA protocol. This is because the application server has implicitly closed the cursor.

SQLSTATE 24501.

System Action: Processing of the SQL statement has ended.

User Response: Ensure the cursor defined on the SELECT statement is OPENED.

-508 **An UPDATE or DELETE statement uses a WHERE CURRENT OF clause, but the cursor is not properly positioned on a row.**

Explanation: A reference to a CURRENT OF CURSOR was made when the cursor was not positioned on a row or no row has been fetched.

SQLSTATE 24504.

System Action: Processing of the SQL statement has ended.

User Response: Verify that the value in the SQL statement matches the row in the table. Try again.

-509 **An UPDATE or DELETE statement with a WHERE CURRENT OF clause specifies a table for which no cursor exists.**

Explanation: A reference was made to CURRENT OF CURSOR when a cursor is not defined on the current table.

SQLSTATE 42827.

System Action: Processing of the SQL statement has ended.

User Response: Either correct the UPDATE or DELETE statement by removing the WHERE CURRENT OF clause or declare the necessary cursor. Try again.

-510 **You cannot use a WHERE CURRENT OF clause in this UPDATE or DELETE statement.**

Explanation: You can not use a DELETE WHERE CURRENT OF clause if the query is not deletable. You can not use an UPDATE WHERE CURRENT OF clause if the query is not updateable.

1. The following are cases of nondeletable queries:
 - Multiple tables are involved.
 - You can not use DISTINCT, GROUP BY, ORDER BY, UNION, or a column function.
 - Subqueries cannot reference the same table.
 - Isolation level UR is used.
2. The following are cases of nonupdateable queries:
 - Multiple tables are involved.
 - You can not use DISTINCT, GROUP BY, ORDER BY, UNION, or a column function.
 - Subqueries cannot reference the same table.
 - The FOR UPDATE OF clause must specify the column to be updated in the UPDATE statement.

SQLSTATE 42828.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-511 **You cannot declare a cursor with a FOR UPDATE OF clause that involves a query that is not updateable.**

Explanation: Following are some examples of queries that are not updateable:

- Multiple tables are being used.
- Subqueries cannot reference the same table.
- May not use DISTINCT, GROUP BY, ORDER BY, UNION, or a column. function
- The NOFOR option was specified during preprocessing and the database manager appended the FOR UPDATE OF clause to the statement.

SQLSTATE 42829.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-512 **You cannot open or close a cursor that has been prepared with an SQL statement other than SELECT or INSERT.**

Explanation: An OPEN or CLOSE has been attempted on a cursor that is not associated with a SELECT or INSERT statement.

SQLSTATE 07005.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-513 **More than 512 disjoint DECLARE CURSOR and PREPARE statements have been used in the program.**

Explanation: If a PREPARE statement uses a cursor, the preprocessor matches it to the appropriate DECLARE CURSOR statement. The total number of such pairs plus any unmatched DECLARE CURSOR and PREPARE statements cannot exceed 512.

SQLSTATE Spaces.

System Action: Processing of this SQL statement has ended.

User Response: Rewrite the program to contain fewer disjoint DECLARE CURSOR and PREPARE statements. Try again.

-515 **You cannot use the SQL EXECUTE statement to perform a COMMIT or ROLLBACK.**

Explanation: The statements that control logical units of work cannot be the object of dynamic SQL statements; PREPARE, EXECUTE, or EXECUTE IMMEDIATE.

SQLSTATEs:

2D528 Dynamic COMMIT is invalid.

2D529 Dynamic ROLLBACK is invalid.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-516 **The current statement references a statement-name which has not been properly prepared.**

Explanation: The current statement refers to a statement name that has not been properly prepared. The current statement is an EXECUTE, a DESCRIBE, or a dynamic cursor operation.

SQLSTATEs:

07003 EXECUTE

26501 DESCRIBE or Dynamic cursor operation.

System Action: Processing of the statement has ended.

User Response: Correct the logic of the application program to ensure that the referenced statement is properly prepared prior to the current statement, and in the same logical unit of work. Try again.

-517 **The cursor name *cursor-name* has already been declared for package *package-name*.**

Explanation: The cursor name specified in a DECLARE CURSOR statement has already been declared for the named package in the current logical unit of work.

SQLSTATE 3C000.

System Action: Processing of the SQL statement ends.

User Response: Two cursors of identical names cannot be declared in the same logical unit of work. Move this statement outside the current logical unit of work, or end the current logical unit of work with a COMMIT or ROLLBACK command before executing this statement. Correct the error and rerun the program.

-518 **The application program references the cursor *cursor-name*, but the cursor is not declared in the current logical unit of work.**

Explanation: The cursor name used in an Extended OPEN, FETCH, PUT, or CLOSE was not declared (using an Extended DECLARE cursor) in the current logical unit of work.

SQLSTATE 42719.

System Action: Processing of the SQL statement ends.

User Response: Roll back the logical unit of work, then correct the error. Try again.

-519 **The database manager is blocking INSERTs. The application has issued a COMMIT, and there is at least one INSERT cursor which the program has not yet closed.**

Explanation: The application, in which the database manager is blocking INSERTs, has executed a COMMIT statement, but there is still at least one opened INSERT cursor (which has been blocked) in the current logical unit of work that has not been closed. Note that the application may have run successfully on previous occasions because the database manager chose not to block because of storage limitations or was executing the program in single user mode.

SQLSTATE 24505.

System Action: The COMMIT has not been executed and the current logical unit of work has been rolled back.

User Response: Modify the program to ensure that all OPEN cursors have a corresponding CLOSE for the same cursor. Also ensure that all opened cursors will be closed prior to executing a COMMIT statement. After these two conditions are met, preprocess, compile, and execute the program again.

-520 **The database manager is blocking FETCHs for cursor *cursor-name*. Therefore, a DELETE... WHERE CURRENT OF CURSOR statement cannot be executed against that cursor.**

Explanation: Because the database manager is blocking FETCHs for the mentioned cursor, any dynamic or extended dynamic PREPAREs, or EXECUTE IMMEDIATEs of DELETE... WHERE CURRENT OF CURSOR statements against that cursor are considered errors and will not be executed.

SQLSTATE 42828.

System Action: Processing of the PREPARE or EXECUTE IMMEDIATE statement is terminated.

User Response: Blocking applications cannot use

DELETE... WHERE CURRENT OF CURSOR statements in conjunction with SELECT cursors that are qualified for blocking. Such DELETE statements should be removed from blocking applications. If the application continues execution after receiving this SQLCODE, any subsequent EXECUTEs, which are dependent upon the PREPARE of the DELETE, also will not be executed successfully by the database manager.

-521 **The database manager is blocking FETCHs or PUTs. The data type or length has changed for a host variable whose ordinal position is *position-number* in the host variable list or descriptor SQLDA.**

Explanation: The database manager is blocking FETCHs or PUTs. A discrepancy has been found concerning the use of host variables in the FETCH or PUT. The reason code is in SQLERRD1. The ordinal position of the host variable is in SQLERRD2. The meaning of the SQLERRD1 codes are as follows:

152, 156

The number of elements in the SQLDA or in the host variable list of the current statement does not match that of the original PUT or FETCH.

160

The nulls allowed setting of a host variable in the SQLDA or host variable list for the current statement does not match that of its counterpart in the original FETCH or PUT for the cursor. SQLERRD2 contains the ordinal position of the incorrect host variable.

164

The length of a host variable in the SQLDA or host variable list does not match the length of its counterpart in the first FETCH or PUT of this cursor. SQLERRD2 is the ordinal number of the incorrect host variable.

168

The data type of a host variable in the SQLDA or host variable list implies that nulls are allowed but no indicator variable is supplied. SQLERRD2 is the ordinal position of the incorrect host variable.

172

The length associated with a host variable is negative or zero. SQLERRD2 is the ordinal position of the incorrect host variable.

This reason code can also be generated by a NUMERIC or DECIMAL type with a length greater than 31.

176

The data type of a host variable in the SQLDA or host variable list does not match its counterpart in the original PUT or FETCH statement for this cursor. SQLERRD2 is the ordinal position of the incorrect host variable.

180

The SQLDATA or SQLIND pointer to a host variable is zero. SQLERRD2 is the ordinal position of the incorrect host variable.

Note: This error can also occur when the database manager is not blocking FETCHs or PUTs.

SQLSTATE 55021.

System Action: Processing of the PUT or FETCH statement is terminated.

For PUTs, the inserted data is not included in the block buffer.

For FETCHs, the row is not returned to the application and is skipped as part of the output answer set. The next FETCH of the cursor would return the next row, if there is one, of the answer set.

User Response: Check the application. If the host variable associated with an ordinal position in the host variable list or DESCRIPTOR SQLDA changes, make sure its data type and length are identical to the host variable in that position for the previous FETCH or PUT. Also check that the code does not alter the data type or length of elements in the DESCRIPTOR SQLDA from one FETCH or PUT to the next. The data types and lengths may be altered after the subject cursor is closed, but once the cursor is opened, each ordinal position is bound to the data types and lengths specified on the first FETCH or PUT after the OPEN.

You may wish to continue processing even though the row of information was not included in the input or output set. Or you may issue a ROLLBACK and terminate the program, make the correction, and then preprocess, compile, link edit, and run the application again.

-522 **NCSCANS, the initialization parameter that defines the number of cursors which you may open concurrently in a logical unit of work, has been exceeded.**

Explanation: The current logical unit of work in the user application has too many cursors opened concurrently. Each opened cursor usually corresponds to one internal scan, but when joins and subqueries are used, the database manager implicitly opens its own cursors. As a guideline, the database manager will open as many cursors as there are subqueries or tables joined in an SQL SELECT statement (or DECLARE CURSOR SELECT statement). Additional cursors may be opened, however, if the access path chosen requires sorts for ordering. The database manager also implicitly uses internal cursors to execute Searched DELETE, Searched INSERT via SELECT statement, Searched UPDATE, and CREATE INDEX statements and to access its catalog and packages.

One of the following limitations occurred for the current logical unit of work:

- The storage reserved for scans made by the NCSCANS DB2 Server for VSE initialization parameter is exceeded, or

- The number of concurrently opened scans exceeded 255. 255 is the maximum allowed for an DB2 Server for VSE user.

SQLSTATE 54014.

System Action: Processing of the SQL statement has ended.

User Response: Acquire information about the number of open cursors in the current logical unit of work and the nature of the SQL SELECT statements associated with those cursors and contact your database administrator. The database administrator may have to change the DB2 Server for VSE initialization parameter NCSCANS, or the application may need more SQL COMMIT statements to reduce the number of opened scans in a logical unit of work.

-523 **Section *section-number* of package *package-name* was not created as the result of executing the NULL form of an extended dynamic PREPARE or of preprocessing a dynamic PREPARE statement.**

Explanation: The user's application is executing a dynamic PREPARE or the FOR form of an Extended Dynamic PREPARE for the package named **package-name**. The database manager does not allow such execution because the section number **section-number** was not created by the execution of either the NULL form of an Extended Dynamic PREPARE, or the previous preprocessing of a dynamic PREPARE statement.

SQLSTATE 54015.

System Action: Processing of the SQL statement has ended.

User Response: The program and the package are probably out of synchronization. Preprocess the program again; then compile and link-edit the program to ensure that the package matches the application. If you are executing the FOR form of the Extended Dynamic PREPARE, make sure that the statement-id specified was generated using the NULL form of the Extended Dynamic PREPARE.

-524 **You used an ORDER BY clause in a query with no cursor.**

Explanation: The system assumes that a statement involving an ORDER BY clause will refer to more than one row. Therefore, queries using an ORDER BY clause should use a cursor.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Remove the ORDER BY clause, or define a cursor. Try again.

-525 **Section *section-number* of package *package-name* cannot be executed because of an error that was detected at preprocessing time.**

Explanation: At preprocessing time, the ERROR parameter was specified, and the package was stored in the database with incorrect sections. At execution time, an attempt was made to execute the section that contained the error.

SQLSTATE 51015.

System Action: Execution of the statement has ended.

User Response: Correct the statement. Preprocess, compile, link edit, and run the program again.

-530 **The INSERT or UPDATE value of a foreign key *constraint-name* owned by *owner* is invalid.**

Explanation: There is an attempted violation of the referential constraint **owner.foreign-key** during the execution of an insert or update operation on a dependent table. The value is invalid because it does not also appear as a value of the PRIMARY KEY of the parent table of the relationship.

SQLSTATE 23503.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-532 **The DELETE or UPDATE operation is prevented by a rule of RESTRICT associated with the foreign key *constraint-name* owned by *owner*.**

Explanation: There is an attempted violation of the referential constraint **owner.constraint-name** during the execution of a DELETE or UPDATE operation on a parent table. A row in the table cannot be deleted or updated because of either of the following:

- It has a dependent relationship with a rule of RESTRICT, or
- Its deletion deletes a row of another table that has a dependent in a relationship with a delete rule of RESTRICT.

SQLSTATE 23504.

System Action: Processing of the SQL statement has ended.

User Response: Examine the constraint rule for all descendent tables to determine the cause of the problem. The specific tables involved can be determined from the relationship *constraint-name*.

-534 **Invalid multiple row update.**

Explanation: An UPDATE statement cannot be processed because the table is in a nonrecoverable storage pool and a PRIMARY KEY column is an object of the SET clause, and more than one row is selected for updating.

SQLSTATE 21502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-535 **Invalid UPDATE WHERE CURRENT OF clause.**

Explanation: The UPDATE WHERE CURRENT OF clause cannot be used when the column to be updated is part of a PRIMARY KEY column.

SQLSTATE 42913.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-536 **The DELETE or UPDATE statement is invalid because table *owner.table-name* can be affected by the operation.**

Explanation: The DELETE or UPDATE statement is invalid because the indicated table is referenced in a subquery of the statement. The indicated table is either:

- A dependent of the object table in a relationship with a delete rule of SET NULL or CASCADE, or
- A dependent of another table, call it T, in a relationship with a delete rule of SET NULL or CASCADE, and table T is delete-connected to the object table.

SQLSTATE 42914.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-537 **The *key-type* identifies column *column-name* more than once.**

Explanation: The indicated column-name appears more than once in a key. **Key-type** could be PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT.

SQLSTATE 42709.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-538 **Foreign key *constraint-name* does not conform to the description of the primary key of table *owner.table-name*.**

Explanation: The definition of the indicated FOREIGN KEY does not conform to the description of the PRIMARY KEY of the indicated table. Either the keys do not have the same number of columns, or the description of the corresponding columns of the FOREIGN KEY is not identical to the PRIMARY KEY. The requirement for identical descriptions includes data type, field procedure, and length, but not the null attributes. If a field procedure is defined for the corresponding columns, their column CCSID values must be identical. The name is the FOREIGN KEY name specified in the FOREIGN KEY clause or, if a constraint-name was not specified, the generated name.

SQLSTATE 42830.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-539 **Table *owner.table-name* does not have a primary key.**

Explanation: The indicated table, which is specified as a parent in a FOREIGN KEY clause, cannot be defined as a parent because it does not have a PRIMARY KEY.

SQLSTATE 42888.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-542 ***column-name* cannot be a column of a *key-type* because it can contain NULL values.**

Explanation: A column identified in a key is defined to allow null values. **Key-type** can be a PRIMARY KEY or UNIQUE CONSTRAINT. You cannot allow null values in a PRIMARY KEY or UNIQUE CONSTRAINT column.

SQLSTATE 42831.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-550 **You cannot create or acquire the *object-type*. The owner SYSTEM is reserved for internal use.**

Explanation: The owner SYSTEM is reserved for internal use and therefore cannot be used as specified.

SQLSTATE 42939.

System Action: Processing of the SQL statement has ended.

User Response: Change owner to a valid name. Try again.

-551 **User *user-id* does not have the privilege to perform *action* on *object-name*.**

Explanation: An attempt was made to reference an object that the user is not authorized to use, or the SQL statement needs specific authority that the user does not have (for example, RUN authority). This can occur if a user with DBA authority preprocesses a program but because of the nature of the SQL statements in the program, the DBA does not have the authority to grant RUN authority to another user. Refer to the *DB2 Server for VSE & VM Application Programming* manual for information on defining privileges on packages.

This error might also occur if the object is a read-only view (for GRANT DELETE/INSERT/UPDATE).

When this SQLCODE results from GRANT ALL, the grantor has no privilege on the object table/view upon which he/she can grant privileges.

No error message is issued for GRANT ALL on a view if the grantor has at least one grant privilege on the view.

No error message are issued for GRANT ALL on a table if the grantor has less than all possible privileges on the table as long as he/she has at least one privilege.

This code is returned either when, a statement is being executed, or a program is being preprocessed with the EXIST option.

Formats of this code include:

Format 1:

- User &1. does not have the privilege to perform &2. on &3..

Format 2

- User &1. does not have the &2. privilege to affect keys on &3..&4..

Format 3

- User &1. does not have the privilege to perform &2..

SQLSTATE 42501.

System Action: Processing of the SQL statement has ended.

User Response: Check that the user ID, owner, and object name are correct and acquire the required authorization for the object.

-552 *userid is not authorized to action.*

Explanation:

Format 2:

- User ID is not authorized to CREATE a package for another user.

Format 3:

- User ID is not authorized to unload a package.

Format 4:

- User ID is not authorized to reload a package.

Format 5:

- User ID is not authorized to revoke special privileges.

Format 6

- User ID is not authorized to insert or delete rows from the system catalog.

Format 7

- User ID is not authorized to drop the catalog table SYSDbspaces.

Format 8

- User ID is not authorized to alter the catalog table **action**.

Format 9

- User ID is not authorized to grant an authority.

Format 10

- User ID is not authorized to revoke an authority.

Format 11

- User ID is not authorized to REBIND a package for another user.

This code is returned when either a statement is being executed, or a program is being preprocessed with the EXIST option.

SQLSTATEs:

Spaces action is to unload or reload a package

42502 action is anything else

System Action: Processing of the SQL statement has ended.

User Response: Create the required object or provide the proper name of the object. Try again.

-554 **You cannot grant a privilege to yourself.**

Explanation: The database manager does not allow you to grant your own privileges or set your password even though you have been granted CONNECT authority implicitly through the command "GRANT CONNECT TO ALLUSERS". You can only change your password after the DBA has granted CONNECT authority to you explicitly and set your initial password.

SQLSTATE 42502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-555 **You cannot revoke an authority or a privilege from yourself.**

Explanation: The authorization subsystem does not allow you to revoke your own authority or privilege.

SQLSTATE 42502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-556 **An attempt to revoke a privilege from revokee was denied. Either revokee does not have this privilege, or revoker does not have the authority to revoke this privilege.**

Explanation: The authorization subsystem neither allows you to revoke a privilege which has not been granted nor to exceed your authority.

SQLSTATEs:

42502 Revoker does not have authority.

42504 Revokee does not have privilege.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-557 **You cannot grant or revoke this combination of privileges.**

Explanation: User granted a privilege which conflicted with the granting of another privilege in the same statement.

SQLSTATE 42852.

System Action: Processing of the SQL statement has ended.

User Response: Refer to the "Statements" section in the *DB2 Server for VSE & VM SQL Reference* manual. Correct the SQL statement and resubmit it.

-558 **You cannot revoke an authority from *user-id* because *user-id* has DBA authority.**

Explanation: If user has DBA authority, only this authority can be revoked by another user with DBA authority. All other authority (RESOURCE, CONNECT, SCHEDULE) cannot be revoked without revoking DBA authority first.

SQLSTATE 42504.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-560 **A CONNECT statement contains an incorrect password for *user-id*.**

Explanation: The password you submitted to access the database manager is incorrect for your user ID.

SQLSTATE 42505.

System Action: Processing of the SQL statement has ended. If password encryption is currently being used (i.e., the DBNAME directory contains the PWDENC=Y tag). SQLERRD2 is set to 1 to indicate decryption was attempted by the server.

User Response: Correct the statement. Try again. If password encryption is being used, the server may be unable to decrypt the password successfully. Remove the PWDENC tag from the DBNAME directory entry, or set it to N. Rebuild the DBNAME directory and try again.

-561 **User *user-id* does not have CONNECT authority.**

Explanation: The specified user is not authorized to access the database manager because CONNECT authority has not been granted.

Or, when using CIRB or CIRA, the APPLID of the CICS subsystem has not been granted SCHEDULE authority.

SQLSTATE 42505.

System Action: Processing of the SQL statement has ended. If you are attempting to switch databases, SQLWARN0 and SQLWARN6 are set to 'S' to signal that a severe error has occurred.

User Response: See your database administrator to obtain the authorization you require. If a severe error has occurred, only a CONNECT statement will be accepted.

-562 **ALLUSERS is a reserved user ID. ALLUSERS can only be used in a GRANT CONNECT statement without a password.**

Explanation: You cannot grant DBA, SCHEDULE, or RESOURCE authority to the reserved user ID ALLUSERS. You can only grant ALLUSERS CONNECT authority without a password.

SQLSTATE 56034.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-563 **A user ID has not been established prior to this statement.**

Explanation: Every batch program must issue a CONNECT statement with the user ID clause to establish the proper authority before any other SQL statements.

SQLSTATE 51007.

System Action: Processing of the SQL statement has ended.

User Response: Use a CONNECT statement before you use any other SQL statement.

-564 **Either the statement contains an incorrect authorization name or password, or the password is missing.**

Explanation: Authorization name or password must begin with an alphabetic character and contain up to eight alphabetic or numeric characters. It cannot contain embedded blanks or special characters. A user ID of SYSTEM, PUBLIC, ALLUSERS, or \$TOTAL% is not valid. This error also occurs if a password is not supplied.

If SECTYPE=ESM, SQLERRD1 provides extra information about error:

SQLERRD1	Meaning
09	External Security Manager - retryable error
10	External Security Manager - non-tryable error
14	Password Expired
15	Password Invalid
16	Password Missing
17	Password Too Long
18	Userid Missing
19	Userid Invalid
20	Userid Revoked

SQLSTATE 28000.

System Action: Processing of the SQL statement has ended. If password encryption is currently being used

(i.e., the DBNAME directory contains the PWDENC=Y tag). SQLERRD2 is set to 1 to indicate decryption was attempted by the server.

User Response: Correct the statement. Try again. If password encryption is being used, the server may be unable to decrypt the password successfully. Remove the PWDENC tag from the DBNAME directory entry, or set it to N. Rebuild the DBNAME directory and try again.

-565 **Package *package-name1* was specified but another package, *package-name2*, is the subject of the current logical unit of work. You must end the logical unit of work before changing packages.**

Explanation: You established a package as the target of all activity in the current logical unit of work. The package in the SQL statement now being processed is not the same as the target for the logical unit of work.

SQLSTATE 56042.

System Action: Processing of the SQL statement has ended.

User Response: Roll back the logical unit of work and correct the error that is giving the incorrect package. Try again.

-566 **User ID *user-id* does not have authorization to modify package *package-name*.**

Explanation: Only the owner or a user who has DBA authority can modify a package.

SQLSTATE 42501.

System Action: Processing of the SQL statement has ended.

User Response: Rollback the logical unit of work, and correct the error. Try again.

-568 **INFILE contents invalid.**

Explanation: An error has been detected in the RELOAD PACKAGE input data file. The format or content of the input file is incorrect.

SQLSTATE Spaces.

System Action: The command is not processed. See "Common Error Action" on page 191 for more information.

Programmer Response: Contact the system programmer. The system programmer should perform problem determination. If a DB2 Server for VSE system error occurred, make a record of what went wrong and contact the designated support group for your installation.

-601 **The name used in the CREATE statement or the ACQUIRE DBSPACE statement already exists.**

Explanation: An attempt was made to create a table, create an index, create a view, create a synonym, or acquire a dbspace using a name that already exists. SQLERRD1, module names, and descriptions are shown below:

SQLERRD1 Module Name and Description

-110 ARIXI06 Index already exists.

-110 ARIXI08 Name already exists as a table.

-120 ARIXI07 Name already exists for this user as a table.

-130 ARIXI09 View name already exists for this user.

-130 ARIXI08 Name already exists for this user as a synonym.

-140 ARIXI01 DBSPACE already exists.

-140 ARIXI07 Name already exists for this user as a synonym.

-150 ARIXI09 Name already exists for this user as a synonym.

SQLSTATE 42710.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-602 **You can neither create nor alter a table or a view to establish more than 255 columns.**

Explanation: The maximum number of columns for a table or view is 255. The statement contains more than 255 columns for the table or view.

SQLSTATE 54011.

System Action: Processing of the SQL statement has ended.

User Response: Correct the SQL statement so no more than 255 columns will be established for table or view.

-603 **A *key-type* cannot be created because the table contains rows that are duplicates with respect to the values of the identified columns.**

Explanation: The following are invalid:

- Creating a unique index, primary key, or unique constraint on columns that contain equal values.
- Reorganizing an index that contains equal values.

- Activating a primary key or unique constraint with a unique index that contains equal values.

The token **key-type** can be UNIQUE INDEX, PRIMARY KEY, or UNIQUE CONSTRAINT. (If a column has a type of VARCHAR or VARGRAPHIC, two columns that differ only in the number of trailing blanks might cause duplication.)

SQLSTATE 23515.

System Action: Processing of the SQL statement ends.

User Response: If you are creating a unique index, primary key, or unique constraint, correct the statement. Try again.

If you are reorganizing a unique index or activating a primary key or unique constraint, then the unique index or supporting unique index is marked invalid with Duplicates Exist in UNIQUE INDEX. You can use the SHOW INVALID operator command to display invalid indexes.

Either drop the index, remove the duplicates, and recreate the index, or deactivate the primary key or unique constraint, remove the duplicates, and activate the primary key or unique constraint again. For more information about invalid indexes, see the SHOW INVALID operator command in the *DB2 Server for VSE & VM Operation* manual.

-604 An incorrect length, precision, or scale was specified for a column.

Explanation: You cannot create or expand the table to establish the precision, scale (decimal type), or field length specified because it is beyond the design limits of the column type.

- Decimal precision must be greater than or equal to 0 and less than or equal to 31. Scale must be less than or equal to precision.
- CHAR type must have a length less than or equal to 254.
- FLOAT must have a length greater than 0 and less than or equal to 53.
- GRAPHIC type must have a length less than or equal to 127.
- VARCHAR type must have a length less than or equal to 32767.
- VARGRAPHIC type must have a length less than or equal to 16383.

SQLSTATE 42611.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-605 The creation of an index failed because you exceeded the limit for indexes on a table.

Explanation: The maximum number of indexes that can be created for a table is 255. The target table for an index already has 255 indexes. Adding an index to a table can occur from a CREATE INDEX statement or by adding a PRIMARY KEY or UNIQUE CONSTRAINT to the table.

SQLSTATE 54020.

System Action: Processing of the SQL statement ends.

User Response: Drop an index that you do not need from the table. Try again.

-606 The COMMENT ON or LABEL ON statement failed because the specified table or column is not owned by owner.

Explanation: An attempt was made to comment or label on a table or column which does not exist or is not owned by the owner specified in the message text.

SQLSTATE 42502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-607 The CREATE TABLE statement failed because adding a table would cause more than 255 tables in dbspace owner.dbspace-name.

Explanation: The dbspace specified in the CREATE TABLE statement exists, but it has 255 tables, which is the maximum number of tables allowed in a dbspace.

The number 255 includes both tables in the dbspace and any internal tables created because of long fields defined in the tables. Each table with one or more long fields requires an internal table to be created in the dbspace.

If the dbspace specified is PUBLIC.SYSnnnn, where nnnn >= 0002 and nnnn <= 9999, the dbspace has 255 tables created for packages. Information about these tables is in catalog table SYSACCESS.

SQLSTATE 54016.

System Action: Processing of the SQL statement has ended.

User Response: There are the following options:

1. Create the table in a different dbspace.
2. Drop a table in the current dbspace to free up an entry.
3. Acquire a new dbspace for the table to be created. This may require assistance from your database administrator.

Database Administrator Response: If appropriate, acquire a private dbspace for the user.

-608 **The CREATE TABLE statement failed because the dbspace *dbspace-name* was not found for the table *owner.table-name*.**

Explanation: The dbspace specified in the CREATE TABLE statement was not found. The search order is:

1. The database manager first searches for a dbspace with a qualifier of *dbspaceowner.dbspace-name*.
2. If the dbspace owner is not specified in the CREATE TABLE statement, then the database manager looks for a private dbspace qualified as *owner.dbspace-name*.
3. Finally, the database manager searches for a public dbspace qualified as *public.dbspace-name*.

SQLSTATE 42704.

System Action: Processing of the SQL statement has ended.

User Response: These are the options:

1. Create the table in a different dbspace.
2. Acquire a new dbspace for the table to be created. This may require assistance from your database administrator.

Then rerun the CREATE TABLE statement.

Database Administrator Response: If appropriate, acquire a dbspace for the user.

-609 **The ALTER statement cannot be applied to a system DBSPACE *dbspace-name*.**

Explanation: An attempt was made to change a public system dbspace.

- For SYS001, you tried to change the level of the lockmode to DBSPACE or PAGE.
- For other than SYS001, you tried to change the lockmode or freepct of the DBSPACE.

SQLSTATE 42832.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-610 **The statement failed because a user without DBA authority attempted to create a table in a dbspace owned by another user or by the system.**

Explanation: Only users with DBA authority can create a table in another user's dbspace or a system dbspace.

SQLSTATE 42502.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-611 **The ALTER statement failed because the NOT NULL option was specified for the new column.**

Explanation: The new column specified in an ALTER TABLE statement must allow null values. The NOT NULL option cannot be used.

SQLSTATE 42601.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-612 **The statement failed because the column *column-name* was specified more than once in the CREATE TABLE or CREATE VIEW or CREATE INDEX, or the column *column-name* specified in the ALTER statement already exists in the table.**

Explanation: All columns within a specific table, view or index must be unique. The user tried to create a column with name as specified in the message, but it already exists in the table.

SQLSTATE 42711.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-614 **You cannot create a(n) *key-type1* on a long string column or on a table where the length of the encoded key derived from the *key-type2* column(s) is greater than 255 bytes.**

Explanation: Either:

- Creating an index, primary key or unique constraint on a column defined as a long string is not permitted. A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.
- Creating an index, primary key or unique constraint on a table, where the encoded key created for the indexed columns is greater than 255 bytes, exceeds an internal limitation of the database manager. The maximum length for a non-unique index is 251 bytes.

SQLSTATE 54008.

System Action: Processing of the SQL statement has ended.

User Response: For a multiple column key, use fewer columns. If only one column is involved and its data type is VARCHAR or VARGRAPHIC, the length of the encoded value used as the key must not exceed 255. To prevent the encoded key from exceeding the limit, the length of a VARCHAR column must be less than or equal to 204; the length of a VARGRAPHIC column must be less than or equal to 102.

-615 **Package name *owner.package-name* not found in application server *server-name*.**

Explanation: The database manager did not find the identified package in the SYSTEM.SYSACCESS catalog table for this application server.

SQLSTATE Spaces.

System Action: The command is not processed. See “Common Error Action” on page 191 for more information.

Programmer Response: Ensure the package-name specified in the command is correct. If it is incorrect, correct the command and reprocess it. (See “Rerunning DBS Utility” on page 191.) If the package-name is correct, create the package before processing it with the UNLOAD PACKAGE command, or specify the NEW parameter in the RELOAD PACKAGE command.

-616 **The RELOAD PACKAGE command with the NEW option cannot be used because the package already exists in server *server-name*.**

Explanation: The Database Services Utility cannot create a package because one with the same package-name already exists in this application server.

SQLSTATE Spaces.

System Action: Command processing on this application server is ended. If the TO clause was used in command, processing continues on subsequent application servers.

Programmer Response: Correct the command by specifying a different package-name or the REPLACE parameter. Reprocess the command for the failed cases. (See “Rerunning DBS Utility” on page 191.)

-617 **You cannot create a(n) *key-type* on more than 16 columns.**

Explanation: The maximum number of columns for a **key-type** is 16. **key-type** can be an INDEX, a PRIMARY KEY, or a UNIQUE CONSTRAINT. The statement contains more than 16 columns for the INDEX, PRIMARY KEY, or UNIQUE CONSTRAINT.

SQLSTATE 54008.

System Action: Processing of the SQL statement has ended.

User Response: Correct the SQL statement so that no more than 16 columns are established for the index, key, or constraint.

-618 **You cannot use the NEW option because the package already exists.**

Explanation: You specified the NEW option on a CREATE PACKAGE statement to create a new package, but the named package already exists.

SQLSTATE 42710.

System Action: Processing of the SQL statement has ended.

User Response: Unless you used the NEW option intentionally to determine whether a package already exists, roll back the logical unit of work, correct the statement, and try again.

-619 **An error was encountered while inserting data into the *explain-table-name* on behalf of the EXPLAIN statement. This may be caused by using the old EXPLAIN tables created in a release prior to SQL/DS Version 3 Release 4.**

Explanation: Explanation tables for the EXPLAIN statement may have been created improperly. Check for an incorrect column type, length, or nulls specification.

If there are no errors in the explanation tables, a system error has occurred. If this is the situation, apply the explanation and actions given for SQLCODE -901.

SQLSTATE 55002.

System Action: Processing of the SQL statement has ended.

User Response: Drop and recreate the required tables before using EXPLAIN. You can use a supplied A-type source member ARISEXP to create the EXPLAIN tables. See the *DB2 Server for VSE & VM SQL Reference* manual for details about the ARISEXP source member.

-620 **The CREATE TABLE statement failed because *user-id* has no private, recoverable dbspaces with less than 255 tables.**

Explanation: The dbspace name was not specified in the CREATE TABLE statement, so the database manager tried to find a private dbspace owned by **user-id**. This message will appear under one of the following conditions:

1. There were no private dbspaces found in the DB2 Server for VSE database for the **user-id**.
2. There were one or more private dbspaces found for the **user-id**, but each contained 255 tables.
3. The private dbspaces were located in nonrecoverable storage pools. Only private

dbspaces that exist in recoverable storage pools will be available when the CREATE TABLE statement does not specify the dbspace name.

SQLSTATE 57022.

System Action: Processing of the SQL statement has ended.

User Response: Suggestions for the three conditions above are:

For (1): Acquire a private dbspace in a recoverable storage pool. You may require a database administrator's assistance.

For (2): Drop a table in a private dbspace residing in a recoverable storage pool to free up an entry, or take the action indicated in (1) above.

For (3): If you want to create the table in a dbspace existing in a non-recoverable storage pool, then specify the dbspace name on the CREATE TABLE command. Otherwise, take the action indicated in (1) above.

Then rerun the CREATE TABLE statement.

Database Administrator Response: If appropriate, acquire a private dbspace for the user.

-621 **You have attempted to use invalid index
index-id in dbspace dbspace-number.**

Explanation: A statement made by the user attempted to use an index which has been marked invalid.

SQLSTATE 51013.

System Action: Processing of the SQL statement has ended.

User Response: If you are the owner of the invalid index then drop and recreate the index. The **index-id** can be found in the SYSINDEXES catalog table as follows:

```
SELECT A.DBSPACENO, B.IID, B.INAME, B.ICREATOR, A.TNAME
FROM SYSTEM.SYSCATALOG A, SYSTEM.SYSINDEXES B
WHERE A.TNAME = B.TNAME AND A.CREATOR = B.CREATOR
      AND A.DBSPACENO = dbspace_number
      AND B.IID = index_id
ORDER BY A.DBSPACENO, B.IID ;
```

Otherwise, notify your database administrator.

Database Administrator Response: Contact the owner of the invalid index and have the owner drop and recreate the index.

-622 **A request to continue collecting
statistics while loading table
owner.table-name has failed.**

Explanation: The Database Services Utility made a request to continue collecting statistics while loading table **owner.table-name**. This request failed because the database manager provided statistics as input, but the

statistics are not for the table being loaded.

SQLSTATE Spaces.

System Action: Statistics are not collected during subsequent inserts into the table. If this message is received while the Database Services Utility is executing a DATALOAD or RELOAD command, DATALOAD or RELOAD processing is discontinued.

User Response: If you received this message while using the Database Services Utility, reissue the DATALOAD or RELOAD command to continue loading the table. To collect statistics for the specified table, issue an UPDATE STATISTICS command for the table.

-623 **You cannot collect statistics while
loading table owner.table-name. Reason
Code = reason-code.**

Explanation: The Database Services Utility requested statistics collection to begin for table **owner.table-name** while the utility added rows to the table. **owner** is the owner of the table. **table-name** is the name of the table. The database manager does not support this form of statistics collection for this table, as explained by the reason code:

- 01** The table has one or more indexes defined on it. This form of statistics collection does not support tables with indexes.
- 02** The ROWCOUNT column in the SYSCATALOG entry for this table does not have value 0 or -1, which indicates that the table is not empty. This reason can occur only when you have indicated that the value of ROWCOUNT should be respected.

SQLSTATE Spaces.

System Action: Statistics are not collected during subsequent inserts into the table. If you receive this message while executing a Database Services Utility DATALOAD command, the database manager generates table statistics by issuing an UPDATE STATISTICS statement after the Database Services Utility has loaded all the rows.

User Response: To use this form of statistics collection, you must first correct the indicated problem. Alternatively, you can issue an UPDATE STATISTICS statement for the table after all rows have been loaded into it.

-624 **Completion of statistics for table
owner.table-name has failed. Reason Code
= reason-code.**

Explanation: The Database Services Utility requested the termination of statistics collection for table **owner.table-name** during the addition of rows to the table. **owner** is the owner of the table. **table-name** is

the name of the table. The reason code could be either of the following:

- 01 Collected statistics did exist, but for a table other than the specified table. This can occur if a previous request to begin collecting statistics had specified a different table.
- 02 No collected statistics existed for any table. This can occur if no previous request had been made to begin collecting statistics for a table, or if statistics collection had begun but had been discontinued. In the latter case, an appropriate SQLCODE would have been issued to inform you that statistics collection had been discontinued.

SQLSTATE Spaces.

System Action: The database manager did not modify any table statistics. It discarded any statistics that it had collected.

User Response: To get statistics for the specified table, issue an UPDATE STATISTICS statement for the table.

-625 **A request to collect statistics while loading table *owner.table-name* has failed. Statistics collection is in progress for some table.**

Explanation: The Database Services Utility made a request to begin collecting statistics for table **owner.table-name** during the addition of rows to the table. **owner** is the owner of the table. **table-name** is the name of the table. This request has failed because statistics are already being collected for some table (this might be the same table). The database manager does not support concurrent collecting of statistics for more than one table by a user. This error occurs only if a previous request to begin collecting statistics did not have a matching request to terminate the collecting of statistics.

SQLSTATE Spaces.

System Action: Statistics are not collected during subsequent inserts into the specified table. The statistics that the database manager has already collected are not affected. If this message is received while you are executing a DATALOAD or RELOAD command, the Database Services Utility stops the DATALOAD or RELOAD processing.

User Response: To collect statistics for the specified table, you must first terminate the statistics collection that is currently underway. If you are using the Database Services Utility, reissue the DATALOAD or RELOAD command.

-629 **SET NULL cannot be specified because foreign key *constraint-name* cannot contain null values.**

Explanation: The SET NULL option of the indicated FOREIGN KEY clause is invalid because no column of the key allows null values. The **constraint-name** was specified in the FOREIGN KEY clause or, if a FOREIGN KEY constraint-name was not specified, it is the generated name.

SQLSTATE 42834.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-630 **Duplicate *keyword* keyword.**

Explanation: The SQL statement contains a duplicate specification for the **keyword** keyword.

SQLSTATE 42614.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-632 **The table *owner1.table-name1* cannot be defined as a dependent of table *owner2.table-name2* because of rule restrictions. Reason Code = *reason-code*.**

Explanation: The object table specified in the CREATE TABLE or ALTER TABLE statement cannot be defined as a dependent of the indicated table because one of the following reason codes = *reason-code*.

03 You were attempting to define the indicated table as its own dependent. Self-referencing constraints are not allowed.

06 The relationship forms a referential cycle that delete-connects a table to itself.

SQLSTATE 42915.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-640 **The clause or scalar function *name* is invalid because mixed and graphic data are not supported on this system.**

Explanation: One of the following has occurred:

- A FOR MIXED DATA clause was specified in an ALTER or CREATE TABLE statement when the package default mixed CCSID was zero.
- A GRAPHIC data type was specified in an ALTER or CREATE TABLE statement when the package default graphic CCSID was zero.

- The VARGRAPHIC scalar function was used when the application server default graphic CCSID, CCSIDGRAPHIC, was zero.

SQLSTATE 56031.

System Action: Processing of the SQL statement has ended.

User Response: Specify the appropriate CCSID for the package, or try the statement on an application server which supports mixed and graphic data.

-641 You cannot reorganize a key index with a DBSU REORGANIZE INDEX command.

Explanation: Using the DBSU REORGANIZE INDEX command to reorganize an index that the database manager created to enforce the uniqueness of a primary or unique key is invalid.

SQLSTATE Spaces.

System Action: The Database Services Utility ignores the command.

-644 *name* is a duplicate name for the same keytype.

Explanation: *name* cannot be defined as a new key-name for the same keytype because the name has already been defined on the current table.

The duplication can occur if the specified name already exists for the same FOREIGN KEY, PRIMARY KEY, or UNIQUE CONSTRAINT on the current table.

SQLSTATE 42710.

System Action: Processing of the SQL statement has ended.

User Response: Specify a different name on the statement. Try again.

-648 The foreign key cannot be defined because it will cause table *owner1.table-name1* to be delete-connected to table *owner2.table-name2* through multiple paths. Reason Code = *reason-code*.

Explanation: The foreign key cannot be defined because one of the following reason codes = *reason-code*:

- 01 - The relationship will cause table *owner1.table-name1* to be delete-connected to table *owner2.table-name2* through multiple paths with the same delete rule of SET NULL.
- 02 - The relationship will cause table *owner1.table-name1* to be delete-connected to table *owner2.table-name2* through multiple paths with different delete rules.

SQLSTATE 42915.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-649 The EXPLAIN table *owner.explain-table-name* was not found in the system catalog.

Explanation: The EXPLAIN table (*owner.explain-table-name*) does not exist, so the EXPLAIN statement cannot be performed.

SQLSTATE 42704.

System Action: Processing of the SQL statement has ended, and the statement is not recorded in the package.

User Response: Create the EXPLAIN tables, and then resubmit the application to the preprocessor. You can use the IBM-supplied A-type source member ARISEXP to create the EXPLAIN tables. See the *DB2 Server for VSE & VM SQL Reference* manual for details about the ARISEXP source member. The explicit EXPLAIN versions of this SQLCODE are +204 or -204.

-656 Table *owner.table-name* already has a primary key.

Explanation: A PRIMARY KEY cannot be defined in an ALTER TABLE statement because the indicated table already has a PRIMARY KEY.

SQLSTATE 42889.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-657 You cannot issue the UPDATE STATISTICS statement for a view.

Explanation: An attempt was made to update statistics on a view rather than the base table of the view.

SQLSTATE 42809.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-666 The LABEL ON statement failed because the row describing the *column-name* column does not exist in SYSTEM.SYSCOLUMNS or SYSTEM.SYSCATALOG.

Explanation: The row for the label column (TLABEL or CLABEL) was not found in SYSTEM.SYSCOLUMNS. *column-name* is either TLABEL or CLABEL. The TLABEL column resides in SYSTEM.SYSCATALOG and

contains correlation names. The CLABEL column resides in SYSTEM.SYSCOLUMNS and contains column labels.

SQLSTATE 42703.

System Action: Processing of the SQL statement has ended.

User Response: Verify that your SQL statement is valid. If you cannot determine the cause of the error, contact your system programmer.

Database Administrator Response: Use SQLERRP and SQLERRD1 in message ARI0504I to determine more information about the error. Verify that the DB2 Server for VSE catalog has not been destroyed. If this is a system error, make a record of what went wrong and contact the designated support group for your installation.

-667 **The database manager cannot activate the key constraint-name defined for table owner.table-name. Reason Code = reason-code.**

Explanation: The **key-type** could be PRIMARY KEY, FOREIGN KEY, or UNIQUE CONSTRAINT. For a PRIMARY KEY, **constraint-name** would be omitted. For a FOREIGN KEY, **constraint-name** would be the name of the first key that causes the failure. For a UNIQUE CONSTRAINT, **constraint-name** would be omitted.

The reason code could be one of the following:

- 1 - Your attempt to activate a PRIMARY KEY or UNIQUE CONSTRAINT has failed because the PRIMARY KEY or UNIQUE CONSTRAINT contains duplicate values.
You have to update or remove the erroneous rows before the PRIMARY KEY or UNIQUE CONSTRAINT can be activated.
- 2 - Your attempt to activate a FOREIGN KEY has failed because the FOREIGN KEY references a parent table that has an inactive PRIMARY KEY.
You must activate the PRIMARY KEY of the parent table before you can activate the dependent FOREIGN KEY.
- 3 - The operation failed because not every value in the given FOREIGN KEY can be found in the PRIMARY KEY of its parent.
You have to update or remove the erroneous rows before the key can be activated. The failure could occur when you attempt to activate a FOREIGN KEY, or when you attempt to activate a PRIMARY KEY which implicitly activates other FOREIGN KEYS that reference it.

For more information see the *DB2 Server for VSE & VM Database Administration* manual.

SQLSTATE 22519.

System Action: Processing of the SQL statement has

ended. No keys were added or activated.

User Response: See Explanation for the reason of failure and recovery action. For more information, refer to the *DB2 Server for VSE & VM Database Administration* manual.

-668 **Table owner.table-name is inactive and you cannot access it.**

Explanation: No operation can be performed on this table because at least one inactive key participates in a relationship with this table.

This may be a PRIMARY KEY, a FOREIGN KEY, or a dependent FOREIGN KEY which references the PRIMARY KEY.

While an inactive key exists, only the table owner and a DBA can issue DML statements against the table. In addition, no one can issue DML statements against an active table which results in a reference to an inactive table in order to enforce Referential Constraints.

SQLSTATE 57016.

System Action: Processing of the SQL statement has ended.

User Response: Before using the indicated table you must make sure that all the keys in which the table participates are active. Once the keys are active try the statement again.

-669 **You cannot drop a key index explicitly.**

Explanation: The database manager does not allow you to drop a primary key index or unique constraint index explicitly with the DROP INDEX statement. A key can be a PRIMARY KEY or a UNIQUE CONSTRAINT.

SQLSTATE 42917.

System Action: Processing of the SQL statement has ended.

User Response: If you want to reorganize the primary key or unique constraint index, you can drop and recreate the unique constraint, or deactivate and activate the unique constraint.

If you do not want to keep the unique constraint, you can use the DROP UNIQUE clause of the ALTER TABLE statement to remove the constraint and implicitly remove its index.

-670 **You cannot create the foreign key constraint-name for table owner.table-name. Reason Code = reason-code.**

Explanation: The reason code could be one of the following:

- 1 Your attempt to create a foreign key has failed

because the foreign key references a parent table that has an inactive primary key.

- 2 Your attempt to create a foreign key has failed because not every value in the given foreign key can be found in the primary key of its parent.

For more information, refer to the *DB2 Server for VSE & VM Database Administration* manual.

SQLSTATEs:

23520 Reason code = 2

22521 Reason code = 1

System Action: Processing of the SQL statement has ended. A foreign key is not created.

User Response: The next step depends on the reason code you received:

Reason Code

Action

- 1 Activate the primary key of the parent table. Then create the dependent foreign key.
- 2 Update or remove the erroneous rows in the parent table. Then create the dependent foreign key.

-674 The database manager cannot load the DBCS data conversion routine
transproc-name. Reason Code = *reason-code(sub-code)*.

Explanation: The DBCS data conversion routine *transproc_name* cannot be loaded. The *reason-code* has one of the following values:

- 1 The conversion routine is not available on this installation.
- 5 Insufficient storage to set up conversion control block.
- 6 Insufficient storage to load the conversion routine.
- 7 Other system load error.

The *sub-code* is a one-byte hexadecimal value represented as a hexadecimal string constant. It has one of the following meanings:

X'01' - The error was discovered at the application requester.

X'02' - The error was discovered at the application server.

SQLSTATE 57011

System Action: Processing of the SQL statement has ended.

User Response: Report to your system programmer.

Database Administrator Response:

Reason Code Action

1 Verify whether the conversion routine name in SYSTEM.SYSSTRINGS is correct, and that the routine has been set up properly according to the *DB2 Server for VSE System Administration* manual.

5, 6, or 7 Check your installation storage and other system requirements and take the appropriate action.

-681 Column *column-name* is in violation of installation defined field procedure *fieldproc-name* Return Code=*nn*, Reason Code=*cccc*, Message= *string*.

Explanation: The installation field procedure **fieldproc-name** has returned an error for column **column-name**. Use the return code **nn** to determine the problem.

The following return codes are reserved:

- 4 Invalid value passed for encoding or decoding, or invalid column description during field procedure definition function.
- 8 Invalid parameter value.
- 12 Field procedure error on any function.

Use the **nn** and **string**, which the field procedure returned, for further information.

SQLSTATE 23507.

System Action: Processing of the SQL statement ends.

User Response: If a field procedure did not cause the error, determine the requirements imposed by the field procedure; verify the data type and length of the values to encode (return code 4), or verify the contents of the Field Procedure Parameter Value List (return code 8). If a field procedure caused the error, examine the field procedure (return code 12).

-682 The database manager cannot load the field procedure *fieldproc-name*. Reason Code = *reason-code*.

Explanation: The field procedure **fieldproc-name** cannot be loaded. The reason code can have one of the following values:

- 4 The number of field procedures already loaded on this installation has reached its limit of 16.

- 8 The field procedure is not available on this installation.
- 10 The field procedure was loaded above 16MB when the DB2 Server for VSE application server was running AMODE 24.
- 12 Insufficient storage.
- 16 Other system load error.

SQLSTATE 57010.

System Action: Processing of the SQL statement has ended. The application either commits or rolls back to the previous COMMIT; then the application terminates.

User Response: If you get a reason code of 8 check your application, correct it if necessary and try again. If the application is correct and your problem persists, contact your systems programmer. For all other reason codes, contact your systems programmer immediately.

System Programmer Response:

Reason Code Action

- 4 Consider replacing multiple field procedures with a single multi-function field procedure containing a procedure list that identifies various functions that may be requested.
- 8 Verify whether the field procedure requested should be loaded and take the appropriate action.
- 10 NUCXDROP the field procedure *fieldproc-name*. Ensure that the field procedure has RMODE 24. One way to ensure this is to use the CMS command GENMOD with the RMODE 24 option.

If there is no longer any need for the DB2 Server for VSE application server to run AMODE 24, (that is, all your user exits and single-user-mode applications support 31-bit addressing), then you can use the AMODE(31) parameter when running SQLSTART. AMODE 31 will then become the default addressing mode for the DB2 Server for VSE application server, and your field procedure can be loaded above the 16MB line.

12 or 16

Check your installation storage and other system requirements and take the appropriate action.

-683 Column type of column name *column-name* is invalid for string option.

Explanation: The *string* option can either be FIELDPROC, FOR subtype DATA, or CCSID integer. The following actions are invalid:

- Specifying the FIELDPROC option on column **column-name** whose data type is other than CHAR, VARCHAR, GRAPHIC, or VARGRAPHIC.
- Specifying the FOR subtype DATA option on column **column-name** whose data type is other than CHAR, VARCHAR, or LONG VARCHAR.
- Specifying the CCSID integer option on column **column-name** whose data type is other than CHAR, VARCHAR, LONG VARCHAR, GRAPHIC, VARGRAPHIC, or LONG VARGRAPHIC.

SQLSTATE 42842.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-684 The length of literal list beginning *string* is too long.

Explanation: The length of literal list beginning with **string**, excluding insignificant blanks and delimiting parentheses, is greater than 254.

SQLSTATE 54012.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-685 Invalid field type. Column: *column-name* in table *owner.table-name*.

Explanation: The field description returned by the field procedure field-definition function is invalid. The data type code denotes a long string or the data type has an invalid value.

SQLSTATE 58002.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-686 Column defined with a field procedure cannot be compared to another column with a different field procedure.

Explanation: The columns specified are not compatible. Each column has a different field procedure, or only one column has a field procedure. If the columns have the same field procedure, their column CCSID values are different.

SQLSTATE 53043.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Refer to the *DB2 Server for VSE & VM SQL Reference* manual for

restrictions on comparing columns defined with a field procedure. Try again.

-687 Field types incompatible.

Explanation: Comparing a column defined with a field procedure to the value of a constant or host variable that has an incompatible type is invalid.

SQLSTATE 53044.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Refer to information on predicates definition in the *DB2 Server for VSE & VM SQL Reference* manual for restrictions on comparing columns defined with field procedures. Try again.

-688 Incorrect data returned from field procedure. Column = *column-name*. Table owner.*table-name*. Reason Code = *reason-code*.

Explanation: A field procedure for column **column-name** in table **owner.table-name** returned unexpected data.

The reason code can have the following values:

- 1 Invalid data type returned from field procedure
- 2 Invalid precision returned from field procedure
- 3 String returned from field procedure is too long
- 4 Invalid length returned from field procedure
- 5 Invalid length of storage returned by field procedure
- 6 Invalid length of FPPVL returned by field procedure.

SQLSTATE 58002.

System Action: Processing of the SQL statement has ended.

User Response: Correct the field procedure according to the following reason codes, and try again:

- For reason codes 1, 2, 3, and 4: ensure that the field procedure returns values that are consistent with their descriptions.
- For reason code 5: ensure that the storage size is a positive integer.
- For reason code 6: ensure that the length of FPPVL is positive.

-698 The statement failed because the invalid entities table could overflow.

Explanation: The statement requires an available entry in the invalid entities table and the total number of invalid and transient indexes is greater than the internal limit. The statement can be CREATE INDEX, REORGANIZE INDEX, or searched UPDATE. These statements mark indexes transient or invalid during processing and therefore require room in the invalid entities table.

SQLSTATE 56004.

System Action: Processing of the SQL statement has ended.

User Response: Try the statement again later. If the error persists then contact your database administrator.

Database Administrator Response: Use the SHOW INVALID operator command to display the invalid entities table. Notify the owners of the invalid indexes and have them drop and recreate or reorganize the invalid indexes to free entries in the table.

If there are no invalid indexes, the error was caused by too many concurrent CREATE INDEX, REORGANIZE INDEX, and searched UPDATE statements. Try the statement again later.

If the problem persists, do one of the following:

- Reduce the number of internal dbspaces. Refer to the *DB2 Server for VSE System Administration* manual for more information.
- Increase the size of the directory. Refer to the *DB2 Server for VSE System Administration* manual for more information.

-699 The ACQUIRE DBSPACE statement failed because all storage pools for available dbspaces are full.

Explanation: Dbspaces are available, but the storage pools in which they reside do not have enough space for you to acquire dbspaces. The shortage can occur if someone deleted all dbextents from a storage pool, and other storage pools do not have available dbspaces.

SQLSTATE 57037.

System Action: Processing of the SQL statement ends.

User Response: Inform your database administrator.

Database Administrator Response: Use the SHOW POOL command to find the full storage pools. Increase the size of your storage pools.

-700 No available space in storage pool *pool-number*.

Explanation: An SQL request requires a physical page (a new page or a shadow page) but the storage pool does not have enough space. If a REORGANIZE

INDEX command returned this SQLCODE, the command processing may have marked the index invalid. Use the SHOW INVALID operator command to determine if the index is now invalid.

SQLSTATE 57038.

System Action: Processing of the SQL statement ends.

User Response: Inform your database administrator.

If an index that you are reorganizing is now invalid, either drop and recreate the index or reorganize it again after the database administrator has corrected the storage pool problem.

Database Administrator Response: Increase the size of the storage pool.

-701 No available space in the dbspace number *dbspace-number* for data.

Explanation: The space allocated for data in the dbspace is full. No more pages are available now. **dbspace-number** is the dbspace number which has run out of space.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: Check the PCTFREE value for the dbspace (the value in the FREEPCT column in SYSTEM.SYSDBSPACES). If this value is greater than 0, it can be reduced to 0 by the ALTER DBSPACE statement. This reduction allows for more insertions of data. If PCTFREE is currently 0, you must delete some data from the dbspace to make room for the new data. You can delete space using the DROP TABLE statement. You can also, create a new dbspace and use the DBS Utility UNLOAD and RELOAD statements to transfer the information to the new larger dbspace.

Note: If the dbspace referenced in the text is the catalog dbspace (SYS0001), you must do another database generation specifying a larger size for the first dbspace. Then use the DBS Utility UNLOAD and RELOAD commands to transfer the information to the new database.

For more information, refer to the *DB2 Server for VSE & VM Database Administration* and the *DB2 Server for VSE System Administration* manuals.

-702 No available space in the dbspace number *dbspace-number* for indexes.

Explanation: The space allocated in the dbspace for indexes is full. No more pages are available. **dbspace-number** is the dbspace number which has run out of space.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: You may use the DROP INDEX statement to make room for the new index. If this is not desirable, a new dbspace will have to be created with a larger number of index pages. This is determined by the PCTINDEX value on the ACQUIRE DBSPACE statement. You may specify a larger PCTINDEX value with the same number of pages as the current dbspace or increase the PAGES value to acquire a larger dbspace. Then use the DBS Utility UNLOAD and RELOAD commands to transfer the information to the new dbspace. Then the original statement may be resubmitted.

For more information, refer to the *DB2 Server for VSE & VM Database Administration* manual.

Notes:

1. If the dbspace referenced in the text is the catalog dbspace (SYS0001), you can try reorganizing the indexes for the catalog tables by running the catalog reorganization utility. For more information, refer to the *DB2 Server for VSE & VM Database Administration* manual.
2. If the catalog index reorganization does not solve the problem, you must do another database generation specifying a larger size for the first dbspace. Then use the DBS Utility UNLOAD and RELOAD commands to transfer the information to the new database.

-703 No available space in the dbspace for header information.

Explanation: The space allocated for the database manager to record information about the contents of the dbspace is full. No more header pages are available.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: Check the NHEADER value for the dbspace in the catalog table SYSTEM.SYSDBSPACES. If the value is less than 8, issue an ACQUIRE DBSPACE statement with a larger NHEADER value (less than or equal to 8). Then use the DBS Utility UNLOAD and RELOAD commands to transfer the information to the new larger dbspace. If the NHEADER value is already 8, the dbspace is full. You may either acquire a new dbspace or delete some objects in the current dbspace by using the DROP TABLE or DROP INDEX statements which will free space in the current dbspace. Then the original statement may be resubmitted.

For more information, refer to the *DB2 Server for VSE &*

Note: If the indicated action does not eliminate the problem, the dbspace referenced in the text is probably the catalog dbspace(SYS0001). You must do another database generation specifying a larger size for the first dbspace. Then use the DBS Utility UNLOAD and RELOAD commands to transfer the information to the new database.

-704 The ACQUIRE DBSPACE statement failed because no dbspaces are available.

Explanation: Either:

1. There are no dbspaces available of the requested type and size in the specified storage pool.
2. If the STORPOOL parameter was not specified, then there are no recoverable storage pools having any free dbspaces.
3. The specified storage pool does not exist.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: For reason 3, enter the SHOW POOL operator command to determine the existing storage pools. Otherwise, notify your system programmer.

System Programmer Response: Determine what type dbspace is needed and perform an ADD DBSPACE operation. For details on ADD DBSPACE, refer to the *DB2 Server for VSE System Administration* manual. The ACQUIRE DBSPACE statement may be resubmitted when a dbspace has been added.

-705 You specified an incorrect value for the parameter, parameter.

Explanation: An incorrect value was provided for the parameter specified in the message.

Format 2:

- An incorrect value was specified for the parameter, PCTINDEX or NHEADER.

Format 3:

- An incorrect value was specified for the parameter, PCTFREE or LOCK.

parameter can refer to the parameters associated with the following statements:

```
ACQUIRE DBSPACE
ALTER DBSPACE
CREATE INDEX
CREATE TABLE PRIMARY KEY
ALTER TABLE ADD PRIMARY KEY.
ALTER TABLE UNIQUE
```

SQLSTATEs:

37515

42615

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-706 The ACQUIRE PUBLIC DBSPACE statement failed because you cannot acquire SYSxxxx from a nonrecoverable storage pool.

Explanation: Public dbspace names beginning with SYS are system dbspaces and cannot be acquired from a nonrecoverable storage pool. The STORPOOL parameter value is for a nonrecoverable storage pool.

SQLSTATE 53060.

System Action: Processing of the SQL statement has ended.

User Response: Resubmit the request with a recoverable storage pool specified on the ACQUIRE DBSPACE STORPOOL parameter or omit the STORPOOL parameter.

System Programmer Response: Same as user action.

-707 The ACQUIRE DBSPACE statement failed because the name you specified was incorrect.

Explanation: The DBSPACE name you specified starts with SYS, but is not in the range SYS0002 to SYS9999.

SQLSTATE 42939.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-708 You cannot ALTER, LOCK, or DROP a public dbspace because you do not have DBA authority.

Explanation: DBA authority is required to DROP, LOCK, or ALTER a public dbspace.

SQLSTATE 42502.

System Action: Processing of the SQL statement has ended.

User Response: Notify your database administrator.

-709 You cannot drop a system dbspace.

Explanation: You tried to drop a dbspace which has a owner of SYSTEM. This is not allowed.

SQLSTATE 42832.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-710 **An attempt to access a private dbspace failed because it is in use.**

Explanation: The private dbspace you tried to access is now in use.

SQLSTATE 40503.

System Action: Processing of the SQL statement has ended.

User Response: Try again later.

-711 **An attempt to access a dbspace failed because it is disabled.**

Explanation: You tried to access an object in a disabled dbspace. The dbspace cannot be accessed until it is enabled by the system programmer.

This error condition can occur when accessing a view. When a view is accessed, the package generated at CREATE VIEW time must be retrieved. If the package dbspace (SYS000n) is disabled, the statement will fail. In this case, the SQLCA SQLERRP value is ARIXOVC. Note that if SQLERRP is not ARIXOVC (or ARIXELX), then the error occurred because an underlying table is in a disabled dbspace.

If this error condition also returns the SQLERRP value of ARIXELX, this indicates that the program's package resides in a disabled dbspace and cannot be accessed. SQLERRP is displayed in message ARI0504I. In this case, SQLCA fields SQLWARN0 and SQLWARN6 are both set to S to indicate a severe error. This condition will cause ISQL, the DBS Utility, and the FORTRAN preprocessor to terminate.

This error condition can occur during preprocessing or during execution of CREATE VIEW if a package dbspace (SYS000n) is disabled.

System Action: Processing of the SQL statement has ended.

SQLSTATE 57011.

User Response: If you must access the disabled dbspace, you must request your system programmer to enable the dbspace. You can continue to access other dbspaces, unless your DB2 Server for VSE application's package is in a disabled dbspace.

-712 **The SQL statement failed because internal dbspaces were not available or were too small.**

Explanation: The system may require internal dbspaces to process SQL statements involving ORDER BY, GROUP BY, or joins. Either it was unable to acquire

enough internal dbspaces, or the internal dbspaces were not large enough to process the command.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: If SQLERRD2 = -74, internal dbspaces are returned to the system by a COMMIT or ROLLBACK statement. If you have issued previous SELECT statements without doing a COMMIT statement, you could alleviate the problem by issuing COMMIT statements interspersed with your other SQL statements. Also, notify your system programmer to increase the number of internal dbspaces in the system.

If SQLERRD2 = -77, -78 or -136 notify your system programmer to increase the size of the internal dbspaces.

System Programmer Response: If SQLERRD2 = -74, allocate additional internal dbspaces using the ADD DBSPACE operation

If SQLERRD2 = -77, -78 and -136, perform an ADD DBSPACE operation for internal dbspaces with a larger size parameter than previously specified and resubmit the original command.

-713 **Incorrect isolation level value *value* specified.**

Explanation: During execution of an application program, an incorrect value for isolation level was found. The only values recognized for this option are:

- C** For concurrency at the cursor stability level.
- R** For concurrency at the repeatable read level.
- U** For concurrency at the uncommitted read level.

Note: If the package was created prior to Version 5 Release 1, you must explicitly reprocess it before you can specify U for isolation level Uncommitted Read.

SQLSTATE 42815.

System Action: Processing of the SQL statement has ended.

User Response: Assign a correct value to the SQL isolation level variable in the application program. In COBOL, it is SQL-ISL. In other languages, it is SQLISL. Try again.

-714 **Referential constraints cannot span dbspaces in different types of storage pools.**

Explanation: Both the parent and dependent tables of a referential constraint must be in the same type of storage pool; that is, both are in a recoverable or

nonrecoverable storage pool.

SQLSTATE 56035.

System Action: Processing of the SQL statement has ended.

User Response: Make sure both tables are in the same type of storage pool. Correct the statement. Try again.

-720 The initial subcomponent message repository could not be accessed.

Explanation: During NLS sub-component initialization, code -720 will be returned by the resource adapter if **all** of the following conditions have been met:

- The repository phase corresponding to the default language, defined as the first entry in the link-edited LANGBLK table, could not be CICS LOADED.
- The phase corresponding to the American English (LANGID: AMENG, LANKEY: S001) repository could not be CICS LOADED.

SQLERRMT(1:40) has the following meaning:

It contains the language id associated with the last language that failed.

SQLERRD1 has the following meaning:

Code Number	Explanation
1	The initial message file's corresponding default (or American English) phase could not be successfully CICS LOADED.
4	The LANGBLK information corresponding to the American English language is incomplete.

SQLSTATE 57024.

System Action: Initialization is aborted with the message ARI2902E.

User Response: Ensure that the phase corresponding to the default language is available, or alternatively that the phase corresponding to AMENG is available (Phase name :ARIMS001).

-721 The message file associated with the string or ID specified as an argument to a SET LANGUAGE command cannot be accessed.

Explanation: While issuing the SET LANGUAGE command (ISQL and operator), code -721 will be returned if the repository associated with the SET LANGUAGE command argument cannot be accessed.

SQLERRD1 has the following meaning:

Code Number	Explanation
-------------	-------------

1 The SET LANGUAGE argument's corresponding message file module could not be found for a CICS LOAD (ISQL statement) or LOAD (operator command).

4 The SET LANGUAGE argument could not be found in the SQLDBA.SYSLANGUAGE table as a LANGUAGE or LANGID entry or if the entry was found in the preceding table, then the argument's corresponding language id could not be found in the link-edited LANGBLK table.

SQLSTATE 57024.

System Action: Processing of the command or statement has ended with the message ARI2900E.

User Response: Ensure that the SET LANGUAGE argument is valid. For example, you require a language string (LANGUAGE) or language id (LANGID) that is less than or equal to 40 characters in length. The language string or ID is present in the SQLDBA.SYSLANGUAGE catalog and the corresponding PHASE is accessible.

-751 A stored procedure has been placed in MUST_ROLLBACK state due to SQL operation *op-name*.

Explanation: A stored procedure issued an SQL operation that forced the DB2 server to roll back the unit of work.

op-name

The SQL operation that caused the DB2 server to be placed in the MUST_ROLLBACK state is one of the following:

CALL
COMMIT
CONNECT
ROLLBACK

SQLSTATE: 38003

System Action: The statement cannot be executed. All further SQL statements are rejected until the SQL application that issued the SQL CALL statement rolls back the unit of work.

User Response: If this message is received by a stored procedure, the stored procedure must terminate. When control returns to the SQL application that issued the SQL CALL statement, the application must roll back the unit of work. No other SQL statement will be accepted.

The stored procedure should be deactivated by issuing STOP PROC with the REJECT option, so that the disallowed statement can be removed from the procedure. After the statement has been removed, issue

the START PROC command to activate the stored procedure.

-752 **You cannot specify an SQL CONNECT statement within a logical unit of work.**

Explanation: You attempted to issue a CONNECT statement before issuing a COMMIT or ROLLBACK statement.

SQLSTATE 0A001.

System Action: Processing of the SQL statement has ended.

User Response: Submit a COMMIT or ROLLBACK statement before the CONNECT statement.

-753 **Internal system error starting a logical unit of work.**

Explanation: While attempting to start a logical unit of work an internal processing error was encountered.

SQLSTATE 58004.

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

-754 **Database manager internal error while attempting to log user data.**

Explanation: While attempting to log user data, a database error occurred. An internal field contained an incorrect value on the log request.

SQLSTATES:

58008 DRDA protocol error

58029 internal error while logging user data error

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

-756 **You are permitted only one CREATE PACKAGE statement in a logical unit of work.**

Explanation: The program contains more than one CREATE PACKAGE statement in the same logical unit of work.

SQLSTATE 56042.

System Action: Processing of the SQL statement has ended.

User Response: Conclude this logical unit of work with a COMMIT or ROLLBACK statement. Remove the excess CREATE PACKAGE statements. Try again.

-757 **A CREATE PACKAGE statement is not permitted following a statement that modifies a package in the same logical unit of work.**

Explanation: The program contains a CREATE PACKAGE statement in a logical unit of work. In the same logical unit of work, extended dynamic PREPARE or DROP STATEMENT statements have been processed to modify an existing package.

SQLSTATE 56042.

System Action: Processing of the SQL statement ends.

User Response: Roll back the logical unit of work, then correct the placement of the CREATE PACKAGE statement. Try again.

-758 **You cannot use the current statement if a program has been created or changed in the same logical unit of work.**

Explanation: The current statement may not follow in the same logical unit of work, if a DROP STATEMENT statement or Extended PREPARE statement is used.

SQLSTATE 56042.

System Action: Terminate processing of the statement.

User Response: Commit or ROLLBACK the current logical unit of work before trying to execute the current statement.

-759 **The database manager has not committed package *package-name* because it is not a modifiable package and it contains no statements.**

Explanation: The current logical unit of work contains a CREATE PACKAGE. No statements were added to this package so that the COMMIT did not cause the package to be created. This will occur for any CREATE PACKAGE if the NOMODIFY option was specified with the CREATE PACKAGE statement.

SQLSTATE 42943.

System Action: The current logical unit of work was rolled back.

User Response: The package created by the CREATE PACKAGE must have statements added to it by executing Extended PREPARE statements.

-760 **Statement cannot be executed in the same logical unit of work where a package is being updated because the authority to execute the statement did not exist when the package was processed again.**

Explanation: The database manager has processed the subject package again. When this processing ended, the authority to execute the current statement did not exist. The resulting limitation on the user is that the current statement might not execute in the same logical unit of work in which the system is updating the package. A previous DROP STATEMENT or Extended PREPARE against the subject package in the current logical unit of work started the update activity.

SQLSTATE 56044.

System Action: Processing of the SQL statement ends.

User Response: Drop the current statement. Replace it after the authority needed to execute the statement has been granted.

-761 **The language preprocessor being run cannot replace package *package-name*.**

Explanation: The Assembler, C, PL/I, and COBOL preprocessors cannot be used to replace a package created using the FORTRAN preprocessor or the CREATE PACKAGE statement. A package created by using a CREATE PACKAGE statement can be replaced only by using a CREATE PACKAGE statement with the REPLACE option. It cannot be replaced by the language preprocessor now being executed.

Note: This SQLCODE will also be issued if you preprocessed a FORTRAN program in a Distributed Relational Database Architecture (DRDA) environment and then reprocess it in a non-DRDA environment.

To avoid this situation, you must either first drop the package or consistently preprocess the program in a DRDA or non-DRDA environment.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Either use the appropriate preprocessor or change the preprocessor parameters PREPNAME or USERID and then rerun the preprocessor.

-762 **Your request is incompatible with the target application server. Reason Code = *reason-code*.**

Explanation: The target application server cannot process your request. The possible reason code is:

01 You are preprocessing a package using a previous release of an SQL/DS or DB2 Server for VSE application requester against a remote DB2 Server for VSE or SQL/DS application server of a newer release. The two releases are incompatible. If you want to store a package in the target application server, preprocess your program on an application requester of the same release, and then you can run the program from the back release application requester.

SQLSTATE Spaces.

System Action: Execution of the statement has ended.

User Response: See the **Explanation** for details.

-801 **Exception error *exception-type* occurred during *operation-type* operation on *data-type* data.**

Explanation: The database manager had to materialize a view. In doing so, an arithmetic operation in the subselect clause of the view definition has caused the program exception identified by the **exception-type** value.

The explanation for SQLCODE -802 describes the exception-type and data-type values possible.

SQLSTATEs:

22003 Arithmetic overflow or underflow

22012 Division by zero

22502 Anything else.

System Action: Processing of the SQL statement has ended.

User Response: The information shown in the message can be used by the view owner to determine what data used in the view might be causing the program exception.

System Programmer Response: The view owner can use the information shown in the message to determine what data used in the view might cause the program exception. Running just the subselect clause used in defining the view should cause a similar problem, except it produces SQLCODE -802. This information should help you to determine the problem.

-802 **Exception error *exception-type* occurred during *operation-type* operation on *data-type* data, position *position-number*. *psw1 psw2*.**

Explanation: An arithmetic operation in the SQL statement has caused the program exception identified by the exception-type value. The two 4-byte fields shown in the message are the contents of the Program Status Word (PSW) when the abend occurred.

exception-type, data-type, operation-type position-number and **psw1 psw2** may or may not be returned in SQLCA, depending on where the error was detected. The SQLERRD1 field will be -9xx, where xx is the value of the interruption code.

Note: SQLERRD1 would not be set if you are using the Distributed Relational Database Architecture (DRDA) protocol.

The following is a list of **exception-type** values:

- **DATA EXCEPTION** can occur when incorrect operand fields have been detected in a machine code instruction. One of the following has occurred:
 - The sign or digit codes of operands in Decimal Instructions or in CONVERT TO BINARY are not correct.
 - The multiplicand in MULTIPLY DECIMAL has too few high-order zeros.
 - In ADD DECIMAL, COMPARE DECIMAL, DIVIDE DECIMAL, MULTIPLY DECIMAL, or SUBTRACT DECIMAL the operand fields overlap such that the rightmost bytes of the operand fields do not occupy the same place in storage.
 - In ZERO AND ADD DECIMAL, the operand fields overlap, but the rightmost byte of the second operand is to the right of the rightmost byte of the first operand.
- **FIXED POINT OVERFLOW** can occur during any arithmetic operation on either INTEGER or SMALLINT fields.
- **DECIMAL OVERFLOW** exception can occur when one or more non-zero digits are lost because the destination field in any decimal operation is too short to contain the result.
- **DIVIDE EXCEPTION** can occur on a division by zero operation on any numeric field type (DECIMAL, FLOAT, SMALLINT, or INTEGER), on a decimal division operation when the quotient exceeds the specified data-field size, or on a decimal division operation when the conversion of the divisor requires more than 15 significant digits to represent the whole part of the number.
- **MULTIPLY EXCEPTION** can occur on a decimal multiplication operation when the value chosen for conversion requires more than 15 significant digits to represent the whole part of the number. This exception can only occur when both the multiplier and the multiplicand have precision greater than 15.
- **EXPONENT OVERFLOW** can occur when the result characteristic of any floating point operation exceeds the maximum value supported by System/370 architecture (approximately 7.2E+75).
- **EXPONENT-UNDERFLOW EXCEPTION** can occur if the resulting value of a double-precision floating-point arithmetic operation was less than the minimum value supported by System/370 architecture.

- **SIGNIFICANCE EXCEPTION** can occur when an error has occurred in floating-point addition or subtraction. The error is that the fraction resulting from the arithmetic operation in the SQL statement is zero.

The possible **data-types** are INTEGER, SMALLINT, DECIMAL, and FLOAT. The data type displayed in the message indicates the data type of the temporary internal copy of the data which may differ from the actual column or literal data type due to conversions by the database manager. The possible **operation-types** are ADDITION, SUBTRACTION, MULTIPLICATION, and DIVISION. (Unary minus is treated as a multiply by -1.) If the error was in the select-list of an outer SELECT statement then **position-number** will indicate the position of the expression in the select list. If the error was not in the select-list, **position-number** will be zero.

SQLSTATEs:

- 22003** Arithmetic overflow or underflow
- 22012** Division by zero
- 22502** Anything else.

System Action: Processing of the SQL statement ends.

User Response: Check the arithmetic operation and the columns within the statement to determine what data may be causing the program exception. If you cannot determine the cause of the error, contact your system programmer.

Note: If the error occurred in the select-list of an outer subselect, indicator variables can be added to each of the expressions to allow you to get values not in error and retrieve subsequent rows. In that case, the +802 SQLCODE would be issued.

System Programmer Response: Check the arithmetic operation and the columns within the statement to determine what data may be causing the program exception. The exception-type and associated PSW shown in the message should aid in problem determination. Also refer to the *DB2 Server for VSE & VM Database Administration* manual for information on arithmetic operations.

-803 **The statement failed because the INSERT or UPDATE statement causes a duplicate value for a column defined in either a UNIQUE INDEX, PRIMARY KEY, or UNIQUE CONSTRAINT. Index identifier = index-id DbSPACE number = dbSPACE-number Reason code = reason code**

Explanation: A column was defined with a unique index, primary key, or unique constraint. An attempt was made to update such a column with a value that

already exists in that column. This is not allowed.

If a column has a type of VARCHAR or VARGRAPHIC, two column values which differ only by trailing blanks cause duplication.

The index name corresponding to index-id can be found in the SYSINDEXES catalog table as follows:

```
SELECT A.DBSPACENO,B.II.INAME,B.ICREATOR,A.TNAME
FROM SYSTEM.SYSCATALOG A, SYSTEM.SYSINDEXES B
WHERE A.TNAME = B.TNAME AND A.CREATOR = B.CREATOR
AND A.DBSPACENO = dspace-number
AND B.IID = index-id
ORDER BY A.DBSPACENO,B.IID
```

The reason code provides additional information about the error.

- 0 The statement executed was one of the following:
- An INSERT
 - A positioned UPDATE
 - A searched UPDATE where at most one row can satisfy the search condition.
- 1 The statement executed was a searched UPDATE on a table in a recoverable storage pool whose search condition could be satisfied by more than one row. Uniqueness checking was deferred until all rows were updated but all duplicates were not resolved by the end of statement processing.
- 2 The statement executed was a searched UPDATE on a table in a nonrecoverable storage pool whose search condition could be satisfied by more than one row. Uniqueness checking was not deferred and a duplicate was detected before all rows were updated.

SQLSTATE 23505.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-804 **Either the structure or the section number in the RDIIN control block with call type *call-type* is incorrect.**

Explanation: The database manager found an incorrect call type in the RDIIN structure.

SQLSTATE 07002.

System Action: The processing of this call to the database manager ends.

User Response: If your program generates its own RDIIN structure or modifies an RDIIN structure that DB2 Server for VSE preprocessors generated, ensure that a valid call type is in the RDIIN.

If your program does not generate its own RDIIN or

modify an existing RDIIN, a database manager error has occurred. Notify your system programmer.

System Programmer Response: Record the error and contact the designated support group for your installation.

-805 **The package *owner.package-name* is not in the SYSTEM.SYSACCESS catalog table.**

Explanation: When the system tried to run the program, it could not find the package in the catalog table SYSTEM.SYSACCESS.

SQLSTATEs:

42704 On a GRANT, REVOKE, or DROP statement (for example, when directly naming the package)

51002 On any other statement (for example, when indirectly attempting to access a package that is not at the application server).

System Action: Processing of the SQL statement has ended. The application can issue subsequent SQL statements.

User Response: Be sure that the program has been preprocessed with no errors. If not, correct any errors which caused the preprocess to fail, preprocess the program and rerun it.

-806 **The package *owner.package-name* is unusable.**

Explanation: The package is unusable because it depends on some name (table, view, index, etc.) not now defined, or some authorization is required which is not granted now.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended. The logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Determine the name or authorization that is required and submit necessary statements to correct the error. If a change is made to the program, it must be preprocessed.

-807 **The maximum number of active packages for an agent is exceeded. Maximum allowed number is *npackage*.**

Explanation: The user has link edited more than the permissible number of programs together and has executed an SQL statement from each of them without an intervening COMMIT or ROLLBACK. This means that the user has more than the permissible number of packages active at the same time. The maximum number of active packages allowed is the same as the value of the initialization parameter NPACKAGE.

SQLSTATE 54017.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response:

1. Redesign or restructure your programs so that no more than the maximum permissible number of packages are involved during execution; or ask your database administrator to increase the value of the NPACKAGE parameter on the SQLSTART EXEC. If the value of the NPACKAGE parameter changes, using the new value, re-run the SQLSTART EXEC.
2. Issue a COMMIT at an appropriate point during execution, before the program which causes this error executes.

-809 The statement failed because an attempt was made to insert a row longer than allowed.

Explanation: The row was longer than allowed for a table. Only 4080 bytes of data can be placed in a row, unless a long string is involved. A long string column is either a LONG VARCHAR, LONG VARGRAPHIC, VARCHAR(*n*) where *n* is greater than 254 but less than or equal to 32767, or VARGRAPHIC(*n*) where *n* is greater than 127 but less than or equal to 16383.

This error is not detected at the time the table is created. Rather, the error is issued the first time that an attempt is made to insert data into the table.

SQLSTATE 54018.

System Action: Processing of the SQL statement has ended.

User Response: Drop the table. Recreate the table so that the total length of a row is reduced. Try again.

-810 The statement failed because more than one row was returned for a SELECT clause when only one is allowed. (Subquery or non-cursor SELECT).

Explanation: A cursor SELECT is required to return more than one row.

The contents of any output host variables are unpredictable.

SQLSTATE 21000.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-811 The use of this statement is invalid against a section created by a PREPARE SINGLE ROW statement.

Explanation: The only statements that can be executed against a section created by the PREPARE SINGLE ROW form of the EXTENDED PREPARE statement are Extended EXECUTE statements specified with the OUTPUT DESCRIPTOR clause and Extended DESCRIBE statements.

SQLSTATE 07007.

System Action: Processing of the SQL statement has ended.

Programmer Response: Correct the statement. Try again.

-813 You cannot lock a view.

Explanation: An attempt was made to lock a view. A user may only lock a DBSPACE or a table.

SQLSTATE 42809.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-814 You cannot lock a system dbspace or catalog table.

Explanation: A dbspace with owner of SYSTEM or a catalog table cannot be locked.

SQLSTATE 42832.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-815 CONNECT denied by accounting user exit routine.

Explanation: An attempt to connect to the application server was rejected by the installation's accounting user exit routine. Note that this can occur on either an explicit or implicit (only applies to the on-line environment) SQL CONNECT.

SQLSTATE 42505.

System Action: The application server denies the connection and returns to the application. SQLERRD1 contains the return code from the installation's accounting user exit routine.

User Response: Contact the database administrator to verify the authorization name which was rejected.

-816 Error converting a date/time value in the local exit routine *exit-name*.

Explanation: The local date/time exit **exit-name** encountered an error when converting a date/time value from/to the local format.

SQLERRD5 contains the function code with the following values.

- 4 - Convert from local format to ISO format.
- 8 - Convert from ISO format to local format.

SQLERRD1 contains the return code set by the local exit.

SQLSTATE 58002.

System Action: The statement is not executed.

User Response: Contact your system administrator about this problem.

-818 The preprocessor-generated consistency token in the load module is different from the consistency token in the package.

Explanation: At preprocessing time, the database manager creates a consistency token and stores it, for run time use, in the source program (to be stored later in the object program) and in the package. At run time, the consistency token within the package is compared with the consistency token in the object program being executed. If the two consistency tokens do not match, the package and the program were not the result of the same preprocessing invocation.

This problem can occur if the owner of an application changes the program (in other words, adds or deletes SQL statements), reprocesses and recompiles the application, and someone else tries to run the program using the old object code.

SQLSTATE 51003.

System Action: Processing of the SQL statement ends.

User Response: Preprocess and compile the program again and rerun it, or rerun the program using the object code that matches the package.

-821 The PREPARE or EXECUTE IMMEDIATE statement failed because the associated SQL statement has an incorrect length.

Explanation: The SQL statement that was sent over to the database manager on a PREPARE or EXECUTE IMMEDIATE statement at execution time contained an incorrect length. The SQL statement was expected to be in the form of a variable length character string with length of from 0 to 8 192 bytes.

SQLSTATE 22501.

System Action: Processing of the SQL statement has ended.

User Response: Ensure that the SQL statement that is being used by the PREPARE or EXECUTE IMMEDIATE statement is a variable length character string with a length of from 0 to 8 192.

For a host variable declared as a fixed length character string variable in PL/I or in FORTRAN, ensure that the length is correct.

-823 The statement failed because you are not permitted to perform this operation on a catalog table.

Explanation: This code is issued when you attempt to do any of the following:

- Delete rows from certain catalog tables.
- Update rows in certain catalog tables.
- Insert rows into certain catalog tables.
- Alter any catalog table other than SYSTEM.SYSLANGUAGE.
- Reference a catalog table other than SYSTEM.SYSLANGUAGE as the parent table of your foreign key.
- Reorganize a system-created index on any catalog table other than SYSTEM.SYSLANGUAGE using the DBS Utility REORGANIZE INDEX command.

Only someone with DBA authority may issue UPDATE, INSERT and DELETE statements against catalog tables whose columns may be altered. For a list of alterable catalog tables, see the *DB2 Server for VSE & VM SQL Reference* manual.

SQLSTATE 42832.

System Action: Processing of the SQL statement has ended.

User Response: Correct the statement. Try again.

-824 Resource Adapter internal error.

Explanation: This is a DB2 Server for VSE system error. An incorrect set/reset request was made, or an internal error occurred during blocking of a FETCH or PUT request. SQLERRD1 contains further information about the error. The possible values are:

- 4 A pointer used to obtain addressability to an internal control block is zero.
- 5 The calltype of the statement passed is not P (for PUT) or F (for FETCH).
- 4 The set exit process found that a cancel exit is already enabled.
- 8 The set or reset exit process found the RMAR pointer is zero.

- 12 The Online Resource Adapter found that the pointer to the cancel exit in the RMAR is zero.
- 16 The reset exit process found that a cancel exit is not enabled.

SQLSTATE 58004.

System Action: Processing of the SQL statement has ended.

If the value of SQLERRD1 is less than zero, a severe error has occurred. The logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Notify your system programmer. After a severe error has occurred, only a CONNECT statement will be accepted.

System Programmer Response: Make a record of what went wrong. Ensure that the SQLERRD1 value is included in the information. Contact the designated support group for your installation.

-825 An error occurred while processing an operator command.

Explanation: An error occurred while processing an operator command. SQLERRD1 contains further information about the errors. The possible values are:

- 65 Operator commands are not valid in a LUW.
- 120 Operator commands are not valid in SUM.
- +61 Length of operator command or parameter exceeds 8 characters. Refer to message ARI0061E for detailed information.
- +63 Operator command has not been specified. Refer to message ARI0063I for detailed information.
- +64 Operator command is invalid. Refer to message ARI0064E for detailed information.
- +66 Unexpected error such as: invalid parameter or I/O error. Refer to message ARI0066E for detailed information.
- +67 Invalid SHOW command. Refer to message ARI0067E for detailed information.
- +68 Invalid SET command. Refer to message ARI0068E for detailed information.

SQLSTATE 51010.

System Action: database operator command processing ends.

User Response: Ensure that the command is correct and try again. However, if the SQLERRD1 is +66 and the problem persists, notify your system programmer.

System Programmer Response: Refer to the error

messages returned to the user and the operator, and take the appropriate corrective action.

-826 The statement identifier *statement-id* in package *owner.package-name* is not valid because: *reason-code*.

Explanation: The **statement-id** of an Extended DESCRIBE, DECLARE cursor, or EXECUTE is not valid for one of the following reasons:

1. **statement-id** does not exist in the package named.
2. **statement-id** is not executable because it was deleted with a DROP STATEMENT.
3. **statement-id** is not a SELECT, but a query operation is implied by the current statement. (The current statement is an extended DESCRIBE or DECLARE CURSOR).
4. **statement-id** is a SELECT, but a query operation is not implied by the current statement. (The current statement is an extended EXECUTE).
5. **statement-id** is not a SELECT statement, but a SELECT statement is required. (The current statement is an extended PREPARE SINGLE ROW...).
6. **statement-id** is not a SINGLE ROW SELECT (prepared with a PREPARE SINGLE ROW form of PREPARE). (The current statement is an extended EXECUTE...USING OUTPUT DESCRIPTOR).

SQLSTATEs for reason codes 1 and 2:

- 07003 EXECUTE
- 26501 DECLARE CURSOR, DESCRIBE, DROP STATEMENT, PREPARE – Filling empty section.

SQLSTATEs for other reason codes:

- 07005 Reason code 3
- 07003 Reason code 4
- 26507 Reason code 6
- 26508 Reason code 5.

System Action: Execution of the SQL statement has ended.

User Response: Rollback the logical unit of work, then correct the error. Try again.

-827 Extended dynamic statements are permitted only for package created by the CREATE PACKAGE statement. Package *owner.package-name* was not created by CREATE PACKAGE.

Explanation: You can use extended dynamic statements only to execute or modify a package that a CREATE PACKAGE statement has created.

SQLSTATE 42862.

System Action: Processing of SQL statement ends.

User Response: Roll back the logical unit of work, correct the error, and rerun the program.

-828 **Package *owner.package-name* was created using the NODESCRIBE option of the CREATE PACKAGE statement. Therefore, you cannot use the DESCRIBE statement for it.**

Explanation: You used the NODESCRIBE option when creating the package with the CREATE PACKAGE statement.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Roll back the logical unit of work, then correct the error. Try again.

-829 **You cannot use a CREATE PACKAGE statement with the REPLACE option to replace package *owner.package-name* which was created with the MODIFY option.**

Explanation: When the package was originally created, the MODIFY option was specified. The current CREATE PACKAGE statement is incorrect because it contains the REPLACE option. A modifiable package may not be replaced.

SQLSTATE 56046.

System Action: Processing of SQL statement has ended.

User Response: Rollback the logical unit of work, then correct the error. Try again.

-830 **You cannot use an Extended PREPARE or DROP STATEMENT to change package *owner.package-name*.**

Explanation: You are not allowed to add or delete a statement from the package either because:

- The package was created with the NOMODIFY option, or
- The package was created with the MODIFY option but you are running the program under the Distributed protocol, which does not support these two statements.

SQLSTATE 42859.

System Action: Processing of the SQL statement ends.

User Response:

- If the NOMODIFY option was specified on the CREATE PACKAGE, roll back the logical unit of work, correct the error, and rerun the program.

- If the MODIFY option was specified, rerun the application locally if the application can be ported to this operating environment.

-831 **A package created by the CREATE PACKAGE statement can be the target of the following Extended Dynamic Statements only: EXECUTE, DECLARE CURSOR, OPEN, FETCH, PUT, CLOSE, DROP STATEMENT, and DESCRIBE.**

Explanation: The only SQL extended dynamic statements that might reference or modify a package created using the CREATE PACKAGE statement are:

- Extended DECLARE CURSOR
- Extended DROP STATEMENT
- Extended OPEN, FETCH, PUT, and CLOSE
- Extended EXECUTE
- Extended DESCRIBE.

Any other SQL statements referencing a CREATE PACKAGE package are invalid.

SQLSTATE Spaces.

System Action: Processing of the SQL statement has ended.

User Response: Roll back the current logical unit of work, correct the problem, and rerun the preprocessor.

-832 **A CREATE PACKAGE statement has been issued in the current logical unit of work. The database manager cannot execute the current statement until you commit or roll back the current logical unit of work.**

Explanation: After you have issued a CREATE PACKAGE, rules apply to the execution of SQL statements that can follow in the same logical unit of work. Those rules are:

- If the CREATE PACKAGE contains the NOMODIFY option, only Extended PREPARE SQL statements can follow.
- If the CREATE PACKAGE contains the MODIFY option, the SQL statements that follow can only reference the package named in the CREATE PACKAGE statement, and must be one or a combination of the following SQL statements:
 - Extended PREPARE
 - Extended EXECUTE
 - Extended DECLARE Cursor
 - Extended OPEN
 - Extended PUT
 - Extended FETCH
 - Extended CLOSE
 - Extended DESCRIBE
 - DROP STATEMENT.

After a COMMIT or ROLLBACK statement is issued, these rules no longer apply.

SQLSTATE 56042.

System Action: Processing of the SQL statement has ended.

User Response: Modify the user program so that the statement in error is executed after the package has been committed or rolled back. A package is committed with the COMMIT statement and rolled back with the ROLLBACK statement.

-833 **The package or view, *name*, cannot be rebound because the character set under which it was preprocessed, *charset1*, does not coincide with the character set under which the database manager is running, *charset2*.**

Explanation: The database manager is rebinding package or view *name*. The package or view was preprocessed with the character set *charset1*. The database manager is currently running using character set *charset2*, which is different from the preprocessed character set.

Note that if the value of the column 'VALID' in SYSTEM.SYSACCESS is manually changed to 'N' by a user for a view package, this error will be received on all subsequent invocations of the view.

SQLSTATE 51016.

System Action: Rebinding is terminated and processing of the SQL statement has ended.

User Response:

1. Preprocess the package again. If it is the DBS Utility package (SQLDBA.ARIDSQL), the database manager provides a job control program to recreate the package. See the *DB2 Server for VSE Program Directory* for more information.
2. Contact the database administrator. End the application server and restart, supplying a character set name in the CHARNAME parameter that is identical to the character set that was used to first preprocess the package.

Packages preprocessed using either the ENGLISH or the INTERNATIONAL character set never encounter this error. They are always rebound in ENGLISH or INTERNATIONAL, respectively.

-834 **The NULL form of the Extended PREPARE statement does not follow a CREATE PACKAGE...USING NOMODIFY statement in the current logical unit of work.**

Explanation: The user application is executing an Extended PREPARE statement using the NULL option.

In the current logical unit of work, this statement does not follow a CREATE PACKAGE statement of the form: CREATE PACKAGE...USING NOMODIFY... . Therefore, the database manager does not allow it to be executed. The database manager enforces an execution sequence rule for the NULL form of the Extended PREPARE: it must be in the same logical unit of work as CREATE PACKAGE of the form: CREATE PACKAGE...USING NOMODIFY... ; and it must follow the CREATE PACKAGE in the execution sequence.

SQLSTATE 56047.

System Action: Processing of the SQL statement has ended.

User Response: Arrange the execution sequence of the NULL form of the Extended PREPARE so that it follows, in the same logical unit of work, a CREATE PACKAGE of the form: CREATE PACKAGE... USING NOMODIFY... .

-835 **The database manager cannot rebind the view *owner.view-name* because this view was created in a previous version of the database system.**

Explanation: When the database manager is running an application for the first time, and the application uses a view that was created before the current version of the application, the database manager rebinds the CREATE VIEW statement of the view.

An unexpected error can occur during the rebinding. In most instances, this is because the view definition included a SELECT * and the table on which the view is based had columns added to it since the view was originally created. In this instance, SQLERRD1 is equal to -110. Otherwise, SQLERRD1 is set to the SQLCODE that indicates the error detected during view preprocessing.

When the application server default CHARNAME value has been changed and a view has a dependency on a system table, the view is no longer valid. In this case, SQLERRD1 is set to -833.

SQLSTATE 56049.

System Action: Processing of the SQL statement has ended.

User Response: Drop the view and recreate it before rerunning the application. Contact your database administrator to have this done.

-836 **The current statement cannot be executed using the DRDA protocol.**

Explanation: The current statement is not defined in the DRDA protocol. The following is a list of the statements that are not supported when the DRDA protocol is used.

- Extended PREPARE SINGLE ROW (In FORTRAN this is SELECT INTO.)
- Positioned UPDATE or positioned DELETE in FORTRAN.
- Extended EXECUTE...USING OUTPUT DESCRIPTOR
- CONNECT (userid) IDENTIFIED BY (password)
- DB2 Server for VSE Operator Commands
- Extended Dynamic statements for modifiable packages

SQLSTATE 42612.

System Action: Processing of the SQL statement has ended. The logical unit of work (if any) has been rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Preprocess and execute the program against the database application server and do not use the DRDA protocol. If you must execute against a remote server, a program should be rewritten to avoid these statements. For example, if the current statement is a PREPARE SINGLE ROW, replace it with a Basic PREPARE and use cursor operations to retrieve the required data.

-841 A DBNAME Directory error has occurred. Reason Code= X'reason-code'.

Explanation: The database manager detected an error with the DBNAME Directory when it tried to resolve the server name.

The **reason-code** value is the 2-byte hexadecimal error code. Possible reasons for the error:

- X'1007' - Default DBNAME not found in DBNAME Directory.
- X'1015' - SNA communications is requested, but SNA address information is not available for the DBNAME.
- X'1016' - TCP/IP communications is requested, but TCP/IP address information is not available for the DBNAME.

SQLSTATE:

57040

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

Correct the communications directory problem and try to connect again.

-844 An Extended PREPARE can only be executed using the DRDA protocol if it has an input SQLDA.

Explanation: You cannot PREPARE an SQL statement with host parameter markers without specifying input SQLDA when using the DRDA protocol.

SQLSTATE 56041.

System Action: Processing of the SQL statement has ended.

User Response: Execute the program against a local application server. If you must execute against a remote server, the program should be rewritten to include the SQLDA information for the parameter markers specified in the PREPARE statement.

-860 The SQL statement was not processed because the application server *server-name* is not accepting connections from DRDA-only application requesters.

Explanation: A VSE application requester is attempting to access a remote server, but the remote server does not support the DRDA protocol.

SQLSTATE 56077.

System Action: Processing of this SQL statement has ended. The resource adapter returns to the application with SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: Change your dbname directory so the DB2 Server for VM application server is no longer defined as a remote database and will be accessed through guest sharing, or contact your Database Administrator to start the DB2 Server for VM application server with PROTOCOL(AUTO).

-861 Cannot access a remote server because the DRDA facility has not been installed for the application requester.

Explanation: The application requester is connecting to a remote application server. However, the DRDA facility has not been installed for the application requester.

SQLSTATE 56079

System Action: Processing of the SQL statement ends. The resource adapter returns to the application with the SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: Contact your database administrator to install the DRDA facility.

Database Administrator Response:

Determine whether or not you require your application requester to initiate DRDA conversation. If so, install the DRDA facility following the steps in the *DB2 Server*

for VSE System Administration manual. If not, access to remote application servers will not be allowed.

-900 **The SQL statement cannot be executed because the previous error has left the application in an unconnected condition.**

Explanation: A previous failure has placed the application process in a connectable and unconnected state. The only SQL statement that can be executed from the connectable and unconnected state is CONNECT.

SQLSTATE 08003.

System Action: Processing of the SQL statement ends and SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error occurs, enter a CONNECT statement only.

-901 **The SQL statement failed because of a system error. You can continue to use the database manager.**

Explanation: An error has occurred which is due to system error.

SQLSTATE 58004.

System Action: Processing of the SQL statement has ended.

User Response: Verify that your SQL statement is valid. If you cannot determine the cause of the error, contact your system programmer.

SQLERRD2 in message ARI0504I or in the SQLCA is the DBSS return code which may further define the error that occurred. The following SQLERRD2 codes are considered to be limit or user errors, not system errors:

- -63 = 'SCHEDULE' (for example, CONNECT) operation requested from an active LUW
- -64 = Database log space exhausted
- -65 = Operation not valid in an active LUW
- -92 = Checkpoint in progress, try later
- 137 = Duplicate found during sort of unique index, unique constraint, or primary key

For a complete list of possible SQLERRD2 values, see Chapter 17, "DBSS Return Codes" on page 231.

System Programmer Response: Use SQLERRP and SQLERRD1 in message ARI0504I to determine more information about the error. Verify that the database catalog has not been destroyed. If this is a system error: Make a record of what went wrong and contact the designated support group for your installation.

-902 **Serious system error. Discontinue further use of the database manager.**

Explanation: An unrecoverable error occurred.

SQLSTATE 58005.

System Action: Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

User Response: Notify your system programmer.

System Programmer Response: Use SQLERRP and SQLERRD1 in message ARI0504I to determine more information about the error. Make a record of what went wrong and contact the designated support group for your installation.

-903 **The current logical unit of work has been rolled back because of a system failure.**

Explanation: An error has occurred that may be due to a user error or a real system error. The catalog may be destroyed. Refer to **User Response**.

SQLSTATE 40003.

System Action: Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

User Response: Notify your system programmer.

SQLERRD2 in message ARI0504I or in the SQLCA is the DBSS return code which may further define the error that occurred. The following SQLERRD2 codes are considered to be limit or user errors, not system errors:

- -63 = 'SCHEDULE' (for example, CONNECT) operation requested from an active LUW
- -64 = Database log space exhausted
- -65 = Operation not valid in an active LUW
- -92 = Checkpoint in progress, try later
- 137 = Duplicate found during sort of unique index, unique constraint, or primary key

For a complete list of possible SQLERRD2 values, see Chapter 17, "DBSS Return Codes" on page 231.

System Programmer Response: SQLERRD2 in message ARI0504I is the DBSS return code if SQLERRD2 is not zero. For more information about the error, see Chapter 17, "DBSS Return Codes" on page 231. If SQLERRD2 is zero, a database system error has occurred. In that case, make a record of what went wrong and contact the designated support group for your installation.

-906 **The current program was cancelled because of a system error. The program exception is as follows:** *exception-type psw1 psw2*

Explanation: While the system was executing a package, a program exception occurred.

SQLSTATE 58023.

System Action: Processing has ended.

User Response: Notify your system programmer.

System Programmer Response: The exception-type and associated PSW shown in the message should aid in problem determination. If a database system error occurred, make a record of what went wrong and contact the designated support group for your installation.

-911 **The current logical unit of work was rolled back because of a deadlock or timeout. It was waiting for a lock-level lock in dbspace = *dbspace-number* held by user {*job-name* | *sql-userid*}. Reason code = *code*.**

Explanation: 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.

The value of *lock-level* can be any one of DBSPACE, TABLE, INDEX PAGE, PAGE, INDEX KEY, or ROW.

SQLSTATE 40001.

System Action: Processing has ended for this logical unit of work and all changes to the database have been rolled back.

User Response: If a deadlock occurred, resubmit your current job at a later time.

If a lock timeout occurred, determine if the lock timeout value is too short or resubmit your current job at a later time.

Operator Response: If a lock timeout occurred and it is determined that the lock timeout value is too short, the lock timeout value can be increased by using the SET LTIMEOUT *new-time* command.

-912 **The current logical unit of work was rolled back because of excessive (system-wide) lock requests.**

Explanation: The system has encountered too many system lock requests and has ended processing for this logical unit of work.

SQLSTATE 57028.

System Action: Processing has ended for this logical unit of work and all changes to the database have been rolled back.

User Response: Resubmit your current job at a later time.

-913 **Unsuccessful execution caused by timeout. Reason code *reason-code*, type of resource *resource-type*, and resource name *resource-name*.**

Explanation: A CALL statement has timed out while waiting for a stored procedure server. The startup parameter PTIMEOUT determines the maximum time the database manager will wait for a stored procedure server to be assigned for an SQL CALL statement.

Possible reason codes are:

- 1 An agent has exceeded the allowed time to wait for a stored procedure server to become available.
- 2 A stored procedure server failed to start within the allowed time.

SQLSTATE: 57033

System Action: The statement terminates.

User Response: Run the application again when the stored procedure servers are less busy. Consider rebalancing the stored procedure server workload, or defining additional stored procedure servers.

-914 **A ROLLBACK of the current logical unit of work was scheduled because of a user CANCEL request.**

Explanation: A CANCEL request has been issued. The CANCEL could be initiated by the user or by the system. The CANCEL initiated by the system is a result of reaching the limit on lock request blocks.

SQLSTATE 57014.

System Action:

- The ROLLBACK is scheduled.
- The SQLCODE is returned to the application.
- For a VSE system online user, the communication path to the database manager remains unavailable until the required rollback is completed.

User Response: You may continue to use SQL.

If the user did not issue a CANCEL request, then retry at a later time and if the operation is still receiving an SQLCODE of -914, contact your system programmer about increasing the NLRBU or the NLRBS parameters when starting the application server.

-915 The current logical unit of work was rolled back because of excessive locks held for this logical unit of work.

Explanation: The user has issued too many lock requests within the logical unit of work.

SQLSTATE 57029.

System Action: Processing has ended and all changes to the data base have been rolled back.

User Response: Issue a COMMIT statement between lock requests and rerun.

-916 The current logical unit of work was rolled back because of operator action.

Explanation: The system operator entered the FORCE command to cause ROLLBACK of the current logical unit of work.

SQLSTATE 57027.

System Action: ROLLBACK logical unit of work.

User Response: You may continue to use SQL.

-917 The package was not created and the logical unit of work was rolled back due to a system error.

Explanation: During preprocessing or the creation of a nonmodifiable extended dynamic package that was processed with the ERROR bind option, an error occurred that prevents the package from being created. The logical unit of work was rolled back (SQLWARN0 = W, SQLWARN6 = W). Examples of these types of errors are invalid section numbers, internal limitations of the system, or a system error (-9XX).

SQLSTATES:

42969 Statement too long or invalid section number

58027 Earlier system error

System Action: Processing has ended for this logical unit of work and all changes to the database have been rolled back.

User Response: Correct the cause of the problem and try again.

-921 The system catalog table *table-name* has an incorrect column type *column-type*.

Explanation: The catalog table in the message has an incorrect column type as shown.

SQLSTATE 58025.

System Action: Processing of the SQL statement has ended.

User Response: Notify your system programmer.

System Programmer Response: This is a system error.

Make a record of what went wrong and contact the designated support group for your installation.

-923 The index was marked invalid.

Explanation: One of the following may have happened during ROLLBACK, UNDO or REDO processing:

- The database manager cannot obtain a logical index page. The shortage of index pages can result from the ROLLBACK or UNDO of either a DROP INDEX, a REORGANIZE INDEX, a deletion of a row, or an update of a row. It can also result from the REDO of either a CREATE INDEX, an insertion of a row, or an update of a row.
- The database manager cannot obtain a physical index page. The shortage of index pages can result from the ROLLBACK or UNDO of either a DROP INDEX, a REORGANIZE INDEX, a deletion of a row, or an update of a row. It can also result from the REDO of either a CREATE INDEX, an insertion of a row, or an update of a row.
- Not enough virtual storage or not enough room in a temporary DBSPACE exists to recreate an index. The shortage can result from the ROLLBACK or UNDO of either a DROP INDEX or REORGANIZE INDEX, or from the REDO of a CREATE INDEX or REORGANIZE INDEX.

SQLSTATE 51012.

System Action: The database manager completed the ROLLBACK, UNDO, or REDO without updating the index and marked the index invalid. You may now have more than one invalid index. If the database manager performed an implicit ROLLBACK, the actual reason for the ROLLBACK (DBSS Return Code) is in SQLERRD2.

User Response: Issue the SHOW INVALID operator command to find the invalid indexes. You cannot use an invalid index until you have dropped and recreated it. Drop invalid indexes that you own, and inform your system programmer about any other invalid indexes.

System Programmer Response: Contact the owners of the invalid indexes and have them drop and recreate the indexes.

-928 An error *error* occurred while accessing the *{user | global}* SQLGLOB record.

Explanation: An error occurred when the DRDA Resource Adapter tried to access the SQLGLOB VSAM file. Possible causes are:

- neither the user nor the global SQLGLOB record were found in the SQLGLOB file,
- the user SQLGLOB record may have been altered by an unauthorized change to the SQLGLOB file,
- the global SQLGLOB record may have been altered by an unauthorized change to the SQLGLOB file.

SQLSTATE: 55028

System Action: Processing of the SQL statement ends. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Use the DSQU transaction or execute the job ARISBGUD to update the user SQLGLOB parameters, or notify your system programmer.

System Programmer Response: Use the DSQG transaction or execute the job ARISBGUD to update the global SQLGLOB parameters, or recreate the SQLGLOB file. Refer to the *DB2 Server for VSE & VM Database Administration* manual.

-929 The database name has not been defined in the DBNAME Directory.

Explanation: The application server name has not been defined in the DBNAME Directory.

SQLSTATE 42705.

System Action: Preprocessor or statement execution ends.

User Response: Correct the statement. Try again.

-930 Sufficient storage is not available to process the statement.

Explanation: The virtual storage necessary to execute the command is not available now.

SQLSTATE 57011.

System Action: Processing of the SQL statement has ended.

User Response: Resubmit the statement later. If the problem persists, notify your system programmer.

System Programmer Response: One of the following has occurred:

- All available virtual storage has been used.
- A hardware error has occurred.
- An internal database error has occurred.

This error is associated with message ARI0001E. Refer to the explanation of message ARI0001E for more information.

Reconfigure the system so that you have a larger DB2 Server for VSE partition. If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

-931 Failure while freeing dynamically allocated storage.

Explanation: While attempting to free storage during processing, an error occurred. This is a DB2 Server for VSE or VSE error.

SQLSTATE 58004.

System Action: Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

User Response: Notify your system programmer. Make a record of what went wrong and contact the designated support group for your installation.

-932 An error occurred when the Resource Adapter attempted to get or to free dynamic storage.

Explanation: The resource adapter encountered an error in either getting or freeing storage needed for control blocks and work areas. SQLERRM will be set to GET or GETVIS for a failure when trying to obtain storage. SQLERRM will be set to FREE, FREEVIS, MBXFREE, CURSFREE, or SQLDAFRE.

SQLSTATEs:

57011 Dynamic storage could not be obtained.

58004 Dynamic storage could not be released.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: If possible, retry with a larger user partition GETVIS area. Otherwise, notify your system programmer.

After a severe error has occurred, only a CONNECT statement will be accepted. If the resource adaptor is initialized, only a CONNECT statement will be accepted. If the resource adaptor is not initialized, any subsequent statement will result in termination of the application.

System Programmer Response: SQLERRD1 contains the GETVIS or FREEVIS macro return code. If SQLERRD1 is 12, it indicates that not enough space was available to satisfy the request for additional storage. SQLERRD2 indicates the amount of space required.

-933 The communications path to the server is disabled. No further access to this path is possible. Request Code = request-code.

Explanation: The database manager detected a communication error. This usually indicates that the communication link to the database partition was disconnected. This disconnection may have resulted from:

- The system operator terminating the database manager
- A serious system or sub-system error

- The system operator issuing a FORCE command.

SQLERRD1 contains the return code which the resource adapter received from the DSC component of the database manager. SQLERRD2 is the reason code which DSC received from the system communication facility. Refer to "VSE/Advanced Functions Cross-Partition Communication Codes" (or to Chapter 20, "DB2 Server for VSE Reason Codes" on page 355) for a list of these codes and their meanings. If the reason code is not listed in the above reference, see the **System Programmer Response** below for a list of these codes and their meanings.

If communication is through TCP/IP, SQLERRD1 contains the return code which the resource adapter received from TCP/IP and SQLERRD2 is always 0. Refer to the *IBM Language Environment for VSE/ESA: LE/VSE Enhancements* manual for the meaning of the TCP/IP return codes.

Request Code=**request-code** is the communication request code.

TCP/IP request codes:

1. 002 - Connect
2. 008 - Close socket

SQLSTATES:

57027	Operator action.
57030	Maximum number of connections to virtual machine exceeded.
40003	System error.

System Action: The logical unit of work (if any) of the application is rolled back.

- The CIRT termination transaction was internally activated. The transaction displays message ARI0406E on the system operator console.
- Any further attempt by the application to access the database manager will cause CICS to abort the transaction with an AEY9 abend code.

Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

User Response: Report this problem to your system programmer. Do not reenter the user transaction until the problem in the database manager is corrected and the database on-line support is restored using the CIRB or CIRA transaction.

System Programmer Response: Take corrective action based on the **Explanation** and message ARI0406E. If SQLERRD2 shows a reason code that is not documented in this manual, record this reason code. If

message ARI2908I is displayed on the system console, record the content of this message. Contact the designated support group for your installation.

-934 An error occurred referencing *object*. The action being performed was *action*.

Explanation: An error occurred when the Resource Adapter attempted to perform the specified *action* on the specified *object*.

object is the program or control block on which the action is performed.

action is the action performed.

Note: If the application is linked with SQL/DS Version 3 Release 3 or earlier code, the *action* may not be available.

SQLSTATE 58021.

System Action: Processing has ended. The following fields are set in the SQLCA:

- SQLWARN0 and SQLWARN6 are set to S to signal that a severe error has occurred
- SQLERRD1 is set to the error code returned by the failing action
- SQLERRP contains the name of the module reporting the error.

User Response:

Notify your system programmer.

System Programmer Response:

This is when all necessary packages should be added to your libraries. If no steps were left out and all ran successfully, you have a database system error. Make a record of what went wrong and contact the designated support group for your installation.

-935 The address of an output variable is outside the partition.

Explanation: An address pointing to application output variables was found to be outside the application partition boundaries.

SQLSTATE 51004.

System Action: The resource adapter returns to the calling program. Some output variables may have been moved to the user area if they contained valid addresses. No moving takes place after the incorrect addresses are found. Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

In the SQLCA, SQLERRD1 is set to 5, meaning an addressing error has occurred.

SQLERRD2 is set to the host variable ordinal position

number of the address in error, in the host variable list or SQLDA descriptor.

User Response: Notify your system programmer.

System Programmer Response: Check the RDIIN structure and verify that it is the same as after preprocessing. If the program looks valid, make a record of what went wrong and contact the designated support group for your installation.

-936 DB2 Server for VSE Resource Adapter internal error.

Explanation: A database system error has occurred. The number of logical units of work prepared for commit or rollback exceeds an internal limitation. Applications and terminal users should not receive this SQLCODE.

SQLSTATE Spaces.

System Action: When the Resource Adapter receives this SQLCODE, it generates message ARI0408E and the CIRA or CIRB transaction ends.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong and contact the designated support group for your installation.

-937 The DB2 Server for VSE online support is ending. No further support to the application server is possible.

Explanation: The Resource Adapter Termination transaction (CIRT) or the Resource Adapter Remove Connections transaction (CIRR) was activated by either a terminal operator or the CIRR transaction was activated internally, by the DB2 Server for VSE online support. (The CIRR transaction is internally activated when the online support detects a serious error.)

SQLSTATE 57039.

System Action:

- The CIRT or CIRR termination process continues.
- Any further attempt by the application to access the database manager will cause CICS/VSE to abort the transaction with an AEY9 abend code.
- The logical unit of work (if any) of the application is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: The user transaction should not be reentered until the DB2 Server for VSE online support is restarted using the CIRB transaction.

-938 Multiple task SQL statements were submitted in single partition mode.

Explanation: After one task had issued an SQL statement, in single user mode, a second task issued a subsequent SQL statement. Multi-task SQL statements are not allowed in single user mode.

SQLSTATE 56063.

System Action: Processing of the SQL statement has ended. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred. If a severe error has occurred, only a CONNECT statement will be accepted.

User Response: Restart the job in multiple user mode.

-939 An error occurred with the CICS/VSE service *service* while accessing the [file] file.

Explanation: An error occurred while the Online DRDA Resource Adapter is accessing *file*.

SQLSTATE 58030.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Report the problem to your system administrator.

System Programmer Response: To correct a PHLOAD error, refer to SQLERRD1 for the CICS/VSE RESP2 value returned from the CICS/VSE LOAD service.

-940 The SQL statement was not processed because the application server resource *server-name* was not ready or was not found.

Explanation: An implicit or explicit connect request failed due to the following possible reasons:

- If you issued a CONNECT statement with the TO *server-name* option, either no DB2 Server for VSE application servers were started with the application server resource name you desired, or you specified an incorrect server name.
- Otherwise, it is likely that your application server has not been started with the server name you specified in the DBNAME directory or on the CIRB or CIRC CICS transactions.
- SNA sessions between the AVS gateway and the target LU may not be established when the user attempts to connect to a remote application server through VTAM.
- Intermediate communications server, like TSAF, or AVS may not be active.

- The COMDIR has been unloaded by the VM system after the application program or the application server abended.

If the SQLSTATE is 57011, then a communications directory entry was found with the specified *server-name*, but the connection to the target application server failed.

If the SQLSTATE is 42705, no communications directory entry was found or the directories were not used. The attempt to connect to the target application server failed.

SQLSTATES:

57011 **server-name** resource not available.

42705 **server-name** resource not available.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

Contact your system administrator to start up the desired application server, communications server, or SNA sessions, and restart your application.

-941 **An error occurred while the database manager was building a system communication message.**

Explanation: An error was detected while building a cross-partition message. The cause of the error is indicated by the return code in SQLERRD1.

The possible return codes are:

- 12** Not enough virtual storage for the message.
- 16** Incorrect storage area being freed.
- 36** CALLTYPE in RDIIN specifies a function which is not supported.
- 40** The specified RDICTYPE requires an input length and RDIMBLEN is not specified in RDIIN.
- 44** SQLTYPE in SQLDA specifies a data type which is not supported.
- 48** RDIMBLEN in RDIIN does not specify a length which is equal to the total input.
- 52** Free area pointer is not equal to the start of the Mailbox plus our current offset to it.
- 56** Space used plus space left not equal to 8K for blocked output.
- 60** Address of blocked PUT Mailbox is less than or equal to zero.

64 No pointer to Mailbox found in RDIIN for blocked PUT.

For error codes 12 and 16 the amount of storage required by the message is placed in SQLERRD2.

For error code 44, the ordinal number of the host variable with the unsupported datatype in the SQLDA is placed in SQLERRD2.

Either the application program overlaid some of the input structure, or this is a system error.

SQLSTATE 58004.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Notify your system programmer. After a severe error has occurred, only a CONNECT statement will be accepted.

System Programmer Response: Verify that the desired database machine has been started and that the application does not mistakenly overlay any of the DB2 Server for VSE input structures. If neither of these is the case, then this is a DB2 Server for VSE system error. Make a record of what went wrong and contact the designated support group for your installation.

-942 **Because of insufficient storage, the database manager cannot process the SQL statement.**

Explanation: The DB2 Server for VSE partition does not have enough storage to build internal control blocks necessary for receiving the SQL statement. SQLERRD1 contains the length of the storage required.

Note: This code will be reported for DB2 Server for VSE protocol.

SQLSTATE 57011.

System Action:

- The SQLCODE is returned to the user.
- The logical unit of work is not rolled back.

User Response: Re-enter the SQL statement after the DB2 Server for VSE partition is made larger (or when the partition is less active).

-944 **The system dbspace SYS0002 does not exist.**

Explanation: The database manager was attempting to store a package on dbspace SYS0002 during preprocessing; however, SYS0002 does not exist. This dbspace should have been created at DB2 Server for VSE installation time during database generation.

SQLSTATE 57026.

System Action: Preprocessing will end.

User Response: Contact your system programmer to find out why dbspace SYS0002 was not created or why it no longer exists. When SYS0002 becomes available, rerun the preprocessor job.

System Programmer Response: A user with DBA authority may have deleted the SYS0002 entry in the SYSTEM.SYSDBSPACES catalog table. Use the INSERT command on the SYSTEM.SYSDBSPACES catalog table with the following values for the associated column names:

```
DBSPACENAME - SYS0002
DBSPACENO - 2
OWNER - PUBLIC
DBSPACETYPE - 1
NTABS - 0
NPAGES - (value specified at database
           generation for the second
           PUBLIC DBSPACE)
NRHEADER - 8
PCTINDEX - 0
FREEPCT - 1
LOCKMODE - P
NACTIVE - 1
POOL - (value specified at database
        generation for the second
        PUBLIC DBSPACE)
```

If this fails or does not correct the problem, you have a system error. A database generation may be necessary. Make a record of what went wrong and contact the designated support group for your installation.

-945 All dbspaces for packages are full. Acquire another dbspace for additional packages.

Explanation: Because all dbspaces for packages are full, another package dbspace must be acquired before CREATE VIEW, CREATE PACKAGE, RELOAD PACKAGE, or a preprocessor can run successfully. A dbspace might be full for one of the following reasons:

- All the available packages in the dbspace are used.
- No more space is available in the dbspace.

A FREEPCT column value of zero in a row for a package dbspace in SYSTEM.SYSDBSPACES catalog table indicates the second condition. Issuing the following SELECT indicates (by a count of 255) that all packages in a dbspace are used:

```
SELECT DBSPACENO, COUNT(*)
       FROM SYSTEM.SYSACCESS
WHERE TNAME NOT LIKE '%AVAILABLE'
GROUP BY DBSPACENO
```

SQLSTATE 57025.

System Action: Preprocessing or statement execution ends. If dbspaces became full during the current logical unit of work, the current logical unit of work is rolled back, the entry or entries in the SYSTEM.SYSDBSPACES table for the filled dbspaces is updated to reflect the full condition (the FREEPCT columns are updated), and the entries in the SYSTEM.SYSACCESS table for the filled dbspaces are also updated to reflect the full condition (the TNAME columns are updated).

User Response: Notify your system programmer or database administrator.

System Programmer Response: Acquire a public dbspace named SYSyyyy as follows:

```
ACQUIRE PUBLIC DBSPACE NAMED SYSyyyy
(PAGES = xxx, PCTINDEX = 0, PCTFREE = 1)
```

where SYSyyyy is the name of the new package dbspace (yyyy being a value 0003-9999 that has not already been used) and xxx is the number of dbspace pages for the packages in this new dbspace. This size is installation dependent, as determined by the size of the programs at your installation. (The recommended size for the initial dbspace is 1024 pages).

Refer to the *DB2 Server for VSE System Administration* manual for exact instructions on acquiring dbspaces for packages.

-946 There is insufficient space remaining for packages in dbspace number dbspace-number. Someone with DBA authority may need to acquire another dbspace for packages if all existing package dbspaces are full.

Explanation: While attempting to insert a row into a package table residing in dbspace number *dbspace-number*, the database manager found that the dbspace was full.

SQLSTATE 57025.

System Action: The current logical unit of work is rolled back. The entry in the SYSTEM.SYSDBSPACES catalog table for the filled dbspace is updated to reflect the full condition. (The FREEPCT column is updated.) The entries in the SYSTEM.SYSACCESS table for the filled dbspace are also updated to reflect the full condition. (The TNAME columns are updated.) Preprocessing will end.

User Response: Notify your system programmer or database administrator.

System Programmer Response: If other package dbspaces are not yet full, retry the command. If all package dbspaces are now full, you need to acquire additional package dbspaces. A dbspace might be full for one of the following reasons:

- All the available packages in the dbspace are used.

- No more space is available in the dbspace.

A FREEPCT column value of zero in a row for a package dbspace entry in the SYSTEM.SYSDBSPACES catalog table indicates the second condition. Issuing the following SELECT indicates (by a count of 255) that all packages in a dbspace are used:

```
SELECT DBSPACENO, COUNT(*)
      FROM SYSTEM.SYSACCESS
WHERE TNAME NOT LIKE '%AVAILABLE'
GROUP BY DBSPACENO
```

Acquire a PUBLIC DBSPACE named **SYSyyyy** as follows:

```
ACQUIRE PUBLIC DBSPACE NAMED SYSyyyy
(PAGES = xxx, PCTINDEX = 0, PCTFREE = 1)
```

where SYSyyyy is the name of the new package DBSPACE (yyyy being a value 0003-9999 that has not already been used) and xxx is the number of dbspace pages for the packages in this new dbspace. This size is installation dependent, as determined by the size of the programs at your installation. (The recommended size for the initial dbspace is 1024 pages.)

Refer to the *DB2 Server for VSE System Administration* manual for exact instructions on acquiring dbspaces for packages.

-947 **This environment does not support**
string.

Explanation: See each Format, below:

Format 1

If *string* is **DATABASE SWITCHING**, the Explanation, SQLSTATE value, System Action and User Response are as follows:

This environment does not support database switching.

Environment may be:

- SINGLE USER MODE
- DBMODE=N

You tried to connect to a database other than the default one while running in single user mode. Database Switching Support is only available in multiple user mode with DBMODE=L or DBMODE=G.

SQLSTATE 56038.

System Action: The statement is not executed.

User Response: If you were operating in single user mode, rerun the program in multiple user mode.

Format 2

If *string* is **CMS WORK UNITS**, the Explanation, SQLSTATE value, System Action and User Response are as follows:

Explanation:

You tried to switch to a new CMS work unit while running in single user mode. Support is only available in multiple user mode.

SQLSTATE 56038.

System Action: Processing of this SQL statement ends.

User Response: If you were operating in single user mode, rerun the program in multiple user mode.

Format 3

If *string* is **DBNAME parameter in preprocessor or DBSU**, the Explanation, SQLSTATE value, System Action and User Response are as follows:

Explanation: This environment does not support the DBNAME parameter in the preprocessor or the DBS Utility.

SQLSTATE 56038.

System Action: The statement is not executed.

User Response: Correct the error. Try again.

Format 4

If *string* is **RESULT SET PROCESSING**, the Explanation, SQLSTATE value, System Action and User Response are as follows:

Explanation: You tried to process result sets over private protocol. The following is a list of statements that are not supported when private protocol is in use :

- ASSOCIATE LOCATORS
- ALLOCATE CURSOR
- DESCRIBE PROCEDURE
- DESCRIBE CURSOR

SQLSTATE 56038.

System Action: Processing of this SQL statement ends.

User Response: Preprocess and execute the program against the database application server and do not use private protocol.

Format 5

If *string* is **AMODE24 ARIUXIT**, the Explanation, SQLSTATE value, System Action and User Response are as follows:

Explanation: You tried to connect to a remote DRDA application server, and your accounting exit is link-edited in AMODE 24.

SQLSTATE 56038.

System Action: Connect is not executed.

User Response: Link-edit the accounting exit with AMODE ANY, RMODE 24. Try again.

-949 **A system error has occurred. Reason Code = *reason-code*.**

Explanation: The database manager has encountered an Operating System error. SQLERRD1 contains the return code from the Operating System if one exists. The possible Reason Codes are:

01 An error occurred while the Resource Adapter was attempting to EXTRACT the current work unit id.

SQLSTATE 58024.

System Action: The statement is not executed.

User Response: Notify your system programmer.

System Programmer Response: Make a record of what went wrong. Ensure that both the Reason Code and the return code are included in this information. Contact the designated support group for your installation.

-965 **FORMAT 1**
Stored procedure *proc-name*
terminated abnormally.
FORMAT 2
Stored procedure *proc-name*
terminated abnormally for AUTHID
***authid*.**

Explanation: DB2 received an SQL CALL statement for a stored procedure. The stored procedure terminated abnormally while attempting to execute the statement.

proc-name

The name of the stored procedure that terminated abnormally.

authid The authorization ID associated with the stored procedure.

SQLSTATE: 51021

System Action: The statement cannot be executed. If the procedure has exceeded the maximum abend count, which is determined by the startup parameter PROCMXAB, then the procedure *proc-name* is stopped and further requests to call it are rejected.

User Response: Correct the errors in the procedure, and then issue START PROC command to activate the stored procedure.

-993 **The file *file* cannot be found.**

Explanation: The file *file* cannot be found by the DRDA Resource Adapter.

SQLSTATE 57044.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back.

SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Report this problem to your system programmer.

System Programmer Response: Create the file *file*. Refer to the *DB2 Server for VSE Program Directory* for the steps to follow.

-994 **The row with *charname* = *charname* does not exist in the file *file*.**

Explanation: The character table for *charname* cannot be loaded by the DRDA Resource Adapter because the required row does not exist in the file *file*.

SQLSTATE 57045.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Report this problem to your system programmer.

System Programmer Response: Create the file *file* to include the required character translation table. Refer to the *DB2 Server for VSE Program Directory* for the steps to follow.

-8001 **Product key validation failed.**

Explanation: A valid product license key is not found or is invalid. A valid key is required to run DB2 Server for VSE. SQLERRD1 contains the return code from the validation. The possible values are:

8 The key is not found or the key that was found is invalid.

20 The key validation routine is not loaded.

SQLSTATE 42968.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: Report this error to your system programmer.

System Programmer Response: Obtain and install a valid key for the product. A valid key can be obtained by contacting your IBM representative. Instructions for installing the key are found in the *DB2 Server for VSE Program Directory*.

-15000 **The *object-type object-name* must have a status of *status*, and not be in use, before it can be altered or dropped.**

Explanation: A stored procedure must have been stopped with the REJECT option, giving a status of

STOP-REJ, and not be running in a stored procedure server, before an ALTER or DROP of that procedure can be processed. In addition, no agents can be running the procedure. A stored procedure server must have been stopped with IMPL=NO before an ALTER or DROP of that stored procedure server can be processed.

Note: If the CREATE PROCEDURE or CREATE PSERVER statement is not yet committed, the PROCEDURE or PSERVER cannot be stopped since the entry is not put in the cache until the unit of work is committed. However, in this case, as ALTER or DROP is allowed if it is issued in the same unit of work as the CREATE statement.

SQLSTATE 55044.

System Action: Processing of the SQL statement ends.

User Response: Issue the appropriate STOP operator command. If the ALTER or DROP PROCEDURE is rejected because an agent is running the procedure, the SHOW PROC command can be used to monitor activity and determine when the agent(s) have finished running the procedure. Once no agents are running the procedure, issue the ALTER or DROP statement again.

-30020 **Execution failed because of a DRDA protocol error that caused deallocation of the conversation. Reason Code = reason-code(sub-code)**

Explanation: The *reason-code* value is the 2-byte hexadecimal code point for the DDM reply message that reported the error and is one of the following:

- X'1232' - AGNPRMRM
- X'1254' - CMDCHKRM
- X'220A' - DSCINVRM
- X'220E' - DTAMCHRM
- X'1218' - MGRDEPRM
- X'1245' - PRCCNVRM
- X'2202' - QRYNOPRM
- X'220F' - QRYPOPRM
- X'2207' - RDBACCRM
- X'2204' - RDBNACRM
- X'124C' - SYNTAXRM

When the error is reported at the application requester, the reason-code is the 2-byte hexadecimal code point of the reply message that most closely defines the error condition.

The *sub-code* is a 2-byte hexadecimal value represented as a hexadecimal string constant. The first byte of the *sub-code* is defined as:

- X'01' which indicates that the error was discovered at the application requester.

- X'02' which indicates that the error was discovered at the application server.

The second byte of the *sub-code* should be X'00', unless the reply message has an error code defined. The error code value should be placed in the second byte. The reply messages with error codes defined are listed below:

DSCINVRM

The *sub-code* value is a 1-byte hexadecimal value that defines the type of descriptor error. Refer to the DDM term DSCERRCD in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for the 1-byte hexadecimal values.

MGRDEPRM

The *sub-code* value is a 1-byte hexadecimal value that defines the manager dependency that was not met. Refer to the DDM term DEPERRC in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for the 1-byte hexadecimal values. No FFDC dump.

PRCCNVRM

The *sub-code* value is a 1-byte hexadecimal value that defines the type of conversation protocol error. Refer to the DDM term PRCCNVCD in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for the 1-byte hexadecimal values.

SYNTAXRM

The *sub-code* value is a 1-byte hexadecimal value that defines the type of syntax error. Refer to the DDM term SYNERRCD in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for the 1-byte hexadecimal values.

SQLSTATE 58009.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

System Programmer Response: This is a DRDA protocol error. Make a record of what went wrong and contact the designated support group.

-30021 **Execution failed because of a DRDA protocol error that will affect the successful execution of subsequent DDM commands or SQL statements. Manager *manager* at level *level* is not supported.**

Explanation: The *manager* value is the 2-byte hexadecimal code point for the DDM manager class identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRLVL in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for the 2-byte hexadecimal values.

The manager *level* is the decimal value for the manager class identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRLVL in the *IBM Distributed Data Management (DDM) Architecture, Architecture Reference, Level 4* manual for more information.

SQLSTATE 58010.

System Action: The attempt to connect to the database is not successful. The resource adapter returns to the application with SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: Do not continue processing. Notify your system programmer.

-30040 **Execution failed because of unavailable resources that do not affect the successful execution of subsequent commands and SQL statements: Application server *server-name*, type of resource *resource-type*, reason *reason-code*(*sub-code*).**

Explanation: The application server has problems obtaining or freeing resources that are needed to process the current request before or after the request is executed by the target relational database manager.

server-name identifies the target application server.

resource-type indicates the type of resource involved, such as storage; *reason-code* may or may not contain product-specific information, depending on the product ID involved. The *sub-code* is a 2-byte hexadecimal value represented as a hexadecimal string constant. The first byte of the *sub-code* is defined as:

- X'01' indicates that the error was discovered at the application requester.
- X'02' indicates that the error was discovered at the application server.

The second byte of the *sub-code* is X'00.

SQLSTATE 57012.

System Action: The SQL statement is not processed.

User Response: Resubmit the statement later. If the problem persists, notify your system programmer.

-30041 **Execution failed because of unavailable resources that affect the successful execution of subsequent commands or SQL statements: Application server *server-name*, type of resource *resource-type*, reason *reason-code* (*sub-code*).**

Explanation: The application server has problems obtaining or freeing resources that are needed to process the current request before or after the request is executed by the target relational database manager. The *server-name* identifies the target application server.

The *resource-type* indicates the type of resource involved, such as storage. If the *resource-type* is "Encrypt" or "Decrypt", the user exits for password encryption or decryption are unavailable or had an error. The *reason-code* may or may not contain product specific information, depending on the product-id involved. The *sub-code* is a 2-byte hexadecimal value represented as a hexadecimal string constant. The first byte of *sub-code* is defined as:

- X'01' indicates that the error was discovered at the application requester.
- X'02' indicates that the error was discovered at the application server.

If the second byte of *sub-code* is not X'00' it is defined as:

- X'01' indicates that the user exit for encryption/decryption is not available.
- X'02' indicates that the user exit for encryption/decryption encountered an error.

SQLSTATE 57013.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted. If *resource-type* is "Encrypt" or "Decrypt", disable password encryption/decryption by removing the PWDENC tag from the DBNAME directory or setting it to N. Reload the DBNAME directory and try again. Notify your system programmer of this error.

System Programmer Response: If the second byte of *sub-code* is X'01', install the encryption/decryption user exit, as described in the *DB2 Server for VSE System Administration* manual. If the problem persists, make a record of what went wrong and contact the designated support group.

-30050 The *ddm-command-codepoint* command is invalid while the bind process is in progress.

Explanation: An attempt was made to execute a specific DDM command that is invalid while a bind process is in progress. BNDSQLSTT, RDBCMM, RDBRLLBCK, and ENDBND are the only legal DDM commands that you can issue while a bind process is in progress. The *ddm-command-codepoint* command is a two byte hexadecimal codepoint.

SQLSTATE 58011.

System Action: The SQL statement is not processed. The resource adapter returns to the application with SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: Do not continue processing. Notify your system programmer of this DRDA protocol error.

-30051 The bind process with specified package name and consistency token is not active.

Explanation: An attempt was made to execute a DDM BNDSQLSTT or ENDBND command for a bind process that was not active.

SQLSTATE 58012.

System Action: The preprocessing of the program ends. No package is created. The resource adapter returns to the application with SQLCA fields SQLWARN0 and SQLWARN6 both set to S, indicating a serious system error.

User Response: Do not continue further processing. Notify your system programmer of this DRDA protocol error.

-30052 Program preparation assumptions are incorrect.

Explanation: An SQL statement that is incompletely understood by the preprocessor is sent to the target application server with the following assumptions:

- All host variables are assumed to be input variables.
- The statement is assigned a unique section number.
- The section is executed through the DDM EXCSQLSTT command.

At least one of these assumptions is incorrect according to the target application server.

SQLSTATE 42932.

System Action: The preprocessing of the program has ended. No package is created.

User Response: Do not continue processing. Notify your system programmer and database administrator of this DRDA protocol error.

-30053 Owner *pkgownid* authorization failure.

Explanation: An authorization error occurred associated with *pkgownid* when preprocessing a program. The following are some possible scenarios where this error may occur:

- The person who preprocesses the program does not have the authority to specify the value *pkgownid* for the OWNER parameter.
- When the target application server is a DB2 Server for VSE server, the value of the OWNER parameter (of SQLPREP EXEC or CREATE PACKAGE) is not the same as that of:
 - the COLLECTION-ID portion for the PREPNAME parameter
 - the USERID parameter when the COLLECTION-ID portion for the PREPNAME parameter is not specified
 - the connected user's id as it is known to the target application server when the USERID parameter is not specified and the COLLECTION-ID portion for the PREPNAME parameter is not specified

SQLSTATE 42506.

System Action: The SQL statement is not processed, or the preprocessing of the program has ended with no package created.

-30000 (SQLSTATE 58008)
-30020 (SQLSTATE 58009)
-30021 (SQLSTATE 58010)
-30040 (SQLSTATE 57012)
-30041 (SQLSTATE 57013)
-30050 (SQLSTATE 58011)
-30051 (SQLSTATE 58012)
-30052 (SQLSTATE 42932)
-30053 (SQLSTATE 42506)
-30060 (SQLSTATE 08004)
-30061 (SQLSTATE 08004)
-30070 (SQLSTATE 58014)
-30071 (SQLSTATE 58015)
-30072 (SQLSTATE 58016)
-30073 (SQLSTATE 58017)
-30074 (SQLSTATE 58018)
-30080 (SQLSTATE 08001)
-30090 (SQLSTATE 25000)

-30060 Application Server *server-name* authorization failure.

Explanation: The user is not authorized to access the application server *server-name*.

SQLSTATE 08004.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back.

SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

-30061 **Application server *server-name* is not found.**

Explanation: The user attempted to connect to an application server *server-name* which cannot be found.

SQLSTATE 08004.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

Contact your system administrator to start up the desired application server and restart your application.

-30070 ***ddm-command-codepoint* DDM command is not supported.**

Explanation: The target does not support a particular DDM command. The error causes the command processing to end, but does not affect the processing of subsequent DDM commands and SQL statements issued by the application program. The *ddm-command-codepoint* command is a two byte hexadecimal codepoint.

SQLSTATE 58014.

System Action: The SQL statement is not processed.

User Response: Do not continue processing. Notify your system programmer and database administrator of this DRDA protocol error.

-30071 **There is no support for the DDM object *ddm-object-type*.**

Explanation: The application server does not support a particular DDM object. The error causes current DDM command processing to end, but does not affect the processing of subsequent DDM commands and SQL statements issued by the application program. The *ddm-command-type* command is a two byte hexadecimal codepoint.

SQLSTATE 58015.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

-30072 **There is no support for the DDM command parameter *ddm-parameter*.**

Explanation: The target does not support a particular DDM command parameter. The error causes command processing to end, but does not affect the processing of subsequent DRDA commands and SQL statements issued by the application program. The *ddm-command-type* command is a two byte hexadecimal codepoint.

SQLSTATE 58016.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

System Programmer Response: Make a record of what went wrong and contact the designated support group.

-30073 **Value not supported for *ddm-parameter* parameter.**

Explanation: The target does not support a particular DDM command parameter value. The error causes termination of processing, but does not affect the processing of subsequent DDM commands and SQL statements issued by the application program. The *ddm-command-type* command is a two byte hexadecimal codepoint.

SQLSTATE 58017.

System Action: The SQL statement is not processed.

User Response: Do not continue processing. Notify your system programmer and database administrator of this DRDA protocol error.

-30074 **There is no support for the reply message with a codepoint of *codepoint(svr cod)***

Explanation: The application server has returned a reply message that is not known to the application requester. DDM architecture defines the valid *codepoints* and *svr cod* values for reply messages.

SQLSTATE 58018.

System Action: The SQL statement has produced unpredictable results.

User Response: Do not continue processing. Notify your system programmer and database administrator of this DRDA protocol error.

-30080 **FORMAT 1
Communication error occurred.
FUNCTION: *function*
RETCODE: *retcode*
CDBCIMPL: {0 | 1}**

CDBSYNC: {0|1}
CDBFREE: {0|1}
CDBRECV: {0|1}
CDBSIG: {0|1}
CDBCONF: {0|1}
CDBERR: {0|1}
CDBERRCD: *cdberrcd*
CDBSYNRB: {0|1}
FORMAT 2
Communication error occurred.
FUNCTION: *function*
RETCODE: *X'TCP/IP retcode'*

Explanation: This SQLCODE reports TCP/IP communications errors that are visible to an application requester or application server.

One possible reason is that a FORCE command was issued by the DB2 Server for VSE operator.

System Action: Processing of the SQL statement ends and the logical unit of work (if any) is rolled back. SQLWARN0 and SQLWARN6 of the SQLCA are set to S to signal that a severe error has occurred.

User Response: After a severe error has occurred, only a CONNECT statement will be accepted.

System Programmer Response: Take corrective action based on the **Explanation** and the **User Response**.

-30090 **The remote operation is invalid for this application execution environment.**

Explanation: You are trying to update a read-only application server, or to dynamically prepare or execute a COMMIT or ROLLBACK statement against a read-only application server.

SQLSTATE 25000.

System Action: The SQL statement is not processed.

User Response: Issue other non-update SQL statements or notify your database administrator.

Chapter 19. SQLSTATEs

If you have the Remote unit of work feature, the SQLSTATE value can provide application programs with common codes for common error conditions that can occur in any of the DB2 family of database systems including DB2 Server for VSE.

An SQLSTATE field is returned in the SQLCA for all warnings and errors that can be returned from executing SQL statements. The SQLCA contains both an SQLCODE and a corresponding SQLSTATE value, if applicable. If, however, you are running an SQL/DS Version 2 Release 2 or earlier database that is connected to a DB2 Server for VSE Version 7 Release 1 user machine, the DB2 Server for VSE system has no control of the SQLSTATE value returned to you.

The application programs, when SQLSTATEs are fully implemented, can test for classes of errors that are common to all products, or for specific errors that are unique to a product.

SQLSTATE values are comprised of a two-character class code value, followed by a three-character subclass code value. Class code values represent classes of successful (class codes 00 and 01) and unsuccessful (all other class codes) execution conditions.

The SQLSTATE class codes defined by IBM SQL and ISO/ANSI are:

00	Unqualified Successful Completion	25	Invalid Transaction State
01	Warning	26	Invalid SQL Statement Identifier
01H	External Function Warning	27	Triggered Data Change Violation
02	No Data	28	Invalid Authorization Specification
07	Dynamic SQL Error	2B	Dependent Privilege Descriptors Still Exist
08	Connection Exception	2C	Invalid Character Set Name
09	Triggered Action Exception	2D	Invalid Transaction Termination
0A	Feature Not Supported	2E	Invalid Connection Name
0F	Invalid Token	33	Invalid SQL Descriptor Name
21	Cardinality Violation	34	Invalid Cursor Name
22	Data Exception	35	Invalid Condition Number
23	Constraint Violation	37	Syntax Error (Discontinued)
24	Invalid Cursor State	38	External Function Exception
		39	External Function Call Exception
		3C	Ambiguous Cursor Name
		3D	Invalid Catalog Name
		3F	Invalid Collection (Schema) Name
		40	Transaction Rollback (Serialization Failure)
		42	Syntax Error or Access Rule Violation
		425	Access Violation
		426	Syntax Error
		427	Duplicate or Undefined Name
		428	Invalid Operand or Inconsistent Specification
		429	Miscellaneous SQL or Product Restriction
		44	WITH CHECK OPTION Violation
		51	Invalid Application State
		52	Duplicate or Undefined Name (Discontinued)
		53	Invalid Operand or Inconsistent Specification (DB2 and SQL/DS only)
		54	SQL or Product Limit Exceeded
		55	Object Not in Prerequisite State
		56	Miscellaneous SQL or Product Error
		57	Resource Not Available or Operator Intervention

SQLSTATEs

579 Request Suspended - Intervention Required

58 System Error

HY Call Level Interface

HZ Remote Database Access

S1 ODBC Interface

Programmers who want to use SQLSTATE as the basis of their application's return codes may define SQLCODE numbers above 32767, SQLSTATE classes beginning with the characters '7' through '9' or 'I' through 'Z' and subclasses for any class beginning with the characters 'I' through 'Z'. These value ranges will not be used by IBM SQL or ISO/ANSI.

The SQLSTATE values have been standardized in SQL92 the (*ISO IS 9075:1992, Database Language SQL* manual). If the SQLSTATE values of all databases comply with SQL92, customers who are writing applications which are either portable across SQL implementations or have to connect to more than one SQL implementation can thus rely on a consistent SQLSTATE being returned to report the same diagnostic condition.

IBM standardized diagnostic reporting across its various databases by complying with the SQLSTATE mechanism proposed in the ISO/ANSI SQL2 the (*DIS 9075:199x(E) Database Language SQL2*) draft a few years ago. However, the SQLSTATE values in the final published version of SQL92 deviate in many ways from the scheme that SQL/DS was planning to follow a few years ago. As a result, SQL/DS is implementing those changes in Version 3 Release 5 to comply with SQL92.

Here is a summary of the changes:

01501 changed to 01004
01502 changed to 01003

22509 changed to 42806
22515 changed to 23515
22517 changed to 22021
22518 changed to 22021
22520 changed to 23520
23501 changed to 44000
26503 changed to 07005
26504 changed to 07003
26506 changed to 07007

37501 changed to 42601
37502 changed to 42602
37503 changed to 42603
37504 changed to 42604
37505 changed to 42605
37506 changed to 42606
37507 changed to 42607
37509 changed to 42609
37510 changed to 42610
37511 changed to 42611
37512 changed to 42612
37514 changed to 42614
37515 changed to 42615
37517 changed to 42617
37518 changed to 42618

40000 changed to 40001
42507 changed to 08004

51001 changed to 07002
51011 changed to 0A001
51018 changed to 08003
52001 changed to 42701
52002 changed to 42702
52003 changed to 42703
52004 changed to 42704
52005 changed to 42705
52006 changed to 42706
52007 changed to 42707
52008 changed to 34000
52009 changed to 42709
52010 changed to 42710
52011 changed to 42711
52012 changed to 42712
52013 changed to 3C000
52017 changed to 08004
52019 changed to 42719
53002 changed to 42802
53003 changed to 42803
53005 changed to 42805
53007 changed to 42807
53008 changed to 42808
53009 changed to 42809
53010 changed to 42810
53011 changed to 42811
53013 changed to 42813
53015 changed to 42815
53016 changed to 42816
53018 changed to 42818
53019 changed to 42819
53020 changed to 42820
53021 changed to 42821
53023 changed to 42823
53024 changed to 42824
53025 changed to 42825
53026 changed to 42826

53027 changed to 42827
 53028 changed to 42828
 53029 changed to 42829
 53031 changed to 42831
 53032 changed to 42832
 53034 changed to 42834
 53042 changed to 42842
 53052 changed to 42852
 53053 changed to 42853
 53056 changed to 28000
 53059 changed to 42859
 53062 changed to 42862
 53067 changed to 42867
 54003 changed to 42622
 55008 changed to 42888
 55013 changed to 42889
 56001 changed to 42901
 56002 changed to 42902
 56003 changed to 42903
 56005 changed to 42905
 56006 changed to 42906
 56007 changed to 42907
 56008 changed to 42908
 56009 changed to 42909
 56011 changed to 42911
 56012 changed to 42912
 56013 changed to 42913
 56014 changed to 42914
 56015 changed to 42915
 56017 changed to 42917
 56026 changed to 25000
 56032 changed to 42932
 56037 changed to 42937
 56039 changed to 42939
 56043 changed to 42943
 56061 changed to 42961
 56069 changed to 42969
 58019 changed to 08001
 58022 changed to 40003

The SQLSTATES and their corresponding SQLCODEs are listed below. In some cases, the SQLSTATE occurs when a particular situation caused the SQLCODE, and these situations are also listed. For more information about the corresponding SQLCODEs, a page number is provided with each reference.

SQLSTATE

Meaning and SQLCODE

00000 0 on page 237 for no warnings

0A001 This SQLSTATE was formerly 51011.

The CONNECT statement is invalid, because the process is not in the connectable state.

-752 on page 309

0F001 The locator value does not currently represent any value.

-423 on page 281

0A501 Security Failure

-30080 on page 332

01003 This SQLSTATE was formerly 01502.

Null values were eliminated from the argument of a column function.

0 on page 237 for SQLWARN2=W

01004 This SQLSTATE was formerly 01501.

The value of a string column was truncated when assigned to a host variable.

0 on page 237 for SQLWARN1=W

01501 This SQLSTATE has been changed to 01004.

01502 This SQLSTATE has been changed to 01003.

01503 The number or result columns is larger than the number of host variables provided.

0 on page 237 for SQLWARN3=W

01504 The UPDATE or DELETE statement does not include a WHERE clause.

0 on page 237 for SQLWARN4=W

01506 An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.

0 on page 237 for SQLWARN7=W

01507 One or more non-zero digits were eliminated from the fractional part of a number used as the operand of a multiply or divide operation.

0 on page 237 for SQLWARN7=Z

01508 The statement was disqualified for blocking for reasons other than storage.

0 on page 237 for SQLWARN8=W

01509 Blocking was cancelled for a cursor, because there is insufficient storage in the user virtual machine.

0 on page 237 for SQLWARN9=W

SQLSTATEs

- 01510** Blocking was canceled for a cursor, because a blocking factor of at least two rows could not be maintained.
0 on page 237 for SQLWARNA=W
- 01511** Performance may not be optimum because of the number of predicates specified in the WHERE clause.
0 on page 237 for SQLWARN5=W
- 01512** The REVOKE operation has no effect on CONNECT privileges.
+150 on page 239
- 01513** A subsequent commit operation will revoke all EXECUTE privileges on the package except for that of the owner.
+200 on page 240
- 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.
+304 on page 242
- 01516** An inapplicable WITH GRANT OPTION has been ignored.
+558 on page 246
- 01517** A character that could not be translated was replaced with a substitute character.
0 on page 237 for SQLWARN8=Z
- 01519** The null value has been assigned to a host variable, because an arithmetic exception occurred in computing the value of the column.
+802 on page 247
- 01520** The null value has been assigned to a host variable, because the characters cannot be translated.
+331 on page 242
- 01525** The number of INSERT values is not the same as the number of columns.
+117 on page 238
- 01532** An undefined object name was detected.
+204 on page 241
- 01533** An undefined column name was detected.
+202 on page 240
+205 on page 241
- +206 on page 241
- 01536** During remote bind where existence checking is deferred, the server name specified does not match the current server.
+114 on page 237
- 01539** Connection is successful, but only SBCS characters should be used.
+863 on page 248
- 01541** Operator command processing has completed successfully.
+825 on page 248
- 01542** Authorization ID does not have the privilege to perform the operation as specified.
+552 on page 246
- 01543** A duplicate constraint has been ignored.
+541 on page 245
- 01545** An unqualified column name has been interpreted as a correlated reference.
+12 on page 237
- 01548** Authorization ID does not have the privilege to perform the specified operation on the identified object.
+551 on page 246
- 01555** Mixed data is invalid and has been truncated according to SBCS rules.
0 on page 237 for SQLWARN1=Z
- 01570** The bind process detected a character string in an INSERT or UPDATE statement that is too large for the target column.
+404 on page 242
- 01571** The bind process detected a numeric value that is out of range.
+414 on page 244
- 01572** The bind process detected an invalid datetime format; that is, an invalid string representation or an invalid value.
+180 on page 240
- 01573** The bind process detected a null insert or update value is null for a column that cannot contain null values.
+407 on page 243

- 01574** The bind process detected an INSERT, UPDATE, or DELETE that is not permitted on this object.
+149 on page 239
- 01575** The bind process detected a non-updateable column in an INSERT or UPDATE statement.
+151 on page 239
- 01576** The bind process detected a CREATE INDEX statement for a view.
+154 on page 239
- 01577** The bind process detected a CREATE VIEW statement that includes an operator or operand that is not valid for views.
+154 on page 239
- 01578** The bind process detected operands of an operator that are not compatible.
+401 on page 242
- 01579** The bind process detected a numeric constant that is either too long or has a value that is not within the range of its data type.
+405 on page 243
- 01580** The bind process detected an update or insert value that is not compatible with the column.
+408 on page 243
- 01581** The bind process detected incompatible operands of a UNION operation.
+415 on page 244
- 01582** The bind process detected a string that is too long.
+134 on page 238
+416 on page 244
- 01583** The bind process detected a decimal divide operation that is invalid because the result would have a negative scale.
+419 on page 245
- 01584** The bind process detected an insert or update value of a long string column that is neither a host variable or NULL.
+135 on page 238
- 01585** The bind process detected a table that cannot be accessed because it is inactive.
+668 on page 247
- 01609** The procedure generated more than the maximum allowed number of result sets. Only the first integer result sets have been returned to the caller.
+464 on page 245
- 01610** One or more ad hoc results sets were returned from the procedure.
+466 on page 245
- 01614** There are fewer locations than the number of result sets.
+494 on page 245
- 02000** One of the following exceptions occurred:
- The result of the SELECT INTO statement or the subselect of the INSERT statement was an empty table.
 - The number of rows identified in the searched UPDATE or DELETE statement was zero.
 - The position of the cursor referenced in the FETCH statement was after the last row of the result table.
- +100 on page 237
- 07001** This SQLSTATE was formerly 53017.
The number of host variables is not the same as the number of parameter markers.
-313 on page 271
- 07002** This SQLSTATE was formerly 51001.
An invalid call parameter list or control block was detected.
-804 on page 312
- 07003** This SQLSTATE was formerly 26504.
The statement identified in the EXECUTE is a select-statement, or it is not in a prepared state.
-160 on page 258 for using EXECUTE
-504 on page 285 when statement not prepared
-516 on page 287 for EXECUTE
-826 on page 315 for reason code 4 and EXECUTE
- 07004** This SQLSTATE was formerly 53017.

SQLSTATEs

- The statement contains parameter markers but the USING clause is not specified.
-313 on page 271
- 07005** This SQLSTATE was formerly 26503.
The statement-name of the cursor identifies a prepared statement that cannot be associated with a cursor.
-512 on page 287
-826 on page 315 for reason code 3.
- 07006** This SQLSTATE was formerly 22507.
An input host variable cannot be used because of its data type.
-301 on page 268
- 07007** This SQLSTATE was formerly 26506.
INTO DESCRIPTOR clause must be specified on an Extended EXECUTE against a statement that was prepared via an Extended PREPARE - Single Row.
-811 on page 313
- 08001** Communication error occurred.
-30080 on page 332
- 08003** This SQLSTATE was formerly 51018.
An error has left the application in an unconnected state.
-900 on page 319
- 08004** The application server rejected establishment of the connection.
-30060 on page 331
-30061 on page 332
- 2D528** A COMMIT WORK statement cannot be dynamically prepared or executed.
-515 on page 287
- 2D529** A ROLLBACK WORK statement cannot be dynamically prepared or executed.
-515 on page 287
- 21000** The result of a SELECT INTO is a table of more than one row, or the result of the subquery of a basic predicate is more than one value.
-810 on page 313
- 21501** A multiple-row INSERT into a self-referencing table is invalid.
- 21502** A multiple-row UPDATE of a Primary Key is invalid.
-534 on page 290
- 21504** A multiple-row DELETE from a self-referencing table with a delete rule of RESTRICT or SET NULL is invalid.
- 22001** Character data, right truncation occurred; for example, an update or insert value is a string that is too long for the column.
-302 on page 269 when character or graphic string is too long
-304 on page 270 when date or time value is too large for host variable
-404 on page 279.
- 22002** A null value or the absence of an indicator parameter was detected; for example, the null value cannot be assigned to a host variable, because no indicator variable is specified.
-305 on page 270
- 22003** A numeric value is out of range.
-302 on page 269 for numeric overflow or underflow
-304 on page 270 for numeric overflow or underflow
-413 on page 280
-425 on page 281
-801 on page 310 for arithmetic overflow and underflow
-802 on page 310 for arithmetic overflow and underflow.
- 22007** An invalid datetime format was detected; that is, an invalid string representation or an invalid value was specified.
-180 on page 264
-181 on page 264.
- 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, or a datetime value cannot be assigned to a host variable because it is too small.
-183 on page 265
- 22011** A substring error occurred; for example, an argument of SUBSTR is out of range.

- 171 on page 263 when an argument of SUBSTR is out of range
- 22012** Division by zero is invalid.
-801 on page 310 for division by zero
-802 on page 310 for division by zero.
- 22019** The LIKE predicate has an invalid escape character.
-131 on page 255
- 22021** This SQLSTATE was formerly 22517 or 22518.
Character is not in the coded character set.
-330 on page 277
-331 on page 277
- 22024** This SQLSTATE was formerly 22510.
A C NUL-terminated input host variable with length greater than 1, did not contain a NUL.
-302 on page 269
- 22025** The LIKE predicate string pattern contains an invalid occurrence of an escape character.
-131 on page 255
- 22501** The length control field of a variable length string is negative or greater than the maximum.
-311 on page 271
-821 on page 314.
- 22502** Miscellaneous data exceptions occurred; for example, a floating-point NAN (not a number) or invalid data in a packed decimal field was detected.
-424 on page 281
-801 on page 310 for general errors
-802 on page 310 for general errors.
- 22504** Mixed data value is improperly formed.
-191 on page 265
- 22507** This SQLSTATE has been changed to 07006.
- 22509** This SQLSTATE has been changed to 42806.
- 22510** This SQLSTATE has been changed to 22024.
- 22512** A host variable in a predicate is invalid, because its indicator variable is negative.
-309 on page 271
- 22515** This SQLSTATE has been changed to 23515.
- 22517** This SQLSTATE has been changed to 22021.
- 22518** This SQLSTATE has been changed to 22021.
- 22519** The Primary or Foreign Key cannot be activated.
-667 on page 301
- 22520** This SQLSTATE has been changed to 23520.
- 22521** The Foreign Key cannot be defined, because the Primary Key of the parent table is inactive.
-670 on page 301 for reason code 1
- 22522** CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.
-189 on page 265
- 22524** A string conversion resulted in truncation.
-334 on page 278
- 23501** This SQLSTATE has been changed to 44000.
- 23502** An insert or update value is null, but the column cannot contain null values.
-407 on page 279
- 23503** The insert or update value of a foreign key is invalid.
-530 on page 290
- 23504** The operation is prevented by the RESTRICT update or delete rule.
-532 on page 290
- 23505** A violation of the constraint imposed by a unique index occurred.
-803 on page 311
- 23507** A violation of a constraint imposed by a field procedure occurred.
-681 on page 302
- 23515** This SQLSTATE was formerly 22515.

SQLSTATEs

- The unique index could not be created, because the table contains duplicate values of the specified key.
-603 on page 294
- 23520** This SQLSTATE was formerly 22520.
The Foreign Key cannot be defined, because all of its values are not equal to the primary key of the parent table.
-670 on page 301 for reason code 2
- 24501** The identified cursor is not open.
-160 on page 258 for using FETCH
-501 on page 285
-507 on page 286.
- 24502** The cursor identified in an OPEN statement is already open.
-502 on page 285
- 24503** The cursor identified in the PUT statement is a select cursor, or the cursor identified in the FETCH statement is an insert cursor.
-160 on page 258 for using PUT
- 24504** The cursor identified in the UPDATE or DELETE statement is not positioned on a row.
-508 on page 286
- 24505** COMMIT is invalid, because blocking is in effect and an insert cursor is open.
-519 on page 288
- 24506** The statement identified in the PREPARE is the select-statement of an open cursor.
-519 on page 288
- 24506** The statement identified in the PREPARE is the select-statement of an open cursor.
- 24516** A cursor has already been assigned to a result set.
-499 on page 284
- 25000** Operation is invalid for the application execution environment.
-30090 on page 333
- 26501** The statement identified does not exist.
-516 on page 287 for DESCRIBE or dynamic cursor operation
-826 on page 315 for reason code 1 and 2
- DECLARE CURSOR, DESCRIBE, DROP STATEMENT, and PREPARE (Filling empty section)
- 26503** This SQLSTATE has been changed to 07005.
- 26504** This SQLSTATE has been changed to 07003.
- 26505** An extended EXECUTE, DECLARE CURSOR, or DESCRIBE has been issued against an empty section.
-504 on page 285 when trying to execute a NULL section
- 26506** This SQLSTATE has been changed to 07007.
- 26507** An extended EXECUTE with an OUTPUT DESCRIPTOR has been issued against a section that is not a Single Row SELECT.
-826 on page 315 for reason code 6
- 26508** The statement identified in an extended PREPARE Single Row is not a select-statement.
-826 on page 315 for reason code 5
- 28000** This SQLSTATE was formerly 53056.
Authorization-name or password on CONNECT is missing or invalid.
-564 on page 293
- 3C000** This SQLSTATE was formerly 52013.
A duplicate cursor name was detected.
-517 on page 287
- 34000** This SQLSTATE was formerly 52008.
An undefined cursor name was detected.
-504 on page 285 when cursor name not declared
- 37501** This SQLSTATE has been changed to 42601.
- 37502** This SQLSTATE has been changed to 42602.
- 37503** This SQLSTATE has been changed to 42603.
- 37504** This SQLSTATE has been changed to 42604.
- 37505** This SQLSTATE has been changed to 42605.

37506	This SQLSTATE has been changed to 42606.	privilege to perform the specified operation on the identified object.
37507	This SQLSTATE has been changed to 42607.	-551 on page 291
37509	This SQLSTATE has been changed to 42609.	-566 on page 294.
37510	This SQLSTATE has been changed to 42610.	42502 Authorization ID does not have the privilege to perform the operation as specified.
37511	This SQLSTATE has been changed to 42611.	-552 on page 292
37514	This SQLSTATE has been changed to 42614.	-554 on page 292
37515	This SQLSTATE has been changed to 42615.	-555 on page 292
37517	This SQLSTATE has been changed to 42617.	-556 on page 292
37518	This SQLSTATE has been changed to 42618.	-606 on page 295
38003	The statement is not allowed in a function or procedure.	-610 on page 296
	-751 on page 308	-708 on page 306.
39002	A null value is not allowed for an IN or INOUT argument when using the SIMPLE CALL calling convention.	42504 A specified privilege cannot be revoked from a specified authorization-name.
	-470 on page 283	-556 on page 292 when revokee does not have privilege
39501	An output argument value returned from a function or a procedure was too long.	-558 on page 293.
	-450 on page 283	42505 Connection authorization failure occurred.
40000	This SQLSTATE has been changed to 40001.	-560 on page 293
40001	This SQLSTATE was formerly 40000.	-561 on page 293
	Deadlock or timeout with automatic rollback occurred.	-815 on page 313.
	-911 on page 320	42506 Owner authorization failure occurred.
40003	This SQLSTATE was formerly 58022.	-30053 on page 331
	A system error has caused the unit of work to be rolled back.	42601 This SQLSTATE was formerly 37501.
	-903 on page 319	A character, token, or clause is invalid or missing.
	-933 on page 322 for a for a system error.	-104 on page 249 for general errors
40503	PRIVATE dbspace is in use by another process.	-105 on page 250
	-710 on page 307	-106 on page 250 for general errors
42501	Authorization ID does not have the	-109 on page 251
		-110 on page 251
		-115 on page 252
		-128 on page 254
		-130 on page 255
		-159 on page 257
		-160 on page 258 for using ALL, REFERENCE, STRUCTURE, COST, or PLAN

SQLSTATEs

- 162 on page 260 when the name is missing
-524 on page 289
-611 on page 296.
- 42602** This SQLSTATE was formerly 37502.
An invalid character in a name has been detected.
-162 on page 260 when the name is incorrect
-165 on page 261
-210 on page 268.
- 42603** This SQLSTATE was formerly 37503.
An unterminated string constant has been detected.
-106 on page 250 for an unterminated string constant
- 42604** This SQLSTATE was formerly 37504.
An invalid numeric or string constant has been detected.
-103 on page 249
-164 on page 261
-166 on page 261
-170 on page 262.
- 42605** This SQLSTATE was formerly 37505.
The number of arguments specified for a scalar function is invalid.
-172 on page 264
- 42606** This SQLSTATE was formerly 37506.
An invalid hexadecimal constant has been detected.
-167 on page 262
- 42607** This SQLSTATE was formerly 37507.
An invalid operand of a column function has been detected.
-112 on page 251
-409 on page 279.
- 42609** This SQLSTATE was formerly 37509.
All operands of an operator or predicate are parameter markers.
-417 on page 280
- 42610** This SQLSTATE was formerly 37510.
An invalid use of parameter markers has been detected.
-184 on page 265
-418 on page 281.
- 42611** This SQLSTATE was formerly 37511.
An invalid column definition has been detected.
-604 on page 295
- 42612** The statement string is an SQL statement that is not acceptable in the context in which it is presented.
-084 on page 248
-836 on page 317
- 42614** This SQLSTATE was formerly 37514.
Invalid duplication of keyword has been detected.
-630 on page 299
- 42615** This SQLSTATE was formerly 37515.
Invalid alternative has been detected.
-168 on page 262
-705 on page 306
- 42617** This SQLSTATE was formerly 37517.
The statement string is blank or empty.
-104 on page 249 when statement string is empty or blank
- 42618** This SQLSTATE was formerly 37518.
Host variable is not allowed.
-163 on page 261
-312 on page 271.
- 42622** This SQLSTATE was formerly 54003.
A name or label is too long.
-107 on page 250
-108 on page 251
-116 on page 252
-162 on page 260 when the name is too long.
- 42701** This SQLSTATE was formerly 52001.
A duplicate column name in INSERT or UPDATE statement was detected.
-121 on page 253

- 42702** This SQLSTATE was formerly 52002.
A column reference is ambiguous because of duplicate names.
-203 on page 266
-209 on page 267
- 42703** This SQLSTATE was formerly 52003.
An undefined column name was detected.
-201 on page 266
-202 on page 266
-205 on page 267
-666 on page 300.
- 42704** This SQLSTATE was formerly 52004.
An undefined object or constraint name was detected.
-204 on page 267 for general errors
-206 on page 267
-608 on page 296
-805 on page 312 for a GRANT, REVOKE or DROP statement.
-649 on page 300 for a missing EXPLAIN table.
- 42705** This SQLSTATE was formerly 52005.
An undefined server name was detected.
-929 on page 322
- 42706** This SQLSTATE was formerly 52006.
Column names in ORDER BY are invalid, because all columns of the result table are unnamed.
-207 on page 267
- 42707** This SQLSTATE was formerly 52007.
Column name in ORDER BY does not identify a column of the result table.
-208 on page 267
- 42709** This SQLSTATE was formerly 52009.
A duplicate column name in a PRIMARY or FOREIGN KEY clause was detected.
-537 on page 290
- 42710** This SQLSTATE was formerly 52010.
A duplicate object name was detected.
-601 on page 294
- 618 on page 297
-644 on page 300.
- 42711** This SQLSTATE was formerly 52011.
A duplicate column name in an object definition was detected.
-612 on page 296
- 42712** This SQLSTATE was formerly 52012.
A duplicate table designator in a FROM clause was detected.
-211 on page 268
- 42719** This SQLSTATE was formerly 52019.
The cursor referenced in the extended OPEN, FETCH, PUT, or CLOSE has not been declared in the current unit of work.
-518 on page 288
- 42724** Unable to access an external program used for a user-defined function or a procedure.
-444 on page 282
- 42802** This SQLSTATE was formerly 53002.
The number of insert values is not the same as the number of columns.
-117 on page 252
- 42803** This SQLSTATE was formerly 53003.
A column reference in the SELECT or HAVING clause is invalid, because it is not a grouping column or a column reference in the GROUP BY clause is invalid.
-119 on page 252
- 42805** This SQLSTATE was formerly 53005.
An integer in the ORDER BY clause does not identify a column of the result table.
-125 on page 253
- 42806** This SQLSTATE was formerly 22509.
A value cannot be assigned to a host variable, because the data types are not compatible.
-303 on page 270
- 42807** This SQLSTATE was formerly 53007.
The INSERT, UPDATE, or DELETE is not permitted on this object.

SQLSTATEs

- 149 on page 257
- 42808** This SQLSTATE was formerly 53008.
A column identified in the INSERT or UPDATE statement is not updateable.
-151 on page 257
- 42809** This SQLSTATE was formerly 53009.
The identified object is not the type of object to which the statement applies.
-154 on page 257 for using CREATE INDEX on a view.
-204 on page 267 for DROP VIEW table or DROP TABLE view
-657 on page 300
-813 on page 313.
- 42810** This SQLSTATE was formerly 53010.
A view is identified in a FOREIGN KEY clause.
-157 on page 257 for general errors
- 42811** This SQLSTATE was formerly 53011.
The number of columns specified is not the same as the number of columns in the SELECT clause.
-158 on page 257
- 42813** This SQLSTATE was formerly 53013.
WITH CHECK OPTION cannot be used for the specified view.
-140 on page 256
- 42815** This SQLSTATE was formerly 53015.
The data type, length, value, or CCSID of an operand is invalid.
-171 on page 263 for general errors
-713 on page 307.
- 42816** This SQLSTATE was formerly 53016.
An invalid use of a datetime value or duration in an expression has been detected.
-182 on page 264
-187 on page 265.
- 42818** This SQLSTATE was formerly 53018.
The operands of an operator are not compatible.
- 401 on page 278
- 42819** This SQLSTATE was formerly 53019.
An operand of an arithmetic operation is not a number.
-402 on page 278
- 42820** This SQLSTATE was formerly 53020.
A numeric constant is too long, or it has a value that is not within the range of its data type.
-405 on page 279
- 42821** This SQLSTATE was formerly 53021.
An update or insert value is not compatible with the column.
-408 on page 279
- 42823** This SQLSTATE was formerly 53023.
The SELECT clause of a subquery specifies multiple columns.
-412 on page 280
- 42824** This SQLSTATE was formerly 53024.
An operand of LIKE is not a string, or the first operand not a column.
-132 on page 255
-414 on page 280.
- 42825** This SQLSTATE was formerly 53025.
The operands of UNION do not have compatible columns.
-415 on page 280
- 42826** This SQLSTATE was formerly 53026.
The operands of UNION do not have the same number of columns.
-422 on page 281 for different number of items in select lists
- 42827** This SQLSTATE was formerly 53027.
The table identified in the UPDATE or DELETE is not the same table designated by the cursor.
-509 on page 286
- 42828** This SQLSTATE was formerly 53028.
The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.
-510 on page 286

- 520 on page 288.
- 42829** This SQLSTATE was formerly 53029.
FOR UPDATE OF is invalid, because the table designated by the cursor cannot be modified.
-126 on page 253
-511 on page 287.
- 42830** This SQLSTATE was formerly 53030.
The Foreign Key does not conform to the description of the Primary Key.
-538 on page 291
- 42831** This SQLSTATE was formerly 53031.
A column of a Primary Key cannot allow null values.
-542 on page 291
- 42832** This SQLSTATE was formerly 53032.
The operation is not allowed on system objects.
-609 on page 296
-709 on page 306
-814 on page 313
-823 on page 314.
- 42834** This SQLSTATE was formerly 53034.
SET NULL cannot be specified, because the Foreign Key does not allow null values.
-629 on page 299
- 42842** This SQLSTATE was formerly 53042.
A column definition is invalid, because a specified option is inconsistent with the column description.
-683 on page 303
- 42852** This SQLSTATE was formerly 53052.
Privileges specified in GRANT or REVOKE are invalid or inconsistent.
-557 on page 292
- 42853** This SQLSTATE was formerly 53053.
Both alternatives of an option were specified, or the same option was specified more than once.
-161 on page 260
- 42859** This SQLSTATE was formerly 53059.
An extended PREPARE or DROP STATEMENT cannot be used to change a non-modifiable package.
-830 on page 316
- 42862** This SQLSTATE was formerly 53062.
An extended dynamic statement cannot be executed against a non-extended dynamic package.
-827 on page 315
- 42867** This SQLSTATE was formerly 53067.
Conflicting options have been specified.
-160 on page 258 for the inconsistent use of the NEW, CHECK, or ERROR clauses
- 42878** An invalid function or procedure name was used with the EXTERNAL keyword.
-449 on page 282
- 42884** No function or procedure was found with the specified name and compatible arguments.
-440 on page 282
- 42886** The IN, OUT, or INOUT parameter attributes do not match.
-469 on page 283
- 42888** This SQLSTATE was formerly 55008.
The nominated parent table does not have a Primary Key.
-539 on page 291
- 42889** This SQLSTATE was formerly 55013.
The table already has a primary key.
-656 on page 300
- 42893** The object or constraint cannot be dropped, because other objects are dependent on it.
-478 on page 284
- 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.
-302 on page 269
- 42901** This SQLSTATE was formerly 56001.
A column function does not include a column name.

SQLSTATEs

- 111 on page 251
- 42902** This SQLSTATE was formerly 56002.
The object of the INSERT, UPDATE, or DELETE is also identified in a FROM clause.
-118 on page 252
- 42903** This SQLSTATE was formerly 56003.
A WHERE clause or SET clause includes an invalid reference such as a column function.
-120 on page 253
- 42905** This SQLSTATE was formerly 56005.
DISTINCT is specified more than once in a subselect.
-127 on page 254
- 42906** This SQLSTATE was formerly 56006.
A column function in a subquery of a HAVING clause includes an expression that applies an operator to a correlated reference.
-133 on page 255
- 42907** This SQLSTATE was formerly 56007.
The string is too long.
-134 on page 255
-416 on page 280.
- 42908** This SQLSTATE was formerly 56008.
The statement does not include a required column list.
-153 on page 257
- 42909** This SQLSTATE was formerly 56009.
The CREATE VIEW includes an operator or operand that is not valid for views.
-154 on page 257 for general errors
- 42911** This SQLSTATE was formerly 56011.
A decimal divide operation is invalid, because the result would have a negative scale.
-419 on page 281
- 42912** This SQLSTATE was formerly 56012.
A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.
-503 on page 285
- 42913** This SQLSTATE was formerly 56013.
An invalid UPDATE or DELETE WHERE CURRENT OF has been detected.
-535 on page 290
- 42914** This SQLSTATE was formerly 56014.
The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.
-536 on page 290
- 42915** This SQLSTATE was formerly 56015.
One or more invalid referential constraints have been detected.
-632 on page 299
-648 on page 300
- 42917** This SQLSTATE was formerly 56017.
The object cannot be explicitly dropped.
-669 on page 301
- 42932** Program preparation assumptions are incorrect.
-30052 on page 331
- 42937** This SQLSTATE was formerly 56037.
Parameter must not have a subtype of mixed.
-192 on page 265
- 42939** This SQLSTATE was formerly 56039.
The object cannot be created, because the specified qualifier (or an DB2 Server for VSE DBSPACE name that starts with SYS) is reserved for system use.
-550 on page 291
-707 on page 306.
- 42943** This SQLSTATE was formerly 56043.
The database manager has not committed package package-name because it is a modifiable package and it contains no statements.
-759 on page 309
- 42961** This SQLSTATE was formerly 56061.
The server name specified does not match the current server.
-114 on page 251

- 42969** This SQLSTATE was formerly 56069.
The package was not created and the unit of work was rolled back because of either an invalid section number or internal limitations.
-917 on page 321
- 44000** This SQLSTATE was formerly 23501.
The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition.
-141 on page 256
- 51001** This SQLSTATE has been changed to 07002.
- 51002** The package corresponding to an SQL statement execution request was not found.
-805 on page 312 for any statement other than GRANT, REVOKE or DROP
- 51003** Consistency tokens do not match.
-818 on page 314
- 51004** An address in the SQLDA is invalid.
-935 on page 323
- 51007** A CONNECT statement has not been executed.
-563 on page 293
- 51010** The programmable interface for operator commands is not valid when within a unit of work.
-825 on page 315
- 51011** This SQLSTATE has been changed to 0A001.
- 51012** Index has been marked invalid.
-923 on page 321
- 51013** An attempt has been made to use an index that has been marked as invalid.
-621 on page 298
- 51015** An attempt was made to execute a section that was found to be in error at bind time.
-525 on page 290
- 51016** A package or view cannot be rebound, because the character set under which it was originally bound is different than the character set under which the database manager is running.
-833 on page 317
- 51018** This SQLSTATE has been changed to 08003.
- 51021** SQL statements cannot be executed until the application process executes a rollback operation.
-965 on page 328
- 51030** The procedure referenced in a DESCRIBE PROCEDURE statement or an ALLOCATE CURSOR statement has not yet been called within the application process.
-480 on page 284
-482 on page 284
- 52001** This SQLSTATE has been changed to 42701.
- 52002** This SQLSTATE has been changed to 42702.
- 52003** This SQLSTATE has been changed to 42703.
- 52004** This SQLSTATE has been changed to 42704.
- 52005** This SQLSTATE has been changed to 42705.
- 52006** This SQLSTATE has been changed to 42706.
- 52007** This SQLSTATE has been changed to 42707.
- 52008** This SQLSTATE has been changed to 34000.
- 52009** This SQLSTATE has been changed to 42709.
- 52010** This SQLSTATE has been changed to 42710.
- 52011** This SQLSTATE has been changed to 42711.
- 52012** This SQLSTATE has been changed to 42712.
- 52013** This SQLSTATE has been changed to 3C000.
- 52017** This SQLSTATE has been changed to 08004.

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- 53019 This SQLSTATE has been changed to 42719.
- 53002 This SQLSTATE has been changed to 42802.
- 53003 This SQLSTATE has been changed to 42803.
- 53005 This SQLSTATE has been changed to 42805.
- 53007 This SQLSTATE has been changed to 42807.
- 53008 This SQLSTATE has been changed to 42808.
- 53009 This SQLSTATE has been changed to 42809.
- 53010 This SQLSTATE has been changed to 42810.
- 53011 This SQLSTATE has been changed to 42811.
- 53013 This SQLSTATE has been changed to 42813.
- 53015 This SQLSTATE has been changed to 42815.
- 53016 This SQLSTATE has been changed to 42816.
- 53017 This SQLSTATE has been changed to 07001 and 07004.
- 53018 This SQLSTATE has been changed to 42818.
- 53019 This SQLSTATE has been changed to 42819.
- 53020 This SQLSTATE has been changed to 42820.
- 53021 This SQLSTATE has been changed to 42821.
- 53023 This SQLSTATE has been changed to 42823.
- 53024 This SQLSTATE has been changed to 42824.
- 53025 This SQLSTATE has been changed to 42825.
- 53026 This SQLSTATE has been changed to 42826.
- 53027 This SQLSTATE has been changed to 42827.
- 53028 This SQLSTATE has been changed to 42828.
- 53029 This SQLSTATE has been changed to 42829.
- 53030 This SQLSTATE has been changed to 42830.
- 53031 This SQLSTATE has been changed to 42831.
- 53032 This SQLSTATE has been changed to 42832.
- 53034 This SQLSTATE has been changed to 42834.
- 53042 This SQLSTATE has been changed to 42842.
- 53043 Columns with different field procedures cannot be compared.
-686 on page 303
- 53044 The columns have a field procedure, but the field types are not compatible.
-687 on page 304
- 53052 This SQLSTATE has been changed to 42852.
- 53053 This SQLSTATE has been changed to 42853.
- 53056 This SQLSTATE has been changed to 28000.
- 53059 This SQLSTATE has been changed to 42859.
- 53060 Public dbspaces must be acquired from a recoverable storage pool.
-706 on page 306
- 53062 This SQLSTATE has been changed to 42862.
- 53067 This SQLSTATE has been changed to 42867.
- 54001 The statement is too long or too complex.
-101 on page 248
- 54002 A string constant is too long.
-102 on page 249
- 54003 This SQLSTATE has been changed to 42622.
- 54004 The statement has too many table names or too many items in a SELECT or INSERT list.

- 129 on page 254 for too many table names or columns
- 54005** The sort key is too long, or it has too many columns.
-124 on page 253
- 54006** The result of concatenation is too long.
-137 on page 256
- 54008** The key is too long, or it has too many columns.
-614 on page 296
-617 on page 297.
- 54011** Too many columns were specified for a table or view.
-602 on page 294
- 54012** The FIELDPROC literal list is too long.
-684 on page 303
- 54013** The statement has too many host variables.
-129 on page 254 for too many variables or too many characters in variable names
- 54014** Too many cursors are open.
-522 on page 289
- 54015** Section was not created as a result of executing the null form of an extended dynamic PREPARE or preprocessing a PREPARE statement.
-523 on page 289
- 54016** Too many tables were detected in a DBSPACE.
-607 on page 295
- 54017** The maximum number of active packages for a unit of work has been exceeded.
-807 on page 312
- 54018** The row is too long.
-809 on page 313
- 54019** The maximum number of late descriptions has been exceeded, probably because too many different CCSIDs were used.
-129 on page 254
- 54020** Too many indexes were detected for a table.
-605 on page 295
- 55002** The explanation table is not defined properly.
-619 on page 297
- 55008** This SQLSTATE has been changed to 42888.
- 55013** This SQLSTATE has been changed to 42889.
- 55021** Change of data type or length of host variable is invalid, because blocking is in effect.
-521 on page 288
- 55023** An error occurred calling a procedure.
-471 on page 284
-928 on page
- 55044** The PROCEDURE must have a status of STOP-REJ, or the PSERVER must be stopped with IMPL=N, before it can be altered or dropped.
-15000 on page 328
- 56001** This SQLSTATE has been changed to 42901.
- 56002** This SQLSTATE has been changed to 42902.
- 56003** This SQLSTATE has been changed to 42903.
- 56004** The statement failed, because the Invalid Entities table is full.
-698 on page 304
- 56005** This SQLSTATE has been changed to 42905.
- 56006** This SQLSTATE has been changed to 42906.
- 56007** This SQLSTATE has been changed to 42907.
- 56008** This SQLSTATE has been changed to 42908.
- 56009** This SQLSTATE has been changed to 42909.
- 56011** This SQLSTATE has been changed to 42911.
- 56012** This SQLSTATE has been changed to 42912.

SQLSTATEs

- 56013** This SQLSTATE has been changed to 42913. -832 on page 316.
- 56014** This SQLSTATE has been changed to 42914.
- 56015** This SQLSTATE has been changed to 42915.
- 56017** This SQLSTATE has been changed to 42917. -760 on page 310
- 56026** This SQLSTATE has been changed to 25000.
- 56031** The clause or scalar function is invalid, because mixed and graphic data are not supported on this system. -829 on page 316
-640 on page 299
- 56032** This SQLSTATE has been changed to 42932. -834 on page 317
- 56033** The insert or update value of a long string column must be a host variable or NULL. -136 on page 256
-135 on page 256
- 56034** ALLUSERS can only be used in GRANT CONNECT without a password. -835 on page 317
-562 on page 293
- 56035** Referential constraints cannot cross DBSPACES resident in different types of storage pools. -835 on page 317
-714 on page 307
- 56037** This SQLSTATE has been changed to 42937.
- 56038** Requested feature is not supported in this environment. -861 on page
-947 on page 327
- 56039** This SQLSTATE has been changed to 42939.
- 56042** Only one package can be created or modified in a unit of work, and, while that package is being created or modified, all statements in that unit of work must be issued against that package. If the package is non-modifiable, only Extended PREPARE statements can be issued. -861 on page
-565 on page 294
-756 on page 309
-757 on page 309
-758 on page 309
- 56043** This SQLSTATE has been changed to 42943.
- 56044** An attempt was made to execute a section that has been marked as invalid in a modifiable package that is undergoing modification. -861 on page
-760 on page 310
- 56046** CREATE PACKAGE with the REPLACE option cannot be issued against a modifiable package. -829 on page 316
- 56047** PREPARE Adding Empty Section was not preceded by a CREATE PACKAGE with the NOMODIFY option. -834 on page 317
- 56048** Three part package name is not supported. -136 on page 256
- 56049** An unexpected error occurred when attempting to rebind a view with a new version of the database manager. The view must be dropped and recreated. -835 on page 317
- 56058** This SQLSTATE has been changed to 2D528 and 2D529.
- 56061** This SQLSTATE has been changed to 42961.
- 56069** This SQLSTATE has been changed to 42969.
- 56079** Neither protocol option AUTO nor DRDA can be specified because the DRDA facility has not been installed for the application requester. -861 on page
- 57008** The date or time local format exit has not been installed. -185 on page 265
- 57010** A field procedure could not be loaded. -682 on page 302
- 57011** Virtual storage or database resource is not available. -674 on page 302
-701 on page 305

- 702 on page 305
- 703 on page 305
- 704 on page 306
- 711 on page 307
- 712 on page 307
- 930 on page 322
- 932 on page 322 when obtaining dynamic storage
- 940 on page 324 when server-name resource is not available.
- 942 on page 325.
- 57012** A non-database resource is not available. This will not affect successful execution of subsequent statements.
-30040 on page 330
- 57013** A non-database resource is not available. This will affect the successful execution of subsequent statements.
-30041 on page
- 57014** Processing was canceled as requested.
-914 on page 320.
- 57016** Table cannot be accessed, because it is inactive.
-668 on page 301
- 57017** Character conversion is not defined.
-332 on page 278
- 57022** Table could not be created, because the authorization ID of the statement does not own any suitable dbspaces.
-620 on page 297
- 57024** No appropriate message repository can be accessed.
-720 on page 308
-721 on page 308.
- 57025** There is not enough room in the dbspaces allocated to hold packages.
-945 on page 326
-946 on page 326.
- 57026** The system dbspace SYS002 does not exist. This dbspace is used to store packages.
-944 on page 325
- 57027** Connection to the application server has been severed by the operator.
-916 on page 321
-933 on page for operator action
- 57028** Unit of work has been rolled back due to an excessive number of system-wide lock requests.
-912 on page 320
- 57029** Unit of work has been rolled back due to an excessive number of lock requests by the unit of work.
-915 on page 321
- 57030** Connection to the application server would exceed the installation-defined limit.
-933 on page 322 when maximum number of connections exceeded
- 57033** Deadlock or timeout occurred without automatic rollback.
-913 on page 320
- 57037** The ACQUIRE DBSPACE command failed, because all storage pools for available dbspaces are full.
-699 on page 304
- 57038** No space is available in the storage pool.
-700 on page 304
- 57039** Online support is ending.
-937 on page 324
- 57040** DBNAME Directory error.
-841 on page 318
- 57044** Resource adapter cannot find file.
-993 on page 328
- 57045** The Resource Adapter cannot find an entry for the character set in the file.
-994 on page 328
- 58002** An exit has returned an error or invalid data.
-685 on page 303
-688 on page 304
-816 on page 314
- 58003** An invalid section number was detected.
-144 on page 256

SQLSTATEs

- 58004** A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.
-753 on page 309
-824 on page 314
-901 on page 319
-931 on page 322
-932 on page 322 when freeing dynamic storage
-941 on page 325.
- 58005** A system error (that prevents the successful execution of subsequent SQL statements) occurred.
-902 on page 319
-754 on page 309
- 58009** Execution failed due to a distribution protocol error that caused deallocation of the conversation.
-30020 on page 329
- 58010** Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.
-30021 on page 330
- 58011** The DDM command is invalid while the bind process in progress.
-30050 on page 331
- 58012** The bind process with the specified package name and consistency token is not active.
-30051 on page 331
- 58014** The DDM command is not supported.
-30070 on page 332
- 58015** The DDM object is not supported.
-30071 on page 332
- 58016** The DDM parameter is not supported.
-30072 on page
- 58017** The DDM parameter value is not supported.
-30073 on page 332
- 58018** DDM reply message is not supported.
-30074 on page 332
- 58019** This SQLSTATE has been changed to 08001.
- 58021** A system error occurred while loading a program or control block.
-934 on page 322
- 58022** This SQLSTATE has been changed to 40003.
- 58023** System error has caused the current program to be canceled.
-906 on page 320
- 58024** An error occurred in the underlying operating system.
-949 on page 328
- 58025** A column in a catalog table has the wrong data type.
-921 on page 321
- 58027** The package was not created and the unit of work was rolled back due to an earlier system error.
-917 on page 321
- 58029** An internal error has occurred while attempting to log user data.
-754 on page 309

Chapter 20. DB2 Server for VSE Reason Codes

The DB2 Server for VSE reason codes are printed in message ARI0042I. The DB2 Server for VSE reason codes are the VSE return codes that were returned to the database manager. Message ARI0042I is usually accompanied by other database messages; for example: ARI0026E, ARI0027E, ARI0039E, ARI0040E, ARI0041E, etc. The return codes fall into three categories:

1. VSE/Advanced Functions System Services (such as CDLOAD or GETVIS).
2. VSE/Advanced Functions Abnormal Termination Codes.
3. VSE/Advanced Functions Cross-Partition Communication (XPCC) return codes.

VSE/Advanced Functions System Services Return Codes

The VSE/Advanced Functions System Services return codes are found in the *IBM VSE/ESA System Macros Reference* manual.

VSE/Advanced Functions Abnormal Termination Codes

The return codes from VSE/Advanced Functions Abnormal Termination are found in *IBM VSE/ESA System Macros Reference* under the discussion of STXIT macro instructions with the AB parameter. The following is a list of the VSE/Advanced Functions Abnormal Termination Codes. (The code values also appear as the reason code in message ARI0042I.)

Code Value Dec (Hex)	VSE/Advanced Functions Abnormal Termination Code Meaning
00 (00)	Default value for all cases other than those listed below
10 (0A)	Access control processing error
11 (0B)	Access violation
12 (0C)	Operator/ICCF system request
13 (0D)	Program check in subsystem or appendage
14 (0E)	Page fault in subsystem or appendage
15 (0F)	Invalid FBA DASD address for SYSFIL
16 (10)	Normal EOJ
17 (11)	No channel program translation for unsupported device

Code Value Dec (Hex)	VSE/Advanced Functions Abnormal Termination Code Meaning
18 (12)	Insufficient buffer space for channel program translation
19 (13)	CCW with count greater than 32K
20 (14)	Page pool too small
21 (15)	Page fault in disabled program (not a supervisor routine)
22 (16)	Page fault in MICR stacker select or page fault appendage routine
23 (17)	Main task issued a CANCEL macro with subtask still attached
24 (18)	Main task issued a DUMP macro with subtask still attached
25 (19)	Operator replied CANCEL as the result of an I/O error message
26 (1A)	An I/O error has occurred
27 (1B)	Channel failure
28 (1C)	CANCEL ALL macro issued in another task
29 (1D)	Main task terminated with subtask still attached
30 (1E)	I/O error on external lock file
31 (1F)	Processing unit failure
32 (20)	A program check occurred
33 (21)	An invalid SVC was issued by the problem program or macro
34 (22)	Phase not found in the library phase member
35 (23)	CANCEL macro issued
36 (24)	Canceled due to an operator request
37 (25)	Invalid virtual storage address given (outside partition)
38 (26)	SYSxxx not assigned (unassigned LUB code)
39 (27)	Undefined logical unit. Guest sharing is not supported in a Dynamic partition.
40 (28)	Reserved
41 (29)	Reserved
42 (2A)	I/O error on page data set
43 (2B)	I/O error during fetch from private library phase member
44 (2C)	Page fault appendage routine passed illegal parameter to supervisor
45 (2D)	Program cannot be executed or restarted because of a failing storage block
46 (2E)	Invalid resource request (possible deadlock)
47 (2F)	More than 255 PFI requests on one page
48 (30)	Read past a /& statement

DB2 Server for VSE Reason Codes

Code Value Dec (Hex)	VSE/Advanced Functions Abnormal Termination Code Meaning
49 (31)	I/O error queue overflow during system error recovery procedure
50 (32)	Invalid DASD address
51 (33)	No long seek on a DASD
52 (35)	Job control open failure
53 (36)	Page fault in I/O appendage routine
54 (38)	Wrong privately translated CCW
55 (39)	Error in SYSLOG channel program
64 (40)	ACF/VTAM® error, invalid condition
65 (41)	ACF/VTAM error, invalid condition
66 (42)	Invalid extent information violates DASD file protection
255 (FF)	Unrecognized cancel code

VSE/Advanced Functions Cross-Partition Communication Codes

The VSE/Advanced Functions cross-partition communication (XPCC) codes are usually displayed as returned to the DB2 Server for VSE system. In some cases they are translated by the database manager. These codes are printed by the database manager and the resource adapter partitions.

The message ARI0406E is issued by the Resource Adapter and displays the request code, return code, and reason code. Message ARI4006E, like ARI0406E, also displays the request code, return code, and reason code. If the reason code = 06 or 07 with a return code of 04, accompanying messages will be issued by the DB2 Server for VSE partition. The accompanying messages must be considered to determine the condition that existed and the action to be taken. The following is a list of the reason codes, return codes, and their meanings as contained in message ARI0406E and ARI4006E.

If ARI0406E or ARI4006E contains a reason code that is not found in the following table, make a record of what went wrong and contact the designated support group for your installation. The XPCC return codes are documented in the *IBM VSE/ESA System Macros Reference*.

Reason Code Value Dec (Hex)	Return Code Value Dec (Hex)	Reason Code Meaning
05 (05)	04 (04)	DB2 Server for VSE partition terminated while the resource adapter had a connect request pending
06 (06)	04 (04)	DB2 Server for VSE partition disconnected normally
07 (07)	04 (04)	DB2 Server for VSE partition disconnected abnormally
08 (08)	04 (04)	A duplicate application name (identify) exists in the system
08 (08)	04 (04)	When accompanied by message ARI2908, indicates that an APPC/VM function was rejected at initialization
09 (09)	04 (04)	A duplicate application name (identify) exists in the partition
09 (09)	04 (04)	When accompanied by message ARI2908, indicates that an APPC/VM function completed unsuccessfully
10 (0A)	04 (04)	The DB2 Server for VSE system has not done an identify
10 (0A)	04 (04)	When accompanied by message ARI2908, indicates that the other side issued an unexpected APPC/VM function
11 (0B)	04 (04)	When accompanied by message ARI2908, indicates that an unexpected interrupt occurred on an APPC/VM connection
12 (0C)	04 (04)	The DB2 Server for VSE system has not issued a CONNECT command
23 (17)	08 (08)	The DB2 Server for VSE system issued a TERMQSCE command
06 (06)	12 (0C)	Control block format error
07 (07)	12 (0C)	Wrong identity token
08 (08)	12 (0C)	Wrong path id
09 (09)	12 (0C)	Requesting task does not own the control block
10 (0A)	12 (0C)	Invalid buffer list
11 (0B)	12 (0C)	Buffer length greater than 16 megabytes
12 (0C)	12 (0C)	Receive buffer too small
13 (0D)	12 (0C)	More than 64 connect requests issued by resource adapter partition
14 (0E)	12 (0C)	No storage available for VSE/Advanced Functions control blocks
15 (0F)	12 (0C)	Connect request must be made to a subsystem by user partition (resource adapter)

DB2 Server for VSE Reason Codes

Reason Code Value	Return Code Value	Reason Code Meaning
16 (10)	12 (0C)	No request pending for other partition
18 (12)	12 (0C)	Request already pending for same partition
19 (13)	12 (0C)	Invalid request sequence
20 (14)	12 (0C)	Invalid terminate request while requests are still pending
21 (15)	12 (0C)	Invalid disconnect request while request still by disconnecting side
22 (16)	12 (0C)	Invalid disconnect request while request still pending from other partition
24 (18)	12 (0C)	Invalid request; no connect was ever done by other partition
28 (1C)	12 (0C)	Invalid XPCCB (control block) address
38 (26)	12 (0C)	VSE Guest Sharing, APPC/VM request failed. See System Console message ARI2908I
39 (27)	12 (0C)	Not enough real storage was allocated to PFI buffers needed for XPCC communication
255 (FF)	12 (0C)	Invalid DB2 Server for VSE request

If message **ARI0027E, A COMMUNICATION LINK ERROR HAS OCCURRED** is issued:

- Message ARI0040E provides an indication of the communication link request associated with the error. (See Chapter 24, "System Errors" on page 371 for the definitions.)
- Message ARI0042I contains the reason code. Reason code values and meanings are the same as listed for message ARI0406E where the return code is 12 (X'0C').
- Message ARI0043I contains a value of 516.

If message **ARI0040E DB2 Server for VSE SYSTEM ERROR OCCURRED - ARICIP2 01** is issued, the reason code in message ARI0042I is the return code from the VSE SUBSID macro instruction. The reason code meanings are:

Reason Code Value	Reason Code Meaning
04 (04)	The DB2 Server for VSE system already exists in another partition

Reason Code Value	Reason Code Meaning
08 (08)	SUBSID not accepted, invalid name length
12 (0C)	SUBSID not accepted, VSE/Advanced Functions internal list is full
16 (10)	Name not found
20 (14)	SUBSID function not available

The following are the request codes for messages ARI0406E and ARI4006E and their meanings:

Request Code Value	Request Code Meaning
01 (01)	Logon (XPCC IDENT)
02 (02)	Connect (XPCC CONNECT)
04 (04)	Send with reply (XPCC SENDR)
05 (05)	Receive (XPCC RECEIVE)
06 (06)	Reply (XPCC REPLY)
07 (07)	Reset Send (XPCC CLEAR)
08 (08)	Reset Receive/Reply (XPCC PURGE)
09 (09)	Disconnect (XPCC DISCONN)
10 (0A)	Disconnect Unconditional (XPCC DISCPRG)
11 (0B)	Disconnect All (XPCC DISCALL)
12 (0C)	Logoff (XPCC TERMIN)
13 (0D)	Logoff Unconditional (XPCC TERMPRG)
14 (0E)	Shutdown (XPCC TERMQSCE)
15 (0F)	Wait (VSE/Advanced Functions WAIT)

Other DB2 Server for VSE Abnormal Termination Codes

Reason Code Value	Reason Code Meaning
254 (FE)	The database manager has been terminated due to a lack of virtual storage. A dump has been issued. (Register 15 contains the '254' return code.) Register 14 contains the return code from the failing VSE GETVIS macro.

ARISBDID JCL Return Codes

ARISBDID JCL Return Codes

During DBNAME Directory generation, some errors might be reported by the DBNAME Directory Generator, ARICBDID. The following lists the return codes with their explanations.

- 1xx - SYSIPT or SYSPCH open error
 - 112 - I/O error
 - 124 - Virtual storage request failed or CDLOAD anchor table full
- 2xx - Read error
 - 212 - I/O error
 - 248 - Error retrieving file for SYSIPT READ MEMBER statement
- 3xx - Write error
 - 312 - I/O error
 - 352 - End of extents encountered while attempting to write to disk
- 4xx - Close error
 - 412 - I/O error
- 5xx - Content error
 - 500 - Invalid APPLID specified in ARISDIRD.A
 - 501 - Invalid DBNAME specified in ARISDIRD.A
- 6xx - Definition error
 - 600 - More than one system default specified.

Report all undocumented return codes to the designated support group for your installation.

ARISBGUD JCL Return Codes

When updating the SQLGLOB file using the SQLGLOB File Batch Update/Query Program (ARIRBGUD), some error might be reported by the update program. The following lists the return codes with their explanations.

- xxx1 - Check the VSAM SQLBLOG file label
 - 100 - Label not found
 - 125 - Unexpected error
- xxx2 - Generate ACB and RPL for SQLGLOB file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
- xxx3 - Open a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call

- xxx4 - Erase data from a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx5 - Write data to a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx6 - Close a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call

Report all undocumented return codes to the designated support group for your installation.

ARISCNVD JCL Return Codes

During the refresh of the CCSID-related phases, some errors might be reported by the refresh job, ARISCNVD. The following lists the return codes with their explanations.

- 1xx - Error opening work file
 - 12 - I/O error
 - 16 - Invalid device type
 - 20 - Invalid call
 - 24 - Virtual storage request failure or CDLOAD anchor table full
 - 32 - Internal error
 - 36 - Tape dynamic assign or unassign error
- 3xx - Error writing to work file
 - 12 - I/O error
 - 20 - Invalid call
 - 32 - Internal error
 - 52 - End of extents encountered while attempting to write to disk
- 4xx - Error closing work file
 - 12 - I/O error
 - 20 - Invalid call
 - 32 - Internal error
 - 32 - Tape dynamic assign or unassign error
- 1xxx - SQL warning occurred
 - xxx - SQLCODE (positive value)
- 2xxx - SQL error occurred
 - xxx - SQLCODE (negative value)

Report all undocumented return codes to the designated support group for your installation.

ARISGDEF JCL Return Codes

During the setting of the SQLGLOB file default, some errors might be reported by the default creation, ARISGDEF. The following lists the return codes with their explanations.

- xxx1 - Check the VSAM SQLBLOG file label
 - 100 - Label not found
 - 125 - Unexpected error
- xxx2 - Generate ACB and RPL for SQLGLOB file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
- xxx3 - Open a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx4 - Erase data from a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx5 - Write data to a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx6 - Close a VSAM file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- 175 - I/O error
- 200 - Get storage failed
- 225 - Free storage failed
- 250 - Invalid call
- xxx3 - Open a BIND file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx4 - Erase a BIND record
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx5 - Write data to a BIND file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx6 - Close a BIND file
 - 150 - End of file
 - 175 - I/O error
 - 200 - Get storage failed
 - 225 - Free storage failed
 - 250 - Invalid call
- xxx7 - Open a PACKAGE file
 - 175 - I/O error
 - 200 - Get storage failed
 - 250 - Invalid call
 - 300 - Wrong record length
 - 325 - Internal error
 - 360 - Error retrieving file for SYSIPT read
 - 370 - End of extents encountered while attempting to write to disk
- xxx8 - Read data from a PACKAGE file
 - 175 - I/O error
 - 200 - Get storage failed
 - 250 - Invalid call
 - 300 - Wrong record length
 - 325 - Internal error
 - 360 - Error retrieving file for SYSIPT read
 - 370 - End of extents encountered while attempting to write to disk
- xxx9 - Close a PACKAGE file
 - 175 - I/O error
 - 200 - Get storage failed
 - 250 - Invalid call
 - 300 - Wrong record length
 - 325 - Internal error
 - 360 - Error retrieving file for SYSIPT read
 - 370 - End of extents encountered while attempting to write to disk

Report all undocumented return codes to the designated support group for your installation.

ARISIQBD JCL Return Codes

During the conversion of the ISQL bind file, some errors might be reported by the bind file generation, ARISIQBD. The following lists the return codes with their explanations.

- xxx0 - Get the storage for bind file record
 - 200 - Get storage failed
- xxx1 - Check the BIND file label
 - 100 - Label not found
 - 125 - Unexpected error
- xxx2 - Generate ACB and RPL for BIND file

ARISIQBD JCL Return Codes

Report all undocumented return codes to the designated support group for your installation.

Chapter 21. Sequential File Errors

This section describes the causes and suggests corrective actions for error messages due to errors encountered by the DB2 Server for VSE system while processing sequential input or output files in a VSE system. The error messages are displayed on the system operator console or in a SYSLST print file.

Problem Determination Notes for VSAM Access of Sequential Files (Log Archive Files):

- The primary error code value is the return code value from entry point ARISYSEA and ARISYSEF in module ARISYSED.

4	End of file
12	I/O error
20	Invalid call
24	Get virtual storage failed
32	Internal error (such as free storage failed)

- The secondary error code value is the operation which failed:

1	GENCB for ACB or RPL failed
2	Open file for input or output failed
3	Get log control information descriptor page failed
4/7	Closed file failed
5/6	Get or Put operation failed

Problem Determination Notes for SAM Access:

- The primary error code value is the return code value from entry point ARISYSD5 in module ARISYSD5.
- The secondary error code value is the field EREASON in parameter structure ARIFDESC used in ARISYSD5 calls.
- For primary error code 36, the secondary error code is the return code (in decimal) from the VSE/Advanced Functions ASSIGN macro instruction.

Primary-Secondary Error Code Pairs

In the following list, the Primary Error Code is listed first, and the Secondary Error Code is listed

second. For any pair of codes not listed, see the "Other" item at the end of the list.

- 12 0** An uncorrectable I/O error occurred while reading (GET macro) or writing (PUT macro) a SAM file.

Corrective Action: Get the I/O error message (0Pnn PIOCS message) from the system operator. Take the corrective action recommended or suggested by the I/O error message. You may need help from your VSE or system programmer to resolve the problem. Depending on the type of I/O error, you may be able to recover by using a different hardware I/O device or by using a different tape or DASD volume.

- 24 12** The database file could not be opened because the partition did not have enough virtual storage.

Corrective Action: Either change the program's parameters so that it requires less virtual storage, or run the program in a larger partition. If you are running the program with the database manager in single user mode, you may be able to run the program in a smaller partition by running the database manager in multiple user mode (if the failing program can be run in multiple user mode). You may need help from your VSE or system programmer.

- 24 16** The database file could not be opened because the partition CDLOAD anchor table is full. (This table is used by the VSE/Advanced Functions CDLOAD macro instruction.)

Corrective Action: Save the error message and any other error messages. Request help from your system programmer.

System Programmer Response: If the program is being run with the database manager in single user mode, you may be able to eliminate this problem by running it with the database manager in multiple user mode.

VSE/VSAM consumes a lot of CDLOAD anchor table space. If the failure is in the

Sequential File Errors

DB2 Server for VSE database partition, consider moving SVA-eligible VSAM phases to the VSE/Advanced Functions Shared Virtual Area (SVA). If the problem persists, make a record of what went wrong and contact the designated support group for your installation.

- 24 32** The database file could not be opened because the VSE/Advanced Functions GETVIS macro instruction detected a main storage hardware error.

Corrective Action: Report this problem to the hardware service person at your installation.

- 28 0** VSE/Advanced Functions data management detected a wrong-length record while reading the file (using a GET macro instruction).

Corrective Action: Ensure that the program is reading the file it expects. Ensure that (where applicable) the correct blocksize, record format, and logical record length were specified for the file. If the program requires a specific blocksize, logical record length, maximum logical record length, or record format, ensure that the input file meets these specifications. Check the program that created the file to ensure that it used the correct blocksize, (maximum) logical record length, and record format. If you find no inconsistencies, ask the system programmer to determine the service level of the database manager and report this problem to the designated support group for your installation.

- 36 4** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output tape file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not done because the VSE supervisor had no free Logical Unit Block (LUB) entry to allocate to the file.

If this occurs for any other file (or not on open), it is a DB2 Server for VSE or VSE system error.

Corrective Action: Either reconfigure the job control for the failing program or run it in a partition with more programmer logical units available. If you do not have

such a partition, request that your VSE system programmer generate a new VSE supervisor with a partition containing more programmer logical units. (The number of programmer logical units is controlled by the BGPGR or FnPGR parameter of the VSE/Advanced Functions IOTAB supervisor generation macro instruction.)

- 36 8** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output tape file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not done because the specified tape unit address (cuu) was not found in the VSE supervisor PUB table; that is, the cuu is not known to the VSE system.

If this occurs for any other file (or not on open), it is a DB2 Server for VSE or VSE system error.

Corrective Action: Ensure that the system operator entered a valid tape unit cuu address. If a valid tape unit cuu was entered by the system operator (in a reply to message ARI073A, ARI295A, ARI299A, or ARI092A, or by the TRACE ON command), refer the problem to your VSE system programmer. The system programmer should ensure that the tape unit is defined to the VSE system by using the initial program load (IPL) ADD command.

- 36 12** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output tape file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not done because the specified tape unit address (cuu) was defined in the VSE supervisor PUB table as a device other than a tape unit.

If this occurs for any other file (or not on open), it is a DB2 Server for VSE or VSE system error.

Corrective Action: Ensure that the system operator entered a valid tape unit cuu address. If a valid tape unit cuu was entered by the system operator (in a reply to message ARI0073A, ARI0295A, ARI0299A, or ARI0092A, or by the

- TRACE ON command), refer the problem to your VSE system programmer. The system programmer should ensure that the tape unit is defined to the VSE system by using the initial program load (IPL) ADD command.
- 36 16** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output tape file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not done because the specified tape unit address (cuu) is down (due to the VSE/Advanced Functions DVCDN job control command).
If this occurs for any other file (or not on open), it is a DB2 Server for VSE or VSE system error.
Corrective Action: If the tape unit is no longer inoperative or off-line for service, enter the VSE/Advanced Functions DVCUP job control command to make the tape unit available for program use. Otherwise the system operator must select a different tape unit for the tape file.
- 36 40** In opening or closing a DB2 Server for VSE accounting output tape file, archive tape file, or trace output tape file, the tape unit could not be dynamically assigned or unassigned (VSE/Advanced Functions ASSIGN macro instruction). The action was not taken because the partition did not have enough virtual storage.
Corrective Action: Either change the program's parameters so that the it requires less virtual storage, or run the program in a larger partition. If you are running a program with the database manager in single user mode, you may be able to run the program in a smaller partition by running the database manager in multiple user mode (if the failing program can be run in multiple user mode). You may need help from your VSE or system programmer.
- 36 44** In closing a DB2 Server for VSE accounting output tape file, archive tape file, or trace output file, the tape unit could not be dynamically unassigned (VSE/Advanced Functions ASSIGN macro instruction). The unassignment was not made because the specified tape unit (cuu) has not been previously assigned.
This is a DB2 Server for VSE or VSE system error if the specified tape unit remained assigned.
Corrective Action: Ensure that the specified tape unit is no longer assigned. Otherwise, contact the designated support group for your installation.
- 36 48** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not made because the specific tape unit (cuu) is currently owned by another partition.
If this occurs for any other file (or not on OPEN), it is a DB2 Server for VSE or VSE system error.
Corrective Action: The system operator must select a tape unit which is not currently assigned to any partition when entering the cuu for the accounting tape file, the archive tape file, or the trace tape file.
- 36 52** In opening a DB2 Server for VSE accounting output tape file, archive tape file, or trace output file, the tape unit could not be dynamically assigned (VSE/Advanced Functions ASSIGN macro instruction). The assignment was not made because the specified tape unit (cuu) is currently assigned to a system logical unit (for example, SYSLST).
If this occurs for any other file (or not on OPEN), it is a DB2 Server for VSE or VSE system error.
- 48 0** An error occurred while processing an READ MEMBER statement in a SYSIPT file. Message ARI0068E describing the error condition has been displayed on the system operator console and on SYSLST. Refer to that message for further explanation.
Corrective Action: Refer to the corrective action for message ARI0068E.
- 52 0** The disk output file has filled all space allocated to it (including any secondary allocations if the VSE/VSAM Space Management for SAM feature is being

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used). No more output can be written to the file. Some output has already been lost because it could not be written to the file.

Corrective Action: Allocate more disk space to the disk output file and rerun the program.

Other DB2 Server for VSE or VSE system error.

Corrective Action: Save the error message and any other error messages displayed and give the material to your system programmer.

System Programmer Response:
Determine the service level of the database manager and report this problem to the designated support group for your installation.

Chapter 22. Include File Access Errors

This section describes the causes and suggests corrective actions for error messages due to errors encountered by the DB2 Server for VSE system while locating and reading VSE source members. The error messages are displayed on the system operator console or in a SYSLST print file.

Problem Determination Notes:

- The database manager uses the VSE DTFSL macro (with FIND and GET calls) and access method to find and sequentially retrieve source members.
- The primary error code value is the return code value from entry point ARISYSD8 in module ARISYSDD.
- The secondary error code value is the field REASON in the parameter structure used in ARISYSD8 calls.
- FIND calls determine if the library source member exists (or can be accessed) and perform OPEN-like functions for accessing the member. GET (or READ) calls sequentially retrieve the records from the member.

Primary-Secondary Error Code Pairs

In the following list, the Primary Error Code is listed first, and the Secondary Error Code is listed second. For any pair of codes not listed, see the "Other" item at the end of the list.

8 0 The requested source member is not in any currently accessed library. This error occurs on FIND calls.

Corrective Action: Verify that you specified the correct membername (and, if applicable, the correct source member type). Check the job control for the failing job. Verify that the library containing the member is in the library concatenation chain. If necessary, add the library using the appropriate JCL. If you have failed to put the member in the library, run the appropriate librarian job to place the member in the desired library.

12 0

An uncorrectable I/O error occurred while reading (by a GET macro) the source member.

Corrective Action: Check for further error messages (including OPnn PIOCS messages to the system operator) indicating the cause of the I/O error. You may be able to recover by mounting the DASD volume on a different (or repaired) disk drive. If the error is due to a DASD volume media error (such as a defective track), you may have to rebuild the library source member on a new volume or DASD extent. You may need help from your VSE system programmer.

24 12

The source member could not be opened (FIND call) for access because the partition did not have enough virtual storage.

Corrective Action: Either change the program's parameters so that it requires less virtual storage, or run the program in a larger partition. If you are running the program with the database manager in single user mode, you may be able to run the program in a smaller partition by running the database manager in multiple user mode (if the failing program can be run in multiple user mode). You may need help from your VSE or system programmer.

24 16

The source member could not be opened (FIND call) for access because the partition CDLOAD anchor table is full. (This table is used by the VSE/Advanced Functions CDLOAD macro instruction.)

Corrective Action: Save the error message and any other error messages. Request help from your system programmer.

Problem Determination Notes:

System Programmer Response: If the program is being run with the database manager in single user mode, you may be able to eliminate this problem by running it with the database manager in multiple user mode.

VSE/VSAM consumes a lot of CDLOAD anchor table space. If the failure is in the DB2 Server for VSE database partition, consider moving SVA-eligible VSAM phases to the VSE/Advanced Functions Shared Virtual Area (SVA). If you cannot eliminate the problem, report it to the DB2 Server for VSE designated support group for your installation.

24 32

The source member could not be opened (FIND call) for access because the VSE/Advanced Functions GETVIS macro instruction detected a main storage hardware error.

Corrective Action: Report this problem to the hardware service person at your installation.

44 0

The source member could not be opened (FIND call) for access because the specified source member type is an invalid character. The source member type character must be an uppercase alphabetic character (including the extended alphabetic characters \$, #, and @) or a digit. If the source member type character was user-specified, this is a user error. Otherwise, this is a DB2 Server for VSE system error.

Corrective Action: If the source member type character was user-specified, correct the source member type character specification. Otherwise, save the error message and any other error messages displayed and give the material to your system programmer.

System Programmer Response: Determine the service level of the

database manager and report this problem to the designated support group for your installation.

Other

DB2 Server for VSE or VSE system error.

Corrective Action: Save the error message and any other error messages displayed and give the material to your system programmer.

System Programmer Response: Determine the service level of the database manager and report this problem to the designated support group for your installation.

Chapter 23. Limit Errors

When limit errors are detected, message ARI0039E is issued. The text of the message is:

ARI0039E **Application server limit error occurred - ARIxxxx nm**

Explanation: The following are the conditions that cause the message to be issued where **ARIxxxx nm** is:

ARICCRA nm

(See note 1.)

- 01 Get working storage error (DSCAREA)
- 02 Get working storage error (YTABLE1)
- 04 Get working storage error (SCANS)
- 05 Get working storage error (MODCB)
- 06 Working storage initialization error (DSCAREA)
- 07 Get working storage error (Communication Link control blocks)
- 08 Get working storage error (Communication Manager Parameter List)
- 09 Get working storage error (OMB Parameter List)
- 10 Get working storage error (RDAREA)
- 11 Get working storage error (SQLCA)
- 12 Get working storage error (TBASE)
- 14 Get working storage error (RI area)
- 15 Get working storage error (default input buffer)
- 16 Get working storage error (default output mailbox buffer)
- 17 Get working storage error (Parser)
- 18 Get working storage error (Generator)
- 19 Get working storage error (Conversion)
- 20 Get working storage error (DRRMSTR)
- 21 Get working storage error (DCAREA)
- 22 Get working storage error (ASPAREA)
- 25 Get working storage error (TRANS)
- 26 Get working storage error (PCAREA)

ARICDSP nm

- 03 All agents waiting for buffers, and SQL is out of page buffers

ARICEXP nm

(See note 1.)

- 01 Insufficient storage
- 02 Insufficient storage

ARICIP1 nm

(See note 1.)

- 01 Failure occurred while loading phase ARIXRDS (not enough storage or phase not found)
- 02 Failure occurred while loading phase ARIXSXR (not enough storage or phase not found)

ARICIPB nm

(See note 1.)

- 01 Working storage initialization error (DSCAREAP)
- 02 Get working storage error (WAITM Table)
- 03 Get working storage error (DCES)
- 04 Get working storage error (Communication Link ID BLOCKS)
- 05 Get working storage error (CPC Connect Blocks)
- 06 Get working storage error (TRACE FDESC)
- 07 Get below working storage error (HSDS, CID)
- 08 Get working storage error (Global Tables)
- 09 Get working storage error (Accounting I/O File Descriptor Block)
- 10 Get working storage error (Online Accounting Storage Queue Header)
- 11 Get working storage error (accounting records)
- 23 Get working storage error (Transproc control)

ARICIP1 nm

(See note 1.)

- 01 Failure occurred while loading phase ARIXRDS (not enough storage or phase not found)
- 02 Failure occurred while loading phase ARIXSXR (not enough storage or phase not found)

Limit Errors

ARICJAC *nn*

(See note 1.)

01 Insufficient storage

ARICSPM *nn*

(See note 1.)

01 Failure occurred while loading phase
xxxxxxx (not enough virtual storage or
phase not found; message ARI0026E
identifies the phase name)

ARICSHO *nn*

(See note 1.)

01 Insufficient storage

02 Insufficient storage

ARICSPM *nn*

(See note 1.)

01 Single user mode, and either the program
was not found, or there was insufficient
storage

ARICSTK *nn*

(See note 1.)

01 Not enough virtual storage to allocate
DB2 Server for VSE stack storage for
agents

ARISDBR *nn*

(See note 1.)

01 Not enough virtual storage for database
generation value table

02 Not enough virtual storage for database
generation input file control block

ARISDSK *nn*

(See note 1.)

01 Insufficient storage

02 Insufficient storage

ARISFDB *nn*

(See note 1.)

01 Not enough virtual storage for loading
directory block during database
generation

ARISFMG *nn*

(See note 1.)

01 Insufficient storage

13 Insufficient storage

ARISFM1 *nn*

(See note 1.)

01 Not enough virtual storage for
input/output buffer to format database
files

ARISIIO *nn*

(See note 1.)

01 Not enough virtual storage for directory
file buffer during database generation

03 Not enough virtual storage for directory
file blocks during database generation

04 Same as 03

05 Same as 03

06 Same as 03

07 Same as 03

08 Same as 03

09 Same as 03

10 Same as 03

ARISRMG *nn*

(See note 1.)

01 Insufficient storage

10 Insufficient storage

ARISUXP *nn*

16 DASD storage assigned to the storage
pool is full (See message ARI0201E)

ARIXERO *nn*

(See note 1.)

13 No working storage

21 Same as 13

22 Same as 13

23 Same as 13

ARIYC11 *nn*

(See note 1.)

09 Not enough virtual storage for log buffer

13 Same as 09

17 Not enough virtual storage for log
information

24 Same as 17

27 Same as 09

30 Same as 17

35 Not enough virtual storage for log record

52 Same as 17

58 Not enough virtual storage for log

ARIYD48 *nn*

12 DASD storage assigned to the storage
pool is full (See message ARI0201E)

13 DASD storage assigned to the storage
pool is full (See message ARI0201E)

ARIYD69 nm

(See note 1.)

- 01 Request for working storage for building new row during row update recovery (UNDO/BACKUP or REDO) failed
- 02 Same as 01
- 05 Same as 01

ARIYD81 nm

(See note 1.)

- 06 Request for working storage to assemble data manipulation call parameter values for DBSS entry or exit level 2 trace output failed
- 07 Same as 06
- 08 Same as 06
- 09 Same as 06
- 10 Same as 06

ARIYI14 nm

- 01 Directory buffer pool is exhausted (NDIRBUF parameter) (See message ARI0203E)

ARIYI19 nm

- 01 Page buffer pool is exhausted (NPAGBUF parameter) (See message ARI0203E)

ARIYI22 nm

(See note 1.)

- 01 Not enough storage to allocate VSAM ACBs for database files
- 02 Not enough storage to allocate VSAM EXLISTs for database files
- 04 Not enough storage to allocate VSAM ACB pointer array for database files
- 05 Same as 01
- 07 Not enough storage to allocate VSAM RPLs for database files
- 08 Same as 07
- 09 Same as 07

ARIYI29 nm

- 01 DASD storage assigned to the storage pool is full (See message ARI0201E)
- 02 DASD storage assigned to the storage pool is full (See message ARI0201E)

ARIYI36 nm

(See note 1.)

- 02 Not enough storage to allocate bit map table for DBSPACE directory file allocation blocks

ARIYI63 nm

- 01 Invalid entities table is in new format. The directory must be reset, but there are either transient or invalid indexes.

ARIYK12 nm

(See note 1.)

- 03 Not enough storage for deadlock cycle tables
- 04 Same as 03
- 05 Same as 03

ARIYK41 nm

- 01 No more LRBs available

ARIYK53 nm

(See note 1.)

- 01 Not enough virtual storage space for SHOW LOCK WANTLOCK command processing.
Insufficient storage for stack storage.

ARIYK54 nm

(See note 1.)

- 01 Not enough virtual storage for SHOW LOCK USER command processing

ARIYK55 nm

(See note 1.)

- 01 Not enough virtual storage for SHOW LOCK DBSPACE command processing

ARIYK56 nm

(See note 1.)

- 01 Not enough virtual storage for SHOW LOCK ACTIVE command processing
- 04 Same as 01

ARIYK57 nm

(See note 1.)

- 01 Not enough virtual storage for SHOW LOCK GRAPH command processing
- 04 Same as 01

ARIYL00 nm

(See note 1.)

- 04 Number of log pages exceeds limit. (Note 1 does not apply to this limit error.)
- 50 Insufficient storage for checkpoint record
- 51 Insufficient storage for checkpoint record
- 52 Insufficient storage for log page
- 54 Insufficient storage for checkpoint record
- 55 Insufficient storage for log page

ARIYL01 nm

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05 Database manager log file is full (See message ARI0276E)

ARIYL08 *nm*
(See note 1.)

01 Not enough virtual storage for checkpoint record

ARIYL09 *nm*
(See note 1.)

60 Insufficient storage for checkpoint record

65 Insufficient storage for checkpoint record

ARIYL14 *nm*
(See note 1.)

08 Insufficient storage for checkpoint record

ARIYL17 *nm*
(See note 1.)

01 Get working storage error (File Descriptor Block)

04 Same as 01

ARIYL18 *nm*
(See note 1.)

01 Get working storage error (File Descriptor Block)

15 Same as 01

ARIYL19 *nm*
(See note 1.)

02 Get working storage error

04 Get working storage error

ARIYL21 *nm*
(See note 1.)

01 Not enough virtual storage for restore buffer

15 Not enough virtual storage for file descriptor block

ARIYL23 *nm*
(See note 1.)

01 Not enough virtual storage for archive buffer

15 Not enough virtual storage for archive file descriptor block

ARIYS08 *nm*
(See note 1.)

02 Sort REDO/UNDO - not enough virtual storage for log record

ARIYT00 *nm*

08 Get working storage error (Counter Internal Structure)

09 Get working storage error (Counter Pool Structure)

ARIYT29 *nm*

01 Not enough agents specified (NCUSERS parameter) (See message ARI0231E)

ARIYX02 *nm*

21 DASD storage assigned to the storage pool is full (see message ARI0201E) or internal DBSPACE is full

ARIYX04 *nm*

06 Create index - not enough virtual storage for sort base

ARIYX09 *nm*

04 Get working storage error (See note 1.)

05 The index was at the maximum of eight levels, and the insert would have caused the index to expand to a ninth level.

ARIYX29 *nm*

15 The index was at the maximum of eight levels, and the INSERT would have caused the index to expand to a ninth level.

ARIYX36 *nm*

01 An attempt was made to mark an entity invalid but there are already 16 invalid entities.

04 More entries in the YINVALID table than the maximum number allowed.

ARIYZ00 *nm*
(See note 1.)

02 Insufficient storage

03 Insufficient storage

05 Insufficient storage

09 Insufficient storage (TABSTAT)

Note 1: These limit errors are caused by insufficient virtual storage. See message ARI0059E for corrective action.

Chapter 24. System Errors

When a system error is detected, message ARI0040E is issued. The text of the message is:

ARI0040E A database manager system error occurred - ARIxxxx nn

Explanation: Communication Link error conditions may have caused the message to be issued. Communication Link errors are VSE XPCC errors. The reason code (message ARI0042I) contains the system return code. **When any of these situations occurs, contact the designated support group for your installation.**

Some of the error messages are shown below. ARIxxxx nn in the message is equal to:

ARICCLA nn

01 Communication Link error - DISCONNECT

ARICDSP nn

01 Communication Link error - READY/RECOVERY AGENT (Reason code of less than 5 is not valid.)

ARICENA nn

01 Communication Link error - CONNECT

ARICIP2 nn

01 Communication Link error - SUBSID
02 Communication Link error - IDENTIFY (General Purpose)
03 Communication Link error - IDENTIFY (INDOUBT)
06 Communication Link error - IDENTIFY (READY/RECOVERY)

ARICJACC

The following new SYSTERR codes may be set:

01 Get working error or no storage for accounting queue entry or on-line accounting records
03 Cannot find the accounting queue entry for the on-line user
04 Cannot find the accounting queue entry for the on-line user being at End Of Transaction

ARICMUD nn

03 Communication Link error - RECEIVE
05 Communication Link error - PURGE

ARICMUDC

The following new SYSTERR codes may be set:

07 Error freeing prereceive buffer
08 Error freeing input mailbox buffer

ARICOMB nn

01 Communication Link error - REPLY
02 Same as 01

ARICSHT nn

01 Communication Link error - TERMQSCE (READY/RECOVERY)
02 Communication Link error - TERMQSCE (General)
03 Communication Link error - TERMQSCE (INDOUBT)

ARISIIO nn

05 The database directory has not been properly restored.

ARIYC25 nn

09 The DB2 Server for VSE system was rolling back the drop index operation. Message ARI0042I contains the DBSS Return Code. Refer to Chapter 17, "DBSS Return Codes" on page 231 for these codes.

ARIYD77 nn

08 During recovery, an entry was found in the log for a delete, shorten, or update of a tuple, and the tuple does not exist in the database. You will need to use filtered log recovery to BYPASS or ROLLBACK this LUW.

ARIYI01 NN

05 During an archive, a DB2 Server for VSE system disk (directory, log or data disk) was defined in VSAM with SHAREOPTIONS(1). The SHAREOPTIONS will need to be set to 2, and the archive must be redone.

ARIYL00 nn

62 During warmstart, ARIYL00 tries to read the checkpoint record from the log and does not find a checkpoint at the address pointed to by the directory.
87 Performing a restore, the log disk is checked to find the last checkpoint that

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occurred before the restore (to determine whether the current log needs to be archived). This error occurs when the record pointed to (by the LOGCID) is not a checkpoint.

ARIYL26 nn

- 09 During a startup of the application server, ARIYL26 scans the logs for the HSDS (history area) of the logs and there are no HSDS records in the logs. You may have done a VSAM delete and define of the log extents. Perform a coldlog and take a new database archive immediately after performing the coldlog. The coldlog will write the HSDS record to the log.

ARIYX29 nn

- 04 Not enough index pages in the dbspace to accomplish the INSERT
- 16 Not enough index pages in the dbspace to accomplish the INSERT

NOTE 1

Other situations can occur where message ARI0040E is issued. **When any of these situations occurs, make a record of what went wrong and contact the designated support group for your installation.**

Chapter 25. Hardware Errors

ARI0041E System hardware error occurred -
ARIxxxx nn.

Explanation: In this message, **ARIxxxx** identifies the DB2 Server for VSE module that detected the error, and **nn** is the detection point in that module.

Make a record of what went wrong and contact the designated support group for your installation.

Chapter 26. DPROPR MESSAGES

ASN0000E–ASN0203I DPROPR Capture Messages

The following is a list of messages issued by the IBM DPROPR Capture component of the IBM Relational Data Replication Tools for the VSE platform. A brief explanation of the status is provided.

These messages are intended to aid the user, as well as IBM Development and Support Center personnel.

Unless otherwise stated, error messages are issued with a return code of 8.

ASN0000E INTERNAL ERROR OCCURRED FOR MESSAGE NUMBER = *message_number*. ITS SUBSTITUTION FIELDS ARE

sub1 sub2 sub3 sub4 sub5 sub6 sub7
ACCESS RC= *return_code*.

Explanation: Capture was unable to read the file containing messages. Note that message ASN0000E is issued in English.

User Response: See the messages and codes publication for your platform for information about return codes to determine why Capture could not read the messages file.

- Capture had a problem attempting to read the file. The file is specified in the MSGS DLBL job control statement.

Errors include:

- 4 - error on flocate()
- 8 - error on fread()
- 12- error on fopen()

Examine the message description for *message_number* to determine the underlying error.

ASN0001E The Capture program encountered an SQL error. The routine name is *routine*; the SQL request is *request*; the table name is *table_name*; the SQLCODE is *sqlcode*; the SQLERRML is *sqlerrml*; the SQLERRMC is *sqlerrmc*

Explanation: A nonzero SQLCODE was returned when Capture issued an EXEC SQL statement.

User Response: Take action based on the SQLCODE and SQLERRMC descriptive text. For additional information on the specific problem, refer to the appropriate SQLCODE in the section Chapter 18, “SQLCODEs” on page 237, or use the SQLCODE numbers as the topic for the ISQL HELP command.

ASN0002E The Capture program could not connect to DB2. The routine name is *routine*; the SQLCODE is *sqlcode*.

Explanation: An error occurred when Capture issued a CONNECT function to the data base.

User Response: Take action based on the SQLCODE. For additional information on the specific problem, refer to the appropriate SQLCODE in the section Chapter 18, “SQLCODEs” on page 237, or use the SQLCODE numbers as the topic for the ISQL HELP command.

ASN0005E The Capture program encountered an error while reading the DB2 log. The routine name is *routine*; the log sequence number is *log_sequence_number*; the return code is *return_code*; the reason code is *reason_code*.

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

A dump has been generated for this message. The return code is for VSE/VSAM GET macro.

User Response: See Chapter 20, “DB2 Server for VSE Reason Codes” on page 355 for the appropriate reason code. For more information on VSE/VSAM errors, see the *VSE/VSAM Return and Error Codes* manual.

ASN0006E The Capture program encountered an unexpected log error of unknown log variation. The routine name is *routine*.

Explanation: An unexpected log error occurred while Capture was processing the DB2 log records. Capture could not determine the type of SQL update associated with the log record.

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User Response: Contact your IBM Service Representative.

ASN0007E The Capture program encountered an unexpected log error of an unimplemented data type. The routine name is *routine*.

Explanation: The SQL type in the log record data was invalid. A table might have been registered without the Control Center and contains unsupported SQL types (e.g. LONG or large object types).

User Response: Cancel the registration and use the Control Center to register tables, to ensure only valid types are registered. Or, when manually registering a table, ensure that the table has supported SQL types. See the *DB2 Replication Guide and Reference* for information about unsupported data types.

ASN0008I The Capture program was stopped.

Explanation: This informational message is issued when the STOP command is entered.

User Response: None required.

ASN0009E The table was created without the DATA CAPTURE CHANGES attribute. The routine name is *routine*; the table name is *table_name*.

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

User Response:

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 can not obtain enough storage. The routine name is *routine*; the storage required is *amount*.

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

User Response:

All available GETVIS storage has been exhausted. You may need to restart the Capture program after allocating a larger partition.

ASN0013E The Capture program required a column that was not defined in the change data table. The routine name is *routine*; the table name is *table_name*.

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

User Response: Ensure that the change data table definition is correct. Refer to the *DB2 Replication Guide and Reference* 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*.

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

User Response: Refer to the *DB2 Replication Guide and Reference* manual for more information on the lag limit. Perform a cold start.

ASN0015E The Capture program encountered a storage allocation error. The routine name is *routine*; the storage required is *amount*.

Explanation: A storage allocation error was detected; sufficient storage is not available.

User Response:

All available GETVIS storage has been exhausted. You may need to restart the Capture program after allocating a larger partition.

ASN0016E The Capture program could not begin capturing changes because there was not an eligible replication source.

Explanation: The replication source information has not been defined.

Capture 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.

User Response: Ensure that the register table is defined properly. For more information about the register table, see the *DB2 Replication Guide and Reference* 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*.

Explanation: An unexpected error occurred while Capture was executing.

User Response: Contact your IBM Service Representative.

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*.

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

User Response:

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

ASN0022E DB2 release *release* is not supported. The routine name is *routine*.

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

User Response: 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*.

Explanation: A REINIT command was issued and the updates were successfully made to the Capture internal control information.

User Response: None required. This is an informational message.

ASN0024I The Capture program did not need to reinitialize the register table. The table *table_name* did not change.

Explanation: The REINIT command was issued. No updates were made to the register table since initialization or the last REINIT.

User Response: None required. This is an informational message.

ASN0025I The Capture program reinitialized the register table. The table *table_name* has *number* potentially bad row(s).

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

User Response: See ASN0018W. This is an informational message.

ASN0026W The Capture program could not allocate the trace buffer. The routine name is *routine*; the storage required is *amount*.

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

User Response:

All available GETVIS storage has been exhausted. You may need to restart the Capture program after allocating a larger partition.

ASN0027W The Capture program is already active.

Explanation: You tried to start more than one Capture program per database.

User Response: Capture generates a unique lockname for each data base. This lockname is already in use indicating that Capture is active for the data base.

ASN0028I The Capture program is suspended by operator command.

Explanation: This informational message is issued when the SUSPEND command is entered. The Capture program has entered a wait state.

User Response: None required.

ASN0029I The Capture program is resumed by operator command.

Explanation: This informational message is issued when the RESUME command is entered. The Capture program has resumed and continued running.

User Response: None required.

ASN0030I The Capture program command or parameter entered by the operator was unrecognized.

Explanation: This message is issued when a command is not recognized by the Capture program. The only valid commands are:

STOP
SUSPEND

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RESUME
REINIT
PRUNE
GETLSEQ

No parameters are allowed for the commands.

User Response: 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*.

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

User Response: Refer to the *DB2 Replication Guide and Reference* 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*.

Explanation: The Capture program tried to reinitialize, 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.

User Response: This is a secondary message. See any preceding messages for more information about the error. See the *DB2 Replication Guide and Reference* for more information about reinitializing Capture and 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*.

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

User Response: Refer to the *DB2 Replication Guide and Reference* for more information. Check the lag limit, retention period and commit frequency.

ASN0035W Some rows were found in the register table with an unsupported architectural level. The routine name is *routine*; the table name is *table_name*.

Explanation: 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 Capture that you are running.

User Response: Refer to the *DB2 Replication Guide and Reference* 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*.

Explanation: DB2 was terminated while the Capture program was still active and the user did not specify the NOTERM start up parameter.

User Response: Start DB2 and start the Capture program.

ASN0100I The Capture program initialization is successful.

Explanation: The Capture program initialization was successfully performed. If Capture was started with the NOTERM option and and DB2 terminates, this message is also issued by Capture after DB2 comes back up.

User Response: None required. This is an informational message.

ASN0101W The Capture program warm start failed because existing data is too old; a cold start will be attempted.

Explanation: The data in the change data tables is older than the value *current_timestamp-lag_limit*. A cold start will be performed.

User Response: None required. This is an informational message. See the *DB2 Replication Guide and Reference* for more information about warm and cold starts to determine why the Capture program could not warm start.

ASN0102W The Capture program will switch to cold start as warm start information is insufficient.

Explanation: A problem occurred during the retrieval of the warm start information. The warm start table data was invalid or not found. A cold start will be performed.

User Response: None required. This is an informational message. See the *DB2 Replication Guide and Reference* for more information about warm and cold starts to determine why the Capture program could not warm start.

ASN0103I **The Capture program started. The Enq_name is *enq_name*; the start_type is *start_type*; the term_type is *term_type*; the prune_type is *prune_type*.**

Explanation: This is an informational message that displays the Capture start up options.

User Response: None required.

ASN0104I **Change capture started for owner *owner*; the table name is *table_name* at log sequence number *log_sequence_number*.**

Explanation: Capture was started for the table owner and table name at the specified log sequence number (LSN). This message is issued for each base table for which Capture captures changes.

User Response: None required. This is an informational message.

ASN0105I **Data that has been copied was pruned from the change data table *table_name* and the unit-of-work table.**

Explanation: This is an informational message to indicate the pruning operation was performed.

User Response: None required.

ASN0106I **The Capture program is waiting for DB2 to come up.**

Explanation:

If the NOTERM option is specified on the ASNCCP command, Capture will wait for DB2 to come back up when DB2 fails. The operator can stop Capture with the STOP command while it is waiting.

User Response: None required. This is an informational message.

ASN0116I **The Capture program did not reinitialize the tuning parameters table. The routine name is *routine*; the table name is *table_name*.**

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

User Response: None required. This is an informational message.

ASN0117I **Warm start control information was not saved. The routine name is *routine*; the table name is *table_name*.**

Explanation: 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.

User Response: None required. This is an informational message.

ASN0120I **DataPropagator Relational Log Read Feature Trace Buffer contents:**

Explanation: This header appears prior to the trace buffer, which is printed in case of severe error.

User Response: None required. This is an informational message.

ASN0121E **The Capture program warm start failed because existing data is too old; the Capture program will terminate.**

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

User Response: 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.**

Explanation: A problem occurred during retrieval of the warm start information. The warm start table data may be invalid.

User Response: 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***

Explanation: 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.

User Response: No response required; this message accompanies termination.

ASN0124I **The prune command was accepted; the pruning action is queued.**

Explanation: This informational message is issued when the PRUNE command is entered. The Capture program has queued the request. Capture will prune the change data (CD) table and the unit-of-work (UOW) table.

User Response: No response required.

IBM DPROPR Capture – ASN0000E-ASN0203I

ASN0125I The current log sequence number of successfully captured log records is *log_sequence_number*. The log timestamp is *timestamp*.

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

User Response: None required. This is an informational message only.

ASN0200E An incorrect parameter *parameter* was passed to the Capture program.

Explanation:

For VSE,

- An incorrect parameter was specified on the ASNCCP start up command.

User Response: Verify the values supplied.

ASN0201E The Capture program encountered a *platform* error. The routine name is *routine*; the function name is *function*; the return code is *return_code*.

Explanation: For *platform* VSE,

- For *functionname* GENCB, MODCB, OPEN, GET, CLOSE, or ENDREQ errors see the *IBM VSE/ESA Messages & Codes* under 42xxx and 4Axxx (for IBM VSE/VSAM macros). Capture received an error while trying to set-up or read the database log or directory.
- For *functionname* GETVIS, FREEVIS, or XPCC errors see the *IBM VSE/ESA System Macros Reference*. Capture received an error while trying to perform one of these functions.

User Response: Correct the error as described in the VSE documentation.

ASN0202E The USERID parameter was not specified.

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

User Response: Add the USERID= parameter, specifying the userid and password, in the PARM= field and resubmit the job.

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 -142 235
 -143 235
 -15 232
 -16 232
 -17 232
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 -19 232
 -2 231
 -200 235

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 -22 232
 -23 232
 -29 232
 -3 231
 -30 232
 -31 232
 -32 232
 -38 232
 -39 232
 -4 231
 -40 232
 -400 235
 -401 235
 -402 235
 -403 235
 -404 235
 -405 235
 -406 235
 -407 235
 -409 235
 -41 232
 -410 235
 -42 232
 -43 232
 -5 231
 -58 233
 -59 233
 -6 231
 -64 233
 -7 231
 -70 233
 -71 233
 -79 234
 -8 231
 -80 234
 -81 234
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 -117 252
 -118 252
 -119 252
 -120 253
 -121 253
 -124 253
 -125 253
 -126 253
 -127 254
 -128 254
 -129 254
 -130 255
 -131 255
 -132 255
 -133 255
 -134 255
 -135 256
 -136 256
 -137 256
 -140 256

SQLCODE (*continued*)
 -141 256
 -144 256
 -149 257
 -15000 328
 -151 257
 -153 257
 -154 257
 -157 257
 -158 257
 -159 257
 -160 258
 -161 260
 -162 260
 -163 261
 -164 261
 -165 261
 -166 261
 -167 262
 -168 262
 -169 262
 -170 262
 -171 263
 -172 264
 -173 264
 -180 264
 -181 264
 -182 264
 -183 265
 -184 265
 -185 265
 -187 265
 -189 265
 -191 265
 -192 265
 -198 266
 -201 266
 -202 266
 -203 266
 -204 267
 -205 267
 -206 267
 -207 267
 -208 267
 -209 267
 -210 268
 -211 268
 -30020 329
 -30021 330
 -30040 330
 -30041 330
 -30050 331
 -30051 331
 -30052 331
 -30053 331
 -30060 331
 -30061 332
 -30070 332
 -30071 332
 -30072 332
 -30073 332
 -30074 332
 -30090 333
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 -302 269
 -303 270
 -304 270

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 -305 270
 -306 270
 -307 270
 -309 271
 -311 271
 -312 271
 -313 271
 -314 271
 -315 275
 -316 276
 -317 276
 -318 276
 -319 276
 -320 276
 -321 276
 -322 276
 -323 277
 -324 277
 -325 277
 -326 277
 -330 277
 -331 277
 -332 278
 -334 278
 -401 278
 -402 278
 -404 279
 -405 279
 -407 279
 -408 279
 -409 279
 -412 280
 -413 280
 -414 280
 -415 280
 -416 280
 -417 280
 -418 281
 -419 281
 -422 281
 -423 281
 -424 281
 -425 281
 -440 282
 -444 282
 -449 282
 -450 283
 -469 283
 -470 283
 -471 284
 -478 284
 -480 284
 -482 284
 -499 284
 -501 285
 -502 285
 -503 285
 -504 285
 -505 286
 -506 286
 -507 286
 -508 286
 -509 286
 -510 286
 -511 287
 -512 287

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-513 287
 -515 287
 -516 287
 -517 287
 -518 288
 -519 288
 -520 288
 -521 288
 -522 289
 -523 289
 -524 289
 -525 290
 -530 290
 -532 290
 -534 290
 -535 290
 -536 290
 -537 290
 -538 291
 -539 291
 -542 291
 -550 291
 -551 291
 -552 292
 -554 292
 -555 292
 -556 292
 -557 292
 -558 293
 -560 293
 -561 293
 -562 293
 -563 293
 -564 293
 -565 294
 -566 294
 -568 294
 -601 294
 -602 294
 -603 294
 -604 295
 -605 295
 -606 295
 -607 295
 -608 296
 -609 296
 -610 296
 -611 296
 -612 296
 -614 296
 -615 297
 -616 297
 -617 297
 -618 297
 -619 297
 -620 297
 -621 298
 -622 298
 -623 298
 -624 298
 -625 299
 -629 299
 -630 299
 -632 299
 -640 299
 -641 300

SQLCODE (continued)

-644 300
 -648 300
 -649 300
 -656 300
 -657 300
 -666 300
 -667 301
 -668 301
 -669 301
 -670 301
 -674 302
 -681 302
 -682 302
 -683 303
 -684 303
 -685 303
 -686 303
 -687 304
 -688 304
 -698 304
 -699 304
 -700 304
 -701 305
 -702 305
 -703 305
 -704 306
 -705 306
 -706 306
 -707 306
 -708 306
 -709 306
 -710 307
 -711 307
 -712 307
 -713 307
 -714 307
 -720 308
 -721 308
 -751 308
 -752 309
 -753 309
 -754 309
 -756 309
 -757 309
 -758 309
 -759 309
 -760 310
 -761 310
 -762 310
 -8001 328
 -801 310
 -802 310
 -803 311
 -804 312
 -805 312
 -806 312
 -807 312
 -809 313
 -810 313
 -811 313
 -813 313
 -814 313
 -815 313
 -816 314
 -818 314
 -821 314

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-823 314
 -824 314
 -825 315
 -826 315
 -827 315
 -828 316
 -829 316
 -830 316
 -831 316
 -832 316
 -833 317
 -834 317
 -835 317
 -836 317
 -841 318
 -844 318
 -860 318
 -861 318
 -900 319
 -901 319
 -902 319
 -903 319
 -906 320
 -911 320
 -912 320
 -913 320
 -914 320
 -915 321
 -916 321
 -917 321
 -921 321
 -923 321
 -928 321
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 -932 322
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 -935 323
 -936 324
 -937 324
 -938 324
 -939 324
 -940 324
 -941 325
 -942 325
 -944 325
 -945 326
 -946 326
 -947 327
 -949 328
 -965 328
 -993 328
 -994 328
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 +12 237
 +134 238
 +135 238
 +142 239
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 +401 242
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 +408 243
 +414 244
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 42810 346
 42811 346
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