

GC28-1377-6
File No. S370-40

Program Product

**MVS/Extended Architecture
Message Library:
System Messages
Volume 2 IEC - ITV**

MVS/System Product:

JES3 Version 2	5665-291
JES2 Version 2	5740-XC6

IBM

This edition of *MVS/XA System Messages, Volume 2* is totally cumulative and applies to all releases of MVS/System Product Version 2.

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This is a major revision of, and obsoletes, GC28-1377-5 and Technical Newsletters GN28-1183, GN28-1188, GN28-1919, and GN28-1273. See the Summary of Changes following the Contents for a summary of the changes made to this manual. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

This edition applies to Version 2 of MVS/System Product 5665-291 or 5740-XC6 and to all subsequent releases until otherwise indicated in new editions or Technical Newsletters. Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest *IBM System/370 Bibliography*, GC20-0001, for the editions that are applicable and current.

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Summary of Changes

Summary of Changes for GC28-1377-6 as updated March 1989

This edition contains the following changes to support Version 2 of MVS/System Product 5665-291 or 5740-XC6.

- These messages are new:

IEC334E	IEC335E	IEC336I	IEC337I	IEF691I	ILR012W
ISG080E	ISG081E	ISG082D	ISG083E	ISG085E	ISG086E
ISG100E	ISG101D	ISG102I	ISG103I	ISG104I	ISG106I
ISG110E	ISG111D	ISG112I	ISG113I	ISG114I	ISG115I
ISG116E	ISG117D	ISG118I	ISG119I	ISG120I	ISG121I
ISG122I	ISG123I				

- These messages have been updated (messages marked with an asterisk now have different message text):

IEC143I	IEC150I	IEC161I	IEE479W	IEE459I	IEE490I
IEF201I	IEW0332*	IGF953I	IGF955I	ISG006I	ISG020I
ISG021I	ISG026I*	ISG027I*			

- The message-to-module table at the back of this book has been updated to support new and changed messages.

Summary of Changes for GC28-1377-5 as updated January 15, 1988 by TNL GN28-1919

This technical newsletter contains the following updates to support various system product enhancements.

- These messages are new:

IEC537I	IOS427A	IOS428I	IOS429I	IOS430I
IOS450E	IOS451I	IOS452I		

- These messages have been updated (messages marked with an asterisk now have different message text):

IEE479W	IOS162A	IOS163A
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- The message-to-module table at the back of this book has been updated to support new and changed messages.

**Summary of Changes
for GC28-1377-5
as updated September 30, 1987
by TNL GN28-1188**

This technical newsletter contains the following updates to support MVS/System Product Version 2 Release 2.0.

- Message IEE459I has been updated.
- The message-to-module table at the back of this book has been updated to support new and changed messages.

Data Management Messages (IEC)

Component Name	IEC
Program Producing Message	Data management
Audience and Where Produced	For operator: console.
Message Format	<p>xx IECnnns text</p> <p>xx Message reply identification (absent if operator reply not required).</p> <p>nnn Message serial number, which is coded to indicate the data management function.</p> <p>Onn End of volume</p> <p>1nn Open</p> <p>2nn Close</p> <p>3nn Catalog management</p> <p>4nn Checkpoint/restart</p> <p>5nn Open/Close/EOV/DADSM common messages</p> <p>6nn Direct access device space management (DADSM)</p> <p>7nn Tape label creation</p> <p>8nn BTAM</p> <p>9nn Problem Determination and 3505/3525</p> <p>s Type code:</p> <p>A Action; operator must perform a specific action.</p> <p>D Decision; operator must choose an alternative.</p> <p>E Eventual action; operator must perform action when he has time.</p> <p>I Information; no operator action is required.</p> <p>text Message text.</p>
Comments	<p>dsn Data set name will not appear in the message text if the JSCB is not available.</p> <p>ser Volume serial number will not appear in the message text for unit record equipment.</p>
Related Publications	<p><i>MVS/XA SPL: System Modifications, GC28-1152</i></p> <p><i>MVS/XA Data Administration: Macro Instruction Reference, GC26-4014</i></p> <p><i>MVS/XA Integrated Catalog Administration: Access Method Services Reference, GC26-4019</i></p> <p><i>MVS/XA Catalog Administration: Access Method Services Reference, GC26-4075</i></p> <p><i>MVS/XA VSAM Administration Guide, GC26-4015</i></p> <p><i>MVS/XA VSAM Administration: Macro Instruction Reference, GC26-4016</i></p> <p><i>MVS/XA VSAM Logic, LY26-3907</i></p> <p><i>MVS/XA DADSM Diagnosis Reference, SY26-3904</i></p> <p><i>MVS/XA SAM Logic, LY26-3891</i></p>

IEC001A M ddd,ser[,jjj,sss] [,dsn]

Explanation: M indicates that a stack of documents, identified by ser, is to be readied on 1419/1275 unit ddd.

jjj indicates the job requesting the volume and sss indicates the job step requesting the volume if these fields appear in the message text.

If a MONITOR DSNAME command is active, dsn indicates the data set requesting the volume.

System Action: The job step waits for the operator to ready the documents or until the task reaches time-out.

Operator Response: Ready the indicated documents on the device.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, Format 3.

IEC003E R ddd,ser,jjj,sss [,SPACE = prm] [,dsn]

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, AL for ISO/ANSI/FIPS label, NSL for nonstandard label,

or NL for no label; the density is as specified by den. The volume is being used by step sss of job jjj.

For direct access volumes, if a MONITOR SPACE command is active, the field

SPACE = cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc

Total number of free cylinders on the volume.

tttt

Total number of tracks in addition to the free cylinders.

aaaa

Areas or extents dividing the cylinders and tracks.

yyyy

Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a MONITOR DSNNAME command is active, data set dsn contained on the volume is also specified in the message text.

System Action: For tape, the system rewinds and unloads the tape volume.

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Then retain the volume near the computer. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message. If LSPACE-NOT A DIRECT ACCESS VOL or LSPACE-INVALID PARAMETER was in the message, perform the problem determination action.

Problem Determination: Table I, items 2, 29.

IEC006I UNABLE TO ACTIVATE A VIO DATA SET DURING RESTART PROCESSING

Explanation: The Auxiliary Storage Manager (ASM) was unable to reset its control blocks for a VIO data set to its status at the time it was journaled. This message should be followed by message IEF086I.

System Action: Restart processing is terminated.

Programmer Response: See message IEF086I and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 29.

IEC011I 031-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: An input/output error occurred during the execution of a QISAM CLOSE macro instruction issued by task termination (the problem program returned control to the supervisor without issuing a CLOSE macro instruction). In the message text, 031-rc associates this message with system completion code 031 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

dsn

data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
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08	An input/output error occurred during execution of a CLOSE macro instruction for an ISAM data set opened for QISAM mode while task termination was in progress.
----	---

System Action: The task is terminated and no SYNAD exit is taken because the user program did not execute a CLOSE macro instruction for the ISAM data set opened for QISAM processing prior to returning control to the supervisor.

Programmer Response: If the task was in the process of loading the ISAM data set, the data set must be reloaded. If the task was updating records (QISAM scan mode), any records waiting to be rewritten when the error occurred will not be rewritten. To ensure that the SYNAD routine gets control, issue a CLOSE macro instruction for the ISAM data set prior to returning control to the supervisor.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC014E D ddd

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no label or nonstandard labels when standard labels were specified.
- Contains standard labels when no labels or nonstandard labels were specified.

- Contains labels that are written in a density other than the density specified.

System Action: The system rewinds and unloads the tape volume.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 16, 28, 29. Table II, Format 3.

IEC015I A37-rc,mod,jjj,sss,ddn[-#],ddd,ser

Explanation: The error occurred during end-of-volume processing. In the message text, A37-rc associates this message with system completion code A37 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An SVC 55 (EOV) was issued, usually by a CHECK, GET, or PUT routine, against a DCB which was not open.
08	DEB does not point to DCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. An open DCB may have been partially overlaid, closed by the user in a SYNAD routine, or automatically closed by a previous end-of-volume error where ignore was specified in the DCB ABEND exit routine. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 15, 16 29. Table II, Format 3.

IEC020I 001-rc,mod,jjj,sss,ddn,-#[ddd,ser,dsn]

NO ERROR HANDLING, (SYNAD), EXIT SPECIFIED
 ERROR OCCURRED WHILE CLOSING DATA SET
 NON-ACCEPTABLE ERROR
 DCB EROPT = ABE OR AN INVALID CODE, AND/OR NO SYNAD EXIT SPECIFIED
 GET ISSUED AFTER END-OF-FILE

IEC

Explanation: A 001 system completion code is issued for step sss of job jjj for one of the following reasons:

- If rc is 0, the logical record length and blocksize specified in the data control block (DCB) or DD statement differ from the logical record length and blocksize indicated in the data set.
- If rc is 1, an I/O error occurred during BDAM, BSAM, BISAM, QSAM, QISAM, or BPAM and no SYNAD exit was specified by the user. For BSAM, one of the following conditions might be true:
 - RECFM=U was specified on the DCB macro instruction, but no logical record length was specified.
 - A write was attempted to a data set that was opened for input.
 - A read was attempted to a data set that was opened for output.
 - For concatenated data sets, some data set in the concatenation has attributes that are different than the attributes of the first data set in the concatenation. For example, some data set may have a different blocksize than the first data set.
- If rc is 2, an error was encountered while attempting to close the data set.
- If rc is 3, for QSAM, an error was encountered that could not be accepted.
- If rc is 4, for QSAM, ABE or an invalid value for EROPT parameter in the DCB and/or no error handling (SYNAD) exit was specified.
- If rc is 5, for QSAM, a GET was issued after end-of-file.

Other conditions that cause this message are:

- CLOSE processing called end-of-volume (EOV), and EOV processing detected an out-of-space condition.
- The POINT macro instruction was issued with an incorrect value for the relative track address (TTRz).
- A hardware error has occurred. Message IEA000I is also issued.

In the message text, ddn is the data definition name of the DD statement describing the data set, ddd is the unit name, ser is the serial number of the volume, and dsn is the data set name. For concatenated data sets, dsn is the name of the first data set in the concatenation and is not necessarily the data set causing the error. mod is the name of the module in which the error occurred.

Note: The unit address (ddd), volume serial number (ser), and data set name (dsn) fields do not appear in the message text when it applies to a SYSIN/SYSOUT data set.

System Action: A WTP message is issued to give the ABEND and return codes, pertinent control blocks are recorded on the GTF data set, and the job abnormally terminates.

Programmer Response: Correct any errors that caused the abnormal termination. Then execute the job step again. Corrective procedures for the problems mentioned above are as follows:

- If no error analysis routine was available, specify the address of a SYNAD routine in the SYNAD operand of the DCB macro instruction.
- If the EROPT parameter in the DCB is invalid, correct the value of the EROPT operand in the DCB macro instruction or in the DCB subparameter of the appropriate DD statement. If desired, specify the ACC or SKP option for the EROPT operand. Be sure the problem program does not issue a GET macro instruction after an end-of-data condition.
- If an out-of-space condition was detected, change the JCL SPACE parameter in the DD statement for the data set to specify a larger primary quantity or add a secondary quantity.
- If the logical record length and/or blocksize is incorrect, correct the value of LRECL and/or BLKSIZE in the DCB macro instruction or in the DCB subparameter of the DD statement.
- If the POINT macro instruction is incorrect, correct the relative track address operand.
- If a hardware error has occurred, see the explanation of the accompanying IEA000I error message.

Problem Determination: Table I, items 1, 3, 25a, 29.

IEC021I NO SPACE IN PASSWORD DATA SET

Explanation: The password data set on the system residence device is full. No additional entries may be added until entries are deleted or a new password data set is created.

System Action: The job step is terminated.

Operator Response: Inform the programmer responsible for the installation that you have received this message.

Programmer Response: Delete outdated entries in the present password data set or create a new password data set.

Problem Determination: Table I, items 2, 25a, 29.

IEC022I 137-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume on a magnetic tape. In the message text, 137-rc associates this message with system completion code 137 and return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred while writing an end-of-volume label or a tape mark.
08	An I/O error occurred while positioning the tape in preparation for label processing.
0C	An I/O error occurred while the system was reading a trailer label for a data set opened with the input or output option. If an embedded short block was encountered when using FBS to read a data set, the I/O error occurred while attempting to read the EOF1 label to verify EOD. If the data set was opened with the option RDBACK, the I/O error occurred reading the header label.
10	An I/O error occurred while positioning a magnetic tape at the end of the data set.
14	An I/O error occurred reading header labels for a data set opened for INPUT or INOUT. If the data set was opened for RDBACK, the error occurred while reading the trailer label.
18	An I/O error occurred while positioning a magnetic tape data set at the first data record, or on a Read Block ID command used to establish the tape position.
1C	An invalid trailer label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.
20	An invalid header label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.

- 24 A specific volume serial number was specified for the second or subsequent volume of an output data set on magnetic tape. During EOV processing, it was discovered that the expiration date (from the HDR1 label of the first data set currently on the specified volume) had not passed. When requested to specify whether the volume could be used in spite of the expiration date, the operator did not reply 'U'. Ask the operator to reply 'U' or specify another volume serial number.
- 28 The operator responded with an 'M' reply (reject VOL1 label rewrite) to message IEC704A.
- 2C The input volume contains an ISCI/ASCII volume label with a standard ISO/ANSI tape label that is not Version 1 or Version 3.
- 30 A label violated the published standard for that label, and the label validation exit issued a return code requesting OPEN/EOV to reject the volume.
- 38 While processing a Read Block ID command to establish the tape position, an I/O error occurred.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Then resubmit the job.

If the return code is 2C, correct the volume label to be compatible with ISO/ANSI/FIPS Version 3 processing (use the IEHINITT utility program).

If the return code is 30, the label field that is in error is identified in message IEC512I. Respond to IEC512I before reusing the volume.

If I/O error has occurred, a defective volume or device may be the cause. Rerun the job, specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC023I 237-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume. In the message text, 237-rc associates this message with system completion code 237 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The block count in the DCB does not match that in the trailer label. A block of data has been missed or skipped (probably due to a hardware error).
08	The DSNAME in a header label does not match that in the JFCB on the second or subsequent volume of a magnetic tape data set. Verify that the correct volume and DSNAME were specified.
0C	The number of blocks processed, which is determined by the position of the tape, does not match the number of blocks specified in the DCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless hardware error has occurred. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC024I 337-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when the end of a data set was reached. In the message text, 337-rc associates this message with system completion code 337 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a physical sequential concatenated data set and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The end of a data set was reached, but no end-of-data-set routine (EODAD) was specified in the DCB.
08	No EODAD specified in the DCB for DD DUMMY data set.

System Action: The task is terminated.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC025I 437-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred at an end-of-volume. In the message text, 437-rc associates this message with system completion code 437 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred. dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
08	When FEOV was issued, it was found that the DCB pointer was invalid. Correct any errors that may have caused the DCB to be invalid.
0C	DEB not in DEB table.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC026I 637-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume for a data set on magnetic tape or an end-of-volume during concatenation. In the message text, 637-rc associates this message with system completion code 637 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred while reading a tape label, writing a tape mark, or positioning a magnetic tape volume.
08	Following user trailer label processing, an I/O error occurred positioning a magnetic tape.
0C	Concatenation of data sets with unlike attributes was detected, but not specified in the DCB (that is, DCBOFLGS bit 4 is 0).
10	An I/O error occurred while positioning a magnetic tape data set that was opened with the option INPUT or INOUT to be read backward. If it is a tape with standard labels, the error occurred positioning at the labels. If it is a tape with no labels, the error occurred positioning at the data.
14	An I/O error in tape positioning occurred for a data set with the LEAVE option specified in the OPEN macro instruction or with the LEAVE option specified in the FEOV macro instruction.
18	An I/O error in tape positioning occurred for a data set opened with the REREAD option.

- 1C An I/O error occurred in tape positioning when FEOV is issued for a data set with DISP=PASS and no OPEN option 2 specified.
- 20 The RDBACK option was invalidly specified. During EOJ/FEOV processing for a new concatenated tape volume, EOJ/FEOV found that the RDBACK option had been specified, but it is not supported with concatenation.
- 24 An I/O error occurred rewinding a scratch magnetic tape volume. Either FEOV with a REWIND option was issued, or no OPEN option 2 was specified when the DISP was not PASS.
- 2C An I/O error occurred while rewinding a magnetic tape volume prior to verifying the volume label.
- 34 An I/O error occurred during end-of-volume processing while reading the volume label of a magnetic tape volume.
- 38 An I/O error occurred while positioning a tape without a label or with nonstandard labels.
- 3C An I/O error occurred while positioning a concatenated magnetic tape data set. If it has standard labels, the error occurred positioning at the labels. If it has no labels, the error occurred positioning at the data.
- 40 An I/O error occurred while positioning a magnetic tape data set that was opened with the option INPUT or INOUT to be read forward. If it is a tape with standard labels, the error occurred positioning at the labels. If it is a tape with no labels, the error occurred positioning at the data.
- 44 An I/O error occurred while checking sense bytes to determine if a file protect ring is on a magnetic tape containing a data set opened for INOUT.
- 4C An I/O error occurred in tape positioning following user header label processing.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement.

If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC027I 737-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume or during allocation of a secondary quantity of direct access storage as requested in the SPACE parameter of the DD statement for the data set. In the message text, 737-rc associates this message with system completion code 737 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return Code

Meaning

- | | |
|----|--|
| 04 | An I/O error occurred while reading the format-1 DSCB, or the format-1 DSCB for the data set could not be found on the first volume (or the volume indexed by the volume sequence number) specified by the DD statement. |
| 08 | An I/O error occurred reading a direct access volume label during end-of-volume processing. |
| 0C | An I/O error occurred reading the DSCB for a concatenated partitioned data set. |
| 10 | An I/O error occurred writing a file mark for a data set on a direct access device. |
| 14 | An I/O error occurred while reading a DSCB preparing for user trailer label processing. |
| 1C | An I/O error occurred while reading a format-3 DSCB. |
| 24 | A missing member name was detected by BLDL while searching for the TTR of a concatenated member. |
| 28 | The EOJ DA module was passed an error return code in register 15 after issuing the IEFSSREQ macro instruction. This indicates the subsystem |

- (JES3) discovered a functional or logical error that it could not process.
- 2C The error occurred when a FEOV macro instruction was issued while attempting to write a file mark at the end of the data. The DCBFDAD field in the DCB indicated an extent number in the DEB greater than the number of extents in the data set. Consequently, it could not be determined where the file mark should have been written.
- 34 An error occurred during a MOUNT, DEMOUNT, ACQUIRE or RELINQUISH operation on a Mass Storage System (MSS) virtual volume. See message IEC066I.
- 38 The MSS hardware mounted a virtual volume other than the one requested.
- 3C The format-1 DSCB not found installation exit module encountered an error.

System Action: The task terminates unless the error can be ignored as specified in the DCB ABEND exit routine. If the error can be ignored, the system attempts to close the DCB before returning to the user.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

If the format-1 DSCB could not be found (return code 04), be sure that the DSNAME and VOLUME parameters on the DD statement are correct. A recovery attempt request can be specified in the DCB ABEND exit routine.

The 28 return code error indicates a subsystem interface problem and your system programmer should be contacted for advice.

If return code is 2C, probable user error. Make sure that the DCBFDAD field is not being invalidated before the FEOV macro instruction is issued.

For return code 3C, contact your system support personnel.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC028I 837-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume for a sequential data set. In the message text, 837-rc associates this message with system completion code 837 and with return code rc. Other fields in the message text are:

ijj
job name

- sss**
step name
- ddn[-#]**
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).
- ddd**
device number
- ser**
volume serial number
- mod**
The name of the module in which the error occurred.
- dsn**
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The tape volume whose serial number is ser was first requested and then mounted on unit ddd. However, a density conflict exists between the user's specified density and the unit's density capability.
08	The volume whose serial number is ser was not found in the JFCB and no address was found for the JFCB extension in the SWA. Specify more volume serial numbers, or a larger volume count in the VOL parameter of the DD statement. See JCL for a description of the rules for coding volume count. This situation can also occur if an OPEN TYPE=J macro is used to open the data set after the volume serial number is changed and the JFCB is not updated in the SWA because bit 4 of the JFCBTSDM field of the JFCB is set to one.
0C	The indicated tape volume whose serial number is ser was requested and mounted on unit ddd but another data set was processing the volume.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Execute job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC029I 937-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred at an end-of-volume. This abnormal termination condition results from an unsatisfactory response by the operator to message IEC254D, IEC255D, or IEC256A. These messages are issued when a checkpoint data set is created, modified, or deleted in installations that wish to ensure the security of their checkpoint data sets. External labeling and suggested installation procedures are discussed in *Checkpoint/Restart*. In the message text, 937-rc

associates this message with system completion code 937 and with return code rc. Other fields in the message text are as follows:

iii

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return**Code****Meaning**

10 1) If the data set is opened for input, the second or succeeding volume of a secure checkpoint data set has been found to be insecure.

2) If the data set is opened for output, the second or succeeding volume of a secure checkpoint data set could not be made secure.

14 During EOV processing, the second or subsequent volume of a noncheckpoint data set was found to be a secure checkpoint data set.

18 An unauthorized user has issued a FEOV or an EOV SVC against a checkpoint data set open with a security interface.

1C An error was detected after mounting a new volume for a data set that spans volumes. The extents listed in the data extent block (DEB) and in the data set control block (DSCB) do not match.

20 For ISO/ANSI Version 1:

The indicated tape volume whose serial number is ser contained ASCII labels. The volume accessibility byte (offset X'0A' in the volume label) is not blank. This indicates that the label was not created on an IBM system or that it was created by the user. If the volume accessibility field is not blank, the tape cannot be used on an IBM system.

For ISO/ANSI/FIPS Version 3:

This message occurs after message IEC502E with the ddn-c field in the message text. If c is 2, access to the data set has been denied.

- 24 A specific volume serial number was specified for the second or subsequent volume of an output data set on magnetic tape. During EOV processing for this volume, it was determined that the first data set currently on the specified volume was password protected, and the protection mode indicator in the HDR1 label did not match that in the JFCB. Supply the password to the operator or select another volume.
- 28 At end of volume, the caller is not authorized to use the data set on the new DASD or tape volume.
- 29 At end-of-volume, the caller is not authorized for input.
- 2C RACF definitions are inconsistent. A previously allocated multi-volume direct access data set is being processed for output. The first volume was RACF-defined, but the current volume is not RACF-indicated.
- 30 An end of volume occurred and the data set on the new volume is RACF-indicated in the Format-1 DSCB; however, the data set on the new volume is not RACF-defined.
- 34 A VSAM data space requested at end of volume is RACF-defined.
- 38 RACF failed to add a volume to an existing RACF-defined, direct access data set while the data set was being extended to a new volume.
- 3C RACF definitions are inconsistent. A previously allocated multi-volume direct access data set or a tape volume is being processed for output. The first volume is not RACF defined and the current volume is RACF-defined, or the first volume was RACF defined and no longer is.
- 40 RACF definitions are inconsistent. A previously allocated multi-volume DASD data set or a tape volume is being processed for output. The current volume being processed at end of volume is defined to RACF, but not as part of the same volume set as the previous volume.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: If the return code is 10 and the data set is open for input, one of the checkpoint data set volumes has lost its secure status. Contact the installation personnel to verify the secure status of the checkpoint volumes. If all volumes are found to be secure, rerun the job and make sure the operator responds correctly when the system requests the status of each volume. Otherwise, rerun the job which creates the checkpoint data set.

If the return code is 10 and the data set is open for output, one of the volumes specified on the checkpoint data set DD statement could not be made secure. Contact the installation personnel and verify the eligibility of all volumes, then rerun the job.

If the return code is 14, probable user error. Contact the installation personnel to ensure that the status of each data set volume is as expected.

If the return code is 18, probable user error. Only APF-authorized programs can access a secure checkpoint data set. Remove the referenced FEOV SVC call, recompile the program, and rerun the job.

If the return code is 1C, probable user error. Check to see if the program incorrectly modifies the job file control block (JFCB) of the subject data set after OPEN and before CLOSE. Of particular interest are the JFCB data set name field and volume serial number field.

If the return code is 20, make sure that the correct volume was mounted. If the correct volume was mounted, the tape volume must be recreated for use on an IBM system.

If the return code is 28, the owner of the data set must update the RACF data set profile to permit access.

If the return code is 2C or 3C, make RACF definitions consistent among all volumes of a multi-volume data set.

If the return code is 30, define the data set to RACF without setting the RACF-indicated bit in the Format-1 DSCB.

If the return code is 34, delete the RACF-definition of the VSAM data space.

If the return code is 38, the data set may have been previously defined to RACF on the new volume. Check with the data set owner, or inspect the data set RACF profile.

Problem Determination: Table I, items 1, 3, 4, 5a, 29, 44.

IEC030I B37-rc,mod,ijj,sss,ddn[#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume. In the message text, B37-rc associates this message with system completion code B37 and with return code rc. Other fields in the message text are:

ijj

jobname

sss

step name

ddn-#

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04

During end-of-volume processing, one of the following occurred:

1. For an output data set, all space was used on the current volume and no more volumes were specified.
2. The system had to demount a volume in order to mount the next volume of the data set. It was unable to demount the volume for one of the following reasons:
 - a. The volume was permanently resident
 - b. The volume was reserved
 - c. Another job had data sets allocated on the volume
 - d. There were open data sets on the volume for the failing task.

For an output data set on a direct access device, the system might have needed to demount the volume for one of the following reasons:

- No more space was available on the volume.
- The data set already had 16 extents, but required more space.
- More space was required, but the volume table of contents (VTOC) was full. If additional space were allocated, another data set control block (DSCB) might have been needed, but could not have been written.

For an output data set on magnetic tape, a volume needed to be demounted because the reflective spot was encountered and more records were to be written.

For an input data set on more than one volume, one of the volumes needed to be demounted so that the next one could be mounted, but the system was unable to demount the volume.

08

During end-of-volume processing, the system attempted to extend data set dsn to a volume on which the DOS bit or the DIRF bit (bits 0 and 5 respectively in the DS4VTOCI byte of the format-4 DSCB) was set. The VTOC for the volume could not be converted to standard format for one of the following reasons:

- Two data sets were allocated to the same space on the volume.
- A split cylinder data set was located on cylinder zero, the same cylinder as the VTOC, or the same cylinder as a non-split cylinder data set.

- The DADSM VTOC conversion routine had been modified (by altering CSECT IGG0325Z, as specified in *DADSM Logic*) to reject any space allocation requests on a volume on which the DIRF bit is set to one.
- Under DOS, the alternate tracks were assigned to cylinder zero.

0C The indicated direct access volume ser on unit ddd was requested to continue processing the data set, but the unit already contained 127 users, the maximum number.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. For all cases, allocate as many units as volumes required.

For return code 04, case 1, specify at least one more volume in the SER, VOL COUNT, or REF subparameter of the VOLUME parameter of the DD statement.

For return code 04, case 2a and 2b, if the volume to be demounted is permanently resident or reserved, set up the JCL to allocate devices that are removable.

For return code 04, case 2c, change the JCL to request deferred mounting, or specify more volumes than units to prevent sharing of required units.

For return code 04, case 2d, rewrite the program or change the JCL insuring that there are no open data sets on volumes that must be demounted.

For the next case (first of 08 return code), scratch one of the data sets that has the overlapping extent.

For the next case (second of 08 return code), either scratch or move the split cylinder data set that is causing the error.

For the next case (third of 08 return code), the VTOC can be converted by either removing the modification to IGG0325Z or by resetting the DIRF bit to zero and setting the DOS bit to one and allocating a non-ISAM data set to the volume.

For the next case (last of 08 return code), the volume can only be used under the Disk Operating System (DOS).

In all cases, correct the errors and execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC031I D37-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when an output operation to a direct access device was requested. In the message text, D37-rc associates this message with system completion code D37 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	A data set opened for output used all the primary space, and no secondary space was requested. Change the JCL specifying a larger primary quantity or add a secondary quantity to the space parameter on the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC032I E37-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when an output operation was requested. The data set was on a direct access or magnetic tape device. In the message text, E37-rc associates this message with system completion code E37 and with the return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
------	---------

04	A data set opened for output used all space available to or on the current volume, and no more volumes were available. Change the JCL to specify more volumes.
----	--

1. Not enough volumes were specified for the data set, through the SER, volume count, or REF subparameter of the VOLUME parameter of the DD statement. When all the volumes were filled, the program attempted to write another record.
2. For a partitioned data set on a direct access volume or for a VIO data set, all space was filled when the program attempted to write another record. (A partitioned data set or a VIO data set can reside on only one volume.)
3. For a partitioned data set on a direct access volume, 16 extents had been used when the program attempted to write another record.

08	A multi-volume physical sequential data set was being written on a direct access device. All space was filled on the volume, and an attempt was made to obtain space on the next specified volume. Either the space was not available on that volume or the data set already existed on that volume. The message contains the volume serial number of the last volume used.
----	---

0C	An installation DADSM exit, IGGPRE00, rejected the extend request.
----	--

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text as follows:

For return code 04, case 1, specify at least one more volume than the number of volumes previously used for the data set. For case 2, specify a different volume for the partitioned data set or specify more space for the VIO data set.

For case 3, either specify a volume for the data set, use a utility program to reorganize the volume so that data sets will not be fragmented (that is, no more than 16 extents used for this data set), or change the program so that a device will be free when a volume must be mounted.

For return code 08, either specify a new volume to continue the data set or make sure that enough

space is available on the volumes already specified. Ensure that the data set does not already exist on the volumes to be used. In all cases, rerun the job.

For return code 0C, consult your installation procedures.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC033I

C37-rc,mod,iii,sss,ddn[-#],ser,dsn

Explanation: The error occurred when an input operation was requested. The data set was on a direct access device. In the message text, C37-rc associates this message with system completion code C37 and with return code rc. Other fields in the message text are:

iii

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of the concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
------	---------

04	An end-of-volume condition occurred on a data set opened for input, but the next volume of the data set contained more than 16 extents.
----	---

08	An end-of-volume condition occurred on a data set opened for input, but the next volume of the data set contained a type of split cylinder allocation that cannot be processed under MVS/XA.
----	--

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. The volume was created on DOS and is not compatible with MVS/XA. Either recreate the data set under MVS/XA or correct the problem by creating it under DOS so it is compatible.

Problem Determination: Table I, items 1, 5a, 13, 25a, 29. Table II, Format 3.

IEC036I 002-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn]

Explanation: The error occurred while the control program was processing a sequential data set with BSAM or QSAM, or creating a direct data set. In the message text, 002-rc associates this message with system completion code 002 and with return code rc. Other fields in the message text are:

iii

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

Note: The unit address (ddd), volume serial number (ser), and data set name (dsn) do not appear in the message text when it applies to a SYSIN/SYSOUT data set.

The values of rc and their meanings are as follows:

Return**Code Meaning**

04 One of the following occurred:

- An invalid record was encountered during a QSAM GET operation. The data set consists of variable format records. The length field in the record descriptor word (RDW) is invalid for one of the following reasons:

- The RDW specifies a length less than 4.

- The RDW specifies a length greater than the DCBLRECL value that was specified when the data set was opened. DCBLRECL is the logical record length (LRECL) in the data control block (DCB).

- QSAM tried to read segments of variable spanned records that are not in proper sequence.
- LRECL is not large enough.
- The record area in QSAM locate mode is too small to contain a logical record from a spanned-format data set.

08 One of the following is true:

- An invalid record was encountered on a QSAM or BSAM PUT or WRITE

operation. The record or block length plus the key length and required overhead add up to more than 32,767 bytes.

- The data consists of spanned format records, and the RDW, SDW, or BDW length field, being translated to an ISO/ANSI/FIPS format, exceeds the length field capacity (9999) of the ISO/ANSI/FIPS format RCW, SCW, or block prefix.

0C

An invalid record was encountered on a QSAM or BSAM PUT or WRITE operation. The record or block length plus the key length and required overhead is greater than the DASD track capacity.

10

An invalid record was encountered on a QSAM PUT operation; the data set uses the track overflow feature. The record descriptor word (RDW) for a variable length record specifies a length greater than 32,752.

14

An invalid record was encountered on a QSAM PUT or WRITE operation. The record length is greater than the blocksize specified in the DCB.

18

An invalid record was encountered on a QSAM PUT operation; the data set uses the variable record format. The value in the length of the record descriptor word (RDW) is invalid for one of the following reasons:

- It is greater than 32,767, or greater than the blocksize specified in the DCB.
- It is less than 4, or less than 5 if ASA control characters are used.
- It specifies a value greater than the DCBLRECL value (maximum record size) that was specified when the data set was opened.

1C

The error occurred during the creation of a direct data set. A WRITE macro instruction was issued for a record larger than the track capacity, and the record format does not use the track overflow feature. Return code 1C also occurs when a DCB, LRECL, BLKSIZE, RECFM, or KEYLEN parameter is missing.

20

The error occurred during the creation of a direct data set. A WRITE macro instruction was issued causing a secondary extent to be obtained. The block will not fit on the amount of space allocated for the secondary extent.

24

The error occurred during the creation of a direct data set. A WRITE macro instruction was issued to write out a block larger than the primary extent on the preallocated data set. This could also occur if allocation of the primary extent was split and any of the secondary extents were smaller than the block.

IEC

28 The error occurred during the creation of a direct data set. During the execution of OPEN it was detected that the blocksize was larger than the primary extent.

System Action: Pertinent control blocks are written to the GTF trace data set as follows:

Code	Trace Data
04	DCB, IOB, or ICB seek field, current logical record (maximum, 88 bytes).
08,10,14	DCB, DECB (if BSAM), current block (maximum, 88 bytes).
0C,1C	DCB, DECB (if BSAM), current block (maximum, 88 bytes), track capacity.
18	DCB and the current logical record (maximum, 88 bytes).
20,24	DCB, DECB, current block (maximum, 88 bytes), track capacity, current DEB extent.

The user's DCB ABEND exit routine is taken if one is provided.

Programmer Response: Probable user error.

If rc is 04 or 18, ensure that the DCBLRECL value specified includes the maximum data length plus 4 bytes for the RDW.

If rc is 08, 10, or 14, verify that the record size passed to the access method is correct.

If rc is 14, if necessary, increase the blocksize to accommodate the largest logical record.

If rc is 0C or 1C, use a smaller blocksize, or a device with a greater track capacity, or specify track overflow.

If rc is 20, 24, or 28, allocate a larger primary or secondary extent, specify a smaller blocksize, or use a device with greater track capacity. If the error occurred because the primary allocation was fragmented into a number of extents, specify the CONTIG subparameter on the SPACE parameter.

Correct the error and rerun the job step.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC037I 008-rc,mod,ijj,ddn,ddd,ser,dsn

Explanation: The error occurred following execution of a CHECK macro instruction during the processing of the creation of a direct data set. In the message text, 008-rc associates this message with system completion code 008 and with return code rc. Other fields in the message text are:

- ijj** job name
- sss** step name
- ddn** DDname
- ddd** device number
- ser** volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	During the creation of a direct data set, EOVS was unable to allocate more space because the current volume was taken. The user returned to the CHECK module from his SYNAD routine.
08	During the creation of a direct data set, an I/O error occurred and the SYNAD exit was taken. The user returned from his SYNAD routine to the check module.

System Action: The user's DCB ABEND exit routine will receive control if one was specified. On return, the following control blocks are traced to a GTF data set for return code 04:

1) all DEB extents and 2) the first 88 bytes (or less if blocksize is less) of the user's output record. No control blocks are traced for return code 08. In both cases, the task is terminated.

Programmer Response: For return code 04, allocate more space or more volumes. For return code 08, check the IOB in error. If the IOBCSW field does not indicate a user error, (user's data area less than blocksize or not in user key, which could result in a channel program check), rerun the job.

Problem Determination: For return code 04, see Table I, items 3, 4, 5b, 16, 25a, 29. For return code 08, see Table I, items 3, 4, 5a, 13, 16, 29, or 30, (if not user error).

IEC040I ddn=rc UNABLE TO LOAD

**3890 CONTROL UNIT
FORMAT RECORD xxx**

Explanation: If 3890 CONTROL UNIT appears in the message text, the 3890 document processor support was unable to load the 3890 control unit for the data set ddn for reason rc. If FORMAT RECORD xxx appears in the message text, the 3886 optical reader support was unable to load a format record whose identifier is xxx for data set ddn for reason rc.

The values of rc and their meanings are as follows:

Return Code	Meaning
04	For the 3890, the SCI program or subroutine was not added to SYS1.IMAGELIB. For the 3886, the format record specified for the data set was not added to SYS1.IMAGELIB.
08	For the 3890, an SCI program or subroutine from SYS1.IMAGELIB could not be loaded. Make sure SYS1.IMAGELIB is mounted. For the 3886, a format record from SYS1.IMAGELIB could not be loaded. Make sure SYS1.IMAGELIB is mounted.

- 0C A hardware error occurred.
- 10 For the 3890, one of the following occurred:
- DCB address operand in the SETDEV macro instruction was missing.
 - IREC operand in the SETDEV macro instruction was missing.
 - Sum of the lengths for the fields (bytes) specified in the IREC macro instruction does not equal LRECL-12. (LRECL is specified in the DCB macro instruction.)
 - I/O error posted in the data control block.
 - The data control block specified in the SETDEV macro instruction was not opened.

For the 3886, the format record identifier was missing from the SETDEV parameter list when the execute form of the macro was issued.

- 14 For the 3890, the error can be found by investigating the sense bytes and header record.
- 18 For the 3890, the SCI program does not begin with the ENTR stacker control instruction.

System Action: The error occurred during a SETDEV operation where the 3890 control unit or format record was to be dynamically loaded. The write-to-programmer message is printed and control is returned to the user with a return code in register 15.

Programmer Response: For the 3890, return codes 04, 08, 10, and 18 are probable user errors. Correct the error and resubmit the job. Return code 0C is a probable hardware error and return code 14 is an exceptional condition that should be handled according to condition.

For the 3886, return code 04 and 10 are probable user errors. Make sure that the SETDEV parameter list has a format record identifier when the execute form of the macro is issued (return code X'10'). If the return code is X'04', make sure that the format record specified for the data set has been added to SYS1.IMAGELIB. If the return code is X'08', make sure the volume containing SYS1.IMAGELIB is mounted. If the return code is X'0C', it is a probable hardware error.

Problem Determination: Table I, items 2, 29 or 30.

IEC0411 005-rc,mod,jjj,sss,ddn[-#],ddd

Explanation: The DECB specified is invalid. In the message text, 005-rc associates this message with system completion code 005 and with return code rc. Other fields in the message text are:

jjj job name
sss step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

mod

The name of the module in which the error occurred.

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	A required address was not specified. This can be either the header address and/or the area address.
08	The RBL type of read was not used for the 3886.

System Action: The task is terminated with a 005-rc system completion code.

Programmer Response: Make sure the RBL type of read is used and the area address and header address parameters are specified so that the DECB is valid.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC0421 INVALID DATA - prm SPECIFIED FOR opr

Explanation: The parameter prm passed to the data management routine for 3886 support was invalid. The operation, opr, can be one of the following:

RD LINENO -	An attempt to read backwards was made (for example, a line number less than the last line read was specified) or the support detected two EOP conditions on successive reads with no eject between them.
LINEFMAT -	The line format number specified was greater than 63.
NUM TIME MKS -	The number of timing marks specified on an eject was greater than 33.
NO LINE FMAT -	No line format number specified for read.
LINE MK CODE -	The code specified for a line mark was greater than 15.
LINE NK NO -	The line number to be marked was greater than 33.
DOC CODE -	The code specified for a document mark was greater than 15.

System Action: Processing continues. An I/O error will be caused by the invalid data passed to the device.

Programmer Response: Correct the invalid data specification and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC066I **jjj,ser[,ddd] MSS FAILURE IN**

{
MOUNT
DEMOUNT
ACQUIRE
RELINQUISH
}

CODE = cde

Explanation: An error occurred while the Mass Storage System communications routine (SVC 126) was processing a request from End-of-Volume. The job name is *jjj*, *ser* is the volume serial number, and *ddd* is the device number. The Mass Storage System Communicator (MSSC) reason code is *cde*. See *Mass Storage System (MSS) Messages* for the meaning of the particular reason code.

System Action: A 737-34 abend is requested.

Programmer Response: See *Mass Storage System (MSS) Messages* for the programmer responses to each reason code.

Problem Determination: See *Mass Storage System (MSS) Messages*.

IEC067I **CHKPT = EOVS FACILITY EXECUTED UNSUCCESSFULLY**

Explanation: The checkpoint at EOVS facility, module IFG0558X received a return code, other than 0 or 4, which indicates an unsuccessful or unusual execution of the CHKPT macro. A preceding Checkpoint/Restart message (prefixed IHJ) should identify more exactly the nature of the problem. Checkpoint/Restart, if required would probably not be possible using the Checkpoint at EOVS checkpoint data set (SYSCKEOV) entry which just failed.

System Action: Processing continues. Checkpoint at EOVS will be attempted again at the next end-of-volume occurrence.

Operator Response: Refer to associated IHJ message for recommended action and notify programmer of error situation.

IEC068A **u ddd,ser**

Explanation: U indicates that the tape volume indicated by *ser* on device *ddd* is not file protected. That is, a program without RACF output authorization attempted to use the volume for INPUT only and the tape's file-protection ring is inserted. Therefore, the volume is not completely write protected.

System Action: The volume is rewound, the device is unloaded and task waits for the operator to remount the volume or until the task reaches time-out. If a volume is mounted with its file protect ring still inserted, the volume will be unloaded again and the message reissued.

Operator Response: Remove the file-protection ring, remount the volume, and ready the device.

IEC070I **rc[(sfi)]-ccc,jjj,sss,ddn,ddd,ser,xxx,dsn,cat**

Explanation: An error occurred during EOVS (end-of-volume) processing for a VSAM data set. The other fields in the message text are:

rc
 return code. This field indicates the reason for the error. The return codes, their meanings, and the corresponding system action and required responses are listed under message IEC161I.

(sfi)
 subfunction information (error information returned by another subsystem or component). This field appears only for certain return codes, and its format is shown with those codes to which it applies.

ccc
 function code. This field indicates the function being performed at the time the error occurred. The function codes, and their meanings are listed under message IEC161I.

jjj
 jobname

sss
 stepname

ddn
 DDname

ddd
 device number, if the error is related to a specific device

ser
 volume serial number, if the error is related to a specific volume

xxx
 name of cluster that contains the data set being processed when the error was detected; or when not available, the DSNNAME specified on the DD statement specified by the ACB.

dsn
 name of the data set being processed when the error was detected

cat
 catalog name

Note: Any missing field is indicated by a comma.

Problem Determination: Table I, items 1, 5a, 13, 16, 29. Table II, Format 4.

IEC089I **rsnc RACF VOL SET CONFLICT ddd,ser,jjj,sss**

Explanation: The system issues this message under either one of the following conditions:

- The OPEN tape mount verification module, IFG0194F, detected a RACF volume conflict with the volume being opened; the system can not use the volume.
- The end of volume (EOV) tape mount verification module, IFG0554F, detected a RACF volume set conflict (1) between the current volume and the previous volume or (2) on the current volume. In either case, the system cannot use the current volume.

A RACHECK macro is issued for tape volumes that are write enabled, and not file protected. An error occurred while the system was processing the scratch tape volume *ser* for input or output in either OPEN

or EOVS. *rsnc* contains one of the following reason codes:

Reason Code	Explanation
1	<p>OPEN processing found either one of the following conditions to be true:</p> <ul style="list-style-type: none"> • PROTECT is specified for a tape volume that is already RACF protected. • An open was issued for a RACF protected tape volume, but the caller was not authorized.
2	<p>The EOVS processing of a concatenated tape volume encountered either one of the following conditions:</p> <ul style="list-style-type: none"> • PROTECT is specified for a tape volume that is already RACF protected. • At EOVS, the user is not authorized to use the data set on the new volume.
3	<p>During EOVS processing of a tape volume (1) for output that was not concatenated, and (2) the previous volume was not RACF defined, the system encountered either one of the following conditions:</p> <ul style="list-style-type: none"> • The RACF definitions are inconsistent. The system is processing a previously allocated tape volume for output. One of two conditions may exist. The first volume is not RACF defined while the current volume is defined as such or the first volume was previously RACF defined, but currently is not defined as such. • At EOVS, the caller is not authorized to use the new tape volume.
4	<p>During EOVS processing of a tape volume (1) for output that was not concatenated, and (2) the previous volume was RACF defined, the system encountered one of the following conditions:</p> <ul style="list-style-type: none"> • PROTECT is specified for a tape volume that is already RACF protected. • The RACF definitions are inconsistent. The system is processing a previously allocated tape volume for output. The current volume being processed at EOVS is defined to RACF, but this current volume is not a part of the same RACF volume set as the previous volume.

The remaining fields in the message are:

ddd	This is the device address.
jjj	This is the jobname.
sss	This is the stepname.

System Action: The system issues messages IEC502E and IEC501A. These messages request that the operator mount a new scratch volume.

Operator Response: If PROTECT was specified, either mount a scratch volume that is not RACF protected or remove the PROTECT specification. If the user is not RACF authorized to use the volume, mount a scratch tape volume that is not defined to RACF.

If message IEC089I contains a reason code of either 3 or 4 you can take following additional steps:

- If *rsnc* is 3 and the current volume is defined to a RACF volume set, but the previous volume was not defined to a RACF volume set mount a scratch tape volume that is not defined to RACF. If you want RACF protection for the dataset being created, the volumes must be manually defined to the same RACF volume set at a later time.
- If *rsnc* is 4 and the current volume and the previous volume are defined to different RACF volume sets then you have two choices. You can make sure that either (1) the scratch tape volumes are defined to the same RACF volume set or (2) none of the volumes are defined.

IEC090I 50D-18, DCB RESIDES ABOVE 16MB.

Explanation: An EOVS macro was issued with the *MODE=31* parameter, and register 15 contains the address of one of the following:

- a DCB that resides above 16 megabytes, or
- an ACB, for an access method other than VSAM and VTAM, that resides above 16 megabytes.

System Action: The system terminates the task.

Programmer Response: Before issuing the EOVS call, change the residency of the DCB or ACB to below 16 megabytes.

IEC101A M ddd,ser,jjj,sss[,dsn]

Explanation: M indicates that a volume is to be mounted on device *ddd*:

- If *ser* is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If *ser* is SCRTCH, a scratch volume is to be mounted.
- If *ser* begins with a slash or L, the volume to be mounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If *ser* begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, *labtyp* and *den* appear only for tape volumes. The volume has the type of label specified by *labtyp*: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by *den*.

The volume is being used by step *sss* of job *jjj*.

IEC102I – IEC113A

If a MONITOR DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: If ser is SCRTCH, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device; then, ready the device.

IEC102I INCORRECT AUTHORIZATION TO RUN 1419.

Explanation: The processing and stacker select routines were not in the correct libraries to run a 1419. This message is associated with system completion code 006.

System Action: The job is abnormally terminated with a 006 ABEND code.

Programmer Response: The pocket select routine must be link-edited into SYS1.SVCLIB. The processing program should be link-edited into an authorized library as an authorized program.

Problem Determination: Table I, items 1, 7bc, 29.

IEC103I rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a DCB that specified the user totaling option, or for a data set directed to a printer. The fields in the message text are:

ijj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code Meaning

04 A permanent I/O error occurred during the attempt to block or unblock data checks on the printer.

08 The user totaling option was specified in the DCB and could not be supported for one of the following reasons:

- No DCB exit list was provided.

- No user totaling entry was found in the DCB exit list.
- The user totaling area address in the user totaling entry was zero.

System Action: The DCB is not opened. If the OPEN macro instruction specified more than one DCB, the system continues normal OPEN processing on the other DCBs. Then control is given to the next sequential instruction after the OPEN macro instruction.

Programmer Response: For return code 08, if the jobstep should be rerun and this data set processed, either provide a user totaling area in the DCB exit list, or do not specify the user totaling option.

Problem Determination: Table I, items 1, 3, 15, 29.

IEC105I ddd,ijj REDUCED ERROR RECOVERY REQUESTED

Explanation: A data set was opened on magnetic tape with a request to use the reduced error recovery facility. In the message text, ddd is the unit address and jjj is the job name.

System Action: Processing continues.

Operator Response: None.

IEC108I OPERATOR ACTION HAS BEEN REQUESTED FOR YOUR DATA SET

Explanation: Operator intervention is necessary before processing can continue on your data set.

System Action: The system waits for the operator to respond.

Programmer Response: A long wait may ensue before the operator responds.

IEC111E D ddd,ser

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, is not the requested volume. ser is the 6-digit serial number of the volume that was actually mounted.

Operator Response: Demount the volume. The system will then request that the correct volume be mounted.

IEC113A ENTER PASSWORD FOR DATA SET dsn

Explanation: The requested data set is password protected. The correct password must be provided within two tries before access is allowed to the data set. Any TSO logon password or the last previous password for the corresponding DD statement has already been tried and found to be invalid.

System Action: The system waits for the TSO user to reply.

Programmer Response: Enter the correct 1 to 8 character password. On terminals that support the suppress print feature, the printing or displaying of the password will be suppressed.

IEC114E D ddd,ddn-n]

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no labels or nonstandard labels when standard labels were specified.
- Contains standard labels when no labels or nonstandard labels were specified.
- Contains labels that are written in a density other than the density specified.

If ddn (DDNAME) is supplied in the message text, the tape volume to be demounted was recorded in ASCII; n specifies the reason for demounting as follows:

if n equals

- 1 The accessibility field of the volume label contains a nonblank character which means that the volume is security protected and may not be processed by the operating system.
- 2 The accessibility field of the file header label contains a nonblank character other than one, which means that the file may not be processed by the operating system.
- 3 The system cannot process the volume which is recorded in ASCII, because the ASCII option was not specified at system generation.
- 4 The control program has determined that conflicting data control block attributes have been used to define the data set on the volume. Some of the conflicting attributes may be the following:
 - BUFOFF greater than 99.
 - BUFOFF not equal to L on OUTPUT, OUTIN, OUTINX, or EXTEND.
 - BUFOFF equal to L where RECFM is not equal to D.
 - OPTCD not equal to Q where LABEL equals AL or AUL.
 - OPTCD equal to Q where DSORG is not equal to PS.
 - OPTCD not equal to Q where RECFM equals D.
 - OPTCD equal to Q where RECFM equals V.
 - LABEL equal to AL or AUL for a seven track tape device.

System Action: The data set is not opened and processing continues.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Programmer Response: Probable user error. Respond as indicated for the following values of n:

- 1 Make sure that the correct volume was specified in the job control statements.
- 2 Make sure that the correct file and volume are being used.
- 3 The ASCII option was not specified at system generation, so bit 6 in the CVTOPTA field of the communications vector table is 0.
- 4 Make sure that the data control block attributes do not conflict.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 16, 28, 29.

IEC115I INVALID PASSWORD

Explanation: The first password supplied was incorrect. Either the password did not exist for the requested data set, its read/write mode was invalid, or it was longer than 8 characters.

System Action: The system issues message IEC116A.

Programmer Response: Determine what the correct password is and respond to message IEC116A.

IEC116A REENTER

Explanation: The first password was incorrect. A second password may not be entered.

System Action: The system waits for the TSO user to reply.

Programmer Response: Enter the correct 1 to 8 character password. On terminals that support the suppress print feature, the printing or displaying of the password will be suppressed.

IEC117I DATA SET CANNOT BE USED - PASSWORD INVALID

Explanation: Both attempts at supplying the correct password were invalid.

System Action: Use of the requested data set is denied.

If this occurs in OPEN or end-of-volume, message IEC150I 913-0C is issued and the task is terminated with a system completion code of 913. If this occurs in SCRATCH or RENAME, the data set is bypassed and processing continues.

Programmer Response: Probable user error. Determine the correct password or correct the password data set. Rerun the job.

IEC118I READ ONLY DATA SET CANNOT BE OPENED FOR OUTPUT

Explanation: The second attempt to open a data set was with a read only password for that data set.

System Action: Use of the requested data set is denied. Message IEC150I 913-0C is issued and the task is terminated with a system completion code of 913.

Programmer Response: Probable user error. Determine the correct write mode password; only open the data set for input; or change the mode of the password or add a write mode password to the password data set. Rerun the job.

IEC119I – IEC123D

IEC119I ERROR-IMAGELIB, CODE = rc

Explanation: An attempt to open SYS1.IMAGELIB was unsuccessful for one of the following reasons:

- CODE = 1 SYS1.IMAGELIB was not a cataloged data set.
- CODE = 2 The volume on which SYS1.IMAGELIB resides is not permanently resident.
- CODE = 3 An error occurred during an attempt to read the the DEB.
- CODE = 4 No space was available in subpool 230 for constructing the DEB or in subpool 229 for constructing the DEB or in subpool 229 for constructing the DCB for SYS1.IMAGELIB.

System Action: The related program was terminated if the error occurred when the output data set was being opened. If the error occurred during execution of the SETPRT macro, the problem is passed a return code and determines further processing based on the nature of the error.

Operator Response:

- If CODE = 2, mount the proper volume and rerun the job.
- If CODE = 1 or 3, report the message to the system programmer.

Programmer Response:

- If CODE = 1, catalog SYS1.IMAGELIB.
- If CODE = 3, check the format1 DSCB for errors. Contact your programming support personnel if the problem persists.
- If CODE = 4, ensure that sufficient storage is available when the storage request is executed.

IEC120A M ddd, character set code [,FOLD][,VERIFY]

Explanation: M indicates a mounting request. The programmer has requested that the chain, train or band specified by character set code, be used on UCS printer ddd.

Operator Response: Mount the train, chain or band that was requested and enter REPLY xx,'text' where text is the character set code.

To ignore the request and use the character set image currently loaded, enter REPLY xx,'U'.

Otherwise, mount a suitable alternate chain, train or band and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.)

If the mounting request cannot be satisfied with any available chain, train or band enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS request. The system will terminate the job if the request occurred during execution of an OPEN macro instruction. If the request was due to execution of a SETPRT macro, a return code of

X'04' will be placed in register 15, and control returned to the program issuing the SETPRT macro.

IEC121D V ddd, character set code [,FOLD]

Explanation: V indicates a verification request. The system has displayed the character set image, specified by character set code, on UCS printer ddd.

Operator Response: Verify that the image displayed corresponds to the requested image.

If the image is correct, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the image is incorrect, mount the correct chain, train or band and enter REPLY xx,'RETRY' or REPLY xx,'R'. If subsequent verifications are still incorrect, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction. If the request was due to execution of a SETPRT macro, a return code of X'14' will be placed in register 15, and control returned to the program issuing the SETPRT macro.

IEC122D ddd, character set code UCS IMAGE NOT FOUND

Explanation: The character set image, specified by character set code, to be used on printer ddd could not be found in the image library or image table.

Operator Response: To correct an erroneous specification, mount the requested chain, train or band and enter REPLY xx,'text' where text is the correct character set code.

If an alternate character set can be used, select the alternate chain, train or band and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.)

To ignore the request and use the character set image currently in use, enter REPLY xx,'U'. A reply of 'U' for printers other than 4245 is invalid at the first occurrence.

If no alternate character set can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction. If the request was due to execution of a SETPRT macro, a return code of X'04' will be placed in register 15, and control returned to the program issuing the SETPRT macro.

Problem Determination: Table I, items 1, 3, 5a, 15, 17a, 29.

IEC123D ddd, SPECIFY UCS PARAMETER

Explanation: The current job step did not specify UCS parameters and the character set currently in use on UCS printer ddd cannot be assumed as a default option for one of the following reasons:

- The character set is unknown to the system.
- The character set is invalid because of a previous error condition.
- The character set is not a default character set.

Operator Response: For the first occurrence of this message, mount the chain, train or band of a suitable default character set and enter REPLY xx,'text' where text is the character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.) Note that this response should be used only the first time this message is produced.

1. For all printers other than the IBM 4245, enter REPLY xx 'U' to ignore the request and use the character set image currently in use when one of the following conditions exist.
 - If this is not the first occurrence of message IEC123D since the printer was varied online.
 - If this is not the first occurrence of message IEC123D since the system was IPLed.
2. For the IBM 4245 printer this reply is valid at all times.

If no character set is available for the job step, enter REPLY xx,'CANCEL' or REPLY xx,'C'. The system will terminate the job if the request occurred during execution of an OPEN macro instruction. If the request was due to execution of a SETPRT macro, a return code of X'04' will be placed in register 15, and control returned to the program issuing the SETPRT macro.

IEC124I ddd, ERROR OCCURRED WHILE LOADING FCB

Explanation: A permanent I/O error persisted after two attempts were made to load the FCB. The error occurred while opening the data control block for printer ddd or during the execution of a SETPRT macro. This error can be caused by:

- A form control buffer parity error.
- An attempt to load an invalid FCB image.
- A hardware error occurred during the printer interrogation and forms positioning part of the load FCB routine.

System Action: The related program was terminated.

Operator Response: If the associated I/O error message (IEA000I) contains a X'02' in the first sense byte, an attempt was made to load an invalid FCB image.

Specify a substitute image or correct the one in error. An image is invalid if:

- Its specified length exceeds the maximum allowed for the device.
- Its specified and actual lengths are not equal.
- There is an invalid channel specified.
- The last byte of the image is incorrect.

If IEA000I contains a X'04' in the first sense byte a buffer parity error occurred.

Problem Determination: Table I, items 18, 24, 30.

IEC125D ERROR - REPEAT REPLY

Explanation: An invalid response was made to a previous Universal Character Set (UCS) or Forms Control Buffer (FCB) message.

Operator Response: Enter the reply again, correctly.

IEC126I ddd, UNCORRECTABLE ERROR LOADING UCS

Explanation: A permanent input/output error (UCS parity error) persisted after ten attempts were made to load the UCS buffer. The error occurred while opening the data control block for UCS printer ddd. Subsequent output on this printer may be invalid.

If the error was due to execution of an OPEN macro instruction, the related program is terminated. If the request was due to execution of a SETPRT macro, the return code (X'0C') will be placed in register 15 and control returned to the program issuing the SETPRT macro.

Operator Response: Probable hardware error. None.

Problem Determination: Table I, items 1, 2, 13, 18, 30.

IEC127D ddd, image-id FCB IMAGE NOT FOUND

Explanation: The FCB buffer of printer ddd was not loaded because the FCB image specified by the image-id was not in the image library.

Operator Response: To correct an erroneous specification, enter REPLY xx,'text' where text is the correct or alternate FCB image-id to be used. The image-id can then be followed by VERIFY or V, or ALIGN or A.

Specifying VERIFY or ALIGN allows the operator to align forms to the new image.

The VERIFY option also provides a printout of the image loaded.

To ignore the request and use the FCB image currently loaded, enter REPLY xx,'U'.

If no alternate image can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the FCB load. The system will terminate the job if the request occurred during execution of an OPEN macro. If the request occurred during execution of a SETPRT macro a return code (X'04') will be placed in register 15 and control returned to the program issuing the SETPRT macro.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC128D V ddd, VERIFY FORMS ALIGNMENT

Explanation: V indicates a verification request. The system was requested to verify forms alignment to the FCB image printer ddd.

Operator Response: Verify that the forms are aligned to the forms control buffer image.

When forms are aligned, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the VERIFY option was specified, entering REPLY xx,'RETRY' or REPLY xx,'R' causes the FCB image to be printed again. This can be repeated until forms are properly aligned.

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If the image is incorrect or forms alignment is not possible, enter **REPLY xx,'CANCEL'** or **REPLY xx,'C'** to cancel the FCB image load. The system will terminate the job if the request occurred during execution of an **OPEN** macro. If the request occurred during execution of a **SETPRT** macro a return code of **X'14'** is placed in register 15 and control returned to the program issuing the macro.

IEC129D ddd, SPECIFY FCB PARAMETER

Explanation: The current job step did not specify FCB parameters and the image currently loaded on the printer **ddd** cannot be assumed as a default for one of the following reasons:

- The image is invalid because of a previous error condition.
- The image is not a default image.

Operator Response: For the first occurrence of this message, load the FCB buffer by entering **REPLY xx,'text,'** where **text** is the image-id to be used. **STD1** or **STD2** may be specified to load the IBM forms-control buffer images. In addition to the image-id, **VERIFY** or **ALIGN** can be specified after a comma.

Specifying **VERIFY** or **ALIGN** allows the operator to align forms to the new image.

The **VERIFY** option also provides a printout of the image loaded.

To ignore the request and use the image currently loaded, enter **REPLY xx,'U'**.

If no image is available for the job step, enter **REPLY xx,'CANCEL'** or **REPLY xx,'C'**. The system will terminate the job if the request occurred during execution of an **OPEN** macro instruction. If the request was due to execution of a **SETPRT** macro, a return code of **(X'04'** will be placed in register 15, and control returned to the program issuing the **SETPRT** macro.

IEC129I 002-rc,mod,jjj,sss,-#],ddd,ser,dsn

Explanation: The error occurred during **BDAM CREATE**. The fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of **rc** and their meanings are as follows:

Return Code	Meaning
04	Neither A, K, nor I was specified in the MACRF field of the DCB.
08	BDAM OPEN was attempted on a data set containing zero extents as specified in the DSCB.
1C	A record was found to be larger than 1 track.
20	The block will not fit in the amount of space allocated for a secondary extent.
24	The block will not fit in the amount of space allocated for the primary extent.
28	Upon opening a data set for BDAM CREATE , BLKSIZE was found to be larger than the primary extent.

System Action: A **WTP** message is issued to give the **ABEND** and return code. Pertinent control blocks on the **GTF** data set are recorded and the job is abnormally terminated.

Programmer Response: If **rc** is 28, allocate more space, specify a smaller blocksize or use a larger device. If **rc** is 1C, specify a shorter blocksize, a larger device, or use track overflow.

If **rc** is 04, specify A, K, or I in the DCB.

If **rc** is 08, specify a positive nonzero value for primary allocation in the space parameter of the **DD** card when creating the data set.

If **rc** is 20, specify a larger secondary allocation, shorter blocks, or use a larger device.

If **rc** is 24, specify a larger primary allocation, shorter blocks, or use a larger device.

IEC130I ddn - DD STATEMENT MISSING

Explanation: An **OPEN** macro instruction was issued for a data control block that specified **ddn** as the **DDNAME**. However, **ddn** does not appear in the name field of any **DD** statement for the job.

System Action: Processing continues. However, abnormal termination is likely if an attempt is made to read or write the data set.

Programmer Response: Probable user error. Supply the missing **DD** statement, and execute the job step again.

Problem Determination: Table I, items 3, 15

IEC131I xx,jjj,sss,RDJFCB ISSUED FOR DCB WITH BLANK DDNAME

Explanation: A **RDJFCB** macro instruction was issued. A DCB in the parameter list had a blank **DDNAME** field.

xx - the position of the DCB in the parameter list.
jjj - job name
sss - step name

System Action: The request for this DCB is ignored and a return code of 4 is passed in register 15.

Programmer Response: Correct the errors causing the **DDNAME** field to be blank and execute the job

which ends with an EOVS label. More volume serial numbers follow.

- The data set was opened for MOD processing to a magnetic tape file. The volume sequence number specified is less than the last volume number that the existing data set resides on. More volume serial numbers follow.

If END appears in the message text, the data set was opened to the end of an SL or AL magnetic tape file 1. One of the following error conditions exists:

- The dsname in the HDR1, EOVS1, or EOF1 label was not correct.
- The file sequence number specified (default = 1, must be 1 for this message) in the LABEL parameter of DD statement ddn is less than the first file on the tape volume indicated by ser.
- A tape mark was read instead of a HDR1 label.

There are more previous volume serial numbers. This usually occurs when several specific volume serial numbers are specified in advance for a DISP=MOD data set to use instead of SCRTCH tapes.

System Action: For START, the open routine permanently increases the volume sequence number by one and continues processing on the next volume specified.

For END, the open routine decreases the working volume sequence number by one and continues processing on the next volume specified.

Programmer Response: To save the time required to do this multivolume positioning recovery, change the JCL.

For START:

- Specify a volume sequence number in the VOL parameter of the DD statement, or
- Omit the skipped volume serial numbers, or
- Specify VOL=REF=*.ddname to get only the last volume serial number of the previous file. This then is the first volume serial number of this file.

For END:

- Specify a volume sequence number in the VOL parameter of the DD statement, or
- Omit the excess volume serial numbers, or
- Omit all the volume serial numbers. This lets the system assign SCRTCH volumes as needed instead of you making specific requests.

If you want to rerun the job, analyze and/or modify the JCL and program to ensure that the job does not accept the wrong tape because one of the three original error conditions for END may no longer exist.

IEC141I 013-rc,mod,ijj,sss,ddn-#[,ddd,ser,dsn]

Explanation: The error occurred during execution of an OPEN macro. This message is accompanied by system completion code 013 with return code rc. Other fields in the message text are:

ijj

Job name

sss

Step name

ddn-#

ddname, followed by a concatenation number, if it is part of a concatenation and not the first DD statement in the concatenation.

ddd

Device number

ser

Volume serial number

mod

The name of the module in which the error occurred.

dsn

Data set name

Note: For a SYSIN or SYSOUT data set, the ddd, ser, and dsn fields do not appear.

The values of rc and their meanings are as follows:

rc Meaning

04 One of the following occurred:

- ISO/ANSI/FIPS tape labels were specified in the LABEL parameter of the DD statement (as AL), but are not supported by your system because ASCII=INCLUDE was not specified when your system was generated.
- OPTCD=Q processing was specified but is not supported by the system. Correct the DCB OPTCD option.

08 ISO/ANSI/FIPS tape labels were specified in the LABEL parameter of the DD statement (as AL), but the UNIT parameter specified a 7-track tape drive. ISO/ANSI/FIPS tape labels not valid for 7-track drives. Correct the LABEL and/or UNIT parameters on the DD statement.

0C A buffer length of 0 was specified for a BDAM data set for which dynamic buffering was requested. Correct the DCB specifying a valid buffer length.

10 An OPEN macro instruction was issued for a null data set; the BLKSIZE and BUFL are both 0. Correct the DCB: specify BLKSIZE or BUFL other than 0.

14

- An OPEN macro instruction was issued with OUTPUT or OUTIN specified. DCB specifies DSORG=PO or POU, but the DSCB indicates that the data set is not partitioned. Change the DCB macro instruction DSORG subparameter to PS, or imply partitioned organization by allocating space for the directory on the

SPACE parameter of the DD statement, or verify that the DSNNAME and VOLUME parameters on the DD statement are correct.

- An OPEN macro instruction was issued with INPUT specified. The DSCB indicates that DSORG = PO, but the DCB specifies neither DSORG = PO or PS.
- 18 An OPEN macro instruction was issued for a partitioned data set. The DSNNAME parameter specified a member that could not be found.
- 1C An OPEN macro instruction was issued for a partitioned data set, but an I/O error occurred while searching the directory.
- 20 An OPEN macro instruction was issued for a sequential data set using queued access. Either BLKSIZE is not a multiple of LRECL, LRECL = 0 when RECFM = FB or FBS, or BLKSIZE is not four bytes greater than LRECL when RECFM = V.
- 24 An OPEN macro instruction was issued with INPUT, INOUT, RDBACK, or UPDAT specified, but the DCB did not specify a MACRF of EXCP, GET, or READ.
- 28 An OPEN macro instruction was issued with OUTPUT, OUTIN, OUTINX, or EXTEND specified, but the DCB did not specify a MACRF of EXCP, PUT, or WRITE.
- 2C A sequential data set using queued access with exchange buffering was opened for input, and the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 30 A sequential data set using the queued access technique with exchange buffering was opened for output, but the buffer control block address is 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 34 One of the following was detected:
- An OPEN macro instruction was issued for a data set with BLKSIZE and BUFL equal to 0. The system determined that it had to obtain buffers but was unable to do so.
 - The following combination was specified: QSAM, LRECL = 0, and a RECFM that was not V or VB.
 - The following combination was specified: RECFM = V or VB and LRECL greater than the quantity BLKSIZE minus 4.
 - The following combination was specified: QSAM and BLKSIZE = 0.
 - The following combination was specified: RECFM not variable or undefined and LRECL greater than BLKSIZE.
- The following combination was specified:
BFTEK = A, RECFM = VBS, and
LRECL = 0
- 38 An OPEN macro instruction was issued for a sequential data set on a direct access device with track overflow, but the buffer control block address was zero. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 3C A sequential data set was opened for INPUT, OUTPUT, or EXTEND, but the next available buffer address in the buffer control block was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 40 A sequential or direct data set was opened for INPUT, but the next available buffer address in the buffer control block was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 44 An OPEN macro instruction was issued for a data set on a direct access device for which chained scheduling was specified, but the next available buffer address in the buffer control block was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 48 An OPEN macro instruction was issued for a sequential data set using the queued access techniques, but the next available buffer address in the buffer control block was 0.
- 4C An OPEN macro instruction was issued for a data set using queued access. The system determined that a buffer pool existed for this data set and checked the buffer length value as follows, thus detecting an error:
- If the data was to be sent directly to a unit record device (no spooling), the buffer length value in the buffer control block had to be equal to or greater than the value specified in the DCB for LRECL. This type of error often occurs if a DCB is shared by two or more tasks, or is opened or closed several times within one job step.
 - Otherwise, the buffer length value in the buffer control block or in DCBBUFL had to be equal to or greater than the value specified in the DCB for BLKSIZE.
- 50 An OPEN macro instruction issued for a data set allocated to a printer did not have OUTPUT specified as an OPEN option.
- 54 An OPEN macro instruction was issued for a data set allocated to a 1419. No secondary control unit could be found.

- 58 An OPEN macro instruction was issued for a paper tape data set, but concatenation with unlike attributes was specified, that is, the DCBOFLGS bit 4 is 1. Set the DCBOFLGS bit 4 to 0 and do not attempt to concatenate a data set on paper tape with data sets of unlike attributes.
- 5C One of the following occurred:
- An OPEN macro instruction was issued for a sequential data set using queued access. The data set contained spanned variable length records larger than 32,756, but GET locate mode was not specified, or LRI (logical-record interface) and LRECL=x were both specified.
 - An OPEN macro instruction was issued for a sequential data set with the DCB specifying BUFFER=A and MACRF=GM or MACRF=PM.
- 60 An OPEN macro instruction was issued for a data set with a DCB specifying RECFM=F, but the BLKSIZE was not equal to LRECL. Correct the DCB parameters to specify RECFM=FB, or make LRECL and BLKSIZE equal.
- 64 An OPEN macro instruction was issued for a null data set using an access method other than QSAM or BSAM. Correct the DD statement to specify a real data set, or access the data set using BSAM or QSAM.
- 68 An OPEN macro instruction was issued for a data set whose DCB specified a block size and key length whose sum is greater than the maximum allowed, which is 32,767.
- 6C An OPEN macro instruction was issued for a data set with RECFM=T in the DCB, requesting track overflow, but the direct access device allocated does not support track overflow. Correct the DCB or specifically request a device that supports track overflow, through the unit parameter or through a generic name that applies only to the needed devices.
- 70 One of the following occurred:
- An OPEN macro instruction was issued for a data set on magnetic tape. A conflict exists between LABEL parameters on the DD statement, and the DCBRECFM, DCBOPTCD, DCBBUFOF, and DCBUSASI fields, which give the appearance of mixed USASI and EBCDIC attributes for the data set; or TRTCH was specified for a 9-track tape.
 - An OPEN macro instruction was issued for a data set not on magnetic tape. Either OPTCD=Q was specified, or OPEN was issued for an ISAM data set using QSAM.
- 74 An OPEN macro instruction was issued for an optical character reader data set, but option 1 on the OPEN macro instruction did not specify input.
- 78 An OPEN macro instruction was issued for an optical character reader data set. The BUFL parameter in the DCB was specified as zero, or incorrectly modified during execution.
- 7C An OPEN macro instruction was issued for an optical character reader data set. But the LRECL parameter in the DCB was zero. Specify an LRECL other than zero, and rerun the job.
- 80 An OPEN macro was issued for an optical character reader data set, but the specified BUFL was less than LRECL. Specify BUFL equal to, or greater than, LRECL, and rerun the job.
- 84 An OPEN macro instruction was issued for an optical character reader data set. The number of buffers specified in the buffer pool control block is not the same as that specified in the DCBBUFNO field.
- 88 An OPEN macro instruction was issued for a telecommunications device, but the DCB was not a TSO DCB.
- 8C RECFM was not specified for a direct organization (BDAM) data set. Specify the correct RECFM in the DCB.
- 90 An OPEN macro instruction was issued for a 3890 document processor. It did not specify INPUT.
- 94 An OPEN macro instruction was issued for a 3890 document processor. The BUFL or BLKSIZE parameter in the DCB was less than 16 times the LRECL parameter in the DCB.
- 98 An OPEN macro instruction was issued for a 3890 document processor. The RECFM parameter in the DCB did not specify F or FB.
- 9C An OPEN macro instruction was issued for a 3890 document processor. The MACRF parameter in the DCB was not GM, or the DSORG parameter in the DCB was not PS.
- A0 An OPEN macro instruction was issued for a 3890 document processor. The LRECL parameter in the DCB was not specified or less than 12 or greater than 48.
- A4 A DCB was opened for a SYSIN or SYSOUT data set, but DSORG was not specified as PS.
- A8 An invalid record format was requested for a SYSIN or SYSOUT data set. Either RECFM=D was specified, or variable spanned records (VS, VBS) were requested for a SYSIN data set.
- AC The system issued an OPEN macro instruction for a sequential data set using the queued access technique. However, a key length was specified in the DCB which is not supported when using the queued access technique.
- B0 An OPEN macro instruction specified the RDBACK option and the DCB specified a record format of variable spanned records. These are conflicting parameters.

- B4 An OPEN macro instruction specified the INOUT, OUTIN, or OUTINX option and the DCB specified QSAM MACRF values. These are conflicting parameters.
- B8 An OPEN macro instruction was issued for a 3890 document processor. The DCBHDR parameter was not specified in the DCB.
- BC A SYSIN or SYSOUT DCB was opened with invalid options. Either OPEN option 1 specified UPDAT or RDBACK, or for BSAM, the POINT macro function was selected (MACRF = RP or WP). Repositioning or updating a spooled data set is not permitted.
- C0 A SYSIN or SYSOUT data set could not be opened by a job entry subsystem. The failing DCB is not opened; processing for other DCBs opened in parallel continues normally. For JES2, this return code can occur because a SYSOUT data set incurred a subsystem JCL facility (SJF) error. For JES3, this return code can occur because a reserved ddname, for example, JOURNAL, was specified on a DD statement.
- C4 During the creation of a direct data set, the open routine found that the DCB specified READ (R) or GET (G) in the MACRF field. Only WRITE LOAD (WL) is allowed.
- C8 The open subsystem executor module was passed an error return code in register 15 after issuing the IEFSSREQ macro to connect the user's ACB to the subsystem. This indicates the subsystem was not operating.
- CC An OPEN macro instruction was issued for the IBM 3800 Printing Subsystem, but the SETPRT processing to set up the device failed. See accompanying message IEC162I for the reason for the failure.
- D0 An invalid record format of FBS or FS was specified for a partitioned data set.
- D4 A DS/DBS record format has been specified for QSAM locate mode, but the logical record interface is not present in the associated buffer control block; that is, segment mode is implied.
- D8 A conflict has occurred for the spanned record format extended logical record interface (XLRI).
- E4 The limit of 123 extents for a concatenated partitioned data set has been exceeded.
- E8 The open verification function of the IEFSSREQ macro passed an error return code in register 15. This indicates an error in connecting to the subsystem or a failure in the subsystem verification processing for the data set.

System Action: The system issues a WTP message to give the ABEND and return codes, records pertinent control blocks on the GTF data set, and abnormally terminates the job.

Programmer Response: Correct the error causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

A C8 return code indicates that the subsystem was not operating when OPEN was issued. Notify your system programmer.

If the return code is D4, specify the logical record interface by using the BUILDRC macro before OPEN processing or by specifying A for the DCB BFTEK operand. If records are greater than 32K, specify the extended logical record interface (XLRI) by using OK for the DCB LRECL operand.

If the return code is D8, then:

- LRECL = nnnnnK for JCL or dynamic allocation requires the DCB to indicate the K format. The DCB K format is indicated by specifying LRECL = 0K in the DCB macro instruction, or by a DCB exit during open setting DCBBFTEK = DCBBFTK and DCBLRECL = 0. The use of XLRI is not required for an LRECL less than 32,760.
- A spanned record format data set with a logical record length greater than 32,760 requires use of XLRI. The record length may come from the label for input data sets with the spanned format, up to 99,999 bytes.
- LRECL = X is not valid for spanned record format.
- The value for XLRI LRECL cannot exceed 16383K (where K indicates 1024-byte multiples).
- XLRI is valid only for ISO/ANSI-label (AL) tape; the DCB must indicate spanned record format (DS or DBS); and the access method must be QSAM locate mode.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, format 3.

IEC142I 113-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction or an OPEN macro instruction with a TYPE = J operand. In the message text, 113-rc associates this message with system completion code 113 and with return code rc. Other fields in the message text are:

ijj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

IEC143I - IEC144I

The values of rc and their meanings are as follows:

Return Code	Meaning
08	A JFCB extension block was needed for processing a physical sequential data set but none was available.
0C	An OPEN TYPE=J was issued, but no JFCB exit was found in the DCB exit list. Specify a JFCB exit, supply the JFCB.
18	A JFCB extension block was needed for processing a direct or index sequential data set.

System Action: The task is terminated.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC143I 213-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 213-rc associates this message with system completion code 213 and with return code rc. Other fields in the message text are:

iii

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading the format1 DSCB, or the format1 DSCB for the data set could not be found on the first volume (or the volume indexed by the volume sequence number) specified by the DD statement or in the catalog. For the second case, make sure that the DSNAME and VOLUME parameters on the DD statement or in the catalog are correct. A recovery attempt request may be specified in the DCB ABEND exit routine.
08	An OPEN macro instruction was issued for a password protected data set, but the system was unable to locate the PASSWORD data set. Make sure that the

PASSWORD data set exists on the system residence volume. If it does not exist, build it and execute the job step again.

0C	An I/O error occurred reading a format1 DSCB for a direct or indexed sequential data set, or the format1 DSCB could not be found on the volume specified by the DD statement for a direct or indexed sequential data set. Ensure that the dsname and volume parameters on the DD statement are correct.
18	An I/O error occurred writing back a format1 DSCB.
20	During an OPEN, a volume contained more than 16 extents of the indicated data set.
24	During an OPEN, a volume of the indicated data set had a type of split cylinder allocation which is not supported under this operating system.
28	An OPEN macro instruction was issued for a direct access data set. UNIT=SYSDA, but the unit already contained 127 users, the maximum number.
2C	The format-1 DSCB not found installation exit module encountered an error.
30	An attempt was made to open a PDS for OUTPUT, DISP=SHR. The PDS is already open in this condition.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job. For return code 2C, contact your system support personnel.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC144I 313-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 313-rc associates this message with system completion code 313 and with return code rc. Other fields in the message text are:

iii

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred.

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An I/O error occurred reading a format 2 or format 3 DSCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. You should save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC145I**413-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn**

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. In the message text, 413-rc associates this message with system completion code 413 and with return code rc. Other fields in the message text are:

jjj

job name

sss

step name

ddn[-#]

DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd

device number

ser

volume serial number

mod

The name of the module in which the error occurred, if it is available.

dsn

data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	No device is available for mounting the volume containing the data set to be

opened (dsn), or the allocated device is not available for one of these reasons:

- The volume already on the allocated device, identified in the ser field of the message text, is permanently resident, reserved, or enqueued.
- Another DCB is open on the device.
- The device type is incompatible with the DSORG in the DCB.

Specify another device in the UNIT parameter of the DD statement.

Notes

- This error can occur if you modify the volume serial number in the JFCB after the device is allocated but before the data set is opened. In this case, specifying the DEFER subparameter on the UNIT parameter of the DD statement might solve the problem.
- This error can be caused by a previous abnormal termination associated with the same device in the same step. In this case, correct the error that caused the previous abnormal termination.

08	An I/O error occurred positioning a magnetic tape volume.
0C	An I/O error occurred reading the volume label on a magnetic tape volume.
10	An I/O error occurred writing a tape mark.
18	The specified data set was opened for input, but no volume serial number was specified on the DD statement. A recovery attempt request may be specified in the DCB ABEND exit routine.
1C	An OPEN macro instruction was issued for a data set, but volume sequence number on the associated DD statement was greater than the number of volumes containing the data set.
20	One of the following is true: <ul style="list-style-type: none"> • An I/O error occurred while reading the volume label on a direct access volume. • The label is invalid. • An I/O error occurred while reading the format-4 DSCB. • The format-4 DSCB in the VTOC is invalid.
24	An OPEN macro instruction was issued for a data set on magnetic tape. A density was specified in the DCB DEN parameter which was incompatible with the recording density of the drive allocated to the data set. Change the DD statement to specify a tape drive with the recording density specified in the DCB macro instruction.

IEC

- 28 The OPEN DA volume verification module was passed an error return code in register 15 after issuing the IEFSSREQ macro instruction. This code indicates the subsystem discovered a functional or logical error that it could not process.
- 2C An error occurred during MOUNT, DEMOUNT, ACQUIRE, or RELINQUISH operation on an Mass Storage System (MSS) virtual volume. See message IEC166I.
- 30 The MSS hardware mounted a virtual volume other than the one requested.
- 34 LABEL=(n) was specified, where n is greater than 1, and vol=ser was not specified for a tape data set.
- 38 During a Read Block ID command to establish the tape position, an error occurred.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job. The 28 return code error indicates a subsystem interface problem and your system programmer should be contacted for advice.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC146I 513-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 513-rc associates this message with system completion code 513 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a magnetic tape data set allocated to a device that already has an open data set on it. Make sure that the first data set is closed before the second is opened, or allocate the second data set to a different device. This error may be due to a previous abnormal termination associated with the same unit in the same step. If so, correct the error causing the previous abnormal termination.
08	A label violated the published standard for that label, and the label validation exit issued a return code requesting OPEN/EOV to reject the volume.
0C	The volume contains a volume label that is not a standard version label supported for any of the following kinds of DCB processing: <ul style="list-style-type: none"> • An input volume with an ISCI/ASCII VOL1 standard version label that is not 1 or 3. • An output volume with an ISO/ANSI Version 1 or ISCI/ASCII Version X VOL1 label that is to be written at other than the first data set, or that is to extend the first data set (for example, DISP=MOD).

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

If the return code is 08, the label field in error is identified in message IEC512I. Respond to IEC512I before reusing the volume.

If the return code is 0C, correct the volume label to be compatible with ISO/ANSI/FIPS Version 3 processing (use the IEHINITT utility program).

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC147I 613-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 613-rc associates this message with system completion code 613 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return

Return Code	Meaning
04	An I/O error occurred positioning a magnetic tape volume.
08	An I/O error occurred reading a label on a magnetic tape volume.
0C	An invalid label was read from a magnetic tape volume. Make sure that the correct volume was mounted, and that it contains standard labels. If it is the desired volume, recreate it, and rerun the job. This error may be due to a previous abnormal termination associated with the same tape since it was last mounted, possibly in a previous job or step, leaving the tape positioned improperly. If so, either correct the error causing the previous abnormal termination or reestablish the tape position by causing it to be unloaded and mounted again by the system.
10	An I/O error occurred writing a tape label.
14	An I/O error occurred writing a tape mark after the header labels.

System Action: The system terminates the task unless either one of the following conditions is true:

- The error is to be ignored or recovered as specified in the DCB ABEND exit routine.
- Retry processing for return code 08 or 0C is successful.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC148I

713-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. In the message text, 713-rc associates this message with system completion code 713 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return

Return Code	Meaning
04	A data set on magnetic tape was opened for INOUT, OUTIN, OUTPUT, OUTINX, or EXTEND, but the volume contained a data set whose expiration data had not been reached. The operator replied "M" to message IEC507D and a specific volume serial had been specified. Specify a different volume on the DD statement, or, in the case of INOUT only, open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement.
08	An OPEN macro instruction was issued with INOUT for a data set on a direct access device with DISP=OLD specified on the DD statement. The expiration date on the data set had not been reached. The operator replied 'M' to message IEC507D. Specify a different volume on the DD statement, or open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement. There is another possible meaning for return code 08: the volume serial number in the UCB is 000000. In this case, the system does not issue message IEC507D.
0C	During OPEN processing, the system issued messages IEC704A with either L, L UVL, C, C UVL in the text and the operator replied M to the message, meaning reject VOL1 label rewrite. The system had to terminate the job step.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless the volser in the UCB is 000000. If the volser is 000000, it is probably a system error and the system programmer should be contacted. Otherwise, correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC

IEC149I 813-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 813-rc associates this message with system completion code 813 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module calling the routine that issued the message.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a data set on magnetic tape, but the data set name on the header label did not match that in the JFCB. Verify that the DD statement specifies the correct DSNNAME and volume serial number. If they are correct, ensure that the JFCB was not incorrectly modified prior to issuing the OPEN macro.

System Action: The task is terminated unless the error is to be ignored or recovered as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC150I 913-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during 1) the execution of an OPEN macro instruction or during end-of-volume for a password-protected data set after the operator attempted to enter a password in response to message IEC301A or 2) the execution of an OPEN macro instruction involving a checkpoint data set. A VSAM data set is being opened with a DCB instead of an ACB. In the message text, 913-rc associates this message with system completion code 913 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	For ISO/ANSI Version 1: An OPEN macro instruction was issued for a magnetic tape data set with ISO/ANSI labels. The volume accessibility byte (offset X'0A' in the volume label) is not blank. This indicates that the label was not written on an IBM system or that it was written by the user. If the volume accessibility byte is not blank, the tape cannot be used on an IBM system. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated for use on an IBM system. For ISO/ANSI/FIPS Version 3: This message occurs after message IEC502E with the ddn-c field in the message text and with c=1, meaning that the mounted volume is the requested volume, but access to it has been denied.
08	For ISO/ANSI Version 1: An OPEN macro instruction was issued for a magnetic tape data set with ISO/ANSI labels. The security byte in the header label was not blank and not equal to X'F1'. This means that the label was not created on an IBM system or was created by the user. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated on an IBM system. For ISO/ANSI/FIPS Version 3: This message occurs after message IEC502E with the ddn-c field in the message text and with c=2, meaning that access to the requested data set has been denied.
0C	An OPEN macro instruction was issued, but either an I/O error occurred during password verification, or one of the following conditions occurred: 1. For a password-protected data set, the operator failed to supply the correct password in response to

- message IEC301A or TSO message IEC113A.
2. For a protected VSAM data space that has password-protected or RACF-protected data or index components, the operator failed to supply the correct passwords or the user did not have proper RACF authorization.
- 10 An OPEN macro instruction was issued to the VTOC for output processing by an unauthorized job step or job-step task. The ability to open the VTOC for output is restricted to authorized job steps or job step tasks.
- 14 An OPEN macro instruction was issued to concatenate checkpoint and noncheckpoint data sets.
- 18 An OPEN TYPE=J macro instruction was issued for a magnetic tape volume. The JFCB was modified to indicate LABEL=BLP (bypass label processing) and the task was not authorized. BLP can be specified in the JCL (if the installation allows it via its reader procedure), but the JFCB cannot be modified to indicate BLP unless the task is authorized.
- 1C The error occurred during execution of an OPEN TYPE=J macro instruction to a data set residing on a direct access device. The JFCB has been incorrectly modified or the data set name supplied in the JFCB passed to OPEN was not available to the job because it was being used by some other job. Either (1) the data set was being opened for INPUT and some other job had exclusive control of the data set (either referenced the data set in a DD control statement with DISP of OLD or MOD, or issued an OPEN TYPE=J macro instruction with processing option INOUT, OUTIN, OUTPUT, OUTINX, EXTEND, or UPDATE), or (2) the data set was being opened for an option other than INPUT (INOUT, OUTIN, OUTPUT, or UPDATE: requiring exclusive control of the data set) and some other JOB was using the data set (either referenced the data set in a DD control statement, or issued an OPEN TYPE=J macro instruction).
- 20 An OPEN macro instruction was issued using the EXCP access method in which user-written appendages were required. The appendage names were not included in the SYS1.PARMLIB member IEAAPPO0, and the program issuing the OPEN was not authorized either under APF, or by being in a system protect key (0-7).
- 28 An OPEN macro instruction was issued for a checkpoint data set. The data set organization was not BPAM or BSAM and the task was not authorized via the authorized program facility (APF).
- 2C An OPEN or OPEN TYPE=J macro instruction was issued to an ISAM data set defined by two or three DD statements. Either 1) the data set names coded in the DD statements were not all the same, or 2) the JFCB passed to OPEN TYPE=J has a data set name different from that coded in the DD statements. All the DD statements for an ISAM data set must contain the same data set name. If an OPEN TYPE=J macro instruction is issued to a DDname referencing an ISAM data set which is defined by two or three DD statements, the data set name cannot be altered from that coded in the DD statement, because the JFCBs for the other DD statements cannot be similarly altered.
- 30 An OPEN macro instruction was issued to write a data set on a magnetic tape containing one or more previous data sets. The protection mode of the data set to be written was different than the protection mode of the previous data set.
- 34 At OPEN, the caller is not authorized to reject for input.
- 38 An OPEN was issued for a RACF-protected data set on a DASD volume or a RACF-protected tape volume to which the caller was not authorized.
- 3C An OPEN was issued for a data set with a format-1 DSCB indicating RACF-protection, but the data set is not defined to RACF.
- 40 A VSAM data space being OPENed is RACF-defined.
- 44 Invalid specification of PROTECT. PROTECT is specified for a tape volume that is already RACF-protected.
- 48 Invalid specification of PROTECT. PROTECT is specified but the system tape option is not in effect.
- 4C Invalid specification of PROTECT. PROTECT is specified but the user is not defined to RACF.
- 50 Invalid specification of PROTECT. PROTECT is specified but the request is for a NL, BLP or LTM tape.
- 54 Invalid specification of PROTECT. PROTECT is specified by the request is for INPUT or INOUT.
- 58 Invalid specification of PROTECT. PROTECT is specified but the volume sequence number or the file sequence number is not equal to one on a tape with LABEL=SL, SUL, AL or AUL or the tape is being opened with DISP=MOD (including OPEN options OUTINX and EXTEND).
- 5C Invalid specification of PROTECT. PROTECT is specified but the volume being used is a public volume.

- 60 The user is not authorized to define a data set with the specified name. The specified data set name and file sequence indicator do not match the corresponding names in the Tape Volume Table of Contents (TVTOC).
- 64 The user is not authorized to specify BLP.
- 68 The user is not authorized to add a data set to the volume.
- 6C PROTECT was not specified in the JCL. The user is not authorized to define a data set that is protected with a GENERIC PROFILE.

System Action: The task is always terminated if the return code is 0C. For all other return codes, the task is terminated unless otherwise specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

If rc is 0C for a protected data set, supply the operator with the correct password or have the correct password added to the PASSWORD data set and execute the job step again.

If rc is 0C for a protected VSAM data space, supply the operator with the correct passwords or obtain the proper RACF user authorization for the data and index components within the data space and execute the job step again.

If rc is 0C and an I/O error occurred, correct the problem causing the error and execute the job step again.

If rc is 14, redefine the concatenated data sets such that only checkpoint or only noncheckpoint data sets are in the concatenation.

If rc is 18, probable user error. Unless your task is authorized, do not modify the JFCB to indicate BLP.

If rc is 1C, probable user error. If an OPEN TYPE=J macro instruction is issued to a data set not referenced in a DD control card, the normal procedures for data set protection are not performed when the JOB is initiated, but must be performed at OPEN time when no recovery is possible. The issuer of such an OPEN TYPE=J must ensure that no other JOB is processing the data set in a manner which is in conflict with the processing requested by the OPEN macro instruction. This can best be accomplished by not using the OPEN TYPE=J macro instruction to open to a data set which is not already referenced in a DD control statement, and not opening with a processing option of INOUT, OUTIN, OUTPUT, OUTINX, EXTEND, or UPDATE unless the DD control statement indicates DISP=OLD or DISP=MOD. Ensure that the JFDB has not been incorrectly modified.

If rc is 28, redefine the data set organization to BPAM or BSAM or authorize the program issuing the OPEN macro instruction under APF.

If rc is 2C, correct the data set name on the DD statement or do not alter the data set name in the JFCB before issuing the OPEN TYPE=J macro instruction.

If rc is 30, all data sets on a tape volume must have the same security level. Change the requested security level to match the previous data sets and rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC151I A13-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, A13-rc associates this message with system completion code A13 and with return code rc. Other fields in the message text are:

iii job name

sss step name

ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd device number

ser volume serial number

mod The name of the module in which the error occurred.

dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An unexpected load point was encountered while positioning a tape. For NL tape this is probably a user error associated with the use of multivolume multifile NL tape. Check the file sequence number and whether the tape was demounted during the job.
08	The requested file sequence number is less than that of the first file on the SL or AL tape during an open to the start of the file. Probable user error. Check the file sequence number and volume serial numbers.
0C	The requested file sequence number is less than that of the first file on the SL or AL tape during an open to the end of a file. Probable user error. Check the file sequence number and volume serial numbers.
10	A tape mark was read instead of a HDR1 label while forward spacing to the desired file on an SL or AL tape. Thus, the multifile tape ends before the desired file. When positioning to the end of file 1, this means the vol label is followed by a tape mark. Probable user error. Check the file sequence number and volume serial

- numbers and that the job that wrote the tape wrote all the files.
- 14 A tape mark was read instead of HDR1 label while opening for input to the start of the desired file on an SL or AL tape. Thus, the tape ends just before the desired file. Probable user error. Check the file sequence number and volume serial numbers and that the job that wrote the tape wrote all the files.
- 18 An EOVI label was read on the last SL or AL tape volume while forward spacing to the desired file or just before the desired file. If opening to the end of the file, it could not be treated as the end of the data set because it was for a previous file sequence number. Probable user error. Check the volume serial numbers and file sequence number.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC152I B13-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a printer with universal character set (UCS). In the message text, B13-rc associates this message with system completion code B13 and with return code rc. Other fields in the message text are:

iii
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module calling the routine that issued the message.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to message IEC120A, IEC122D or IEC123D because the UCS image could not be found in SYS1.IMAGELIB data set. Specify the

correct character set type, or have the system programmer update the SYS1.IMAGELIB to include the associated UCS image or image table entry and execute the job step again. During 3886 OPEN, the requested format record identifiers could not be found on SYS1.IMAGELIB.

08 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when the BLDL macro instruction was issued to locate the requested UCS image in the SYS1.IMAGELIB data set.

0C An OPEN macro instruction was issued for a data set allocated to a printer or to IBM 3886. A permanent I/O error persisted after two attempts were made to load the UCS buffer or a permanent I/O error occurred while loading the format record into the 3886.

10 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when (1) an attempt was made to display the character set image on the printer for visual verification with the previous output operation or (2) during an operation which resulted in possible lost data.

14 An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC121D because the wrong UCS image was displayed for visual verification. Specify the correct character set type, or have the operator mount the proper chain, train or band, and execute the job step again.

18 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when an attempt was made to display the FCB image on the printer for visual verification.

1C An OPEN macro instruction was issued for a data set allocated to a printer. The operator may have replied 'CANCEL' to the message IEC128D because an incorrect FCB image was displayed for visual verification or forms alignment was not possible. If this is the case, specify the correct FCB image-id and execute the job step again. Other reasons for this return code include: an error associated with the previous output operation, or a lost data condition.

20 An OPEN macro instruction was issued for a data set allocated to a printer, but not enough storage was available to open SYS1.IMAGELIB. During 3886 OPEN, either the proper volume was not mounted, or a permanent I/O error occurred while reading from SYS1.IMAGELIB.

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- 24 An OPEN macro instruction was issued for a data set allocated to a printer, but the volume containing SYS1.IMAGELIB was either not mounted or not cataloged. During 3886 OPEN, the format record identifier was not specified in the DCB or the DD statement for the data set being opened.
- 28 An OPEN macro instruction was issued for a data set allocated to a printer, but a permanent I/O error persisted while opening SYS1.IMAGELIB.
- 2C An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error was detected when the BLDL macro instruction was issued to locate the requested FCB image in the SYS1.IMAGELIB data set.
- 30 An OPEN macro instruction was issued for a data set allocated to a printer. A permanent I/O error persisted after two attempts were made to load the forms control buffer.
- 34 An OPEN macro instruction was issued for a data set allocated to a printer. The operator replied 'CANCEL' to the message IEC127D because the FCB image could not be found in SYS1.IMAGELIB data set. Specify the correct FCB image-id, or have the system associated FCB image and execute the job step again.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC153I C13-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a concatenated partitioned or graphics data set. In the message text, C13-rc associates this message with system completion code C13 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
10	An OPEN macro instruction was issued specifying OUTPUT or EXTEND for a concatenated partitioned data set. Output data sets cannot be concatenated.
18	An OPEN macro instruction was issued for a partitioned data set that has been concatenated with a data set that does not reside on a direct access storage device (DASD). Partitioned data sets can only be concatenated with data sets having like attributes. See <i>System-Data Administration</i> .

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC155I 240-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a RDJFCB macro instruction. In the message text, 240-rc associates this message with system completion code 240 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation)

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A RDJFCB macro instruction was issued, but the DCB did not contain a foundation extension block. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.
08	A RDJFCB macro instruction was issued, but no EXLST address was found in the DCB. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.
0C	A RDJFCB macro instruction was issued, but no JFCB exit was specified in the DCB exit list. Specify a JFCB exit in the DCB exit list and execute the job step again.
10	A RDJFCB macro instruction was issued, but the JFCB buffer is not within the user's storage. Correct any errors that may have caused the exit list to be incorrectly modified and execute the job step again.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC156I 03D-rc,mod,iii,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a QISAM or BISAM OPEN macro instruction or a BDAM OPEN macro instruction. In the message text, 03D-rc associates this message with system completion code 03D and with return code rc. Other fields in the message text are:

iii
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for an indexed sequential or direct data set. The volume serial numbers on the DD statement were not specified in the same order that the data set was created. Change the JCL respecifying the volume serial numbers in the correct order.
08	An OPEN macro instruction was issued for an indexed sequential data set. The first volume of the data set does not have a format2 DSCB.
0C	An OPEN macro instruction was issued for a direct data set. The data set has an indexed sequential organization.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC157I C13-rc,mod,iii,sss,ddn[-#],ddd

Explanation: The error occurred during the execution of an OPEN macro instruction for a graphic data control block. In the message text, C13-rc associates this message with system completion code C13 and return code rc. Other fields in the message text are:

iii
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

mod
The name of the module in which the error occurred.

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The current task attempted to open a device that was previously opened and not closed.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

IEC158I – IEC161I

Problem Determination: Table I, items 1, 5a, 13, 23, 29. Table II, Format 3.

IEC158I D13-rc,mod,ijj,sss,ddn[-#],ddd

Explanation: The error occurred during the execution of an OPEN macro instruction for a graphic data control block. In the message text, D13-rc associates this message with system completion code D13 and return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
ddname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation)

ddd
device number

mod
The name of the module in which the error occurred.

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The data control block (DCB) was associated with a device other than a graphic device, or a permanent I/O error occurred during execution of an OPEN macro instruction for a DCB associated with a graphic device. The device was specified by the name subparameter of the UNIT parameter of the DD statement for the graphic data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 5a, 13, 23, 29. Table II, Format 3.

IEC159I E13-rc,mod,ijj,sss,ddn[-#],ddd

Explanation: The error occurred during the execution of an OPEN macro instruction for a graphic data control block. In the message text, E13-rc associates this message with system completion code E13 and return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
ddname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

mod
The name of the module in which the error occurred.

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The GNCP byte in the DCB contained a value outside the acceptable range of 1 to 99. The GNCP byte count determines the maximum number of I/O macro instructions that may be issued before a WAIT macro instruction is issued.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 5a, 13, 23, 29. Table II, Format 3.

IEC161I rc(sfi)-ccc,ijj,sss,ddn,ddd,ser,xxx,dsn,cat

Explanation: An error occurred during the execution of an OPEN macro instruction for a VSAM data set. The fields in the message text are listed below; the reason codes and the system action also apply to the CLOSE and EOVS errors documented in messages IEC251I and IEC070I, respectively.

rc
return code. This field indicates the reason for the error. The return codes, their meanings, and the corresponding system action and required responses are listed below.

(sfi)
subfunction information (error information returned by another subsystem or component). This field appears only for certain return codes, and its format is shown with those codes to which it applies.

ccc
function code. The function codes and their meanings are listed after the return codes.

ijj
job name

sss
step name

ddn
DDname

ddd
device number, if the error is related to a specific device

ser
volume serial number if the error is related to a specific volume

xxx
name of cluster that contains the data set being processed when the error was detected, or when

not available, the DSNNAME specified on the DD statement indicated in the ACB.

dsn
name of the data set being processed when the error was detected

cat
catalog name

Note: Any missing field is indicated by a comma.

Note: If xxx specifies AMASTCAT, the error involved the master catalog. If the master catalog failed to successfully open, the cause of the failure must be corrected and the system re-IPLed.

The values of rc, their meanings and the corresponding system action and required responses are as follows:

Return

Code	Meaning
04	One of the following errors occurred during VSAM catalog processing: <ol style="list-style-type: none"> 1. Not enough storage was available for work areas. 2. The required volume could not be mounted. 3. An I/O error occurred while reading the catalog cluster record, the format-1 DSCB, the format-4 DSCB, or the JFCB. 4. The format-1 DSCB or the catalog cluster record is invalid. 5. The user-supplied catalog name does not match the name on the catalog entry. 6. The user is not authorized to open the catalog as a catalog.

System Action: OPEN, CLOSE, or EOVS processing terminates for the data set. CLOSE (TYPE = T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 132.

Programmer Response: If the error occurred during OPEN processing, the required action depends on which of the errors listed earlier caused a return code of 04. The possible actions are:

1. Rerun the job.
2. Make sure the unit is available to mount/demount the volume.
3. Rerun the job.
4. See Problem Determination for this message.
5. Make sure the correct catalog name is supplied. Rerun the job. If the problem persists, see Problem Determination.
6. Be sure the program is running in storage protect key 0 through 7, in supervisor state, or that it is an APF-authorized program.

If the error occurred during CLOSE processing, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct. Then proceed as for OPEN processing above.

If the error occurred during EOVS or CLOSE (TYPE = T operand) processing, no response is required; informational message only.

20 Not enough virtual storage was available for work areas, buffers, or control blocks.

System Action: OPEN, CLOSE, or EOVS processing terminates for the data set. CLOSE (TYPE = T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 136.

Programmer Response: If the error occurred during OPEN, CLOSE (TYPE = T), or EOVS processing, specify a larger REGION parameter or increase the size of the SQA (system queue area). Rerun the job. For information on possible region size limitation, see section, "Limiting User Region Size — IEALIMIT," in *SPL: System Modifications*.

If the error occurred during CLOSE processing, and the data set was open for output, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct, and specify a larger region size or increase the size of the SQA. Do this before trying any further processing on the data set. If the data set was open for input, the VERIFY command need not be used.

21 The catalog indicates that the data set being opened has an invalid physical record size. MVS supports the following physical record sizes: 512, 1024, 2048, and 4096.

System Action: Open processing is terminated for the data set. The ACB error flags are set to 140.

Programmer Response: This error is caused by defining a VSAM data set on DOS/VSE/VSAM and then attempting to process the data set on MVS. The data set must be rebuilt on MVS.

22 An I/O error occurred while I/O requests were being completed.

For EOVS processing, the (sfi) field, if present, contains the RPL feedback code from the last I/O request.

System Action: OPEN, CLOSE, or EOVS processing terminates for the data set. CLOSE (TYPE = T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 184.

Programmer Response: If the error occurred during OPEN, CLOSE (TYPE = T), or EOVS processing, rerun the job, specifying a different device for the volume.

If the error occurred during CLOSE processing, and the data set was open for output, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct. Do this before trying any further processing on the data set. If the data set was open for input, the VERIFY command need not be used.

- 28 The requested master or user catalog does not exist or is not open. The (sfi) field in the message is of the form (rc, crs, cmi) where

rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error

See message IDC3009I for a list of these catalog return and reason codes.

System Action: OPEN, CLOSE, or EOVS processing terminates for the data set. CLOSE (TYPE = T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 180.

Programmer Response: If the error occurred during OPEN, CLOSE (TYPE = T), or EOVS processing, make sure that the correct catalog is open by specifying it in the JOBCAT or STEPCAT DD statement, and rerun the job.

If the error occurred during CLOSE processing, make sure that the correct catalog was not deleted and is open. If the data set was open for output, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct. Do this before trying any further processing on the data set. If the data set was open for input, the VERIFY command need not be used.

- 32 The catalog record for the data set being processed was not found. During EOVS processing, the error can also occur if an additional volume is required for a data set but the catalog contains no more volume records for the data set. The (sfi) field in the message is of the form (rc, crs, cmi) where

rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error

See message IDC3009I for a list of these catalog return and reason codes.

System Action: OPEN, CLOSE, or EOVS processing terminates for the data set.

CLOSE (TYPE = T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 148.

Programmer Response: If the error occurred during OPEN, CLOSE (TYPE = T), or EOVS processing, ensure that the data set entry is contained in the master catalog or a user catalog specified in a JOBCAT or STEPCAT DD statement. Run the access method services LISTCAT function to list the data set entries contained within a specific catalog.

If the error occurred during CLOSE processing, proceed as for OPEN or EOVS processing. Then, if the data set was open for output, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct.

Do this before trying any further processing on the data set. If the data set was open for input, the VERIFY command need not be used.

- 33 Cannot extend the VSAM catalog. The VSAM catalog has reached the maximum number of extents. Either additional space is unavailable or a system error occurred. The (sfi) field in the message is of the form (rc, crs, cmi) where

rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error

See message IDC3009I for a list of these catalog return and reason codes.

System Action: EOVS processing terminates for the data set.

Programmer Response: The access method services DELETE command can be used to delete entries from the catalog. If no entries can be deleted, the access method services EXPORT command can be used to move some of the data sets defined in the full catalog to a portable volume. The IMPORT command can be used to define the exported data sets in a user catalog that has space available.

- 34 One of the two following conditions occurred:

- The data set reached the maximum number of extents.
- The maximum RBA limit (4,294,967,295) has been reached.

The (sfi) field in the message is of the form (rc, crs, cmi) where

rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error

See message IDC3009I for a list of these catalog return and reason codes.

- System Action:** EOV processing terminates for the data set.
- Programmer Response:** Use the access method services REPRO command to make a backup copy of the cluster that contains the data set. Delete the cluster from the catalog with the DELETE command. Use the DEFINE command to redefine the cluster in the catalog with increased space allocation. Reload the backup of the cluster with the REPRO command.
- 35 The catalog record for the data set has reached the maximum number of sets of fields allowed. The number of key ranges and volume entries have reached the maximum allowed. The (sfi) field in the message is of the form (rc, crs, cmi) where
- rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error
- See message IDC3009I for a list of these catalog return and reason codes.
- System Action:** EOV processing terminates for the data set.
- Programmer Response:** Use access method services to: (1) copy the cluster that contains the data set to another volume, (2) delete the cluster, (3) redefine the cluster and either reduce the number of key ranges and volumes or increase the space allocation for each key range to reduce the number of overflow volumes, and (4) reload the copy of the cluster.
- 36 An I/O error was detected while the system was reading or writing a catalog record. The (sfi) field in the message is of the form (rc, crs, cmi) where
- rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error
- See message IDC3009I for a list of these catalog return and reason codes.
- System Action:** OPEN, CLOSE, or EOV processing terminates for the data set. CLOSE (TYPE=T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 144.
- Programmer Response:** If the error occurred during OPEN, CLOSE (TYPE=T), or EOV processing, specify different device for the catalog that caused the problem and rerun the job.
- If the error occurred during CLOSE processing, and the data set was open for output, use the access method services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct. Do this before trying any further processing on the data
- 37 The catalog routines returned an unexpected return code. The (sfi) field in the message is of the form (rc, crs, cmi) where
- rc - catalog return code
crs - catalog reason code
cmi - catalog module name that detected the error
- See message IDC3009I for a list of these catalog return and reason codes.
- System Action:** OPEN, CLOSE, or EOV processing terminates for the data set. CLOSE (TYPE=T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 148.
- Programmer Response:** If the error occurred during OPEN, CLOSE (TYPE=T), or EOV processing, rerun the job. If the error persists, restore the catalog and all volumes controlled by the catalog from synchronized restore tapes.
- If the error occurred during CLOSE processing, and the data set was open for output processing, use the access method services VERIFY command to ensure that the end-of-file marker is properly addressed in the data set's entry in the catalog; then rerun the job. If the problem persists, restore the catalog and all volumes controlled by it from synchronized restore tapes.
- 38 OPEN processing encountered an empty path alternate index.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 196.
- Programmer Response:** Use the access method services BLDINDEX command to build the alternate index defined under the path that the OPEN was issued against.
- 39 OPEN processing encountered an empty upgrade alternate index.
- System Action:** OPEN processing continues; however, the empty upgrade alternate index is not updated to reflect changes in the base data set. The error flags in the ACB (access method control block) for the data set are set to 100.
- Programmer Response:** You can ignore the warning and process the base data set, but the empty upgrade alternate index will not be updated to reflect changes in the base data set. Use the access method services BLDINDEX command to build an upgrade alternate index.
- 40 The data set being opened is security protected and the OPEN routine could not validate your password, or an unauthorized program is attempting to

- open a catalog as a data set. The (sfi) field in the message is of the form (rc, crs, cmi) where
- rc - catalog return code
 - crs - catalog reason code
 - cmi - catalog module name that detected the error
- See message IDC3009I for a list of these catalog return and reason codes.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 152.
- Programmer Response:** If the password could not be validated, make sure that the correct password was supplied in the ACB or by the system or TSO terminal operator. Use the access method services LISTCAT command to list the passwords for each data set in a catalog. (The master password for the catalog is needed to do this.) If an unauthorized program attempted to use a catalog as a data set, change the authorization for the program.
- 41 The buffer space specified is not consistent with the buffer requirements of the data set.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 160.
- Programmer Response:** Make sure that the buffer space specified is large enough to contain the data and index buffers required to process the data set for the specified number of concurrent multiple requests.
- 44 User buffering was specified in the MACRF field of the ACB (access method control block), but processing other than control-interval was also specified.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Change the ACB so that only control-interval processing is specified if user buffering is specified.
- 45 An unusable data set was opened for input.
- System Action:** OPEN processing continues for the data set. The error flags in the ACB (access method control block) for the data set are set to 096.
- Programmer Response:** You can ignore the warning and try to process the data set but the results are unpredictable. To make the data set usable, use the access method services IMPORT command to load a backup copy of the data set, or delete and reload the data set.
- 46 An unusable data set was opened for output.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 192.
- Programmer Response:** Use the access method services IMPORT command to load a backup copy of the data set, or delete and reload the data set.
- 47 The ACB (access method control block) specifies improved control interval processing but the data set attributes are not consistent with this mode of access. One of the following errors was detected:
- Physical blocksize was not equal to control interval size.
 - The data set was not an entry-sequenced data set or the data/index component of a key-sequenced data set.
 - The data set was an index with IMBED or REPLICATE specified.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Correct the indicated error and rerun the job.
- 48 Reset was specified in the ACB (access method control block) for the index or data component of a key-sequenced data set.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Correct the indicated error and rerun the job.
- 49 The ACB MACRF indicates improved control interval processing, and the OPEN is for create mode.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 224.
- Programmer Response:** Correct the indicated error and rerun the job.
- 50 The OPEN or EOVS routine was unable to fix in real storage the ACB (access method control block) for the data set being processed.
- System Action:** OPEN or EOVS processing terminates for the data set. The error flags in the ACB for the data set are set to 176.
- Programmer Response:** Rerun the job.
- 52 One of the following occurred:
- The OPEN routine was unable to get the resource the system requested for the data set being opened because the

- resource was being used by another task in the system.
- The OPEN routine was unable to open the data set for output or update processing because the update inhibit indicator was on in the data set's catalog record.
 - The OPEN routine was unable to open the data set for CBUF processing because the data set was already opened for non-CBUF processing. The error flags in the ACB for the data set are set to 168.
 - The OPEN routine found conflicting CBUF attributes for the data and index components of the ACB for the data set being opened. The error flags in the ACB for the data set are set to 168.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 168.
- Programmer Response:** Ensure the availability of the resource by means of DD statements, or use the access method services ALTER command to reset the update inhibit indicator in the data set's catalog record and rerun the job.
- 54 The ACB (access method control block) indicated keyed accessing, but the data set is not a key-sequenced data set.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Make sure that the type of accessing indicated in the ACB is consistent with the data set being opened.
- 56 The last request to close this data set was not completed successfully. A previous VSAM job might have terminated abnormally and left the data set open. This is a normal message for system data set during IPL.
- System Action:** OPEN processing continues. The error flags in the ACB (access method control block) for the data set are set to 116.
- Programmer Response:** If the error occurred at a time other than during IPL, use the access method services VERIFY command to make sure the end-of-file marker in the data set entry in the catalog is correct. If you ignore the warning and try to process the data set, the results are unpredictable. For example, you could cause lost records. If you use the VERIFY command, this message can appear when VERIFY processing opens the data set. If VERIFY processing then successfully closes the data set, it issues condition code 0.
- 58 The time stamp for the index is less than the time stamp for the data set. This could occur if the data set was updated without the index being open.
- System Action:** OPEN processing continues. The error flags in the ACB (access method control block) for the data set are set to 108.
- Programmer Response:** You can continue to process the data set, but errors can occur if the data set and index do not correspond.
- 59 The time stamp for the volume does not match the time stamp in the catalog entry for the data set, and the data set is opened for input. This might mean that the cluster existing on the volume is not accurately described in the catalog.
- System Action:** OPEN processing continues. The error flags in the ACB (access method control block) for the data set are set to 104.
- Programmer Response:** You can continue to process the data set, but the results are unpredictable. The volume contents do not correspond with the catalog contents for that volume. If the volume contents are more current, then the catalog should be restored. For further information on catalog recovery, see *Catalog Administration Guide*.
- 60 The time stamp for the volume does not match the time stamp in the catalog entry for the data set, and the data set is opened for output.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 240.
- Programmer Response:** The volume contents do not correspond with the catalog contents for that volume. If the volume contents are more current, then the catalog should be restored. For further information on catalog recovery, see *Catalog Administration Guide*.
- 62 VERIFY has been successfully run by the OPEN routine to correct a previous abnormal termination. The error flags in the ACB for the data set are set to 118.
- 64 The last request to close this data set was not completed successfully and an attempt by OPEN to run VERIFY has been unsuccessful. A previous VSAM job might have terminated abnormally and left the data set open. The cataloged information pertaining to the data set may be in error. The sfi field in the message indicates a record management physical error occurred and is of the form rc, which is the request parameter list reason code. See *MVS/XA VSAM Administration: Macro Instruction Reference* for a description of these reason codes.

- System Action:** Open processing continues. The error flags in the access method control block (ACB) for the data set are set to 116.
- Programmer Response:** You should first correct the problem that is causing the VERIFY to fail, then use the Access Method Services VERIFY command to make sure that the end-of-file marker in the data set entry in the catalog is correct. If VERIFY processing successfully closes the dataset, it issues a condition code of 0. If you ignore the warning and try to process the data set the results are unpredictable. For example, you could lose records.
- 68 The device type specified in the DD statement is not consistent with the device type indicated in the catalog record for the data set.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 160.
- Programmer Response:** Change the DD statement to indicate the same device type as the catalog record for the data set.
- 72 The data set was empty, but the ACB (access method control block) for the data set did not indicate that it was open for output.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Change the MACRF parameter in the ACB to indicate output.
- 76 The ACB (access method control block) that was opened was not associated with a valid data set.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 188.
- Programmer Response:** Correct the error and rerun the job. (VSAM OPEN cannot be used to open a page space data set.)
- 78 The AMBL (access method block list) is invalid.
- System Action:** CLOSE or EOV processing terminates for the data set. CLOSE (TYPE=T operand) processing continues, if possible. The error flags in the ACB (access method control block) for the data set are set to 188.
- Programmer Response:** If the error occurred during CLOSE, CLOSE (TYPE=T), or EOV processing, correct the indicated error and resubmit the job.
- 80 The data set was opened for CREATE processing (empty data set and ACB indicates output) and the number of strings specified was greater than one.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 160.
- Programmer Response:** Correct the error and resubmit the job.
- 84 Reset was specified for a non-reusable data set, and the data set was not empty.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 232.
- Programmer Response:** Correct the error and rerun the job.
- 88 Reset was specified against a real path.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 160.
- Programmer Response:** Correct the error and resubmit the job.
- 90 MSS MOUNT error. The (sfi) field contains the return code from MSS; for the meaning of these codes, see *Mass Storage System (MSS) Messages*.
- System Action:** EOV processing terminates for the data set. OPEN processing continues. The error flags in the ACB (access method control block) for the data set are set to 0.
- Programmer Response:** This is a hardware error. Proceed as directed for the MSS return code.
- 91 MSS DEMOUNT error. The (sfi) field contains the return code from MSS; for the meaning of these codes, see *Mass Storage System (MSS) Messages*.
- System Action:** EOV processing terminates for the data set.
- Programmer Response:** This is a hardware error. Proceed as directed for the MSS return code.
- 92 MSS ACQUIRE error. The (sfi) field contains the return code from MSS; for the meaning of these codes, see *Mass Storage System (MSS) Messages*.
- System Action:** OPEN, EOV, or CLOSE (TYPE=T operand) processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 236.
- Programmer Response:** This is a hardware error. Proceed as directed for the MSS return code.

- 93 MSS RELINQUISH error. The (sfi) field contains the return code from MSS; for the meaning of these codes, see *Mass Storage System (MSS) Messages*.
System Action: EOVS, CLOSE, or CLOSE (TYPE=T operand) processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 236.
Programmer Response: This is a hardware error. Proceed as directed for the MSS return code.
- 94 MSS unable to bind. The (sfi) field contains the return code from MSS; for the meaning of these codes, see *Mass Storage System (MSS) Messages*.
System Action: OPEN or EOVS processing continues for the data set. The error flags in the ACB (access method control block) for the data set are set to 0.
Programmer Response: You may ignore the warning. However, increased system running time is likely to result. To remedy this, proceed as directed for the MSS return code.
- 100 No space was available on candidate volumes. You defined the volumes as ordered in the access method services DEFINE command.
System Action: EOVS processing terminates for the data set.
Programmer Response: Delete unneeded data sets from the volumes you specified or use the access method services ALTER command to provide a different list of volumes for space allocation. Rerun the job.
- 104 No more volumes are available on which to allocate space.
System Action: EOVS processing terminates for the data set.
Programmer Response: Use the access method services ALTER command to provide additional volumes for the data set.
- 108 The EOVS routine was unable to mount the volume you specified.
System Action: EOVS processing terminates for the data set.
Programmer Response: Make sure at least one of the units allocated for your program is flagged as nonsharable so the volume can be demounted. You can do this by specifying DEFER or more volume serial numbers than units on the DD statement. Rerun the job.
- 112 The EOVS routine was unable to get the volume you needed for space allocation.
System Action: EOVS processing terminates for the data set.
Programmer Response: Make sure at least one of the units allocated for your
- program is flagged as nonsharable so the volume can be demounted. You can do this by specifying DEFER or more volume serial numbers than units on the DD statement.
- 116 The system detected an I/O error while reading the volume label and format-4 DSCB.
System Action: OPEN or EOVS processing is terminated for the data set. The error flags in the ACB (access method control block) for the data set are set to 164.
Programmer Response: Mount the volume on which the error occurred on a different device, and rerun the job. If the problem recurs, restore the catalog and all volumes defined by it from synchronized restore tapes.
- 120 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) and the control interval size of the data set exceeds the size of the largest buffer specified in the BLDVSR macro instruction.
System Action: OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 220.
Programmer Response: Increase the largest buffer size in the BLDVSR macro instruction and rerun the job.
- 124 The ACB (access method control block) indicates LSR (local shared resource) or GSR (global shared resource) and the VSAM Shared Resource Table (VSRT) does not exist.
System Action: OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 228.
Programmer Response: The BLDVSR macro instruction has probably not been issued or a failure was detected in BLDVSR. Make sure the BLDVSR macro instruction was executed correctly before trying to open the ACB with LSR or GSR specified.
- 128 An error was detected in WRTBFR.
System Action: CLOSE processing terminates for the data set. CLOSE (TYPE=T operand) processing continues. The error flags in the ACB (access method control block) for the data set are set to 184.
Programmer Response: If the error occurred during CLOSE or CLOSE (TYPE=T) processing, correct the error and rerun the job.
- 136 The ACB (access method control block) specifies LSR (local shared resource) and RESET. These are inconsistent parameters.

- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Correct the error and rerun the job.
- 140 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) in conjunction with improved control-interval processing.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Change the ACB so that improved control-interval processing is not specified with LSR or GSR, and rerun the job.
- 144 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) in conjunction with user buffering.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** Change the ACB so that LSR or GSR is not specified with user buffering and rerun the job.
- 148 The ACB (access method control block) specifies GSR (global shared resource) and the calling routine is not running in supervisor state or under protect key 0 or protect key 7.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 204.
- Programmer Response:** Correct the error and rerun the job.
- 152 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) and the data set requires create processing.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 212.
- Programmer Response:** Change the ACB so that LSR or GSR is not specified when the data set is opened for create, and rerun the job.
- 156 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) and the key length of the data set exceeds the BLDVRP 'MAXKEY' specification.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 216.
- Programmer Response:** Increase the length of MAXKEY in the BLDVRP macro instruction and rerun the job.
- 164 The ACB (access method control block) specifies LSR (local shared resource) or GSR (global shared resource) in conjunction with DFR (defer) and the data set share option is 4.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
- Programmer Response:** If LSR or GSR and DFR are specified in the ACB, the data set share option must be changed to 1, 2, or 3. Rerun the job.
- 168 A catalog recovery area (CRA) volume was not mounted and verified.
- System Action:** OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 244.
- Programmer Response:** Ensure that a DD statement is provided for a catalog recovery area volume. Rerun the job.
- 172 The format-4 DSCB indicates that the volume is unusable.
- System Action:** OPEN and EOV processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 200.
- Programmer Response:** Restore the unusable volume, and then rerun the job.
- 175 For the data set being opened, OPEN found that the data and index components of the ACB have conflicting CBUF attributes. That is, one of them does not allow CBUF processing. Both the data and index component must allow CBUF processing before the data set can be successfully opened. Note that CBUF processing is requested when a VSAM data set with a disposition of share (DISP=SHR) is opened and the data or index component has share option 3,3 or 4,3.
- System Action:** The system opens the data set and sets the error flag in the ACB for the data set to 92.
- Programmer Response:** Use the access method services (AMS) ALTER command to correct the share options specified for the data or index component.
- 176 A FORCE DLVRP was done to free storage used by a GSR (global shared resources) pool, with a dump of control blocks to the SYS1.DUMP data set.
- System Action:** CLOSE processing continues.
- Programmer Response:** No response required; informational message only.

- 177 The EOVR routine was unable to extend the data set due to a critical error in the previous EOVR space allocation. The error flags in the ACB are set to 88.
- 180 A FORCE DLVRP was done to free storage used by a GSR (global shared resources) pool, and the dump of control blocks to the SYS1.DUMP data set resulted in partial output.
System Action: CLOSE processing continues.
Programmer Response: No response required; informational message only.
- 184 A FORCE DLVRP was done to free storage used by a GSR (global shared resources) pool, and the attempted dump of control blocks to the SYS1.DUMP data set resulted in no output.
System Action: CLOSE processing continues.
Programmer Response: No response required; informational message only.
- 188 The ACB (access method control block) specifies a system data set in conjunction with LSR (local shared resource) and GSR (global shared resource).
System Action: OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
Programmer Response: Correct the error and rerun the job.
- 192 The ACB (access method control block) specifies a system data set that does not support path or upgrade processing.
System Action: OPEN processing terminates for the data set. The error flags in the ACB for the data set are set to 160.
Programmer Response: Correct the error and rerun the job.
- 196 The CBIC (control blocks in common) option was used but the program is not running in supervisor state using protect key 0 through 7.
System Action: OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 204.
Programmer Response: Ensure you are running in supervisor state with a protect key of 0 through 7. Rerun the job.
- 197 The CBIC (control blocks in common) option is used with GSR (global shared resources) or LSR (local shared resources) specified.
System Action: OPEN processing terminates for the data set. The error flags in the ACB (access method control block) for the data set are set to 160.
- 198 If the CBIC (control blocks in common) option is used, then ICI must also be specified.
System Action: OPEN processing terminates for the data set. The error flags in the ACB (access method control block) are set to 160.
Programmer Response: Be sure to specify ICI with CBIC processing. Rerun the job.
- 199 The ACBCATX option or VVDS processing was requested and the invoking program was not authorized.
System Action: Open processing terminates for the data set. The error flags in the ACB are set to 205.
Programmer Response: Re-link calling program as APF authorized and rerun the job.
- 201 Open detected an Interrupt Recognition condition while opening a data set for input processing.
System Action: Open processing continues. The ACB error flags are set to 76.
Programmer Response: You may continue processing the data set, however, a critical operation was interrupted on this data set and the operation did not complete. Erroneous results could occur. You may wish to run the access method services DIAGNOSE command against the Catalog and VVDS entries associated with this data set to identify possible problems.
- 202 Open detected an Interrupt Recognition condition while opening a data set for output.
System Action: Open processing is terminated for the data set. The ACB error flags are set to 193.
Programmer Response: A critical operation was interrupted on this data set and the operation did not complete. Erroneous results could occur. You may wish to diagnose the Catalog and VVDS entries associated with this data set to identify possible problems.
- 203 An extend was attempted, but no secondary space allocation quantity was specified.
System Action: Extend processing is terminated for this data set. The ACB error flags are set to 0.
Programmer Response: Scratch unneeded data sets from the volume, or execute an access method services ALTER command to add more candidate volumes to the catalog entry for the data set.

- 204 An extend was attempted, but the maximum number of extents was reached. The maximum number of extents for a VSAM data set cataloged in an ICF catalog is between 119 and 123, depending upon the number of extents (1-5) allocated by DADSM per allocate/extend request.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to 0.
- Programmer Response:** List the catalog in order to determine space fragmentation. Use the REPRO command to reorganize the data set in order to reduce fragmentation.
- 205 An unexpected error return code was received from VVDS manager. If the SFI field is returned, it contains the reason code.
- System Action:** Open processing is terminated for the data set. The ACB error flags are set to 145.
- Programmer Response:** Run the access method services DIAGNOSE command against the VVDS(s) associated with the data set. Perform any required recovery operations for the VVDS or data set.
- 206 An extend was attempted, but an error occurred during DADSM ALLOCATE processing. The SFI field contains the DADSM ALLOCATE return code.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to 0.
- Programmer Response:** See DADSM Diagnosis Reference for the explanation of the return code and take the appropriate corrective action before rerunning the job that failed.
- 207 An extend was attempted, but an error occurred during DADSM EXTEND processing. The SFI field contains either an 8, indicating the VTOC could not be converted, or a 16, indicating an I/O error had occurred.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to 0.
- Programmer Response:** For reason codes:
- 8 Restore the volume in order to correct the VTOC.
 - 16 If a hardware error is not causing the problem, restore the volume in order to correct the VTOC.
- 208 An extend was attempted, but an error occurred during DADSM OBTAIN processing. The SFI field contains the DADSM OBTAIN return code.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to 0.
- Programmer Response:** See the DADSM Diagnosis Reference for the explanation of the return code and take the appropriate corrective action before rerunning the job that failed.
- 209 An extend was attempted, but no space was available on user volume.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to 0.
- Programmer Response:** Scratch data sets from the volume, or execute an access method services command to add more candidate volumes to the catalog entry for the data set.
- 213 An extend was attempted, but the VVR information changed unexpectedly during extend processing.
- System Action:** Extend processing is terminated for this data set. The ACB error flags are set to zero.
- Programmer Response:** Run the access method services DIAGNOSE command against the VVDS(s) associated with the data set. Perform any required recovery operations for the VVDS or data set.
- 214 An extend was attempted, but the number of new extents after DASDM extend is inconsistent, zero, or more than 5.
- System Action:** Extend processing is terminated for this data set, and the ACB error flags are set to zero.
- Programmer Response:** Run the access method services DIAGNOSE command against the VVDS(s) associated with the data set. Perform any required recovery operations for the VVDS or data set.
- 220 The media manager function, indicated by function code ccc, detected an invalid parameter list. The parameter list is invalid for one of the following reasons:
- the USM parameter is invalid for the EXTEND function, or
 - EXTEND processing for a data set connected with the USM parameter is invalid.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable subsystem error. Follow the procedures specified by the subsystem message(s).
- 221 Invalid data set characteristics were detected by media manager CONNECT processing. One or more of the following data set attributes has been specified:
- A key-sequenced data set (KSDS) is required, but an entry-sequenced data set (ESDS) was defined.
 - KEYRANGES
 - REPLICATE
 - IMBED

- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Make sure the data set has been properly defined with valid attributes. If the attributes are valid, follow the procedures specified by the subsystem message(s).
- 222 Media manager CONNECT processing detected a data set not cataloged in an integrated catalog facility (ICF) catalog.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable user error. Catalog the data set in an ICF catalog.
- 223 CLOSE TYPE=T was issued against a VSAM data set that was opened via the media manager. The system does not support this use of CLOSE.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Make sure an ACB is not connected to a media manager structure against which the T-CLOSE was issued.
- 224 A path name was specified as the data set name for media manager CONNECT processing.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** If the data set name in the message is a path name, correct the JCL on the cluster definition. If the data set was dynamically allocated, follow the procedures specified by the subsystem message(s).
- 225 The system was unable to mount all prime volumes for media manager CONNECT processing.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable subsystem error. Follow the procedures specified by the subsystem message(s).
- 226 Invalid extents were detected during media manager EXTEND processing. A discrepancy exists between internal control blocks and the catalog.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Run a LISTCAT with either ALL or ALLOCATION specified.
- 227 DD entry not found for the specified ddname.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable subsystem error. Follow the procedures specified by the subsystem message(s).
- 228 One of the following UPDATE operations was requested for an input-only structure during media manager processing:
- CATALOG UPDATE
EXTEND
DISCONNECT with UPDHURBA
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable subsystem error. Follow the procedures specified by the subsystem message(s).
- 229 A catalog error was detected during media manager CATALOG READ or CATALOG UPDATE processing. The (sfi) field in the message contains the following in the form (rc,crs,cmi):
- | Sub-Field | Meaning |
|-----------|--|
| rc | Catalog return code |
| crs | Catalog reason code |
| cmi | Catalog module that detected the error |
- See message IDC3009I for a list of these return and reason codes.
- System Action:** The system terminates processing for the function and passes a return code of 8 to the calling function.
- Programmer Response:** Probable subsystem error. Follow the procedures specified by the subsystem message(s).
- The values of ccc and their meanings are as follows:
- | Function Code | Operation being performed when error was detected |
|---------------|---|
| 001 | Initialize for catalog interface processing. |
| 002 | Determine which data sets are associated with data set name on DD statement, determine catalog, and check password. |
| 003 | Determine data set attributes. |
| 004 | Get volume information. |
| 005 | Update "open" indicator in catalog. |
| 006 | Update catalog when data set is being closed. |
| 007 | Retrieve volume time stamp. |
| 008 | Record management catalog update. |
| 009 | Update preformat indicator in catalog. |
| 010 | Retrieve 44-byte cluster name. |

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011	Retrieve 44-byte elementary data set name.	104	Close path
020	Initialize for mounting and verify volume.	105	Close base
021	Check volume time stamp.	106	Close sphere
022	Handle messages.	107	Close upgrade
023	Mount volume.	108	VMT (volume mount table) processing
024	MSS JES3 volume mount/verify.	109	Close dummy data set
030	Initialize for SMF processing.	110	Initialize for close of a cluster
031	Build SMF record.	111	Validity check
040	Initialize for Staging.	112	SMF processing
041	Build UCB list	113	Update catalog
042	Build list for ACQUIRE/RELINQUISH (stage/destage).	114	Release control block
043	Issue ACQUIRE or RELINQUISH.	115	Write buffer
050	Initialize for building control blocks.	116	Update VVR (IDA0200B)
051	Determine number of buffers needed.	148	VSAM close, with DLVRP issue
052	Build buffers.	149	VSAM task close executor, with DLVRP issued
053	Build control blocks.	150	Read JFCB
054	Build string block.	151	Initialize for VSAM Close (TYPE=T) processing
055	Retrieve VVR (JDA0192X)	152	Validity check
060	Initialize for open of a cluster.	153	Complete deferred write requests
061	Locate data set attributes and validity check.	154	Close (TYPE=T) path
062	Volume processing.	155	Close (TYPE=T) base
063	Preformat extent.	156	Close (TYPE=T) upgrade
070	Initialize for building channel program.	157	Initialize for Close (TYPE=T) of a cluster
071	Build channel program area.	158	Validity check
072	OPEN CBUF processing	159	Update catalog
080	Return from catalog ACB processor.	160	SMF processing
081	Initialize for VSAM Open processing.	161	Write buffer
082	Verify ACB.	200	Read JFCB
083	Fix control blocks in real storage.	201	Initialize for VSAM end-of-volume processing
084	Allow subtasks to share data set.	202	Locate and mount volume
085	Mount and verify volumes.	203	Allocate space
086	OPEN implicit verify	204	Switch volumes
087	Connect base.	205	Build control blocks
088	Open base cluster.	206	Update SMF record
089	Open upgrade alternate index.	207	Preformat extent
090	Open path alternate index.	208	Record management, catalog update
093	Build dummy DEB.	209	Reset control blocks
095	Open termination.	211	ICF external processing (IDA0557X)
096	Open error cleanup.	228	Media manager initialization
100	Read JFCB	229	Media manager CONNECT
101	Initialize for VSAM Close processing	230	Media manager EXTEND
102	Validity check	231	Media manager DISCONNECT
103	Complete deferred write requests	232	Media manager CATALOG READ
		233	Media manager CATALOG UPDATE

- Problem Determination:** Table I, items 1, 5a, 13, 16, 29.
- IEC162I** SETPRT FAILURE IN OPEN FOR UNIT ddd,
3800
PRINTER.
R15 = hhh R0 = h
- Explanation:** An error was detected during SETPRT processing for IBM 3800 printing subsystem device ddd. In the message text, a 3-byte hexadecimal return code contained in register 15, and a 1-byte hexadecimal reason code contained in register 0 identify the failure. For an explanation of the return and reason codes, see the SETPRT macro instruction in *Data Administration: Macro Instruction Reference*.
- System Action:** Processing associated with the OPEN macro instruction is terminated, and message IEC141I issued with system completion code 013 and return code CC specified.
- Programmer Response:** Probable user error. Correct the setup requirements for the 3800, and rerun the job.
- Problem Determination:** Table I, items 1, 3, 5a, 29.
- IEC163A** L ddd,cccc,LOAD FORMS OVERLAY FRAME
- Explanation:** This message indicates that forms overlay frame cccc must be loaded in IBM 3800 Printing Subsystem device ddd.
- System Action:** IBM 3800 Printing Subsystem processing does not continue until the operator responds to this message.
- Operator Response:** Load forms overlay frame cccc into device ddd; then enter REPLY xx,'LOAD' or REPLY xx,'L'. If forms overlay frame cccc cannot be loaded, enter REPLY xx,'CANCEL' or REPLY xx,'C'. In this case, a return code of X'28' is placed in register 15 to be passed to the requester of the SETPRT function.
- IEC164A** ddd,THREAD { SHEET STACKER
CONTINUOUS FORM STACKER }
- Explanation:** This message is a request to change the paper threading on IBM 3800 Printing Subsystem device ddd so that the output will go into the burster-trimmer-stacker or the continuous form stacker, as indicated in the message text.
- System Action:** IBM 3800 Printing Subsystem processing does not continue until the operator responds to this message.
- Operator Response:** If you perform the requested action and wish to continue, enter REPLY xx,'PROCEED' or REPLY xx,'P'. If you do not perform the requested action but wish to continue, enter REPLY xx,'PROCEED' or REPLY xx,'P'. In this case, device ddd uses whatever output stacker unit it is threaded to.
- If you cannot satisfy the requested action, enter REPLY xx,'CANCEL' or REPLY xx,'C'. In this case, the system terminates its current SETPRT operation for device ddd. In addition, a return code X'2C' is placed in register 15 to be passed to the requester of the SETPRT function.
- IEC166I** jij,ser[,ddd] MSS FAILURE IN { MOUNT
DEMOUNT
ACQUIRE
RELINQUISH }
- CODE = cde**
- Explanation:** The error occurred while the MSS (Mass Storage System) communications routine (SVC 126) was processing a request from OPEN. jij is the job name, ser is the volume serial number, ddd is the device number, and cde is the reason code returned from SVC 126. See *Mass Storage System (MSS) Messages* for the meaning of the particular reason code.
- System Action:** A 413-2C abend is requested.
- Programmer Response:** See *Mass Storage System (MSS) Messages* for the programmer responses to each reason code.
- Problem Determination:** See *Mass Storage System (MSS) Messages*.
- IEC167I** ddd NO SETPRT OPTIONS SPECIFIED FOR
3800 DEVICE
- Explanation:** The SETPRT parameter list did not contain any options that apply to IBM 3800 Printing Subsystem device ddd.
- System Action:** No action is performed by the SETPRT SVC routine. A return code X'00' is placed in register 15, and control is returned to the caller.
- Programmer Response:** Probable user error. Provide a SETPRT parameter list containing options applicable to the IBM 3800 Printing Subsystem.
- Problem Determination:** Table I, items 1, 3, 15.
- IEC168I** ddd { CHARACTER ARRANGEMENT TABLE mod
GRAPHIC MODIFICATION
COPY MODIFICATION
FCB
LIBRARY CHARACTER SET
NOT IN LIBRARY }
- Explanation:** A SETPRT macro instruction was issued for 3800 printer ddd and module mod, a module of the specified type, was not found in the SYS1.IMAGELIB data set or a private image library.
- System Action:** SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference* and *SAM Logic*.
- Operator Response:** None.
- Programmer Response:** Be sure that you specified the module name correctly in the JCL or on the SETPRT macro instruction. If module mod was specified correctly, add it to the SYS1.IMAGELIB data set or a private image library.

IEC169I ddd I/O ERROR SEARCHING FOR

CHARACTER ARRANGEMENT TABLE mod
 GRAPHIC MODIFICATION
 COPY MODIFICATION
 FCB
 LIBRARY CHARACTER SET
 IN LIBRARY

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. A permanent I/O error was detected when the BLDL macro instruction was issued to locate module mod, a module of the specified type, in SYS1.IMAGELIB or a private image library. This error can occur when the private library is not authorized.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference and SAM Logic*.

Operator Response: Probable system error. Report the problem to the system programmer.

Programmer Response: If the specified module resides in a private library, be sure the library is authorized.

IEC170I ddd I/O ERROR WHILE LOADING

TRANSLATE TABLE FOR mod
 COPY MODIFICATION mod
 GRAPHIC MODIFICATION mod
 FCB mod
 LIBRARY CHARACTER SET mod
 WCGMS id-id-id-id
 STARTING COPY NUMBER
 COPY AND/OR FORMS OVERLAY COUNT

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd, and a permanent I/O error was detected for the specified operation. If one of the first five message texts appears, mod is the name of a module; if WCGMS appears, each id is a two-character hexadecimal identifier for a character set. Message IEA000I, which gives detailed information about the I/O error, precedes this message.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *MVS Data Management Macro Instructions and SAM Logic*.

Operator Response: Notify the system programmer.

Programmer Response: Respond as indicated for message IEA000I.

IEC171I ddd I/O ERROR WHILE PRINTING FCB imageid

Explanation: A SETPRT macro instruction with the FCB VERIFY option was issued for 3800 printer ddd. A permanent I/O error was detected while the 3800 was printing a representative map of the requested FCB image. In the message text, imageid is the one to four-character identifier specified for the FCB image on the macro instruction. Message IEA000I, which gives detailed information about the I/O error, precedes this message.

System Action: SETPRT processing terminates and places a return code in register 15. The return code

is documented in *Data Administration: Macro Instruction Reference and SAM Logic*.

Operator Response: Notify the system programmer.

Programmer Response: Respond as indicated for message IEA000I.

IEC172I ddd OPERATOR CANCELED

FCB imageid VERIFY REQUEST
 FORMS OVERLAY
 RETHREAD

Explanation: During SETPRT processing, the operator received and replied CANCEL to one of these messages for 3800 printer ddd:

- Message IEC128D, requesting that he verify the alignment of forms to the forms control buffer image; imageid is the one to four-character identifier specified for the image on the FCB operand of the SETPRT macro instruction.
- Message IEC163A, asking that he load a forms overlay frame.
- Message IEC164A, asking that he change the paper threading.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference and SAM Logic*.

Operator Response: If you decide that you should not have replied CANCEL to message IEC128D, IEC163A, or IEC164A, rerun the job that issued the SETPRT macro instruction. If you tried to perform the action requested by message IEC128D, IEC163A, or IEC164A but you could not, or if you think that the message was issued because of a programming error, notify the programmer whose job issued the SETPRT macro instruction.

Programmer Response: If the operator tried to perform the action requested by message IEC128D, IEC163A, or IEC164A but he could not, determine why he could not perform the action and correct the problem. If it appears that the system should not have issued message IEC128D, IEC163A, or IEC164A, there is probably an error in the values specified for the 3800 printer parameters in the JCL or on the SETPRT macro instruction.

IEC173I ddd I/O ERROR ON

PREVIOUS OUTPUT
 BLOCKING OR UNBLOCKING DATA CHECKS

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. If I/O ERROR ON PREVIOUS OUTPUT appears in the message text, a permanent I/O error occurred during a previous output operation. If I/O ERROR BLOCKING OR UNBLOCKING DATA CHECKS appears in the message text, a permanent I/O error occurred while SETPRT processing was executing an internal channel command that blocks or unblocks data checks. Message IEA000I, giving details about the I/O error, precedes this message.

System Action: If I/O ERROR ON PREVIOUS OUTPUT appears, the system enters the error analysis (SYNAD) routine when it encounters the next PUT or CHECK macro instruction. In all

cases, SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: Notify the system programmer. Respond as indicated for message IEA000I.

Programmer Response: Follow your installation's procedures for correcting the permanent I/O error.

IEC174I ddd INSUFFICIENT STORAGE AVAILABLE TO OPEN SYS1.IMAGELIB

Explanation: A SETPRT macro instruction was issued for because there is insufficient storage space in subpools 229 and 230 for its data control block (DCB) and data extent block (DEB).

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: Notify the system programmer.

Programmer Response: Follow your installation's procedures for relieving a shortage of virtual storage.

IEC175I ddd SYS1.IMAGELIB CANNOT BE OPENED

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. One or more of the operands specified on the macro data set, but SYS1.IMAGELIB cannot be opened.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference* and *SAM Logic*.

Operator Response: Notify the system programmer.

Programmer Response: Contact your programming support personnel.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 25a, 25b, 25c, 29 and 52.

IEC176I ddd CHARACTER ARRANGEMENT TABLE mod CAUSED WCGM OVERFLOW $\left(\begin{array}{c} 2 \\ 4 \end{array} \right)$

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. Character arrangement table mod cannot be loaded. The number of unique character sets it specified, when combined with the number of unique character sets specified by other character arrangement tables, would require more writable character generation modules (WCGMs) than are available. The number of WCGMs on printer ddd is 2 or 4, as indicated in the message text.

When two or more character arrangement tables specify the same character set, only one copy of that character set is loaded into a WCGM. However, if a character arrangement table calls for graphic modification modules for a character set, the modified character set is considered unique.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference* and *SAM Logic*.

Operator Response: None.

Programmer Response: Specify fewer character arrangement tables, or modify the character arrangement tables you do specify so that they require fewer WCGMs.

IEC177I ddd CHARACTER ARRANGEMENT TABLE FOR COPY MODIFICATION mod NOT SPECIFIED

IEC

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd, and the MODIFY parameter specified copy modification table mod. The table reference character (TRC) subparameter was specified, but it contained an error. Either the value for the TRC was invalid (4 or greater), or there is no character arrangement table in the position specified by TRC value.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: None.

Programmer Response: If the value specified for the TRC subparameter is invalid (4 or greater), respecify it correctly. If there is no character arrangement table in the position specified on the TRC subparameter, either use the CHARS parameter to load a character arrangement table in that position or specify a different position on the TRC subparameter.

IEC178I ddd I/O ERROR ON INITIALIZE PRINTER COMMAND

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd, but a permanent I/O error occurred while the printer was being initialized. Message IEA000I, which gives details about the I/O error, precedes this message.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: Notify the system programmer. Respond as indicated in message IEA000I.

Programmer Response: Follow your installation's procedures for correcting the I/O error.

IEC179I ddd BURST REQUESTED BUT BTS NOT INSTALLED

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd, and either BURST=Y was coded or Y is the default value selected by your job entry subsystem (JES) for the BURST parameter. However, information in the UCB extension indicates that there is no burster-trimmer-stacker (BTS) installed on printer ddd.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: None.

Programmer Response: Either specify BURST=N on the SETPRT macro instruction or allocate the

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output to a printer that has a burster-trimmer-stacker installed.

IEC180I ddd I/O ERROR WHILE

{ SENSING PRESENT PAPER THREAD PATH
SELECTING TRANSLATE TABLE 0
DISPLAYING STATUS CODE }

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd, but a permanent I/O error occurred during the operation indicated in the message text. Message IEA000I, which gives details about the I/O error, precedes this message.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: Notify the system programmer. Respond as indicated for message IEA000I.

Programmer Response: Follow your installation's procedure for correcting the I/O error.

IEC181I ddname IN-STORAGE ADDRESSES AND FCB/OPEN EXITS INVALID

Explanation: A SETPRT macro instruction was issued for the SYSOUT data set identified in the ddname field of the message text. One of the following errors occurred:

- A copy modification module, a character arrangement table, or a forms control buffer was specified on the SETPRT macro instruction as an in-storage address instead of by name.
- The address of a user library DCB was specified instead of the
- The OPEN exit routine specified a forms control buffer.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: None.

Programmer Response: Reissue the SETPRT macro instruction and data set.

IEC182I ddd CHARACTER ARRANGEMENT TABLE mod REFERENCES AN EMPTY WCGM

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. A byte in the translate table part of character arrangement table module mod references a writable character generation module (WCGM) that does not contain a character set.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: None.

Programmer Response: If the translate table has an incorrect reference for the WCGM ID, correct the reference. If the translate table reference is correct but the WCGM has no character set assigned to it, assign a character set to the WCGM.

IEC183I ddd LOST nnnn PAGES DUE TO

{ CANCEL KEY
PRINTER SYSTEM RESTART }

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. If CANCEL KEY appears in the message text, the operator pressed the cancel key and nnnn pages of data (the pages in the 3800 page buffer) were lost. If PRINTER SYSTEM RESTART appears, a paper jam occurred that requires a printer system restart and nnnn pages of data (the pages from the fuser back to the transfer station and in the 3800 page buffer) were lost.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: If you pressed the cancel key, but you need the data that was lost, rerun the job. If you are restarting the printer system, retransmit the lost pages.

Programmer Response: None.

IEC184I ddd LOAD CHECK WHILE LOADING

{ TRANSLATE TABLE FOR mod
COPY MODIFICATION mod
GRAPHIC MODIFICATION mod
FCB mod
LIBRARY CHARACTER SET mod
WCGMS id-id-id-id }

Explanation: A SETPRT macro instruction was issued for 3800 printer ddd. A load check I/O error occurred while the data specified in the message text was being loaded. If a value for mod appears in the message text, it is the name of a module of the indicated type. If WCGMS appears in the message text, each id is a two-character hexadecimal identifier for a character set. A description of the conditions that cause load checks appears in *IBM 3800 Printing Subsystem Programmer's Guide*.

System Action: SETPRT processing terminates and places a return code in register 15. The return code is documented in *Data Administration: Macro Instruction Reference*, and *SAM Logic*.

Operator Response: None.

Programmer Response: Correct any errors in the format of the data to be loaded. Be sure that printer ddd is set up with the appropriate operating characteristics.

IEC185I { QMGRIO CLOSE OPEN SEGMENTING ENQ MULT DCB } ERROR

ON SETPRT TO SYSOUT ddname
REASON CODE nnnnnnnn

Explanation: A SETPRT macro instruction was issued for the SYSOUT data set identified in the ddname field of the message text. One of the following errors occurred:

- QMGRIO ERROR, reason code X'00000008': an error occurred while SETPRT processing was

attempting to read a JFCB or JFCBE control block from the system work area (SWA).

- CLOSE ERROR, reason code X'0000000C': an error occurred when SETPRT processing invoked the CLOSE subsystem interface for the previous data segment.
- OPEN ERROR, reason code X'00000010': an error occurred when SETPRT processing invoked the OPEN subsystem interface for the new data segment being created.
- SEGMENTING ERROR, reason code X'00000014': an error occurred while the scheduler spool file allocation routine was segmenting the data set.
- ENQ ERROR, reason code X'00000018': SETPRT processing issued an ENQ macro instruction that failed.
- MULT DCB ERROR, reason code X'0000001C': More than one DCB was opened for the SYSOUT data set.

System Action: SETPRT processing terminates and places a return code in register 15 and a reason code in register 0. The return code and the reason code are documented in *Data Administration: Macro Instruction Reference*.

Operator Response: Notify the system programmer.

Programmer Response: Follow your installation's procedures for correcting the error. If necessary, contact your programming support personnel.

Problem Determination: Table I, items 1, 2, 3, 4, and 29.

IEC190I ddname, DCB RESIDES ABOVE 16MB.

Explanation: An OPEN macro was issued with the MODE=31 parameter for one of the following:

- a DCB that resides above 16 megabytes, or
- an ACB, for an access method other than VSAM and VTAM, that resides above 16 megabytes.

If **ddname** is "XXXXXXXX," data management could not determine the actual ddname of the DCB or ACB.

System Action: Data management continues processing the job step; however, the data set represented by DCB or ACB does not open, and any attempts to read from or write to that data set will fail.

Programmer Response: Before issuing the OPEN call, change the residency of the DCB or ACB to below 16 megabytes.

IEC191I 50D-rc, INVALID PARAMETER LIST SUPPLIED TO OPEN MACRO, DCB ADDRESS = dcb

Explanation: The OPEN parameter list contains invalid DCB address **dcb**. Reason code **rc** further explains the condition:

Return

Code	Meaning
1C	The execute form of the OPEN macro specifies MODE = 31, but the parameter list specifies, or defaults to, MODE = 24.
20	The execute form of the OPEN macro specifies MODE = 24, but the parameter list specifies MODE = 31.

System Action: The task terminates.

Programmer Response: If you generated the parameter list by using the list form of the OPEN macro, change the mode specification to be consistent on both the MF=L and MF=E forms of the OPEN macro. Otherwise, to have consistent modes, you may either change the form of the parameter list or change the mode specification on the MF=E form of the OPEN macro.

IEC192I OPEN MACRO MAY HAVE BEEN USED WITH INCONSISTENT MODE SPECIFICATIONS.

Explanation: The first DCB address in the OPEN parameter list is zero. This address value could be caused by specifying MODE=31 on the list form of the OPEN macro, and MODE=24 on the execute form.

System Action: If this is a multiple-DCB invocation of OPEN, the second DCB address should point to storage that belongs to the user. If it does, the job continues; otherwise, the job fails and message IEC191I appears after this message.

Programmer Response: If you generated the parameter list by using the list form of the OPEN macro, change the mode specification to be consistent on both the MF=L and MF=E forms of the OPEN macro. Otherwise, to have consistent modes, you may either change the form of the parameter list or change the mode specification on the MF=E form of the OPEN macro.

IEC203I 031-rc, jii, sss, ddn[-#], ddd, ser, dsn

Explanation: An input/output error occurred during execution of a QISAM CLOSE macro instruction issued by task termination (the problem program returned control to the supervisor without issuing a CLOSE macro instruction). In the message text, 031-rc associates this message with system completion code 031 and with return code rc. Other fields in the message text are:

jii
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An input/output error occurred during execution of a CLOSE macro instruction for an ISAM data set opened for QISAM mode while task termination was in progress.

System Action: The task is terminated and no SYNAD exit is taken because the user program did not execute a CLOSE macro instruction for the ISAM data set opened for QISAM processing prior to returning control to the supervisor.

Programmer Response: If the task was in the process of loading the ISAM data set, the data set must be reloaded. If the task was updating records (QISAM scan mode), any records waiting to be rewritten when the error occurred will not be rewritten. To ensure that the SYNAD routine gets control, issue a CLOSE macro instruction for the ISAM data set prior to returning control to the supervisor.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC208I 014-rc,mod,ijj,sss,ddn,ddd,ser,dsn

Explanation: The error occurred during the execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 014-rc associates this message with system completion code 014 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The task which issued the CLOSE is not the task which opened the data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 5a, 13, 23, 29. Table II, Format 3.

IEC210I 214-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 214-rc associates this message with system completion code 214 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A I/O error occurred reading a user label on magnetic tape.
08	A I/O error positioning a magnetic tape volume during execution of a CLOSE macro instruction.
0C	While processing a Read Block ID command to establish the tape position, an I/O error occurred.
10	The number of blocks processed, which is determined by the position of the tape, does not match the number of blocks specified in the DCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC211I 314-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during the execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 314-rc associates this message with system completion code 314 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A I/O error occurred reading a DSCB for a data set on a direct access device during execution of a CLOSE macro instruction.
08	A I/O error occurred reading a format1 DSCB during execution of a CLOSE macro instruction and standard user labels were specified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC212I 414-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 414-rc associates this message with system completion code

414 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The value of rc and its meaning is as follows:

Return Code	Meaning
04	An I/O error occurred writing a DSCB during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC214I 614-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device or a subsystem data set. In the message text, 614-rc associates this message with system completion code 614 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction.
08	A file mark should have been written on an output data set. The DCBFDAD field in the DCB indicated an extent number in the DEB greater than the number of extents in the data set. Consequently, it could not be determined where the file mark should have been written.
0C	The close subsystem executor module was passed an error return code in register 15 after issuing the IEFSSREQ macro to connect the user's ACB to the subsystem. This indicates the subsystem was not operating.
10	A spooled or subsystem data set could not be closed by a job entry subsystem or alternate subsystem. The failing DCB could not be closed; processing for other DCBs closed in parallel continues normally.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

If return code is 08, probable user error. Make sure that the DCBFDAD field is not being invalidated before the CLOSE macro instruction is issued.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC215I 714-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 714-rc associates this message with system the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing trailer label 1 for a data set on magnetic tape during execution of CLOSE macro instruction.
08	An I/O error occurred writing trailer label 2 for a data set on magnetic tape.
0C	An I/O error occurred writing a tape mark during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC216I A14-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, A14-rc associates this message with system completion code A14 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The value of rc and its meaning is as follows:

Return Code	Meaning
04	An I/O error occurred during execution of a CLOSE macro instruction attempting a partial release of space on a direct access device.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC217I B14-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a partitioned data set opened for output to a member. In the message text, B14-rc associates this message with system completion code B14 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A duplicate name was found in the directory of a partitioned data set. The close routine attempted to add a member name to the directory using the STOW macro instruction, but a code of 4 was returned, indicating that the member already exists. Specify a different member name, or remove the old member name using the IEHPROGM utility, or specify DISP=OLD on the DD statement.
0C	The close routine attempted to update the directory of a partitioned data set; however, a code of 12 was returned by the STOW macro instruction, indicating that there is no space left in the directory. Copy the data set to a scratch volume, reallocate space for the data set specifying more directory blocks, and then copy it back using IEBCOPY.
10	An I/O error occurred trying to update the directory of a partitioned data set.
14	The CLOSE routine attempted to update the directory of a partitioned data set; however, the DCB of the partitioned data set was not open; or opened incorrectly. Make sure the DCB is open before issuing a CLOSE.
18	Unsuccessful GETMAIN for STOW work area when CLOSE routine attempted to update a partitioned data set. Specify a larger region and rerun the job.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC218I 117-rc,mod,ijj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand. In the message text, 117-rc associates this message with system completion code 117 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction with a TYPE=T operand.
08	A CLOSE macro instruction with a TYPE=T operand was issued for a data set that was opened with the options RDBACK and LEAVE or INOUT and REREAD. An I/O error occurred in tape positioning while performing a forward space file past a tape mark.
10	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A backspace file past the tape mark following trailer labels was being attempted.
14	An I/O error occurred in tape positioning attempting a rewind during execution of a CLOSE macro instruction with a TYPE=T operand. The data set was opened with the options RDBACK and LEAVE or INOUT and REREAD.
18	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with TYPE=T operand. A forward space file was being performed past a tape mark preceding data for a data set with standard labels opened for RDBACK.
1C	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A forward space file was being performed past a tape mark preceding data for a data set with no labels opened for RDBACK.
20	An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand for a data set with no labels opened for input, or a data set with standard labels opened for output.

24	An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand. A forward space file past a tape mark following the data was being attempted.
28	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A backspace file past the tape mark following data was being attempted for a data set opened with the options INPUT and LEAVE.
2C	An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand. A tape mark was written following the last data record. During this operation, end-of-volume condition was encountered. The close routine attempted to backspace file past the tape mark prior to calling EOVS, and encountered an I/O error.
30	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction attempting a backspace following user trailer label processing.
34	A CLOSE macro instruction with a TYPE=T operand was issued for a data set opened for output processing for which a file mark should have been written. The DCBFDAD field in the DCB indicated an extent number in the DEB greater than the number of extents in the data set. Consequently, it could not be determined where the file mark should be written.
38	While processing a Read Block ID command to establish the tape position, an I/O error occurred.
3C	The number of blocks processed, which is determined by the position of the tape, does not match the number of blocks specified in the DCB.
40	A CLOSE MACRO instruction with a TYPE=T operand was issued for an output data set with no file mark. The file mark could not be written for the data set because of conflicting information in the PROGRAM DCB. First, the MBBCCCHR field of the DCBFDAD contains a value for R that is greater than zero; this value indicates that data is written on the track. Secondly, the DCBTRKBAL field indicates that the track is empty.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

If return code is 34 or 40, probable user error. Make sure that the DCBFDAD field is not being invalidated before the CLOSE TYPE=T macro instruction is issued.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC220I 317-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on a direct access device. In the message text, 317-rc associates this message with system completion code 317 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The value of rc and its meaning is as follows:

Return Code	Meaning
04	An I/O error occurred reading a format-1 DSCB during the execution of a CLOSE macro instruction with a TYPE = T operand.
08	The DSCB read did not have either a format-1 or format-4 format ID while reading either a format-1 or format-4 DSCB during the execution of a CLOSE macro instruction with TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement.

If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC221I 417-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on a direct access device. In the message text, 417-rc associates this message with system completion code 417 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The value of rc and its meaning is as follows:

Return Code	Meaning
04	An I/O error occurred writing an updated format-1 DSCB during execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC222I 717-rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE = T operand for a data set on magnetic tape. In the message text, 717-rc associates this message

with system completion code 717 and with return code rc. Other fields in the message text are:

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation)

ddd
device number

ser
volume serial number

mod
The name of the module in which the error occurred.

dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing a tape mark following the last data record during execution of a CLOSE macro instruction with a TYPE = T operand.
08	An I/O error occurred during execution of a CLOSE macro instruction with a TYPE = T operand, writing trailer label 1 or trailer label 2.
0C	An I/O error occurred writing a tape mark following the trailer labels during execution of a CLOSE macro instruction with a TYPE = T operand.
10	An I/O error occurred reading trailer label 1 in order to update the DCB block count during execution of a CLOSE macro instruction with a TYPE = T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC223I rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when the system detected an invalid control block. In the message text, the fields are:

mod
The name of the module in which the error occurred.

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

dsn
data set name

The value of rc and its meaning is as follows:

Return Code	Meaning
00	For SYSIN and SYSOUT data sets, both the ACB and DCB associated with each data set must contain the address of the same DEB.

System Action: Processing is discontinued for the DCB in error. Other DCBs in the CLOSE parameter list will be processed.

Programmer Response: Probable user error. Correct any errors causing the control blocks to be incorrectly modified. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC225I rc,mod,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: A CLOSE (TYPE = T) macro instruction was issued for the specified data set, but an invalid condition was encountered, indicated by the return code rc. The fields in the message text are:

mod
The name of the module in which the error occurred.

jjj
job name

sss
step name

ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation).

ddd
device number

ser
volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
00	The DCB parameter of the DD statement was not DSORG = PO or PS.
04	The DCB was opened for input to a member of a partitioned data set.
08	An input data set, with the CLOSE disposition of LEAVE, did not specify DSORG = PO or PS in the DCB.
0C	Output processing was specified for a data set that did not specify a data set organization with DSORG = PO or PS in the DCB.
10	The REREAD option was specified for a data set that did not specify DSORG = PO or PS in the DCB.

System Action: Processing is discontinued for the DCB error. Other DCBs in the CLOSE (TYPE = T) parameter list will be processed normally.

Programmer Response: Probable user error. Consult *Data Administration: Macro Instruction Reference*, correct the specification that is in error, then run the job again.

Problem Determination: Table I, items 1, 4, 15, 19, 25b, 29.

IEC250I rc-ccc,ijj,sss,ddn,ser,xxx,dsn,cat

Explanation: An error occurred during the execution of an OPEN macro instruction for a VSAM data set. In the message text, rc indicates the specific error that occurred. Other fields in the message text are:

ccc
Function code. See *VSAM Logic*, which lists each code, its meaning, the name of module that detected the error causing the code to be generated.

ijj
jobname

sss
stepname

ddn
DDname

ddd
device number, if the error is related to a specific device

ser
volume serial number, if the error is related to a specific volume

xxx
name of cluster that contains the data set being processed when the error was detected.

dsn
name of the data set being processed when the error was detected.

cat
catalog name

Note: Any missing field is indicated by a comma. The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An error was detected while trying to open a catalog.
20	Not enough virtual storage was available for work areas, buffers, or control blocks.
22	An I/O error occurred while I/O requests were being completed.
28	The requested system or user catalog does not exist or is not open.
32	The catalog record for the data set being opened was not found.
36	An I/O error was detected while the system was reading or writing a catalog record.
37	An unexpected return code was returned by the catalog routines.
40	The data set being opened is security-protected, and the OPEN routine was unable to validate your password.
41	The buffer space specified is not consistent with the buffer requirements of the data set.
44	User buffering was specified in the MACRF field of the ACB, but processing other than control-interval was also specified.
50	The OPEN routine was unable to fix in real storage the access-method control blocks for the data set being opened.
52	The OPEN routine was unable to get the resource the system requested for the data set being opened. The resource was being used by another task in the system.
54	The ACB indicated keyed accessing, but the data set is not a key-sequenced data set.
56	The last request to close this data set was not completed successfully.
58	The time stamp for the index is less than the time stamp for the data set. This could occur if the data set was updated without the index being open.
59	The time stamp for the volume does not match the time stamp in the catalog entry for the component. This may mean the component existing on the volume is not accurately described in the catalog.
68	The device type specified in the DD statement is not consistent with the device type indicated in the catalog record for the data set.
72	The data set was empty, but the ACB for the data set did not indicate that it was open to be loaded.

IEC

- 76 The access method control block opened was not associated with a valid data set.
- 80 Parameters conflict; create with multiple strings.
- 116 The system detected an I/O error while reading the volume label and format-4 DSCB.

System Action: Processing associated with the OPEN macro instruction is terminated for the data set in error. The error flags in the ACB for the data set are set to a value depending on the return code, as follows:

Return Code	ACB Error Flag
04	132
20	136
22	184
28	180
32	148
36	144
37	148
40	152
41	160
44	160
50	176
52	168
54	160
56	116
58	108
59	104
68	160
72	160
76	188
80	160
116	164

Programmer Response: The response depends on the value of rc:

Return Code	Meaning
04	Rerun the job.
20	Specify a larger REGION parameter and rerun the job.
22	Specify a different device for the volume causing the error and rerun the job.
28	Make sure that the correct catalog is open by specifying it in the JOBCAT or STEPCAT DD statement, and rerun the job.
32	Ensure that the data set entry is contained in the master catalog or a user catalog specified in a JOBCAT or STEPCAT DD statement. You can run the AMS LISTCAT function to list the data set entries contained in a specific catalog.
36	Specify a different device for the catalog that caused the problem, and rerun the job.
37	Rerun the job. If the error persists, restore the catalog and all volumes controlled by it from synchronized restore tapes.

- 40 Make sure that the correct password was supplied in the ACB or by the system or TSO terminal operator. Use the access method services LISTCAT command to list the passwords for each data set in a catalog. (The master password for the catalog is needed to do this.)
- 41 Make sure that the buffer space specified is large enough to contain the data and index buffers required to process the data set for the specified number of concurrent multiple requests.
- 44 Change the ACB so that only control-interval processing is specified if user buffering is specified.
- 50 Rerun the job.
- 52 Ensure the availability of the resource by means of DD statements, and rerun the job.
- 54 Make sure that the type of accessing indicated in the ACB is consistent with the data set being opened.
- 56 Ignore the warning and attempt to process the data set, but the results will be unpredictable. Use the access method services VERIFY command to make sure the end-of-file marker in the data set entry in the catalog is correct.
- 58 Continue to process the data set, but errors may occur if the data set and index do not correspond.
- 59 Continue to process the data set, but the results are unpredictable. To get the time stamp to match, restore the volume for a restore tape that has the same time stamp as the catalog record for the volume. If the problem persists, use synchronized restore tapes to restore the catalog and all volumes specified in the catalog.
- 68 Change the DD statement to indicate the same device type as the catalog record for the data set.
- 72 Change the MACRF parameter in the ACB to indicate output.
- 76 Correct the error and resubmit the job.
- 80 Correct the error and resubmit the job.
- 116 Mount the volume on which the error occurred on a different device, and rerun the job. If the problem recurs, restore the catalog and all volumes defined by it from synchronized restore tapes.

Problem Determination: Table I, items 1, 5a, 13, 16, 29.

IEC251I rc(sfi)-ccc,jjj,sss,ddn,ddd,ser,xxx,dsn,cat

Explanation: An error occurred during the execution of a CLOSE macro instruction for a VSAM data set. The fields in the message text are:

rc
return code. This field indicates the reason for the error. The return codes, their meanings, and

the corresponding system action and required responses are listed under message IEC161I.

(sfi) subfunction information (error information returned by another component invoked by EOV). This field appears only for certain return codes, and its format is shown with those codes to which it applies.

ccc function code. This field indicates the function being performed at the time the error occurred. The function codes and their meanings are listed under message IEC161I.

jjj job name

sss step name

ddn DDname

ddd device number, if the error is related to a specific device

ser volume serial number if the error is related to a specific volume

xxx name of cluster that contains the data set being processed when the error was detected, or when not available, the DSNAME specified on the DD statement specified by the ACB.

dsn name of the data set being processed when the error was detected

cat catalog name

Note: Any missing field is indicated by a comma.

Problem Determination: Table I, items 1, 5a, 13, 26, 29. Table II, Format 4.

IEC252I rc[(sfi)]-ccc,jjj,sss,ddn,ddd,ser,xxx,dsn,cat

Explanation: An error occurred during the execution of a CLOSE (TYPE=T operand) macro instruction for a VSAM data set. The fields in the message text are:

rc return code. This field indicates the reason for the error. The return codes, their meanings, and the corresponding system action and required responses are listed under message IEC161I.

(sfi) subfunction information (error information returned by another subsystem or component). This field appears only for certain return codes, and its format is shown with those codes to which it applies.

ccc function code: This field indicates the function being performed at the time the error occurred. The function codes and their meanings are listed under message IEC161I.

jjj jobname

sss stepname

ddn DDname

ddd device number, if the error is related to a specific device

ser volume serial number if the error is related to a specific volume

xxx name of cluster that contains the data set being processed when the error was detected, or when not available, the DSNAME specified on the DD statement specified by the ACB.

dsn name of the data set being processed when the error was detected

cat catalog name

Note: Any missing field is indicated by a comma.

Problem Determination: Table I, items 1, 5a, 13, 16, 29. Table II, Format 4.

IEC253I rc-ccc,jjj,sss,ddn,ddd,ser,xxx,dsn,cat

Explanation: The error occurred during EOV (end-of-volume) processing for a VSAM data set. See message IEC070I.

IEC254D SHOULD jjj USE (ddn,utn,ser) FOR CREATING A NEW CHECKPOINT DATA SET

Explanation: A request has been made by job jjj to create a new checkpoint data set on volume ser, mounted on device utn, and described by DD statement ddn.

System Action: The system waits for the operator to reply.

Operator Response: Determine if the desired volume can be made secure after the data set is created. If the request is for a direct access volume, determine if there have been any opportunities for prior offline use of the volume by an unauthorized user. If the request is for a tape, make sure that it is either a new tape, an old secure checkpoint volume, or an old tape which has been bulk erased. Reply 'YES' to allow the use of the volume for checkpoint entries. Reply 'NO' to prevent its use for checkpoint entries. If the reply is 'YES', attach a special label to the volume to indicate that the volume contains a checkpoint data set.

IEC255D jjj IS (ddn,utn,ser) A SECURE CHECKPOINT VOLUME

Explanation: Job jjj has defined an old checkpoint data set with DD statement ddn, on volume ser, mounted on device utn.

System Action: The system waits for the operator to reply. When the reply is 'NO', processing continues with the indicated volume, making it a non-secure volume. When the reply is 'YES' and the

password was supplied, cancel the job by entering REPLY xx, zzzzzzzz twice, where zzzzzzzz is any zero- to eight-character dummy password; this will result in message IEC150I 913-0C being issued.

If you are using VSAM, message IEC331I, rc 56, will be issued.

If the program is attempting to scratch, catalog, or rename the data set, a WRITE password must be supplied.

IEC302I SYSCTLG I/O ERROR,ser,dsn

Explanation: An I/O error has occurred while Catalog Management routines were reading or writing in the system catalog. In the message text, ser is the volume serial number of the volume containing the catalog that was being processed, and dsn is the fully-qualified index level or data set name that was being processed.

System Action: The Catalog Management routine exits directly to the caller without performing any further processing on the catalog data set. Return code is 28.

Operator Response: Report this message to the programmer responsible for the system. He should check the catalog for missing or damaged entries.

Problem Determination: Table I, items 2, 25d, and 28.

IEC304I SYSCTLG ENTRY SEQUENCE ERROR, X'ttr', ser, dsn

Explanation: A catalog entry within a given name level was found to be out of sequence. The entry occurred in the catalog record at offset X'ttr' into the catalog data set on volume ser. The name of the data set being processed when the error was detected is dsn. This error might make it impossible to locate some catalog entries.

System Action: Catalog management processing attempts to complete the request.

Operator Response: Notify the system programmer.

Programmer Response: Take a DASDR dump of the catalog to check for missing or damaged entries. The incorrect entry can be found in the catalog record pointed to by ttr, or will be the last entry in the previous record of the same level.

Problem Determination: Table I, items 2, 5a, 28.

IEC305I INVALID ENTRY IN SYSCTLG, ser, dsn

Explanation: While adding, deleting or changing the catalog entry for data set "dsn" in the CVOL catalog on volume "ser" an entry was found which has an invalid length field.

System Action: Catalog Management exits to the caller without performing any further processing on the catalog data set. Return code is 8.

Operator Response: Report this message to the system programmer. He should find and correct the damaged entries.

IEC331I rc-crs,ijj,sss,proc,mmm

Explanation: An error condition was detected while processing a catalog management request directed to a VSAM catalog. The value rc is the VSAM catalog management return code and crs is the reason code associated with the error condition. See message IDC3009I for an explanation of the possible return and reason codes. Other fields in the message text are:

ijj

job name

sss

step name

proc

The name of the VSAM catalog management procedure that caused the message to be issued. (The name omits the IGGP prefix.)

mmm

The name of the VSAM catalog management control section (CSECT) that detected the error condition.

System Action: The command is terminated. See the system action associated with the value printed for rc - crs for message IDC3009I.

Programmer Response: See the programmer response associated with the value printed for rc - crs for message IDC3009I.

Problem Determination: Table I, items 1, 4, 29.

IEC332I proc[proc...]

Explanation: This message lists the nest of VSAM catalog management procedures that existed when control was passed to the VSAM catalog management routine that caused message IEC331I to be issued. (In the message text, the procedure names omit the IGGP prefix.)

System Action: The command is terminated.

Programmer Response: See message IEC331I.

Problem Determination: Table I, items 1, 4, 29.

IEC333I terr,xx,cat,yyy

Explanation: An I/O error condition was detected while processing a catalog management request that was directed to either an ICF or a VSAM catalog (or VSAM catalog recovery area). This message follows messages IEC331I and IEC332I. The fields in the message text have the following meanings:

t

L - Logical error (associated with a VSAM record management return code of 8).

P - Physical error (associated with a VSAM record management return code of 12).

err

The VSAM record management logical or physical error code. See the explanation of message IDC3351I for an explanation of these codes.

Note: If this field is zero, no record management error is associated with this message.

xx

A control byte that indicates the type of I/O that resulted in the error. If field xx is provided, it can be interpreted as follows:

1... ..	GET
0... ..	PUT
.1... ..	ERASE
.0... ..	DO NOT ERASE
..1... ..	USE ARA BUFFER
..0... ..	USE URA BUFFER
...1... ..	KEYED REQUEST
...0... ..	ADDRESSED REQUEST
.... 1... ..	NON-UPDATE REQUEST
.... 0... ..	UPDATE REQUEST
.... .1... ..	NO ERROR CHECK
.... .0... ..	CHECK FOR ERRORS
.... ..1... ..	TRUENAME REQUEST
.... ..0... ..	LOW KEYRANGE REQUEST
.... ..1... ..	FOR GET, MEANS KEY GREATER THAN OR EQUAL
.... ..0... ..	FOR PUT, MEANS SEQUENTIAL REQUEST
1100 0000	SEQUENTIAL GET
1000 0100	GET AND NOTE STRING POSITION

cat

Identifies the name of the catalog in EBCDIC with trailing blanks truncated.

yyy

Identifies the catalog or catalog recovery area (VSAM catalog only) logical record that was being processed when the error occurred. The value of yyy is either the key of the record, (excluding position 45 if an ICF catalog), in EBCDIC with trailing blanks truncated, or 'CI=cccccc', where ccccc is the relative control-interval number of the record, in hexadecimal (VSAM catalogs only). If the area is associated with a VSAM-recoverable catalog, then 'CRAVOL=vvv' will appear in the message following 'CI=cccccc', where vvv is the volume serial number of the volume containing the catalog recovery area.

zz

Identifies, for the ICF catalog only, the extension record number (key position 45) associated with the I/O request. zz is only included if the extension number is non-zero.

System Action: The request is terminated.

Programmer Response: If a physical error is indicated, this is a probably a hardware error. Contact your hardware support personnel.

Also, notify your system programmer of this message; in any case, it may be necessary to restore the VSAM catalog.

Problem Determination: Table I, items 1, 2, 4, 29, 30, 31.

IEC334E **DUPLICATE SUBSYSTEM *ssid* DEVICE *addr* NOT BROUGHT ONLINE.**

Explanation: During Nucleus Initialization Processing (NIP), 3990 Model 3 subsystem validation determined that when the initialization of the addressed device on the system occurred, it already had a device table entry initialized for the identified subsystem. This device cannot be brought online.

In the message text:

- *ssid* is the identifier of the subsystem being processed
- *addr* is the device number of the subsystem device.

System Action: Processing continues.

Operator Response: Probable subsystem configuration problem. The identified Subsystem already has a device configured with the same Channel Connection Address (CCA) and Director-to-Device Connection address (DDC). Use the IDCAMS Cache Utility LISTDATA command to obtain a full device status report. The system operator may vary the device online after the problem is repaired.

IEC335E **CHECK STORAGE SUBSYSTEM *X'ssid'* DUAL COPY STATUS FOR *pri/sec* DEVICE *addr* DUPLEX PAIR STATUS: *stat* PRIMARY CCA: *X'xx'* SECONDARY CCA: *X'xx'***

Explanation: During Nucleus Initialization Processing (NIP), 3390 Model 3 subsystem validation detected an inconsistency in determination of the primary or secondary device of a duplexed volume. The primary device of a duplex pair cannot be associated with a secondary device or the secondary device cannot be associated with its primary. If it is a primary device, it is marked offline. If a secondary device is encountered without a primary, the primary device address may have been genned offline and this case may not be a problem. If the primary device is varied on before the problem is resolved, then I/O operations that may occur to the duplexed volume may result in subsequent error conditions from the subsystem.

In the message text:

- *ssid* is the identifier of the subsystem being processed
- *pri/sec* is either PRI or SEC depending on whether the addressed device is the primary or the secondary.
- *addr* is the device number of the affected device in the duplex pair.
- *stat* can be any of the following:
 - AVAILABLE when the duplex pair is available.
 - PENDING when the copy to establish a duplex pair had been in progress.
 - SUSPENDED when the duplex pair had been put into the suspended state by host command or by the subsystem.
- *xx* is the channel connection address (CCA) value of the devices in the duplex pair returned in the Sense Subsystem Status data.

System Action: Processing continues.

Operator Response: Use the IDCAMS Cache Utility LISTDATA command to obtain a full status report. The system operator should only vary the primary device online after the problem is repaired.

IEC336I STORAGE SUBSYSTEM X'ssid' state INITIALIZED

Explanation: During Nucleus Initialization Processing (NIP), 3390 Model 3 subsystem validation has completed 3390 Model 3 host structure initialization processing, as shown in the message text.

In the message text:

- *ssid* is the identifier of the 3390 Model 3 subsystem being processed.
- *state* may be one of the following:
 - the value 'NOT', if there are no device table entries valid
 - the value 'PARTIALLY', if there is unresolved status for a duplex pair of devices
 - or, null, if the subsystem initialized successfully with no unresolved status.

System Action: Processing continues.

IEC337I ASYNCHRONOUS OPERATIONS MANAGER TRACE FUNCTION DISABLED, SUFFICIENT STORAGE UNAVAILABLE

Explanation: The Asynchronous Operations Manager Trace function is not able to obtain enough storage (8K) from subpool 241 in ESQA to perform component trace. No trace entries are generated.

System Action: Processing continues. If tracing is to be performed, then the ESQA size must be expanded to accommodate the trace table.

IEC338I xxxxxxxx VALIDITY CHECK FAILED ON CATALOG PARAMETER LIST [STORAGE]

Explanation: The VSAM catalog initialization routine received an error code when an attempted catalog parameter list validity check failed. xxxxxxxx is the module name of the routine.

System Action: VSAM catalog management returns to the caller with error code 128 in Register 15 immediately after detecting the error.

Programmer Response: See description under message IDC3009I for error code 128. If access method services detects the error, message IDC3009I will appear; however, there will be no module name or reason code in the message.

Problem Determination: Table I, items 2, 3, 4, 29.

IEC339I xxxxxxxx INSUFFICIENT STORAGE FOR VSAM CATALOG [COMMUNICATION] WORK AREA

Explanation: VSAM catalog initialization issued a conditional GETMAIN for CCA storage and it failed due to a lack of storage. xxxxxxxx is the module name of the routine.

System Action: VSAM catalog management returns to the caller with an error code in Register 15 immediately after detecting the error. If the catalog

request is from job scheduler or the catalog controller, the return code value will be 8. Otherwise, the return code value will be 164 and the reason code will be 10.

Programmer Response: Increase the region size available to the job step. The storage size requested was approximately 4288 bytes.

IEC340I mmmm, INSUFFICIENT STORAGE FOR THE CATALOG WORK AREA

Explanation: Catalog management issued a conditional GETMAIN for work area storage space. GETMAIN failed due to insufficient storage in your region. In the message, mmmm is the name of the catalog management control section (CSECT) that detected the error condition.

System Action: Catalog management returns to the caller immediately after detecting the error with an error code in Register 15. If the catalog request points to a catalog parameter list (CTGPL), the return code value is 64 and the reason code is 2. If the request points to a CAMLST, the return code is 24 for a locate function or 28 for a non-locate function.

Programmer Response: Increase the region size available to the job step.

IEC341I IGGOCLHB, CATALOG SERVICE TASK ABENDED - DURING CATALOG PROCESSING.

Explanation: The task that was servicing this request abnormally terminated in the catalog address space.

System Action: The SYS1.DUMP data set contains the dump taken by the FRR/ESTAE in the catalog address space. The system returns catalog return code 246 to the issuer of SVC 26.

Programmer Response: Print the SYS1.DUMP data set, and then contact your programming support personnel.

IEC342I IGGOCLHC, ABEND OCCURRED DURING CATALOG PROCESSING.

Explanation: Due to an abnormal termination, the catalog FRR/ESTAE recovery routine in the user address space was entered.

System Action: The SYS1.DUMP data set contains the dump taken by the FRR/ESTAE in the user address space. The system also writes a LOGREC record.

Programmer Response: Print the SYS1.DUMP data set, and then contact your programming support personnel.

IEC343I IGGOCLHC, FRR/ESTAE ROUTINE UNABLE TO PERFORM CLEANUP PROCESS.

Explanation: The catalog FRR/ESTAE recovery routine in the user address space was unable to continue processing after an abnormal termination. Either (1) the routine was unable to pass the FRR/ESTAE an SDWA or (2) due to an overlay, a catalog CFWA block was invalid. No FRR/ESTAE processing is possible.

System Action: Percolation to the next FRR/ESTAE occurs.

Programmer Response: Contact your programming support personnel.

IEC344I IGGCLA9, VALIDITY CHECK FAILED ON CATALOG PARAMETER LIST STORAGE

Explanation: While the system was processing a user parameter list, an abnormal termination occurred in the catalog address space.

System Action: The SYS1.DUMP data set contains the dump taken by the FRR/ESTAE in the user address space. The system also writes a LOGREC record.

Programmer Response: Print the SYS1.DUMP data set, and then contact your programming support personnel.

IEC345I IGGCLA9, FRR/ESTAE WAS ENTERED WHEN NO CATALOG REQUEST WAS ACTIVE

Explanation: No FRR/ESTAE processing is required.

System Action: Percolation to the next FRR/ESTAE occurs.

Programmer Response: None.

IEC346I IGGCLA9, INVALID CCA WAS PASSED TO ESTAE ROUTINE.

Explanation: After an abnormal termination, the FRR/ESTAE routine in the catalog address space was unable to continue processing. The catalog CCA block was invalid due to an overly, and no FRR/ESTAE processing occurs.

System Action: Percolation to the next FRR/ESTAE occurs.

Programmer Response: Contact your programming support personnel.

IEC347I LIST ACTIVE CATALOG TASKS

TASK ADDRESS	JOBNAME	STEPNAME
address	jname	sname

END LIST OF ACTIVE CATALOG TASKS

Explanation: The MODIFY command was issued for the catalog address space (CAS), requesting a list of CAS service tasks. The list may contain up to 200 active CAS tasks.

System Action: The system issues a multi-line message with the hexadecimal address of each CAS service task, and the jobname **jname** or stepname **sname** that the task is currently processing. If the task is not processing a catalog request, NONE appears in the message display.

Operator Response: None.

Programmer Response: None.

IEC348I LIST OPEN CATALOGS

VOLSER	USER	CATALOG NAME
volser	count	cname

END LIST OF OPEN CATALOGS

Explanation: The MODIFY command was issued for the catalog address space (CAS), requesting a list

of open catalogs. The list may contain up to 250 open catalogs.

System Action: The system issues a multi-line message with the volume serial number **volser**, the hexadecimal use count **count** and the name of each open catalog **cname**.

Operator Response: None.

Programmer Response: None.

IEC349I DISPLAY ENTRY POINT

NAME	ADDRESS	FMID	LEVEL
name	address	fmid	level

END DISPLAY ENTRY POINT ADDRESS

Explanation: The MODIFY command was issued for the catalog address space (CAS), requesting a list of entry points. The list may contain every entry point in catalog load modules IGG0CLX0 and IGG0CLHA.

System Action: The system issues a multi-line message with each module name **name** and its hexadecimal address **address**. The message also contains the maintenance level **level** for each module.

Operator Response: None.

Programmer Response: None.

IEC350I CATALOG ADDRESS SPACE MODIFY COMMAND AVAILABLE

Explanation: The MODIFY command interface task for the catalog address space (CAS) is initialized and can accept MODIFY commands.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: None.

IEC351I CATALOG ADDRESS SPACE MODIFY COMMAND ACTIVE

Explanation: The user issued the MODIFY command for the catalog address space (CAS) and the CAS MODIFY task received the command.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: None.

IEC352I CATALOG ADDRESS SPACE MODIFY COMMAND COMPLETED

Explanation: The user issued the MODIFY command for the catalog address space (CAS) and the CAS MODIFY task completed the requested function.

System Action: The system performs the requested function.

- If the user requested a restart of CAS, the CAS jobstep task abnormally terminates and the system issues system completion code 81A. The system also takes a complete dump of CAS and then restarts CAS.
- If the user requested an abnormal termination of the service task, then the system issues system

completion code 91A. The system also takes a complete dump of CAS.

Operator Response: None.

Programmer Response: None.

IEC353I CATALOG ADDRESS SPACE MODIFY UNSUCCESSFUL

Explanation: The user issued the MODIFY command for the catalog address space (CAS) and the CAS MODIFY cannot process the request for one of two reasons: the command's format, keyword or address is invalid; or some system resource was unavailable.

System Action: The system continues processing.

Operator Response: If the MODIFY command was invalid, re-enter the command with the correct format, keyword or address. Otherwise, a system resource was unavailable, so resubmit the command later.

Programmer Response: None.

IEC354I CATALOG ADDRESS SPACE INPUT COMMAND NOT MODIFY

Explanation: The user issued a command for the catalog address space (CAS) and the CAS MODIFY task cannot process the request since the command was not MODIFY.

System Action: The system continues processing.

Operator Response: Enter the MODIFY command to request the catalog function.

Programmer Response: None.

IEC355I CATALOG ADDRESS SPACE IS RESTARTING

Explanation: The catalog memory has terminated, and the system is restarting the catalog address space.

System Action: The system automatically starts a new catalog address space.

Programmer Response: First, print any SYS1.DUMP data sets, and second, contact your programming support personnel.

IEC356W IDACAT13, CATALOG ADDRESS SPACE INITIALIZATION FAILED

Explanation: This message appears if the operator does not respond 'Y' when prompted by message IEC358D, which requests a retry of catalog restart.

System Action: The system does not make any further attempts to restart the catalog address space.

Operator Response: Contact your system programmer.

Programmer Response: Take the following actions:

- Get a copy of a stand alone dump for the system.
- Print any SYS1.DUMP data sets
- Contact your programming support personnel.

IEC357I CATALOG ADDRESS SPACE RESTART COMPLETED

Explanation: A new catalog address space has been successfully completed.

System Action: None

Programmer Response: None

IEC358D CATALOG RESTART FAILED, REPLY 'Y' TO RE-INITIATE RESTART

Explanation: An automatic restart of catalog address space failed.

System Action: The system waits for the operator to respond.

Operator Response: Reply 'Y' to retry restart. If restart is not possible, re-IPL the system. If you issue a response other than 'Y', the system issues message IEC356W.

Programmer Response: Print the SYS1.DUMP data set and then contact your programming support personnel.

IEC366I *jjj,ser* MSS FAILURE DURING ACQUIRE CODE = *hhh*

Explanation: The error occurred while the Mass Storage System (MSS) communications routine (SVC 126) was processing an ACQUIRE request from Catalog. The fields of the message text are:

jjj

job name

ser

volume serial number

hhh

return code from SVC 126. See *System Codes* for the values of *hhh* and their meanings.

System Action: Normal processing continues.

Programmer Response: See *System Codes* for the programmer responses to each return code.

IEC400A M *ddd,ser/dsn*

Explanation: M indicates that a tape volume is to be mounted on device *ddd* for data set *dsn*. The *ser* is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

IEC401A F *ddd,ser/dsn*

Explanation: F indicates that the volume on device *ddd* for output data set *dsn* is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. The *ser* is the six-digit serial number of the volume.

System Action: The system rewinds and unloads the volume.

Operator Response: Insert a file protection ring in the volume, mount the volume, and ready the device.

IEC402D – IEC502E

IEC402D F ddd,ser/dsn

Explanation: F indicates that the volume on device ddd for input/output data set dsn is file protected; that is, its file protection ring is not inserted, so it can only be read. The ser is the six-digit serial number of the volume.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then ins file protection ring in the volume, mount the volume, and ready the device.

IEC403A M ddd,ser

Explanation: M indicates that a direct access volume is to be mounted on device ddd. The ser is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

IEC466I jjj,ser[,ddd] MSS FAILURE IN func CODE = hhh

Explanation: The error occurred while the Mass Storage System (MSS) communications routine (SVC 126) was processing a request from the Restart routine. The fields of the message text are:

jjj

job name

ser

volume serial number

ddd

device number

func

MOUNT, DEMOUNT, ACQUIRE, or RELINQUISH

hhh

return code from SVC 126. See *System Codes* for the values of hhh and their meanings.

System Action: A 13F abend is requested.

Programmer Response: See *System Codes* for the programmer responses to each return code.

Problem Determination: See *System Codes*.

IEC501A M ddd,ser [,labtyp] [,den],jjj,sss [,dsn]

IEC501E M ddd,ser [,labtyp] [,den],jjj,sss [,dsn]

Explanation: M indicates that a volume is to be mounted on device ddd:

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on device ddd.
- If ser is SCRTCH, a public scratch volume is to be mounted.
- If ser is PRIVAT, a private scratch volume is to be mounted.
- If ser begins with L, the volume to be mounted is unlabeled; the number after the first character is an internal serial number assigned by the system to an unlabeled volume. The internal serial is of the form Lxxxxy where xxx is the data set number (0-999) and yy is the volume

sequence number (0-99). The numbers are recycled after they reach the limit.

In the message text, labtyp indicates the label type of the mounted volume (either SL, NL, AL, or NSL) and will appear for tape volumes only.

den

indicates the density of the volume to be mounted and will appear for tape volumes only.

jjj

indicates the job requesting the volume and sss indicates the job step requesting the volume.

If a MONITOR DSNNAME command is active, dsn indicates the data set requesting the volume.

System Action: If the message ID is IEC501A, the job step waits for the volume to be mounted or until the task reaches time-out. If the message ID is IEC501E, the volume indicated by ser is the next volume to be processed after the system finishes processing on the current volume.

Operator Response: If ser is SCRTCH or PRIVAT and ddd is a tape unit, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device. If ser is SCRTCH or PRIVAT and a scratch volume is already on the device, mount another scratch volume. Then ready the device.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC502E

n ddd,ser [,labtyp] [,ddn-c]

[,SPACE = ccccc,tttt,aaaa/cccc,tttt],jjj,sss[,dsn]

Explanation: The volume on device ddd is to have a disposition of n, where n is K, D, RK, RD, or R:

- K - Implies PRIVATE volume; the volume is to be demounted and returned to the library.
- D - Implies PUBLIC volume; the volume is to be demounted and used as a scratch volume when the job ends.
- RK- Implies PRIVATE-RETAIN volume; the volume is to be demounted and retained near the system for future use. In the event that the job ends and the volume has not been remounted, return it to the library.
- RD- Implies PUBLIC-RETAIN volume; the volume is to be demounted and retained near the system for future use. In the event that the job ends and the volume has not been remounted, it may be used as a scratch volume.
- R - Implies RETAIN volume; the volume is to be demounted and retained near the system for future use. In the event that the job ends and the volume has not been remounted, the operator must determine what disposition to give to the volume. This message will appear if a volume is rejected because it is not the volume requested (for example, a conflict in the label, label type, or density).

If ser is blank, O/C/EOV look ahead mount has found a premounted and unverified (UCBVOLI = ZEROS) volume on the next available unit. Operator intervention is required to verify that the proper volume is mounted.

If ser is a 6-digit serial number, the volume with that serial number is to be demounted from the device.

If ser begins with L, the volume to be demounted is unlabeled; the number after the first character is an internal serial number assigned by the system to an unlabeled volume. The internal serial number is of the form Laaabb where aaa is the data set number (0-999) and bb is the volume sequence number (0-99). The numbers are recycled after they reach the limit.

In the message text, labtyp indicates the label type of the demounted volume (either SL, AL, NL, or NSL) and will appear for tape volumes only).

If ddn-c appears in the message text, the volume to be demounted is a tape recorded in ASCII; ddn specifies the DDNAME of the JCL requesting the volume and c specifies the reason for demounting:

c Reason for Demounting

1 For ISO/ANSI Version 1:

The accessibility field of the volume label contains a nonblank character, which means the volume is security-protected and may not be processed by the operating system.

For ISO/ANSI/FIPS Version 3:

The accessibility code in the volume label is not acceptable for further processing because of one of the following:

1. It is not a blank.
2. It is not an uppercase A through Z.
3. It was rejected by the volume access exit (for A through Z).

2 For ISO/ANSI Version 1:

The accessibility field of the volume label contains a nonblank character other than the character 1, which means the file may not be processed by the operating system.

For ISO/ANSI/FIPS Version 3:

The accessibility code in the first data set label (for example, HDR1) is:

- A character that is not acceptable for further processing because:
 - It is not a blank, not an uppercase A through Z, or not an MVS-recognized numeric, that is, a 1 or 3 with system code IBMZLA.
 - It was rejected by the file access exit (for A through Z).
 - It was accepted, but the ACCODE value (A through Z) was rejected by the file access exit.
- Blank, but the ACCODE value for an output data set was rejected by the file access exit.

3 The system cannot process the volume which is recorded in ASCII, because the ASCII = INCLUDE option was not specified at system generation.

4 The control program has determined that conflicting data control block (DCB) attributes have been used to define the data set on the volume. Some of the conflicting attributes are:

- BUFOFF greater than 99.
- BUFOFF equal to L on OUTPUT or OUTIN.
- BUFOFF equal to L and RECFM not equal to D.
- OPTCD not equal to Q and LABEL equal to AL or LABEL equal to AUL.
- OPTCD not equal to Q and RECFM equal to D.
- OPTCD equal to Q and DSORG not equal to PS.
- OPTCD equal to Q and RECFM equal to V.
- LABEL equal to AL or AUL specified for a 7-track tape device.

5 This message follows IEC512I when the system detects violation of a label standard and the installation label validation exit issues a return code indicating the volume should be rejected. An abnormal termination follows.

6 The volume contains an ISCI/ASCII volume label that is not supported. To be processed as an ISO/ANSI volume, an ISCI/ASCII volume label must contain a 1 or 3 to specify Version 1 or Version 3 in character position 80. An output request to a data set other than the first data set of an ISO/ANSI Version 1 tape is not supported.

7 The volume was rejected by the operator in response to a WTOR.

In the message text, jji indicates the job demounting the volume and sss indicates the job step demounting the volume.

If a MONITOR DSNAME command is active, dsn indicates the data set requesting the volume.

If a MONITOR SPACE command is active and ddd is a direct access device, the SPACE parameter will appear:

cccc - total number of free cylinders on the volume.

tttt - total number of tracks in addition to free cylinders.

aaaa - total number of free extents.

ccc,tttt - largest contiguous free area in cylinders and tracks.

If the error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

System Action: The volume is unloaded if the device is a tape drive. If the device is a direct access unit, I/O to the device is inhibited.

Operator Response: Demount the volume and mark the serial number and label type on the volume and perform the indicated disposition. If LSPACE-PERMANENT I/O ERROR appears in the message text, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of the volume specified by ser or ddd.

Programmer Response: If ddn-c appears in the message text, the volume was probably demounted due to a programming error or operator error. Respond as follows, if:

- c=1 Insure that the indicated JCL statement indicated the correct volume.
- c=2 Make sure that the correct file and volume are being mounted.
- c=3 The ASCII option was not specified at system generation, so bit 6 in the CVTOPTA field of the CVT is 0. If it is 1, have a record of the options specified at system generation available.
- c=4 Insure that the data control block attributes do not conflict.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3. If LSPACE-INVALID PARAMETER appears in the message text, see Table I, items 2, 29.

IEC507D E ddd,ser,jjj,sss,dsn

Explanation: E indicates that a program intended to write on the volume indicated by ser on device ddd; however, the expiration date for the data set has not occurred.

In message text, jjj indicates the job requesting the volume and sss indicates the job step requesting the volume.

System Action: The job step waits for the operator to reply U or M, or until the task reaches time-out.

Operator Response: If the expiration date of the indicated data set is to be ignored and the program has authorization to write on the data set, enter REPLY xx,'U' in response to this message.

If the expiration date of the indicated data set is to be honored or if the program is not authorized to write on the data set, enter REPLY xx,'M' in response to this message. If another volume can be used, that is, if the program originally requested a SCRTCH or PRIVAT volume, the system will then request that a new volume be mounted. However, if another volume cannot be used, the system will terminate the job step.

Warning: If ddd is a direct access device, do not enter REPLY xx,'M'. Instead, use the CANCEL command to terminate the job step and notify the system programmer that the expiration date on the data set has not been reached.

Note: Normally, the operator should terminate any job attempting to update a system data set or

otherwise authorized data set, if this message is issued. However, the operator may respond with REPLY xx,'U' if so instructed by a programmer with proper authorization. An authorized programmer desiring to update a system data set should notify the operator of his intentions and make sure that no other concurrently running job can have access to the data set. If you want to remove expiration date protection from the data set, specify LABEL = RETPD=0 in the JCL next time the data set is created. Subsequently, the message will not appear.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC509A F ddd,ser,jjj,sss [,dsn]

Explanation: F indicates that the tape volume indicated by ser on device ddd is file-protected; that is, a program attempted to write on the volume but its file protection ring is not inserted, so it can only be read.

In the message text, jjj indicates the job requesting the volume and sss indicates the job step requesting the volume.

If a MONITOR DSNAME command is active, dsn indicates the data set requesting the volume.

System Action: The volume is rewound, the device is unloaded and the job step waits for the operator to remount the volume or until the task reaches time-out. If a volume is mounted without its file protect ring, it will again be unloaded, and this message will be reissued.

Operator Response: If the volume specified by ser was mounted in response to a request for SCRTCH or PRIVAT, determine if the volume mounted was in fact a scratch volume. If so, insert a file-protect ring, remount the volume, and ready the device. If the volume is not a scratch volume, obtain one and mount it on the device with its file-protection ring inserted.

If the volume specified by ser was not mounted in response to a request for SCRTCH or PRIVAT and if the program is authorized to write on the volume, insert a file-protection ring, remount the volume, and ready the device. If the program is not authorized to write on the volume, the CANCEL command should be used to terminate the task and the installation's system programmer notified.

Note: Normally, the operator should terminate any job attempting to update a system data set or otherwise authorized data set, if this message is issued. However, the operator may insert the file-protect ring and remount the volume if so instructed by a programmer with proper authorization. An authorized programmer desiring to update a system data set should notify the operator of his intentions.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC510D F ddd,ser,jjj,sss, [,dsn]

Explanation: F indicates that the tape volume indicated by **ser** on device **ddd** is file-protected; that is, a program may be attempting to write on the volume but its file-protection ring is not inserted, so it can only be read.

In the message text, **jjj** indicates the job requesting the volume and **sss** indicates the job step requesting the volume.

If a MONITOR DSNAME command is active, **dsn** indicates the data set requesting the volume.

System Action: The job step waits for the operator to reply 'U' or 'F' or until the task reaches time-out.

Operator Response: Determine which one of the following conditions applies to the volume specified by **ser**, and then complete the instructions for that specific condition:

1. the volume is mounted on an Automatic Cartridge Loader;
2. the volume became mounted due to a SCRATCH or PRIVAT request; or
3. the volume became mounted due to a request other than SCRATCH and PRIVAT.

For condition one, set the Automatic Cartridge Loader in manual mode, and follow these instructions in order:

- enter REPLY xx,'F' to rewind the volume and unload the device;
- insert a file-protection ring into the volume; and
- remount the volume and ready the device to its previous mode.

For condition two, determine whether **ser** is a scratch volume. If it is a scratch volume, follow these instructions in order:

- enter REPLY xx,'F' to rewind the volume and unload the device;
- insert a file-protection ring into the volume; and
- remount the volume and ready the device.

If **ser** is not a scratch volume, obtain one with its file-protection ring inserted, and mount it on the device.

For condition three, determine whether the program is authorized to write on the volume. If the program is authorized, follow these instructions in order:

- enter REPLY xx,'F' to rewind the volume and unload the device;
- insert a file-protection ring into the volume; and
- remount the volume and ready the device.

If the program is not authorized to write on the volume, simply enter REPLY xx,'U' in response to message IEC510D.

Note: An authorized programmer desiring to write on a file-protected volume should notify the operator of his intentions.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC512I {I/O ERR | LBL ERR | SEC VOL} ddd, ser [,labtyp] [,ser] [,labtyp],jjj,sss[,dsn] LBL STD ddd,ser[,reason] [,labid-postn],jjj,sss[,dsn]

Explanation: An error has been detected processing volume **ser** on device **ddd**. In the message text, **jjj** names the job requesting the volume and **sss** names the job step requesting the volume.

If I/O ERR appears in the message text, an uncorrectable input/output error occurred while processing labels on the volume.

If the tape is an output tape, the tape label has probably been destroyed. The tape must be relabeled or reinitialized with a tape mark before it can be used again.

If LBL ERR appears in the message text, the mounted volume has a different volume serial number or label attribute than the requested volume. The mounted volume is identified by the first **ser** in the message and the requested volume is identified by the second **ser**. Additional messages will be issued to change the label or dismount the tape.

If SEC VOL appears in the message text, security-protected tape volume **ser** was mounted on tape unit **ddd**. One of the following occurred:

- The program was attempting to process the volume as NL or NSL; LABEL = NL or LABEL = NSL was specified on the JCL.
- The data set name on the tape did not match the data set name specified by the DSN parameter in the JCL.
- The label is ISO/ANSI Version 1 or version x, but the accessibility code is not blank.
- The label is ISO/ANSI/FIPS Version 3, but the accessibility code is an invalid character (not uppercase A through Z).
- The label is ISO/ANSI/FIPS Version 3, but the VOL1 accessibility code was rejected by the ISO/ANSI volume access exit.
- The label is ISO/ANSI/FIPS Version 3, but the HDR1 accessibility code was rejected by the ISO/ANSI file access exit.
- The label is ISO/ANSI/FIPS Version 3, but the HDR1 accessibility code indicated password protection.
- The label is ISO/ANSI/FIPS Version 3, but RACF or RACHECK installation exits did not authorize access.

If a MONITOR DSNAME command is active, **dsn** indicates the data set requesting the volume.

If LBL STD appears in the message text, an error was detected during validation of a label. The error is a direct violation of, or a conflict in system support for, the published standards for the label and its associated file structure. *MVS/XA Magnetic Tape Labels and File Structure Administration* describes the specifications and processing of tape labels.

IEC

In the message text, reason is one of the following:

Reason	Validation Error Detected
DATA	An invalid character type. For example, an alphabetic character is found in a numeric field.
RANGE	A value out of bounds, unknown, or unsupported. For example, the specified block size is unsupported.
ALGN	Data incorrectly aligned. For example, an alphabetic field is not left-justified.
SEQU	A label out of sequence.
VRSN	A label version that is not supported. That is, the label on a mounted tape is not compatible with the system's tape labeling requirements.
DUPL	A duplicate data set name found during data set positioning.
DATE	A file set contains a data set immediately before the requested data set on the same volume with an expiration date lower than the expiration date of the data set to be written.
SYMM	A request that will result in an unmatched or unsymmetrical set of labels and/or inconsistent file structure.

labid is the label identifier, for example, VOL1. The identifier is followed in the message text by a slash (/) to signify that the label was about to be written when the error was detected.

The labid field is blank when a reliable label is not available, for example, when reason is SYMM.

For DATA, RANG, or ALGN reasons, postn in the message text is the character position within the label when a validation error is detected. The postn value can indicate an error in an existing label or in data used to construct a new label.

For DUPL, DATE, or SEQU reasons, postn is the file sequence number relative to the beginning of the current volume.

For a VRSN reason, postn is the version character from VOL1 position 80.

postn is ACCODE if the file accessibility code supplied by the user job step is invalid. A value of 254+ in the message indicates a file sequence number greater than 254.

For a SYMM reason, postn is blank in the message text because a specific error location is not available. This can occur when a data set is opened for MOD (OLD OUTPUT/OUTIN), INOUT, OUTINX, or EXTEND.

System Action: If I/O ERR or SEC VOL appears in the message text, the system rewinds the volume and unloads the unit. If the original request was for a SCRATCH or PRIVAT volume, the system requests a new volume. Otherwise, the system terminates the job step.

If LBL STD appears in the message text and VRSN does not, the installation label validation exit is entered to determine further processing. If both LBL

STD and VRSN appear in the message text, the system does one of the following:

- Enters the volume label editor, if the volume is being used for output to the first data set (except extending the data set, such as DISP = MOD).
- Rejects the volume for all other output requests.
- Rejects the volume for all input requests. Input volumes with label versions other than the supported versions are rejected.

Operator Response: If I/O ERR, LBL ERR, or SEC VOL appears in the message, respond as indicated in subsequent messages.

Programmer Response: If LBL STD appears in the message, reasons DATA, RANG, or ALGN indicate an ISO/ANSI/FIPS Version 3 standards violation in label labid at position postn. Correct the label before rerunning the job.

Reason RANG with postn ACCODE indicates that the ACCODE value specified in the JCL is not a valid character. Specify only uppercase alphabetic characters (A-Z) for an ACCODE value. ACCODE from JCL can be one to eight characters, but only the first character is processed.

If LBL STD appears in the message text, reasons SEQU, DUPL, or DATE indicate an error during positioning of the tape to the requested data set. The error was detected at the file number indicated in postn, relative to the beginning of the volume. A postn value of 254+ means that the problem occurred at a data set beyond the 254th data set on the volume. The labid with a DATE reason is the label identifier of the previous data set's trailing label, which was used to compare the expiration date sequence. Correct the source of the violation before rerunning the job.

If LBL STD appears in the message text, reason SYMM indicates that specifications for the data set will produce unsymmetrical ISO/ANSI/FIPS labels framing the data set, or that the ISO/ANSI/FIPS label will not match its counterpart at the end of the data set. Some mismatches are allowed by the ISO/ANSI/FIPS standard, such as block length and reserved for system use. In the message, labid and postn are blank. A SYMM violation results from:

- DISP=(MOD,...) for an existing output data set, including OUTIN.
- Open for EXTEND, OUTINX, or INOUT.
- Using an EXCP DCB without at least a four-word device-dependent area, to maintain a tape block count.

Correct the violation, and rerun the job.

If LBL STD appears in the message text, reason VRSN indicates that the system cannot process the mounted volume, which contains an ISCH/ASCII label with a version other than 3 indicated. The version code contained in the VOL1 label on the mounted volume is displayed as postn in the message. An ISCH/ASCII labeled volume cannot be processed when:

- The volume is being processed for input and the version number is not 1 or 3.

- The volume is being processed for output to other than the first data set and the version is not 3.

Correct the violation and rerun the job. A version 3 ISO/ANSI/FIPS label can be created by using the IEHINITT utility program.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC513D I/O ERR,ddd,ser,labtyp,kkk,sss [,dsn]

Explanation: I/O ERR indicates that an I/O error occurred writing the labels specified by labtyp, on a tape volume specified by ser on unit ddd.

If a MONITOR DSNNAME command is active, dsn indicates the data set requesting the volume.

In the message text, jjj indicates the job requesting the volume and sss indicates the job step requesting the volume.

System Action: The job step waits for the operator to reply U or M or until the task reaches time-out.

Operator Response: The operator must determine if a new volume may be substituted for the one specified by ser in the message. If so, REPLY xx,'M' to dismount the tape and issue a mount message for a new volume to be labeled the same as the first. If a new volume may not be substituted or if private tapes were supplied to run the job REPLY xx,'U' to ABEND the job with a message indicating that an I/O ERROR occurred. Note: A reply of M will result in creating two tapes with the same volume serial number.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, and 29. Table II, format 3.

IEC534D A ddd,ser [,labtyp],jjj,sss [,dsn]

Explanation: A indicates that the tape volume with serial number ser on unit ddd bears a label indicated by labtyp which is incompatible with the label type specified in the LABEL parameter of the JCL. If present, dsn indicates the existing data set name on the volume.

In the message text, jjj indicates the job requesting the volume and sss indicates the job step requesting the volume.

If a MONITOR DSNNAME command is active, dsn indicates the data set requesting the volume.

System Action: The job step waits for the operator to reply U or M or until the task reaches time-out.

Operator Response: If the volume specified by ser was mounted in response to a request for SCRATCH or PRIVAT, determine if the volume mounted was in fact a scratch volume and if so, determine if it is desirable to change the label on the volume to one compatible with the programmer's request. Enter REPLY xx,'U' to allow the program to change the label type of the volume. Enter REPLY xx,'M' to reject the currently mounted volume and mount a new volume.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC537I BLOCK COUNTS: DEVICE = xxxx DCB = yyyy

Explanation: At EOVS time, a block count mismatch was detected. xxxx, the count computed from hardware device information, does not match yyyy, the count computed by the access method or application program. A block count mismatch results in one of three system completion codes:

- abend 237, reason code 0C;
- abend 214, reason code 10; or
- abend 117, reason code 3C.

System Action: The system abnormally terminates the task, and issues an accompanying message that further describes the error condition. For abend 237, the system issues IEC023I; for abend 214, IEC210I; and for abend 117, IEC218I.

Operator Response: None.

Programmer Response: Refer to IEC023I, IEC210I, or IEC218I for an appropriate response.

IEC601D M ddd,ser,jjj,sss - REPLY U OR M

Explanation: M indicates that volume ser is to be mounted on device ddd, so that a data set can be scratched or renamed. jjj is the job requesting the volume, and sss is the job step requesting the volume.

System Action: The system waits for the operator to reply.

Operator Response: If the volume can be mounted, enter REPLY xx,'U'. Then mount the volume and ready the device.

If the volume cannot be mounted but the job step is to continue, enter REPLY xx,'M'. The system will skip the Scratch or Rename function on this volume.

If the volume cannot be mounted, and the job must not continue unless the data set is scratched or renamed, or unless the volume is scratched, terminate the job step.

IEC602I VTOC NOT CONVERTED ON ddd,ser,cde,(EXTENT = cchh,DSCB = cchhr)

Explanation: When the system tried to allocate new space in volume ser on unit ddd, the volume table of contents (VTOC) conversion routine was unable to convert the VTOC.

Cde 0 or 4

Either space was previously allocated under the Disk Operating System (DOS), or the space management routines had been interrupted during a previous allocation or deallocation of space before they completed updating the VTOC. Either case caused the VTOC conversion routine to be called. But the VTOC conversion routine could not convert the VTOC because of one of the following:

- Cde 0 Data set control blocks (DSCB) were incorrectly chained or two data sets were allocated to the same space on the volume. This error can occur if a prior Data Facility Data Set Services (DFDSS) execution is abnormally terminated. The error can be identified by a format-1 DSCB that has a unique

name of
SYS1.DFDSS.DEFRAG.xxxxxxxx
where xxxxxxxx is 8 bytes of 'FF'X.

- Cde 4 A split-cylinder data set was located on cylinder zero, or on the same cylinder as the VTOC, or on the same cylinder as a non-split-cylinder data set.

Cde 8 or 12

The space management routines had been interrupted during a previous allocation or deallocation of space before they completed updating the VTOC. This situation caused the DIRF bit (bit 5 of DS4VTOCI) to be set to one in the format-4 DSCB of the volume and caused the VTOC conversion routine to be called for this space allocation. But, the VTOC conversion routine could not convert the VTOC because of one of the following:

- Cde 8 The DADSM VTOC conversion routine had been modified (by altering CSECT IGG0325Z as specified in *DADSM Logic*) to reject any space allocation requests on a volume on which the DIRF bit is set to one.
- Cde 12 During allocation of the second or subsequent volume of a multivolume ISAM PRIME data set, the DIRF bit was found set to one.

System Action: For Cde 0, 4, and 8, if the error occurred during allocation, the system terminates the job; if the error occurred in the middle of a job extending the space allocation to a data set, the system abnormally terminates the job.

For Cde 12, the system terminates the job.

Operator Response: Notify the system programmer.

Programmer Response: Analyze the volume to determine the cause of the error.

For Cde 0, if two data sets were allocated to the same space and the overlapping extent is mapped by SYS1.DFDSS.DEFRAG.xxxxxxxx, rerun the DFDSS DEFRAG job. DFDSS will correct the error. Then rerun the job that was terminated with this message. If the overlapping extent is not mapped by SYS1.DFDSS.DEFRAG.xxxxxxxx, scratch one of the data sets allocated to the same space, and execute the job again.

For Cde 4, scratch or move the split-cylinder data set that is creating the error, and execute the job again.

Note: The volume can be used only in a DOS environment until the offending split-cylinder data set has been moved or scratched.

For Cde 8 or 12, convert the VTOC either by removing the modification to IGG0325Z or by resetting the DIRF bit to zero and setting the DOS bit to one in the format-4 DSCB (see the *DADSM Logic*), and allocating a non-ISAM data set to the volume.

Problem Determination: Table I, items 1, 4, 7d, 25b, 29.

IEC603I VTOC ERRORS MAY EXIST ON ddd,ser,cde,rsnc

Explanation: An unusual condition was encountered in the system routines that update the VTOC on unit ddd, volume ser, which caused the DIRF bit (bit 5 of DS4VTOCI in the format-4 DSCB of the volume) to be set to one, or caused active VTOC recording facility (VRF) data to be left in the VTOC index map, indicating that the VTOC may contain errors:

Code 0-- An I/O or unexpected CVAF error return code error occurred in the DADSM routines Allocate, Extend, Scratch or Partial Release. The routine terminated processing, thereby leaving the VTOC in a partially updated state.

Code 4-- The Scratch or Partial Release function of DADSM discovered that the space it was returning to the chain of Format-5 DSCBs which describe the free space on the volume was already present in a format-5 DSCB. Although Scratch or Partial Release was able to successfully process this invalid data, thereby correcting the situation, other problems may exist on the VTOC.

Code 8-- An I/O error or unexpected DVAF error return code occurred in the DADSM routines (Allocate, Extend, Scratch, Partial Release, Rename) during updating of the VTOC index or the VTOC on an indexed VTOC volume, thereby leaving the indexed VTOC in a partially updated state. DADSM processing is terminated.

There is only one decimal reason code rsnc associated with message IEC603I.

027 The index data set is full.

System Action: For codes 0 and 8, if the error occurred during allocation, the job is terminated. If the error occurred in the middle of a job extending the space allocated to a data set, or a job releasing unused allocated space while closing a data set, the job is abnormally terminated. If the error occurred while scratching or renaming a data set, an I/O error is returned. For code 0 the DIRF bit in the format-4 DSCB is set to one; for code 8 the VRF data set is left in the VTOC index map to indicate that Active VTOC Recording Facility (VTOC) may be in error. A system dump is taken if the cause of the error is an unexpected CVAF error return code.

If code is 4, VTOC updating continues, and if no further errors are encountered, the job continues processing.

The DIRF bit in the format-4 DSCB is set to one.

Operator Response: Report this message to the system programmer.

For error code 0 or 4, either message IEC602I or message IEC604I will be issued the next time allocation is attempted on this volume. For code 8, which refers to an indexed VTOC, message IEC605I will be issued when the next DADSM VTOC updating function (Allocate, Extend, Scratch, Partial Release, Rename) is performed.

Programmer Response: Some attempt should be made to analyze the state of the VTOC on the

affected volume. Consult *DADSM Logic* for procedures.

Problem Determination: Table I, items 1, 4, 7d, 25b, 29.

IEC604I VTOC CONVERT ROUTINE ENTERED ON ddd,ser,cde

Explanation: Space for a new data set or additional space for an old data set was requested on volume ser on unit ddd when either the DOS bit (bit 0 of DS4VTOCI) or the DIRF bit (bit 5 of DS4VTOCI) in the format-4 DSCB was found to be on by the space allocation routines. If cde is DOS, the DOS bit was on and the DIRF bit was not on; this indicates that a previous allocation on the volume was made under DOS or that an indexed VTOC was disabled leaving the DOS bit on. Certain control information needed by the OS DADSM routines is not maintained by the DOS DADSM routines or by the indexed VTOC routines, and thus must be established. If cde is DIRF, the DIRF bit was on and the DOS bit may or may not have been on; this indicates that the last time the volume was accessed by DADSM, the DADSM routines were prematurely interrupted, thus leaving the VTOC in a partially updated state; the fields not updated should be able to be reestablished by the VTOC conversion routine; if not, message IEC602I will be issued. If cde is DOS, the volume should be able to be identified as one having been in a DOS environment or an indexed VTOC environment. If cde is DIRF, either message IEC602I, IEC603I, or IEC999I should have previously appeared for the volume, or a system failure occurred while DADSM routines were processing the volume.

System Action: The VTOC is converted to reestablish certain control information necessary for the operation of the DADSM routines. The requested space is then allocated.

Programmer Response: None.

IEC605I DADSM VRF RECOVERY ROUTINE ENTERED ON ddd,ser,cde

Explanation: The VTOC recording facility (VRF) recovery routine is invoked to recover a DADSM function that was interrupted by a system failure or a permanent I/O error on device ddd, volume serial number ser. The functions for which recovery is attempted are Allocate, Extend, Scratch, Partial Release, and Rename. The interrupted function is indicated by the value of cde, as follows:

1. Allocate
2. Extend
3. Scratch
4. Partial Release
5. Rename
6. Function name from DF/DSS

System Action: The VRF data saved in the VTOC index map is used to recover the interrupted function. The interrupted function either is completed or it is backed out to allow the request which invoked the VRF recovery process to complete its processing.

Operator Response: Notify the system programmer.

IEC606I VTOC INDEX DISABLED ON ddd,ser,cde[,rba[secno,ofst]]

Programmer Response: Identify and correct the system problem or the I/O error that interrupted the DADSM function.

Explanation: The common VTOC access facility detected an error in VTOC index structure. The fields of the message text are:

ddd
device number

ser
volume serial number

cde
one of the following error codes:

- 129 The first high-level VIER indicated in the VTOC index map (VIXM) does not have the flag bit set to show that it is the first high-level VIER.
- 130 A horizontal or vertical VIER pointer is outside the RBA range of the VTOC index.
- 131 A vertical VIER pointer points to a VIR which is not a VIER. There is an invalid ID in the header.
- 132 A level N vertical index entry pointer points to a VIER that is not at level N-1.
- 133 A level N horizontal index entry pointer points to a VIER that is not at level N.
- 134 A horizontal VIER or map pointer points to a VIR which is not a VIER or map. There is an invalid ID in the header.
- 135 A horizontal map pointer points to a VIR that is not one of the first N VTOC index records (N is recorded in the VIXM field VIMRCDS); or the first record in the VTOC index is not a VIXM.
- 136 A level-1 index entry contains a CCHHR pointer which is outside the VTOC extent.
- 137 The first high-level VIER, as indicated in the VIB, does not have the flag bit set indicating that it is the first high-level VIER. The error is recovered from either by updating the VIB from the VIXM, or by changing the error code to 129.
- 138 The RBA of the VTOC index VIR does not match the RBA recorded in the header of the record.
- 139 The first record of a map (VIXM, VPSM, or VMDS) is not one of the first N VTOC index records. (N is recorded in the VIXM field VIMRCDS.)
- 140 The data set name in the level N+1 VIER entry is lower than the high key of the level N VIER pointed to by the level N+1 entry.

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- 141 The VTOC index structure error bit was found set to one in the first high-level VIER.
- 142 There is an I/O error indicating that the VTOC index is not formatted correctly.
- 143 Either the index bit is zero or the DOS bit is zero in the format-4 DSCB of a VTOC previously found to be an indexed VTOC.
- 144 There is no SYS1.VTOCIX.nnn data set name in a VTOC whose format-4 DSCB has the index bit on.
- 145 The data set name in a level N + 1 VIER entry is higher than the high key of the level N VIER pointed to by the level N + 1 VIER entry.
- 146 Four or more high-level VIERS were encountered.
- 147 There are too many levels in the VTOC index. The search list length, defined in the static text module ICVIXST0, was exceeded.
- 148 A VIER is invalid: the offset to the last section is invalid.
- 149 A VIER is invalid: the offset to the last entry in a section is invalid.
- 150 Initialization of the media manager failed.
- 151 A level 2 or higher VIER contains less than two entries.
- 152 RECOVER = YES was specified, but the static text module ICVIXST0 indicates that recovery is not permitted.
- 153 The format-4 DSCB on an indexed VTOC is written with either the index bit or the DOS bit zero.
- 154 A space map extends over more than 10 VTOC index records.
- 155 DSN was not found in the section with high key greater than or equal to the DSN key being searched. This section in the VIER is invalid.
- 156 The horizontal pointer of VIER1 points to a VIER2 whose high key is lower than or equal to the high key of VIER1.
- 157 Could not find an entry in a level-2 or higher VIER that matches the high key of the VIER.
- 158 The VIER header has an invalid section length or an invalid number of sections.
- 159 The first high-level VIER pointed to by the VIB has an invalid ID in the header.

rba

relative byte address of the VTOC index record (VIR) that contains a structure error indicated by cde.

secno

if the VIR is a VTOC index entry record (VIER), the number of the VIER section that contains the VIR pointing to the invalid record.

ofst

offset into the VIER section of the index entry pointing to the invalid record.

System Action: The VTOC index for the volume is disabled by setting the index bit in the format-4 DSCB to zero and, optionally, the structure error bit in the first high-level VIER to one, indicating an invalid VTOC index structure. A system dump is taken to the SYS1.DUMP data set, and an entry is made in the SYS1.LOGREC data set if the error code is not 141, 143, or 144.

At the next access by DADSM routines to allocate space on the volume, the VTOC is converted to non-indexed format and message IEC604I will be issued. When the system converts the VTOC to non-indexed format, the DOS bit is set to zero and message IEC604I is issued. If the volume is shared with another system, the other system will not reconvert the VTOC because both the DOS bit and the index bit are off. Instead, message IEC606I with error code 141 or 143 is issued and the VTOC is accessed as an OS VTOC.

Programmer Response: Examine the system dump and a print of the VTOC index, and use the information in message IEC606I to determine the cause of the VTOC index structure error.

Problem Determination: Table I, items 3, 7, 16, 18, 25b (VTOC), 26b (VTOC index), 29, 33.

IEC607I**SPACE NOT RELEASED ON ddd,ser,fcfn,dsn**

Explanation: While attempting to overwrite data for dsn, the scratch or partial release function was terminated due to an I/O error. In the message text, ddd is the device address, ser is the volume serial number and fcfn may contain a 1 for scratch or a 2 for partial release.

System Action: The system terminates the scratch or partial release function.

Operator Response: None.

Programmer Response: You may take either one of the following two actions:

1. Resubmit the request.
2. First overwrite any secure data or determine if you need erasure, second, resubmit the request without the erase option.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16 and 29. Table II, format 3.

IEC608I**DADSM FUNCTION DISABLED THE VTOC INDEX ON ddd,ser,cde,cchhr**

Explanation: The VTOC index on device ddd, volume serial number ser was disabled by the DADSM, Allocate, Extend, Scratch or Partial Release function because an error, indicated by cde, was detected. The error codes and the associated values of cchhr are as follows:

Code 4-- The Scratch or Partial Release function discovered that the space to be released is already described as free in the volume pack space map of the indexed VTOC. The cchhr is that of the format-1 DSCB that describes the data set to be scratched or released.

Code 8-- The Scratch or Partial Release function discovered that the DSCB to be released is already described as free in the VTOC map of DSCBs in the VTOC index. The cchhr is that of the format-1, format-2, or format-3 DSCB to be released.

Code 12-- The Scratch function discovered that the CCHHR retrieved from the VTOC index points to a DSCB whose data set name is different from the one retrieved from the index. The cchhr is that of the DSCB.

Code 16-- The Scratch function discovered that the data set to be scratched has more than 16 extents. The cchhr is that of the format-1 DSCB for the data set to be scratched.

Code 20-- The Allocate or Extend function discovered that a DSCB marked unallocated in the VTOC Index, indicating that the DSCB is a Format 0, is not a Format 0 DSCB. The cchhr is that of the DSCB.

System Action: The index bit in the format-4 DSCB is set to zero causing the VTOC index to be disabled and message IEC606I to be issued. For codes 4, 8, and 16, the request is processed without updating the format-5 DSCBs. If no further error is encountered, the job continues to run.

For codes 12 and 20, processing of the request is terminated with an I/O error return code, after disabling the VTOC index. The DOS bit is left on to cause the VTOC conversion routine to be called the next time the Allocate or the Extend function is invoked and message IEC604I to be issued.

Programmer Response: Take a print of the VTOC and the VTOC index to determine the cause of the error. The problem can be caused by the volume being processed on another system without Indexed VTOC support, without first converting the volume from an Indexed VTOC volume to a non-Indexed VTOC volume.

Problem Determination: Table I, items 1, 4, 7d, 25b, 29.

IEC609I

DADSM VRF RECOVERY ROUTINE DISABLED THE VTOC INDEX ON ddd,ser,fcfn,cde

Explanation: The DADSM VTOC recording facility (VRF) recovery routines detected an error in the VRF data in the VTOC index map during recovery of an interrupted DADSM function. The VTOC index is disabled on device ddd, volume serial number ser. The function the VRF recovery routine was trying to recover from is indicated by fcfn, as follows:

1. Allocate
2. Extend
3. Scratch
4. Partial Release
5. Rename
6. Function name from DF/DSS

The cde field contains one of the following error codes:

- 0 DSN in the format-1 DSCB is not the same as DSN in the VRF data.

- 4 The format-3 CCHHR in the format-1 or format-2 DSCB is not the same as the format-3 CCHHR in the VRF data.
- 8 The number of extents shown in the format-1 DSCB does not agree with the number of extents in the VRF data extent table.
- 12 The number of extents shown in the format-1 DSCB is less than the number of primary extents in the VRF data.
- 16 The CCHHR in the VTOC index for the format-1 DSCB is not the same as the format-1 CCHHR in the VRF data.
- 20 The VRF function code is invalid, or the module required for the function is not available.
- 24 An unexpected return code (4) was received from a CVAF call. The probable cause is erroneous VRF data.
- 28 An unexpected return code (4 or 12) was received from a CVAF call. The probable cause is a logic error in a VRF recovery routine.
- 32 The VRF recovery routine was called but no VRF data exists.
- 36 A format-2 CCHHR in VRF data does not point to a format-2 DSCB.
- 40 A format-3 CCHHR in VRF data does not point to a format-3 DSCB.
- 44 The format-2 CCHHR in the VRF data is not the same as the format-2 CCHHR in the format-1 DSCB.
- 48 The format-2 CCHHR is invalid. The data set organization is not ISAM.
- 52 The format-3 CCHHR in VRF data is invalid. There are less than four extents.
- 56 The format-3 CCHHR in VRF data is zero, but there are more than three extents.
- 60 The format-1 CCHHR in VRF data does not point to a format-1 DSCB for an Extend function.

System Action: The index bit in the format-4 DSCB is set to zero causing the VTOC index to be disabled and message IEC606I to be issued. If the current request is for the Allocate or the Extend function, the VTOC conversion routine is invoked to rebuild the format-4 and format-5 DSCBs and message IEC604I will be issued; the request is processed as a non-indexed VTOC request and if no further errors are encountered, the job continues to run. If the current request is Scratch, Partial, Release, or Rename, the request is processed and if no further errors are encountered, the job continues to run.

Programmer Response: Take a print of the VTOC index and analyze the data in the VTOC index map. Use the dump to determine the cause of the error in the VRF data.

Problem Determination: Table I, items 1, 4, 7d, 25b, 29.

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IEC613A – IEC704A

IEC613A **jjj,sss,ddd,ser TAPE POSITION ERROR - REPLY 'R' RETRY OR 'U' CONTINUE WITH ABEND**

Explanation: For step sss of job jjj, open processing is trying to position tape volume serial number ser on device ddd to a specific file in order to open that file. Open processing has retried positioning the tape to the correct file (at least once), but cannot find the file because the file is not known. Open processing issued this message to ask if it should retry positioning the tape to the correct file again.

Operator Response: If you wish open processing to retry positioning the tape to the correct file, enter REPLY xx, 'R'. Otherwise, to continue with the ABEND already in progress, enter REPLY xx, 'U'. xx is the message reply identification for this message.

Problem Determination: None.

IEC666I **jjj,ser[,ddd] MSS FAILURE IN func. CODE = hhh**

Explanation: The error occurred while the Mass Storage System (MSS) communications routine (SVC 126) was processing a request from DADSM. The fields of the message text are:

jjj

job name

ser

volume serial number

ddd

device number

func

MOUNT, DEMOUNT, ACQUIRE, or RELINQUISH

hhh

The MSSC (Mass Storage System Communicator) reason code. See the appropriate MSS messages manual for the meanings of the various hhh values.

System Action: Processing is terminated for this request; return code = 8.

Programmer Response: See the MSS messages manual for the programmer response for MSSC reason code hhh.

Problem Determination: See the MSS messages manual entry for MSSC reason code hhh.

IEC701D **M ddd, VOLUME TO BE LABELED ser**

Explanation: M indicates that a volume is to be mounted on device ddd. If ser is a 6-digit serial number, a standard label containing the serial number will be written on the volume. If ser is absent, a nonstandard label will be written on the volume.

Operator Response: For the first appearance of this message mount a volume on device ddd, ready the device, and enter REPLY xx, 'M'. The volume mounted should be a scratch volume, unless the programmer supplied a volume to be used. If this message is repeated immediately after message IEC702I, the system attempted to write a label on the volume but the label could not be verified. Inspect the tape for irregularities:

- If irregularities appear, remove the bad section of tape or, if the volume was a scratch volume,

substitute another volume. Then, mount the correct or substituted volume, ready the device, and enter REPLY xx, 'M'.

- If the irregularities are uncorrectable and the volume was supplied by the programmer, enter REPLY xx, 'S'.
- If no irregularities are found, mount the tape volume again, ready the device, and enter REPLY xx, 'M'.
- If only this message is repeated, enter REPLY xx, 'S'. Report the message sequence to the programmer, asking him to check the program for improper recording characteristics. If the program is not at fault, a customer engineer should be called to check the tape drive.

If this message is repeated immediately after message IEC703I a label cannot be written on the volume because the volume is file protected:

- If the volume is to be labeled, insert a file protection ring in the volume, mount the volume, ready the device, and enter REPLY xx, 'M'.
- If the volume is not to be labeled, demount the volume, mount a new scratch volume with a file protection ring, ready the device, and enter REPLY xx, 'M'.
- If only this message is repeated, enter REPLY xx, 'S'. Report the message sequence to the programmer.

Problem Determination: Table I, items 1, 2, 15, 28, 29.

IEC702I **ddd, VOLUME LABELS CANNOT BE VERIFIED**

Explanation: The system attempted to write a label on the volume on device ddd. The label could not be verified.

System Action: The system rewinds and unloads the volume. Immediately, or in a short time, the system issues message IEC701D which follows this message.

Operator Response: Respond as indicated for message IEC701D, which follows this message.

IEC703I **ddd, VOLUME IS FILE PROTECTED**

Explanation: The volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. A label cannot be written on the volume.

System Action: The system rewinds and unloads the volume. Immediately or in a short time, the system issues message IEC701D.

Operator Response: Respond as indicated for message IEC701D, which follows this message.

IEC704A **{L|L UVL|C|C UVL} ddd[,ser] [,labtyp] [,den] [,jjj,sss] [,dsn]**

Explanation: The message display may be in one of the following forms:

- If L appears in the message display then the tape volume on unit ddd requires label information. The label is to be written as the type labtyp in the density den.

- If **L UVL** appears in the message display then the tape volume on unit **ddd** is about to be rewritten on volume **ser**. Volume **ser** contains ISO/ANSI/FIPS Version 3 user volume label(s) that will be lost if the volume header label (VOL1) is rewritten. If this message is issued to rewrite a VOL1 label to a new density, the contents of the label will be unchanged from the contents currently on the volume.
- If **C** appears in the message display then the tape volume mounted on unit **ddd** is an ISO/ANSI/FIPS Version 1 (or other unsupported version level) volume that must have its label converted to the latest supported version level. You must supply label information to rewrite the volume header label (VOL1). The label is written as the type **labtyp** in the density **den**.
- If **C UVL** appears in the message display then the ISO/ANSI/FIPS tape volume mounted on unit **ddd** is about to be rewritten on volume **ser** and contains user volume labels (UVLs) that will be lost if the volume header label is rewritten.

The following fields may also appear in the message display:

- jjj** This indicates the job requesting the volume.
- sss** This indicates the job step requesting the volume.
- ser** If this appears in the message text, it indicates a specific volume serial was requested.
- dsn** This may appear if a MONITOR DSNNAME command is active. If this is the case, **dsn** indicates the data set requesting the volume.

Operator Response: If the message display contains **L** or **L UVL** there are a series of responses you may make. First, the following is a list of variables that you may use in your response:

- ser** This is the volume serial number and may contain up to 6 characters.
- ownername** This is the owner name or similar information which may contain up to 10 characters.

The following is a list of the possible responses you may make:

- If you need to label the volume as indicated, enter:
REPLY xx,'ser ,ownername '
- To reject the currently mounted volume and mount a new volume, enter:
REPLY xx,'M'
- If **ser** appears in the message text, the operator may allow the program to create a vol label with the serial number (which was specified in the message text) and an owner name by entering:
REPLY xx,'U [,ownername]'

Caution: Enter REPLY 'U' only if **ser** appears in the message text. Otherwise, the volume will be labeled with the serial number 'U'.

- If **L UVL** appears in the message display and you want the system to proceed when rewriting the VOL1 label enter:

REPLY xx,'U'

Operator Response: If the message display contains **C** or **C UVL** there are a series of responses you may make. First, the following is a list of variables that you may use in your response:

- volser** This is the volume serial number and may contain up to 6 characters.
- ownerinfo** This is the owner information and may be up to 14 characters long.
- a** This is the volume access code and is a 1 character code from A to Z.

The following is a list of the possible responses you may make:

- If you want to use the serial number, owner information and access code from the old label for the new label, enter:

REPLY xx,'U'.

The system will then copy the old label into the new label, except for version level which must reflect the latest supported level.

- If you want to specify different owner information and/or an access code, enter:

REPLY xx,'U,[ownerinfo][,a]'

In this instance, the system uses the serial number from the old volume label. If you skip one of these fields, the value used in the old label will be used for the new label.

- If you want to cause the volume to be demounted, followed by a label rewrite abend for the job step requesting the volume, enter:

REPLY xx,'M'.

- If you want to use the volume, enter:

REPLY xx,'volser[,ownerinfo][,a]'

The owner information and access code are optional but will be left blank if you do not supply them.

- If you want to reject the volume, enter:

REPLY xx,'M'.

The volume will be demounted, followed by a mount request for another scratch volume.

- If **C UVL** appears in the message text, a reply other than 'M' allows the system to proceed with the rewriting of the VOL1 label, but all user volume labels will be destroyed.

IEC7051 TAPE ON ddd,ser [IS],[labtyp],den BPI [,jjj,sss] [,dsn]

Explanation: The labels of the tape volume whose serial number is **ser**, on unit **ddd**, have been rewritten to conform to the label type indicated by **labtyp**: either SL, AL, NL, or NSL in the density indicated by **den**.

jjj indicates the job requesting the volume and **sss** indicates the job step requesting the volume.

If a MONITOR DSNNAME command is active, dsn may appear and indicates the data set requesting the volume.

System Action: The job step continues processing.

Operator Response: Record the indicated information for use of the volume in conjunction with subsequent requests.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 13, 15, 16, 29. Table II, format 3.

IEC801I **lna THRESHOLD TRANS = nnn DC = nnn IR = nnn TO = nnn**

Explanation: During BTAM, certain errors occurred before a specified transmission count was reached on a line.

The errors are data check errors, intervention required errors, or non-text time-out errors.

In the message text, the fields are:

lna
Line address, in hexadecimal.

TRANS = nnn
Number of transmissions, in decimal, before an error threshold was reached.

DC = nnn
Number of data check errors, in decimal, in the above number of transmissions.

IR = nnn
Number of intervention required errors, in decimal, in the above number of transmissions.

TO = nnn
Number of non-text time-out errors, in decimal, in the above number of transmissions.

Operator Response: None.

IEC802I **lna LINE TOTALS TRANS = nnn DC = nnn IR = nnn TO = nnn**

Explanation: This message is produced, at the request of the user, to indicate total counts for a line being used in BTAM processing.

In the message text, the fields are:

lna
Line address, in hexadecimal.

TRANS = nnn
Total number of transmissions, in decimal.

DC = nnn
Total number of data check errors, in decimal.

IR = nnn
Total number of intervention required errors, in decimal.

TO = nnn
Total number of non-text time-out errors, in decimal.

Operator Response: None.

IEC804A **lna CONTROL UNIT NOT OPERATIONAL REPLY CONT OR POST**

IEC804A **lna DEVICE NOT OPERATIONAL REPLY CONT POST OR DROP**

Explanation: A not operational SIO condition occurred in a line during BTAM processing. In the message text, lna is the line address.

Operator Response: Make sure the control unit is operational. Enter one of the following replies:

- **REPLY xx,'CONT'**. The system retries the condition. If the retry is successful, processing continues. If the retry is not successful, If **CONTROL UNIT NOT OPERATIONAL** appears in the message text, this message is issued again.
- **REPLY xx,'POST'**. The operation is posted complete with error. The not-operational SIO bit will be on in the DECERRST field of the (DECB) data event control block.
- **REPLY xx,'DROP'**. The DROP reply discontinues issuance of messages for the duration of open processing.

If a reply is not entered before the requesting job is canceled, the system may enter wait state. If the problem recurs, contact your hardware support personnel.

Problem Determination: Table I, items 2, 30.

IEC805I **I/O ERROR - CHECKPOINTS TERMINATED**

Explanation: An uncorrectable input/output error occurred while writing the current checkpoint record in the checkpoint data set. The record could not be written.

System Action: Processing continues, but no checkpoint records are written.

Operator Response: Either allow the job to continue, or restart the job at the last checkpoint by reloading the program. If the job is restarted, processing will continue as usual and checkpoint records will be written as specified.

Problem Determination: Table I, items 1, 2, 3, 5a, 15, 29.

IEC807I **cuu ONLINE TEST xx yy tt nnn id**

Explanation: This message reports the results of an online test in which BTAM sends test messages to a remote computer or terminal, or in which BTAM sends a request-for-test message specifying a test type (X field) of 0. This message appears once for each online test, following transmission of all requested test messages.

In the message text, the fields are:

cuu
Address of the communication line (channel and unit).

xx
Test type specified in the request-for-test message.

yy
Number of test message transmissions requested, as specified by the Y field of the request-for-test message.

tt Number of time-out errors that occurred during the test message transmissions.

nnn Number of NAK responses to BTAM-transmitted test messages.

id Terminal identification sequence of the terminal to which the BTAM-transmitted test message or request-for-test message was sent, for multipoint terminals only.

Operator Response: None.

IEC808I cuu ONLINE TEST xx nnn tt ll dd

Explanation: This message reports the results of an online test in which BTAM receives test messages from a remote computer or terminal. This message appears once for each online test, following receipt of all test messages from the remote computer or terminal.

In the message text, the fields are:

cuu Address of the communication line (channel and unit).

xx Test type specified in the request-for-test message received from the remote computer or terminal.

nnn Number of test message transmissions received from the remote computer or terminal.

tt Number of time-out errors that occurred while receiving test messages.

ll Number of lost-data errors that occurred while receiving test messages.

dd Number of data checks that occurred while receiving test messages.

Operator Response: None.

IEC809I lna CONTROL UNIT NOT OPERATIONAL

Explanation: This message indicates that a not operational SIO condition occurred in a line during BTAM processing. In the message text, lna is the line's address.

Operator Response: Reactivate the appropriate control unit.

IEC815I $\left\{ \begin{array}{l} \text{cuu tttt yy ERS z} \\ \text{cuu xx tttt THRESHLD} \\ \text{cuu xx tttt yy eeee ZZZZ yy eeee ZZZZ yy eeee ZZZZ} \\ \text{yy eeee ZZZZ} \\ \text{cuu ww tttt eeeeeee ZZZZ eeeeeee ZZZZ eeeeeee ZZZZ} \\ \text{eeeeeee ZZZZ} \end{array} \right\}$

Explanation: This message provides the results of a scan of the error file of an IBM 2715 Transmission Control Unit. The scan occurs when the error threshold for one of the area stations connected to the 2715 is exceeded (threshold value is eight) or when manually requested at the 2715, the 2740

terminal attached to the 2715, or the central system console. BTAM prints the message on the master console, the teleprocessing console, or the system maintenance console, depending on the routing code specified at the 2715.

In all four formats of the message text, cuu is the address in EBCDIC of the communications line (channel and unit), xx is the address in hexadecimal of the area station for which the error scan is reported, tttt is the time (0001 - 2400) when the error occurred, and ww is the address in hexadecimal of a particular adapter within the 2715. Fields appearing uniquely within a message format are described below.

The first format of the message is issued when five or more of the eight errors involved a particular one of the devices attached to the area station. In the message text, yy is the address in hexadecimal of the device for which the errors occurred, and z is the number of errors (from decimal 5 to 8) that occurred for the device.

The second format of the message indicates that the threshold value of eight has been reached for the area station whose address is xx, but that no one device attached to the station accounted for as many as five of the errors.

The third format of the message is issued twice whenever an error scan for a particular area station is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The address of device yy for which the error data eeee was recorded at time zzzz is given four times in each message; the two messages together thus provide information about the eight most recent error occurrences for area station xx.

The fourth format of the message is issued twice whenever an error scan for a particular 2715 adapter is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The error data eeeeeee for adapter ww recorded at time zzzz is given four times in each message; the two messages together thus provide information about the eight most recent error occurrences for adapter ww.

Operator Response: None.

IEC900I INVALID ABEND CODE PASSED TO MODULE mod

Explanation: The module mod is an OPEN/CLOSE/EOV Problem Determination routine. It did not recognize the passed abnormal termination code, so it issued an Fxx abnormal termination code where xx =

13 for OPEN
14 for CLOSE
17 for CLOSE TYPE = T
37 for EOV.

Register 12 contains the abnormal termination code passed to the module.

System Action: The task is terminated.

Programmer Response: None.

Problem Determination: Table I, items 1, 4, 5a, 7b, 16, 29. Table II, Format 3.

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IEC902I 235,rc,cc,ijj,sss,ddn

Explanation: An error occurred during processing associated with SVC 53, which gets and releases exclusive control of a resource associated with a BDAM data set. The task recovery routine for this SVC determined that a control block required as input to SVC 53 was not in the user's region and/or key. (The control block is identified by rc.) In the message text, 235, rc, cc, associates this message with system completion code 235, with return code rc, and with cleanup code cc. Other fields in the message text are:

ijj job name
sss step name
ddn DDname

The values of rc identify the control block found to be outside the user's key or region. They are as follows:

Return Code	Meaning
01	IOB (nothing was written to the GTF data set).
02	DCB (nothing was written to the GTF data set).
03	BLKREF address - applicable only if SVC 53 was entered because a RELEX macro was issued (nothing was written to the GTF data set).
04	DECB (nothing was written to the GTF data set).
05	DEB (nothing was written to the GTF data set).
06	Next IOB to get exclusive control (nothing was written to the GTF data set).
84	DECB (the IOB was written to the GTF data set).
85	DEB (the DCB was written to the GTF data set).
86	Next IOB to get exclusive control (the entry in the exclusive control list that's related to this IOB was written to the GTF data set).

The values of cc identify the results of attempting to clean up the processing left in partial stages of completion by SVC 53.

The values and meanings are as follows:

Cleanup Code	Meaning
01	Cleanup not attempted. The request for which the SVC was entered is unfulfilled. All control blocks remain as they were before the SVC was issued.
02	An attempt was made to complete processing if the current request was to get or release exclusive control. If a user

error was determined, the current request was removed from all queues. If not a user error, processing of the current request was completed. The DCB associated with the request should be reusable.

- 03 A request to get exclusive control failed; the block was not enqueued. An attempt was made to restore all control blocks to the state they were in before SVC 53 was issued. The DCB associated with the request should be reusable.
- 04 No cleanup was done for the request to get or release exclusive control. It was determined that none was required, as all SVC processing had completed. The DCB associated with the request should be reusable.
- 05 No cleanup was done for the request to get or release exclusive control. The abnormally terminating task is enqueued on a block which is inaccessible to other users. Use of exclusive control is unpredictable.
- 06 No cleanup was attempted for the request to release exclusive control. The block for which the abnormally terminating task had control was dequeued from the system queue but remains on the exclusive control list. This block is inaccessible to other users.
- 07 Cleanup not attempted because DEBCHK found an invalid DEB, audit trail bit was invalid, or the condition is unknown. Results are unpredictable.
- 08 While cleaning up exclusive control resources, the recovery routine program checked. Condition is unknown. Results of future use of the exclusive control function with this DCB are unpredictable.

System Action: Those control blocks indicated by the particular return code (as specified above) are written to the GTF data set. The task is terminated.

Programmer Response: Ensure the validity of the control block from which the address of the block in error was taken. For example, ensure that the input specified in the RELEX macro instruction, the BLKREF address, is valid and in the correct format and that the DCB address passed is valid. If the RELEX macro was not issued, ensure that the IOB related to the exclusive control request is correct and contains the correct DECB address (IOBECBPT) and DCB address (IOBDCBPT). In addition, check the DCBDEBAD field in the DCB to ensure that it contains the correct DEB address, and that the DEB (DEBDCBAD) points back to this DCB. If the next IOB is found to be in error, find the entry in the read exclusive list associated with the requested block and ensure that the RDXIOBUQ field is correct.

Problem Determination: Table I, items 4, 5b, 16, 29. Table II, item 3.

IEC903I 135,rc,cc,ijj,sss,ddn

Explanation: An error occurred during processing associated with SVC 53, which gets and releases exclusive control of a resource associated with a BDAM data set. The task recovery routine for this SVC determined that all user control blocks required as input to the SVC were in the user's region and key; hence the error could not be ascribed to any user control block. In the message text, 135, rc and cc, associate this message with system completion code 135, return code rc, and cleanup code cc. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname

The values of rc indicate the results of a system dump request to the SYS1.DUMP data set. The values and their meanings are as follows:

Return Code	Meaning
04	SYS1.DUMP taken successfully.
08	Partial SYS1.DUMP taken.
0C	SYS1.DUMP unsuccessful.

The values of cc identify the results of attempting to cleanup the processing left in partial stages of completion by SVC 53.

Their values and meanings are as follows:

Cleanup Code	Meaning
01	Cleanup not attempted. The request for which the SVC was entered is unfulfilled. All control blocks remain as they were before the SVC was issued.
02	An attempt was made to complete processing if the current request was to get or release exclusive control. If a user error was determined, the current request was removed from all queues. If not a user error, processing of the current request was completed. The DCB associated with the request should be reusable.
03	A request to get exclusive control failed; the block was not enqueued. An attempt was made to restore all control blocks to the state they were in before SVC 53 was issued. The DCB associated with the request should be reusable.
04	No cleanup was done for the request to get or release exclusive control. It was determined that none was required, as all SVC processing had completed. The DCB associated with the request should be reusable.
05	No cleanup was done for the request to get or release exclusive control. The abnormally terminating task is enqueued on a block which is inaccessible to other users. Use of exclusive control is unpredictable.

- 06 No cleanup was attempted for the request to release exclusive control. The block for which the abnormally terminating task had control was dequeued from the system queue but remains on the exclusive control list. This block is inaccessible to other users.
- 07 Cleanup not attempted because DEBCHK found an invalid DEB, audit trail bit was invalid, or the condition is unknown. Results are unpredictable.
- 08 While cleaning up exclusive control resources, the recovery routine program checked. Condition is unknown. Results of future use of the exclusive control function with this DCB are unpredictable.

System Action: A system dump is taken to SYS1.DUMP data set and the task is terminated.

Programmer Response: None.

Problem Determination: Table I, items 4, 5a, 13, 16, 29.

IEC904I 239,rc,cc,ijj,sss,ddn

Explanation: An error occurred during processing associated with SVC 57, which frees a buffer or extends the unscheduled list (via a FREEDBUF macro issued either by the user or by the system). The BDAM task recovery routine for this SVC determined that a control block required as input to SVC 57 was not in the user's region and/or key. (The control block is identified by rc.) In the message text, 239, rc and cc associate this message with system completion code 239, with return code rc, and with the cleanup code cc. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname

The values of rc identify the control block found to be outside the user's region or key. They are as follows:

Return Code	Meaning
01	DCB (nothing was written to the GTF data set).
02	DECB (nothing was written to the GTF data set).
03	BCB (nothing was written to the GTF data set).
04	USL (nothing was written to the GTF data set).
05	Next IOB to get a buffer (nothing was written to the GTF data set).
82	DECB (the DCB was written to the GTF data set).
83	BCB (the DCB and DECB were written to the GTF data set).

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- 84 USL (the DCB, DECB, and BCB were written to the GTF data set).
- 85 Next IOB to get a buffer (the DCB, DECB, and BCB were written to the GTF data set).

The values of cc identify the results of attempting to clean up the processing left in partial stages of completion by SVC 53.

Their meanings are as follows:

Cleanup

Code	Meaning
01	Cleanup was unsuccessful. While attempting to clean up the buffer and IOB queues the recovery routine program checked. Results of future use of dynamic buffering with this DCB are unpredictable.
02	Cleanup was successful. The DCB with dynamic buffering should be reusable.
03	Cleanup not attempted. It was determined unnecessary as all processing was completed before the abnormal termination. The DCB with dynamic buffering should be reusable.
04	Cleanup not attempted because DEBCHK found an invalid DEB or the audit trail bit was invalid. Results of future use of dynamic buffering with this DCB are unpredictable.

System Action: Those control blocks indicated by the particular return code (as specified above) are written to the GTF data set. The task is terminated.

Programmer Response: Ensure the validity of the control block from which the address of the block in error was taken. The DECB and DCB were specified in the FREEDBUF macro as input to the SVC. Ensure that the DCBBUFCB field in the DCB contains the correct address of the buffer control block and the DCBDYNB field contains the correct address of the unscheduled list (if address space is virtual). The BCB or USL contain the address of the next IOB waiting to get a buffer, if one was not available. Ensure that this address has not been overlaid. Ensure also that the input DECB contains the address of the buffer being freed (DECAREA field) and, if a buffer was requested for keys also, that the DECKYADR field contains the correct address.

Problem Determination: Table I, items 4, 5b, 16, 29. Table II, item 3.

IEC905I 139,rc,cc,ijj,sss,ddn

Explanation: An error occurred during the processing associated with SVC 57, which frees a buffer or extends the unscheduled list (via the FREEDBUF macro issued by either the user or the system). The BDAM task recovery routine for this SVC determined that all user control blocks required as input to the SVC were in the user's region or key; hence the error could not be ascribed to any user control block. In the message text, 139, rc and cc associate this message with system completion code 139, return code rc, and with

cleanup code cc. Other fields in the message text are:

ijj job name

sss step name

ddn DDname

The values of rc indicate the results of a system dump request to the SYS1.DUMP data set. They are as follows:

Return

Code	Meaning
04	SYS1.DUMP taken successfully.
08	Partial SYS1.DUMP taken.
0C	SYS1.DUMP unsuccessful.

The values of cc identify the results of attempting to clean up the processing left in partial stages of completion by SVC 53.

They are as follows:

Cleanup

Code	Meaning
01	Cleanup was unsuccessful. While attempting to clean up the buffer and IOB queues the recovery routine program checked. Results of future use of dynamic buffering with this DCB are unpredictable.
02	Cleanup was successful. The DCB with dynamic buffering should be reusable.
03	Cleanup not attempted. It was determined unnecessary as all processing was completed before the abnormal termination. The DCB with dynamic buffering should be reusable.
04	Cleanup not attempted because DEBCHK found an invalid DEB or the audit trail bit was invalid. Results of future use of dynamic buffering with this DCB are unpredictable.

System Action: A system dump is taken to the SYS1.DUMP data set and the task is terminated.

Programmer Response: Notify the system programmer.

Problem Determination: Table I, items 4, 5a, 13, 16, 29.

IEC906I

POSSIBLE SYSTEM ERROR DETECTED BY SYNADAF. SVC DUMP TRIED, RC = rc.

Explanation: An error occurred during the execution of SYNADAF or SYNADRLS. The SYNADAF task recovery routine received control during task termination after some other recovery routine failed. The return code, RC = rc, indicates the results of an SVC Dump attempt as follows:

- 0 - Successful dump.
- 4 - Partial dump.
- 8 - No dump.

System Action: The SVC Dump written to the SYS1.DUMP data set or user-designated data set contains the CPU prefixed storage area, nucleus,

system queue area and the user's address space. The dump header contains the job name, step name, procedure step name, system completion code, and the SYNADAF task recovery routine name, IGCT006H. A software error record is written to SYS1.LOGREC and task termination continues.

Programmer Response: Rerun the job step.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29.

IEC907I 744 SYNADAF ERROR, SVC DUMP TRIED, RC = rc.

Explanation: An error occurred during the execution of SYNADAF or SYNADRLS. The SYNADAF task recovery routine received control during task termination after a program check in a SYNADAF or SYNADRLS module. In the message text, 744 associates this message with system completion code 744.

The return code, RC = rc indicates the results of an SVC Dump attempt as follows:

- 0 - Successful dump.
- 4 - Partial dump.
- 8 - No dump.

System Action: The SVC Dump written to the SYS1.DUMP or user-designated data set contains the CPU prefixed storage area, nucleus, system queue area, and the user's address space. The dump header contains the job name, step name, procedure step name, system completion code 744, and the SYNADAF first load module name, IGC006H. A software error record is written to SYS1.LOGREC. Task termination continues.

Programmer Response: Rerun the job step.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29.

IEC908I 112-rc,jjj,sss,ddn

Explanation: Invalid input was passed to SVC 18 by the BLDL or FIND macro instruction. In the message text, 112-rc associates this message with system completion code 112 and with return code rc. Other fields in the message text are as follows:

jjj

job name

sss

step name

ddn

DDname, if a valid DCB in the user's region was passed to SVC 18; or SYSDCB, if a DCB address of 0, an invalid DCB, or the address of the system LINKLIB or SVCLIB DCB was passed to SVC 18.

The values of rc and their meanings are as follows:

Return

Code	Meaning
01	Parameter list not in caller's storage.
02	DCB not in caller's storage.
03,13	DCB does not point to a valid DEB. If rc is 13, the DCB is dumped to the GTF data set.

04,14 A program check occurred in the POINT routine. If rc is 14, the DCB is dumped to the GTF data set.

System Action: An attempt is made to trace the DCB to the GTF trace data set. The task is terminated.

Programmer Response: Probable user error. Correct the BLDL or FIND macro instruction. For return codes 03, 13, 04, and 14, make sure that the DCB is not being overlaid, in particular the fields DCBDEBAD and DCBPOINT. Recompile the program and rerun the job.

Problem Determination: Table I, items 1, 2, 5b, 15, 16, 29. Table II, format 3.

IEC909I 212-rc,jjj,sss

Explanation: An error occurred during the execution of SVC 18 which could not be attributed to invalid user input. In the message text, 212-rc associates this message with system completion code 212 and return code rc. The values of rc and their meanings are as follows:

- 01 - A dump was taken to the SYS1.DUMP data set.
- 02 - A partial dump was taken to the SYS1.DUMP data set.
- 03 - No dump was taken to the SYS1.DUMP data set.

System Action: An SVC Dump was attempted. A software error record was written to SYS1.LOGREC and the task is terminated.

Programmer Response: Make sure that the BLDL or FIND macro instruction is correctly coded, and that the parameter list and control blocks involved are not modified by the program during the execution of SVC 18.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29.

IEC910I 215-rc,x,jjj,sss,ddn

Explanation: The error occurred during the execution of SVC 21 (STOW). In the message text, 215-rc associates this message with system completion code 215 and with return code rc. Other fields in the message text are:

x

GTRACE indicator

- 0 - A trace record has been written to the SYS1.TRACE data set.
- 1 - An unsuccessful attempt was made to trace data; GTRACE was not active.
- 2 - An unsuccessful attempt was made to trace data; the GTRACE buffers were full.
- 3 - No information has been traced.

jjj

job name

sss

step name

ddn

DDname or ***** if unable to locate the DDname.

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The values of rc and their meanings are as follows:

Return Code	Meaning
01	The DCB whose address was supplied in register 1 is not in the caller's region.
02	The DCB does not point to a valid DEB, or the DEB does not point back to the DCB.
03	The DCB contains an invalid entry pointer to the device characteristics table.
04	The parameter list whose address was supplied in register 0 is not in the caller's region.

System Action: If the DCB is in the caller's region, an attempt is made to trace it to the GTF trace data set. The task is terminated.

Programmer Response: Probable user error. For return codes 01, 02, and 03, verify that register 1 contained the correct DCB address prior to issuing SVC 21 and that the DCB has not been overlaid since being opened. For return code 04, verify that register 0 contained the correct parameter list address and that the list is within the caller's region prior to issuing SVC 21.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 29. Table II, format 3.

IEC911I 315-rc, jii, sss, ddn

Explanation: An error occurred during the execution of SVC 21 (STOW) which could not be attributed to invalid user input. In the message text, 315-rc associates this message with system completion code 315 and with return code rc from SVC Dump. Other fields in the message text are as follows:

jii
job name

sss
step name

ddn
DDname or ***** if unable to locate the DDname.

The values of rc and their meanings are as follows:

Return Code	Meaning
01	SDUMP successfully completed.
02	The dump data set contains a partial dump.
03	Unable to dump.

System Action: An SVC Dump is issued. A software error record is written to SYS1.LOGREC and the task is terminated.

Programmer Response: Make sure that the STOW macro instruction is correctly coded, and that the parameter list and DCB involved are not modified by your program during the execution of SVC 21.

Problem Determination: Table I, items 1, 2, 3, 7ab, 11, 13, 15, 18, 29.

IEC912I 118-rc, jii, sss, ddn

Explanation: Invalid parameters were passed to DEVTYPE (SVC 24). In the message text, 118-rc associates this message with system completion code 118 and with return code rc. Other fields in the message text are as follows:

jii
job name

sss
step name

ddn
DDname of ***** if no valid DDname is passed to DEVTYPE.

The values of rc and their meanings are as follows:

Return Code	Meaning
01	The ddname, whose address was supplied in register 1 is not in the caller's region.
02	The output area whose address was supplied in register 0 is not in the caller's region.

System Action: The task is terminated.

Programmer Response: Probable user error. Correct the DEVTYPE macro instruction, recompile the program, and rerun the job step.

Problem Determination: Table I, items 1, 3, 5b, 15, 16, 29.

IEC913I 218-rc, jii, sss, ddn

Explanation: An error occurred during the execution of SVC 24 (DEVTYPE) which could not be attributed to invalid user input. In the message text, 218-rc associates this message with system completion code 218 and with return code rc. Other fields in the message text are:

jii
job name

sss
step name

ddn
DDname

The values of rc and their meanings are as follows:

Return Code	Meaning
01	A dump was taken to the SYS1.DUMP data set.
02	A partial dump was taken to the SYS1.DUMP data set.
03	No dump was taken to the SYS1.DUMP data set.

System Action: An SVC Dump is issued. A software error record is written to SYS1.LOGREC and the task is terminated.

Programmer Response: Make sure that the DEVTYPE macro instruction is correctly coded, and that the areas passed to DEVTYPE are not freed by your program during the execution of SVC 24.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29.

IEC914I 119-rc,ijj,sss,ddn

Explanation: Invalid input was passed to SVC 25 (track balance). In the message text, 119-rc associates this message with system completion code 119 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname

The values of rc and their meanings are as follows:

Return Code	Meaning
01	The DCB is not in the caller's region.
02,12	The DCB does not point to a valid DEB. If rc is 12, the DCB is traced to the GTF data set.
03,13	The IOB address (pointed to by DCBIOBAD) is not in the caller's region. If rc is 13, the DCB is traced to the GTF data set.
04,14	The channel program address (pointed to by IOBSTART) is not in the caller's region. If rc is 14, the DCB and IOB are traced to the GTF data set.

System Action: An attempt was made to trace pertinent control blocks to the GTF trace data set and the task is terminated.

Programmer Response: Probable user error. Make sure that your program does not overlay the DCB and IOB fields described by the error code. Correct the error and rerun the job step.

Problem Determination: Table I, items 1, 3, 5b, 16, 29. Table II, format 3.

IEC915I 219-rc,ijj,sss,ddn

Explanation: An error occurred during the execution of SVC 25 which could not be attributed to invalid user input. In the message text, 219-rc associates this message with system completion code 219 and with return code rc. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname

The values of rc and their meanings are as follows:

Return Code	Meaning
01	A dump was taken to the SYS1.DUMP data set.

- 02 A partial dump was taken to the SYS1.DUMP data set.
- 03 No dump was taken to the SYS1.DUMP data set.

System Action: The system issues an SVC Dump, writes a software error record to SYS1.LOGREC, and the task is terminated.

Programmer Response: Make sure that your program does not alter the DCB or IOB during execution of SVC 25.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29. Table II, format 3.

IEC916I 145-rc,x,ijj,sss,ddn

Explanation: The error occurred during execution of SVC 69 (backspace). In the message text, 145-rc associates this message with system completion code 145 and with return code rc. Other fields in the message text are:

- x**
GTRACE indicator
- 0 - A trace record has been written to the SYS1.TRACE data set.
- 1 - An unsuccessful attempt was made to trace data; GTRACE was not active.
- 2 - An unsuccessful attempt was made to trace data; the GTRACE buffers were full.
- 3 - No information has been traced.

ijj
job name

sss
step name

ddn
DDname, or ***** if unable to locate the DDname.

The values of rc and their meanings are as follows:

Return Code	Meaning
01	The DCB whose address was supplied in register 1 is not in the caller's region.
02	The DCB does not point to a valid DEB or the DEB does not point back to the DCB.
03	The device type field in the DCB is invalid.
04	The DCB contains an invalid entry pointer to the device characteristics table.
05	Normal scheduling; the DCB does not point to a valid IOB or the IOB pointed to by the DCB does not point to a valid IOB within the caller's region.
06	Chained scheduling; the DCB does not point to a valid main IOB within the caller's region.
07	Chained scheduling; The DCB, or the ICB pointed to by the DCB, does not point to a valid ICB within the caller's region.

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08 Chained scheduling; the ICBs are not correctly chained together or the value of DCBNCP is less than the number of ICBs. Normal scheduling; same error in IOBs for chained scheduling.

System Action: The backspace task recovery routine has been invoked. If the caller's DCB, main IOB, and first ICB for chained scheduling, or first IOB for normal scheduling are in his region, an attempt was made to trace them to the SYS1.TRACE data set.

Programmer Response: Probable user error. Verify that register 1 contained the correct DCB address prior to issuing BSP and that the DCB has not been overlaid since being opened. If the DCB is valid, verify that it contains the correct IOB and/or ICB addresses and that neither the IOBs and/or the ICBs have been overlaid.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 29. Table II, format 3.

IEC917I 245-rc,ijj,sss,ddn

Explanation: An error occurred during the execution of SVC 69 (backspace) which could not be attributed to invalid user input. In the message text, 245-rc associates this message with system completion code 245 and with return code rc from SVC Dump. Other fields in the message text are:

ijj
job name

sss
step name

ddn
DDname, or ***** if unable to locate the DDname.

The values of rc and their meanings are as follows:

Return Code	Meaning
01	SDUMP successfully completed.
02	The dump data set contains a partial dump.
03	Unable to dump.

System Action: The backspace task recovery routine has been invoked. Low core and the caller's region have been dumped to the SYS1.DUMP data set. The caller's input register 1 and his DCB have been written to the SYS1.LOGREC data set.

Programmer Response: Make sure that the BSP macro instruction is correctly coded and that the DCB and the IOBs and/or ICBs for the file being processed are not overlaid by your program during the execution of SVC 69.

Problem Determination: Table I, items 1, 2, 3, 7ab, 11, 13, 15, 18, 29.

IEC918I cde-xy,ijj,sss,ddn

Explanation: An error occurred during the execution of SETPRT. The fields in the message text are:

cde
System completion code 151, 251, 351, or 451. See the description of the appropriate system

completion code for an explanation of its meaning.

x

Reason codes:

With 451 completion codes

- 1 DCB EXLST pointer did not pass validity checking.
- 2 IOBs/ICBs did not pass validity checking.
- 3 DEB did not pass validity checking.
- 4 DCB did not pass validity checking.

With 251 completion codes

- 1 Exit list entry invalid.
- 2 FCB image invalid.
- 3 User-provided image did not pass validity checking.
- 4 Message area did not pass validity checking.

With 351 completion codes converted from SDUMP SVC

- 1 Successful SDUMP.
- 2 Partial SDUMP.
- 3 Unsuccessful SDUMP.

y

GTRACE code:

- 1 GTRACE successful with 151, 251 and 451 completion codes.
- 2 GTRACE unsuccessful with 151, 251 and 451 completion codes.
- 0 with 351 completion codes.

ijj

job name

sss

step name

ddn

DDname

System Action: The task is terminated. See the system action for the appropriate system completion code.

Programmer Response: See the appropriate system completion code.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29. Table II, format 3.

IEC919I 169-rc,ijj,sss

Explanation: The error occurred during the execution of IMGLIB with the CLOSE option. The DCB address passed to IMGLIB in register 1 was invalid. In the message text, 169-rc associates this message with system completion code 169 and with return code rc. Other fields in the message text are:

ijj

job name

sss

step name

The values of rc and their meanings are as follows:

Return Code **Meaning**

- 01 DCB address is outside of the user's region.

02 The DCB does not point to a valid DEB, or the DEB does not point back to the DCB.

03 The DCB does not point to a valid DEB, or the DEB does not point back to the DCB; the DCB was written to the GTF trace data set.

System Action: For return code 03, the DCB is written to the GTF data set. For other return codes, no data is traced and the task is terminated.

Programmer Response: Probable user error. Make sure that the IMGLIB CLOSE macro instruction is correctly coded. Make sure that the DCB address passed to IMGLIB is the same address returned to your program by a previous IMGLIB OPEN.

Problem Determination: Table I, items 1, 3, 5b, 15, 16, 29. Table II, format 3.

IEC920I 269-rc,iii,sss

Explanation: An error occurred during the execution of IMGLIB OPEN or IMGLIB CLOSE which could not be attributed to invalid input to IMGLIB. In the message text, 269-rc associates this message with system completion code 269 and with return code rc. Other fields in the message text are:

iii
job name

sss
step name

The values of rc and their meanings are as follows:

Return Code	Meaning
01	A dump was taken to the SYS1.DUMP data set.
02	A partial dump was taken to the SYS1.DUMP data set.
03	No dump was taken to the SYS1.DUMP data set.

System Action: The system issues an SVC Dump and writes a software error record to SYS1.LOGREC. The task is terminated.

Programmer Response: Make sure that the IMGLIB macro instruction is correctly coded.

Problem Determination: Table I, items 1, 3, 5a, 15, 16, 18, 29.

IEC921I cde-rc,iii,sss,ddn

Explanation: A trace record has been written to the GTF trace data set. In the message text, cde-rc associates this message with system completion code cde and with return code rc. For a description of the data which has been traced refer to the description of the completion, its corresponding return code, and the associated message. Other fields in the message text are:

iii
job name

sss
step name

ddn
DDname

System Action: A trace record is written to the GTF trace data set.

Programmer Response: Respond as indicated in the explanation of the system completion code cde, and its associated message.

Problem Determination: Table I, item 29. Table II, format 3.

IEC950I 003-x 3525 ASSOCIATED DATA SET I/O SEQUENCE ERROR

Explanation: This is an explanatory message for the system completion code 003. A sequence I/O error has occurred for a 3525 reader punch. In the message text, x defines the nature of the error.

- If x is 1, the error occurred because of a READ I/O sequence error.
- If x is 2, the error occurred because of a PUNCH I/O sequence error.
- If x is 3, the error occurred because of a PRINT I/O sequence error.

System Action: The system terminates the task.

Programmer Response: Probable user error. Specify the I/O macro instructions in the proper sequence and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC951I 004 INVALID FORMAT CARD OR INVALID DEVICE FOR OMR

Explanation: Either the format card for Read Column Eliminate (RCE) or for Optical Mark Read (OMR) is invalid, or the device indicated with OMR is ineligible for OMR. Register 15 has the return code X'05'.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC952I 004 CONFLICTING/INVALID DCB FUNC OR RELATED PARAMETER

Explanation: This is an explanatory message for system completion code 004. A conflicting or invalid DCB parameter (FUNC or related parameter) was specified. The contents of register 15 indicate the nature of the error:

Register 15

Contents in

Hexadecimal

Explanation

01	An invalid DCB FUNC parameter was specified.
02	An invalid combination of the DCB FUNC parameter and CNTRL macro instruction was specified.
03	Conflicting associated data set access methods were specified.

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04 An invalid DCB was specified with a 3505 or 3525.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC953I 004 DATA PROTECTION IMAGE NOT FOUND

Explanation: This is an explanatory message for the system completion code 004. A data protection image was not found. This is indicated by a X'06' return code in register 15.

The image was not found for one of the following reasons:

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC954I 23F INVALID ATTEMPT TO ACCESS CHECKPOINT DATA SET (ddn)

Explanation: This is an explanatory message for the system completion code 23F. An unauthorized user has attempted to access a checkpoint data set, described by DD statement ddn. Checkpoint data sets contain information which is critical to overall system security and integrity; only authorized programs are allowed access. This message is a WTP and will, therefore, appear only on the system message output for the job.

System Action: The task is terminated.

Programmer Response: Remove the logic that accesses the checkpoint data set and recompile the program, or authorize the program.

Problem Determination: Table I, items 1, 5b, 15, 16, 23, 29.

IEC999I

{ mod,sub, debaddr = xxxxxx }
{ mod,sub,workarea = xxxxxx }
{ mod,ijj,sss,ddd,ser,dsn }

Explanation: This message is issued during termination of a module. The fields in the message text are:

mod

name of the module in which the error occurred (usually IFG0TC0A)

sub

subroutine of CSECT within the module in error

debaddr

address of a DEB that could not be properly closed. The DEB has been removed from the TCB DEB chain

work area

address of the work area for the module in error, which should appear in an SDUMP

ijj

job name

sss

step name

ddd

device number

ser

volume serial number

dsn

data set name

Note: The unit address (ddd), volume serial number (ser), and data set name (dsn) will appear only if the error occurred during DADSM processing.

System Action: The task is terminated.

Programmer Response:

If debaddr = is specified, the problem is probably with the program that issued the OPEN SVC. Correct the problem and rerun the job.

If work area = is specified, a system problem was encountered. Prior to contacting field engineering for help, make the SDUMP and failing job available. For ISO/ANSI/FIPS tape labels, the system may have detected an invalid IECIEPRM parameter list passed by an MVS routine.

If job name (ijj) and step name (sss) are specified, an indeterminate error (a program check or a machine check) was encountered during OPEN/CLOSE/EOV or DADSM processing.

Master Scheduler Messages (IEE)

Component Name	IEE
Program Producing Message	Master Scheduler
Audience and Where Produced	For operator: console.
Message Format	<p>xx IEEnnns text</p> <p>xx Message reply identification (absent, if operator reply not required).</p> <p>nnn Message serial number.</p> <p>s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed.</p> <p>text Message text</p>
Related Publications	<p><i>MVS/XA Operations: JES2 Commands</i>, SC23-0064 <i>MVS/XA Operations: System Commands</i>, GC28-1206 <i>MVS/XA Data Administration: Macro Instruction Reference</i>, GC26-4014 <i>MVS/XA SPL: System Macros and Facilities</i>, Volumes 1 and 2, GC28-1150 and GC28-1151 <i>MVS/XA SPL: System Modifications</i>, GC28-1152 <i>MVS/XA SPL: System Management Facilities (SMF)</i>, GC28-1153 <i>MVS/XA VSAM Administration Guide</i>, GC26-4015 <i>MVS/XA VSAM Administration: Macro Instruction Reference</i>, GC26-4016 <i>IBM 3990 Information Panel Description and Reference Information</i>, GA23-0021 <i>IBM 3990 Storage Control: Reference</i>, GA32-0099 <i>Device Support Facilities User's Guide and Reference</i>, GC35-0033</p>

IEE

IEE019I cm QUOTE(S) MISSING.

Explanation: In the cm command, one or more apostrophes that should appear are missing.

System Action: The system did not execute the command.

Operator Response: Enter the command again, making sure that the required apostrophes are used.

Problem Determination: Table I, items 2, 7ab, 29.

IEE023I cm CLASSNAME ERROR.

Explanation: In the cm command, the class specified was not a valid job class or system output class.

System Action: The system did not execute the command.

Operator Response: Enter the command again, making sure that the class name is correct.

Problem Determination: Table I, items 2, 7ab, 29.

IEE025I UNIT ddd HAS NO {LOGICAL|PHYSICAL} PATHS [,UNCOND ACCEPTED]

Explanation: A VARY device ONLINE command was issued for device ddd, but there are no paths of the indicated type (LOGICAL or PHYSICAL) available for device ddd.

System Action: The VARY device ONLINE command is not executed. However, if UNCOND ACCEPTED appears in the message text, device ddd has been marked online even though a path for the device does not exist.

Operator Response: If NO LOGICAL PATHS appears in the message text, make sure that the processor and channel path needed to bring device ddd online are online. If device ddd is not a tape device or a DASD and you cannot bring the device online, but a critical job requires that the device be marked online, reenter the VARY device ONLINE command specifying the UNCOND operand. Device ddd will be marked online even though a path for it does not exist and it cannot be used for I/O operations.

If NO PHYSICAL PATHS appears in the message text, there is a probable hardware error.

If UNCOND ACCEPTED appears in the message text, no response is necessary.

Problem Determination: Table I, items 2, 11, 29.

IEE026I cmd NOT SUPPORTED.

Explanation: If the command indicated by cmd in the message text is:

- LOG or WRITELOG, the system log is not active because the WRITELOG CLOSE command had been issued or the system log task terminated abnormally.
- DDR SYSRES, dynamic device reconfiguration (or the SYSRES option of dynamic device reconfiguration) is not supported. The system cannot complete the SWAP request entered by the operator.
- NET, VTAM is not active.
- command dependent upon a Selectable Unit, the Selectable Unit supporting the command has not been installed on the system.

System Action: The system did not execute the command.

Operator Response: If cmd is LOG or WRITELOG, and if the system log is supposed to be kept, report the message to the system programmer at the installation.

If cmd is NET, do not issue VARY, DISPLAY or HALT NET commands until VTAM is active.

If cm is command dependent upon a Selectable Unit, do not use the command until the Selectable Unit has been installed on the system.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If the function denoted by the command is supported, and any necessary data sets are cataloged and mounted, and you must have the function before proceeding, check Table I, items 11, 29.

**IEE032I WRITELOG COMMAND PENDING.
CLASSNAME = class.**

Explanation: A WRITELOG command was entered to write the currently recording system log data set on the system output writer of class class. However, execution of a previously entered WRITELOG command is still pending.

System Action: The second WRITELOG command is ignored.

Operator Response: If execution of the second WRITELOG command is required, reissue the WRITELOG command.

IEE033I HALT OR WRITELOG CLOSE COMMAND HAS BEEN ISSUED

Explanation: A HALT or WRITELOG CLOSE command was entered to close the data set currently recording. However, the execution of a previously entered HALT or WRITELOG CLOSE command has not completed.

System Action: The second HALT or WRITELOG CLOSE command is ignored. After execution of the first command has completed, the log is no longer supported.

Operator Response: None.

IEE037I LOG NOT ACTIVE

Explanation: The SYSTEM LOG function is not active for current processing because of one of the following:

- Log initialization failed. This message is preceded by IEE533I.
- Log ABEND recursion in more than one log data set. This message preceded by message IEE769I.
- The system log function is terminating as the result of a WRITELOG CLOSE or HALT command. This message is preceded by message IEE043I.

System Action: The SYSTEM LOG is not supported for current processing. Any WTL issued subsequently will be converted to WTOs and issued to the master console under message number IEE147I.

Operator Response: In the first case, an attempt is made to initialize the log from the console via a WRITELOG START command. If the same message sequence reappears and the system log is critical to the system, the system must be reinitialized.

In case two, no response is required. Notify the system programmer of this message.

In case three, reinitialize the system log via a WRITELOG START command if the system log function is desired.

IEE041I THE SYSTEM LOG IS NOW ACTIVE

Explanation: A SYSTEM LOG data set has now been opened and is ready to receive WTL macro and LOG command messages.

System Action: Processing continues.

Operator Response: None.

**IEE042I SYSTEM LOG DATA SET INITIALIZED
[TIME = hh.mm.ss] DATE = yy.ddd**

Explanation: A new system log data set has been created for one of the following reasons:

- The system is being initialized and the log data set has just been created.
- The current log data set is full. The maximum number of system log records, as specified in the limit parameter, has been reached. The system issues a WRITELOG command to close the current log data set.
- A WRITELOG command was issued.

System Action: This message appears among the first several records in the system log data set. The system does not send it to any console.

Programmer Response: None.

IEE043I A SYSTEM LOG DATA SET HAS BEEN QUEUED TO SYSOUT CLASS class

Explanation: The system log data set was closed and queued to SYSOUT class class (where class is a valid output class) because of one of the following reasons:

- The data set is full. The maximum number of system log records, as specified in the limit parameter, has been reached, and an internal WRITELOG command was issued to close the current log data set.
- A WRITELOG command was issued.
- A WRITELOG CLOSE or HALT command was issued while the log data set was open, followed by message IEE037I.

System Action: For data set full, and for a WRITELOG command, the currently recording data set is closed, and a new data set is obtained. A WRITELOG CLOSE or HALT command will result in the currently recording log data set being closed and the system log will become inactive.

Operator Response: If it is required to print the system log data set at this time, start a writer to the class defined by this message or change the class currently being processed by an active writer.

IEE050A SMF OPTION CANCELED - REPLY U TO CONTINUE OR RE-IPL

Explanation: During execution of system management facilities (SMF) function, the task abnormally terminated.

System Action: No jobs in the system will terminate until the reply U is given. All data currently residing in the SMF buffers will be preserved. It is necessary to restart the system in order to reinstate SMF.

Operator Response: If the system should proceed without recording SMF records, enter REPLY xx,U. If the SMF function must be active, restart the system and inform the programmer responsible for the system.

Problem Determination: If the indicated function is required before proceeding, see Table I, items 2, 7ab, 11, 29.

IEE076I CHP(xx) NOT BROUGHT ONLINE, HARDWARE FAILURE

Explanation: A CONFIG channel path command brought channel path xx online physically. However, when logical online processing completed, the channel path was found to be physically offline.

System Action: The system continues processing. A hardware failure caused the channel path to be taken physically offline.

Operator Response: Report this message to the system programmer.

Problem Determination: Table I, items 18, 30.

IEE077I CHP(xx) ONLINE, STATUS UNKNOWN

Explanation: Channel path (xx) was brought online in response to a CONFIG channel path ONLINE command. The channel path experienced a hardware failure. Recovery from the hardware failure was in progress when the CONFIG command processor terminated.

System Action: The system continues processing. The CONFIG ONLINE command processor waits up to 45 seconds for channel path recovery to complete. If the waiting period elapses before the channel recovery completes, the system issues this message.

Operator Response: Probable hardware failure. Report this message to the system programmer.

IEE078I cmd 3851 TYPE COMMAND INVALID

Explanation: An MSS command (VARY or HALT command with S parameter, Assign Primary Host, or PURGE) was issued and either:

- MSS was not included during system generation
- A previous HALT command with S parameter was successful
- MSS initialization failed and the SSC message module is not available to the host system. cmd represents the command verb in error.

System Action: The command is rejected.

Operator Response: Do not issue the MSS commands unless MSS has been initialized during system generation, or after HALT command with S parameter has been issued. Inform the system programmer.

Programmer Response: Correct the initialization problem that caused the SSC message module to become nondispatchable.

Problem Determination: Issue the DUMP command, and reply with r id,sdata,stor=(000000,FFFFFF). Table I, items 2 and 16.

IEE082I SYSTEM WAIT STATE 'CCC' QUIESCE FUNCTION PERFORMED

Explanation: A QUIESCE command was issued, and the system will be placed in a restartable wait state (code CCC) as part of normal QUIESCE processing.

System Action: All processors in the system will be placed in the restartable wait state (code CCC). The message is not retained on the screen.

Operator Response: Restart the system.

Problem Determination: Table I, items 2, 29.

IEE083A REPLY SYNTAX ERROR - RESPECIFY

Explanation: The reply to the preceding message was incorrect.

System Action: The system waits for the operator to reply.

Operator Response: Enter the correct reply. The cursor on the display console points to the character on the display screen where the correct reply should begin.

IEE

IEE084I {cm|cuu} 3851 PARAMETER MISSING

Explanation: Invalid specification in either:

- The VARY command (when cuu is part of the message, the cuu represents a DSM)
- The HALT command, where cm represents the command verb in error

For the VARY command, the cuu represents a Data Staging Manager (DSM) of the 3850 Mass Storage System (MSS). Including MSC in a VARY command is only valid when the S parameter is also included. The operator issued the VARY command and either failed to use the S parameter, or erroneously specified a cuu that identified an MSC specified an incorrect cuu (which identified a DSM.)

For the HALT command, one of the MSS parameters (DINIT/SNAP/LONG) was specified but the operator did not include the S parameter.

System Action: If cuu appears in the message text, the VARY command is rejected for the cuu specified in the message, and processed for the other cuu(s) that may have been specified.

If cm appears in the message text, the HALT command is rejected.

Operator Response: Respecify the VARY command to include the S parameter (v cuu,online/offline,s) where cuu is the unit address of an MSC, or issue the VARY command as v cuu,online/offline where cuu is not the unit address of an MSC.

Respecify the HALT command with the S parameter, (HALT S,DINIT/SNAP/LONG)?

Programmer Response: None.

Problem Determination: Issue the DUMP command, and reply with r id,sdata,stor=(000000,FFFFFF). Table I, items 2 and 16.

IEE094D SPECIFY OPERAND(S) FOR DUMP COMMAND

Explanation: The operator issued a dump command from the master console. This message allows the operator to specify the storage locations to be dumped.

System Action: Dump command processing waits for the operator to reply.

Operator Response: Determine which address space and what storage ranges to dump. Then enter the reply.

ASID = nnn

Specifies the address space to be dumped. nnn is the hexadecimal representation of an address space identification number. The address space specified is dumped according to the options on the SDATA and STOR parameters.

JOBNAME = jjj

jjj is a jobname or userid. The address space associated with the specified jobname or userid is dumped according to the options of the SDATA and STOR parameters.

TSOname = jjj

jjj is a userid. The address space associated with the userid is dumped according to the options of the SDATA and STOR parameters.

U

Causes the SDATA default options to be taken for the master scheduler address space. Any other data in the command is ignored.

SDATA = (opt,...,opt)

(PSA, NUC, SOA, LSQA, RGN, TRT, CSA, SWA, SUM, NOSUM, NOSQA, LPA, GRSQ, ALLNUC, NOPSA).

The underlined option is a default option. The default option is used if SDATA is specified without any options or if SDATA is not specified.

STOR = (x,y[,x,y]...)

x,y represents a storage range to be dumped. x represents the lowest address in the range, and y represents the highest address in the range. All addresses between the lowest and the highest are dumped, including the lowest and highest. For example, if x = X'89DCBA' and y = X'89DCBD', you would get storage locations 89DCBA, 89DCBB, 89DCBC, and 89DCBD in the dump. Furthermore, x and y can be in decimal or hexadecimal. A decimal address represents a multiple of 1024 (1K) and must be followed by a 'K'. For example, decimal address 204800 must be entered as 200K.

CONT

Specifies that you want to continue the reply on another line. The system reissues message IEE094D in response to this parameter, after which you continue your reply. The only parameters that you can specify on a continuation line are SDATA, STOR, CONT, and END.

Examples:

1. R xx,ASID=2B,CONT
SDATA=(PSA,ALLNUC,TRT,GRSQ),CONT
STOR=(01008800,01008AC0)
2. R xx,JOBNAME=USERJOB,SDATA,CONT
R xx,STOR=(100456K,100490K)
3. R xx,STOR=(000000,00FFFF,...*
...01000K,02000K,1000000K,1004000K)

Note: SDATA may also be specified with STOR.

*This line is broken because of the way this manual is formatted. You should be able to fit this on one line.

IEE097I hh.mm.ss DEVIATION STATUS [id]

{FROM MEMBER CONFIGxx}
 FROM CONFIG COMMAND}
 FROM CONFIG ONLINE}
 FROM CONFIG OFFLINE}

INVALID

REQUEST TYPE SPECIFIED
 OPERAND SPECIFIED
 INPUT, EXPECTING BLANKS
 BEGINNING gml. yyy...y

elemtype DESIRED ACTUAL
 elemadr desstat actstat

[NO DEVIATION FROM REQUESTED
 CONFIGURATION]

[NO DEVIATION COMPARISONS MADE]

[CONFIG MEMBER CONTAINS NO VALID
 INPUT]

Explanation: This message is issued:

1. In response to a DISPLAY
M=CONFIG(xx)command.
2. When a CONFIG command completes
processing.

The message compares the configuration that actually exists with the configuration described either (1) in member CONFIGxx of SYS1.PARMLIB or (2) in the CONFIG command request.

The text, FROM MEMBER CONFIGxx, or FROM CONFIG COMMAND, and the line beginning INVALID ..., appear for each record in the CONFIGxx member in which an error is detected.

INPUT, EXPECTING BLANKS appears if a nonblank character followed a valid request.

The two lines, elemtype DESIRED ACTUAL and elemadr desstat actstat, describe any deviations from the CONFIGxx member or the CONFIG command.

NO DEVIATION FROM REQUESTED CONFIGURATION appears if no deviations are found.

NO DEVIATION COMPARISONS MADE appears (1) if IEEMPDEV was called and the input parameters did not contain valid data or (2) if either STOR(E=id) or IO(id) is the only request.

CONFIG MEMBER CONTAINS NO VALID INPUT appears if the specified CONFIGxx member exists, but contains records that are all blanks and/or comments.

The fields in the message text are:

hh.mm.ss

The time in hours (hh), minutes (mm), and seconds (ss).

id

A three-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays written on typewriter or printer consoles or displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

xx

The suffix of the CONFIGxx member of SYS1.PARMLIB.

INVALID REQUEST TYPE SPECIFIED

Indicates that the first nonblank characters of a CONFIGxx record are not CPU, CPUAD, CHP, DEV, DEVICE, ESTOR, STOR, STORAGE, VOL, VOLUME, HSA, HIGH, SIDE or IO. The record is ignored.

INVALID OPERAND SPECIFIED

Indicates that a CONFIGxx record contains invalid information. The record is ignored. Possible errors include:

- The processor address, device number, channel path number, I/O engine number, SIDE number, or storage element number contains more than four characters.
- The processor address is greater than X'F'.
- The channel path number, I/O engine number, SIDE number, or storage element number is greater than X'FF'.
- The device number is greater than X'FFF'.
- An invalid delimiter.

Note: Multiple DISPLAY M keywords must be enclosed in parentheses.

yyy...y

The first 16 characters of the invalid CONFIGxx record.

elemtype

The name of the system resource for which the actual status does not match the desired status. The possible system elements are:

CPU or CPUAD

Processor

CHP Channel path

CHP(ALL,x)

All channel paths on the side.

DEVICE

Device

ESTOR(E=id)

The extended storage element

VOLUME

Volume

I/O ENGINE

I/O engine

STORAGE RANGE or STOR RANGE

Real storage range

STOR AMOUNT

Real storage amount

STOR(E=X)

Real storage element

ESTOR RANGE

Extended storage range

VF

Vector Facility

elemadr

The address of the element with the incorrect status, or the volume serial number of a volume that is not correctly mounted. For storage, only one storage range or amount appears on each line: x-x, xK-yK, xM-yM or xM (for storage amount).

IEE

desstat

The desired status of the resource. Possible values are:

ONLINE Indicates that the processor, channel path, device, I/O engine, storage range, or storage element should be online.

OFFLINE Indicates that the processor, channel path, device, I/O engine, storage range, or storage element should be offline.

ddd The device number for the device on which the volume should be mounted. An X in the number indicates that the digit can be any value. For example, a value of XXX indicates that the volume can be mounted on any direct access device.

actstat

The actual status of the resource. Possible values are:

ONLINE Indicates that the processor, channel path, device, I/O engine, storage range, or storage element is online.

OFFLINE Indicates that the processor, channel path, device, I/O engine, storage range, or storage element is offline.

NOT AVAILABLE Indicates that the processor, channel path, I/O engine, or storage element was in another partition or in S/M/R.

NOT GEN|NOT GEND Indicates that the processor, channel path, device, I/O engine, storage range, or storage element was either not specified in system generation, or not installed.

PARTIAL Indicates that only a portion of the requested amount of storage or some of the channel paths on a SIDE were allocated.

UNCHANGED Indicates that the requested storage was not allocated.

NOT OPERATIONAL The SCHIB (SCHPOM) indicated that the path was not operational.

SUBCHANNEL STATUS NOT AVAILABLE Indicates that the device is not defined in the I/O configuration data set (IOCDs).

SUBCHANNEL IN PERMANENT ERROR Indicates that the subchannel is broken.

DEVICE NOT AVAILABLE Indicates that the device is deferred.

BOXED Indicates that the device is boxed, that is, placed offline, because of a hardware problem.

NOT MNTD|NOT MTD Indicates that the volume is not mounted.

System Action: Processing continues.

Operator Response: None.

IEE099A FOLLOWING JES3-ASSIGNED DEVICES ARE OFFLINE TO MVS. VARY THEM OFFLINE TO JES3. ddd[,ddd,ddd...]

Explanation: A VARY channel offline command was issued with the FORCE option. VARY channel command processing found that the channel specified in the command is the last path to device(s) ddd. The device had not been allocated in MVS, so it was marked offline.

System Action: Processing continues.

Operator Response: Issue a JES3 VARY OFFLINE for device(s) ddd.

IEE100E CONFIG WILL FORCE OFFLINE LAST PATH TO ALLOCATED DEVICE[S]: ddd[,ddd,ddd ...]

Explanation: A CONFIG channel path offline command was issued with the FORCE option. The CONFIG channel path command processor determined that the channel path specified in the command represents the last path to device ddd, which was allocated or assigned to JES3. Message IEE131D follows this message to request operator approval before the channel path is taken offline.

System Action: The CONFIG channel path command processor issues message IEE131D and waits for the operator to reply.

Operator Response: Reply to message IEE131D. Reply CANCEL to cancel CONFIG command processing and keep the channel path online.

Reply CONTINUE to force the channel path offline. This keeps the devices listed in message IEE100E allocated and forced offline. Moreover, any I/O request to any of these devices results in a permanent I/O error. To allow any job associated with an allocated device to continue, use the CONFIG command to provide an alternate path to the device.

Note: Do not reply CONTINUE if a device that is critical to the operation of the system is involved, or you may have to re-IPL the system.

IEE104I hh.mm.ss yy.ddd ACTIVITY [id]

JOBS M/S TS USERS SYSAS INITS ACTIVE/MAX VTAM
 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx/xxxxx
 [jjj sss [ppp] www[zz]x [jjj sss[ppp] www[zz]x]]
 [jjj sss [ppp] www[zz]x stradrK - endadrK]
 [userid www[zz] userid www[zz] ...]
[DISPLAY TRUNCATED - INSUFFICIENT STORAGE]

Explanation: This message appears when the operator enters a DISPLAY or TRACK command with JOBS, or TS, or A as a single operand, or with the JOBS,LIST or the TS,LIST or the A,LIST operands. The first three lines of the message text always appear.

The variables in the first line are:

hh.mm.ss

Hour, minute, and second (or 00.00.00 if the TOD clock is not working).

yy.ddd

The last two digits of the year and the day of the year (or 00.000 if the system cannot determine the year and the day).

id

A three-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays being written on typewriter or printer consoles or being displayed inline (that is, not in a display area) on a display console. This number does not appear when the display is presented in a display area on a display console.

Each of the xxxxx fields in the third line contains a decimal number corresponding to the headings in the second line:

JOBS

The number of address spaces executing under initiators.

M/S

The number of address spaces created by the MOUNT or START command, not including initiators.

TS USERS

The number of active TSO address spaces.

SYSAS

The number of system address spaces.

INITS

The number of started initiators in the system.

ACTIVE/MAX VTAM

The number of active TSO address spaces using VTAM and the maximum number of TSO address spaces that could use VTAM.

Note: If the value for JOBS is less than the value for INITS, some initiators are inactive.

The sum of the values for JOBS, M/S, TS USERS, and SYSAS is the total number of active address spaces.

If the command includes the LIST operand, some combination of the fourth, fifth, and sixth lines appears:

JOBS,LIST (or J,L)

The fourth line appears as many times as needed to list all V=V jobs and V=V tasks created by the START or MOUNT command. One or two entries appear on each line. The fifth line appears as many times as necessary to list all V=R jobs and V=R tasks created by the start command. One entry appears on each line.

TS,LIST (or TS,L)

The sixth line appears as many times as needed to list all active TSO users. Up to five entries appear on each line.

A,LIST (or A,L)

The displays for both JOBS,LIST and TS,LIST appear.

The variables in the fourth, fifth, and sixth lines are:

iii

One of the following:

- The jobname of a job attached by an initiator.
- The procedure name of a task created by the START or MOUNT command.
- STARTING if initiation of a started job or task is incomplete.

sss

One of the following:

- The stepname, for a job attached by an initiator.
- The identifier of a task created by the START command.
- The stepname, for a step that called a cataloged procedure.
- STARTING, if initiation of a started job or system task is incomplete.

PPP

One of the following:

- The stepname within a cataloged procedure that was called by the step specified in field sss.
- Blank, if there is no cataloged procedure.

www

The status of the job, task, or TSO address space:

IN swapped in
 OUT swapped out, ready to execute
 OWT swapped out, waiting, not ready to execute
 OU* in process of being swapped out
 IN* in process of being swapped in
 NSW non-swappable

zz

LW address space is in long wait

Note: LW appears only when the address space is swapped in or is non-swappable; LW indicates an abnormal condition.

NF address space is not dispatchable because of a failure in the address space

PR address space has PER trap active

x

The type of user:

J job
 S started task
 M mount
 * system address space

userid

One of the following:

- The ID of an active TSO user.
- *LOGON*, if initiation of the address space is incomplete.

IEE

stradrK - endadrK

Starting and ending decimal addresses, in K, of the job or task's V=R region. Each K is 1024 bytes; 00040 K, for example, is decimal address 40960.

DISPLAY TRUNCATED - INSUFFICIENT STORAGE appears when the system cannot obtain enough storage for the display.

System Action: Processing continues.

Operator Response: If DISPLAY TRUNCATED appears on this display, avoid using the LIST operand until there is less system activity.

The fields jjj and sss are, respectively, the procname and ID required by the STOP and MODIFY commands.

To obtain a display that includes the system address spaces, enter the DISPLAY A,A (meaning DISPLAY ACTIVE,ALL) command.

IEE105I hh.mm.ss yy.ddd ACTIVITY [id]

JOBS M/S TS USERS SYSAS INITS ACTIVE/MAX VTAM

```
xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx/xxxxx
jjj sssppp www[zz]x A=asid PER=aaa SMC=bbb
PGN=ccc DMN=eee AFF=ffff
CT=nnnnnnnn ET=nnnnnnnn
[stradrK - endadrK]
```

```
userid www[zz] A=asid PER=aaa SMC=bbb PGN=ccc
DMN=eee AFF=ffff
```

CT=nnnnnnnn ET=nnnnnnnn

[name NOT FOUND]

[DISPLAY TRUNCATED - INSUFFICIENT STORAGE]

Explanation: This message appears when the operator enters the DISPLAY command with one of these six pairs of operands: JOBS,name; JOBS,ALL; TS,name; TS,ALL; A,name; or A,ALL. The first three lines of the message text appear for any of these six pairs.

The variables in the first line are:

hh.mm.ss

Hour, minute, and second (or 00.00.00 if the TOD clock is not working).

yy.ddd

The last two digits of the year and the day of the year (or 00.000 if the system cannot determine the year and the day).

id

A three-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays being written on typewriter or printer consoles or being displayed inline (that is, not in a display area) on a display console. This number does not appear when the display is presented in a display area on a display console.

Each of the xxxxx fields in the third line contains a decimal number corresponding to the headings in the second line:

JOBS

The number of address spaces executing under initiators.

M/S

The number of address spaces created by the MOUNT or START command, not including initiators.

TS USERS

The number of active TSO address spaces.

SYSAS

The number of system address spaces.

INITS

The number of started initiators in the system.

ACTIVE/MAX VTAM

The number of active TSO address spaces using VTAM and the maximum number of TSO address spaces that could use VTAM.

Note: If the value for JOBS is less than the value for INITS, some initiators are inactive.

The sum of the values for JOBS, M/S, TS USERS, and SYSAS is the total number of active address spaces.

Some combination of the fourth through ninth lines appears, depending on the operands entered:

JOBS,name (or J,name)

The fourth, fifth, and sixth lines appear when the name operand specifies a V=V job, a V=V task created by the START or MOUNT command, or a system address space.

In addition, the seventh line appears when the name operand specifies a V=R job or a V=R task created by the START command.

JOBS,ALL (or J,A)

The fourth, fifth, and sixth lines appear for each V=V job, each V=V task created by the START or MOUNT command, and each system address space.

In addition, the seventh line appears for each V=R job and V=R task created by the START command.

TS,name

The eighth and ninth lines appear when the name operand specifies an active TSO user.

TS,ALL (or TS,A)

The eighth and ninth lines appear for each active TSO user.

A,name

The displays for both JOBS,name and TS,name appear.

A,ALL (or A,A)

The displays for both JOBS,ALL and TS,ALL appear.

The variables in the fourth through ninth lines are:

jjj

One of the following:

- The name of a system address space.
- The jobname of a job attached by an initiator.
- The procedure name of a task created by the START or MOUNT command.

- STARTING, if initiation of a started job or task is incomplete.
- *MASTER*, for the master address space.

sss

One of the following:

- The name of a system address space.
- The stepname, for a job attached by an initiator.
- The identifier of a task created by the START command.
- The stepname, for a step that called a cataloged procedure.
- STARTING, if initiation of a started job or system task is incomplete.
- *MASTER*, for the master address space.

ppp

One of the following:

- The stepname within a cataloged procedure that was called by the step specified in field sss.
- Blank, if there is no cataloged procedure.

www

The status of the job, task, or TSO address space:

IN swapped in
 OUT swapped out, ready to execute
 OWT swapped out, waiting, not ready to execute
 OU* in process of being swapped out
 IN* in process of being swapped in
 NSW non-swappable

zz

LW address space is in long wait

Note: LW appears only when the address space is swapped in or is non-swappable; LW indicates an abnormal condition.

NF address space is not dispatchable because of a failure in the address space
 PR address space has PER trap active

x

The type of user:

J job
 S started task
 M mount
 * system address space

asid

Address space ID, in hexadecimal

aaa

YES, if a PER trap is active in the address space
 NO, if no PER trap is active in the address space

bbb

Number of outstanding step-must-complete requests

ccc

Performance group number

eee

Domain number

ffff

The ID of the processor, for up to any four processors, if the job requires the services of specific processors.

NONE, if the job can execute on any processor.

VF, if Vector Facility (VF) affinity is required, but there is no processor with an attached VF available.

nnnnnnnn

For CT, the processor time used by the address space, including the initiator.

For ET, one of the following:

- For address spaces other than system address spaces, the elapsed time since job select time.
- For system address spaces created before master scheduler initialization, the elapsed time since master scheduler initialization.
- For system address spaces created after master scheduler initialization, the elapsed time since system address space creation.

In any case, nnnnnnnn has one of these formats, where ttt is milliseconds, sss or ss is seconds, mm is minutes, and hh or hhhhh is hours:

sss.tttS when time is less than 1000 seconds
 hh.mm.ss when time is at least 1000 seconds, but less than 100 hours
 hhhhh.mm when time is at least 100 hours
 ***** when time exceeds 100000 hours
 NOTAVAIL when TOD clock is not working

stradrK - endadrK

Starting and ending decimal addresses, in K, of the job or task's V=R region. Each K is 1024 bytes; 00040K, for example, is decimal address 40960.

userid

The ID of an active TSO user.

If NAME NOT FOUND appears, the DISPLAY command included the name operand, and the specified name is not active in the system.

If DISPLAY TRUNCATED - INSUFFICIENT STORAGE appears, the system could not obtain enough storage for the display.

System Action: Processing continues.

Operator Response: If DISPLAY TRUNCATED appears when you enter the DISPLAY command with the ALL operand, avoid using the ALL operand until there is less system activity. Using the name operand or the LIST operand requires less storage than using the ALL operand.

The fields jjj and sss are, respectively, the proname and ID required by the STOP and MODIFY commands.

IEE106I hh.mm.ss UNITS ALLOCATED [id]
UNIT JOBNAME ASID JOBNAME ASID. . . JOBNAME ASID
uuu jjj asid [jjj asid]. . . [jjj asid]
[DISPLAY TRUNCATED - INSUFFICIENT STORAGE]
[UNIT STATUS NUMBER OF UNITS REQUESTED EXCEEDS
NUMBER AVAILABLE]
[INCOMPLETE UNIT ALLOCATION STATUS]
[ALLOC STATUS UNAVAILABLE - ALLOCAS INOPERATIVE]

Explanation: This display message appears when the operator enters the DISPLAY U command with the ALLOC operand. The variables in the first line are:

hh.mm.ss

Hour, minute, and second (or 00.00.00 if the TOD clock is not working).

id

A three digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays being written on typewriter or printer consoles or being displayed in-line (that is, not in a display area) on a display console. This number does not appear when the display is presented in a display area on a display console.

The third line, the display line, appears one or more times for each allocated unit specified on the DISPLAY command. The display line identifies unit uuu and lists each job (jjj) and address space (asid) to which the unit is allocated, where jjj is one of the following:

- The jobname of a job attached by an initiator
- The name of a system address space
- The procedure name of a task created by the START or MOUNT command
- *MASTER* when uuu is allocated to the master address space
- *CONSOLE when uuu is a console allocated to multiple console support (MCS)
- *SYSTEM when uuu is allocated to the system control program
- *PAGE when uuu is being used as a paging device
- *UNKNOWN when uuu is allocated but the DISPLAY command processor cannot identify jjj

DISPLAY TRUNCATED - INSUFFICIENT STORAGE appears when the system cannot obtain enough storage for the display.

UNIT STATUS NUMBER OF UNITS REQUESTED EXCEEDS NUMBER AVAILABLE appears when the DISPLAY command specifies more units than are allocated.

INCOMPLETE UNIT ALLOCATION STATUS appears when the DISPLAY processor cannot display complete data on unit allocation because of an error in the allocation control blocks.

ALLOC STATUS UNAVAILABLE - ALLOCAS INOPERATIVE appears when allocation processing is not recording the units allocated. DISPLAY

command processing must scan certain control blocks to gather this information, but the address space containing those control blocks is inoperative.

System Action: Processing continues.

Operator Response: If DISPLAY TRUNCATED - INSUFFICIENT STORAGE appears, specify fewer units on the DISPLAY U,,ALLOC command.

IEE110I hh.mm.ss PENDING REQUEST[S] [id]

SUMMARY: [n REPLY ID[S]] [n READY UNIT[S]]
[n INTERVENTION[S] REQUIRED]

[xx yy zz ...]

xx text

yy text

zz text

...
[READY UNIT[S]: ddd [ddd ddd ...]]
[INTERVENTION[S] REQUIRED: ddd [ddd ddd ...]]

Explanation: This message is issued in response to a DISPLAY R[,LIST] command if there is any operator action required. In the message text the fields are:

hh.mm.ss

Hour (hh) minute (mm) second (ss). This will be 00.00.00 if the TOD clock is not working when the information is gathered for the display.

id

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

n

A one- to four-digit decimal number representing the number of reply ids, ready units, or interventions required that as to be displayed in the message text.

xx yy zz ...

The two-digit REPLY IDS outstanding if only the R operand is specified.

xx text

yy text

zz text

...
 The REPLY IDS and corresponding text. Up to 64 characters of each text will be displayed. The remaining text, if any, will be truncated after the last blank preceding the 66th position. The text will appear for each outstanding WTOR only if the ,LIST or ,L operand is specified.

ddd

The address of each unit for which MOUNT request was issued, and not yet performed (with READY UNITS:). The address of each unit having an intervention required condition pending (with INTERVENTION REQUIRED:).

Note: The second line (SUMMARY line) of the message indicates the types of requests which are outstanding.

Operator Response: For each xx, yy, or zz listed, find the last message on the console printout with that identifier and reply as indicated by the message.

For each ddd listed, find the last MOUNT message on the console printout for that device and mount the indicated volume, or find the last intervention-required message on the console printout and mount a volume on the indicated unit.

Note: A MOUNT message may not yet have been issued for device ddd. If this is the case, no action should be taken until the MOUNT message has been issued.

IEE111I NO OUTSTANDING REQUESTS

Explanation: In response to a DISPLAY command with R in its operand, this message indicates that there are no messages awaiting replies and there are no unfulfilled mount requests.

System Action: Processing continues.

Operator Response: None.

IEE112I hh.mm.ss PENDING REQUESTS [id]

RM = nnn IM = mmmmm EM = mmmmm RU = pppp
IR = pppp [NO]AMRF

ID:R/K	T	TIME	JOB ID	MESSAGE TEXT
xxxxxx	R	hl.ml.sl	yyyyyyyy	text
	I			
	E			

[NO REQUESTS OUTSTANDING]
[NO REQUESTS OUTSTANDING FOR REQUESTED OPTIONS]
[OUTSTANDING msgid MESSAGE NOT FOUND]
[READY UNITS: ddd[ddd]...]
[INTRV REQ'D: ddd[ddd]...]
[DISPLAY TRUNCATED - INSUFFICIENT STORAGE]

Explanation: This message is issued in response to a DISPLAY R command.

The first two lines always appear. The fields in these lines are as follows:

hh.mm.ss

The time in hours (hh), minutes (mm), and seconds (ss).

The value is 00.00.00 if the TOD clock is not working when the information is gathered for the display.

id

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command to cancel status displays written on typewriter or printer consoles or displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

RM = nnn

A one- to three-digit decimal number representing the number of reply IDs that are outstanding; that is, the number of messages that are awaiting replies.

IM = mmmmm

A one- to five-digit decimal number representing the number of immediate action messages (descriptor code 1 or 2) that are outstanding. If

the number has more than five digits, asterisks appear in this field.

EM = mmmmm

A one- to five-digit decimal number representing the number of eventual action messages (descriptor code 3 or 11) that are outstanding. If the number has more than five digits, asterisks appear in this field.

RU = pppp

A one- to four-digit decimal number representing the number of outstanding mount requests.

IR = pppp

A one-to four-digit decimal number representing the number of outstanding requests for operator intervention.

AMRF

The action message retention facility is active.

NOAMRF

The action message retention facility is not active.

The third and fourth lines of the message appear when messages are displayed in response to a DISPLAY R command with the I, E, R, LIST, or ALL operand.

If the LIST or ALL operand was specified, the messages are grouped so that messages awaiting operator replies (R) appear first, immediate action messages (I) appear next, and eventual action messages (E) appear last.

Within a group of immediate action or eventual action messages, the messages are arranged in approximate time sequence with the most recently issued message appearing first, unless the system was unable to retain all the outstanding messages. In this case, the sequence is unpredictable.

The fields in these lines are as follows:

ID:R/K

The ID of the message text being displayed, represented by the decimal number xxxxxx. If the message is awaiting a reply, the ID is the two-digit reply identifier used in the REPLY command. If the message is an action message, the identifier is the number used in the CONTROL C command to delete the message (see Operator Response).

T

The type of message being displayed, as follows:

- R** The message is awaiting operator reply
- I** An immediate action message; a message with descriptor code 1 or 2 assigned to it
- E** An eventual action message; a message with descriptor code 3 or 11 assigned to it

TIME

The time stamp associated with the message in hours (h1), minutes (m1), and seconds (s1). This data appears only when the T operand was specified in the DISPLAY R command.

JOB ID

The job identification (yyyyyyyy) of the task that issued the message. In a JES2 environment, this field contains the JES2 job identification

IEE

number. In a JES3 environment, this field contains the job name.

This information appears only when the T or J operand was specified in the DISPLAY R command.

MESSAGE TEXT

The message text. The text is continued on the following lines, if necessary. When the system could not retain all lines of a multiple line message (MLWTO), this field includes all of the available message text.

The remaining lines of the message appear as follows:

NO REQUESTS OUTSTANDING

This line appears when there are no messages awaiting replies, no messages waiting for operator action, no outstanding mount requests, and no outstanding requests for operator intervention.

NO REQUESTS OUTSTANDING FOR REQUESTED OPTIONS

This line appears when there are no outstanding requests in the category specified in the DISPLAY R command.

OUTSTANDING msgid MESSAGE NOT FOUND

This line appears when there are no outstanding requests in which the message text begins with the characters specified in the DISPLAY R command (msgid).

READY UNITS: ddd ddd[...]

For each device (ddd) listed, the system issued a mount request that has not yet been performed.

This line appears in response to a DISPLAY R, DISPLAY R,U, or a DISPLAY R,L command if there are outstanding ready unit requests.

INTRV REQ'D: ddd ddd[...]

For each device (ddd) listed, operator intervention was requested but has not yet been performed. This line appears in response to a DISPLAY R, DISPLAY R,U, or a DISPLAY R,L command if there are outstanding intervention-required requests.

DISPLAY TRUNCATED - INSUFFICIENT STORAGE

This line appears when sufficient storage to complete this message is not available. However, the second line of the message does contain the correct number of outstanding requests.

Operator Response: For each message that is waiting for a reply or for operator action, perform the action requested in the message text, if desired. Then, reissue the DISPLAY R command to see if each message was automatically deleted. Issue a CONTROL C command to delete each message that still appears after the requested action has been performed.

For each device (ddd) listed, find the last mount request message for the device and mount the indicated volume on the device, or find the last intervention-required message and ready the

indicated device. Enter a DISPLAY R,LIST command to locate these messages. **Note:** A mount request message might not have been issued yet for a device in the list. If not, wait until the message is issued before taking any action.

IEE121I I/O ERROR DURING COMMAND EXECUTION

Explanation: During processing of a START or MOUNT command, an uncorrectable input/output error occurred in reading or writing records from or to the scheduler work area (SWA).

System Action: The command is not executed.

Operator Response: Enter the command again.

Problem Determination: Table I, items, 2, 11, 29.

IEE122I START COMMAND JCL ERROR

Explanation: Either a START command was specified incorrectly, or the cataloged procedure invoked by the command contains incorrect job control statements.

System Action: The system did not execute the command.

Operator Response: Look in the SYSOUT data set for messages associated with this command; these messages will describe any errors found in the reader or writer procedure or in the overriding job control statements generated from the START command. After making corrections, enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE123A PRESS CANCEL KEY TO RESTORE NORMAL DISPLAY

Explanation: The disabled console communications facility used the console screen to display messages required by system conditions. The original contents of the console screen must be restored.

System Action: The system continues normal operation.

Operator Response: Perform the CANCEL action to restore the contents of the screen. The CANCEL action is documented in *System Commands*. Note that the system might not respond immediately.

IEE124I MOUNT COMMAND JCL ERR

Explanation: The procedure invoked by a MOUNT command contains invalid job control statements.

System Action: The system did not execute the command.

Operator Response: Look in the SYSOUT data set for messages beginning with IEF and associated with this command; these messages will describe any errors found in the procedure. If possible, correct the job control statements in the procedure; otherwise, report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE125A REPLY U TO CONTINUE PROCESSING

Explanation: The system is processing the error condition described in the preceding messages. After performing any actions required by the messages, the recovery processor must be notified that the actions are complete.

System Action: The system waits for the operator to reply. When the reply is received, the system resumes normal processing.

Operator Response: Enter 'U' at the current cursor position.

Problem Determination: Table I, items 2, 29.

IEE126I COMPLETE TEXT OF MESSAGE *msgid* CANNOT BE DISPLAYED

Explanation: The message, *msgid*, issued by the Disabled Console Communications Facility had more lines than could be displayed on the console. The message was truncated.

System Action: See the description for message *msgid*.

Operator Response: See the description for message *msgid*.

IEE127I THE FOLLOWING MESSAGE IS ISSUED THROUGH DISABLED CONSOLE FACILITY

Explanation: This message appears on the screen to tell the operator that the system called on the disabled console communications facility to display the referenced message.

System Action: System operation continues while displaying the referenced message.

Operator Response: If requested, reply to the referenced message.

IEE128A PERFORM THE CANCEL ACTION TO RESTORE THE NORMAL DISPLAY

Explanation: The disabled console communications facility used the console screen to display messages required by system conditions. The original contents of the console screen must be restored.

System Action: The system continues normal operation.

Operator Response: Perform the CANCEL action to restore the contents of the screen. The CANCEL action is documented in *System Commands*. Note that the system might not respond immediately.

IEE129I CONSOLE SWITCH, OLD = *oldconsole* NEW = *newconsole* REASON = *reason*

Explanation: A console switch occurred for *oldconsole*. *newconsole* assumed the responsibilities that *oldconsole* possessed. The system also issues the reason for the console switch *reason*.

oldconsole and *newconsole* may contain either:

ddd The device address of the console.

ddd,ddd The device addresses of the composite console.

The reason for the console switch, *reason*, may be one of the following:

EXT The external interrupt key was pressed.

IOER An I/O error occurred on the failing console.

SWER A software error caused the console to fail.

OPER An open failure forced the console switch.

ACR Alternate CPU recovery forced the console switch.

HCSW The system switched the hardcopy function from SYSLOG.

VMST The operator issued a VARY MSTCONS command.

VCHN The operator issued a VARY CH command.

VCPU The operator issued a VARY CPU command.

CQEER The CQE cannot be obtained.

System Action: The system continues processing.

Operator Response: If (1) a VARY MSTCONS command or (2) pressing the the INTERRUPT key caused the console switch, then you do not have to respond. In these cases, the failing console is left online and unallocated.

Programmer Response: None.

IEE130I TIME-OUT - TERMINAL RESET

Explanation: The 2740 console, upon which this message appears, timed out because the operator did not terminate his input message with EOB (end-of-block) within 28 seconds of requesting entry to the console or entering the last character of data.

System Action: The system reset the terminal to 'stand by' state and ignored the operator's incomplete input message.

Operator Response: Reenter the input message and terminate with EOB.

IEE131D REPLY CANCEL OR CONTINUE

Explanation: This message asks the operator to decide whether to cancel or to continue processing the CONFIG CHP OFFLINE, FORCE command.

Forcing the channel path offline may have serious effects on the system. A message explaining what the effects might be precedes this message.

System Action: The CONFIG channel path command processor waits for the operator to reply.

Operator Response: Read the explanation and operator response sections of the message that precedes this message.

Then reply 'CANCEL' to cancel CONFIG command processing and keep the channel path online, or reply 'CONTINUE' to force the channel path offline.

IEE132I START COMMAND DEV ALLOC ERR
Explanation: During processing of a START command, an error was detected during allocation of the device specified in the command.
System Action: The system did not execute the command.
Operator Response: Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.
Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE133I nn DEVICES BUSY ON CHP(xx)
Explanation: A CONFIG channel path offline command has detected that nn devices are currently doing I/O through channel path xx.
System Action: The CONFIG command processor waits a maximum of two and one half minutes for all I/O through channel path xx to complete. After 15 seconds, if all I/O through channel path xx has not completed, the system issues this message to notify the operator of busy devices. If the two and one half minute waiting time expires and all I/O through channel path xx is not complete, the command processor issues message IEE717D.
Operator Response: None.

IEE134I MOUNT COMMAND DEV ALLOC ERR
Explanation: During processing of a MOUNT command, an error was detected during allocation of the device specified in the command.
System Action: The system did not execute the command.
Operator Response: Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.
Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE135I ERR - REQUESTED DEVICE RESERVED
Explanation: A MOUNT command specified a device that is either reserved or permanently resident.
System Action: The system did not execute the command.
Operator Response: Change the MOUNT command to specify a different device, or enter an UNLOAD command and wait for the device that was specified to be released.
Problem Determination: Table I, items 2, 4, 7ab, 29.

**IEE136I LOCAL: TIME = hh.mm.ss DATE = yy.ddd
 GMT: TIME = hh.mm.ss DATE = yy.ddd**
Explanation: In response to the DISPLAY T command, this message shows the local time and date and the Greenwich Mean Time (GMT) and date. The Greenwich Mean Date is derived from the local date, and is set at system initialization time. If the Greenwich Mean Date was incorrectly set, it may not reflect the actual Greenwich Mean Date value at system initialization time.

In the message text, hh specifies the hour (00-23), mm specifies the minute (00-59), ss specifies the second (00-59), yy specifies the year, and ddd specifies the day (001-366).

Note: The mm and ss fields may contain different values for local time and GMT. This difference can occur because your time zone constant is not an integral number of hours or because execution of the DISPLAY T command took an unusually long time.

Operator Response: None.

IEE138I cm ALREADY IN SYSTEM
Explanation: Command cm was issued. However, the command is currently being processed in the system.

System Action: The system did not execute the command.

Operator Response: None.

IEE141A MASTER AND ALL ALTERNATES UNAVAILABLE - REASON = xxxx ISSUE VARY MSTCONS

Explanation: An attempt to switch from a master console to an alternate console has failed because no alternate consoles are active. The attempt to switch consoles occurred for reason xxxx.

- EXT The external interrupt key was pressed.
- IOER An I/O error occurred on the failing console.
- SWER A software error caused the console to fail.
- OPER An open failure forced the console switch.
- ACR ACF Alternate CPU recovery forced the console switch.

System Action: The system continues processing.

Operator Response: Any operator receiving this message can enter a VARY MSTCONS command declaring his console or another active secondary console as the master console. The VARY MSTCONS command will be accepted from the first console to issue the command. The console identified as the master console in the command will assume the functions of the master console and will receive message IEE143I. (Since the system continues to queue messages to the master console while it is waiting for the VARY MSTCONS command to be entered, the command should be entered as soon as possible.)

If the console switch was caused by the pressing of the interrupt key, no additional response is required.

Problem Determination: If the console switch occurred as a result of an uncorrectable input/output error, see Table I, items 2, 30.

IEE142I {ddd|LOG} NOW RECEIVING HARDCOPY

Explanation: Console ddd or SYSTEMLOG (LOG) is performing the hard copy log function for reason xxxx. Possible values of xxxx are:

- EXT The external interrupt key was pressed.
- IOER An I/O error occurred on the failing console.
- SWER A software error caused the console to fail.
- OPER An open failure forced the console switch.

- ACR Alternate CPU recovery forced the console switch.
- HCSW The system switched the hardcopy function from SYSLOG.
- VMST The operator issued a VARY MSTCONS command.
- VCHN The operator issued a VARY CH command.
- VCPU The operator issued a VARY CPU command.
- CQEER The CQE can not be obtained.

System Action: The hard copy log is switched to console ddd, when a hard copy console is available. The system switches hard copy to SYSLOG if a hard copy console is unavailable and SYSLOG is active.

Operator Response: If ddd is an acceptable hard copy log, no response is necessary. Otherwise, a VARY HARDCPY command must be issued from the master console to switch the log to an acceptable console.

IEE143I

CONSOLE SWITCH, REASON = xxxx
OLD = console NEW = console VALDCMD = auth
ROUTCDE = routed T = a H = b
LEVEL = (level)

Explanation: This message provides a display of the console's attributes after a console switch has occurred. The switch occurred for reason xxxx. Possible values of xxxx are:

- EXT The external interrupt key was pressed.
- IOER An I/O error occurred on the failing console.
- SWER A software error caused the console to fail.
- OPER An open failure forced the console switch.
- ACR Alternate CPU recovery (ACR) forced the console switch.
- HCSW The system switched the hard-copy function from SYSLOG.
- VMST The operator issued a VARY MSTCONS command.
- VCHN The operator issued a VARY CH command.
- VCPU The operator issued a VARY CPU command.
- CQEER The CQE cannot be obtained.

In the message text, the fields are:

console

- ddd Device number of the console.
- ddd,ddd Device numbers of the composite console.

auth

- SYS Commands authorized for console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, SETDMN, SLIP, START, STOP, CHNGDUMP, TRACE, and WRITELOG.
- IO Commands authorized for console are MOUNT, UNLOAD, VARY for devices, and SWAP.

- CONS Command authorized for console is VARY and the routing location operand (L =).
- INFO Commands authorized for console are DISPLAY, CONTROL, MSGRT, STOPMN, MONITOR, LOG, REPLY, TRACK, STOPTR, and SEND.
- ALL Commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.
- NONE No command authority, which means that the console is an output only device.

routed

x,x,... The routing codes assigned to the console or hard-copy device or, for a composite console, the routing codes assigned to the output device.

ALL All of the routing codes.

NONE None of the routing codes.

a

- M Master console.
- S Secondary console.

b

- Y Yes; hard-copy log.
- N No; not a hard-copy log.

level

The message level(s) assigned to the console or hard-copy device.

- NB No broadcast messages.
- ALL All of the following levels.
- R WTOR messages.
- I Immediate action messages.
- CE Critical eventual action messages.
- E Eventual action messages.
- IN Informational messages.

System Action: The system continues processing.

Operator Response: If the console switch was caused by a VARY MSTCONS command or by pressing the INTERRUPT key, no response is required.

Note: The failing console is left online and unallocated.

Problem Determination: If the console switch occurred as a result of an uncorrectable I/O error, see Table I, items 2, 30.

IEE144I

K M,AMRF = {Y|N},MLIM = nnnn

Explanation: This message appears in response to the CONTROL M (K M) or the CONTROL M,REF (K M,REF) command.

The AMRF field shows the status of the action message retention facility (AMRF). If AMRF = Y, the AMRF is active; if AMRF = N, it is inactive.

In the MLIM = nnnn field, nnnn is the current limit on the number of WTO buffers. When the number of WTO buffers reaches nnnn, any problem program that issues a WTO is placed in a wait until

the number of WTO buffers decreases to a value less than nnnn.

System Action: CONTROL command processing continues.

Operator Response: None.

IEE145I DELETION REJECTION [FOR MESSAGE xxxxx] - text insert

Explanation: An invalid CONTROL C,A, CONTROL C,E or CONTROL C,I command was entered. The possible text inserts in the message text are:

FOR MESSAGE xxxxx

The message ID specified in the command is in error for the reason that appears in the message. (This information appears only on printer-keyboard consoles.)

ID DOES NOT EXIST

No message with the specified message ID exists for the message type (immediate action or eventual action) specified in the command.

REPLY COMMAND REQUIRED

The specified message ID identifies a message that requested a reply. The message cannot be deleted.

PRESENTATION INCOMPLETE

The specified message ID identifies a message that has not yet been presented on all consoles. The message is queued to appear on a console or the hardcopy device.

System Action: When a series of message ID is specified in the command, the system deletes all messages for the IDs that precede the ID in error. When the CONTROL command is entered from a display console, the system displays the command again and positions the cursor under the message ID in error. The message IDs of any messages that are deleted are not included in the displayed command.

Operator Response: If ID DOES NOT EXIST appears in the message, issue a DISPLAY R command to determine the correct ID for the message to be deleted. Reissue the command with the correct ID.

If REPLY COMMAND REQUIRED appears in the message, the message requires a reply. Enter the appropriate REPLY command for the message. The system then deletes the message.

If PRESENTATION INCOMPLETE appears in the message, wait for the system to complete the presentation of the message before making another attempt to delete the message. If the message ID is continually rejected, issue the DISPLAY CONSOLES command to determine if a console has a large backlog of messages. If so, correct the problem with the console and reissue the CONTROL command.

Problem Determination: Table I, items 2, 29.

IEE146I CONTROL COMMAND ENDED - {nnnn|NO} MESSAGE(S) DELETED

Explanation: This message is issued in response to a CONTROL C,I, CONTROL C,E, or a CONTROL C,A command used to delete outstanding action messages. When nnnnn appears in the message, it indicates the number of messages deleted in response to the command. When NO appears in the message, no messages were deleted. If an error occurs, message IEE145I precedes this message.

Note: When a range of IDs is specified in the command, certain conditions, which would be flagged as errors if individual IDs were specified, are not flagged. For example, message IDs that do not exist but are within the range are not flagged. If you specified a non-existent ID by itself, you would receive an error message.

System Action: The system deletes the messages for the IDs specified in the command. If an error occurs, the system deletes only the messages for the IDs that precede the ID in error in the command.

Operator Response: None.

IEE147I text

Explanation: This message contains the text portion of any LOG command or WTL macro executions issued while the system log is not supported. If the log is not active, a WTL macro instruction is converted to a WTO and assigned this message ID.

System Action: The system sends each incoming log record as the text of this message.

Operator Response: If the log is not being supported, report the message to the system programmer at the installation.

IEE148I {item1 NOT RECONFIGURED - text1} item2 NOT RECONFIGURED PHYSICALLY {ONLINE|OFFLINE}, text2}

Explanation: The service processor (for example, an MSSF) was processing a CONFIG command but could not reconfigure online or offline all items as requested. In the message, item1 and item2 can be one of the following:

[REAL STORAGE LOCATIONS] xM to yM

The beginning and ending addresses, in megabytes, of a range of real storage. x and y are one- or two-digit decimal numbers.

CPU(z)

Processor z.

VF(z)

Vector Facility attached to processor z.

CHP(xx)

Channel path xx.

I/O ENGINE

I/O Engine.

SIDE (x)

Side.

EXTENDED STORAGE ELEMENT(n)

Extended storage element n.

[REAL] STORAGE ELEMENT(n)

Real storage element n.

REAL STORAGE

Real storage range or amount.

ELEMENT(S) or ITEM(S)

An error occurred while trying to build the new CONFIG ONLINE or OFFLINE display.

In the message text, **NOT RECONFIGURED PHYSICALLY OFFLINE** means that one of the following occurred:

- A CONFIG OFFLINE command was entered. The item was taken logically offline but could not be taken physically offline.
- A CONFIG ONLINE command was entered. The item was brought physically online, but the attempt to bring it logically online failed, and the system issued the appropriate error message. The CONFIG command processor then attempted to take the item physically offline to make its physical status consistent with its logical status. This attempt also failed; message IEE148I refers to this attempt. The item is logically offline but still physically online.

In the message text, **NOT RECONFIGURED PHYSICALLY ONLINE** means that an item could not be brought physically online. The CONFIG command processor did not attempt to bring the item logically online.

In the message, text1 and text2 explain the reasons, as follows:

INVALID ID

The item specified in the CONFIG command does not exist in the configuration.

FUNCTION NOT APPLICABLE

The service processor received an invalid or unsupported command.

IN S/M/R CONFIGURATION

The specified item is part of a service/maintenance/repair configuration.

ITEM NOT AVAILABLE

The specified item is part of a service/maintenance/repair configuration or another partition.

COMMAND NOT EXECUTABLE ON CURRENT CONFIGURATION

The operator command is not supported by the hardware on which MVS is running.

CONTAINS REQUIRED FACILITIES

The extended storage element specified in a CONFIG ESTOR(E=id) command could not be taken offline because it contains storage that must be kept online.

IN ANOTHER PARTITION

The processor specified in a CONFIG CPU ONLINE command is in a different partition of a 3084 from the MVS system in which the CONFIG command was issued.

{SERVICE PROCESSOR|MSSF} BUSY

The service processor could not process the CONFIG command because the service processor control block is in use or the hardware is processing another request.

{SERVICE PROCESSOR|MSSF} FAILURE

The service processor could not process the CONFIG command because of an internal service processor error.

{SERVICE PROCESSOR | MSSF} CALL FAILED

The service processor call SVC routine could not invoke the service processor. The item is not varied. The system records the error status in the SYS1.LOGREC data set and requests an SVC dump.

{INSUFFICIENT RESOURCES|NO MORE STORAGE} AVAILABLE

Real storage could not be brought online because all of the real storage in the system is either currently in use, part of a service/maintenance/repair configuration, or part of another partition.

IN OFFLINE STORAGE ELEMENT

The storage identified in the message could not be brought online because all or part of that storage was in a storage element that is offline.

AT LEAST ONE CHP IS ONLINE

I/O Engine could not be taken offline because at least one CHP is still online.

System Action: Either the item is not reconfigured or CONFIG processing is incomplete. If the CONFIG command specified several items, reconfiguration processing continues for those items not named in the message text.

Operator Response: The response depends on the contents of the text field, as follows:

INVALID ID

Reenter the CONFIG command with the correct ID number for the item.

FUNCTION NOT APPLICABLE

None.

IN AN S/M/R CONFIGURATION

Reenter the CONFIG command after the specified item has been released from the S/M/R configuration.

ITEM NOT AVAILABLE

Reenter the CONFIG command after the specified item has been released from the S/M/R configuration or the other partition.

CONTAINS REQUIRED FACILITIES

None.

COMMAND NOT EXECUTABLE ON CURRENT CONFIGURATION

None.

IN ANOTHER PARTITION

Reenter the CONFIG command after the specified item has been released from the other partition.

{SERVICE PROCESSOR|MSSF} BUSY

Reenter the CONFIG command. If the problem persists, contact your system programmer.

{SERVICE PROCESSOR|MSSF} FAILURE

Reenter the CONFIG command. If you continue to receive this message, contact your system programmer.

IEE

{SERVICE PROCESSOR|MSSF} CALL FAILED

Reenter the CONFIG command. If the problem persists, contact your system programmer.

{INSUFFICIENT RESOURCES|NO MORE STORAGE} AVAILABLE

None.

IN OFFLINE STORAGE ELEMENT

Issue a CONFIG command to bring online the storage element. If the entire range of storage identified in the message does not come online when you bring the storage element online, reenter the CONFIG command for that range.

Problem Determination:

- For {SERVICE PROCESSOR|MSSF} FAILURE, Table I, items 2, 18, 30.
- For {SERVICE PROCESSOR|MSSF} CALL FAILED or {SERVICE PROCESSOR|MSSF} BUSY, Table I, items 2, 18, 29.

IEE150I CHANGE OPTIONS IF DESIRED

Explanation: One of the following occurred at a display console:

- The operator issued a reference-type CONTROL command that requested a display of some current CONTROL or MSGRT conditions. The display appears in the entry area in the CONTROL or MSGRT command format.
- The operator pressed the PA1 key, causing the last command entered to be placed in the entry area in the same format as it had when it was entered.

The operator can change the options of the command that appears in the entry area.

System Action: Processing continues.

Operator Response: If you do not want to change the command, perform the CANCEL or ENTER action. If you want to change the command, do so and then enter it. The new values become effective immediately.

IEE151I DELETE REQUEST INCONSISTENT - text insert

Explanation: The operator entered a request to delete messages from a display console screen, and one of the following error conditions (text insert) occurred:

NO DELETABLE MESSAGES

CONTROL E,F CONTROL E,SEG or CONTROL E,nn [,nn] was issued, but there were no messages that could be erased by this request.

INVALID RANGE

ICONTROL E,nn [,nn] was issued, but one or more of the message numbers specified was not displayed in the visible message area.

CONTROL E,nn [,nn] was issued, but the specified message numbers were invalid.

CONTROL E,nn [,nn] was issued, but the specified message numbers included blank lines.

SEG = 0

CONTROL E,SEG was issued, but SEG was specified with a value of zero.

INVALID OPERAND

CONTROL EX - comma does not follow E.

NO DISPLAY ON SCREEN

CONTROL E,N was issued, but the message line numbers were already removed.

CONTROL E,D,L = cc was issued, but no status display is on the screen specified by cc.

NO DISPLAY IN AREA

CONTROL E,D,L = cca was issued, but no status display is in the area specified by cca.

USE STOPTR TO DELETE

CONTROL E,D[,L = cca] was issued to erase a TRACK dynamic display. The STOPTR command must be used to tell the system the dynamic display is no longer required. This results in an automatic erase of the display currently on the screen.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it.

D C,K may be entered to obtain a display which explains the CONTROL command.

IEE152I *ENTER* *CANCEL* *D C,K*

Explanation: This message appears upon console initialization only if the console device is a 2250- or 3277-type display unit. It permits the operator to use the light pen (if the device has this feature) for ENTER and CANCEL actions, and to request a display of the CONTROL command. The message appears whenever the instruction line is not required for another message. (Positioning the light pen on ENTER has the same effect as performing an ENTER action. Positioning the light pen on CANCEL has the same effect as performing a CANCEL action. Positioning the light pen on D C,K has the same effect as typing D C,K in the entry area and performing an ENTER action; this action will cause a display of the CONTROL command with a brief explanation of all its operands.

System Action: Processing continues.

Operator Response: If the display unit has a light pen and you want to, you may position the light pen on D C,K for an explanation of the CONTROL command (displayed in the status display area.) If an ENTER or CANCEL action is desired, position the light pen on the word that represents the desired action.

IEE153E ERROR - ENTRY GREATER THAN 126 CHARACTERS

Explanation: The 127th position in the entry area contains a character other than a blank (or EOM symbol on the 2260.) The cursor appears under the 127th character to aid the operator in correcting the command.

System Action: Until the 127th position contains a blank (or EOM symbol), the system ignores all commands.

Operator Response: Correct the command that appears in the entry area and make sure that a blank is typed in the 127th position. Then perform an ENTER action.

If it is desired to clear the entry area before making the correction, perform the CANCEL action. Then enter the command correctly and perform an ENTER action.

IEE154I ILLEGAL CURSOR OPERATION - CURSOR REPOSITIONED

Explanation: The operator performed an ENTER action while the cursor was positioned in an invalid area. The following are valid areas:

- Any position on a no-action message line.
- The asterisk on an action message line.
- ENTER, CANCEL, or D C,K in the instruction line.
- Any position in the entry area.
- Any of the detectable options in the control line of a status display.

If the cursor is positioned at any other place, it is an error.

System Action: The cursor is repositioned to the left of the entry area.

Operator Response: Position the cursor properly to perform the desired operation.

IEE156I cm INVALID OPERAND - op

Explanation: In the CONTROL command, one of these error conditions occurred:

- The specification (S) operand was invalid.
- The first character after CONTROL (or K) was not E, S, D, T, C, N, A, or V.
- The operand following CONTROL D (of K D) was not N; N,HOLD; F; H; or U; PFK.
- RNUM or RTME specified a value of zero.
- The K N,PFK command contains an error. The type of error is indicated by the location of the cursor:
 1. If the cursor is positioned under the first letter of a keyword (CMD, KEY, PFK, or CON), that keyword or its trailing equal sign is incorrect.
 2. If the cursor points to the number of the key being defined, that key is either not a numeric character, not a key that was defined during system generation, or is a key being defined as a list of keys that is already contained within another list of keys.
 3. If the cursor points to a key number after the KEY = parameter, that key is either not a numeric character, the number of the key that is being defined, a key which has been defined as a list of keys, or a key that was not defined during system generation.

4. If the cursor points to some other location, a syntax error exists at the position indicated by the cursor.

- The multi-line WTO ID specified on the K C,D command is invalid or is directed to the wrong console.
- The operands on the K V command are invalid.

In the message text, op represents the first six characters of the invalid operand.

System Action: The command was not executed.

Operator Response: If the command is K or MR, correct the command by positioning the cursor under the characters to be changed and typing the correct information. Then perform the ENTER action.

If desired, the command may be canceled.

IEE157E DELETION REQUESTED

Explanation: The operator issued a deletion request in conversational mode. The deletion request appears in command form in the entry area, and the messages selected for deletion are indicated by vertical lines displayed in position 3 of the message line.

System Action: No messages are deleted until the operator has responded to this message.

Operator Response: Respond in one of the following ways:

- To remove the indicated messages, perform an ENTER action, or position the light pen on the same message.
- To change the deletion request, position the cursor under the proper characters and type the desired information. (Also, the light pen may be positioned on message line.) Then perform an ENTER action. All messages that are to be deleted will be marked with vertical lines. Verify that the messages so marked are correct and perform an ENTER action.
- To retain the messages, perform a CANCEL action. This restores the screen, blanks the entry area, and repositions the cursor at the left side of the entry area.

IEE158I K REQUEST INCONSISTENT optional text

Explanation: If no optional text appears, the CONTROL command was used to display or erase the PFK line on a device that does not support the PFK line. If one of the optional message texts appears, the indicated error condition occurred when the CONTROL (K) command was issued. The possible error conditions (optional text) and their explanations are as follows:

STATUS ALREADY EXISTS

A CONTROL option was requested which is already in effect. For example, K S,DEL = R is entered when the console is in roll mode.

NO DISPLAY ON SCREEN

A CONTROL option for a display, such as framing or erasing, was requested and there is no display on the screen.

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NO DISPLAY IN AREA

A CONTROL option, such as framing or erasing, was requested for a display in a particular area and there is no display in that area.

LAST FRAME DISPLAYED

K D,F or K D,F,L=cca was issued but the last frame of the display is already on the screen.

FRAME NOT COMPLETE

A framing request K D,F was issued, but the frame of the display currently on the screen is not complete yet. The request must be reissued when the current frame is complete.

DISPLAY IS NOT DYNAMIC

'Hold' K D,H or 'update' K D,U of a display was requested, but the display is not dynamic (TRACK). These options apply only to a dynamic display, which is initiated by use of the TRACK command.

NO TRACK ACTIVE

A K, T,REF or K,T,UTME=nnn command was issued for a console not receiving output from the TRACK command.

PFK IN USE

Using the K N,PFK command, a request has been made to change the definition of a PFK. However, the system is currently processing a PFK for that console.

System Action: The command is not executed.

Operator Response: If no optional text appears, no response is necessary; you cannot display or erase the PFK line because the device does not support the PFK line. If one of the optional message texts appears, respond as follows:

STATUS ALREADY EXISTS

Change the command and reenter, or CANCEL the command because the condition already exists.

NO DISPLAY ON SCREEN

Change the command to specify the correct console ID, with L=cc, and reenter the command, or CANCEL the command because the conditions required by the command do not exist.

NO DISPLAY IN AREA

Change the command to specify the correct area and reenter, or cancel the command.

LAST FRAME DISPLAYED

CANCEL the command because no more frames can be displayed.

FRAME NOT COMPLETE

Enter the request again after the entire frame has been displayed.

DISPLAY IS NOT DYNAMIC

Change the command to specify the correct display with L=cca and reenter, or CANCEL the command.

NO TRACK ACTIVE

Issue a TRACK command for the console, if desired.

PFK IN USE

Allow the processing of the PFK to complete before trying to change the PFK definition.

Problem Determination: Table I, item 2.

IEE159E**MESSAGE WAITING**

Explanation: All message lines are filled, but another message is waiting to be displayed. This message appears if automatic message deletion was not in effect (DEL=N) or if automatic message deletion was in effect (DEL=Y) but no messages in the message area contained vertical lines in position 3.

This message also appears if the screen is full of intervention required (INT REQ) messages, or WTORS.

System Action: No new messages are displayed until some messages are deleted either by the operator, by a system task, or by a problem program. (Messages are deleted by a problem program or system task only if automatic message deletion is in effect.)

Operator Response: Delete the messages by using either the CONTROL command, the light pen, or the cursor. (In conversational mode, it will be necessary to perform an ENTER action a second time without making any changes to signal verification of the deletion request.) If enough messages are removed so that all waiting messages are displayed, this message is removed.

If the screen is full of intervention required (INT REQ) messages, perform the actions where possible; then, if automatic message deletion is not in effect, delete those messages from the screen.

If the screen is full of WTORS, start replying to them; then, delete those messages from the screen.

IEE160I**UNVIEWABLE MESSAGE**

Explanation: A status display is temporarily replacing one or more messages.

System Action: If a system task or a problem program has issued a DOM macro instruction, and if DEL=Y is in effect, automatic message deletion occurs. Otherwise, the system continues queuing the new messages until the operator either removes the status display or removes some messages above the status display. (Message IEE159E replaces this message if there are more messages waiting than are currently being displaced by the status display.)

Operator Response: Respond in one of the following ways:

- Enter a CONTROL E,D command or position the light pen on *E* in the title line to remove the display, thereby freeing the bottom portion of the message area for displaying messages.
- Request message deletion by using the cursor or light pen or by entering a CONTROL command, thereby removing one or more messages above the display so that more messages can be displayed.

IEE1611 WARNING - CON = N, DEL = Y

Explanation: One of the following occurred:

- Automatic message deletion was in effect (DEL = Y) when the operator entered a CONTROL S, CON = N command, requesting non-conversational mode.
- Conversational mode was not in effect (CON = N) when the operator entered a CONTROL S, DEL = Y command, requesting automatic message deletion.
- The operator entered a CONTROL S, CON = N, DEL = Y command, requesting non-conversational mode and automatic message deletion.

This message is a warning in response to an erase (E) request.

System Action: Processing continues. Some messages other than the requested messages may be lost.

Operator Response: If automatic message deletion is in effect, it is strongly recommended that conversational mode be used so that messages can be verified before they are deleted. If conversational mode is not desired, delete the messages manually before the message area is filled.

IEE1621 hh.mm.ss K COMMAND [id] status display

K S,MFORM =

M DISPLAY MESSAGE TEXT ONLY
S DISPLAY SYSTEM NAME AND MESSAGE TEXT
J DISPLAY JOB NAME AND MESSAGE TEXT
T DISPLAY TIME AND MESSAGE TEXT
(T,S,J) DISPLAY TIME, SYSTEM NAME, JOB NAME AND MESSAGE TEXT

Explanation: This message summarizes the operands in a CONTROL command. The message is displayed in response to a DISPLAY C,K command.

Explanation: The first line contains the following variable fields:

hh.mm.ss

The time the message is issued, given as the hour (00-24), the minute (00-59), and the second (00-59).

id

A three-digit decimal identification number used with the CONTROL C,D command for canceling status displays. These displays are being written on typewriter or printer consoles or being displayed inline (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

The message display also contains information on the format of the message displays as specified in the K S,MFORM parameter.

The rest of the message displays the operands in the CONTROL command. The CONTROL command is described in *System Commands*.

System Action: Processing continues.

Operator Response: None.

IEE1631 MODE = {R|RD}

Explanation: The operator entered a CONTROL S, DEL = R or CONTROL S, DEL = RD command, as indicated in the message text, requesting that roll mode be in effect.

System Action: When the message area is filled, the number of messages specified by the RNUM parameter (of the CONTROL command) is removed at the interval specified by the RTME parameter (of the CONTROL command) or as long as there are messages waiting to be displayed.

Operator Response: None.

IEE1641 ILLEGAL LIGHT PEN - CURSOR DETECT

Explanation: An error occurred because the light pen or the cursor was not positioned in a valid location. The only valid locations for positioning the light pen or the cursor are:

- In any position on a non-action message line.
- On the asterisk on an action message line.
- On a detectable CONTROL command option (such as *F or *E) in the control line of a status display.
- On *ENTER*, *CANCEL*, or *D C,K* in the instruction line.

System Action: The system does not act upon the invalid request; the screen remains the same.

Operator Response: Position the light pen or cursor properly to perform the desired operation.

IEE1651 ONE OR MORE WTO USER EXITS COULD NOT BE LOADED

Explanation: One or more installation-specified WTO exit routines could not be loaded by the SET MPF command.

System Action: Processing continues without the WTO user exit routine(s). The system issues message CSV0031 or CSV0161 to identify the module(s) that were not loaded.

Operator Response: Notify the system programmer. Issue the DISPLAY MPF command to determine which WTO user exit routine(s) were not loaded.

Programmer Response: Check for the following possible problems:

- The requesting program was incorrectly modified.
- The load module library is incorrectly specified.
- The load module library does not contain the requested program.
- The requesting program is trying to access a nonexecutable module. A module that is nonexecutable cannot be fetched into storage via

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the LOAD, LINK, XCTL, or ATTACH services.

Correct the problem, then ask the operator to issue a SET MPF command to load the routine(s).

Problem Determination: Table I, items 2, 16, 25c, 27.

IEE166E {cm|func} RESTARTED AFTER FAILURE

Explanation: The system successfully restarted command cm or function func processing after a previous failure.

System Action: Processing for the command or function continues. If AMRF (action message retention facility) appears in the message, action messages that are issued after this message are retained. Action messages issued before this message are no longer available; they cannot be accessed with the DISPLAY R command.

Operator Response: None.

Programmer Response: None.

IEE167E OUTPUT IN HOLD MODE

Explanation: No new messages can be written on the screen until the operator takes some action, such as confirming a command or canceling a request. This message appears only on 2260 console devices.

System Action: The display console is in HOLD mode. No more messages will be displayed until the operator has responded to this message.

Operator Response: Enter data or perform a CANCEL action by repositioning the cursor next to the START MI symbol and pressing the ENTER key.

**IEE168D NOT ENOUGH RECONFIGURABLE STORAGE AVAILABLE.
REPLY U TO USE PREFERRED STORAGE
(ABOVE/BELOW) OR REPLY C TO CANCEL.**

Explanation: The operator entered a CONFIG STOR (E=x) command to configure real storage element x offline. In response, the command processor tried to swap storage containing fixed data with storage containing non-fixed data, but could not find enough storage containing non-fixed data. If you continue with the reconfiguration, the command processor will swap storage containing fixed data with preferred storage (first with preferred storage above 16 megabytes, and then, if necessary, with preferred storage below 16 megabytes). This swapping will decrease the amount of preferred storage available to the system, and may cause performance degradation.

This message may appear if previous IAR005I messages have been issued.

System Action: The system waits for the operator to reply U or C.

Operator Response: Reply U if you want the CONFIG command processor to continue trying to vary the storage offline. However, remember that the command processor will use preferred storage,

thus decreasing the amount of preferred storage available to the system, and possibly degrading performance.

Reply C if you want to cancel the CONFIG STOR command.

IEE170E RETRIABLE ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE170E PRESS THE CANCEL KEY TO RESTORE THE SCREEN.

Explanation: A hardware error occurred that was not caused by operator action. If the same error occurs again, the device is considered unusable and the error is logged. In addition, multiple console support will transfer the routing codes and the command input capability of this console to an active alternate console, and will issue message IEE143I. (Anything in the entry area at the time of the error will be lost.)

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. To continue, perform a CANCEL action. The messages are rewritten on the screen. However, any status displays are lost. The request must be reentered.

Note: The 2260 display console does not have a CANCEL key; the system will automatically restore the screen in about 30 seconds.

Problem Determination: Table I, items 2, 30.

IEE171E CONDITIONAL ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE171E PRESS CANCEL TO CONTINUE, OR SWITCH CONSOLES.

Explanation: A hardware error has occurred. However, the device may still be usable.

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. If the device is still usable, perform a CANCEL action to continue operating. However, keyboard, cursor, or light pen actions may need to be repeated.

Note: The 2260 display console does not have a CANCEL key; the system will automatically restore the screen in about 30 seconds.

If it is desired not to continue, use the multiple console support option to remove this device as a console.

Problem Determination: Table I, items 2, 30.

IEE172I ALL CHANNEL PATHS ON SIDE x ARE NOW { ONLINE | OFFLINE }

Explanation: The system will display this message when either one of the following situations is true.

- In response to a CONFIG CHP(ALL,x),ONLINE command the system has successfully configured every channel path on side x online.
- In response to a CONFIG CHP(ALL,x),OFFLINE command the system has successfully configured every channel path on side x offline.

System Action: The system continues processing.

Operator Response: None

Programmer Response: None.

IEE173I n CHANNEL PATH[S] ON SIDE x {IS|ARE} STILL { ONLINE | OFFLINE }

Explanation: The system will display this message when either one of the following situations is true.

- In response to a CONFIG CHP(ALL,x),ONLINE command the system could not successfully configure every channel path on side x online. n channel paths were not configured successfully.
- In response to a CONFIG CHP(ALL,x),OFFLINE command the system could not successfully configure every channel path on side x offline. n channel paths were not configured successfully.

System Action: The system continues processing.

Operator Response: You can issue a D M=SIDE(x) command to determine the status of the side. Issue a D M=CHP(y) command for each channel path y on side x that was not successfully configured.

Programmer Response: None.

IEE174I hh.mm.ss DISPLAY M [id]

Explanation: This message appears in response to a DISPLAY M command. The display texts that appear for each of the operands follow, arranged alphabetically according to the display option.

In the message text, hh.mm.ss is the time given as the hour (00-23), the minute (00-59), and the second (00-59) and id is a particular display option.

System Action: Processing continues.

Operator Response: None for most displays.

Symbols appear in the message text for several of the DISPLAY M Command options. In each of these cases, the the meanings of the symbols used also appear as part of the message display. Following is a list of all the symbols used in the various versions of message IEE174I.

***** SYMBOL EXPLANATIONS *****

- . DOES NOT EXIST
- OFFLINE
- # DEVICE OFFLINE
- * PHYSICALLY ONLINE
- + ONLINE

@ ONLINE, PHYSICALLY ONLINE,
AND OPERATIONAL INDICATORS
ARE NOT EQUAL
\$ PATH NOT OPERATIONAL
BX DEVICE IS BOXED
DN DEVICE NOT AVAILABLE
SN SUBCHANNEL STATUS NOT AVAILABLE
PE SUBCHANNEL IN PERMANENT ERROR

When you select the CHP option (D M=CHP) the following message display appears:

CHANNEL PATH STATUS

```

0 1 ... F
0  s s ... s
1  s s ... s
.  . . . .
.  . . . .
.  . . . .
F  s s ... s

```

Explanation: D M=CHP displays the status, s, of all channel paths in the system. The first digit of the channel path appears as 0 through F down the left side; the second digit is 0 through F across the top. Values of s and their meanings are:

s	Meaning
+	The channel path is online.
-	The channel path is offline.
.	The channel path is not in the system.

For example, if the second s in row 0 were +, it would mean that channel path 01 is online.

When you issue D M=CHP(nn) command to select a particular channel path or paths the following display appears:

**CHANNEL PATH nn STATUS BY DEVICE
{CHP nn IS OFFLINE}
CHP=nn DOES NOT EXIST|
NO DEVICES ARE ACCESSIBLE
THROUGH THIS CHANNEL PATH}**

```

0 1 2 3 4 5 6 7   F
00  s.... sss ..... ss
01  ss.. s....s .... s
.
.
.
FF  ... s..ssss .....

```

Explanation: D M=CHP(nn) displays the status of the specified channel path. The status, s, of the channel path, nn, is given for each device connected to the channel path; the first two digits of the device number appear as 00 through FF down the left; the third digit is 0 through F across the top. Values of s and their meanings are:

s	Meaning
+	Channel path nn is logically online to device ddd.
*	Channel path nn is logically offline but physically online to device ddd. The VARY PATH(ddd,nn),ONLINE command brings channel path nn logically online to device ddd.
-	Channel path nn is logically and physically offline to device ddd. The CONFIG CHP(nn),ONLINE command brings channel path nn logically and physically online to all devices connected to channel path nn.

Channel path nn does not exist.

- BX The device is boxed.
- DN The device is not available.
- \$ The path is not operational.
- SN Subchannel status is not available.
- PE The subchannel is in permanent error.

Paths not validated.

For example, if the second s in row 01 were +, it would mean that channel path nn is online to device 001.

CHANNEL PATH nn IS OFFLINE appears only when the channel path is offline.

CHP = nn DOES NOT EXIST appears only when the channel path does not exist.

Operator Response: If the channel path does not exist, reenter the command with an existing channel path number.

When you select the **D M = CPU** option the following display appears:

PROCESSOR STATUS
CPU STATUS SERIAL
 {id stat ser#}
CPU(x) IS NOT IN THIS PARTITION}

Explanation: **D M = CPU** displays the status of the selected processors. In the display, **id** is the processor identifier, **stat** is **ONLINE** or **OFFLINE**. If the processor has a Vector Facility (VF) attached to it, then **stat** also indicates if the VF is online (VFON) or offline (VFOFF). **ser#** is the serial number of the processor.

When you select the **D M = DEV** option, the following display appears:

DEVICE STATUS:
NUMBER OF ONLINE CHANNEL PATHS
 0 1 2 3 4 5 6 F
 00 n.... nnn nn
 01 nn.. n....n ... n
 .
 .
 .
 FF ... n..nnnn

Explanation: **D M = DEV** displays the status of all devices in the system. In the display, **n** is the number of online channel paths available to the indicated device, and/or a symbol if applicable.

The symbol represents information from the store SCHIB service, and can be one of the following:

- n **Status**
Device online, physically online, and operational indicators are not equal.
- + Device is online.
- # Device is offline.
- BX Device is boxed.
- DN Device is not available.
- SN Subchannel status is not available.
- PE Subchannel is in permanent error.
- . Device does not exist.

When you select the **D M = DEV(ddd)** option the following display appears:

DEVICE ddd	STATUS = status
CHP	nn nn
PATH ONLINE	y y
CHP PHYSICALLY ONLINE	y n
PATH OPERATIONAL	n n
[PATHS NOT VALIDATED]	

Explanation: **D M = DEV(ddd)** displays the status of device ddd for all channel paths to the specified device. The status is one of the following:

- ONLINE
- OFFLINE
- NOT IN SYSTEM
- SUBCHANNEL STATUS NOT AVAILABLE
- SUBCHANNEL IN PERMANENT ERROR
- DEVICE NOT AVAILABLE
- DEVICE IS BOXED

In the display, ddd is the device number (000 through FFF). Each nn is a channel path (00 through FF) to the device. Under each nn is yes or no indicating whether the corresponding condition is true.

When you select the **D M = ESTOR** option, the following message display appears:

EXTENDED STORAGE STATUS
ONLINE - [NOT] RECONFIGURABLE
 aaaaM-bbbbM
[ccccK BAD EXTENDED STORAGE]
[PENDING OFFLINE
 {xxxxxxx | NONE} |
dddm IN OFFLINE STORAGE ELEMENT(S)]
[dddm IN ANOTHER CONFIGURATION]
[ESTOR PARAMETER NOT SUPPORTED]

Explanation: **D M = ESTOR** displays the range of extended storage that is or is not available to the system. In the message text, **aaaaM-bbbbM** is the range of extended storage that is either available or unavailable to the system, **ccccK** is the amount of bad extended storage and **xxxxxxx** is the hexadecimal address.

If **PENDING OFFLINE** appears in the message display, this indicates the extended storage blocks for which the offline request has been issued but not yet completed.

If **dddm IN OFFLINE STORAGE ELEMENT(S)** appears in the message display, **dddm** is the total amount of storage, in an offline extended storage element or elements. This amount of storage comes online when the element is brought online. You can issue a **CONFIG ESTOR(E=id)**, **ONLINE** command to bring the extended storage element online.

If **dddm IN ANOTHER CONFIGURATION** appears in the message display, this indicates that the storage is in (1) another partition, or (2) a maintenance or service configuration.

The messages **EXTENDED STORAGE STATUS** and **ESTOR PARAMETER NOT SUPPORTED** appear if the service processor does not support extended storage.

When **NONE** appears with one of the other message headings, it indicates that no extended storage is available.

When you select the **D M=HIGH** option the following message display appears:

STORAGE SIZE STATUS
HIGH REAL STORAGE ADDRESS IS xxxxxxM
HIGH EXTENDED STORAGE ADDRESS IS yyyyyyM

Explanation: DISPLAY M=HIGH displays the highest possible real address and the highest possible extended address, in the system. In the display, xxxxxx and yyyyyy are addresses in decimal megabytes.

When you select the **D M=HSA** option, the following message display appears:

HSA STATUS
{ADDRESS = zzzzzz LENGTH = yyyyyyK |
NO HSA IN MAIN STORE}

Explanation: D M=HSA displays the status of the hardware system area (HSA). In the display, the second line appears once for each HSA in the system; the line gives the real starting address, xxxxxx in decimal kilobytes or zzzzzzzz in hexadecimal bytes, of the HSA and the length, yyyyyy, in decimal kilobytes. If no HSA exists in main storage, the line NO HSA IN MAIN STORE appears.

When you select either the **D M [=SIDE(id)]** or the **D M = IO** option the following message display appears:

```
[RESOURCE: {'SYSZVARY,CPU' |
           'SYSZVARY,PATH' |
           'SYSZVARY,STORAGE'}
 IS CURRENTLY IN USE
 - STATUS MAY BE CHANGING]

SIDE STATUS
SIDE:          id          [id]
STATUS:        status      [status]
[I/O ENGINE:   {xx | xx*}  [ {xx | xx*} ]
CPU:           list        [list]
[VF:           list        [list] ]
CHP:           list        [list]
STOR(E=X)     list        [list]
[ESTOR(E=X):  list        [list] ]

TOTAL STOR: ddddM[UNASSIGNED: ddddM]
[TOTAL ESTOR: ddddM]
* = OFFLINE
```

```
[SIDE STATUS
{SIDE PARAMETER NOT SUPPORTED |
STATUS NOT OBTAINED: {INVALID ID |
SERVICE PROCESSOR CALL FAILED |
SERVICE PROCESSOR FAILURE } }
```

Explanation: During normal processing of the **D M = SIDE** command, the first form of the message display appears. This display includes the status of the selected sides in the system and the status of the resources that make up each side.

One of the following resource names might appear:

- RESOURCE SYSZVARY,CPU
- RESOURCE SYSZVARY,PATH
- RESOURCE SYSZVARY,STORAGE

The appearance of the resource name indicates that another user has exclusive use of the resource.

The following list explains the variables that could appear in the message display:

dddd decimal megabytes.
hh.mm.ss. The time stamp
nnn The sequence number
status status may be ONLINE, OFFLINE or UNAVAILABLE
id The side ID
xx The hexadecimal identifier for an online resource
xx* The hexadecimal identifier for an offline resource
xx-xx The starting and ending hexadecimal identifiers for a range of online resources.
xx-xx* The starting and ending hexadecimal identifiers for a range of offline resources.
list A list of (1) hexadecimal identifiers and/or (2) a range.

UNASSIGNED: ddddM

The part of storage in online real storage elements. This storage can be brought online with a CONFIG STOR(ddddM),ONLINE command.

If an error occurs and the system could not display the status of the sides you requested, then the second form of the message display appears.

System Action: The system may take a variety of actions.

- In the case of normal processing, the system continues processing.
- If SIDE PARAMETER NOT SUPPORTED or STATUS NOT OBTAINED: INVALID ID appear in the message display, the system continues processing.
- If STATUS NOT OBTAINED: SERVICE PROCESSOR CALL FAILED or STATUS NOT OBTAINED: SERVICE PROCESSOR FAILURE appears in the message display, then the system issues system completion code 0B7 and writes a record to SYS1.LOGREC.

Operator Response: You may respond with one of the following:

- In the case of normal processing, or when SIDE PARAMETER NOT SUPPORTED appears in the message display, there is no operator response.
- If STATUS NOT OBTAINED: INVALID ID appears in the message display, then reissue the Display M command with a valid side ID.
- If STATUS NOT OBTAINED: SERVICE PROCESSOR CALL FAILED or STATUS NOT OBTAINED: SERVICE PROCESSOR FAILURE appears in the message display, retry the command. If the failure continues, contact your system programmer.

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Programmer Response: If failure occurs take the appropriate actions, as listed in the following problem determination section.

Problem Determination: Take the following actions, depending on the message displayed in the text.

- If **STATUS NOT OBTAINED: SERVICE PROCESSOR CALL FAILED** appears in the message, then see Table I, items 2, 18 and 29.
- If **STATUS NOT OBTAINED: SERVICE PROCESSOR FAILURE** appears in the message, then see Table I, items 2, 18 and 30.

When you select the **D M=STOR** option the following message display appears:

REAL STORAGE STATUS

```
{status
  blocks
  addstat
  dddM IN OFFLINE STORAGE ELEMENT(S)|
  [dddM UNASSIGNED STORAGE]
  [dddM IN ANOTHER CONFIGURATION]
  NO STORAGE ASSIGNED IN REQUESTED
  RANGE |
  NO STORAGE OFFLINE |
  NO RECONFIGURABLE STORAGE UNITS |
  DEFINED}
```

Explanation: **D M=STOR** displays blocks of real storage frames and their status.

In the display, **status** gives the status of a block or range of blocks. Status can be one of the following:

OFFLINE

The real storage blocks that are offline.

ONLINE - NOT RECONFIGURABLE

The real storage blocks that are online and are not reconfigurable or pending offline.

PENDING OFFLINE

The real storage blocks for which an offline request has been issued but not yet completed.

ONLINE - RECONFIGURABLE

The real storage blocks that are online and are not pending offline or preferred.

Under each status line, the storage blocks are identified by the variable **blocks**. This variable can be the address, range of addresses of the the storage blocks or **NONE**.

An address can be in one of the following forms:

Hexadecimal Address

xxxxxxx

An address range can be in one of the following forms:

Decimal Megabyte Address Range

ccccM-ddddM

Hexadecimal Address Range

xxxxxxx-xxxxxxx

FIRST aaK OF EVERY bbK FROM ccccM TO jjjM

This status is for the first aaK of storage at multiples of bbK in the range of cccc to jjj decimal megabytes.

SECOND aaK OF EVERY bbK FROM ccccM TO jjjM

This status is for the second aaK of storage at

multiples of bbK in the range of cccc to jjj decimal megabytes.

NONE

No frames have this status.

The variable **addstat** can be one of the following:

BAD FRAMES address

The real storage frame that begins at **address** has a storage error. This note can appear when the status is **ONLINE NOT RECONFIGURABLE** or **RECONFIGURABLE**.

PENDING STATUS DUE TO:

RANGE ASID JOBNAME

address range asid jobname

If the line **PENDING STATUS DUE TO** appears, the following lines identify real storage that cannot be released yet. The storage range is given as contiguous frames. The address space ID (**ASID**) and the job name are given for each range of contiguous frames.

dddM IN OFFLINE STORAGE ELEMENT(S)

The amount of real storage in an offline storage element or elements. Each element can be brought online using a **CONFIG STOR(E=id),ONLINE** command.

dddM UNASSIGNED STORAGE

The amount of storage that is available to be brought online in online storage elements. The storage can be brought online with a **CONFIG STOR (dddM),ONLINE** command.

dddM IN ANOTHER CONFIGURATION

The amount of storage in (1) another partition, or (2) a maintenance or service configuration.

When you select either the

D M=[STOR(E)|STOR(E=id)] or the **D M=[ESTOR(E)|STOR(E=id)]** option, the following message display appears:

[REAL|EXTENDED] STORAGE ELEMENT STATUS

```
{id: OWNED STORAGE = xxM
 [UNASSIGNED STORAGE = yyM]
 STATUS = stat|
 ESTOR(E PARAMETER NOT SUPPORTED)|
 STOR(E PARAMETER NOT SUPPORTED)|
 ESTOR(E STATUS NOT OBTAINED: text|
 STOR(E STATUS NOT OBTAINED: text:}
 {STOR(E=id) | ESTOR(E=id)} IS PART OF
 ANOTHER CONFIGURATION-NO STATUS
 OBTAINED
```

Explanation: **D M=STOR(E)** displays the status of all storage elements and **D M=STOR(E=id)** displays the status of the storage element identified by **id**.

id: OWNED STORAGE = xxM [UNASSIGNED STORAGE = yyM] STATUS =stat appears once for each requested storage element. In this line, **id** is the identifier. **xx** is the decimal megabytes. **yy** contains the decimal megabytes of storage in the storage element with no addresses assigned; this storage can be brought online with a **CONFIG STOR** range or amount request. **stat** is the status for the storage element. The status can be:

ONLINE

Storage element **id** is physically online.

OFFLINE

Storage element id is physically offline and is not assigned to a service/maintenance/repair (S/M/R) configuration.

S/M/R

Storage element id is offline and is part of an S/M/R configuration.

STOR(E PARAMETER NOT SUPPORTED or **ESTOR(E PARAMETER NOT SUPPORTED** appears if the service processor does not support information about real storage or extended storage elements.

STOR(E STATUS NOT OBTAINED: text or **ESTOR(E STATUS NOT OBTAINED: text** appears if the system failed to obtain the status of the real or extended storage element(s) from the service processor. The reason for the failure is indicated in **text** as follows:

INVALID ID

An invalid storage element identifier was specified in either the **D M = STOR(E = id)** or the **D M = ESTOR(E = id)** command.

SERVICE PROCESSOR CALL FAILED

An error occurred in the service processor call interface.

SERVICE PROCESSOR FAILURE

An internal error occurred in the service processor.

Operator Response: No response is necessary unless the display includes **STOR(E STATUS NOT OBTAINED: text**. The operator response for each text is:

INVALID ID

Reenter the **D M = STOR(E = id)** command with a valid storage element identifier.

SERVICE PROCESSOR CALL FAILED

Retry the command. If the command fails again because of a problem with the interface, notify the system programmer, who should contact your software support personnel.

SERVICE PROCESSOR FAILURE

Retry the command. If this text appears again, notify the system programmer, who should contact your hardware support personnel.

{STOR(E = id) | ESTOR(E = id)} IS PART OF ANOTHER CONFIGURATION-NO STATUS OBTAINED appears if the storage element is part of another configuration, since the service processor could not obtain the status.

Problem Determination: If the message text includes **STOR(E STATUS NOT OBTAINED: text**, Table I, items 2, 18, 29.

When you select any **D M** option, the following message display appears:

DISPLAY M RESOURCE 'xxx' IS CURRENTLY IN USE

Explanation: Any **D M** command issued while a **CONFIG CPU**, **CONFIG CHP**, **CONFIG STOR**, or **VARY PATH** command is executing generates this display first. This display gives the status of **ENQ** resource **xxx**, which is exclusively held by another user. **xxx** is **PATH**, **CPU**, or **STORAGE**.

The next frame displays the information requested. This second display may or may not reflect the results of the **CONFIG CPU**, **CONFIG CHP**, **CONFIG STOR**, or **VARY PATH** command.

IEE176I CONFIG {CPU(x)|VF(x)} OFFLINE COMMAND WOULD REMOVE LAST VF, dd VF JOBS SCHEDULED. JOB NAMES ARE: jobname [jobname . . .]

Explanation: The reconfiguration command processor attempted to vary either a vector facility (VF) or a CPU with an attached VF offline. However, the message display indicates (1) the number of jobs **dd** and (2) the jobnames **jobname** that require the VF for processing. The most likely reason that this message appears is because **jobname** has been executing VF instructions, and the VF being configured offline is the last VF online in the configuration.

System Action: The system issues message **IEE177D**, requesting that the operator either (1) suspend the jobs and continue reconfiguration or (2) let the jobs run and cancel reconfiguration.

Operator Response: Reply to message **IEE177D**.

IEE177D REPLY 'U' TO SUSPEND VF JOBS. REPLY 'C' TO CANCEL CONFIG COMMAND

Explanation: Message **IEE177D** is issued with message **IEE176I** when the reconfiguration command processor attempted to vary a vector facility (VF) or a cpu with an attached VF offline, while at least one active job still required VF for its processing.

System Action: The reconfiguration command processor waits for the operator's reply.

Operator Response: If you reply 'U', the reconfiguration command processor will (1) reconfigure the CPU or VF offline, then (2) suspend the jobs listed in message **IEE176I**. If your reply 'C', the system continues processing and the reconfiguration command processor will not reconfigure the CPU or VF offline.

IEE180I mem LINE nnnn: stmt STMT IGNORED. NOT VALID.

Explanation: The statement type **stmt** specified on line **nnnn** in **SYS1.PARMLIB** member **mem** is incorrect.

System Action: Nucleus initialization continues.

Operator Response: None.

Programmer Response: Correct the statement type in **SYS1.PARMLIB** member **mem**.

IEE181I mem: LINE nnnn-nnnn IGNORED. UNBALANCED COMMENT DETECTED.

Explanation: The system can issue this message for one of two possible reasons:

1. The system finds a starting comment delimiter, slash asterisk (/*), without finding the matching ending comment delimiter, asterisk slash (*). The generalized parmlib scan routine scans for another starting comment. If the routine finds another starting comment, it first flags the range of records in error then continues processing the

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next statement. If the routine does not find another starting comment, at end-of-file, it processes any remaining SYS1.PARMLIB members.

- The system finds an ending asterisk slash (*/) comment delimiter, without the starting delimiter. In this case, the generalized parmlib scan routine flags the current record and then continues processing the next statement.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: Correct the problem with the comment delimiters in SYS1.PARMLIB member mem.

IEE182I mem IGNORED. STMT STARTING LINE nnnn EXCEEDS 4096 CHARS.

Explanation: If the buffer, which contains records to be passed to the statement processor routine, exceeds 4096 characters, the system ignores SYS1.PARMLIB member mem. If there are any more SYS1.PARMLIB members, the system processes the next one.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: Correct the problem in SYS1.PARMLIB member mem.

IEE188I MESSAGE QUEUE MANIPULATION FOR CONSOLE cc IS COMPLETE

Explanation: A CONTROL Q command has successfully rerouted the messages on the message queue for console cc. This message appears on the console that issued the CONTROL Q command and all consoles receiving the rerouted messages.

System Action: Messages queued for display on console cc at the time the command was issued, are not displayed on that console. Subsequent messages are not affected.

Operator Response: None.

IEE189I hh.mm.ss MPF DISPLAY id

```
[text]
[ MESSAGE-ID SUP RETAIN USER EXIT MPF = xx
msgid      {Y|N} {Y|N} {ERR-|NFD-}userexitid]
GENERAL WTO USER EXIT (IEAVMXIT) -
{ACTIVE|INACTIVE}|ABENDED, NOT ACTIVE]
```

```
FIELD COLOR HLIGHT INTEN MPF = {xx|DFL}
msgtype ccc hhh iii
```

Explanation: This display message appears when the operator enters the DISPLAY MPF (message processing facility) command.

The variables in the first line are:

hh.mm.ss
Hour, minute, and second or 00.00.00, if the TOD clock is not working.

id
A three-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays being written on typewriter or printer consoles or being displayed inline (that is, not in a display area) on a display

console. This number does not appear when the display is presented in a display area on a display console.

If MPF is not active, the second line appears. The text in the line can be one of the following:

MESSAGE SUPPRESSION AND USER EXITS INACTIVE - NOT INITIALIZED

The operator has not requested MPF processing.

MESSAGE SUPPRESSION INACTIVE - HARDCOPY LOG NOT ESTABLISHED

The operator has requested MPF processing, but no hard-copy log has been established. WTO user exit routines receive control, but messages are not suppressed.

MESSAGE SUPPRESSION INACTIVE - HARDCOPY SUSPENDED

The operator has requested MPF processing, and a hard-copy log has been established, but no device is available to print the hard-copy log. WTO user exit routines receive control, but messages are not suppressed.

If the operator requested MPF processing, the message contains the third line once and the fourth line as often as needed to display each message in the MPF table. The MPF = xx field in the third line contains either:

xx The two-digit number the operator entered on the SET MPF = xx command to change the color, intensity, and highlighting attributes; this xx is the last two digits of an MPFLSTxx member in SYS1.PARMLIB.

DFL MPF processing is using the default attributes.

The fields in the fourth line are as follows:

MESSAGE-ID column
msgid is the message ID.

SUP column
Y to indicate that the message is to be suppressed if it is eligible, or N to indicate that the message is not to be suppressed.

RETAIN column
Y to indicate that the message is to be retained by the action message retention facility if it is eligible, or N to indicate that the message is not to be retained.

USER EXIT column
The corresponding user-specified WTO exit routine or blank, if no routine was specified. ERR before the exit routine name indicates a failure in the exit routine; the routine is no longer active. NFD before the exit routine name indicates that the exit routine could not be loaded.

GENERAL WTO USER EXIT (IEAVMXIT)
indicates that IEAVMXIT is ACTIVE, INACTIVE, or NOT ACTIVE because it was abnormally terminated.

The last two lines describe the way different messages are displayed. The message types are:

msgtype	Meaning
URGATTN	Messages requiring urgent attention

IMEDACTN	Messages requiring immediate action
EVETACTN	Messages requiring eventual action
GENMSG	General system messages
PPMSG	Messages issued by problem programs and requiring no action
SELPEN	Fields that can detect a selector (light) pen
INSTRERR	Error messages that appear in the instruction line
ENTRYARA	Entry area
WARNLGEN	General messages in the left half of the warning line
WARNRGEN	General messages in the right half of the warning line
WARNRURG	Messages requiring urgent attention and appearing in the right half of the warning line
OOLCNTL	Control lines in an out-of-line status display
OOLLABEL	Label lines in an out-of-line status display
OOLDATA	Data lines in an out-of-line status display

The way the message is displayed is indicated in the following fields:

ccc

The color attribute of the field. The values are:

- BLUE
- TURQU (turquoise)
- GREEN
- WHITE
- PINK
- YELLOW
- RED

hhh

The highlighting with which the message or field is displayed. The values are:

- NONE.** No highlighting, that is, no colored characters on a black background.
- BLINK.** The message or field background blinks.
- RE-VID.** Reverse video, that is, black characters on a colored background.
- UNDSOCR.** The message or field is underscored with a line.

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The intensity at which the message or field is displayed. The values are:

- NORM.** Normal intensity.
- HIGH.** High intensity.

System Action: If either MESSAGE SUPPRESSION INACTIVE - HARDCOPY LOG NOT ESTABLISHED or MESSAGE SUPPRESSION INACTIVE - HARDCOPY SUSPENDED appears, this display lists the messages in the MPF table, but the system does not

suppress messages until a hard-copy log is established and a device is available to print it; however, the WTO user exits and RETAIN are in effect.

Operator Response: If you want message suppression, but MESSAGE SUPPRESSION INACTIVE or MESSAGE SUPPRESSION AND USER EXITS INACTIVE appears, do one of the following:

- If NOT INITIALIZED appears, use the SET MPF command to request MPF processing.
- If HARDCOPY LOG NOT ESTABLISHED appears, establish a hard-copy log and make a device available to print it.
- If HARDCOPY SUSPENDED appears, make a device or SYSLOG available to print the hard-copy log.

IEE192I INVALID PROCEDURE PARM FIELD FORMAT

Explanation: The writer procedure invoked by a START XWTR command contains an EXEC statement with an invalid PARM parameter.

System Action: The system did not execute the command.

Operator Response: Report this message to the system programmer at the installation.

IEE200I timestamp DISPLAY ASM

TYPE	FULL	STAT	DEV	DATASET NAME
aaaaaaa	bbb%	cccc	ddd	eeeee
VOLSER	DEVTYP	SIZE	USED	AVAIL
ffffff	gggggg	hhhhh	iiii	jjjjj
				ERRORS
				kkkkk

**SYNTAX ERROR, COMMAND TERMINATED
UNABLE TO PROCESS, DATASET NAME LIST
NOT BUILT**

**DATASET dsname
IS NOT IN USE AS A [PAGE|SWAP] DATASET
DUPLICATE PAGE DATASET IS NOT IN USE**

Explanation: In response to a DISPLAY ASM command, the master scheduler has displayed information about one or more system page or swap data sets. A list of message text variables and their definitions follows.

Variable Definition

aaaaaaaa	The type of page or swap data set:
PLPA	the PLPA page data set
COMMON	the COMMON page data set
DUPLEX	the DUPLEX page data set
LOCAL	a local page data set that accepts VIO

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LOCAL NV a NONVIO local page data set

SWAP a swap data set

bbb The percentage of the data set's allocated space which is currently in use; the percentage ranges from 0 to 100%, with leading zeroes suppressed.

cccc The data set status:

OK the data set is in normal use

BAD ASM has marked the data set as bad, and will not process write requests for that data set

FULL the data set presently has no available space

ddd The device number for the device on which the data set resides; **ddd** ranges from 000 to FFF.

eeee The page or swap data set name, as specified to ASM at IPL or PAGEADD. **eeee** uniquely identifies the data set.

ffff The volume serial of the volume on which the data set resides.

ggggg The type of device on which the data set resides. **ggggg** may be any device type supported by ASM (for example: 3330, 3350, 3380, 3350P, etc.).

hhhhh The allocated size of the data set. If the data set is a page data set, the value of **hhhhh** is the number of 4K slots; the maximum size of a page data set is 65,536 slots, even for devices which have a higher capacity. If the data set is a swap data set, the value of **hhhhh** is the number of swap sets. (There are twelve 4K slots in a swap set.) Leading zeroes are suppressed if the value of **hhhhh** is less than six digits.

iiii The number of allocated slots or swap sets which presently contain valid data. Leading zeroes are suppressed if the value of **iiii** is less than six digits.

jjjj The number of allocated slots or swap sets which are presently available to satisfy write requests. Leading zeroes are suppressed if the value of **jjjj** is less than six digits.

kkkkk The number of permanent I/O errors which have occurred on the data set. ASM will mark a data set as bad (thus making the data set unavailable for write requests) if **kkkkk** exceeds the present threshold value of 174. Note that since ASM may attempt to read from a bad data set, the number of errors may exceed 174. Leading zeroes are suppressed if the value of **kkkkk** is less than six digits.

System Action: The system continues processing normally.

Operator Response: None.

IEE220I PFKTABxx: SKIPPING TO PFKTAB STATEMENT. ONE OR MORE PFK DEFINITIONS PRECEDE THE FIRST PFKTAB STATEMENT.

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the erroneous SYS1.PARMLIB member. The command encountered PFK definitions before the first PFKTAB statement, and skips all data until it locates the first valid PFKTAB statement.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

IEE221I PFKTABxx LINE nnnnn: SKIPPING TO PFKTAB STATEMENT. reason

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member, and nnnnn is the relative line number of the line containing the error.

The message also contains the **reason** for the error, and is one of the following:

UNRECOGNIZED STATEMENT TYPE

The SYS1.PARMLIB record did not contain the valid statement type PFKTAB as the first non-comment data item on the record. The SET PFK command skips data until it finds a PFKTAB statement.

UNRECOGNIZED KEYWORD kkkkkkkk

Before it found a valid PFKTAB statement, the SET PFK command found the keyword **kkkkkkkk** as the first non-comment data item in the SYS1.PARMLIB member. (The valid statement type PFKTAB must be the first non-comment data item in the SYS1.PARMLIB member.) The first eight characters of the unrecognized keyword are **kkkkkkkk** and appear in the message display. The SET PFK command skips data until it finds a PFKTAB statement.

MISPLACED PFKTAB STATEMENT

The SET PFK command located a PFKTAB statement identifier, but the statement was not the first non-comment data item on a record. The SET PFK command skips data until it finds a valid PFKTAB statement.

TABLE KEYWORD FOUND WHICH DOES NOT IMMEDIATELY FOLLOW PFKTAB

The SET PFK command found a TABLE keyword, but a PFKTAB statement was not specified immediately preceding the TABLE keyword. The SET PFK command skips data until it finds a PFKTAB statement.

PFKTAB FOUND BUT TABLE KEYWORD DOES NOT IMMEDIATELY FOLLOW

The SET PFK command found a PFKTAB statement, but the TABLE keyword did not immediately follow the statement. The SET PFK command ignores the PFKTAB statement, and skips data up to the next PFKTAB statement.

TABLE NAME NOT VALID. MUST BE 1 TO 8 ALPHANUMERIC CHARACTERS.

The name of the PFK table specified in the TABLE keyword on the PFKTAB statement is not 1 to 8 alphanumeric characters. The SET PFK command ignores the PFKTAB statement, and skips data up to the next PFKTAB statement.

TABLE(ttttttt) SPECIFIED ON A PRECEDING PFKTAB STATEMENT

The SET PFK command is currently processing a PFKTAB statement that has a table name ttttttt. ttttttt was previously specified on an earlier PFKTAB statement. The SET PFK command ignores the PFKTAB statement, and skips data up to the next PFKTAB statement.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

IEE2221

PFKTABxx TABLE (ttttttt): MISSING RIGHT PARENTHESIS FOR TABLE KEYWORD VALUE ASSUMED

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the erroneous SYS1.PARMLIB member, and ttttttt is the name of the PFK table which contains the error.

The table keyword on the last PFKTAB statement in the PFKTABxx member is missing a right parenthesis. The system assumes the placement of the right parenthesis when (1) the TABLE keyword and its value have been processed successfully, and (2) the next data in the PFKTABxx member is another PFKTAB statement or end-of-file.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

IEE2231

Problem Determination: Table I, items 2 and 26c.

PFKTABxx TABLE (ttttttt): SKIPPING TO PFKTAB STATEMENT OR PFK. reason

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member. The system also displays the reason for the error; the reason is one of the following:

PFK DEFINITION DOES NOT IMMEDIATELY FOLLOW THE TABLE KEYWORD

The SET PFK command found a PFKTAB statement with a TABLE keyword, but a PFK definition did not immediately follow the TABLE keyword. The SET PFK command skips all data until it finds a PFK definition or PFKTAB statement.

PFK VALUE OUTSIDE THE RANGE 1 TO 24

The PFK value being defined was not a valid number in the range of 1 to 24. The SET PFK command skips all data until it finds a PFK definition or PFKTAB statement.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

IEE2241

PFKTABxx TABLE(ttttttt): PFK(nn) DEFINITION IGNORED. PFK(nn) SPECIFIED ON A PRECEDING PFK DEFINITION

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member, ttttttt is the name of the table in which the error occurred, and nn is the erroneous PFK number.

nn is a PFK that has been previously defined in TABLE ttttttt. The SET PFK command ignores the duplicate PFK definition and skips all data until it finds another PFK definition or PFKTAB statement.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

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IEE225I PFKTABxx TABLE(ttttttt) PFK(nn): reason

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member, ttttttt is the name of the table in which the error occurred, and nn is the erroneous PFK number.

The message also contains the reason for the error, which is one of the following:

UNRECOGNIZED KEYWORD kkkkkkkk IGNORED

The SET PFK command found an unrecognizable keyword on the PFK definition. There are only three correct keywords that are allowed on the PFK definition: CMD, KEY, and CON. This portion of the message contains the first eight characters of the unrecognizable keyword kkkkkkkk.

The SET PFK command ignores kkkkkkkk and skips all data up to (1) the next right parenthesis, if a left parenthesis follows kkkkkkkk, (2) a blank, (3) the next PFK definition, or (4) a PFKTAB statement.

DUPLICATE kkkkkkkk KEYWORD IGNORED

The valid keyword values are CMD, KEY, and CON. Keyword kkkkkkkk appears more than once on the PFK definition, and the SET PFK command ignores the duplicate keyword.

MISSING RIGHT PARENTHESIS FOR kkkkkkkk KEYWORD VALUE ASSUMED

Keyword kkkkkkkk on PFK definition nn in PFK table ttttttt is missing a right parenthesis. The valid values for kkkkkkkk are PFK, CMD, KEY, or CON. The system assumes the placement of the right parenthesis when (1) kkkkkkkk and its value have been processed successfully, and (2) the next data in the PFKTABxx member is another PFK definition, PFKTAB statement, or end-of-file.

keyword2 MUTUALLY EXCLUSIVE WITH keyword1. keyword2 IGNORED.

keyword1 and keyword2 are mutually exclusive keywords and cannot be specified on the same PFK definition. The valid values for keyword1 and keyword2 are CMD / KEY or KEY / CMD. The SET PFK command processes keyword1 and ignores keyword2.

CON VALUE NOT VALID. CON(N) APPLIED.

The value for the CON keyword was invalid; Y and N are the only valid values. The SET PFK command applies a default value of N for the CON keyword.

nn SPECIFIED FOR BOTH KEY AND PFK KEYWORDS. KEY IGNORED.

The PFK being defined is also in the key list for itself; in other words, the value nn is specified for both the PFK and KEY keywords. Since a PFK cannot be defined as itself, the SET PFK command ignores the KEY keyword.

nn ALREADY PART OF A KEY LIST. KEY IGNORED

nn is being defined as a PFK value but it already

appears in the key list for a different, previously defined PFK. The previously defined key appears in PFK table ttttttt. The SET PFK command ignores the KEY keyword.

kkkkkkkk VALUE NOT VALID. kkkkkkkk IGNORED

The value for the keyword kkkkkkkk is not valid; KEY and CMD are the only valid values.

- If kkkkkkkk is KEY, the keyword value must be a list of keys with values between 1 and 24. These values must be separated by blanks or commas.
- If kkkkkkkk is CMD, the keyword value must be 1 to 126 characters surrounded by single or double quotes.

The SET PFK command ignores kkkkkkkk, and skips all data up to (1) the next right parenthesis, (2) the next PFK definition, or (3) the next PFKTAB statement.

KEY VALUE NOT VALID. nn DEFINED AS A LIST OF KEYS. KEY IGNORED.

A PFK value nn in the key list was previously defined as a list of keys in the the PFK table. The SET PFK command ignores KEY.

MORE THAN 62 KEYS SPECIFIED IN THE KEY VALUE. KEY IGNORED

More than 62 keys were specified in the key list, and the SET PFK command ignores the KEY keyword.

System Action: The system continues processing the valid specifications in PFKTABxx.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the erroneous PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

IEE226I PFKTABxx: INCOMPLETE PFKTAB STATEMENT OR PFK DEFINITION IGNORED. PREMATURE END OF FILE DETECTED

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the erroneous SYS1.PARMLIB member. The system was expecting more input for the last PFKTAB statement or PFK definition in the SYS1.PARMLIB member, but processing of the PFKTABxx member prematurely ended.

System Action: The system continues processing, and any PFK tables specified correctly in PFKTABxx are available for use.

Operator Response: None.

Programmer Response: Check the syntax of the last statement in PFKTABxx and make sure that it is a complete PFKTAB statement or PFK definition.

Problem Determination: Table I, items 2 and 26c.

IEE2271 PFKTABxx: UNBALANCED COMMENT FOUND. SIGNIFICANT DATA MAY BE LOST

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member. A slash asterisk (/*) delimiter was found but a matching asterisk slash (*) delimiter was not found before end-of-file. The system ignores all data from the slash asterisk (/*) to the end-of-file.

System Action: The system continues processing and any PFK tables specified correctly in PFKTABxx are available for use.

Operator Response: Notify the system programmer so that PFKTABxx can be corrected. Once the system programmer corrects PFKTABxx, issue the SET PFK = xx command to process the PFK table definitions.

Programmer Response: Correct the PFKTABxx member of SYS1.PARMLIB.

Problem Determination: Table I, items 2 and 26c.

IEE2281 PFKTABxx: NO VALID STATEMENTS FOUND

Explanation: The SET PFK command found that the PFKTABxx member of SYS1.PARMLIB did not contain any valid PFKTAB statements. xx is the suffix of the SYS1.PARMLIB member.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2 and 26c.

IEE2291 PFKTABxx: PROCESSING TERMINATED. INSUFFICIENT STORAGE

Explanation: The SET PFK command found an error in the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member. There was not enough storage available to satisfy the PFK table request.

System Action: The system halts processing of the PFKTABxx member, and then continues processing.

Operator Response: None.

Programmer Response: None.

Problem Determination: Table I, items 2 and 26c.

IEE2301 PFKTABxx LINE nnnnn: PROCESSING TERMINATED. SYSTEM ERROR. RETURN CODE: rc REASON CODE: rsn

Explanation: An unexpected error was received while parsing the PFKTABxx member of SYS1.PARMLIB. xx is the suffix of the SYS1.PARMLIB member being processed at the time the system detected the error, and nnnnn is the relative line number within that member.

For an unexpected error from the parse routine, the hexadecimal return code rc and the hexadecimal reason code rsn are from IEEMB887.

For an unexpected error from the SYS1.PARMLIB read routine the hexadecimal return code rc indicates that an error occurred during processing of

the SYS1.PARMLIB PFKTABxx member. The reason code rsn is from IEEMB878.

System Action: The system stops processing the PFKTABxx member, but continues other processing. If the SET PFK = xx command was issued internally during IPL, the system uses the IBM default PFK definitions for all consoles.

Operator Response: Contact your system programmer. If you are not satisfied with the IBM default PFK definitions, first issue a SET PFK command for appropriate PFKTABxx member of SYS1.PARMLIB. Then issue a K N,PFK command for each console, specifying the PFK table for that console.

Programmer Response: Determine the impact of the error.

Problem Determination: Table I, items 2 and 26c.

IEE2321 IBM DEFAULT PFKS USED FOR CONSOLE cc. reason

Explanation: During the initialization of console cc, a failure occurred while the system was performing PFK processing. The system displays the reason for the failure; reason is one of the following:

NO PFK TABLE REQUESTED

The CONSOLxx member of SYS1.PARMLIB did not specify the name of a PFK table for console cc.

TABLE ttttttt NOT FOUND

The CONSOLxx member of SYS1.PARMLIB specified ttttttt as the name of the PFK table for console cc; ttttttt was not one of the available PFK tables.

PFK TABLE INITIALIZATION NOT COMPLETE

The CONSOLxx member of SYS1.PARMLIB requested that a PFKTABxx member be used to define PFK tables for consoles. However, the initialization of the PFK tables was not complete when console cc was being initialized.

System Action: The system uses the IBM default PFK definitions for console cc.

Operator Response: If you are not satisfied with the IBM default PFK definitions, first issue a SET PFK command to define the available PFK tables. Then issue a K N,PFK command for each console, specifying the PFK table for that console.

Programmer Response: Depending on the reason displayed in the message, respond as follows:

- If **NO PFK TABLE REQUESTED** appears in the message, update the CONSOLxx member of SYS1.PARMLIB to include a PFK table name for console cc.
- If **TABLE ttttttt NOT FOUND** appears in the message, check the PFK table name specified for console cc in the CONSOLxx member of SYS1.PARMLIB. If the table name is incorrect, change it to a valid PFK table name. If, however, the table name is correct, make sure that the PFK table is defined in the PFKTABxx member of SYS1.PARMLIB.
- If **PFK TABLE INITIALIZATION NOT COMPLETE** appears in the message, you need

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not respond. You can issue the K N,PFK command when IPL is finished.

Problem Determination: Table I, items 2 and 26c.

IEE233I PF KEYS CANNOT BE USED ON CONSOLE cc. reason

Explanation: While initializing console cc, the system encountered a failure during PFK processing. The message contains the **reason** for the error, and **reason** is either:

IBM DEFAULT PFKS NOT FOUND

The system could not locate the IBM default PFK definitions.

INSUFFICIENT STORAGE TO CONTAIN THE PFK DEFINITIONS

The system could not obtain the storage for the PFK definitions, and PFKs cannot be used for console cc.

System Action: Depending on the reason for the error, the system action is one of the following:

- If **IBM DEFAULT PFKS NOT FOUND** appears in the message display, then the system cannot use the PFKs for console cc until (1) the PFK tables are available and (2) a PFK table is assigned to console cc.
- If **INSUFFICIENT STORAGE TO CONTAIN THE PFK DEFINITIONS** appears in the message display, the system cannot use the PFKs for console cc.

Operator Response: You can respond in one of the following ways:

- If **IBM DEFAULT PFKS NOT FOUND** appears in the message display, first issue a SET PFK command for the appropriate PFKTABxx member of SYS1.PARMLIB. Then issue the K N,PFK command to specify a PFK table for console cc.
- If **INSUFFICIENT STORAGE TO CONTAIN THE PFK DEFINITIONS** appears in the message display and console cc requires PFKs, first vary cc offline and then vary the device to the console state. If the problem still occurs, notify your system programmer.

Programmer Response: You can respond in one of the following ways:

- If **IBM DEFAULT PFKS NOT FOUND** appears in the message display, then the system could not find module IEEVC801 in SYS1.LINKLIB. Locate module IEEVC801 and linkedit it into SYS1.LINKLIB.
- If **INSUFFICIENT STORAGE TO CONTAIN THE PFK DEFINITIONS** appears in the message display, there is not enough free storage in the communications task address space to process the request. Wait until the storage shortage is relieved and then reissue the command.

Problem Determination: Table I, items 2 and 26c.

IEE234I SYSTEM FAILURE DURING INITIALIZATION OF CONSOLE cc

Explanation: While the system was trying to initialize console cc, a failure occurred.

System Action: Console cc will not be available as an operator console.

Operator Response: If you must use console cc, issue a VARY CONSOLE command for cc. If the problem still occurs, notify your system programmer.

Programmer Response: Examine the error description in the dump the system produces as a result of this abend.

Problem Determination: Table I, items 2 and 26c.

IEE235I hh.mm.ss PFK DISPLAY [id]

**[NO PFK DEFINITIONS FOR CONSOLE cc]
[NO PFK TABLES AVAILABLE FOR USE]
[PFK TABLE name NOT FOUND IN PFKTABxx.]**

```
{PFK DEFINITIONS FOR CONSOLE cc
- DEFAULTS ARE IN USE}

{PFK DEFINITIONS FOR CONSOLE cc
- TABLE = name IN PFKTABxx}

{PFK DEFINITIONS FOR TABLE = name
IN PFKTABxx}
```

```
KEY# CON -----DEFINITION-----
k1 {YES} {command;command} . . . }
{NO} {k2[,k2]} . . . }
{ } {NOT DEFINED } }
```

PFK TABLES IN PFKTABxx AVAILABLE FOR USE

```
TABLE TABLE TABLE TABLE TABLE TABLE
tttttt tttttt tttttt tttttt tttttt tttttt
```

Explanation: The system displays this message in response to a DISPLAY PFK command. In the message display, the following fields may appear:

hh.mm.ss
This is the time that the system issued the message in hours (hh), minutes (mm) and seconds (ss).

cc
This is the console id for the console whose PFK definitions were requested.

xx
This is the suffix of the SYS1.PARMLIB PFKTABxx member currently in use.

k1
This is the PFK associated with the definition. The message contains one of these lines for each of the 24 PFKs.

CON
This indicates if the PFK is conversational (YES) or not conversational (NO).

command
This is the command associated with the PFK. If multiple commands were specified, they are separated by a semicolon. If the command is too long to fit on one line, the system splits the command and continues it on the following lines.

k2

This is the key list associated with the PFK. If multiple keys were specified in the key list, the system separates them with a comma. If the list of keys is too long to fit on one line, the system splits the list and continues it on the following lines.

ttttttt

This is the name of an available PFK table. The system repeats this line until it lists all available PFK tables.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: None.

IEE249I hh.mm.ss CONSOLE DISPLAY [id]

[MSG: CURR = xxxx LIM = yyyy RPLY: CURR = xxx
LIM = yyy [NO] SUBSYS PFK = xx]

[CONSOLE/ALT ID -----SPECIFICATIONS-----]

{console/alt} nn COND = H AUTH = auth1 NBUF = nnn

{SYSLOG} ROUTCDE = routcde
HARDCOPY SUSPENDED
HARDCOPY NOT ACTIVE

{console/alt} nn COND = cond AUTH = auth2 NBUF = nnn
{console/compid} [AREA = area MFORM = mform]
{compid/asid} [DEL = mode RTME = nnn RNUM = nn
SEG = nn CON = con]
{SUBS/SUBS} [USE = use LEVEL = level
[PFKTAB = nnnnnnnn]
ROUTCDE = routcde

THE FOLLOWING DEVICES ARE NOT CONSOLES:

[aaa aaa aaa ...]
[aaa-bbb]

[NO CONSOLES MEET SPECIFIED CRITERIA]

TYPES OF MESSAGES SENT TO HARDCOPY ONLY ARE:

[BROADCAST] [AND]
[INFORMATIONAL WITH ROUTING CODES x,x,x-x,x]
[NONE]
[TO CHANGE, USE VARY CONSOLE OR
K V,LEVEL COMMAND]

Explanation: In response to a DISPLAY CONSOLES, VARY HARDCOPY, or VARY CONSOLE command, the system issues this message, which displays the system console configuration.

The message display can contain the following information:

hh.mm.ss

This is the time that the system issued the message, defined in hours hh (00-23), minutes mm (00-59), and seconds ss(00-59).

id

This is a three-digit decimal identification number used with the CONTROL C, D command for canceling status displays. These displays are either written on a typewriter or printer console or displayed in line on a display console. id does not appear when the status appears on the display area of a display console.

MSG:

Can be either:

CURR = xxxx The number of WTO message buffers the system is currently using. If the value of xxxx exceeds 9999 buffers, asterisks appear.

LIM = yyyy The limit of the outstanding WTO message buffers the system allows.

RPLY:

Can be either:

CURR = xxx The number of WTOR message buffers the system is currently using. The maximum value of xxx is 100 buffers.

LIM = yyy The limit of the outstanding WTOR message buffers the system allows.

[NO]SUBSYS

SUBSYS indicates that at least one console is dedicated to a system component; otherwise, **NOSUBSYS** indicates that no consoles are dedicated to a system component.

PFK = xx

xx is the suffix of the PFKTABxx member of SYS1.PARMLIB that contains the current PFK table definitions. If no member was specified in the CONSOLxx member of SYS1.PARMLIB, the message display is **PFK = NONE**.

CONSOLE/ALT

Identifies the devices or subsystems associated with each console, and includes the following information for each:

console/alt ddd/ddd or ddd,ddd/ddd,ddd are the device numbers of the primary and alternate console, each of which might be a composite console. The DEL, RTME, RNUM, SEG, and CON specifications will only appear on a display console.

SYSLOG This is the hardcopy log.

console/compid This is the device number and four-character component id of the system component to which the console is allocated.

compid/asid This is the four-character component id and the four-digit hexadecimal address space id of the system component to which the console is allocated.

SUB/SUBS An unassigned, subsystem-allocatable console.

Note: The AREA, MFORM, USE and LEVEL specifications will not appear for an assigned or unassigned subsystem-allocatable console.

ID

Under the ID heading the console identification number nn appears.

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COND

Under the COND heading, the console status **cond** appears and can be one of the following:

- H** Hardcopy log.
- M** Master console.
- A** Active console.
- N** Inactive console.
- A,P** In the process of becoming an active console.
- N,P** In the process of becoming a non-active console.
- SS** Subsystem-allocatable console.
- SS,M** Subsystem console has pseudo master console capability.

AUTH

This specifies the system command groups. Under the heading **AUTH**, one of the following can appear as **auth1**, which denotes the information that will appear in the hardcopy log.

- CMDS** Operator and system commands, responses, and status displays (static and time-interval updated) are to be written to the hardcopy log.
- STCMDS** Operator and system commands and responses (except for time-interval updated status displays) are to be written to the hardcopy log.
- INCMDS** Operator and system commands and responses (not status displays) are to be written to the hardcopy log.
- NOCMDS** Operator and system commands and responses are not to be written to the hardcopy log.

Also under the **AUTH** heading, one of the following can appear as **auth2**, which denotes the commands that can be entered from the console.

- SYS** INFO commands and any command from the system control command group can be entered from this console.
- IO** INFO commands and any command from the I/O control command group can be entered from this console.
- CONS** INFO commands and any command from the console control command group can be entered from this console.
- INFO** Any command from the informational command group can be entered from this console.
- ALL** Any INFO, SYS, IO or CONS commands can be entered from this console.

NONE This console has no command authority.

NBUF

This is the number **nnnn** of WTO message buffers currently queued to this console. If the value of **nnnn** is greater than 9999, asterisks appear.

AREA

This heading specifies the size of the out-of-line display area or areas on the display console. Under this heading, **area** can be either:

z,a-b The range of area designators for this console. **z** is the in-line message area id, **a** is the bottom area, and **b** is the top area. All or a portion of these designators may appear in the message display, depending on the area definitions currently in effect for this console.

NONE If the console is a composite or output-only console, there are no area designators.

MFORM

This specifies the format in which the system displays the messages. **mform** can be one of the following:

- M** The system displays only the message text. The display does not include a time stamp, job id/name and system name.
- J** The system displays each message with its job id/name.
- S** The system displays each message with the name of the system that originated the message.
- T** The system displays each message with a time stamp.

DEL

This indicates the message deletion mode of the console. **mode** can be one of the following:

- Y** This indicates that the automatic mode for deleting messages is in effect. Whenever the screen becomes full, the system will delete messages marked for deletion.
- R** This indicates that the roll mode is in effect. The system will delete a specified number of messages from the screen after a time interval elapses. The system will delete messages only if the screen is full and there are messages waiting for display.
- RD** This indicates that the roll mode is in effect. However, the messages awaiting action will not roll off the screen, but gather at the top of the screen.
- N** This indicates that manual message deletion is required.

RTME

This indicates the number of seconds between message rolls. **nnn** is a decimal value from 1 to 999. The actual RTME value cannot be determined until the console is fully initialized. If the console is not fully initialized, **nnn** contains an asterisk.

RNUM

This indicates the maximum number of message lines included in one message roll. **nn** is a decimal value from 1 to the number of lines in the message area. The actual RNUM value cannot be determined until the console is fully initialized. If the console is not fully initialized **nn** contains an asterisk.

SEG

This specifies the number of lines in the message area that you can delete using a CONTROL E,SEG command. **nn** is a decimal value from 1 to the number of lines in the message area. The actual SEG value cannot be determined until the console is fully initialized. If the console is not fully initialized **nn** contains an asterisk.

CON

Under this heading, the **con** variable indicates the mode for deleting messages:

- Y** Indicates that the conversational mode for deleting message is on.
- N** Indicates that the non-conversational mode for deleting messages is on.

USE

Under this heading, the system lists the operating mode of the display console. **use** can be one of the following:

- FC** The console is in full capability mode.
- MS** The console is in message stream mode.
- SD** The console is in status display mode.

LEVEL

Under this heading, the system lists the message levels that the console can receive. **level** can be one of the following:

- R** The console receives messages requiring a reply (WTOR).
- I** The console receives immediate action messages.
- CE** The console receives critical eventual action messages.
- E** The console receives eventual action messages.
- IN** The console receives informational messages.
- NB** The console cannot receive broadcast messages.
- ALL** The console can receive all messages.

PFKTAB

Under this heading, the system lists the name of the PFK table **nnnnnnnn** that this console is using. If the console is using the IBM default PFK definitions, **nnnnnnnn** contains *DEFAULT.

ROUTCDE

Under this heading, one of the following items appears:

- nnn,nnn** The routing codes assigned to the console or hardcopy log. If the console is a composite console, the system lists the routing codes assigned to the output device.
- ALL** All of the routing codes, 1-128, go to the hardcopy log.
- NONE** None of the routing codes go to the hardcopy log.

System Action: The system continues processing.

Operator Response: If the current WTO or WTOR message buffer count is close to the limit, check the message buffer counts for each console. A console with a high message buffer count may not be functioning properly; if so, refer to the operator response for message IEA405E.

Because messages are being backed up in the system and WQEs are not being freed, issue a DISPLAY CONSOLES command to see if some consoles have an unusually large WTO message buffer count. If so:

- If the console is a display console, then put it in roll mode.
- Satisfy any outstanding intervention-required messages. (For example, a paper-producing console might be out of paper.)
- Nothing might be wrong; the type of jobs that are running might cause message traffic to be heavy. In this case, before the next IPL, increase the limit of the number of WTO messages. To increase the limit, use the MLIM parameter on the INIT statement in the CONSOLxx member of SYS1.PARMLIB.

The D C command may be used to detect backed up consoles. If there are backed up consoles, use the K Q and/or K S command to alleviate the problem.

The number of message buffers queued to all consoles may not match the number of outstanding message buffers. If a message buffer is queued to two consoles, it would be counted twice, once for each console.

The number of message buffers queued to a console may not match the number of messages to be displayed at that console. For multiple line messages, each message buffer can hold two lines.

The number of message buffers queued to a console may be greater than the current number of message buffers in use. This condition may occur after a console switch.

The message buffer limit is not the actual limit at IPL time. The IPL limit is very high, and the limit displayed is correct once the IPL is finished.

Programmer Response: None.

IEE

IEE250I hh.mm.ss CONSOLE DISPLAY [id]

[WTO BUFFERS: CURR = xxxx LIM = yyyy NOSUBSYS]
 [CONSOLE/ALT COND AUTH ID AREA NBUF ROUTCD LEVEL]

[SYSLOG cond auth1 nnnn routed]
 [console/alt cond auth1 nn nnnn routed level]

[HARDCOPY SUSPENDED]
 [HARDCOPY NOT ACTIVE]

[console/alt cond auth2 nn z,a-b nnnn routed level]
 [console/compid cond auth2 nn routed]
 [console/JES cond auth2 nn routed]
 [console/asid cond auth2 nn routed]
 [JES/JES cond auth2 nn routed]

[THE FOLLOWING DEVICES ARE NOT CONSOLES:]
 [aaa aaa aaa ...]
 [aaa-bbb]

[NO CONSOLES MEET SPECIFIED CRITERIA]

[TYPES OF MESSAGES SENT TO HARDCOPY ONLY ARE:
 [BROADCAST][AND]
 [INFORMATIONAL WITH ROUTING CODES x,x,x-x,x]
 [NONE]
 [TO RECOVER, USE VARY CONSOLE OR K V,LEVEL
 COMMAND]

[DISPLAY TRUNCATED - INSUFFICIENT STORAGE]

Explanation: In response to a DISPLAY CONSOLES command, this message provides a display of the system console configuration.

The first line of the message always appears. All other lines may or may not appear, depending on the command issued or the status of the system at the time. The second line appears unless the command was DISPLAY C,HCONLY. The third line appears unless the command was DISPLAY C,HCONLY or unless no consoles meet the specified criteria.

The fourth through seventh lines concern the status of the device being used for the hard-copy log. The fourth and fifth lines appear (1) if a DISPLAY C or DISPLAY C,A or DISPLAY C,L command requests the status of the hard-copy log and a hard-copy device is available or (2) if the DISPLAY C command asks for the status of a console that is being used as the hard-copy log. The sixth or seventh line appears if a hard-copy device is not available.

The remaining lines appear as needed to display console information.

In the message text, the fields are:

hh.mm.ss

The time when the message was issued, given as the hour (00-23), minute (00-59), and second (00-59).

id

A three-digit decimal identification number used with the CONTROL C,D command for canceling status displays. These displays are being written on typewriter or printer consoles or being displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

CURR = xxxx

The number of WTO message buffers in use by the system at this time. If the value is greater than 9999, asterisks will appear.

LIM = yyyy

The limit of the number of WTO message buffers. This value is set at IPL or by a CONTROL M command. If this value is less than or equal to the number of WTO buffers in use by the system, any task that issues a WTO and is not privileged is put into a wait state until the current count drops below the limit. Privileged tasks are allowed message buffers even if the limit is exceeded.

SUBSYS or NOSUBSYS

Appears as SUBSYS if at least one console is dedicated to a system component; otherwise, appears as NOSUBSYS.

CONSOLE

Identifies the devices or subsystems associated with each console.

SYSLOG

The SYSLOG is the hard-copy device.

console

Appears in one of the following forms:

ddd

Device number of the primary console, which is either an output or an input/output device.

ddd,ddd

Device numbers of the composite primary console.

Note: JES specifies a dummy unit control block (UCB) address for a dummy subsystem console.

ddd/JES

An assigned, subsystem-allocatable console that MCS and JES3 are sharing.

JES/JES

An unassigned, subsystem-allocatable console.

ALT

Identifies the devices or subsystems associated with each alternate console.

alt

Appears in one of the following forms:

ddd

Device number of the alternate console, which is either an output or an input/output device.

ddd,ddd

Device numbers of the composite alternate console.

compid

A four-character system component ID for the system component to which this console is allocated.

asid

A four-digit hexadecimal address space ID of the system component to which this console is allocated.

console/JES

An assigned, subsystem-allocatable console that MCS and JES3 are sharing.

JES/JES

An unassigned, subsystem-allocatable console.

COND**cond**

Indicates the console type and use.

H

Hard-copy device.

M

Master console.

A

Active console.

N

Inactive console.

A,P

In the process of becoming an active console.

N,P

In the process of becoming a non-active console.

,T

Request for time stamps and job names before all messages. This symbol can appear after M, A, N, or A,P or N,P.

,J

Request for only job names before all messages. This symbol can appear after M, A, N, or A,P or N,P.

S

Subsystem console in use by a system component.

,M

This symbol appears after S to indicate that the console has pseudo master console capability.

AUTH**auth1****CMDS**

Operator and system commands and responses are to be written on the hard-copy log.

STCMDS

Operator and system commands and status displays are to be written on the hard-copy log.

INCMDS

Operator and system commands and in-line responses are to be written on the hard-copy log.

NOCMDS

Operator and system commands and responses are not to be written on the hard-copy log.

auth2**SYS**

Commands authorized for this console are CANCEL, HALT, HOLD, MODE,

MODIFY, RELEASE, RESET, SET, SETDMN, SLIP, START, STOP, SWITCH, CHNGDUMP, TRACE, and WRITELOG.

IO

Commands authorized for this console are MOUNT, SWAP, UNLOAD, and VARY for devices.

CONS

Command authorized for this console is VARY for consoles, and the routing location operand (L=).

INFO

Commands authorized for this console are DISPLAY, LOG, CONTROL, MONITOR, MSGRT, STOPMN, REPLY, SEND, TRACK, and STOPTR.

ALL

Commands authorized for this console are all the commands listed for SYS, IO, CONS, and INFO.

NONE

No command authority, which occurs with an 'output only' device.

ID**nn**

The system identification number for this console.

AREA**z,a-b**

The range of area designators defined for this console, where z is the id of the message area, a is the bottom area, and b is the top area. The presence of some or all of these designators depends on the area definitions currently in effect at this console.

NBUF**nnnn**

The number of WTO message buffers currently queued to this console. If the value is greater than 9999, asterisks will appear. If the value is zero, blanks will appear.

ROUTCD**routed****x,x,...**

The routing codes assigned to the console or hard-copy device. If it is a composite console, the routing codes assigned to the output device.

ALL

All of the routing codes, 1 - 16.

NONE

None of the routing codes.

LEVEL**level**

The message level(s) assigned to the console or hard-copy device.

NB No broadcast messages.

ALL All of the following levels.

R WTOR messages.

IEE

- I Immediate action messages.
- CE Critical eventual action messages.
- E Eventual action messages.
- IN Informational messages.

Operator Response: If the current WTO message buffer count is close to the limit, check the message buffer counts for each console. A console with a high count may not be functioning properly. See the operator response to message IEA405E.

The number of message buffers queued to all consoles may not match the number of outstanding message buffers. If a message buffer is queued to two consoles, it would be counted twice, once for each console.

The number of message buffers queued to a console may not match the number of messages to be displayed at that console. For multiple line messages, each message buffer can hold two lines.

The number of message buffers queued to a console may be greater than the current number of message buffers in use. This condition may occur after a console switch.

The message buffer limit is not the actual limit at IPL time. The IPL limit is very high, and the limit displayed is correct once IPL is finished.

IEE260I SCHEDxx LINE line: text

Explanation: While processing the SCHEDxx SYS1.PARMLIB member, the system encountered an error in the MT specification. **line** is the relative position of a line within the member which contains the erroneous MT statement.

text contains a description of the problem, and may be one of the following:

MT SIZE 24K APPLIED. SIZE VALUE NOT VALID.

The value was (1) not decimal, (2) not specified in K bytes or (3) not within the range 16K to 999K. The default SIZE of 24K is applied.

USING MT SIZE(xxxx). DUPLICATE SIZE IGNORED.

The SIZE keyword appears more than once on an MT statement. The system ignores the duplicate specification. **xxxx** contains either (1) the size of the MT table, **nnnK**, or (2) **NONE**.

MT data IGNORED. UNRECOGNIZED KEYWORD.

The system encountered **data**, which is not a defined keyword for the MT statement.

DUPLICATE MT STMT IGNORED.

The system has already processed an MT statement, and ignores the duplicate statement.

MISSING RIGHT PARENTHESIS ASSUMED.

The system encountered an end of statement while searching for a closing right parenthesis.

System Action: The system continues processing the data within the SCHEDxx SYS1.PARMLIB member.

Operator Response: Notify your system programmer.

Programmer Response: Find the invalid specification and correct the error that the message described.

Problem Determination: Table I, items 2 and 26c.

IEE271I NO PFK TABLES EXIST

Explanation: A K N,PFK command contained a reference to a PFK table; the PFK tables do not exist in the system. In this situation, either the PFK tables were not specified in the CONSOLxx member of SYS1.PARMLIB or an error occurred during processing of a previously issued SET PFK = xx command.

System Action: The system ignores the K N command.

Operator Response: If (1) the PFK tables were not specified in CONSOLxx and (2) a PFKTABxx member exists in SYS1.PARMLIB, then issue the SET PFK = xx command to activate the PFKTABxx member of SYS1.PARMLIB. Also, reissue the K N,PFK command to define the PFK table for the system to use. If an error occurred on a previously issued SET PFK command, contact your system programmer.

Programmer Response: If a PFKTABxx member of SYS1.PARMLIB does not already exist, create a member to define the PFK tables that the system can use. If an error occurred during processing of a SET PFK command, then correct the error in PFKTABxx.

Problem Determination: Table I, item 2.

IEE272I PFK TABLE NOT FOUND IN PFKTABxx

Explanation: A K N,PFK command asked for information about a PFK table. This particular PFK table is not defined in PFKTABxx, which is the active PFK table member of SYS1.PARMLIB.

System Action: The system ignores the K N command.

Operator Response: First, issue a SET PFK = xx command for the SYS1.PARMLIB member PFKTABxx that contains the requested PFK table definition. Second, reissue the K N,PFK command to define the PFK table for the system to use.

Programmer Response: Make sure that the PFKTABxx member of SYS1.PARMLIB contains the definition of the PFK table specified on the K N,PFK command.

Problem Determination: Table I, items 2 and 26c.

IEE273I VARY ADDED ROUTING CODES REQUIRED FOR THE {MASTER CONSOLE| HARDCOPY LOG}

Explanation: If routing codes are required for the master console, then the VARY CONSOLE command was issued to either (1) assign those codes to the master console, or (2) delete routing codes from the set that the master console was receiving. The final set of routing codes that the master console received did not include routing codes 1 and 2.

If routing codes were required for the hardcopy log, then the VARY HARDCOPY command was issued to either (1) assign those codes to the hardcopy log, or (2) delete routing codes from the set that the hardcopy log was receiving. The final set of routing

codes that the hardcopy log received did not include routing codes 1, 2, 3, 4, 7, 8, 10 and 42.

System Action: If the routing codes were required for the master console, the system adds routing codes 1 and 2 to the set that the master console will receive.

If the routing codes were required for the hardcopy log, the system adds routing codes 1, 2, 3, 4, 7, 8, 10 and 42 to the set that the hardcopy log will receive.

Operator Response: None.

Programmer Response: None.

IEE274I ccccccc CONSOLE ID NOT VALID

Explanation: A console id specified on the ccccccc command is not a valid MCS console id.

System Action: The system rejects the command.

Operator Response: Notify your system programmer.

Programmer Response: Check and make sure that the console id is a decimal value between 01 and 99.

Problem Determination: Table I, items 2 and 29.

IEE275I VARY ROUTING CODE KEYWORD VALUE OF value NOT ALLOWED

Explanation: The VARY CONSOLE or VARY HARDCPY command was issued with the AROUT or DROUT keyword. The value specified for the AROUT or DROUT keyword was either NONE or ALL. Neither of these values can be specified for the AROUT or DROUT keyword.

System Action: The system rejects the VARY CONSOLE or VARY HARDCPY command.

Operator Response: Use specific routing code values for the AROUT and DROUT keywords.

IEE298I cm INVALID CHARACTER

Explanation: In the cm command, an invalid character (not enclosed in apostrophes) was found in the operation, operand, or comment field.

System Action: The command was not executed.

Operator Response: Enter the command again, correctly. (If the command was originally entered through the input stream, the command may be reissued through the console in response to this message.)

Problem Determination: Table I, items 2, 7b, 29. If unable to continue system operation see Table I, item 11.

IEE299I {SYSLOG{ddd} REQ'D FOR HARDCOPY

Explanation: The operator entered the VARY HARDCPY,OFF command without first reassigning the hardcopy function to either the system log, a stand-alone console, or an operator's console. If more than one console is active, or if a single graphics console is active, the hardcopy function is required.

System Action: The command is not executed.

Operator Response: Enter the VARY HARDCPY command specifying a new hardcopy device, or the system log. Then reenter the previous command.

IEE300I ddd/aaa INVALID ALTCON

Explanation: In a VARY ddd,CONSOLE command, parameter ALTCON specified an invalid alternate console aaa:

- ddd and aaa are the same device.
- ddd has input/output capabilities and aaa has only output capabilities.

System Action: In the first case, the command is not processed for device ddd. In the second case, if device ddd was previously a console, the previous alternate console is maintained; otherwise, device ddd is made a console, and the alternate console specified at system generation is maintained.

Operator Response: In the first case, choose another alternate console and reenter the command. In the second case, choose an alternate console with input/output capabilities and reenter the command.

IEE301I jii {CANCEL|FORCE|FORCE ARM} COMMAND ACCEPTED

Explanation: The system terminates job jii in response to a CANCEL, FORCE, or FORCE ARM command. If the operator issued a CANCEL or FORCE ARM command for job jii, messages follow explaining the reason for cancellation. If the job was FORCED, a CANCEL or FORCE ARM command was previously issued for the job. The system terminates the job's address space.

System Action: The system deletes all references to the job or address space.

Operator Response: None.

IEE302I {PATH(ddd,xx)|ddd} ONLINE NOT VERIFIED

Explanation: One of the following occurred:

- In response to a VARY device online command, the system has placed device ddd online.
- In response to a VARY PATH online command, the path to device ddd has been placed online.
- For active TP devices, validity check of physical path to the device is bypassed. The path is marked online.

System Action: Processing continues. The new path is now available for system use.

Operator Response: None.

IEE303I {PATH(ddd,xx)|ddd} OFFLINE

Explanation: One of the following occurred:

- In response to a VARY device offline command, the system has placed device ddd offline.
- In response to a VARY PATH offline command, the path to device ddd has been placed offline.

System Action: Processing continues.

Operator Response: None.

IEE304I jji JOB RESET
Explanation: In response to a RESET command, the system has changed the performance group of the job named jji.
System Action: Processing continues.
Operator Response: None.

IEE305I {cm|(blanks)|MODE|CSCB USE} COMMAND INVALID
Explanation: The cm command is invalid for one of the following reasons:

- The command is misspelled or punctuated incorrectly.
- A command valid only at Initial Program Load (IPL) was used after IPL.
- A command was issued without a prerequisite command.
- A TRACK command was issued to a non-CRT device.
- The command had an incorrect operand, as in HOLD or RELEASE commands without a TP operand.

If blanks appear, the operand of the central command was too long, or a framing quote was not found within 62 bytes.

MODE indicates that ECC was requested in record mode while HIR was in quiet mode.

CSCB USE indicates that the maximum number of TCAM commands had been enqueued when another TCAM command was submitted.

System Action: The system did not execute the command.

Operator Response: If blanks or cm appear, enter the command again correctly. For MODE, if desired, enter the command to place HIR into record mode before resubmitting the command to place ECC into record mode.

When CSCB USE appears, resubmit the command at a later time. If the condition persists, increase the number of CIBs specified on the INTRO macro instruction in the TCAM MCP.

Problem Determination: Table I, items 2, 29.

IEE306I cm INVALID NUMERICS
Explanation: In the cm command, a parameter value that is supposed to be numeric either contains one or more characters that are not numbers or has too large a value.
Example: RESET JOBX,PERFORM=2X where the performance group must be a number between 0 and 255.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE307I cm DELIMITER ERROR
Explanation: In the cm command, either the punctuation for a parameter is incorrect, or the operand field is not followed by a blank.
Example: V (132,133,ONLINE - where the device list must have a closing parenthesis.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.
Problem Determination: Table I, items 2, 29

IEE308I cm TERM LENGTH ERROR
Explanation: In the cm command, a parameter is too long or short. Either the parameter is not spelled correctly or a comma is not in the correct location.
 If this is a VARY Range specification, you cannot mix single units with ranges of units.
Example: C ABCDEFGHI - where a job name cannot exceed 8 characters.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.
Problem Determination: Table I, items 2, 29.

IEE309I cm UNIDENTIFIABLE KEY WORD
Explanation: In the cm command, a key word is misspelled.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.
Problem Determination: Table I, items 2, 29.

IEE310I cm KEY WORD MISSING
Explanation: In the cm command, a required key word parameter is missing.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.
Problem Determination: Table I, items 2, 7ab, 29.

IEE311I cm PARAMETER MISSING
Explanation: In the cm command, a required parameter is missing.
System Action: The system did not execute the command.
Operator Response: Enter the command again correctly.
Problem Determination: Table I, items 2, 29.

IEE312I cm PARAMETERS CONFLICT

Explanation: In the command indicated by cm in the message text, a key word parameter either appears more than once or conflicts with another parameter.

If cm is a VARY command, it indicates that the CONSOLE key word cannot be specified on a Vary Range command or on a VARY command with an MSS parameter.

If cm is DISPLAY M, it indicates that CONFIG cannot be specified with any other operand.

If cm is a SETDMN command, it indicates that more than one of the following key words were specified: WT, AOBJ, DOBJ, or FWKL.

System Action: The system did not execute the cm command.

Operator Response: Enter the correct command again.

Problem Determination: Table I, items 2, 29.

IEE313I {CN(xx)|devname|HARDCOPY} UNIT REF INVALID

Explanation: In a command, the unit name indicated by devname or the console ID indicated by CN(xx) is invalid or indicates a device type that cannot be used for the purpose intended by the command. If a Vary Hardcopy Off command is entered and there is no currently-recording hardcopy log, HARDCOPY will replace devname in the message text. In the case of an invalid composite specification, both the I-unit and the O-unit device numbers will appear. If only one unit of a composite specification is specified, this message will appear with the unit even though it is a valid part of a composite specification. The entire specification must be used. If 'V CN(xx),AUTH=value' was issued (where xx is the console ID) and the console ID is invalid or the issuer is not authorized, the authority value for the specified console is not changed.

If the unit is offline when an UNLOAD command is issued, then the UNLOAD command will not be processed.

Example: UNLOAD 13D - where 13D is offline; will yield IEE313I 13D UNIT REF INVALID

If a Vary device command (for example, vary xxx-yyy,offline) is entered and each of the specified units is individually invalid, xxx-yyy replaces devname in the message.

If a VARY CONSOLE command was issued for device xxx, and the said device is not active and not ready, this message will be issued to show the status.

System Action: The system did not execute the command.

Operator Response: Enter the command again, correcting the unit name.

Problem Determination: Table I, items 2, 7ab, 29.

IEE314I ddd UNIT NOT AVAILABLE - UNLOAD ATTEMPTED

Explanation: The operator issued an UNLOAD command for unit ddd which was online, unallocated, and not ready.

System Action: The system attempts to unload the unit. If the unit is a virtual device, the system attempts to synchronize the status of the UCB (unit control block) with the MSC (mass storage control) tables. The system may issue warning messages because the device is not ready.

Operator Response: If the unit is not unloaded, attempt to ready the unit and reissue the UNLOAD command.

Problem Determination: Table I, items 2, 7b, 29.

IEE315I cm UNIT NOT SUPPORTED

Explanation: In the cm command, one or more units specified are invalid; that is, they cannot be used for the purpose intended by the command.

System Action: The system did not execute the command.

Operator Response: Enter the command again.

Problem Determination: Table I, items 2, 7ab, 29.

IEE324I userid NOT LOGGED ON [IN SPECIFIED ADDRESS SPACE]

Explanation: The operator entered CANCEL U=userid or FORCE U=userid, but the specified userid is not currently active in the system. If IN SPECIFIED ADDRESS SPACE appears in the message text, the A= keyword is specified on the command but the userid is not active in the indicated address space.

System Action: The command is not executed.

Operator Response: If IN SPECIFIED ADDRESS SPACE appears in the message text, issue the DISPLAY TS,A command to determine the correct address space identifier. Reissue the CANCEL/FORCE command.

IEE328I cm COMMAND ABORTED

Explanation: The system cannot execute the command identified in the message text for one of these reasons:

- There is not enough storage available to schedule the command for execution.
- An attempt was made to obtain more address spaces than the maximum number supported on the system.
- For the VARY ddd,ONLINE command, device ddd could not accept an I/O command. Another processor might have reserved the device and then not have released it, or there may be a hardware error.
- If the command is DISPLAY GRS or VARY GRS, an error occurred during global resource serialization processing. The error prevents this system from communicating with any other global resource serialization systems.

System Action: The command is not executed.

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Operator Response: Generally, reenter the command at a later time.

If the command is DISPLAY GRS or VARY GRS, reenter the command. If the problem continues, stop entering global resource serialization commands on this system. Re-IPL the system as soon as possible.

IEE329I ddd IN USE BY A SYSTEM COMPONENT

Explanation: The user issued a V ddd, ONLINE command or, a V ddd, CONSOLE command. The specified device is presently in use by a system component and cannot be made available to VS until completion of the system component.

System Action: The system does not process the request.

Operator Response: Reissue the command when the system component has completed.

IEE331A PROCESSOR (y) IS IN AN EXCESSIVE DISABLED SPIN LOOP WAITING FOR xxxxxxxxxxxx REPLY U TO CONTINUE SPIN, OR STOP PROCESSOR (x) AND REPLY ACR. (AFTER STOPPING THE PROCESSOR, DO NOT START IT)

Explanation: An MVS routine is in a spin loop on processor y, waiting for the designated event on processor x. The spin loop exceeded the length of time normally needed for the event to occur. The event will be one of the following:

- RISGNL RESPONSE
- LOCK RELEASE
- RESTART RESOURCE
- ADDRESS SPACE TO QUIESCE
- INTERSECT RELEASE
- SUCCESSFUL BIND BREAK RELEASE

System Action: Processor y waits for the operator to respond. The other processors continue with their processing. If the operator does not respond within 125 seconds, processor y may be put into an 09x restartable wait state.

Operator Response: Respond with one of the following:

- If processor x is in MANUAL state, start it and reply U on processor y to resume the spin loop.
- If processor x is in a disabled loop, reply U to the message. If the message reappears, issue a PROGRAM START processor x and reply U on the processor to resume the spin loop. If the PROGRAM RESTART has no effect and the message appears again, stop processor x and reply ACR to simulate an alternate CPU recovery (ACR) condition. ACR removes processor x from the configuration.
- If processor x seems to be malfunctioning due to a hardware problem, stop processor x and reply ACR to simulate an alternate CPU recovery (ACR) condition. ACR removes processor x from the configuration.
- If the system is a uniprocessor, an invalid spin loop has occurred. Attempt to recover by restarting the processor. If this fails, take a system dump to collect diagnostic information and re-IPL the system.

Problem Determination: Table I, items 11, 16, 18, 29 or 30.

IEE334I HALT EOD SUCCESSFUL

Explanation: In response to a HALT EOD command, the system has stored internal input/output device error counts in the SYS1.LOGREC data set.

Operator Response: The power can be turned off.

IEE335I VOL PARAMETER MISSING

Explanation: In a MOUNT command, the VOL parameter is missing.

System Action: The system did not execute the command.

Operator Response: Enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE338I ddd INACTIVE AS HARDCPY

Explanation: In response to a VARY HARDCPY, OFF command, the hard copy capabilities have been varied out of device ddd.

System Action: Since hardcopy is not required, the command has been accepted by the system.

Operator Response: None.

IEE339I ddd CHANGING STATUS

Explanation: A VARY command was issued for device ddd. However, the device is currently in the process of changing status. In the case of an invalid composite specification, both the I-unit and the O-unit device numbers will appear.

System Action: The system did not execute the command.

Operator Response: Use the DISPLAY CONSOLES command to determine the status of the device. After the device has completed its status change, reenter the command.

IEE340E DUMP DATA SET UNUSABLE: xxx

Explanation: SDUMP (symptom dump) cannot use the dump data set or tape for one of the following reasons:

- When the DUMPSRV address space terminates, the system unallocates dump data sets that the DUMPDS command added.
- When a dynamic allocation fails to allocate a DASD dump data set to the DUMPSRV address space, the DASD dump data set is unusable.

xxx is the 3 digit tape device number or the DASD dump data set name. For example, if the DASD dump data set name is SYS1.DUMP17, xxx is 17 (the third x is a blank).

System Action: The dump data set or tape can no longer receive SDUMPs. If tape, the tape is unloaded. Normal dump tape procedures are followed.

Operator Response: You may issue the DUMPDS ADD command to try to reconnect any lost dump data sets or tapes.

IEE341I {ttt|jjj|CN=cc} NOT ACTIVE [IN SPECIFIED ADDRESS SPACE]

Explanation: The operator issued a command that applies to the time sharing system *ttt*, the job *jjj*, or the MCS console *cc*. However, no task with this name or console with this ID is currently active.

For example, if CANCEL JOBX is issued with no JOBX running, the message JOBX NOT ACTIVE will appear. The IN SPECIFIED ADDRESS SPACE extension is associated with only the *jjj* NOT ACTIVE message; it appears if a CANCEL or FORCE command is issued with the A=*jjj* keyword.

The CN=*cc* NOT ACTIVE message appears if a D R command is issued with the CN=*cc* keyword, when *cc* is a defined console. For example, if D R,A,CN=95 is issued when only consoles one through 60 are active, the message CN=95 NOT ACTIVE will be issued.

System Action: The command was not executed.

Operator Response: Verify that the task *ttt* has been started by issuing a DISPLAY A,LIST command; otherwise, make sure that the task name was specified correctly in the command. If *ttt* is TRACE, no response is needed.

Verify that console *cc* is the one for which information is desired. The D C command may be helpful for the verification.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11. For CLOCK, add item 7d.

Note: After a swap from a started reader or writer, all console communication must be with the *old* device number until the reader or writer in the swap is closed. Then the new device number can be used.

IEE342I cm REJECTED - TASK BUSY.

Explanation: The command named *cm* was received; however, either the command applies to a task that has not finished processing a previous command or the command was entered for a job or task that is in a 'must complete' mode.

Example: With JOBX running, STOP X was issued. If MODIFY X, parameters is issued, message IEE342I will be issued.

System Action: The command was not executed.

Operator Response: Reenter the command after the previous commands have completed execution.

IEE345I command AUTHORITY INVALID

Explanation: One of the following occurred:

- The operator entered the command named in the message from a console that did not have the proper command authority.
- The operator issued a VARY PATH command from a console that is not authorized to vary console paths or I/O device paths.

- A CONTROL V command was issued against the master console.
- A MSGRT command with a L=*cca* operand was issued from a console without routing authority.

System Action: The system does not execute the command.

Operator Response: Reenter the command from a console with the proper command authority.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. Issue a DISPLAY CONSOLES command to find out the status of all the consoles.

If unable to continue system operation, see Table I, item 11.

IEE349I

**{ HARDCOPY CONSOLE }
{ CONSOLES }**

CONSOLE/ALT	COND	AUTH	ID	AREA	ROUTCD
{ console/alt }	H	auth1	nn	z,a - a	routcd
{ SYSLOG }					routcd
{ console/alt }	{ M }	auth2			
	{ A,P }				
	{ N,P }				
	{ N,T }				

Explanation: In response to a VARY command, this message provides a display of the console configuration. In response to a VARY HARDCPY command, the first format of the title line and the data line appears with the label line. In response to a VARY CONSOLE command, the second format of the data line appears with the title and label lines.

In the message text, the fields are:

CONSOLE

console

ddd

Device number of the primary console, which is either an output device or an input/output device.

dd,ddd

Device numbers of the composite primary console.

SYSLOG

The SYSLOG is the hardcopy device.

ALT

alt

ddd

Device number of the alternate console.

ddd,ddd

Device numbers of the composite alternate console.

COND

H

Hardcopy device.

M

Master console.

A

Active console.

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- A,P**
In the process of becoming an active console.
- N**
Non-active console.
- N,P**
In the process of becoming a non-active console.
- N,T**
Cannot be made a console until the Online Test Executive Program (OLTEP) completes its online test program.

AUTH

- auth1**
 - CMDS**
Operator and system commands and all responses are to be written on the hardcopy log.
 - STCMDS**
Operator and system commands and status displays are to be written on the hardcopy log.
 - INCMDS**
Operator and system commands and inline responses are to be written on the hardcopy log.
 - NOCMDS**
Operator and system commands and responses are *not* to be written on the hardcopy log.
- auth2**
 - SYS**
Commands authorized for the console are CANCEL, HALT, HOLD, MODE, MODIFY, RELEASE, RESET, SET, SETDMN, SLIP, START, STOP, SWITCH, CHNGDUMP, TRACE and WRITELOG.
 - IO**
Commands authorized for the console are MOUNT, UNLOAD, SWAP, and VARY for devices.
 - CONS**
Command authorized for the console is VARY, for consoles, plus use of the routing location operand.
 - INFO**
Commands authorized for console are DISPLAY, LOG, and CONTROL, MONITOR, MSGRT, STOPMN, REPLY, SEND, TRACK, and STOPTR.
 - ALL**
Commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.
 - NONE**
No command authority, which occurs with an 'output only' device.

ID nn
The system identification number for this console.

AREA
z, a - a the range of area designators defined for this console, where z is the id of the message area, a¹ is the bottom area and a² is the top area. The presence of some or all of these designators is dependent on the area definitions currently in effect at this console.

ROUTCD

routed
x,x,...
The routing codes assigned to the console or hardcopy device; if a composite console, the routing codes assigned to the output device.

ALL
All of the routing codes.

NONE
None of the routing codes.

Operator Response: None.

Note: If the console specified is not a CRT console, the AREA column will not be displayed.

IEE351I SMF SYS1.MAN RECORDING NOT BEING USED

Explanation: This message is issued when one of the following conditions occurs during SMF initialization processing or, for MVS/System Product only, during SET SMF command processing:

- Allocation failed for the SYS1.MAN data set.
- The SYS1.MAN data set could not be opened.
- The current SMF member of SYS1.PARMLIB specifies that SMF recording is not being used.

The message is also issued when DISPLAY SMF command processing determines that SMF recording is not currently being used (MVS/System Product only).

System Action: If a problem occurred with the SYS1.MAN data set, an error message describing the problem precedes this message. If the message was issued during SMF initialization processing, no records are written in the SYS1.MAN data set. In all cases, processing continues.

Operator Response: If a problem occurred with the SYS1.MAN data set, ask the system programmer to properly define the SMF member of SYS1.PARMLIB as indicated in the preceding message. If this is a production system that requires SMF recording, re-IPL the system after the SMF member of SYS1.PARMLIB is redefined. In all other cases, no response is required.

IEE352A SMF MEMBER SMFPRMxx MISSING - REPLY WITH SMF VALUES OR RE-IPL

Explanation: During SMF initialization, the specified SMF parmlib member was not found in the SYS1.PARMLIB data set.

System Action: SMF initialization does not continue until the operator has responded to this message.

Operator Response: Enter REPLY xx,keywd = val, keywd = val, listing all the required SMF parameters as defined by the programmer responsible for the system at your installation. Inform the programmer responsible for the system to define the SMF member in the SYS1.PARMLIB data set, thereby eliminating the need to redefine the SMF parameters from the keyboard at every IPL.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEHLIST utility program to list members of SYS1.PARMLIB and save the output.

IEE353A I/O ERROR ON SMFPRMxx READ - REPLY WITH SMF VALUES OR RE-IPL

Explanation: During SMF initialization, an uncorrectable input/output error occurred while reading or searching for the SMFPRMxx member in the SYS1.PARMLIB data set.

System Action: SMF initialization does not continue until the operator has responded to this message.

Operator Response: Restart the system. If the error persists, enter REPLY xx,keywd = val,keywd = val, listing all the required SMF parameters as defined by the system programmer at your installation. Inform the system programmer to redefine the SMF parmlib member.

Problem Determination: Table I, items 2, 7ab, 29.

IEE354I SMF PARAMETERS

Explanation: This message is issued if OPI = YES was specified in the SMF parmlib member. All the parameters of the SMF parmlib member are listed, one parameter to a line, following this message; each parameter is listed in the format 'keywd = val'.

System Action: Message IEE357A is issued, permitting changes to be made.

Operator Response: None.

IEE355I SMF PARAMETER ERRORS IEE355I error text

Explanation: During SMF initialization, a parameter was specified incorrectly either in the SMF parmlib member or in a reply from the console. The specific error (error text) is listed in the second line of the message:

keywd UNRECOGNIZABLE KEY WORD/FORMAT

An unrecognizable key word was detected; keywd specifies up to 25 characters of the key word in error.

keywd = val INVALID VALUE SPECIFIED

The key word specified is valid, but the value specified is invalid.

keywd - KEY WORD NOT SPECIFIED

The key word specified is required, but was not found in the SMF parmlib member.

System Action: Message IEE356A follows, permitting changes to be made.

Operator Response: None.

IEE356A REPLY WITH SMF VALUES

Explanation: This message follows message IEE355I, and permits corrections to be made to the parameters in error.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Enter REPLY xx,keywd = val,keywd = val..., correcting the parameters in error indicated in message IEE355I. Inform the system programmer to correct the errors in the specification of the SMF member of SYS1.PARMLIB.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEBPTCH utility program to list the SMF parmlib member from SYS1.PARMLIB, and save the output.

IEE357A REPLY WITH SMF VALUES OR U

Explanation: This message permits the operator to make corrections or additions to the parameters listed in the preceding message.

System Action: SMF initialization waits for the operator to respond to this message.

Operator Response: To change the parameters on a system that does not have the MVS/System Product installed, enter REPLY

xx,keywd = val,keywd = val..., specifying the desired changes. To change the parameters on a system containing the MVS/System Product, enter REPLY xx,keywd(val), keywd(val),..., specifying the desired changes.

Note: Any additions or corrections you make to the parameters are valid only for the current IPL. If you want the changes to be permanent, update an existing SMF member of SYS1.PARMLIB or create a new member.

If parameters are not to be changed, enter REPLY xx,U.

IEE358I SMF SYS1.MANx NOT FOUND ON ser

Explanation: The SYS1.MAN data set, as indicated in the message text, was specified for the device whose volume serial number is ser. However, no space was allocated for the data set on that device.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: Inform the programmer responsible for the system either to allocate space for the data set on the indicated device or to properly redefine the data set.

Problem Determination: Execute the IEHLIST utility for the volume and save the output. Table I, items 2, 7ab, 29.

IEE359I INCOMPATIBLE SMF VALUES FOR OPT AND DSV. OPT = 2 SUBSTITUTED.

Explanation: The value OPT = 1 is not compatible with the value DSV = 2 or DSV = 3 for the recording of STEP and/or VOLUME information for SMF. The value OPT = 2 is required to create preliminary records needed for the above SMF information.

System Action: The value OPT=2 is substituted. Processing continues and SMF information is recorded.

Programmer Response: If STEP and/or VOLUME information is not desired, reinitialize the system and specify SMF parameter value DSV=0 or DSV=1.

Problem Determination: List the specified SMF SYS1.PARMLIB member to verify the parameter defaults specified. The user may change these defaults in SYS1.PARMLIB, or override them through the console at system initialization, to conform to his current SMF requirements.

IEE360I SMF NOW RECORDING ON SYS1.MANx ON ser
TIME = hh.mm.ss

Explanation: SMF records are now being written on the SMF data set SYS1.MANx. The data set is located on the device with the volume serial number ser.

This message is issued during SMF initialization processing to indicate which data set was chosen by the SMF writer as the current recording data set. It is also issued when a switch in active data sets takes place during system processing.

The message also indicates the time of day in the format hours (hh), minutes (mm), and seconds (ss).

System Action: The SMF records are initially placed in a buffer; when the buffer is full, the data in the buffer is written in the indicated data set. If the system fails before the buffer is full, the records are lost.

Operator Response: None.

IEE361I SMF DATA LOST -- NO DATA SETS AVAILABLE, DATA BEING BUFFERED
TIME = hh.mm.ss

Explanation: The current SMF data set is full, and the system could not find an empty SMF data set. Therefore, no more records can be written; the SMF data will be buffered until a data set is available. This condition occurs when the SYS1.MAN data sets were not dumped as requested by message IEE362A.

The message also indicates the time as the hour (00-23), the minute (00-59), and the second (00-59).

System Action: System processing continues, but no records are written in the SYS1.MAN data sets. Until a data set becomes available, a record is kept of the number of records buffered and of the starting and ending times of the period during which no records were written. When a data set becomes available, an SMF data lost record (type 7) is written.

Operator Response: Initiate execution of the SMF dump program. If a dump program is currently executing, ensure that it completes as soon as possible.

IEE362A IEE362I

SMF ENTER DUMP FOR SYS1.MANx ON ser

Explanation: The SYS1.MANx data set is full, or a HALT EOD or a SWITCH SMF command was issued. The data set is on the device whose volume serial number is ser.

System Action: System processing continues. If another SMF data set is available, SMF recording continues and message IEE360I is issued. If none is available, no further recording takes place.

Operator Response: Initiate execution of the SMF dump program for the indicated data set. If you do not dump the data set within a reasonable time, SMF data might be lost, which is indicated by message IEE361I. How much time can elapse before SMF data is lost depends on the size of the recording data sets and the type of records being recorded.

IEE363I SMF ser NOT DIRECT ACCESS

Explanation: The SYS1.MAN data set cannot be used because a device other than direct access was specified for the SYS1.MAN data set. In the message text, ser is the volume serial number of the volume.

System Action: Processing continues, but no records are written in the SYS1.MAN data set.

Operator Response: Inform the programmer responsible for the system to properly define the device or to make the specified device available.

Problem Determination: Table I, items 2, 7ab, 29.

IEE364I SMF {LOGICAL|PHYSICAL} I/O ERROR ON SYS1.MANx {FEEDBACK CODE = fc|error text}

Explanation: VSAM processing encountered an error while writing to the SMF recording data set SYS1.MANx. If a logical error occurred, the message includes the VSAM feedback code (fc). If a physical error occurred, the message includes the VSAM error message text. See *VSAM Administration: Macro Instruction Reference* for the explanation of the feedback code and the physical error message text.

System Action: SMF processing continues, but ignores recording data set SYS1.MANx. If another SMF data set is available, recording continues and message IEE360I is issued. Otherwise, no further SMF recording is done.

Operator Response: None.

Programmer Response: Correct the error indicated by the feedback code or the VSAM error message text. The error might be the result of an improperly defined data set. See *System Management Facilities (SMF)* for information about defining SMF data sets.

Problem Determination: Table I, items 2, 7a, 7d, 34b.

IEE365I SMF SYS1.{MANx|PARMLIB} NOT OPENED

Explanation: The SYS1.MAN data set or the SYS1.PARMLIB data set could not be opened. The indicated data set has not been allocated or mounted properly.

System Action: Processing continues but no records are written to the SYS1.MAN data set or in the case of SYS1.PARMLIB, message IEE356A will be issued, permitting SMF parameters to be entered.

Operator Response: Inform the system programmer to allocate the indicated data set.

Problem Determination: Table I, items 2, 7ab, 29.

IEE366I NO SMF DATA SETS AVAILABLE -- DATA BEING BUFFERED TIME = hh.mm.ss

Explanation: The current SMF data set is full, and the system could not find an available SMF data set. As a result, SMF can not write any additional SMF records, and it will put the SMF data in buffer until a data set is available. This condition developed because the SYS1.MAN data sets were not dumped in response to message IEE362A.

System Action: System processing continues, but SMF buffers all SMF records. SMF keeps track of (1) the number of records it buffered and (2) the starting and ending times for the period when it was unable to write any records. When a data set does become available, SMF writes an SMF data lost record (type 7) to the available data set and then writes the buffered SMF records to the data set.

Operator Response: You should begin the SMF dump program. If a dump is currently executing, make sure that it completes as soon as possible.

Problem Determination: None.

IEE376I VARY REJECTED, PATH(ddd,xx) LAST PATH TO DEVICE

Explanation: One of the following occurred:

- A VARY PATH command requested that the last path to device ddd be varied offline.
- A VARY PATH command with the UNCOND parameter requested that the last path to allocated device ddd be varied offline.

It is invalid to vary offline the last path to an allocated device.

xx is the channel path representing the last path to device ddd.

System Action: Processing for device ddd is terminated. System processing continues.

Operator Response: If ddd does not indicate the desired device, enter the command again with the desired ddd (device number).

Problem Determination: Table I, items 11, 29.

IEE378I VARY REJECTED, PATH(ddd,xx) DOES NOT EXIST

Explanation: A VARY PATH command requested that a path to device ddd through channel path xx be varied online or offline. However, the path does not exist.

System Action: Processing for device ddd is terminated. System processing continues.

Operator Response: If ddd does not indicate the desired device, enter the command again with the desired ddd (device number).

Problem Determination: If ddd does indicate the desired path, or if the problem recurs, see Table I, items 11, 29.

IEE379I VARY REJECTED, PATH(ddd,xx) RESERVED

Explanation: A VARY PATH command requested that the path to shared direct access storage device ddd, channel path xx, be varied either online or offline. However, the path is temporarily reserved and cannot be varied offline, or the device is reserved, which prevents the system from verifying that the path to be varied is operational. Note that when a reserved condition is detected during an attempt to VARY a path offline, VARY PATH processing retries the I/O a number of times before issuing the message.

System Action: Processing of the VARY PATH request for device ddd is terminated. System processing continues.

Operator Response: If desired, enter the VARY PATH command again after the shared device has been released.

Problem Determination: Table I, items 11, 29.

IEE380I ddd DEVICE TYPE INVALID

Explanation: A SWAP command was entered. However, device ddd is not supported by dynamic device reconfiguration.

System Action: The command is not executed. Processing continues.

Operator Response: If a swap is still desired, reenter the command using a supported device.

Problem Determination: Table I, items 11, 29.

IEE381I ddd DEVICE UNALLOCATED

Explanation: A SWAP command was entered for device ddd. However, the device has not been allocated to a job. Therefore, a swap cannot be performed.

System Action: The command is not executed. The system continues operation.

Operator Response: If movement of the volume on device ddd is not desired, none.

If movement of the volume on device ddd is desired, issue a VARY DEVICE offline command for the device and move the volume. If the VARY DEVICE command is not executed successfully, then the device has since been allocated and the SWAP command can be reentered.

Problem Determination: Table I, items 11, 29.

IEE

IEE382I {ttt|cm} CURRENTLY ACTIVE
Explanation: A command was entered; however, a request is outstanding.
System Action: The command is not executed.
Operator Response: Wait for the outstanding request to complete. Then, if desired, reenter the command.
Note: Canceling the affected job will purge the outstanding request.
Problem Determination: Table I, items 11, 29.

IEE383I VARY REJECTED, DEVICE ddd CANNOT BE ACCESSED
Explanation: The operator entered a VARY PATH command for a path to device ddd. However, the device is in a permanent error state. IOS module IOSVVARY returned a return code of 36.
System Action: Processing for the path to device ddd terminates. System processing continues.
Operator Response: Notify the system programmer.
Problem Determination: Table I, items 11, 29.

IEE384I VARY REJECTED, UCB FOR DEVICE ddd NOT CONNECTED
Explanation: The operator issued a VARY PATH ONLINE command for a device that is not connected to any subchannel. IOS module IECVIOPM returned a return code of 28.
System Action: Processing for the path to device ddd terminates. System processing continues.
Operator Response: Make sure that device ddd is the desired device. If not, reissue the VARY PATH command with the correct device number. If yes, notify the system programmer.
System Programmer Response: Define device ddd to a subchannel by performing another IOGEN. For more information, see *Initialization and Tuning*.

IEE385I VARY REJECTED, I/O TIMED OUT DURING PATH(ddd,xx) VALIDATION
Explanation: The operator issued a VARY PATH ONLINE command for channel path xx to device ddd, but the I/O issued by module IECVIOPM to bring the desired path online has exceeded the given time interval.
System Action: Processing for device ddd is terminated. System processing continues.
Operator Response: An I/O time out of this sort indicates a probable hardware error on device ddd or on the control unit it is attached to. Contact your hardware support personnel.

IEE400I THESE MESSAGES CANCELED- xx,xx,xx
Explanation: The operator need not respond to the messages whose reply identifiers are given by xx. The messages have been canceled and the requirement for a reply no longer exists. The messages were canceled because the issuing task terminated or specifically requested that the message be canceled.

System Action: The system continues processing. The reply identifiers may be used to identify some future message.
Operator Response: None.

IEE444I K M,AMRF = {Y|N},MLIM = nnnn, UEXIT = {Y|N}
Explanation: This message appears in response to a CONTROL M,REF command. The fields in the message are:

AMRF
 This field shows the status of the action message retention facility (AMRF). If AMRF=Y, AMRF is active; if AMRF=N, AMRF is inactive.

MLIM
 This field shows the maximum number, nnnn, of available message buffers. Unless the operator changes it, the MLIM value is the number specified during IPL on the WTOBFRS parameter.

UEXIT
 This field shows the status of the general WTO user exit routine, IEAVMXIT. If UEXIT=Y, IEAVMXIT is active; if UEXIT=N, IEAVMXIT is inactive.

System Action: None.
Operator Response: None.

IEE450I hh.mm.ss UNIT STATUS [id]
Explanation: In response to a DISPLAY U command, this message provides a display of the requested information. The message may appear in either of two formats:

- If OFFLINE is *not* specified in the DISPLAY U command, the following headings will appear on the second line of this message -- UNIT, TYPE STATUS, VOLSER, and VOLSTATE. If two or more units are being described, the headings will appear twice on the second line. The third line, and each succeeding line, will contain information as described by the headings.

The following special device type representations might appear in the TYPE field with these meanings:

- 3331 - 3330-1
- 333V - 3330V
- 348S - 3480 with cartridge stack loader

Note: Type=3277 could be either (1) a local attached 3277, (2) a 3278 or (3) a 3279 display unit.

Other devices are presented as specified at system generation (for TP devices, only the control unit will be shown).

The following alphabetic characters may appear in the STATUS field with these meanings:

- A - allocated
- BOX - hardware error
- BSY - busy
- C - console
- F - offline
- M - Shared (multi-system) assignment
- MTP - mount pending
- NRD - not ready

- O - online
- P - reserve pending
- PND - offline pending
- PUL - unload pending
- R - pending reserved, shared DASD or exclusively assigned unit
- RAL - restricted to allocation
- S - SYSRES
- SPD - channel program is temporarily suspended while ASM is using it.
- SYS - allocated to system

- If OFFLINE is specified in the DISPLAY U command, the following headings appear on the second line -- UNIT and TYPE. Up to seven units may be described on the third line and each succeeding line of the display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Note: A MOUNT pending designation for a given device (shown as 'mtp' in the message text) does not indicate that a volume should be mounted on the device in the following cases:

- No MOUNT message has yet been issued for the device (in this case the device will also be designated allocated - shown as 'A' in the message text.)
- One or more MOUNT messages were issued for the device but the job(s) for which the messages were issued has been canceled.

In the first case no action is necessary because a MOUNT message may or may not be issued. In the second case no action is necessary, but issuing an UNLOAD command to the device will clear the mount-pending condition.

System Action: Processing continues.

Operator Response: None.

IEE452I UNIT STATUS NUMBER OF UNITS REQUESTED EXCEEDS NUMBER AVAILABLE

Explanation: In the DISPLAY U command, the number of devices specified for which information was to be supplied exceeded the number of devices in the system with the requested attributes. This message appears as the last line of the display.

System Action: The command was executed.

Operator Response: None.

IEE453I UNIT STATUS, INVALID OPERAND. RE-ENTER

Explanation: In the DISPLAY U command, invalid parameters were specified.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid parameters.

IEE454I UNIT STATUS, DEVICE DOES NOT EXIST

Explanation: In the DISPLAY U command, the single device specified did not correspond to any device in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying a valid device description.

IEE455I UNIT STATUS, NO DEVICES WITH REQUESTED ATTRIBUTES

Explanation: In the DISPLAY U command, attributes were specified that did not correspond to any devices in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid device descriptions.

IEE459I hh.mm.ss DEVSERV PATHS

UNIT TYPE M CNT VOLSER CHIPD=PATH STATUS

```
[ddd, uuux,m, ccc, vvvvv,
                                     chipid = s [...]]
[ddd, uuux,m, ccc, vvvvv,
                                     device status
                                     message ]
```

[processing message]

***** SYMBOL DEFINITIONS *****

```
symbol 1      symbol 2
symbol n-1    symbol n
```

Explanation: In response to a DEVSERV PATHS command, this message displays the the following requested information:

hh.mm.ss
hours.minutes.seconds

UNIT TYPE M CNT VOLSER CHIPID=PATH STATUS

These are the column headings for the information displayed in the the message.

ddd

A 3 character target device number from the DEVSERV command.

uuux

uuuu is the device type indicated by the UCBTYP field. x is a modifier for a specific feature or model. If the DEVSERV command does not support this device then one of the following generic types applies:

CHRDR Character reader

CTC Channel-to-channel adapter

GRAPH Display device

TP Communication device

UR Unit record device

?dcut This is an unknown device, where dcut is the hexadecimal device class and unit type from the UCB.

m

This is the logical mode of the device, and may be one of the following:

A The device is allocated. See the use count.

- F The device is logically offline to MVS.
- M The device has mount pending.
- O The device is logically online to MVS.
- P The device is pending offline to MVS.
- N The device is not allocatable; a system component has control.

ccc

The number of data sets allocated on the volume from the UCBDMCT field.

wvvvvv

The volume serial label from the UCBVOL1 field.

chpid

The channel path id.

s

This indicates the status of the path, which may be one of the following:

- + The path is logically and physically available and I/O on the path was successful.
- * The path is physically , but not logically available. The subchannel's logical path indicator is off but I/O to the path is successful. You can use the command VARY PATH(ddd,nn),ONLINE to make channel path nn logically available to device ddd.
- The path is neither logically nor physically available. The subchannel's logical and physical indicators are both off for this channel path. You can use the command CONFIG CHP(nn),ONLINE to make channel path nn logically available to all devices connected to channel nn.
- & The device is reserved to another path. This indicator applies to devices with the dynamic pathing selection feature.
- < The path is installed but not physically available. The start subchannel request received a condition code of 3.
- > The device microcode has detected an error and will not allow I/O to complete on the path.
- B The path is unable to communicate. The device indicates that a busy or reserve condition exists on the path.
- C A controller error occurred while accessing the device.
- D A device error occurred while accessing the device.
- I Intervention is required; the device is not ready.
- R The path is available and the device is reserved to this path/group. This only applies to devices with the dynamic pathing feature.
- T A time out has occurred; there is no response from the device. The cause of the time out is undetermined and this condition is transient.

- U A storage control unit or storage director error occurred while accessing the device.
- X Unable to determine the failing unit.

device status message

The device status message may be one of the following:

DEVICE CLASS/TYPE NOT SUPPORTED BY DEVSERV COMMAND

The device must be a tape drive of DASD.

DEVICE UNAVAILABLE, SCP ROUTINE IN CONTROL

The control program is using the device. The system may be attempting recovery.

SUBCHANNEL ERROR, PATH STATUS UNAVAILABLE

Information from the SCHIB is not available. There may be a problem with the processor.

UCB NOT CONNECTED, PATH STATUS UNAVAILABLE

The unit control block does not contain a subchannel number. The path may need to be varied offline.

DEVICE BOXED, PATH STATUS UNAVAILABLE

IOS has forced the device offline.

**** FENCED {STORAGE PATH|CHANNEL|DEVICE} xxxxxxxx**

xxxxxxx xxxxxxxx xxxxxxxx
The storage control subsystem has 'fenced' one or more of the four storage paths (0, 1, 2, and 3). 'Fenced' means that the indicated path to the device will not be used; alternate path(s) to the device will be used. The degree of fencing is indicated by:

STORAGE PATH

A storage path is unavailable to all devices.

CHANNEL

A storage path is unavailable to all devices from one or more channel interfaces; some channel interfaces will continue to use the storage path.

DEVICE A storage path is unavailable to the indicated device.

xxxxxxx represents the four hexadecimal bytes of storage path status for each path. The total 16 bytes of path status are described in *IBM 3990 Storage Control: Reference* under the description of read subsystem data (storage path status).

processing message

The following processing information may be contained in the message:

**** NO DEVICES MEET SELECTION CRITERIA ****

No devices at or higher than the address you specified met your online/offline requirements.

**** NO OTHER DEVICES MEET SELECTION CRITERIA ****

An insufficient number of devices at or higher than the address you specified met your online/offline requirements.

symbol 1 ... symbol n

The meaning of the symbols used in a given display.

Notes:

1. The DISPLAY MATRIX command output may not always agree with DEVSERV's display. DEVSERV's path status is based on the results of real I/O.
2. Due to transient conditions in the system, repetitive issuing of the DEVSERV command may yield different results.
3. With JES3, a device can be online to JES3, but offline to the MVS system on which the DEVSERV command was issued.

System Action: None.

Operator Response: If device status indicates that the storage control subsystem has fenced one or more storage paths, contact your service representative to fix the condition that caused the fencing. If the device has been fenced, refer to the *Device Support Facilities User's Guide and Reference* for an explanation of the CONTROL command needed to unfence the device.

Otherwise, follow your installation's procedures for the status which is indicated in the message display. Recovery actions are contingent upon the following: hardware and software configurations, system load and job mix. However, the following are some examples of possible actions:

Path

Status Action

- < Check all path switches for correct settings.
- & Check if shared device is in use by another system.
- T Reissue DEVSERV, and if the condition still exists, terminate the program which is tying up the device.

IEE479W

{MASTER|COMMAND} SCHEDULER {FAILED,|ABEND cde,} [DUMPED,] RE-IPL - CODE xx

Explanation: MASTER SCHEDULER in the message text means the master scheduler or a system function that depends on the master scheduler has failed.

COMMAND SCHEDULER means the COMM TASK (communications task) address space command task has failed.

FAILED means the task failed during initialization.

ABEND cde is the system completion code.

DUMPED means the system wrote a complete dump to a SYS1.DUMP data set. Omission of DUMPED means there is no usable dump.

CODE xx identifies the failing portion of master scheduler initialization:

xx Failing Portion

- 10 Base initialization (module IEEVIPL).
- 11 Variable initialization (module IEEMB850).
- 12 Initialization for linkage to TSO I/O service routines (module IKJEFXSR).
- 13 Subsystem interface initialization (module IEFJSINT).
- 14 Allocation address space creation routine (module IEFAB4I0).
- 15 Attach for initiator (module IEFSD060) failed.
- 16 Event notification facility (module IEFENFFX).
- 17 Module IEFQBINT was invoked when the error occurred.
- 1Z Initiator returned control to base initialization (module IEEVIPL).
- 20 Region initialization (module IEEMB860).
- 21 Recovery termination management initialization (module IEAVTMSI).
- 22 Mass storage system (MSS) initialization (module ICBINIT).
- 23 Subsystem initialization (module IEEFJSIN2).
- 24 Display allocation scavenge routine (module IEFHB4I2).
- 25 Input/output supervisor (IOS) dynamic pathing initialization (module IECVIOSI).
- 26 Module IEFJSJINT.
- 27 Module ICHSEC05 was invoked when the error occurred.
- 28 Module IKJEFXSR was invoked when the error occurred.
- 2E Region initialization (module IEEMB860) could not establish an ESTAE recovery environment.
- 30 Wait initialization (module IEEVWAIT).

System Action: The failing task enters an enabled wait state. System initialization cannot complete.

Operator Response: Issue the VARY HARDCPY command to switch hard copy to a printer console that is not already being used as the hard-copy log, if one is available. After all messages have been printed, restart the system. Give the output to the system programmer. If DUMPED did not appear in the message, request a stand-alone dump.

Programmer Response: None.

Problem Determination: None.



IEE480I **jjj [COMMAND] {ABEND cde,[FAILED,]
[DUMPED,] TERMINATED**

Explanation: The named task, jjj terminated where jjj can be one of the following:

- The name of the abnormally terminating task.
- The abnormally terminating command, in which case COMMAND appears in the message text.
- SVC 34, in which case the command scheduler abnormally terminated. The "ABEND cde" is always issued with SVC 34.
- MASTER TRACE.

If ABEND cde appears in the message text, cde is the system completion code. If FAILED appears, the task failed during initialization. The optional field DUMPED indicates that a complete dump has been taken to the SYS1.DUMP data set. If DUMPED is omitted, there is no usable dump.

System Action: The task is terminated immediately. A record describing the error is written to the SYS1.LOGREC data set and a dump is attempted.

Operator Response: Notify the system programmer.

Programmer Response: If ABEND cde appears in the message text, take the action indicated for that system completion code.

Problem Determination: Table I, items 2, 7d, 29. Print the SYS1.DUMP data set if DUMPED appeared in the message.

IEE481I **jjj ABEND cde[DUMPED,]RESTARTING**

Explanation: System function jjj failed. The cde in the message text is the system completion code. The optional field DUMPED indicates that a complete dump has been taken to the SYS1.DUMP data set. If DUMPED is omitted, there is no usable dump.

System Action: The failing task automatically restarts.

Operator Response: None.

Programmer Response: Take the action indicated for the system completion code.

Problem Determination: Table I, items 2 and 29. Print the SYS1.DUMP data set if DUMPED appeared in the message.

IEE482E **MASTER SCHEDULER RESTART
FAILED,ABEND RECURSION,RE-IPL**

Explanation: An attempt to restart the master scheduler failed. This message will always be preceded by this message, IEE481I.

System Action: The system will continue to process without the master scheduler.

Operator Response: After current system processing has stopped, restart the system to restart the master scheduler.

Programmer Response: Respond as indicated to message IEE481I.

IEE490I **hh.mm.ss DISPLAY M [id]**

Explanation: This message appears in response to a DISPLAY M command. The display texts that appear for each of the operands follow, arranged alphabetically according to the display option.

In the message text, hh.mm.ss is the time given as the hour (00-23), the minute (00-59), and the second (00-59) and id is a particular display option.

System Action: Processing continues.

Operator Response: None for most displays.

Symbols appear in the message text for several of the DISPLAY M Command options. In each of these cases, the the meanings of the symbols used also appear as part of the message display.

Following is a list of all the symbols used in the various versions of message IEE490I.

***** SYMBOL EXPLANATIONS *****

- . DOES NOT EXIST
- OFFLINE
- # DEVICE OFFLINE
- * PHYSICALLY ONLINE
- + ONLINE
- @ ONLINE, PHYSICALLY ONLINE,
AND OPERATIONAL INDICATORS
ARE NOT EQUAL
- \$ PATH NOT OPERATIONAL
- BX DEVICE IS BOXED
- DN DEVICE NOT AVAILABLE
- SN SUBCHANNEL STATUS NOT AVAILABLE
- PE SUBCHANNEL IN PERMANENT ERROR

When you select the CHP option (D M = CHP) the following message display could appear:

CHANNEL PATH STATUS

	0	1	...	F
0	s	s	...	s
1	s	s	...	s
.
.
.
F	s	s	...	s

Explanation: D M = CHP displays the status, s, of all channel paths in the system. The first digit of the channel path appears as 0 through F down the left side; the second digit is 0 through F across the top. Values of s and their meanings are:

- | | |
|---|--|
| s | Meaning |
| + | The channel path is online. |
| - | The channel path is offline. |
| . | The channel path is not in the system. |

For example, if the second s in row 0 were +, it would mean that channel path 01 is online.

When you select a particular channel path or paths (DM=CHP(nn) or DM=xx) the following display could appear:

```
{CHANNEL PATH nn STATUS BY DEVICE|
DEVICE STATUS FOR CHANNEL PATH nn}
{CHP nn IS OFFLINE|
CHP =nn DOES NOT EXIST|
NO DEVICES ARE ACCESSIBLE
  THROUGH THIS CHANNEL PATH}
  0 1 2 3 4 5 6 7  F
00 s.... sss ..... ss
01 ss.. s....s .... s
.
.
.
FF ... s..ssss .....
```

Explanation: DM=CHP(nn) displays the status of the specified channel path. The status, s, of the channel path, nn, is given for each device connected to the channel path; the first two digits of the device number appear as 00 through FF down the left; the third digit is 0 through F across the top. Values of s and their meanings are:

- | s | Meaning |
|----|--|
| + | Channel path nn is logically online to device ddd. |
| * | Channel path nn is logically offline but physically online to device ddd. The VARY PATH(ddd,nn),ONLINE command brings channel path nn logically online to device ddd. |
| - | Channel path nn is logically and physically offline to device ddd. The CONFIG CHP(nn),ONLINE command brings channel path nn logically and physically online to all devices connected to channel path nn. |
| . | Channel path nn does not exist. |
| BX | The device is boxed. |
| DN | The device is not available. |
| \$ | The path is not operational. |
| SN | Subchannel status is not available. |
| PE | The subchannel is in permanent error. |
| @ | Paths not validated. |

For example, if the second s in row 01 were +, it would mean that channel path nn is online to device 001.

CHANNEL PATH nn IS OFFLINE appears only when the channel path is offline.

CHP =nn DOES NOT EXIST appears only when the channel path does not exist.

Operator Response: If the channel path does not exist, reenter the command with an existing channel path number.

When you select the DM=CPU option the following display could appear:

```
PROCESSOR STATUS
CPU STATUS SERIAL
{id stat ser#|
CPU(x) IS NOT IN THIS PARTITION}
```

Explanation: DM=CPU displays the status of the selected processors. In the display, id is the processor identifier, stat is ONLINE or OFFLINE. If the processor has a Vector Facility (VF) attached to it, then stat also indicates if the VF is on (VFON) or off (VFOFF). ser# is the serial number of the processor.

When you select the DM=DEV option, the following display could appear:

```
DEVICE STATUS:
NUMBER OF ONLINE CHANNEL PATHS
  0 1 2 3 4 5 6  F
00 n.... nnn ..... nn
01 nn.. n....n .... n
.
.
.
FF ... n..nnnn .....
```

Explanation: DM=DEV displays the status of all devices in the system. In the display, n is the number of online channel paths available to the indicated device, and/or a symbol if applicable.

The symbol represents information from the store SCHIB service, and can be one of the following:

- | n | Status |
|----|---|
| @ | Device online, physically online, and operational indicators are not equal. |
| + | Device is online. |
| # | Device is offline. |
| BX | Device is boxed. |
| DN | Device is not available. |
| SN | Subchannel status is not available. |
| PE | Subchannel is in permanent error. |
| . | Device does not exist. |

Operator Response: The @ indicates the operator should determine why the logical, physical, and operational path information does not match exactly.

When you select the DM=ddd option, the following message display could appear:

```
{CHANNEL PATH STATUS FOR DEVICE ddd|
DEVICE ddd STATUS BY CHANNEL PATH}
DEVICE ddd IS NOT IN THE SYSTEM
  CHP = nn nn ... nn
  STATUS = s s ... s
```

Explanation: DM=ddd displays the status of all channel paths to the specified device. If the device is offline the message displays the device status instead of the channel path status.

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In the display, **ddd** is the device number (000 through FFF) and each **nn** is a channel path (00 through FF) to the device. The status, **s**, of each channel path appears under it; values of **s** and their meanings are:

- | | |
|----------|--|
| s | Meaning |
| + | Device ddd is logically online through channel path n . |
| * | Device ddd is logically offline but physically online through channel path nn . The VARY PATH(ddd,nn), ONLINE command brings channel path nn logically online to device ddd . |
| - | Device ddd is logically and physically offline. The CONFIG CHP(nn), ONLINE command brings channel path nn logically online to all devices connected to channel path nn . |
| @ | Paths not validated. |
| # | Device ddd is offline. |

Line two appears only if the specified device does not exist.

Operator Response: If the specified device does not exist, reenter the command with a valid device number.

When you select the **D M=DEV(ddd)** the following display could appear:

DEVICE ddd	STATUS=status
CHP	nn nn
PATH ONLINE	y y
CHP PHYSICALLY ONLINE	y n
PATH OPERATIONAL	n n
[PATHS NOT VALIDATED]	

Explanation: **D M=DEV(ddd)** displays the status of device **ddd** for all channel paths to the specified device. The status is one of the following:

- ONLINE
- OFFLINE
- NOT IN SYSTEM
- SUBCHANNEL STATUS NOT AVAILABLE
- SUBCHANNEL IN PERMANENT ERROR
- DEVICE NOT AVAILABLE
- DEVICE IS BOXED

In the display, **ddd** is the device number (000 through FFF). Each **nn** is a channel path (00 through FF) to the device. Under each **nn** is yes or no indicating whether the corresponding condition is true.

When you select the **D M=ESTOR** command, the following message display could appear:

```
EXTENDED STORAGE STATUS
ONLINE-NOT RECONFIGURABLE
aaaaM-bbbbM
[ccccK BAD EXTENDED STORAGE]
[EXTENDED STORAGE STATUS
ESTOR PARAMETER NOT SUPPORTED]
```

Explanation: **D M=ESTOR** displays the range of extended storage that is available to the system. In the message text, **aaaaM-bbbbM** is the range of extended storage available to the system and **ccccK** is the amount of bad extended storage.

The message EXTENDED STORAGE STATUS ESTOR PARAMETER NOT SUPPORTED

appears if the service processor does not support extended storage.

When you select the **D M=HIGH** option the following message display could appear:

```
STORAGE SIZE STATUS
HIGH REAL STORAGE ADDRESS IS xxxxxxM
HIGH EXTENDED STORAGE ADDRESS IS yyyyyyM
```

Explanation: DISPLAY **M=HIGH** displays the highest possible real address and the highest possible extended address, in the system. In the display, **xxxxxx** and **yyyyyy** are addresses in decimal megabytes.

When you select the **D M=HSA** option, the following message display could appear:

```
HSA STATUS
{ADDRESS = xxxxxxK LENGTH = yyyyyyK}
{ADDRESS = zzzzzz LENGTH = yyyyyyK}
{NO HSA IN MAIN STORE}
```

Explanation: **D M=HSA** displays the status of the hardware system area (HSA). In the display, the second line appears once for each HSA in the system; the line gives the real starting address, **xxxxxx** in decimal kilobytes or **zzzzzz** in hexadecimal bytes, of the HSA and the length, **yyyyyy**, in decimal kilobytes. If no HSA exists in main storage, the line NO HSA IN MAIN STORE appears.

When you select the **D M=IO** option the following message display could appear:

```
I/O ENGINE STATUS
{n chp, chp, chp...
I/O ENGINE n IS OFFLINE}
I/O PARAMETER NOT SUPPORTED}
n IS NOT A VALID I/O ENGINE ID
n IS ONLINE WITH NO CHPS
```

Explanation: **D M=IO** displays the channel paths on the selected I/O engines. In the display, **n** is the I/O engine identifier and **chp** is the identifier for each channel path on the I/O engine.

n IS OFFLINE appears if the I/O engine is offline.

I/O PARAMETER NOT SUPPORTED appears if the service processor does not support the requested information.

n IS ONLINE WITH NO CHPS appears if the I/O engine is online, but no channel paths are associated with that I/O engine.

When you select the **D M=SIDE** option the following message display could appear:

```
SIDE STATUS
sid: CPU = id, id I/O ENGINE = n SE = z, z
STATUS = stat
SIDE PARAMETER NOT SUPPORTED
n IS NOT A VALID SIDE ID
```

Explanation: **D M=SIDE** displays the status of the selected sides in the system. In the display, **sid** identifies a side, **id** the processor(s) on that side, **n** the I/O engine on that side, **z** the storage element(s) on that side, and **stat** the status of the side. The status can be:

MP

The side is in a system that is configured as a multiprocessor.

OFFLINE

The side is offline and unassigned.

UP/AP

The indicated side is the only side in the configuration.

When you select the **D M=STOR** command the following message display could appear:

[REAL] STORAGE STATUS

```
{status
  blocks
  addstat
  [dddM UNASSIGNED STORAGE]}
NO STORAGE ASSIGNED IN REQUESTED RANGE|
NO STORAGE OFFLINE|
NO RECONFIGURABLE STORAGE UNITS
  DEFINED|
dddM AVAILABLE FOR STORAGE ELEMENT
  RECONFIGURATION}
```

Explanation: **D M=STOR** displays blocks of real storage frames and their status.

In the display, **status** gives the status of a block or range of blocks. Status can be one of the following:

{OFF|**OFFLINE}**

The real storage blocks that are offline.

ONLINE - NOT RECONFIGURABLE

The real storage blocks that are online and are not reconfigurable or pending offline.

{PEND|**PENDING OFFLINE}**

The real storage blocks for which an offline request has been issued but not yet completed.

{REC|**ONLINE - RECONFIGURABLE}**

The real storage blocks that are online and are not pending offline or preferred.

UNAVAILABLE

The real storage is unavailable.

Under each status line, the storage blocks are identified by the variable **blocks**. This variable can be the address, range of addresses of the the storage blocks or **NONE**.

An address can be in one of the following forms:

Hexadecimal Address

xxxxxxx

Decimal Kilobyte Address

aaaaaK

An address range can be in one of the following forms:

Decimal Kilobyte Address Range

vvvvvK - wwwwwwK

Decimal Megabyte Address Range

ccccM-dddddM

Hexadecimal Address Range

xxxxxxxx-xxxxxxxx

FRAMES AT xxxxxxK,yyyyyK AND SO ON - EVERY n FRAMES UP TO zzzzzK

The status is for every nth frame, from the frame that begins at xxxxxxK through the frame

that begins at zzzzzK. The second frame begins at yyyyyyK.

FIRST aaK OF EVERY bbK FROM ccccM TO jjjM

This status is for the first aaK of storage at multiples of bbK in the range of cccc to jjj decimal megabytes.

SECOND aaK OF EVERY bbK FROM ccccM TO jjjM

This status is for the second aaK of storage at multiples of bbK in the range of cccc to jjj decimal megabytes.

NONE

No frames have this status.

The variable **addstat** can be one of the following:

BAD FRAMES address

The real storage frame that begins at **address** has a storage error. This note can appear when the status is **ONLINE NOT RECONFIGURABLE** or **RECONFIGURABLE**.

PENDING STATUS DUE TO:

RANGE	ASID	JOBNAME
address range	asid	jobname

address range asid jobname

If the line **PENDING STATUS DUE TO** appears, the following lines identify real storage that cannot be released yet. The storage range is given as contiguous frames. The address space ID (ASID) and the job name are given for each range of contiguous frames.

dddM UNASSIGNED STORAGE

dddM is the amount of storage that is offline and can be brought online with a **CONFIG STOR (dddM) ONLINE** command.

When you select the

D M=[STOR(E)]STOR(E=id) option, the following message display could appear:

[REAL] STORAGE ELEMENT STATUS

{id: OWNED STORAGE = xxM

[UNASSIGNED STORAGE = yyM]

STATUS =stat|

STOR(E PARAMETER NOT SUPPORTED)|

STOR(E STATUS NOT OBTAINED: text}

Explanation: **D M=STOR(E)** displays the status of all storage elements and **D M=STOR(E=id)** displays the status of the storage element identified by id.

id: OWNED STORAGE = xxM [UNASSIGNED STORAGE = yyM] STATUS =stat appears once for each requested storage element. In this line, **id** is the identifier. **xx** is the decimal megabytes. **yy** contains the decimal megabytes of storage in the storage element with no addresses assigned; this storage can be brought online with a **CONFIG STOR** range or amount request. **stat** is the status for the storage element.

The status can be:

ONLINE

Storage element id is physically online.

OFFLINE

Storage element id is physically offline and is not assigned to a service/maintenance/repair (S/M/R) configuration.

S/M/R

Storage element id is offline and is part of an S/M/R configuration.

UNAVAILABLE

The storage element id is unavailable.

STOR(E PARAMETER NOT SUPPORTED

appears if the service processor does not support information about storage elements.

STOR(E STATUS NOT OBTAINED: text appears if the system failed to obtain the status of the storage element(s) from the service processor for the reason indicated in the text, as follows:

INVALID ID

An invalid storage element identifier was specified in the D M = STOR(E = id) command.

{SERVICE PROCESSOR|MSSF} CALL FAILED

An error occurred in the service processor call interface.

{SERVICE PROCESSOR|MSSF} FAILURE

An internal error occurred in the service processor.

Operator Response: No response is necessary unless the display includes **STOR(E STATUS NOT OBTAINED: text**. The operator response for each text is:

INVALID ID

Reenter the D M = STOR(E = id) command with a valid storage element identifier.

{SERVICE PROCESSOR|MSSF} CALL FAILED

Retry the command. If the command fails again because of a problem with the interface, notify the system programmer, who should contact your software support personnel.

{SERVICE PROCESSOR|MSSF} FAILURE

Retry the command. If this text appears again, notify the system programmer, who should contact your hardware support personnel.

Problem Determination: If the message text includes **STOR(E STATUS NOT OBTAINED: text**, Table I, items 2, 18, 29.

When you select the D M = [STOR(E = id)|IO|SIDE] option the following message display could appear:

**{STOR(E = id)|IO(id)|SIDE(id)}
IS PART OF ANOTHER CONFIGURATION-
NO STATUS OBTAINED**

Explanation: D M = STOR(E = id), D M = IO, or D M = SIDE normally displays the status of a storage element, of the channel paths on a I/O engine, or of a side. This display appears if the storage element, I/O engine, or side is part of another configuration, since the service processor could not obtain the status.

When you select any D M option, the following message display could appear:

**DISPLAY M RESOURCE 'xxx' IS CURRENTLY
IN USE**

Explanation: Any D M command issued while a CONFIG CPU, CONFIG CHP, CONFIG STOR, or VARY PATH command is executing generates this display first. This display gives the status of

ENQ resource xxx, which is exclusively held by another user. xxx is PATH, CPU, or STORAGE.

The next frame displays the information requested. This second display may or may not reflect the results of the CONFIG CPU, CONFIG CHP, CONFIG STOR, or VARY PATH command.

**IEE491I PATH(ddd,xx) NOT VARIED, FUNCTION
CANCELED BY OPERATOR**

Explanation: The operator replied CANCEL to message IEE717D.

System Action: The system terminates processing for all paths referenced by the VARY PATH OFFLINE command. However, path(ddd,xx) is back online, and system processing continues.

Operator Response: See if there is I/O active on device ddd. If so, wait for it to complete or terminate the I/O. Reissue the VARY PATH command.

Problem Determination: Table I, items 11, 29.

IEE502I CHP(xx),ONLINE

Explanation: In response to a CONFIG CHP online command, channel path xx is placed online or already is online.

System Action: Processing continues.

Operator Response: None.

IEE503I CHP(xx),OFFLINE

Explanation: In response to a CONFIG CHP offline command, channel path xx is marked offline or already is offline.

System Action: Processing continues.

Operator Response: None.

IEE504I {VF(x)|CPU(x)} ONLINE

Explanation: In response to a CONFIG CPU online command, processor x has been placed online. The Vector Facility attached to processor x has been brought online in response to one of the following commands:

- CONFIG CPU(x),ONLINE
- CONFIG CPU(x),ONLINE,VFON
- CONFIG VF(x),ONLINE

System Action: The system continues processing.

Operator Response: None.

IEE505I {VF(x)|CPU(x)} OFFLINE

Explanation: In response to a CONFIG CPU offline command, processor x has been placed offline.

If information concerning a Vector Facility (VF) appears in the message display, a VF was successfully taken offline in response to one of the following commands.

- CONFIG CPU(x),OFFLINE
- CONFIG CPU(x),ONLINE,VFOFF
- CONFIG VF(x),OFFLINE

System Action: Processing continues.

Operator Response: None.

IEE506I

```

{ CPU(x) NOT RECONFIGURED,
  CPU DID NOT RESPOND TO
  RESET/RESTART
  VF(x) NOT RECONFIGURED
  { CPU HAS NO VF
    CPU NOT ONLINE }
}

```

Explanation: A CONFIG CPU command was entered for processor x. If the command attempted to bring processor x online, either the processor could not be reset because of an error in executing the signal processor (SIGP) instruction, or the processor was not restarted successfully.

If the command attempted to take processor x offline, CONFIG processing attempted to use the signal processor (SIGP) instruction to stop the processor. After 20 seconds passed, the processor had not stopped, and no machine checks had occurred.

Attempt to reconfigure VF(x), using the CONFIG command, failed. One of the following reasons caused the failure:

CPU HAS NO VF

CPU x does not have a Vector Facility (VF) attached to it.

CPU NOT ONLINE

In order to reconfigure VF x, CPU x must be online.

Note: A failure to restart or stop the processor can be caused by a timing problem in the processor's signaling mechanism.

System Action: The system continues processing.

Operator Response: Retry the CONFIG command. If the problem persists, ask your system programmer to contact your software support personnel.

Problem Determination: Table I, items 2, 18, and 29.

IEE507D SHOULD ACTIVE DEVICES HAVE I/O TERMINATED? REPLY NO OR YES

Explanation: The operator replied CONTINUE in response to messages IEE100E and IEE131D. That reply told the system that a CONFIG CHP OFFLINE command with the FORCE option should continue, even though the channel being removed is the last path to one or more devices.

This message, IEE507D, asks the operator whether or not those devices should be boxed, which means:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when these conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.

If the device was offline, it remains offline.

System Action: The CONFIG command processor waits for the operator to reply.

Operator Response: Reply NO if you want current I/O to finish, and if you want allocated devices, teleprocessing devices, and devices the system is using to be left online, even though the channel being removed is their last path.

Reply YES to mark the devices pending offline and purge all I/O.

Generally, reply NO if you are about to vary online another channel that would provide paths to some or all of the devices, or if a test program like OLTEP is going to use the device.

Generally, reply YES if you must prevent I/O from being enqueued to the devices, or you must prevent the device from being allocated.

Reply YES only when you must get a channel offline regardless of what happens to ongoing I/O over the channel. Replying YES to terminate the I/O can cause data to be damaged or lost.

Programmer Response: None.

IEE508E NO ALTERNATE PATHS TO RESERVED DEVICES ddd ,ddd

Explanation: This message is one of a series that can appear during CONFIG CHP,OFFLINE,FORCE command processing. The messages warn the operator about negative effects from CONFIG processing and ask if CONFIG processing should continue.

The channel being forced offline has one or more reserved devices; each ddd in the message text identifies a reserved device for which there is no alternate path.

If CONFIG processing continues, device ddd will be released from the reserve and become available to any systems sharing it. I/O operations on the device may not have completed normally; when the device is released, it may contain damaged or incomplete data. Any sharing systems must be prevented from using any volumes that contain damaged or incomplete information.

System Action: The CONFIG command processor issues message IEE131D and waits for the operator to reply. If the reply is CONTINUE, CONFIG processing continues. Message IEA019A asks the operator to stop the processors that share any of the reserved devices so that those processors do not steal the devices when the reserves are released.

Operator Response: To message IEE131D, reply CANCEL to cancel CONFIG processing and CONTINUE to release the reserved devices and force the channel offline.

Programmer Response: None.

IEE510I **{[REAL] STORAGE LOCATIONS|**
EXTENDED STORAGE LOCATIONS |
n OF EVERY m FRAMES IN
[REAL] STORAGE LOCATIONS}
ddM TO ddM OFFLINE

Explanation: In response to a CONFIG STOR OFFLINE command, [REAL] STORAGE LOCATIONS ddM TO ddM OFFLINE appears in the message display. This message display gives the

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beginning and ending addresses of the real storage that the system has varied offline.

In response to a CONFIG ESTOR(E=id),OFFLINE command, **EXTENDED STORAGE LOCATIONS ddM TO ddM OFFLINE** appears in the message display. This message display contains the ranges of the extended storage that went offline. In both the first and second format, the addresses, ddM, are in decimal megabytes. The ending address is the first byte of the frame that follows the last frame taken offline.

When **n OF EVERY m FRAMES IN [REAL] STORAGE LOCATIONS ddM TO ddM OFFLINE** appears in the message display, **ddM TO ddM** is a range of storage. The beginning and ending addresses, ddM, are decimal megabytes. The ending address is the first byte of the frames that follow the last frames in the range, taken offline. Within this range, n frames are offline in each unit of m frames; n and m are one-digit decimal numbers. For example, if n = 1 and m = 2, one of every two frames within the specified range has been taken offline.

Note: If all storage in a range affected by the CONFIG command has been varied offline, the first format of this message appears for that range.

System Action: Processing continues.

Operator Response: None.

IEE512I ddd BUSY

Explanation: A CONFIG CHP OFFLINE command is waiting for a console to be marked offline.

System Action: The CONFIG CHP OFFLINE processor waits for a maximum of three minutes for all associated I/O to complete. This message is issued after 15 seconds if all associated I/O has not completed, to notify the operator of busy devices. If the three-minute waiting time expires and all associated I/O is not complete, message IEE717D is issued.

Operator Response: None.

IEE513I COMMAND PROCESSING LIMITED

Explanation: The Command Scheduling Control Block (CSCB) chain was invalid and was truncated at the last valid block. This message will always be preceded by the message IEE481I or message IEE480I.

System Action: The system will continue processing but the capability to MODIFY, STOP, CANCEL and DISPLAY certain tasks may be lost and attempts to use them may result in error messages.

Operator Response: None.

Programmer Response: Respond as indicated to message IEE481I or IEE480I.

IEE518I SYSTEM CONSOLE INTERFACE UNSUCCESSFUL, RESTART OPTIONS COULD NOT BE DISPLAYED FOR CPU(x)

Explanation: During execution of the CONFIG CPU(x) ONLINE command, the CONFIG CPU processor could not pass the text of the restart options to processor x for display on the system console.

System Action: Processing continues.

Operator Response: Check the restart options display on the system console for processor x. If the restart options are displayed, no action is necessary and the operator can use the options at that console.

If the restart options are not displayed, notify the system programmer. The operator can do a restart from the console, but the restart parameter value defaults to REASON 0.

Programmer Response: None.

IEE521I hh.mm.ss CONFIG DISPLAY [id]

{Normal Processing | Error Condition}

Explanation: During normal processing of a CONFIG ONLINE or CONFIG OFFLINE command the following message display appears:

```

REQUEST TYPE: reqtyp
[RESOURCE: {'SYSZVARY,CPU' |
            'SYSZVARY,PATH' |
            'SYSZVARY,STORAGE'}
IS CURRENTLY IN USE
- STATUS MAY BE CHANGING]
[SIDE:           [SIDE 0:      SIDE 1:]
0                0            1 ]
[STATUS:        status      [status] ]
CPU:            cpuids      cpuids
[VF:            vfids       [vfids] ]
CHP:            chpids      chpids

{[STOR(E=x):    list        [list] ]
 [ESTOR(E=x):  list        [list] ]
 [TOTAL STORAGE: xxxxM]
 [UNASSIGNED: yyyyM]}

{[STORAGE: xxxxM |
 TOTAL STOR[AGE]: xxxxM
 [UNASSIGNED: yyyyM]}
 [STOR(E=x): list] }
```

{WHICH STARRED {ELEMENTS|ITEMS}
DO YOU WANT BROUGHT ONLINE?|
WHICH {ELEMENTS|ITEMS}
DO YOU WANT TAKEN OFFLINE?}

The message displays two sets of elements or items:

- One set is for the existing configuration.
- The other set is for the elements/items that are currently offline, that is, not in use by the operating system, but that can be brought online. Offline elements/items are identified by an asterisk after the identifier (id).

One of the following resource names might appear:

- RESOURCE SYSZVARY,CPU
- RESOURCE SYSZVARY,PATH
- RESOURCE SYSZVARY,STORAGE

The appearance of the resource name indicates that another user has exclusive use of the resource.

The fields in the message text are:

hh.mm.ss The time, given as the hour (00-23), minute (00-59), and second (00-59).

id A 3-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays that are written on typewriter or display consoles or that are displayed in-line (not in display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

reqtyp The type of request specified on the command: ONLINE or OFFLINE.

status The status of the side. The status may be either ONLINE, OFFLINE or UNAVAILABLE. If the machine is partitioned and all resources are being used by one side then they will be marked as UNAVAILABLE to the other side.

cpuids The processor identifier. The message lists the processors (1) that are in the current configuration and (2) that are offline but can be brought into the configuration.

vfid The vector facility (VF) identifier. This portion of the message includes the status of the Vector Facilities (VF) attached to each processor in the configuration.

chpids The channel path (CHP) identifier. The message lists the CHPs that are (1) online or (2) offline but can be brought online. They are given as a single CHP, a range of CHPs (chpid-chpid), or a combination of the two.

xxxxM The amount of real storage available for each side. The total real storage online equals xxxxM - yyyyM

yyyyM The amount of real storage online or unassigned.

list A list of hexadecimal identifiers and/or ranges.

UNASSIGNED: yyyyM

The part of the storage that is in online real storage elements. This storage can be brought online with a CONFIG STOR(yyyyM),ONLINE command.

When the system can not display the reconfigurable resources installed in the system in response to a

CONFIG ONLINE or OFFLINE command the display for the error condition appears:

REQUEST TYPE: reqtyp

**[RESOURCE: {'SYSZVARY,CPU' | 'SYSZVARY,PATH' | 'SYSZVARY,STORAGE'}
IS CURRENTLY IN USE
- STATUS MAY BE CHANGING]**

STATUS NOT OBTAINED:

{SERVICE PROCESSOR CALL FAILED | SERVICE PROCESSOR FAILURE}

System Action: If the error condition exists, the system issues system completion code 0B7 and writes a record to SYS1.LOGREC.

Operator Response: Depending on which form of message IEE521I you receive you should respond as follows:

- During Normal Processing for online requests, answer the first question. For offline requests, answer the second question. Answer these questions in response to message IEE522D
- When an Error Condition occurs first, retry the command. If you receive the error message again, notify your system programmer.

Programmer Response: If failure occurs then follow the appropriate actions listed in the problem determination section.

Problem Determination: Take the following actions, depending on the message displayed in the text.

- If **STATUS NOT OBTAINED: SERVICE PROCESSOR CALL FAILED** appears in the message, then see Table I, items 2, 18 and 29.
- If **STATUS NOT OBTAINED: SERVICE PROCESSOR FAILURE** appears in the message, then see Table I, items 2, 18 and 30.

IEE522D

REPLY NONE OR REFRESH (TO GET NEW DISPLAY), OR SPECIFY {ELEMENTS|ITEMS}

Explanation: If you want reconfiguration, choose the elements from the CONFIG display (message IEE521I) that is given as part of the CONFIG command. If you want to see the display again, reply REFRESH. If no reconfiguration is wanted, reply NONE. An example of a reply is:

r 1,STOR(8M-12M)

This reply brings online the storage range from 8 meg to 12 meg.

This message is routed to the console that issued the CONFIG command.

IEE523I

[CONFIG CPU IS AN] INVALID COMMAND IN A ONE-CPU SYSTEM

Explanation: A command that requires a multiple processing (MP) system configuration was issued on a uniprocessing system.

System Action: The command is not executed; processing continues.

Operator Response: None.

Problem Determination: None.

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IEE524I {[REAL]STORAGE LOCATIONS|
 n OF EVERY m FRAMES IN
 [REAL] STORAGE LOCATIONS}
 EXTENDED STORAGE LOCATIONS |
 ddM TO ddM ONLINE

Explanation: The first format of this message appears in response to a CONFIG STOR ONLINE command. It gives the beginning and ending addresses of the real storage that the system has brought online. The second format of the message appears in response to a CONFIG ESTOR(E=id),ONLINE command. It gives the ranges of extended storage that came online. In both the first and second format, the addresses, ddM, are in megabytes.

The third format appears when a CONFIG STOR(E=x) command was entered to vary storage element x online. Storage element x contains selected frames in regular patterns across one or more ranges of storage. This message is issued for each range of storage affected by the CONFIG command.

In the second format, ddM TO ddM gives the beginning and ending addresses in decimal megabytes of a range of storage. Within this range, n frames are online in each unit of m frames; n and m are one-digit decimal numbers. For example, if n=1 and m=2, one of every two frames within the specified range has been varied online.

Note: If all storage in a range affected by the CONFIG command has been varied online, the first format of this message appears for that range.

System Action: Processing continues.

Operator Response: None.

IEE525I CHP(xx) FORCE STATUS UNKNOWN, ERROR
 OCCURRED DURING FORCE

Explanation: IOS (input/output supervisor) tried to force channel path xx offline and an error occurred. The error bit in the installed channel path table entry (ICHFORER) for channel path xx was turned on. The CHP (channel path) processor checks this bit when it is ready to complete and issues this message.

System Action: The channel path is in an unknown state. System processing continues.

Operator Response: To determine if the channel path was taken offline, issue the DISPLAY M command.

Problem Determination: Table I, items 2, 18.

IEE526I REAL STORAGE ELEMENT (x)
 {[ONLINE|, yM UNASSIGNED]|OFFLINE}

Explanation: The operator entered either (1) a CONFIG STOR(E=x) command to configure real storage element x online or offline or (2) a CONFIG ESTOR(E=id) command to configure extended storage element x online or offline. The message confirms the state of the storage element.

If yM UNASSIGNED appears in the message, the operator entered a CONFIG ONLINE command the system placed the storage element online, but yM of storage in that element is not assigned to any configuration.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

IEE527I CHP(xx) NOT RECONFIGURED, WOULD
 REMOVE ACCESS TO CONSOLE/HARDCOPY

Explanation: To avoid losing access to the master console or hardcopy device, the system ignored a CONFIG CHP OFFLINE command for channel path xx.

System Action: If a CONFIG CHP OFFLINE command was issued, CONFIG processing for channel path xx terminates. If a CONFIG CHP OFFLINE command specified a range of channels, CONFIG processing continues for the next requested channel.

Operator Response: Provide an alternate path to the master console or hardcopy device and then reissue the CONFIG command for the desired channel path.

IEE531I LOG DATA SET UNALLOCATION FAILED -
 TENTATIVE DATA LOSS - CLASS = class

Explanation: An attempt to unallocate a log data set for output class class has failed. Class class is a valid output class. Because unallocation failure may occur before or after the system log data set has been queued to an output class, the status of the data set is unknown.

System Action: Processing continues.

Operator Response: None.

IEE532I SYSTEM LOG DEFINED AS HARDCOPY -
 WRITELOG CLOSE COMMAND REJECTED

Explanation: A WRITELOG CLOSE command was rejected because the system log is defined as the hardcopy device, and there are no other hardcopy devices online.

System Action: Processing continues with the current log active.

Operator Response: In order to close the system log, a hardcopy device must be varied online, and the WRITELOG CLOSE command must be reissued.

IEE533I SYSTEM LOG INITIALIZATION HAS FAILED

Explanation: Initialization of a system log failed at IPL or via a WRITELOG START command.

This message will be followed by message IEE037I.

System Action: The system log function is not active.

Operator Response: Respond as indicated by message IEE037I.

IEE534I LOG DATA SET SWITCH FAILED - CURRENT
 LOG DATA SET RECORDING

Explanation: As a result of an internal or external WRITELOG command, an alternate LOG data set was scheduled for allocation or open processing. A failure occurred during the processing of this data set.

System Action: The system log continues recording WTLs on the current data set.

Operator Response: If it is not critical that the current log data set be written out, no response is necessary. If it is critical that the current log data set be written out, reissue the WRITELOG command. If this message reappears, issue a WRITELOG CLOSE command for log termination; after message IEE037I appears, issue a WRITELOG START command to reinitialize the log function.

IEE535I cm INVALID PARAMETER

Explanation: A parameter on the cm command is invalid.

System Action: The system does not execute the cm command.

Operator Response: Reenter the cm command correctly.

IEE536I

{	IPS
	ICS
	OPT
	SLIP
	SMF
	MPF
	PFK

 VALUE xx NOW IN EFFECT

Explanation: The parameters contained in the SYS1.PARMLIB member specified in the SET command are now governing the system. In the message, xx is the identifier of the SYS1.PARMLIB member specified in the command.

System Action: System processing continues, using the new parameters.

Operator Response: None.

IEE537I prm IN mem INVALID

Explanation: The SET command processor encountered one or more invalid parameters in the SYS1.PARMLIB member (mem) specified in the command.

System Action: System processing continues, using the existing parmlib parameters. Message IRA300I, IRA301I, IRA302I, IRA303I, IRA304I, or IRA305I, which contains detailed information about the error(s), is written to the system log data set.

Operator Response: Report this message to the system programmer.

Programmer Response: List, check, and correct the syntax of the parameters in member mem. Use the error information in the system log data set to help diagnose the error. Ensure that the installation operating procedure tells the operator what to do if the specified member is rejected when a SET command is entered.

Problem Determination: Table I, items 2, 26c, 29.

IEE538I mem MEMBER NOT FOUND IN SYS1.PARMLIB

Explanation: The command processor cannot find the SYS1.PARMLIB member mem specified in the command.

System Action: Command processing terminates.

Operator Response: Report this message to the system programmer. Verify that the member identifier xx specified in the command is valid. If

desired, reissue the command specifying a different member name.

Programmer Response: Ensure that the installation operating procedures tell the operator which SYS1.PARMLIB members can be used.

Problem Determination: Table I, items 2, 25c, 29.

IEE539I [I/O] ERROR DURING PROCESSING OF MEMBER mem OF SYS1.PARMLIB

Explanation: The command processor encountered an error while attempting to access SYS1.PARMLIB member mem. If an I/O error occurred, I/O appears in the message.

System Action: Command processing terminates. If the error is not an I/O error, a record is written to the SYS1.LOGREC data set.

Operator Response: If an I/O error occurred, it is probably a hardware error. If desired, reissue the command specifying a different parmlib member name.

If the error is not an I/O error, reissue the command. If the problem persists, notify the system programmer.

Problem Determination: Table I, items 2, 30.

IEE540I OPEN FAILED - SYS1.PARMLIB IN PROCESSING MEMBER mem.

Explanation: The command processor could not open the SYS1.PARMLIB data set while trying to access member mem.

System Action: Command processing terminates.

Operator Response: Make sure that SYS1.PARMLIB is mounted. If it is, then there is a probable hardware failure on the initial read.

Problem Determination: Table I, items 2, 30.

IEE541I CHP(xx) NOT RECONFIGURED, WOULD REMOVE LAST PATH TO DEVICE(S): ddd, ddd

...

Explanation: A CONFIG CPU OFFLINE command or a CONFIG CHP OFFLINE command was issued, but channel path xx represents the last path to the device(s) listed in the message text. If the UNCOND option was specified in the command, any device listed in the message is an allocated device or it is assigned to JES3.

System Action: If a CONFIG CHP OFFLINE command was issued, processing for channel path xx terminates. If the CONFIG CHP OFFLINE command specified a range of channel paths, CONFIG processing continues for the next requested channel path.

Operator Response: Respond with one of the following:

- If the UNCOND option was not specified in the command, reissue the CONFIG command using the UNCOND operand to take offline the channel path or processor.

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- If the UNCOND operand was specified on a CONFIG channel path offline command, you can do one of the following:
 - Provide an alternate path to the devices listed in the message or wait until the devices are unallocated or unassigned. Then reissue the command for the desired channel path.
 - Reissue the command for the desired channel path using the FORCE option to force the channel path offline.
- Note:** Do not use the FORCE option if a device listed in this message is one that is critical to the operation of the system, or you might have to re-IPL the system.

IEE559I {CHP(xx)}
 CPU(z)|VF(x)|
 I/O ENGINE (x)|
 SIDE(x) REAL STORAGE [ELEMENT (x)]
 EXTENDED STORAGE ELEMENT (x) |
 NOT RECONFIGURED [PHYSICALLY OFFLINE],
 COMMAND PROCESSOR ERROR
 [CONFIG REAL STORAGE
 STORAGE COMMAND PROCESSOR ERROR]

Explanation: Reconfiguration processing encountered an internal error and tried to recover, but the recovery was not complete and the item identified in the message could not be varied. The internal error, in most cases, causes abnormal termination with system completion code 0B7.

System Action: If the message text contains CHP(xx), channel path xx was not reconfigured. If the CONFIG processing involved a range of channel paths, processing continues for the next requested channel.

If the message text contains CPU(z), VF(x), REAL STORAGE, or REAL STORAGE ELEMENT, the system terminates CONFIG processing.

If the message text contains CPU(z), VF(x), REAL STORAGE, EXTENDED STORAGE ELEMENT or REAL STORAGE ELEMENT, the system terminates CONFIG processing.

Operator Response: Use the DISPLAY M command to determine the status of the various items in your system. Enter a CONFIG command naming only the item specified in the message text. If the CONFIG command succeeds and your original CONFIG command included additional items, retry the original command. If reconfiguration continues to fail, notify the system programmer.

Programmer Response: If reconfiguration fails repeatedly, contact your hardware support personnel.

Problem Determination: Table I, items 18, 33.

IEE564I MESSAGE(S) LOST DURING RECONFIGURATION PROCESSING

Explanation: During CONFIG processing, a reconfiguration module issued a GETMAIN macro instruction to obtain storage for an internal message buffer, but the storage was not available. One or more messages have been lost.

System Action: Processing continues.

Operator Response: Notify the system programmer. You can issue the DISPLAY M command to see whether or not the CONFIG command executed successfully.

Programmer Response: If you determine that there is a shortage of storage, follow your usual procedures for relieving the shortage.

IEE574I NO STORAGE TO {GO OFFLINE|COME ONLINE} IN {REAL|EXTENDED} STORAGE ELEMENT x

Explanation: The operator entered a CONFIG STOR(E=x) command. Storage element x had no storage that could be reconfigured, so no storage changed status.

System Action: Processing continues.

Operator Response: If you receive this message after entering a CONFIG STOR(E=x), ONLINE command for a storage element whose range is physically offline, you should enter a CONFIG STOR(xxM), ONLINE command to bring this storage range online.

You can also use the DISPLAY MATRIX command to display the status of the storage.

Programmer Response: None.

IEE575A CONFIG {STORAGE|ESTOR} WAITING TO COMPLETE - REPLY C TO CANCEL

Explanation: The operator entered a CONFIG STOR OFFLINE or a CONFIG ESTOR(e=id), OFFLINE command. The CONFIG command processor is trying to vary the storage offline, but not all of the storage has gone offline.

This message may appear more than once if the CONFIG command specified one of the following:

- A real or extended storage element.
- An amount or range of real storage greater than the size of one reconfigurable storage unit.

System Action: If the operator does not reply C to cancel the reconfiguration processing, the CONFIG command processor continues to try to vary the storage offline.

If the operator replies C, any storage already varied offline remains offline, but no more storage is varied.

If the operator enters anything but C, the message appears again.

Operator Response: If you want the CONFIG command processor to continue trying to vary the storage offline, no response is necessary.

If you want to cancel the CONFIG STOR command, reply C.

Programmer Response: None.

IEE576I {REAL|EXTENDED} STORAGE NOT RECONFIGURED-text

NO {REAL} STORAGE CONFIGURED-NO MORE AVAILABLE

{REAL|EXTENDED} STORAGE LOCATIONS ddM TO ddM NOT RECONFIGURED-text

NO MORE {REAL} STORAGE CONFIGURED-NO MORE AVAILABLE

Explanation: The operator entered one of these commands:

CONFIG STOR(xM)
CONFIG STOR(xM-yM)

The system did not reconfigure any of the storage as requested. This message describes the failure:

{REAL|EXTENDED} STORAGE NOT RECONFIGURED-text

The system did not execute the command.

NO {REAL} STORAGE CONFIGURED-NO MORE AVAILABLE

The system did not execute the command.

{REAL|EXTENDED} STORAGE LOCATIONS ddM TO ddM NOT RECONFIGURED-text

The system did not reconfigure the range of storage identified in the message, where each dd is a one- or two-digit decimal number, and ddM TO ddM identifies a range of storage addresses in megabytes.

NO MORE {REAL} STORAGE CONFIGURED-NO MORE AVAILABLE

The system reconfigured part of the storage specified in the command but could not reconfigure all of it.

In the message, text gives the reason the storage was not reconfigured, as follows:

OPERATOR CANCELLED

The operator replied C to message IEE575A, canceling a CONFIG STOR command.

PERMANENTLY RESIDENT DATA

The storage cannot be configured because it contains a hardware system area (HSA) or permanently resident data. The nucleus code is an example of permanently resident data.

V=R CANDIDATE STORAGE

The storage contains some or all of the V=R (virtual equals real) storage area. When the system issued message IEE577D, the operator replied N, indicating that none of the V=R area was to be configured offline.

COMMAND PROCESSOR ERROR

One of the following occurred:

- The ESTAE macro failed, so that a recovery environment could not be established for configuring the storage.
- A system ABEND occurred while the storage was being configured offline.

SOME STORAGE IN OFFLINE STORAGE ELEMENT

A CONFIG STOR(xM-yM),OFFLINE command was entered. The range of storage identified in the message is partially or entirely within an offline storage element.

OFFLINE PRIOR TO REQUEST

The range of storage identified in the message was offline when a CONFIG STOR command was entered.

STATE UNCERTAIN

A CONFIG STOR(xM),ONLINE command or CONFIG STOR(xM-yM),ONLINE command was entered. The range of storage identified in the message is physically online, but the command processor failed while bringing the storage logically online. Some or all of the range identified might be online. Use the DISPLAY M=STOR command to find out how much, if any, storage is online.

UNABLE TO SWAP DATA

A CONFIG STOR(E=x),OFFLINE command was entered. The command processor tried to swap storage containing fixed data with storage containing non-fixed data, but the command processor either could not find or could not configure offline enough storage containing non-fixed data.

INVALID RANGE

A CONFIG STOR(xM-yM) command was entered. One of these error conditions existed:

- The starting address, xM, was higher than the ending address, yM.
- One of the addresses was not a multiple of the smallest amount of storage that can be physically configured in the system.

RANGE END TOO HIGH

A CONFIG STOR(xM-yM) command was entered. The ending address, yM, was higher than the highest real storage address in the system.

INVALID AMOUNT

A CONFIG STOR(xM) command was entered. The amount of storage specified, xM, was either 0 or was not a multiple of the smallest amount of storage that can be configured in the system.

AMOUNT TOO HIGH

A CONFIG STOR(xM) command was entered. The amount of storage specified, xM, was greater than the total amount of storage in the system.

NO MORE AVAILABLE

A CONFIG STOR ONLINE command was entered. Either all of the storage in the system was already online, or there was no more storage physically available to be configured online.

OPTION NOT INSTALLED

A CONFIG command was entered, but the option specified is not installed in the system.

System Action: If a CONFIG command processor error caused an abnormal termination, the system requests an SVC dump and writes an error record to SYS1.LOGREC.

In all other cases, system processing continues.

Operator Response: If it is not necessary to configure the storage, no response is required.

If you want to configure the storage and the message text is OPERATOR CANCELED,

COMMAND PROCESSOR ERROR, or STATE UNCERTAIN, retry the CONFIG STOR command. If the retry fails, notify the system programmer.

Programmer Response: If the problem persists, examine the dump, and verify that the RSU parameter is correct for your installation.

**IEE577D MAY V = R STORAGE BE CONFIGURED OFFLINE?
REPLY Y OR N**

Explanation: The operator entered a CONFIG STOR OFFLINE command. However, to execute the command, the CONFIG command processor must vary offline some of the V = R (virtual equals real) storage. This message asks the operator if he will allow V = R storage to be varied offline.

System Action: CONFIG processing takes offline the storage that is not V = R storage and waits until the operator replies 'Y' or 'N' to this message. Other system processing continues. If the operator replies 'Y', V = R storage is taken offline. If the operator replies 'N', CONFIG processing does not attempt to take offline V = R storage.

Operator Response: Reply 'Y' or 'N'.

Programmer Response: None.

IEE578I xK OF BAD {REAL|EXTENDED} STORAGE LEFT OFFLINE

Explanation: The operator entered a CONFIG STOR ONLINE command. In response, the system varied one or more ranges of storage online. However, the system left some frames that contained storage errors offline. This message indicates the total amount of storage, in K bytes, that is left offline.

System Action: Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: You may take either one of the following two actions:

1. Use a DISPLAY M = STOR command to find the defective real storage frames. Then contact your hardware support personnel.
2. Use a D M = ESTOR (ddddM-ddddM) to determine where the E-frames are located. Then contact your hardware support personnel.

IEE581I CPU(x) NOT RECONFIGURED, MAXIMUM NUMBER OF CPUS ALREADY ONLINE

Explanation: A CONFIG CPU command was issued and the MSSF (maintenance and service support facility) determined that the maximum number of CPUs allowed were already online.

System Action: Processing continues.

Operator Response: Issue the DM command to determine the present system configuration. Before the CPU indicated in the message can be configured online, a CPU presently online must be configured offline.

IEE590I CHP(xx) NOT RECONFIGURED, SYSTEM STATUS CHANGED

Explanation: The operator attempted to configure channel path xx offline. Some other channel path failed, making channel path xx the only path to some device(s).

System Action: The system terminates CONFIG processing for channel path xx. The CONFIG command processes any other channel paths that were to be reconfigured. The system continues processing.

Operator Response: Use the D M (display matrix) command to determine the status of the channel paths. If appropriate, reissue the CONFIG command.

IEE600I REPLY TO xx IS; text

Explanation: This message notifies all console operators who received a message request with identification xx that a reply has been accepted to the message. The first 43 characters of the accepted reply appear as 'text'. The text may or may not be enclosed in quotes depending on whether or not the reply was enclosed in quotes. The message text will be replaced with the word SUPPRESSED if the ROUTCDE of the WTOR was 9 (security).

System Action: The system continues processing.

IEE601E PROCESSOR (y) IS IN AN EXCESSIVE DISABLED SPIN LOOP WAITING FOR event HELD BY PROCESSOR (x). ACR IS ALREADY ACTIVE. SPIN WILL CONTINUE.

Explanation: An MVS routine is in a spin-loop on processor y waiting for the designated event on processor x. The spin loop exceeded the length of time normally needed for the event to occur. The event will be one of the following:

RISGNL RESPONSE
LOCK RELEASE
SIGP (NOT OPERATIONAL)
RESTART RESOURCE
ADDRESS SPACE TO QUIESCE
PTLB SYNC
INTERSECT RELEASE
SIGP (EQUIPMENT CHECK)
SIGP (OPERATOR INTERVENING)
SIGP (CHECK STOP)
SIGP (NOT READY)
SIGP (BUSY CONDITION)
SIGP (RECEIVER CHECK)
SUCCESSFUL BIND BREAK RELEASE

Processor recovery (i.e., ACR) is already in process for another malfunctioning processor, so ACR processing to processor x is not allowed here (see descriptions for messages IEA490A and IEE331A).

System Action: The spin-loop will continue. The ACR processing should complete within two minutes.

Operator Response: On the first three occurrences of this message, do not do anything. The ACR will probably complete, and if the spin-loop condition persists, you will then get either message IEA490A or message IEE331A.

If this message keeps reoccurring over several minutes indicating the same processor x (in the third

line of the message), initiate a restart to processor x to ABEND the work running on it. If IEE601E continues to appear, take a stand-alone dump.

Problem Determination: Table 1, items 11, 16, 18, 29 or 30.

IEE602I REQUESTED CONFIG OPERAND xxxx IS NOT SUPPORTED

Explanation: The operator entered a CONFIG command that specifies hardware facility xxxx, which is not included in the installation.

System Action: The system ignores operand xxxx.

Operator Response: None.

Programmer Response: Make sure the operator is using the correct commands.

IEE628I PVTMOD ASSUMED TO BE IN GLOBAL STORAGE FOR SLIP xxxxxxxx

Explanation: A SLIP SET command specified either more than one address space ID (ASID) or omitted the ASID keyword to imply all address spaces. Consequently, SLIP-PER assumes that the private module, specified in the PVTMOD or PVTEP keyword, is in global storage.

In the message text, xxxxxxxx is either ID = yyyy, where yyyy is the ID of the slip trap, or COMMAND.

Programmer Response: If the private module is in local storage, delete or disable this trap and enter a new trap, specifying only one ASID.

IEE699I REPLY xx IGNORED; NON-DECIMAL ID

Explanation: A command was entered specifying a non-decimal id. The reply id must be entered as decimal digits with or without a leading zero in ids 01 through 09.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Enter the REPLY command again correctly.

Problem Determination: Table 1, items 2, 29.

IEE700I REPLY xx IGNORED; REPLY TOO LONG FOR REQUESTOR

Explanation: A REPLY xx command was entered and the reply text was too long for the user's buffer.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Enter the REPLY command again correctly.

Problem Determination: Table 1, items 2, 29.

IEE701I REPLY xx IGNORED; NO REPLIES OUTSTANDING

Explanation: REPLY xx was entered when a reply was not being requested.

System Action: The unexpected REPLY xx was ignored. The system continues processing.

IEE702I REPLY xx IGNORED; IMPROPER USE OF DELIMITERS

Explanation: REPLY xx was invalid for one of the following reasons:

- A closing apostrophe did not follow the text when the text was preceded by an apostrophe.
- An invalid character (a character other than a comma, space, or EOB) followed the id.

System Action: The REPLY xx was ignored. The system continues processing.

Operator Response: Enter the REPLY command again correctly.

Problem Determination: Table 1, items 2, 29.

IEE703I {REPLY xx|MESSAGE [yyyyy]} NOT REQUESTED FROM THIS CONSOLE

Explanation: A command was entered by a secondary console in response to a message that the console did not receive. The fields in the message text are:

REPLY xx

The command was a REPLY command; xx is the reply ID of a write-to-operator with reply (WTOR) message.

MESSAGE yyyyy

The command was a CONTROL C,I, CONTROL C,E, or CONTROL C,A command, where yyyyy is the message ID of the message to be deleted. The ID appears only printer-keyboard consoles. On a display (CRT) console, the cursor is positioned under the message ID in error.

System Action: If a REPLY command was entered, the command is ignored, and the system continues processing. If a CONTROL command was entered, the system deletes any messages that have IDs that precede the ID in error in the command. If the command was entered from a display console, the system displays the command again and positions the cursor under the message ID in error. The IDs of any messages that were deleted are not included in the display.

Operator Response: Enter the command again from the master console or from a console that received the message.

Problem Determination: Table 1, items 2, 29.

IEE704I REPLY xx [IS] NOT OUTSTANDING [ON THIS SYSTEM]

Explanation: A REPLY xx command was entered; however, there is no outstanding reply request with the identification xx. Either the message request has already been answered or the message reply identification xx is incorrect.

If the reply identification was correct, but **ON THIS SYSTEM** appears in the message display, the request originated on another system in the complex.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: If the reply identification was incorrect, enter the correct command.

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If (1) you are on a system with JES3 and (2) ON THIS SYSTEM appears in the message display, then issue the *SEND command to direct the REPLY command to the appropriate system. You can issue the DISPLAY R,R,S command to find the system name to be used in the *SEND command.

Problem Determination: Table I, items 2, 29.

IEE706I {SWITCH|HALT} NOT SUCCESSFUL

Explanation: One of the following occurred:

- The SWITCH SMF command was entered in a system not supporting SMF.
- The SWITCH SMF or the HALT EOD command was entered while the SMF recording data sets were being switched or while no SMF data set was available.

System Action: The command was not executed.

Operator Response: Reenter the command as soon as the data set switch has completed.

Problem Determination: Table I, items 2, 7ab, 29.

IEE707I cm yyy NOT EXECUTED

Explanation: The command indicated by cm in the message text could not be performed by the system for one of the following reasons:

- The subsystem resources are in use.
- The subsystem buffers are filled.

In the message text, yyy is the parameter field. (cm + yyy will not exceed 8 characters.)

System Action: The system did not execute the command.

Operator Response: Enter the command (cm) again when the previously entered subsystem commands have completed execution.

Problem Determination: Table I, items 2, 29.

IEE708I keywd KEY WORD, VALUE INVALID

Explanation: The value of the keyword keywd was unacceptable to the system. Example: The performance group number specified on the PERFORM keyword is not defined to the system resource manager.

If the keyword is ASID, and it was entered in response to message IEE094D, an address space identifier specified is greater than the limit specified by MAXUSER in response to message IEA101A.

System Action: The action requested by the keyword is not performed.

Operator Response: Reenter the command with the correct keyword value.

Problem Determination: Table I, items 2, 29. List the IPS member of SYS1.PARMLIB under which the system is running.

IEE709I HARDCOPY REQUIRED - NO HARDCOPY DEVICE AVAILABLE

Explanation: This message warns that the system is in 'hardcopy is mandatory' mode and that there is no SYSLOG or paper device to make into hardcopy. However, the operator has added a new console to the system configuration.

System Action: Processing continues.

Operator Response: Do one of the following:

- Make a system log available, then issue a VARY SYSLOG,HARDCPY command to make the device function as the hardcopy device.
- Enter a VARY CONSOLE command to bring an input/output or output only paper (non-graphics) console online as the active console. This device will automatically be assigned the hardcopy function.

Note: There is no need to use the VARY HARDCPY command unless you want to change the hardcopy authority and routing codes.

IEE710I {ddd|SYSLOG} NOW RECEIVING HARDCOPY

Explanation: The system did not have an active hardcopy device. However, the system must have an active hardcopy device because of the addition of a console to the console configuration of the system. The system forces device ddd or SYSLOG to act as the hardcopy device. The message states which device is the hardcopy device.

System Action: Processing continues.

Operator Response: If device ddd is not desired as the current hardcopy log do one of the following:

- Make sure that the system log is available, then issue a VARY SYSLOG,HARDCPY command to switch the hardcopy function to SYSLOG.
- Enter a VARY CONSOLE command to bring an input/output or output only paper (non-graphics) console online as the active console. Then enter a VARY HARDCPY command to assign this console the hardcopy status.
- If hardcopy is not desired, make sure that there is only one paper console and no graphics consoles functioning on the system and then enter a VARY HARDCPY,OFF command to terminate the hardcopy function.

IEE711I {SYSTEM UNABLE TO DUMP|SYSTEM DUMP NOT TAKEN reason}

Explanation: One of the two texts above appears for this message ID. For SYSTEM UNABLE TO DUMP, SVC Dump could not complete the dump to the SYS1.DUMP data set. SVC Dump may have been processing another dump at the time the command was issued.

For SYSTEM DUMP NOT TAKEN reason, the text for reason further explains the error condition; reason can be one of the following:

- ANOTHER DUMP WAS IN PROGRESS
- DUMP=NO WAS SET AT IPL OR INDICATED BY CHNGDUMP

- THE DUMP WAS SUPPRESSED BY SLIP
- NO SYS1.DUMP DATA SET WAS AVAILABLE
- AN I/O ERROR OCCURRED
- NO SRBS COULD BE SCHEDULED TO START THE DUMP
- SVC DUMP ABNORMALLY TERMINATED
- A STATUS STOP SRBS CONDITION WAS DETECTED
- THE DUMP WAS SUPPRESSED BY DAE

System Action: Processing continues.

Operator Response: For SYSTEM UNABLE TO DUMP, enter the dump command again. For SYSTEM DUMP NOT TAKEN reason, reason determines how you should respond:

ANOTHER DUMP WAS IN PROGRESS

Enter the dump command again.

DUMP=NO WAS SET AT IPL OR INDICATED BY CHNGDUMP

Issue CHNGDUMP command with DUMP=YES, and then issue the dump command again.

THE DUMP WAS SUPPRESSED BY SLIP

Disable the SLIP to get a dump.

NO SYS1.DUMP DATA SET WAS AVAILABLE

Add or clear a SYS1.DUMP data set, and issue the dump command again.

AN I/O ERROR OCCURRED

Notify your system programmer.

NO SRBS COULD BE SCHEDULED TO START THE DUMP

Notify your system programmer.

SVC DUMP ABNORMALLY TERMINATED

Notify your system programmer.

A STATUS STOP SRBS CONDITION WAS DETECTED

Notify your system programmer.

THE DUMP WAS SUPPRESSED BY DAE

No operator response is required; a dump of this problem already exists.

IEE712I cmd PROCESSING COMPLETE

Explanation: If the cmd command is a command other than CONFIG or CHNGDUMP, the system has successfully executed the command. If the command is CONFIG, command processing either completed successfully or terminated because of an error; this message follows other messages that give detailed information about the CONFIG command processing. If cm is CHNGDUMP, one of the following has been accomplished:

- The dump defaults for SYSABEND or SYSUDUMP DD's specified in SYS1.PARMLIB were temporarily overridden

- by the CHNGDUMP command; or, the dump options specified when a system task issues the SDUMP macro are temporarily overridden by the CHNGDUMP command.
- The overrides specified by a previous issuance of the CHNGDUMP command have been eliminated.

System Action: System processing continues.

Problem Determination: Table I, items 2, 29.

IEE713I

cm	}	COMMAND PROCESSOR
CONFIG CPU		
CONFIG VF		
		FAILED

IEE

[-ISSUE K E,D,L=cca TO DELETE]

Explanation: While processing a cm command an unrecoverable internal error occurred.

System Action: The command processor terminates. The system attempts to record the error status in SYS1.LOGREC and to dump a copy of the main work area to SYS1.DUMPnn; processing continues.

Operator Response: Retry the command. If the command continues to fail, seek system programming support. If cm is TRACK, issue K E,D,L=cca (where cc identifies the command on which TRACK was processing and a is the area owned by TRACK) to erase the display, if desired.

Problem Determination: Print the SYS1.DUMP data set to obtain a copy of the program work area. Table I, items 2, 18, 29.

IEE714I

PATH(ddd,xx) NOT OPERATIONAL

Explanation: Module IEEVPTH, the VARY PATH reconfiguration module, issued this message for one of the following reasons:

- The operator issued a VARY PATH ONLINE request, but path(ddd,xx) is not functioning or device ddd is in permanent error state. Path (ddd,xx) is not brought online.
- The operator issued a VARY PATH OFFLINE command. One of the following is true:
 - The request timed out and message IEE717D was issued, to which the operator replied CANCEL. However, module IECVOPM could not bring device ddd back online.
 - Device ddd is in a permanent error state. Path (ddd,xx) is not taken offline.

System Action: Processing terminates for path(ddd,xx). System processing continues. The status of the path remains unchanged. If the command fails again, notify the system programmer.

Operator Response: Make sure that path(ddd,xx) is operational, that power is up on the device and that all switches are enabled. Then retry the command.

Problem Determination: Table I, items 11, 24, 29, or 30.

IEE715I cm COMMAND REJECTED, INVALID SYNTAX

Explanation: In a cm command, the operand field had a syntax error. Either there was an illegal or missing delimiter, or a key word was misspelled.

System Action: The command is rejected; processing continues.

Operator Response: Reenter the command correctly.

IEE717D cmd NOT PROCESSED, ddd STILL BUSY-REPLY EXTEND OR CANCEL

Explanation: CONFIG channel path or VARY path command processing is trying to configure or vary offline a path to device ddd. CONFIG channel path or VARY path command processing waited two and one half minutes for the completion of I/O through the path. The I/O has not completed. The path is a channel path if CONFIG processing is waiting, a device path if VARY processing is waiting.

System Action: Command processing waits for a reply from the operator. Meanwhile, the system continues processing.

Operator Response: Respond with one of the following:

- EXTEND - Command processing waits another two and one half minutes for the I/O to complete. If the I/O is not complete at the end of two and one half minutes, command processing reissues this message.
- CANCEL - The system cancels the CONFIG or VARY for the path. CONFIG command or VARY command processing continues to process other paths specified on the command, if any.

IEE717I VARY PATH(ddd,xx) IN PROGRESS, CANCEL REJECTED

Explanation: The operator responded to message IEE717D with CANCEL, but the VARY PATH request was too far along for IOS to cancel it. Message IEE303I accompanies this message.

System Action: The system terminates processing for all paths referenced by the VARY PATH OFFLINE command; however, system processing continues.

Operator Response: None.

IEE718I {CPU(x)|VF(x)} NOT RECONFIGURED, nnn JOBS SCHEDULED WITH AFFINITY.

JOBNAMES ARE: ccccccc, ccccccc, ...

IEE718D SHOULD CPU BE UNAVAILABLE FOR JOB SCHEDULING? REPLY YES OR NO

Explanation: These two messages are issued together. A CONFIG CPU OFFLINE command was entered for processor x, but processor x could not be varied offline because one or more jobs were scheduled with affinity to it. nnn is the total number of jobs scheduled with affinity.

ccccccc is the name of each job with affinity to processor x; only the names of the first ten jobs found are listed. If ccccccc is *UNKNOWN, the

CONFIG CPU processor did not find a valid jobname in either of the two areas where the name was sought.

Message IEE718D asks the operator if processor x should be made unavailable for further job scheduling.

If VF(x) appears in the display of message IEE718I, your request to remove a Vector Facility (VF) attached to processor x failed. The VF you specified is the only one online on which the nnn jobs that require a VF could run. This message occurs when either one of the following cases is true:

- You issue a CONFIG CPU(x),ONLINE,VFOFF command when both the CPU and the VF are already online.
- You issue a CONFIG VF(x),OFFLINE command.

When the display for message IEE718I contains information on the VF, message IEE718D will not appear.

System Action: The CONFIG CPU OFFLINE command is not executed. The processor or processor with an attached VF, that you specified, was not taken offline. The CONFIG command processor waits for the operator to reply to message IEE718D.

Operator Response: If the processor must be taken offline immediately, reply 'YES'. This will prevent any new jobs from being scheduled with affinity to the object processor. Then either wait for the already scheduled jobs to complete or cancel them. In either case, after the jobs have completed, the CONFIG CPU,OFFLINE command can be issued again to take the processor offline.

Note: If, after replying 'YES', you decide that you no longer wish to remove processor x from the system, enter a CONFIG CPU,ONLINE command to make processor x available for job scheduling.

If the processor does not need to be removed from the system after receiving messages IEE718I and IEE718D, reply 'NO' to message IEE718D. This will cause the CONFIG CPU,OFFLINE command to be terminated. Processor x will remain available for job scheduling.

IEE719I CHP(x) NOT CONFIGURED, OUTSTANDING RESERVE TO DEVICE ddd

Explanation: A CONFIG CHP OFFLINE command was issued but channel path x represents a path on which there is currently an outstanding reserve to the shared direct access device ddd. If the channel path is removed, a release would never be issued. The CONFIG command processor waited 10 seconds to see if the outstanding reserve would be removed, but it was not.

System Action: If a CONFIG CHP OFFLINE command was issued, processing terminates for channel x. If the CONFIG CHP OFFLINE command specified a range of channels, processing continues for the next requested channel.

Operator Response: Reissue the CONFIG OFFLINE command after device ddd is released.

IEE720I NO PFK ALLOCATION

Explanation: The operator entered the CONTROL command with either the N,PFK or D,PFK or E,PFK operand. The console does not support PFKs (program function keys) because PFKs are unavailable due to an error during console initialization.

System Action: The command is not executed.

Operator Response: The system issues either message IEE233I or IEE234I. These messages contain explanations of why the PFKs were unavailable. You can see these messages for additional information.

Problem Determination: Table I, items 2, 17a,b, 29.

IEE721I PFK nnn NOT SUPPORTED

Explanation: The operator pressed PFK nnn (or selected displayed number nnn from the PFK display line with the light pen) for which support had not been requested at system generation.

System Action: Processing continues.

Operator Response: Retry the operation. Check the PFK specification for correctness. If the problem recurs, do the following before calling your support personnel:

- Issue D PFK command from the console.
- Have the hardcopy printout available.

IEE722I PFK nnn NOT DEFINED

Explanation: This message indicates that the operator has pressed PFK key nnn or positioned the light pen over PFK key number nnn, and either of the following conditions occurred:

- The selected key has no commands defined for it.
- A zero length command is contained within the key definition.

System Action: Processing continues.

Operator Response: Use the DISPLAY PFK command to request a display of the commands associated with the PFK keys. If the selected key is undefined, select another key or use the CONTROL N,PFK command to define commands for the key. If the selected key is defined, check the command syntax. A semi-colon incorrectly located immediately behind the first quote or immediately in front of the last quote, or two semi-colons together within the command, can cause a zero length indication.

Problem Determination: Table I, items 2, 29.

IEE723I PFK IN PROCESS. LAST INTERRUPT IGNORED

Explanation: The operator pressed a nonconversational PFK (or selected a nonconversational PFK number with the light pen) and then pressed a second PFK (or selected a second PFK number) before processing of the first request was complete.

System Action: The system does not recognize the second request. This message is displayed in the instruction line until processing of the first request is complete; then it is removed.

Operator Response: Wait until the message is removed from the instruction line, then reenter the second request.

Problem Determination: Table I, items 2, 29.

IEE724I hh.mm.ss PFK DEFINITIONS [id]

```
KEY# CONV DEFINITION [FOR CONSOLE CC]
nnn stat xxx
NO PFK ALLOCATION, CN=cc
```

Explanation: This message is displayed on a CRT console in response to a DISPLAY PFK command. It provides a display of the operator commands associated with each PFK key.

In the label line KEY # refers to the number of the PFK key (or displayed PFK key number), CONV refers to conversational mode, and DEFINITION refers to the current definition of the key.

In the message text the fields are:

hh.mm.ss

The time of day, where hh specifies the hour (00-24), mm specifies the minute (00-59), and ss specifies the second (00-59).

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line on a display (CRT) console.

cc

The two-digit ID of the console on which the command was entered and for which PFK definitions are displayed.

nnn

The number of the key whose definition is displayed on this line.

stat

The status of the conversational mode: YES, if conversational mode is in effect; NO, if conversational mode is not in effect; and blank, if the key is not defined.

xxx

The current definition for the key. This field can contain up to 108 characters or 52 key numbers separated by commas; this field will be continued on a second line, if necessary. If the key is not defined, this field contains NOT DEFINED.

NO PFK ALLOCATION, CN=cc appears when one of the following has occurred:

- The operator entered the CONTROL (K) command with either the N,PFK, and the D,PFK, or the E,PFK operand, but PFK support is not provided for the device on which the command was entered.
- The operator entered a \$VS, 'D PFK' command. 'D PFK' is not a valid operand for the \$VS command.

In the CN=cc field, cc is the two-digit ID of the console on which the operator entered the command.

IEE

Operator Response: If you entered a CONTROL command, check with the system programmer to be sure that PFK support is included during the system generation for the device on which the operator entered the command.

If you entered a \$VS, 'D PFK' command, enter the D PFK command on the console for which you want the PFK allocation information.

**IEE725I SLIP PARAMETERS ARE -
prm
prm ...**

Explanation: A SLIP SET command was issued without the END parameter, but with the indicated parameters either specified or defaulted. This message is followed by message IEE726D, which allows the parameters to be changed or new parameters to be added, or the command to be terminated.

System Action: The indicated parameters are accepted.

Operator Response: Verify that the indicated parameters are complete.

**IEE726D ENTER ADDITIONAL SLIP PARAMETERS
['END'] OR 'CANCEL'**

Explanation: When a SLIP SET command is entered, this message follows message IEE725I, and permits you to enter new SLIP parameters or change existing parameters. Any parameter can be added in any order except the positional IF, SA, and SB keyword parameters. These parameters can only be added after the SET parameter. All parameters except IF, SA, and SB can be changed. The new parameter replaces the original parameter in its entirety.

When a SLIP MOD or SLIP DEL command is entered, 'END' does not appear in this message and no other message is issued.

If an incomplete SLIP parameter was specified (for example, if the closing parenthesis was omitted on the last parameter), the parameter must be continued and completed in the beginning of the reply.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,prms to add or change indicated parameters. To complete a SLIP SET command, specify END as the last parameter; if END is not specified, message IEE725I will reappear with the updated list of parameters.

Enter REPLY xx,CANCEL to cancel the original command.

IEE727I SLIP TRAP ID = xxxx [ALREADY]

SET ENABLED DISABLED DELETED	{	[BUT GTF IS NOT ACTIVE BY	{	TSO-userid CONS cc	}]	}
---------------------------------------	---	---	-----------------------------	---	-----------------------	---	---	---

Explanation: If ALREADY does not appear in the message, a SLIP command was issued that

successfully set, enabled, disabled, or deleted the SLIP trap identified by xxxx.

If ALREADY appears in the message, a SLIP command was issued to enable or disable a SLIP trap that was already in that state.

If BUT GTF IS NOT ACTIVE appears in the message, a trap designed to collect GTF trace records was set or enabled but GTF is not active.

If the trap was enabled, disabled, or deleted by a TSO user or console other than the one that originally set the trap, a second IEE727I message is sent to the originator of the trap containing the new status of the trap and the TSO userid or the console ID responsible for the change.

System Action: If ALREADY does not appear in the message, the SLIP command processor has successfully changed the status of SLIP trap xxxx. If ALREADY appears in the message, the SLIP command is ignored. If BUT GTF IS NOT ACTIVE appears in the message, the requested trace records might not be produced.

Operator Response: IF BUT GTF IS NOT ACTIVE is present in the message, notify the system programmer.

Programmer Response: If GTF is not active and GTF records are required, enter a START GTF command and specify the SLIP option.

**IEE728D prm INVALID FOR SLIP
{ID = xxxx|COMMAND}, REENTER KEY
WORD, NULL LINE, OR 'CANCEL'**

Explanation: A SLIP command or response to message IEE726D contains an invalid SLIP parameter prm.

In the message, xxxx is the SLIP trap identifier specified in the command. If an ID was not specified, COMMAND appears in the message.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,prm specifying the correct SLIP parameter. This response should include the parameter and all options desired for that key word.

Enter REPLY xx,EOB to ignore the invalid parameter.

Enter REPLY xx,CANCEL to cancel the original command.

**IEE729D SLIP ID = xxxx ALREADY EXISTS. REENTER
ID KEY WORD OR 'CANCEL'**

Explanation: A SLIP SET command was issued for ID xxxx, but ID xxxx already exists.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,ID = xxxx to specify a new ID.

Enter REPLY xx,CANCEL to cancel the original command.

IEE730I DPLICATE xxxx SUBSYSTEM NOT INITIALIZED

Explanation: Subsystem name xxxx, identified in IEFJSSNT or an IEFSSNxx member of SYS1.PARMLIB, is a duplicate of an existing subsystem name.

System Action: The system does not build a subsystem communication vector table (SSVCT) for the duplicate subsystem name.

If the system found the duplicate name in IEFJSSNT, one of the following occurs:

- If subsystem xxxx has been initialized (that is, the initialization routine specified in the first xxxx entry has executed), the system ignores the initialization routine specified with the duplicate subsystem name.
- If subsystem xxxx has not been initialized, the system invokes the initialization routine specified with the duplicate subsystem name.

If the system found the duplicate name in SYS1.PARMLIB, the system ignores the initialization routine specified with the duplicate subsystem name.

Operator Response: Report this message to the system programmer.

Programmer Response: Determine why subsystem xxxx was named more than once.

If subsystem xxxx is not properly initialized, and is essential for system processing, correct the error and re-IPL.

Problem Determination: Table I, items 2, 7d, and 29.

IEE731I SLIP ID=xxxx DOES NOT EXIST, REQUEST IGNORED

Explanation: A SLIP DEL,ID=xxxx, or SLIP MOD,DISABLE,ID=xxxx, or SLIP MOD,ENABLE,ID=xxxx, or DISPLAY SLIP=xxxx command was issued, but no identifier xxxx exists.

System Action: The command is ignored.

Operator Response: Reissue the command, specifying the correct ID. (A DISPLAY SLIP command for a summary may assist in determining the correct ID.)

IEE732D SLIP FUNCTION IN USE. ENTER RETRY OR CANCEL

Explanation: An attempt was made to update or display SLIP control blocks for a SLIP or DISPLAY SLIP command. However, the blocks are unavailable because another SLIP command has control of the blocks.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,RETRY to attempt the command again.

Enter REPLY xx,CANCEL to cancel the original command.

IEE733I NO SLIP TRAPS IN EFFECT

Explanation: A SLIP DEL, or SLIP MOD, or DISPLAY SLIP command was issued, but SLIP is not active (that is, no slip traps have been set).

System Action: The command is ignored.

Operator Response: None.

IEE734I ddd NOW UNLOADED [- DEVICE IS BOXED]

Explanation: In response to an UNLOAD command, the system has unloaded a volume from device ddd.

If DEVICE IS BOXED appears, the device was boxed because of a hardware I/O error, or VARY ddd,OFFLINE,FORCE command processing, or VARY CH(x),OFFLINE,FORCE command processing.

When a device is boxed, these events occur:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when these conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
 If the device was offline, it remains offline.

System Action: Processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 7a, 29.

IEE735I hh.mm.ss. SLIP DISPLAY id

ID STATE ID STATE ID STATE ID STATE
 id state id state id state id state

ID = id, type, state, ACTION = opt, SET BY id-orig
 [DEBUG],[RBLEVEL = opt]
 [ERRTYP = opt]
 [MODE = opt]
 [PRCNTLIM = opt,p],[MATCHLIM = opt,m]
 [COMP = opt],[REASON = opt]
 [JOBNAME = opt],[JSPGM = opt],[RANGE = opt]
 {PVTMOD = opt|PVTEP = opt|LPAMOD = opt|
 LPAEP = opt|NVCMOD = opt|NVCEP = opt|
 ADDRESS = opt}
 [ASID = opt]
 [ASIDSA = opt]
 [DATA = u,opt]
 [TRDATA = opt]
 [SUMLIST = opt]
 [LIST = opt]
 [ASIDLST = opt]
 [SDATA = opt]

Explanation: This message appears in response to a DISPLAY SLIP command.

IEE

The first line of the message always appears. The fields in the text are as follows:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59).

The value is 00.00.000 if the TOD clock is not working when the information is gathered for the display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command to cancel status displays written on typewriter or printer consoles or displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

The second and third lines appear when a DISPLAY SLIP command is issued without a SLIP identifier. The fields in the text are as follows:

id

A SLIP trap identifier

state

ENABLED or DISABLED

The remaining lines appear when a DISPLAY SLIP=xxxx command is issued. The type of SLIP trap and the options chosen when the trap was defined determine which of the optional fields appear in the message.

The possible fields and their meanings are as follows:

ID=id

id is the SLIP trap identifier entered in the DISPLAY command.

type

The type of SLIP trap. This field contains one of the following:

- NONPER - not a PER trap
- PER-IF - PER instruction fetch trap
- PER-SA - PER storage alteration trap
- PER-SB - PER successful branch trap

state

ENABLED(ACTIVE) means that the private module specified in the PVTMOD or PVTEP parameter was found, as by a LOAD, and the enabled trap has been activated.

ENABLED(INACTIVE) means (1) that the private module specified in the PVTMOD or PVTEP parameter was not found or (2) that the enabled trap was deactivated, as by a DELETE.

ENABLED means that the trap is enabled.

DISABLED means that the trap is disabled.

ACTION = opt

The option specified for the ACTION keyword.

SET BY id-orig

id-orig identifies the originator of this SLIP trap. This field contains one of the following:

- TSO userid - the TSO user, if the SLIP trap was defined through a TSO terminal
- CONS cc - the console ID, if the SLIP trap was defined through a console

p

The actual percentage of system processing time used to process PER interruptions beginning with the first PER interruption processed for this SLIP trap.

If the percentage cannot be calculated, one of the following codes appears indicating the reason for the condition:

- NA The calculation is not applicable. Either the trap is disabled or PRCNTLIM=99 was specified in the trap definition.
- LT Less than 33 seconds has elapsed since first PER interruption was processed for this trap.
- CK The time-of-day clock is in error.
- BC The system contains an invalid value for the number of in-line processors.

m

The actual number of times the conditions for this SLIP trap were met since the last time the trap was enabled.

u

The number of times the SLIP processor could not access the data in a target location because the data was unavailable. This failure can occur if either the data itself or an indirect pointer to the data was paged out at the time the SLIP processor attempted to access the data.

opt

The option or options that were specified directly or by default in the SLIP command that defined this SLIP trap. See *System Commands* for an explanation of the SLIP trap options.

System Action: Processing continues.

Operator Response: None.

IEE736D

SLIP {ID=xxxx|COMMAND}, mod IS NOT IN THE {LPA|NUCLEUS}. ENTER {KEY WORD|A KEYWORD}, NULL LINE OR 'CANCEL'.

Explanation: A SLIP command was issued, but the module named mod in keyword LPAMOD or NUCMOD was not found in the CDE or the LPA directory or the NUCMAP. In the message, xxxx is the SLIP trap identifier specified in the command. If an ID was not specified, COMMAND appears in the message.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,keyword where keyword is the LPAMOD or NUCMOD keyword, followed by an LPA or NUCLEUS module name, or specify another keyword, possibly PVTMOD.

Enter REPLY xx,EOB to ignore the invalid parameter.

IEE737I PARAMETER INVALID WITH CURRENT IPS

Explanation: The SETDMN command specified a value for weight (the third positional parameter specified in CNSTR) and the current IPS does not contain any weight specifications or, the command specified new values for the target control key words (AOBJ, DOBJ, or FWKL) and the current IPS does not contain an AOBJ, DOBJ, or FWKL key word.

System Action: The system does not execute the SETDMN command.

Operator Response: Reissue the correct SETDMN command and report this message to the system programmer.

IEE738D SPECIFY {ADDRESS RANGE|RANGE KEYWORD} FOR SLIP xxxxxxxx OR 'CANCEL' {ID = yyyy|COMMAND}

Explanation: If ADDRESS RANGE appears in the message text, the address range was incorrectly specified in a SLIP command or was missing. An address range is required for the type of trap being defined. The keywords that can define the range are RANGE, LPAMOD, LPAEP, PVTMOD, PVTEP, NUCMOD, and NUCEP.

If RANGE KEYWORD appears in the message text, the RANGE keyword was incorrectly specified in a SLIP command or was missing. This keyword is required for the type of trap being processed.

In the message, yyyy is the SLIP identifier specified in the command. If an ID was not specified, COMMAND appears in the message.

System Action: The system waits for a reply.

Operator Response: Enter REPLY zz,prm, where prm is the required keyword operand, or enter REPLY xx,CANCEL to cancel the original SLIP command.

IEE739I xxxxxxxx PARAMETER IGNORED FOR SLIP {ID = yyyy|COMMAND}

Explanation: The key word xxxxxxxx was specified in a SLIP command. The key word operand is not allowed in conjunction with the type of action requested in the ACTION operand.

In the message, yyyy is the SLIP identifier specified in the command. If an ID was not specified, COMMAND appears in the message.

System Action: The SLIP command processor ignores the key word operand.

Operator Response: None.

IEE740I SLIP TRAP ID=xxxx SET BUT DISABLED DUE TO TRAP ID=yyyy

Explanation: A valid SLIP SET command was entered to define a non-ignore PER trap with an ID of xxxx; that is, the action specified in the trap definition was not IGNORE. However, trap yyyy, which is also a non-ignore PER trap, is already enabled. Only one non-ignore PER trap can be enabled at any particular time.

System Action: SLIP command processing disables the new SLIP trap (identified by xxxx) before setting it.

Operator Response: Notify the system programmer.

Programmer Response: If SLIP trap xxxx should be enabled, enter a SLIP MOD command to disable trap yyyy and a second SLIP MOD command to enable trap xxxx.

IEE741I SLIP TRAP ID=xxxx NOT ENABLED DUE TO TRAP ID=yyyy

Explanation: A SLIP MOD command was entered to enable a non-ignore PER trap with an ID of xxxx; that is, the action specified in the trap definition was not IGNORE. However, trap yyyy, which is also a non-ignore PER trap, is already enable.

Only one non-ignore PER trap can be enabled at any particular time.

System Action: The SLIP MOD command is ignored.

Operator Response: Notify the system programmer.

Programmer Response: If SLIP trap xxxx should be enabled, enter a SLIP MOD command to disable trap yyyy and a second SLIP MOD command to enable trap xxxx.

IEE742I SLIP TRAP ID=xxxx ACTIVATION DELAYED DUE TO LACK OF SQA

Explanation: SLIP processing was unable to obtain the SQA storage required to activate PER for the SLIP trap identified by xxxx. Processing for the trap is delayed.

System Action: SLIP processing attempts to activate PER at half-second intervals until an attempt to obtain storage is successful or until the trap is disabled or deleted.

Operator Response: Notify the system programmer.

Programmer Response: If PER cannot be activated for an extended period of time, use the SLIP MOD command to disable or delete the trap. If SQA storage is available at a later time, use the SLIP MOD command to enable the trap.

If the shortage of SQA is a persistent problem, you might want to evaluate and possibly change the way SQA storage is used in the system.

IEE743I SLIP TRAP ID=xxxx ABENDED DURING PROCESSING. DUMP SCHEDULED AND TRAP DISABLED

Explanation: The SLIP global PER activation/deactivation routine encountered an error while processing the SLIP PER trap identified by xxxx.

System Action: SLIP processing disables the trap, schedules an SVC dump, writes an error record to the SYS1.LOGREC data set, and attempts to deactivate PER in the system.

Programmer Response: Examine the dump and the error record from the SYS1.LOGREC data set and take the appropriate action.

IEE

Problem Determination: Table I, items 2, 16, 18, 29, 33.

IEE744I VARY CONSOLE REJECTED - NO FULL CAPABILITY CONSOLES. TO RESTORE MASTER CONSOLE:
 1) PRESS ENTER, REQUEST, OR END ON ANY AVAILABLE CONSOLE
 2) PRESS THE EXTERNAL INTERRUPT KEY

Explanation: A VARY CONSOLE command was executed when the system was in a no-consoles condition.

System Action: The command is rejected by the system.

Operator Response: To resolve the no-consoles condition and recover the master console, perform the operations indicated in the message. If the no-consoles condition remains in effect, repeat the indicated steps on a different device that was specified as a console at system generation. If no device is capable of becoming a console, re-IPL the system.

Problem Determination: Table I, items 2, 7d 11, 13, 16, and 18.

IEE748E SLIP COMMUNICATION ROUTINE FAILED

Explanation: The communication routine in the SLIP command processor (IEECB905) has failed. This routine handles messages generated by the following modules:

- SLIP processor (IEAVTSLP)
- SLIP global PER activation/deactivation routine (IEAVTGLB)
- SLIP local PER activation/deactivation routine (IEAVTLCL)
- SLIP PER selection interface routine (IEAVTJBN)

System Action: The communication routine in the SLIP command processor terminates. An SVC dump is scheduled. Messages issued by modules IEAVTSLP, IEAVTGLB, IEAVTLCL, and IEAVTJBN are held until the communication routine is restarted.

Programmer Response: To restart the SLIP communication routine, issue any valid SLIP SET or SLIP MOD command. You can also use a SLIP MOD command that enables or disables a non-existent trap to restart the routine.

Problem Determination: Table I, items 2, 16, 18, 29, 33.

IEE751I SYSTEM ERROR ENCOUNTERED DURING QUIESCE

Explanation: A system error was encountered during quiesce.

System Action: The command is not executed. Processing continues.

Operator Response: Reissue the command.

Problem Determination: Format the SYS1.DUMPnn data set to obtain a copy of the main work area. Table I, items 2, 18, 29.

IEE752I QUIESCE WAS SUCCESSFUL

Explanation: QUIESCE executed successfully.

System Action: Processing continues.

Operator Response: None.

IEE753I QUIESCE UNSUCCESSFUL (rc)

Explanation: A QUIESCE command was entered, but an abnormal condition has occurred. In the message text, rc is the reason code.

The values of rc and their meanings are as follows:

rc	Meaning
04	The stop and restart subroutine, IEESTPRS, was unable to stop the system because one of the processors was disabled for machine check interrupts at each of two separate status inspections.
08	subroutine IEESTPRS was unable to stop the system because one of the online processors was in a check stop state when the subroutine issued a SIGP SENSE instruction to it.
12	An error return code was received from the interprocessor services routine (IPC) when subroutine IEESTPRS requested a direct signal to another processor.
16	An unexpected event in the stop and restart subroutine, IEESTPRS, resulted in that subroutine's functional recovery routine gaining control.
20	The interrupt handler subroutine for the stop and restart subroutine, IEESTPRS, encountered an unexpected return code when it issued SIGP restart to a processor.
System Action: The system action depends on the value of rc:	
04	The command is not executed. Processing continues, and any processors that have been stopped are restarted.
08	The system restarts processors that were placed in the manual state prior to the time an online processor was found in the check stop state. The command is not executed and processing continues.
12	The system restarts processors placed in the manual state prior to the time an error return code was received from the IPC routine.
16	All online processors are started or restarted, so that the system is restored as near as possible to its state prior to the attempted quiesce.
20	The system continues processing with the loss of the processor that failed on SIGP restart.
Operator Response: The proper response depends on the value of rc indicated in the message text:	
04	Reissue the command.
08	Reissue the command.
12	Reissue the command.
16	Reissue the command.

- 20 Reissue the command. Do not press the RESTART key on the failing processor as the results are unpredictable.

Problem Determination: Table I, items 2, 29.

IEE754I NOT ALL DEVICES BROUGHT ONLINE WITH CHP(xx)

Explanation: In response to a CONFIG channel path command, channel path xx has been placed online. However, not all the devices attached to channel path xx were brought online.

System Action: The system continues processing normally. Channel path xx is online. However, not all attached devices are online.

Operator Response: If DEVICES appears in the message, insure that power is up all required devices and that the meter switches are enabled. If PATHS appears in the message, use the display matrix command to determine which paths are not online. The paths may not be online for any one of the following reasons:

- Path is not physically available.
- The device is active or boxed.
- There is no storage available.
- I/O timed out.
- The device is reserved.
- There is an unrecoverable program error.
- The UCB was not connected.

IEE755I CONFIG COMMAND SMF RECORD ERROR

Explanation: During processing of a CONFIG CPU or a CONFIG CHP command, an error was encountered in writing SMF records that keep track of the processor, channel paths and devices brought online or taken offline. This is an informational message informing the operator that the SMF data for his installation is in error for this reconfiguration.

System Action: The requested reconfiguration is performed. Processing continues.

Operator Response: If required, inform appropriate personnel of the time and place the error occurred in SMF data.

IEE756I {CHP(xx) NOT RECONFIGURED, FUNCTION|D SLIP COMMAND|SLIP} CANCELLED BY OPERATOR

Explanation:

- If CHP(xx) NOT RECONFIGURED appears in the message, the system operator replied CANCEL to either:
 - Message IEE131D for a CONFIG CHP FORCE request
 - Message IEE717D when I/O could not be quiesced for a CONFIG CHP OFFLINE request
- If D SLIP appears in the message, the operator replied CANCEL in response to message IEE732D.
- If SLIP appears in the message, the operator replied CANCEL in response to message

IEE726D, IEE728D, IEE729D, IEE732D, or IEE736D.

System Action:

- If CHP(xx) NOT RECONFIGURED appears in the message, channel path xx is not reconfigured. The same CONFIG command continues processing other channel paths, if any. The system continues processing.
- If D SLIP or SLIP appears in the message, command processing terminates.

Operator Response: None.

IEE757I CPU(z) NOT RECONFIGURED, CLOCKS CANNOT BE SYNCHRONIZED

Explanation: In response to a CONFIG CPU ONLINE command, an attempt was made to bring processor z into the system. However, a synchronization check on processor z's clocks revealed that they could not be synchronized with the active processor.

System Action: The CONFIG command is rejected. No reconfiguration is performed. The system continues processing normally with the configuration that existed before you issued the CONFIG command.

Operator Response: Retry the CONFIG command.

If the problem persists, notify the system programmer.

IEE758I CPU(z) NOT RECONFIGURED, ERROR ON TARGET CPU

Explanation: While attempting to bring processor z into the configuration in response to a CONFIG CPU, ONLINE command, a machine check or program error occurred on processor z.

It is possible that processor z was restarted successfully, but the operating system module that must execute on processor z before the processor can become available for dispatching (IEEVWKUP) did not complete.

If ERROR ON TARGET CPU appears, it might be because processor z has cross-memory support that is different from the cross-memory support on the processor that is already online. Both of the processors in a configuration must have the same cross-memory support. That is, one (and only one) of the following must be true:

- Both of the processors have cross-memory hardware.
- Both of the processors have cross-memory simulation.

System Action: The CONFIG CPU command is rejected. No reconfiguration is performed. The system continues processing normally with the configuration that existed before you issued the CONFIG command.

Operator Response: Retry the CONFIG command. If the problem persists, notify the system programmer.

Problem Determination: Table I, item 29.

IEE759I CPU(z) NOT RECONFIGURED, WOULD RESULT IN A NO CLOCK CONDITION

Explanation: In response to a CONFIG CPU,OFFLINE command, an attempt was made to take processor z offline. However, the only good clock for the configuration was the clock on processor z. Therefore, processor z was not taken offline.

System Action: The CONFIG CPU command is not executed. No reconfiguration takes place. The system continues processing normally with the configuration that existed before you issued the CONFIG command.

Operator Response: Retry the operation. If the problem persists, notify the system programmer.

IEE760I { QUIESCE COMMAND REJECTED, VARY PATH FAILED, CHP(xx) NOT RECONFIGURED, CPU(x) NOT RECONFIGURED }

STORAGE NOT AVAILABLE

Explanation: Not enough storage is available for an internal work area to process the indicated command.

System Action: Channel path xx, path xx, or CPU x is not reconfigured, or QUIESCE is not completed. The system continues processing.

Operator Response: Reissue the command when more storage is available.

IEE761I CPU(z) OFFLINE WITH UNKNOWN STATUS

Explanation: A CONFIG CPU OFFLINE command was issued to take processor z offline. Processor z is logically offline, but some incident occurred that prevented the Reconfiguration processor from completing normally. The exact status of processor z is unknown. The MSSF (maintenance and service support facility) also failed to take processor z offline.

System Action: System processing continues.

Operator Response: Notify the system programmer.

IEE762I {CPU(x)|VF(x)} NOT RECONFIGURED, TERMINATED DUE TO SYSTEM RECOVERY

Explanation: Another processor or a processor with an attached Vector Facility (VF) in the system experienced a hardware or software failure; while the system was processing one of the following commands:

- CONFIG CPU(x),OFFLINE
- CONFIG CPU(x),ONLINE,VFOFF
- CONFIG VF(x),OFFLINE

The alternate CPU recovery (ACR) function or machine check handler took the failing processor or VF offline. The CONFIG CPU processor terminates its offline processing of processor x and its attached VF.

System Action: The CONFIG command is not executed. If processor x was being brought online or being made available for job scheduling, then

processor x was the processor that failed and was taken offline by ACR.

Operator Response: Determine the status of the system and if the CONFIG function is still required, reenter the CONFIG command.

IEE769I SYSTEM ERROR IN SYSTEM LOG

Explanation: This message is issued under one of the following conditions:

- A recursive ABEND has occurred in the log task.
- An ABEND occurred during processing of the log STAE routine.

System Action: The log is set inactive and clean-up of the log task is performed. The log function is placed in a wait state.

Operator Response: If the log is required for this IPL, attempt to reactivate it by issuing the WRITELOG START command. If this message recurs, notify the system programmer.

Problem Determination: Table I, items 2, 29.

IEE771I CPU(z) NOT RECONFIGURED, WOULD REMOVE LAST CPU

Explanation: This message is issued if you enter a CONFIG CPU command that would remove the only remaining processor available for job scheduling.

System Action: The command is not executed; processing continues.

Operator Response: A processor has been marked unavailable for job scheduling because you replied 'YES' to message IEE718D during processing of a CONFIG CPU OFFLINE command. If you want to make the processor available again for job scheduling, issue a CONFIG CPU ONLINE command.

Programmer Response: None.

IEE772I CPU(x) UNAVAILABLE FOR AFFINITY SCHEDULING

Explanation: While attempting to reconfigure a CPU offline, programs were found with affinity to the subject CPU. The operator has requested that the CPU be marked unavailable for starting any new steps with affinity to the subject CPU.

System Action: Any programs currently running with affinity to the subject CPU will complete. Any jobs not requiring affinity to the subject CPU will be processed normally; however, any job, with the first job step requesting affinity to the subject CPU, will not be initiated until the subject CPU is marked available again. Any job with other than the first job step requesting affinity to the subject CPU will be failed.

Operator Response: The CPU may be reconfigured offline by reissuing the CONFIG CPU offline command. The CPU may be made available for affinity scheduling by issuing a CONFIG CPU online command.

IEE775I STORAGE UNAVAILABLE FOR SYSTEM LOG BUFFER-LOG CLOSE IN PROCESS

Explanation: A request for main storage in CSA via a BLDCPOOL macro instruction was rejected. A possible cause may be a program in a WTL macro loop.

System Action: The system log is closed to allow log buffers to be freed. System processing continues. This message will be followed by message IEE043I and IEE037I.

Operator Response: Notify the system programmer. If the system log was the hardcopy device, hardcopy will now be directed to the master console (if a paper console). This output may be stopped by entering a VARY HARDCOPY OFF command. If message IEE147I appears repeatedly with the same text, this would indicate a WTL loop problem. If a problem program is issuing the WTL, cancel the job.

After message IEE037I is issued, the system log may be made active via a WRITELOG START command and hardcopy may be assigned to it via a VARY command.

Problem Determination: Table I, items 2, 3, 4, 11, 13, 16, 29.

IEE777I cm INVALID FROM SUBSYSTEM CONSOLE

Explanation: The cm command was issued from a subsystem console but the issuing sub-system console cannot support this command.

System Action: The system did not execute the command.

Operator Response: If the function performed by cm command is desired, issue the equivalent subsystem command or issue cm command from a system console.

Problem Determination: See Table I, items 2, 29.

IEE779I cm xxx-yyy RANGE INVALID

Explanation: The cm command specified the range of device numbers or routing codes: xxx-yyy. The first number, xxx, should be less than or equal to the second, yyy. However, xxx was greater than yyy. For example, V 250-235,ONLINE, D C,CN=(10-1) or VARY 3E0,CONSOLE, ROUT=(128-44) was specified.

System Action: The system did not execute the command.

Operator Response: Reenter the command with xxx less than or equal to yyy.

Problem Determination: Table I, items 2, 29.

IEE781I PAGEADD COMMAND - UNABLE TO PROCESS DUE TO ERROR AT IPL

Explanation: During IPL, lists of active page and swap data sets were unable to be built, and message ILR004I or ILR021I was issued as a result of the problem. Without the lists, the PAGEADD command is unable to determine if the data set names in the command stream are unique.

System Action: The PAGEADD command is failed, and will continue to fail when issued during the current IPL.

Operator Response: Do not issue the PAGEADD command during this IPL.

IEE782I PAGEADD COMMAND -

dsn { PAGE } DATA SET
 { SWAP }

{ ALREADY IN USE BY SYSTEM
NOT CATALOGED
INSUFFICIENT STORAGE TO PROCESS
THIS DATA SET
VOLUME NOT MOUNTED - DATA SET
WILL NOT BE PROCESSED
HAS AN INVALID DEVICE TYPE
I/O ERROR DETECTED - DATA SET
UNUSEABLE
NOT ALLOCATED - ERROR CODE xxxx
INFORMATION CODE yyyy }

IEE

ALREADY IN USE BY SYSTEM

Explanation: The PAGEADD command requested that data set dsn be added to the system page/swap data sets. However, data set dsn is already being used as a page/swap data set.

System Action: The PAGEADD command continues processing.

Operator Response: If the data set name was entered incorrectly, reissue the command specifying the correct data set name.

NOT CATALOGED

Explanation: The PAGEADD command was unable to add data set dsn to the system because dsn was not cataloged in the master catalog, or because cataloged dsn does not have the expected and necessary attributes of a page or swap data set.

System Action: The PAGEADD command continues processing.

Operator Response: To add data set dsn as a page or swap data set, do one of the following:

- For an uncataloged data set, run the AMS DEFINE utility to create a page/swap data set, and catalog that new data set in the master catalog. Then reissue the PAGEADD command.
- For a data set with incorrect attributes, use the AMS utility to delete dsn, and then to recreate dsn with the correct attributes for a page or swap data set. Catalog the new data set in the master catalog, and reissue the PAGEADD command.

INSUFFICIENT STORAGE TO PROCESS THIS DATA SET

Explanation: While attempting to add page/swap data set dsn, the PAGEADD command was unable to obtain enough SQA to build the control blocks needed for the data set.

System Action: The PAGEADD command continues processing.

Operator Response: Reissue the PAGEADD command. If the problem persists, increase the size of the SQA at the next IPL.

VOLUME NOT MOUNTED - DATA SET WILL NOT BE PROCESSED

Explanation: The PAGEADD command was unable to open the page/swap data set dsn because the volume containing the data set was not mounted.

System Action: The PAGEADD command continues processing.

Operator Response: Mount the requested volume, and reissue the command.

HAS AN INVALID DEVICE TYPE

Explanation: During PAGEADD processing, it was determined that data set dsn resides on a volume of a device type which is not supported for page/swap data sets.

System Action: The PAGEADD command continues processing.

Operator Response: Inform the system programmer that a problem occurred in the ASM control blocks or code.

Programmer Response: This situation should not occur. If it does occur, it is indicative of a problem in the ASM control blocks or code. Verify that module ILRPGEXP and the VSAM catalog entries for the page and swap data sets have not been altered erroneously.

I/O ERROR DETECTED - DATA SET UNUSEABLE

Explanation: The PAGEADD command was unable to add data set dsn to the system because of an I/O error on the cached auxiliary storage subsystem.

System Action: The PAGEADD command continues processing.

Operator Response: Inform your system programmer that a problem occurred when you tried to use the cached auxiliary storage subsystem. Also, insure that both of the following conditions are true for the control unit you are issuing the PAGEADD command for:

- the control unit was assigned a unique subsystem storage director identification; and
- the control unit does not have the same identification as any other subsystem storage director that is used for paging or swapping.

NOT ALLOCATED - ERROR CODE xxxx INFORMATION CODE yyyy

Explanation: The PAGEADD command was unable to add data set dsn to the system because it could not allocate dsn.

System Action: The PAGEADD command continues processing.

Operator Response: Inform your system programmer that a problem occurred during data set allocation, and pass along the error and information codes.

Programmer Response: This situation should not occur and could be a result of a problem in ASM's interfaces to allocation. Look up the SVC99 error

and information codes in *MVS/XA System Programming Library: System Macros and Facilities*.

Problem Determination: Table I, items 2, 8.

IEE783I PAGEADD COMMAND - dsn {PAGE|SWAP} DATA SET NOW AVAILABLE FOR SYSTEM USE

Explanation: The PAGEADD command processing for the page/swap data set dsn is complete.

System Action: The PAGEADD command continues processing.

Operator Response: None.

IEE784I PAGEADD COMMAND - dsn {PAGE|SWAP} DATA SET LENGTH OF DATA SET NAME GREATER THAN 44 OR NULL

Explanation: In the PAGEADD command, the length of the page/swap data set name dsn is zero or greater than 44 characters.

System Action: The PAGEADD command continues processing.

Operator Response: Reissue the PAGEADD command, specifying the correct data set name. Multiple names should be separated by single commas.

IEE785I PAGEADD COMMAND - MAXIMUM NUMBER OF {PAGE|SWAP} DATA SETS FOR THIS IPL IN USE REMAINDER OF COMMAND WILL NOT BE PROCESSED

Explanation: In the PAGEADD command, the maximum number of page/swap data sets that can be added during one IPL have been added. The number is determined by the PAGNUM system parameter which was specified at IPL.

If this message occurred for page data sets, it may still be possible to add swap data sets. If this message occurred for swap data sets, it may still be possible to add page data sets.

System Action: The PAGEADD command is terminated.

Operator Response: If more page/swap space is needed, it may be acquired at the next IPL by either of the following:

- Specify more page/swap data sets on the PAGE and SWAP system parameters.
- Increase the number of page/swap data sets which may be added to the system on the PAGNUM system parameter.

IEE786I PAGEADD COMMAND - {READ|WRITE|GETMAIN} ERROR FOR QUICK/WARM START DATA CONTINUE PAGEADD OR KEEP QUICK/WARM START CAPABILITY FOR NEXT IPL

Explanation: The PAGEADD command encountered an error while attempting to read, write, or obtain storage for quick/warm start data (ILRTPARB). ILRTPARB contains information about in-use page data sets, and must be updated when adding a page data set if the next IPL is to be a quick or warm start. The status of the

quick/warm start data is unknown at this time, but it may still be possible to quick/warm start.

- If the error was during READ or GETMAIN, it may be possible to reenter the command with no errors.
- If the error was during WRITE, the quick/warm start data is probably unusable. If a quick/warm start is to be attempted in spite of a WRITE error, do not attempt to use the PAGEADD command again for a page data set, since no further attempts to update the quick/warm start data will be made by PAGEADD.

System Action: The PAGEADD command will continue or fail after a response to message IEE787A, which follows this message.

Operator Response: Respond to message IEE787A, which follows this message:

- To keep quick/warm start capability:
 1. For READ and GETMAIN, enter REPLY xx,'END', and enter the command again. If the command still fails, do not enter REPLY xx,'U'
 2. For WRITE, enter REPLY xx,'END', and do not enter the PAGEADD command again.
- To continue PAGEADD processing:
 1. Enter REPLY xx,'U'. This reply will destroy all quick/warm start capability.

IEE787A PAGEADD COMMAND - REPLY U OR END

Explanation: This message is issued following message IEE786I.

System Action: The PAGEADD continues after REPLY xx,'U', and fails after REPLY xx,'END'.

Operator Response: Enter REPLY xx,'U' to continue, or REPLY xx,'END' to fail the PAGEADD command.

IEE788A PAGEADD COMMAND - INVALID REPLY - REPLY U OR END

Explanation: The reply entered in response to message IEE787A was invalid. The only acceptable replies are U and END.

System Action: The PAGEADD continues after REPLY xx,'U', and fails after REPLY xx,'END'.

Operator Response: Enter REPLY xx,'U' to continue, or REPLY xx,'END' to fail the PAGEADD command.

IEE789I PAGEADD COMMAND {READ|WRITE} ERROR FOR QUICK/WARM START DATA QUICK/WARM STARTS FROM THIS IPL WILL HAVE UNPREDICTABLE RESULTS

Explanation: Abnormal termination occurred while ILRPREAD was accessing page data set information (ILRTPARB) needed for a quick/warm start. (ILRTPARB resides in the PLPA page data set.) The status of ILRTPARB is unknown.

- For READ: If the error occurred while reading ILRTPARB, the error may have been

temporary. It may still be possible to quick/warm start, and the PAGEADD command may be reentered without further destroying quick/warm start capability.

- For WRITE: If the error occurred while writing ILRTPARB, the status of the data set is unknown. It may still be possible to quick/warm start. However, further use of the PAGEADD command for page data sets will definitely destroy quick/warm start capability.

System Action: The PAGEADD command is failed.

Programmer Response: Determine the cause of the abnormal condition, whether the PAGEADD command should be allowed this IPL, and whether a quick or warm start should be attempted next IPL.

Operator Response: Report this message to the system programmer before issuing any more PAGEADD commands.

IEE791I ddd VARY REJECTED - [reason]

Explanation: VARY ONLINE made an unsuccessful attempt to assign or establish dynamic pathing for device ddd. The attempt failed for the reason given in the message text; the reason can be one of the following:

ASSIGNED TO ANOTHER SYSTEM

VARY ONLINE was issued, but the device is assigned to another system. This system cannot have exclusive access to the device. If the device is shared by another system, it is possible for this system to get shared access.

Operator Response: If a single-system request was made, another device should be chosen and varied online. If device ddd is required, vary the device offline to the other system and vary it online to this system.

If a shared request was made, but some other system has the device exclusively, another device should be chosen and varied online with the SHR option. If device ddd is required, vary the device offline, or online shared, to the other system and vary it online with SHR to this system.

Note: The VARY command must be issued from a console attached to the system it is meant to affect.

ASSIGN CONFLICTS WITH CURRENT DEVICE STATUS

VARY ONLINE was issued, but the device is already assigned to this system and the requested assign status conflicts with the current device status. A single-system assign request cannot be honored if the device is already assigned with shared status.

Operator Response: VARY the device offline and then back online.

ASSIGN FAILED, RC = rc

VARY ONLINE was issued, but the attempted assign failed internally. Possible values for the return code are:

rc	Meaning
16	A timeout condition occurred while performing I/O to assign device ddd.

20 A permanent I/O error occurred while performing I/O to assign device ddd; or device ddd is currently boxed (forced offline).

Operator Response: Reissue the VARY command for device ddd. If it fails again, notify the system programmer.

DYNAMIC PATHING NOT OPERATIONAL ON DEVICE

VARY ONLINE was issued, but an attempt to establish dynamic pathing for the device was not successful. The path group was not established.

System Action: VARY ONLINE processing is terminated for the requested device. The device status remains unchanged.

Operator Response: Notify the system programmer.

Programmer Response:

1. If the assign failed internally, the device or control unit could be malfunctioning, which would prevent the device-end or control unit end from being received.
2. If dynamic pathing is not operational on the device and if SYS1.LOGREC contains hardware error records for the device, contact your hardware support personnel. Or, if the SYS1.LOGREC OBR-DPA record contains invalid path group ID information, contact your programming support personnel.

Problem Determination: Table I, items 2, 29.

IEE792I variable text **INVALID REPLY**

Explanation: The operator has entered an invalid reply to a system message. (The message was issued by means of the WTOR macro instruction.)

This message, IEE792I, then appears with the invalid reply in the variable text field.

System Action: The system repeats the original message and waits for the operator to reply.

Operator Response: Enter a valid reply to the original message.

Programmer Response: None.

IEE793I ddd [PENDING] OFFLINE AND BOXED

Explanation: The operator entered the VARY ddd,OFFLINE,FORCE command.

If device ddd was online, it is now marked pending offline. It will go offline when two conditions are met, in this order:

1. The device is no longer allocated to any job.
2. Allocation processing allocates any device in the system.

If device ddd was offline, it remains offline.

In either case, the device has been boxed, which means:

- I/O for the device has been terminated.
- Any new I/O request for the device will result in a permanent I/O error.
- No new allocations are done for the device.

System Action: Processing continues.

Operator Response: None is required. However, if device ddd is pending offline and not allocated, and the system is inactive, you may have to issue the start command for the procedure DEALLOC. Doing so triggers the allocation processing that takes the device offline.

Programmer Response: None.

IEE794I ddd PENDING OFFLINE

Explanation: The operator entered the VARY ddd OFFLINE command. The system has given device ddd pending offline status.

System Action: Processing continues. Device ddd will be taken offline when these two conditions are met, in this order:

1. Device ddd is no longer allocated to any jobs.
2. Allocation processing allocates any device in the system.

Operator Response: None is required. However, if the system is inactive, you may have to issue the START command for the procedure DEALLOC. Doing so would trigger the allocation processing that takes the device offline.

Programmer Response: None.

IEE795I SYSTEM LOG - DATA LOSS, TEMPORARILY INACTIVE, IN RECOVERY

Explanation: An error was detected in the internal WTL buffer. A dump will be taken. Data loss will occur because the buffer chain will be truncated in the recovery attempt.

Successful recovery will result in message IEE041I being issued. Unsuccessful recovery will result in message IEE037I being issued.

System Action: Processing continues, but the capability to execute system log commands will be lost temporarily, and message responses to the system log commands will be conflicting.

Operator Response: Do not issue system log commands until message IEE041I or IEE037I has been displayed:

- If message IEE041I is displayed, the log is active and no response is needed.
- If message IEE037I is displayed, the log function is not active. Reactivate the log with the WRITELOG START command. If the log was a hardcopy log, issue a VARY command to make the log hardcopy.

IEE796I hh.mm.ss DOMAIN DISPLAY id [CURRENT
IPS = {IEAIPsxx|SKELETON}]
[,OPT = {IEAOPTyy|NONE}]
[,ICS = {IEAICSzz|NONE}] [CMPL COUNTS
NSW] DMNNO MIN MAX [WT] MPLT Cmpl
RUA INC NSW GOO OUTU [TWSR TCTL CIDX]
dmnno min max [wt] mplt cml rua inc nsw goo outu
[twsr tctl cidx]

Explanation: In response to a DISPLAY DMN command, this message provides a display of the domain descriptor table. The first and third lines of the message always appear; the fourth line appears for each domain. The second line appears only if an MVS/System Product is installed on your system.

In the message text, the fields are:

hh.mm.ss

They indicate time of day in hours/minutes/seconds at which the domain table contained the displayed values.

id

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

xx

The last two characters of the IPS in effect when the DISPLAY command was entered.

IPS = SKELETON

The default IPS parameter values are in effect.

yy

The last two characters of the OPT in effect when the DISPLAY command was entered.

OPT = NONE

The user did not specify an OPT for this IPL. The default OPT parameters are in effect.

zz

The last two characters of the installation control specification in effect when the DISPLAY command was entered.

ICS = NONE

The user did not specify an installation control specification for this IPL. No installation control specification is in effect.

CMPL COUNTS NSW

The value for the current multiprogramming level (CMPL) for each domain listed in the display includes the count of non-swappable address spaces (NSW).

DMNNO

A decimal number identifying the domain from which this line of data is taken.

MIN

The minimum multiprogramming level of this domain.

MAX

The maximum multiprogramming level of this domain.

WT

The weighting factor used in defining the relative importance of this domain when SRM assigns new multiprogramming levels to domains.

MPLT

The current multiprogramming level target.

CMPL

The current multiprogramming level. If 'CMPL COUNTS NSW' appears in line two of the display, this field includes the count of non-swappable address spaces for each domain.

RUA

The average number of ready users, to the nearest integer.

(If an MVS/System Product is installed on the system, this number is kept internally to one hexadecimal place.)

INC

The current number of swappable in-storage users.

NSW

The current number of non-swappable in-storage users.

GOO

The average number of users being swapped out.

OUTU

The current number of ready users that are swapped out.

TWSR

The time-weighted average service rate for this domain. If the value exceeds 99,999, the value is represented by nK, where n is the value divided by 1000. Example: 100,000 is displayed as 100K.

TCTL

The method of MPL target control and parameter value for this domain. The method is specified by one of the following characters in the rightmost column of the field.

W

This indicates that the parameter value is a weighting factor specified by CNSTR in an IPS or by WT in a SETDMN command. It determines the relative importance of this domain when SRM assigns new target multiprogramming levels to domains. If values for AOBJ, DOBJ, or FWKL have been specified in this IPS, there will be no W values displayed.

A

This indicates that the parameter value is the number of the performance objective specified by AOBJ in an IPS or SETDMN command. It is to be used in determining the workload level for this domain based on the average service rate per average ready user in the domain. This workload level determines the relative importance of the domain when SRM assigns new target multiprogramming levels to domains.

D

This indicates that the parameter value is the number of the performance objective specified by DOBJ in an IPS or SETDMN command. It is to be used in determining the workload level for this domain based on the total domain service rate. This workload level determines the relative importance of the domain when SRM assigns new target multiprogramming levels to domains.

F

This indicates that the parameter value is a fixed workload level that determines the relative importance of the domain, regardless of service rate to the domain, when SRM assigns new target multiprogramming levels to domains.

IEE

CIDX

The contention index for the domain. This is determined by one of the following methods: 1) by a calculation involving the weight or 2) by performance objective (specified by AOBJ or DOBJ) and the appropriate service rate or 3) by FWKL. For methods 2) and 3), this contention index is the workload level for the domain.

Operator Response: None.

IEE797I DMN nnn NOT DEFINED IN DOMAIN TABLE

Explanation: Domain nnn that was requested does not have an entry in the domain descriptor table under which the system is currently running.

System Action: The command that requested the domain is not executed.

Operator Response: Reenter the command, specifying a valid domain.

IEE798I MIN VALUE EXCEEDS MAX VALUE IN DOMAIN TABLE

Explanation: While attempting to use the SETDMN command to change the minimum or maximum multiprogramming level value for a domain, the minimum value was set greater than the maximum value.

System Action: The command is not executed. The domain table remains unchanged.

Operator Response: Reenter the command, specifying a correct minimum or maximum value.

IEE799D VARY CONSOLE DELAYED - REPLY RETRY OR CANCEL

Explanation: A VARY CONSOLE command has been issued but cannot be executed immediately due to other processing currently in the system. The other processing that is in the system could be another VARY CONSOLE command or a device allocation in progress.

System Action: The VARY CONSOLE command is suspended from processing until a reply to this message has been received from the same console that entered the VARY CONSOLE command.

After a reply has been received, system action depends upon the reply:

- If RETRY is specified, 5 more attempts to execute the VARY CONSOLE command are made at 5 second intervals. If the command still cannot be executed after these 5 attempts, message IEE799D is reissued.
- If CANCEL is specified, the VARY CONSOLE command is not executed, and message IEE756I is issued.

Operator Response: Enter REPLY xx,RETRY or CANCEL. See the system action above.

Problem Determination: Table I, items 2, 7, 11.

IEE800D CONFIRM VARY FORCE FOR ddd[ddd...] - REPLY NO OR YES

Explanation: The operator entered the VARY ddd,OFFLINE,FORCE command for the device or devices listed in the message text.

This message asks the operator to confirm that those devices should be forced offline.

System Action: The VARY command processor waits for the operator to reply.

Operator Response: Reply NO to cancel VARY OFFLINE,FORCE processing for the devices.

Reply YES to allow VARY OFFLINE,FORCE processing to continue.

If your reply is something other than NO or YES, the system issues message IEE792I to identify the invalid reply, and then issues message IEE800D again.

Programmer Response: None.

IEE824A IEE824E cde COMMUNICATION TASK ABEND, xxx DUMP TAKEN

Explanation: The communications task abnormally terminated and is attempting a STAR retry. The fields in the message text are:

- cde - the ABEND completion code.
- xxx - NO if no dump was taken; blank if a successful dump was taken.

System Action: All pending messages and outstanding WTORS are discarded. Users of communication task functions (WTO, WTOR, DOM) can expect unpredictable results. All user tasks and TSO tasks in real storage are abnormally terminated if they have unanswered WTORS. The action message retention facility is no longer active and all retained messages are lost (the MVS/System Products only). Secondary consoles are no longer active (only the master console remains active), and some system storage might be unusable. A dump is attempted using the SVC dump facility.

Operator Response: If the message indicates that a successful dump was taken, use the AMDPRDMP program to print the dump.

If an IPL is required, quiesce the system before doing the IPL. To allow the jobs that are currently in the system to run, you might need to use the VARY console command to reactivate one or more secondary consoles.

If an IPL is not required, use the VARY console command to reactivate the secondary consoles.
Note: There might be some system degradation because of the loss of system storage.

In both cases, restart the action message retention facility, if desired, using the CONTROL M command (the MVS/System Products only).

Problem Determination: Table I, items 2, 16, 29.

**IEE824I TASKNAME ttt FAILED, TERMINATED
[,DUMPED] STARTED TASK**

Explanation: An ABEND, program check, depression of the RESTART key, or machine check took place with STARTED TASK (taskname ttt, if available) in control. If DUMPED appears in the message text, a dump was taken to SYS1.DUMP.

System Action: The STARTED TASK is terminated immediately. A record describing the error is written to SYS1.LOGREC and a dump is attempted to SYS1.DUMP.

Operator Response: Reissue the START or MOUNT command, if one was attempted and failed.

Programmer Response: Reissue the LOGON command, if a LOGON was attempted and failed.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 28, 29.

**IEE825I SUBSYSTEM ssss DOES NOT SUPPORT THE
SUBPARAMETER**

Explanation: When the START command was entered, the subsystem specified via the SUB keyword does not support job selection. In the message text, ssss is the subsystem name.

System Action: The command is rejected.

Operator Response: Make sure the correct subsystem name was specified. If it was correct, notify the system programmer.

Programmer Response: Consult the subsystem documentation to determine if the subsystem supports job selection.

Problem Determination: Table I, items 2, 29.

IEE826I SUBSYSTEM ssss DOES NOT EXIST

Explanation: The SUB keyword specified is a syntactically correct subsystem name but the subsystem is not defined to the system. In the message text ssss is the subsystem name.

System Action: The command is rejected.

Operator Response: Verify the spelling of the subsystem name with the system installation personnel.

Problem Determination: Table I, items 2, 29.

IEE827I SUBSYSTEM ssss IS NOT ACTIVE

Explanation: The subsystem is defined to the system but has not been initialized or has not become operational. Either the subsystem had an error in system initialization, or it has not been started by the operator. In the message text ssss is the subsystem name.

System Action: The command is rejected.

Operator Response: Probable operational, or system error. Insure that the subsystem is operational prior to reentering the command.

Problem Determination: Table I, items 2, 29.

**IEE828E SOME MESSAGES NOW SENT TO
HARDCOPY ONLY**

Explanation: Because of a VARY or CONTROL V command, broadcast messages and/or informational messages with certain routing codes appear only on hard copy; they do not appear on any console. The command was one of the following:

VARY CONSOLE
VARY ONLINE
VARY OFFLINE
CONTROL V,LEVEL

System Action: Processing continues. This message is accompanied by message IEE250I to the console that issued the command; IEE250I provides information about the message loss.

Operator Response: To receive missing informational messages, issue a VARY CONSOLE command. To receive missing broadcast messages, issue a CONTROL V,LEVEL command.

**IEE830I LAST SLIP COMMAND IN IEASLPxx
IGNORED. NO END KEYWORD.**

Explanation: When processing the IEASLPxx member of SYS1.PARMLIB, the system reached the end of file before it completed processing the SLIP command. The system did not find the END keyword for the SLIP command.

System Action: The system ignores the SLIP command.

Operator Response: None.

Programmer Response: Check the IEASLPxx member of SYS1.PARMLIB that you specified on the SET SLIP=xx command, and complete the final command.

**IEE836D SLIP {ID = xxxx/COMMAND}, ERROR IN
KEYWORD keywd - err , COL nnn. ENTER 1
KEYWORD, NULL LINE, OR 'CANCEL'.**

Explanation: A SLIP command or response to message IEE726D contains an invalid SLIP keyword keywd. In the message, xxxx is the SLIP trap identifier specified in the command. If an ID was not specified, COMMAND appears in the message.

In the message, err is a description of the error and nnn is the column number of the error, with origin being the first parameter on the input line.

System Action: The system waits for the operator to reply.

Operator Response: Enter REPLY xx,keywd specifying the correct SLIP keyword. Your response should include all options for the keyword.

Enter REPLY xx,EOB to ignore the invalid parameter.

Enter REPLY xx,CANCEL to cancel the original command.

IEE837I SLIP TRAP xxxx MATCHED.

ACTION = WAIT TYPE = yyyy
 aaaaa: bbbbbbbb
 PSW: cccccccc cccccccc
 CR 3-4: dddddddd eeeeeeee
 GR 0-3: ffffffff ffffffff ffffffff ffffffff
 4-7: ffffffff ffffffff ffffffff ffffffff
 8-B: ffffffff ffffffff ffffffff ffffffff
 C-F: ffffffff ffffffff ffffffff ffffffff

ENTER U TO CONTINUE

Explanation: The system found a match for a SLIP trap that specified ACTION = WAIT. The message contains the following information:

xxxx
 The SLIP trap ID.

yyyy
 The system mode from which the SLIP was entered. The mode may be RTM1, RTM2, MEMTERM, or PER.

aaaa: bbbbbbbb
 This is additional information based on the system mode displayed in yyyy.

System Mode (yyyy)	Contents of aaaa: bbbbbbbb
RTM1	SDWA ADDR: address where address is the address of the SDWA associated with the error.
RTM2	RTM2WA ADDR: address where address is the address of the RTM2 work area associated with the error.
MEMTERM	ASCB ADDR: address where address is the address of the ASCB being MEMTERMed.
PER	PER INFO: PERcode PER-address This indicates both the type of PER event and where it occurred.

cccccc cccccccc
 This is the PSW at the time of the event. If the SDWA indicates that the register and PSW information is invalid, cccccccc cccccccc contains NOT AVAILABLE.

ddddddd eeeeeeee
 This is the content of the control registers 3 and 4. These registers contain cross memory information. If the SDWA indicates that the register and PSW information is invalid, dddddddd eeeeeeee contains NOT AVAILABLE.

fffffff ... ffffffff
 This is the content of the range of general purpose registers indicated in the message display. If the SDWA indicates that the register and PSW information is invalid, the message display contains GR 0-F: NOT AVAILABLE.

System Action: The system remains inactive.

Operator Response: First, look at the information displayed in the message. Then, check any additional system status using the alter/display frame to debug the problem for which you created

the SLIP trap. Finally, reply to the message so that the system can resume processing.

IEE838I jii {CANCELABLE - ISSUE CANCEL BEFORE FORCE|NON-CANCELABLE - ISSUE FORCE ARM}

Explanation: The operator issued a FORCE command for job jii. If CANCELABLE - ISSUE CANCEL BEFORE FORCE is displayed, the operator issued one of the following:

- A FORCE ARM command for a job that can be cancelled according to the program properties table
- A FORCE command for a job that can be cancelled, but no CANCEL command has been issued for it.

If NON-CANCELABLE - ISSUE FORCE ARM is displayed, the operator issued one of the following:

- A CANCEL command for a non-cancelable job
- A FORCE command for a job that is non-cancelable. However, no FORCE ARM command was issued for the job.

System Action: The command is not executed.

Operator Response: Issue a CANCEL or FORCE ARM command for the job. If the job is not terminated after a reasonable period of time, reissue the CANCEL or FORCE ARM command. Multiple CANCEL or FORCE ARM commands may be required to remove the job. If the job is not removed, reissue the FORCE command.

Problem Determination: Table I, items 2, 3, 4, 7d, 13, 16, 29.

IEE839I ST = {(ON,nnnnK,mmmmK)|OFF}
 AS = {ON|OFF} BR = {ON|OFF} EX = {ON|OFF}
 MT = {(ON,pppK)|OFF}

Explanation: This message gives the status of system tracing and master tracing. The system issues this message in response to a TRACE command.

The fields in the message text and the meaning of each follows:

- ST = status of the system trace
- nnnnK amount of storage allocated for the system trace table on each active processor
- mmmmK amount of storage allocated for the system trace table buffers
- AS = status of the address space tracing function
- BR = status of the branch tracing function
- EX = status of the explicit software tracing function
- MT = status of the master trace
- pppK size of the master trace table
- ON the tracing function is active
- OFF the tracing function is inactive

System Action: The system continues processing.

IEE840I

Operator Response: None.

MASTER TRACE TABLE INITIALIZATION FAILURE

Explanation: An error occurred during initialization of the master trace table. The master trace table is initialized during master scheduler initialization or TRACE command processing.

If the error occurred during TRACE command processing, it was caused by one of the following conditions:

- The size of the master trace table specified in the MT=nnnK operand exceeded the amount of storage available. In this case, message IEE839I follows this message.
- The master tracing facility failed. In this case, message IEE480I or IEE481I precedes this message, and message IEE839I can follow this message.

System Action: Master trace table initialization processing terminates.

The master trace facility might not be active. If message IEE839I follows this message, it gives the status of master tracing. Otherwise, enter a TRACE STATUS command to determine the status of master tracing.

Operator Response: Respond with one of the following:

- If the error occurred during master scheduler initialization and the master tracing facility is not active, issue the TRACE ON command, specifying the required storage size.
- If the error occurred because there was not enough storage available to accommodate the table size specified on the TRACE command, reissue the command, specifying a smaller table size.
- If the master tracing facility terminated during TRACE command processing, reissue the TRACE command, specifying the required storage size to restart the facility.

Problem Determination: Table I, items 2, 16, 29, 33.

IEE841I

jjj {NON-CANCELABLE|NON-FORCIBLE}

Explanation: If NON-CANCELABLE appears in the message text, the operator issued a CANCEL command for job jjj. The job is running, but the job is defined as non-cancelable in the program properties table.

If NON-FORCIBLE appears in the message text, the operator issued a FORCE command for job jjj. The job is running, but the address space associated with the job cannot be terminated.

System Action: The command is not executed.

Operator Response: Verify that the job name was specified correctly in the FORCE or CANCEL command. If so, the job cannot be removed by a CANCEL or FORCE command.

Problem Determination: Table I, items 2, 7a,b, 29.

IEE842I

jjj DUPLICATE NAME FOUND - REENTER COMMAND WITH 'A=' KEYWORD

Explanation: The operator issued a CANCEL or FORCE command for job jjj but there was more than one active job with the name jjj.

System Action: The command is not executed.

Operator Response: Issue the CANCEL or FORCE command specifying the A = keyword. Issue the DISPLAY JOBS,LIST command to find the ASID (address space identifier) of the address space associated with the job.

Problem Determination: Table I, items 2, 3, 4, 7d, 13, 16, 29.

IEE852I

hh.mm.ss SYS1.DUMP STATUS [id]

SYS1.DUMP DATA SETS AVAILABLE n AND FULL m
 SYS1.DUMP AVAILABLE DASD DATA SETS : nn,nn,
 nn-nn,nn,nn,nn-nn,...
 SYS1.DUMP FULL DASD DATA SETS : nn,nn,
 nn-nn,nn,nn,nn-nn,...
 SYS1.DUMP AVAILABLE TAPE UNITS : uuu,uuu,
 uuu,uuu,uuu,uuu,...
 SYS1.DUMP FULL TAPE UNITS : uuu,uuu,
 uuu,uuu,uuu,uuu,...

Explanation: The fields in the message text and the meaning of each follow:

- hh.mm.ss The time that the message is issued, in hours (hh), minutes (mm), and seconds (ss).
- id A three digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays:
 - That are written on typewriter or display consoles or
 - That are displayed in-line (not in display area) on display (CRT) consoles
- This identification number does not appear when the display is presented in a display area on a display console.
- n, m The number in decimal of available (n) and full (m) dump data sets.
- nn The suffix of SYS1.DUMP that forms the complete cataloged DASD data set name. For example, if nn=01, the data set name is SYS1.DUMP01.
- uuu The device number of a tape dump data set.

The status of all dump data sets is displayed.

System Action: Processing continues.

Operator Response: No response required. Note: The AMDPRDMP service aid and the DUMPDS command can be used to maintain a sufficient number of available dump data sets.

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IEE853I hh.mm.ss SYS1.DUMP TITLES [id]
 SYS1.DUMP DATA SETS
 AVAILABLE n AND FULL m
 AVAILABLE = nnn AND FULL = mmm

DUMPxx TITLE = dump title,
 DUMP TAKEN TIME = hd.md.sd
 DATE = mm/dd/yy

DUMPxx TITLE = dump title,
 DUMP TAKEN TIME = hd.md.sd
 DATE = mm/dd/yy
 etc.

Explanation: This message appears in response to a D D,T command. The fields in the message text and the meaning of each follow:

hh.mm.ss The time that the message is issued, in hours (hh), minutes (mm), and seconds (ss).

id A three digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays:

- That are written on typewriter or display consoles or
- That are displayed in-line (not in display area) on display (CRT) consoles

This identification number does not appear when the display is presented in a display area on a display console.

n, m The number in decimal of available (n) and full (m) dump data sets.

nnn, mmm The number in decimal of available (nnn) and full (mmm) dump data sets.

xx The suffix of SYS1.DUMP that forms the complete cataloged DASD data set name. For example, if nn = 01, the data set name is SYS1.DUMP01.

dump title The dump title read from the dump header or an error message indicating why the title could not be read.

hd.md.sd The time that the dump was taken in hours (hd), minutes (md), and seconds (sd).

mm/dd/yy The date that the dump was taken in month (mm), day (dd) and year (yy).

The titles of all the requested full dump data sets are displayed.

System Action: Processing continues.

Operator Response: None.

IEE854I hh.mm.ss SYS1.DUMP ERRDATA [id]
 SYS1.DUMP DATA SETS
 AVAILABLE n AND FULL m
 AVAILABLE = nnn AND FULL = mmm

DUMPxx TITLE = dump title,
 [DUMP TAKEN TIME = hd.md.sd DATE = mm/dd/yy]
 ERRORID = SEQyyyyy CPUzzzz ASIDaaaa [TIME = he.me.se]
 [TIME = hd.md.sd DATE = mm/dd/yy]

SYSTEM ABEND CODE = cde REASON CODE = rc or
 USER ABEND CODE = cde REASON CODE = rc
 MODULE = mmmmmmm CSECT = ccccccc
 PSW AT TIME OF ERROR = pppppppp pppppppp
 ILC = ilc INT = ccc
 TRANSLATION EXCEPTION ADDR = tea
 ABENDING PROGRAM ADDR = ssssssss RECOVERY
 ROUTINE = dddddddd
 GPR 0-3 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr
 GPR 4-7 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr
 GPR 8-11 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr
 GPR 12-15 rrrrrrrr rrrrrrrr rrrrrrrr rrrrrrrr

DUMPxx TITLE = dump title,
 [DUMP TAKEN TIME = hd.md.sd DATE = mm/dd/yy]
 ERRORID = SEQyyyyy CPUzzzz ASIDaaaa
 [TIME = hd.md.sd DATE = mm/dd/yy]

Explanation: This message appears in response to a D D command. The fields in the message text and the meaning of each follow:

hh.mm.ss The time that the message is issued, in hours (hh), minutes (mm), and seconds (ss).

id A three digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays:

- That are written on typewriter or display consoles or
- That are displayed in-line (not in display area) on display (CRT) consoles

This identification number does not appear when the display is presented in a display area on a display console.

n, m The number in decimal of available (n) and full (m) dump data sets.

nnn, mmm The number in decimal of available (nnn) and full (mmm) dump data sets.

xx The suffix of SYS1.DUMP that forms the complete cataloged DASD data set name. For example, if nn = 01, the data set name is SYS1.DUMP01.

dump title The dump title read from the dump header or an error message indicating why the title could not be read.

	why the title could not be read.
hd.md.sd	The time when the dump was taken in hours (hd), minutes (md), and seconds (sd).
mm/dd/yy	The date when the dump was taken in month (mm), day (dd), and year (yy).
yyyyy	The unique sequence number assigned to the error.
zzzz	The processor identifier of the processor on which the error occurred.
aaaa	The address space identifier of the address space where the error occurred.
he.me.se	The time associated with the ERRORID in hours (hd), minutes (md), and seconds (sd).
cde	System or user ABEND code in the SDWA (system diagnostic workarea). For user abend codes the text 'USER ABEND CODE' is used instead of 'SYSTEM ABEND CODE'.
rc	The reason code in the SDWA.
mmmmmmmm	The name of the failing load module in the SDWA.
cccccccc	The failing CSECT (control section) name supplied by the recovery routine. This name is in the SDWA.
pppppppp pppppppp	The PSW (program status word) at the time of error, as saved in the SDWA.
ilc	The interrupt length code, as saved in the SDWA.
tea	The translation exception address in the SDWA.
ccc	The interrupt code, as saved in the SDWA.
ssssssss	The address of the abending program taken from the SDWA.
ddddddd	The recovery routine name from the SDWA.
rrrrrrrr	The contents of the general purpose registers at the time of the error as they appear in the SDWA.

Error data from all requested full dump data sets is displayed.

Asterisks (**...*) replace data that is missing from the dump header.

When trying to access the header record on DASD (direct access storage device) dump data sets, several errors can occur. When one of these errors occurs, additional error message text appears with message IEE854I. Possible error message texts follow with an explanation of each:

- **NO DUMP DATA AVAILABLE FOR THE FOLLOWING EMPTY SYS1.DUMP DATA SETS: nn,...,nn-nn,...**

TITLE or ERRDATA was requested for an empty dump data set. The message lists all empty dump data sets. nn represents the data set SYS1.DUMPnn. For example, if nn=01, nn represents SYS1.DUMP01. nn-nn represents a range of SYS1.DUMP data sets. For example, if nn-nn=01-03, nn-nn represents the data sets SYS1.DUMP01, SYS1.DUMP02, and SYS1.DUMP03.

- **NO DUMP DATA AVAILABLE FOR THE FOLLOWING SYS1.DUMP DATA SETS WHICH ARE UNDEFINED TO SDUMP: nn,...,nn-nn,...**

TITLE or ERRDATA was requested for a data set that is not defined to the system as a SYS1.DUMP data set. To make the data set a SYS1.DUMP data set, it must be available at IPL or the operator must add it with the DUMPDS command. The message lists all SYS1.DUMP data sets that are not defined to SDUMP. nn represents the data set SYS1.DUMPnn. For example, if nn=01, nn represents SYS1.DUMP01. nn-nn represents a range of SYS1.DUMP data sets. For example, if nn-nn=01-03, nn-nn represents the data sets SYS1.DUMP01, SYS1.DUMP02, and SYS1.DUMP03.

- ***-.*- ERROR. ALLOCATION ERROR ON SYS1.DUMPnn - RC rc**

The system tried to allocate the data set SYS1.DUMPnn to read the header record and an allocation error occurred. rc is the allocation return code. See SPL: System Modification for a description of the return code.

- ***-.*- ERROR. OPEN ERROR ON SYS1.DUMPnn**

The system tried to open the data set SYS1.DUMPnn to read the header record. There was an error during the open.

- ***-.*- ERROR. READ ERROR ON SYS1.DUMPnn**

The system tried to read the data set header record of the data set SYS1.DUMP and an error occurred.

- ***-.*- ERROR. INVALID HEADER RECORD ON SYS1.DUMPnn.**

The system terminates the request for the data set SYS1.DUMPnn.

System Action: Processing continues.

Operator Response: None.

IEE

IEE855I DUMPDS COMMAND RESPONSE

DUMPDS COMMAND SYS1.DUMP DATA SET STATUS

SYS1.DUMP { **DASD DATA SETS**
TAPE UNIT }
 { **ADDED: nn,nn,nn-nn,...**
DELETED: uuu
CLEARED: }

SYS1.DUMP { **DASD DATA SETS**
TAPE UNIT }
 { **NOT ADDED:**
NOT DELETED:
NOT CLEARED: }

TEXT

Where TEXT is one of the following:

ALREADY DEFINED TO SDUMP: nn,nn,nn-nn, ...
 or **uuu**

Explanation: An attempt to add dump data sets failed because the data sets are already defined to SDUMP (SVC dump).

NOT DEFINED TO SDUMP: nn,nn,nn-nn,... or uuu

Explanation: An attempt to delete or clear dump data sets failed because the dump data sets are not defined to SDUMP (SVC dump).

LOCATE FAILED: (nn,rc),(nn,rc),...

Explanation: An attempt to add DASD (direct access storage device) dump data sets failed when the locate function returned a bad return code.

NOT A DASD DATA SET : nn,nn,nn-nn,...

Explanation: An attempt to add DASD dump data sets failed because the device type is not DASD.

TRACKSIZE TOO SMALL: nn,nn,nn-nn,...

Explanation: An attempt to add DASD dump data sets failed because the track size of the device is too small to hold a 4104 byte SDUMP record.

DYNAMIC ALLOCATION FAILED:

(nn,rc,err,rsn),(nn,rc,err,rsn),...

Explanation: An attempt to add DASD dump data sets failed because the dynamic allocation failed. See *MVS/XA SPL: System Macros and Facilities* for a description of dynamic allocation return codes, error codes, and reason codes.

OPEN FAILED: nn,nn,nn-nn,...

Explanation: An attempt to add or clear DASD dump data sets failed because the data sets failed to open.

READ FAILED: nn,nn,nn-nn,...

Explanation: An attempt to add DASD dump data sets failed because the data set could not be read using BSAM READ.

MULTIPLE VOLUME DATA SET NOT

ALLOWED: nn,nn,nn-nn,...

Explanation: An attempt to add DASD dump data sets failed because they were multivolume data sets, which are not allowed.

EXCEEDS 100 DUMP DATA SET LIMIT:

nn,nn,nn-nn,...

Explanation: An attempt to add dump data sets failed because the limit of 100 data sets has been reached.

IN USE BY SDUMP: nn,nn,nn-nn,...

Explanation: An attempt to delete or clear dump data sets failed because SDUMP was using the data sets.

NOT ALLOCATED: uuu

Explanation: An attempt to clear dump tape uuu failed because tape uuu was defined as a dump tape at IPL time. Such tapes cannot be modified by the DUMPDS command.

INVALID PRIMARY EXTENT SPACE:

nn,nn,nn-nn,...

Explanation: An attempt to add DASD dump data sets failed because the data set was allocated with zero primary extent space.

UNEXPECTED ERROR: nn,nn,nn-nn,...

Explanation: An attempt to add, delete, or clear a dump data set caused the command to receive a program check or abnormally terminate. An SDUMP is taken for this problem.

Definition of symbols used in the message representation:

nn last 2 digits of SYS1.DUMPnn
rc return code
err dynamic allocation error code
rsn reason code for dynamic allocation

Explanation: The dump data sets that were successfully processed are listed in the first part of the message. The second part of the message describes the dump data sets that could not be processed and gives the reasons for each failure.

System Action: Processing continues.

Operator Response: No response is necessary. You may issue the DISPLAY DUMP command to determine the status of the SYS1.DUMP data sets.

IEE856I hh.mm.ss SYS1.DUMP STATUS [id]

SYS1.DUMP DATA SETS AVAILABLE n, AND FULL m
AVAILABLE DASD DATA SET SYS1.DUMPdd
AVAILABLE TAPE DATA SET UNIT = uuu
FULL DASD DATA SET SYS1.DUMPdd ttt

Explanation: This message is in response to a DISPLAY DUMP, STATUS command. This display lists the status of each of the dump data sets for SVC DUMP. Data sets are listed as available to receive a dump or full. Data sets on tape are identified by the unit address of the tape, and are always available. Data sets on DASD are identified by their catalog name, and if a data set is full, the dump title is read and added to the display.

id control message identifier:

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area). Does not appear when the display is presented in a display area on a display console.

n,m
Count of available and full dump data sets.

dd
Suffix for "SYS1.DUMP" to form the complete cataloged DASD data set name.

uuu
Unit address of a TAPE data set.

ttt
For full data sets this text is either "DUMP TITLE=" and the dump TITLE read from the dump, or an error message explaining why the TITLE could not be read.

System Action: Processing continues.

Operator Response: No response required. Note: AMDPRDMP service aid can be used to maintain sufficient available dump data sets.

IEE857I

**hh.mm.ss DUMP OPTIONS [id
dt mode opt**

Explanation: This message is a response to a DISPLAY DUMP,OPTIONS command. This display lists the current system dump options, and identifies how they will be used. This display when used after the CHNGDUMP command will show the results of the changes.

id control message identifier:

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) does not appear when the display is presented in a display area on a display console.

dt

DUMP type:

SYSABEND
SYSMDUMP
SYSUDUMP
SDUMP

Each dump type will be listed on a separate line with its corresponding options.

mode

Mode:

ADD OPTIONS
ADD PARMLIB OPTIONS
OVERRIDE WITH
ADD NO OPTIONS
IGNORE DUMP REQUESTS

The mode describes how the system options will be applied to each dump request of this dump type. ADD PARMLIB OPTIONS is the same as ADD OPTIONS except that it also indicates that the option list is the same as at IPL time.

ADD NO OPTIONS is displayed when there are no system dump options to be added to the dump request.

IGNORE DUMP REQUESTS is displayed when the NODUMP key word was specified on a previous CHNGDUMP command. No options are listed following the last two modes.

opt

Options: List of the current dump options which will either be added to, or override the options on each dump request for the dump type.

System Action: Processing continues.

Operator Response: Compare the options displayed with those desired. Use the CHNGDUMP command to make any changes needed.

IEE858I

ONLY SYSGENED SUBSYSTEMS AVAILABLE - IEFJSSNT NOT FOUND

Explanation: Module IEFJSSNT containing a table of software subsystem names and initialization entry points could not be found in SYS1.LINKLIB or in a library concatenated to SYS1.LINKLIB via a LINKLSTxx number in SYS1.PARMLIB.

System Action: Only the subsystems specified on the SCHEDULR macro at SYSGEN will be available but they will not be initialized at this time. System initialization will proceed.

Operator Response: Report the message to the System Programmer.

Problem Determination: Table I, items 2, 7a, 7d, 13, 27, 29.

IEE859I

SUBSYSTEM xxxx NOT INITIALIZED - yyyyyyyy NOT FOUND

Explanation: The module containing the initialization entry point specified in module IEFJSSNT or specified in an IEFSSNxx member of SYS1.PARMLIB could not be found in SYS1.LINKLIB or in a library concatenated to SYS1.LINKLIB via a LNKLSTxx member of SYS1.PARMLIB. In the message text xxxx is the subsystem name and yyyyyyyy is the entry point of the subsystem initialization routine.

System Action: The subsystem will be defined to the system but not initialized. Some user jobs may consequently fail.

Operator Response: Report the message to the system programmer.

Problem Determination: Table I, items 2, 7a, 7d, 13, 27, 29.

IEE860I

TRACE MT SIZE MUST BE BETWEEN 16K AND 999K

Explanation: An invalid size was specified for the MT=nnnK operand of the TRACE command. The error was detected during initialization of the master trace table.

System Action: TRACE command processing terminates. There is no change in the status of master tracing. If master tracing is active, there is no change in the size of the existing master trace table.

Operator Response: Reissue the TRACE command. Either omit the nnnK portion of the MT operand to allow the master trace table size to default to the value specified during IPL or specify a valid table size in K bytes. The minimum allowable size is 16K bytes; the maximum size is 999K bytes.

IEE

**IEE861I DUMPDS COMMAND RESPONSE
NO DUMPDS PROCESSING REQUIRED**

Explanation: The operator issued a DUMPDS command for data sets that do not require any DUMPDS processing. This message is issued for any one of the following situations:

- The operator issued a DUMPDS ADD,DSN = ALL command to add all the cataloged dump data sets, SYS1.DUMP00 through SYS1.DUMP99, to the SDDSQ, (system dump data set queue). However, all the cataloged dump data sets are already on the dump data set queue.
- The operator issued a DUMPDS DEL,DSN = ALL command to delete all the DASD (direct access storage device) data sets on the SDDSQ. However, there are no DASD data sets on the SDDSQ.
- The operator issued a DUMPDS CLEAR,DSN = ALL command to clear all full DASD data sets on the SDDSQ. However, there are no full DASD data sets on the SDDSQ.

System Action: The command successfully terminates without modifying any of the dump data sets or the SDDSQ.

Operator Response: No response is necessary. You can issue the DISPLAY DUMP command to find the status of the SYS1.DUMP data sets.

**IEE862I DUMPDS COMMAND RESPONSE
SYSTEM NOT ACCEPTING DUMPDS
COMMANDS - FC = xx**

Explanation: The operator issued a DUMPDS command but the system cannot process dump data sets now. FC is the function code describing the problem. A list of the possible values of xx and the meaning of each follows:

xx	Meaning
01	The dumping services address space (DUMPSRV) does not exist. DUMPSRV is required for processing to continue.
02	The dumping services address space (DUMPSRV) has failed and is currently nondispatchable.
03	The dumping services address space (DUMPSRV) is in the process of terminating abnormally.
04	The SDDSQ (system dump data set queue) has sustained queue damage and cannot be modified by the DUMPDS command.
05	The dump data set processing task, IEECB926, in the DUMPSRV address space is in recovery processing or has not yet successfully completed the initialization of the dump data sets.

System Action: The command terminates without modifying any of the dump data sets or the dump data set queue.

Operator Response: Reissue the DUMPDS command. If the message persists, inform the system programmer of the situation. You can issue

the DISPLAY DUMP command to determine the status of the SYS1.DUMP data sets.

IEE908I cm CMD LENGTH EXCEEDS MAX

Explanation: In the cm command, the length of the operand field exceeds the maximum number of characters.

System Action: The system did not execute the command.

Operator Response: Enter the command again with a shorter operand field.

Problem Determination: Have available the master console sheet or the listing from a terminal in operator mode.

IEE919I K V[,USE = xx],LEVEL = (aa,bb,...),L = cc

Explanation: In response to a CONTROL V,REF command, this message gives the message level, aa, bb, etc., currently defined for console cc. The USE field appears only if console cc is a display console; xx is one of the following modes of console operation:

SD Status-display mode, used for output only.

FC Full-capability mode, used for both input and output.

MS Message-stream mode, used for output of messages other than status messages.

System Action: Processing continues.

Operator Response: If desired, issue a CONTROL V,USE = xx,LEVEL = (aa,bb,...) command to change the console operating mode or message level. See the CONTROL V command in *System Commands*.

IEE920I NO TR UPDATE AT hh.mm.ss yy.ddd

Explanation: A time interval has elapsed at hh.mm.ss signaling that an updated display be created on behalf of the TRACK command. However, I/O has not been completed for the previous TRACK display.

In the message text, hh.mm.ss indicates the time (in hours, minutes, and seconds) and yy.ddd indicates the date (in the last two digits of the year and the day of the year). If the date could not be provided when the information for the display was gathered, yy.ddd will appear as 00.000.

System Action: No updated display will be created. A new time interval will be established and another attempt will be made to create an active display when the new interval expires.

Operator Response: None. However, if this condition occurs frequently, the time interval should be increased by entering K T,UTME = nn.

IEE921I cm op REJECTED error

Explanation: When a TRACK, STOPTR, K Q, K S, or K V command was entered, the error named in the message text occurred. The error is one of the following:

DISPLAY ALREADY EXISTS

A TRACK command requested a dynamically updated status display at a console that is already displaying it. A TRACK command with

the same options used for the display is issued to a TRACK display in HOLD mode to try to update the display. Only one TRACK display can appear on a console.

Operator Response: If the TRACK display is in HOLD mode because of a CONTROL D,H command, issue a CONTROL D,U command to reactivate the TRACK display. Also, while a TRACK display is being shown, you can issue a TRACK command to change the display options when you subsequently issue a CONTROL D,U to reactivate the display.

DISPLAY AREA BUSY

A DISPLAY or TRACK command was issued that specified an area in which a display already existed.

Operator Response: Reenter the command specifying another area.

NO TRACK TO STOP

A STOPTR command specified one of the following:

- An area that did not contain a TRACK display.
- A console that did not contain a TRACK display.

Operator Response: If a TRACK display is active, supply the L = cca operand on the PT command and reissue the command.

NEEDS DISPLAY AREA

One of the following occurred:

- A TRACK command was issued to a console without any areas defined.
- A DISPLAY command was issued to a console in STATUS DISPLAY mode without any areas defined.
- A TRACK command was issued with L = z, an in-line operand.

Operator Response: For a TRACK or DISPLAY command, first issue the CONTROL A,ll,ll command to define areas. For a DISPLAY command, you may instead issue a CONTROL V command to change the console mode to message stream.

DEVICE NOT SUPPORTED

A CONTROL V,USE was entered for a nondisplay console.

Operator Response: None.

NO HARDCOPY

A CONTROL Q command was issued to reroute messages to the hard-copy device, but the system does not have a hard-copy device.

Operator Response: Use a VARY command to assign the hard-copy function to a device, and reissue the CONTROL Q command.

FOR CRT ONLY

The CONTROL S command was issued to a paper console but specified an operand that applied to display consoles only.

Operator Response: Remove the incorrect operand, and reissue the command.

MESSAGE LOSS DETECTED

A CONTROL V,LEVEL command would create an environment where broadcast messages and/or messages with certain routing codes may not be displayed on any console.

Operator Response: If the resulting message loss is not desired, do the following:

- Issue DISPLAY C,HONLY to determine if a message loss occurred prior to issuing CONTROL V.
- If messages are currently being sent to hard copy only, then:
 - Issue a DISPLAY CONSOLES command to determine where messages are currently being assigned.
 - Issue a VARY CONSOLE command to respecify the routing codes.
 - Issue a CONTROL V,LEVEL command to allow the console to accept broadcast messages.

If the resulting message loss is desired, add the UNCOND operand to your CONTROL V,LEVEL command. For example, issue CONTROL V,LEVEL = (I,R,NB,UNCOND).

System Action: The system rejected the TRACK, STOPTR, CONTROL Q, CONTROL S, or CONTROL V command.

Problem Determination: Table I, items 2, 29.

IEE922I K T,UTME = nnn,L = cc

Explanation: This message is issued in response to a K T,REF or K T command issued on a non-CRT console. The value specified by nnn is the number of seconds in the time interval (10 - 999) for updating of dynamic display on console cc. It represents the CONTROL (K) command that set the time interval.

cc is the identifier of the console specified in the K T,REF command issued at the console receiving this message.

System Action: Processing continues.

Operator Response: Change the time interval, if desired.

IEE923I K S,[DEL = {Y|N|R|RD}],SEG = nn, CON = {Y|N},RNUM = nn,RTIME = nnn, MFORM = {M|J|T|S} [,L = cc]

Explanation: The system displays this message in response to either:

- a CONTROL S,REF or CONTROL S command from a non-display console.
- a K S command on a non-display console. The message represents the CONTROL (K) command that set the most recent console specifications.

The fields in the message text are:

DEL =

- Y Indicates that automatic message deletion is in effect.

IEE

- N Indicates that automatic message deletion is not in effect.
- R Indicates that roll mode is in effect.
- RD Indicates that roll deletion mode of message deletion is in effect.

Valid for a full-capability display console only.

SEG = nn

nn is the size of the message segment to be deleted by the CONTROL E SEG command. Valid for a full-capability display console only.

CON =

- Y Indicates that conversational message deletion is in effect.
- N Indicates that non-conversational message deletion is in effect.

Valid for a full-capability display console only.

RNUM = nn

nn is the number of message lines to be included in a message roll. Valid for a full-capability display console only.

RTME = nn

nn is the interval, in seconds, between message rolls. Valid for a full-capability display console only.

MFORM =

- M Indicates that only the message text is to be displayed.
- J Indicates that the jobname or job ID of the issuer is to be displayed along with the message text.
- T Indicates that the time stamp and jobname/job ID are to be displayed along with the message text.
- S Indicates that the name of the originating system is to be displayed along with the message text.

L = cc

Gives the ID of the console whose specifications are displayed. This field appears if another console was specified in the routing operand of the CONTROL command.

System Action: Processing continues.

Operator Response: Change the console's specifications, if desired.

IEE924I

INVALID AREA DEFINITION error

Explanation: The operator entered a CONTROL A command to define or redefine the screen areas or a CONTROL A,NONE command. The command contained an error, which is described in the message text by one of the following:

SCREEN SIZE EXCEEDED

The sum of the lengths of the areas defined exceeded the size of the message area on the console for which the definition was requested.

DISPLAY IN OR ABOVE AREA

The error was one of the following:

- The requested redefinition affects an area

with a display in or above it. Any area definition requested while a display is on the screen may differ from the previous definition only in regard to display areas above the area in use.

- The operator attempted to clear the screen of all area definitions via CONTROL A,NONE and one of the areas contained a display.

AREA TOO SMALL

An attempt was made to define a display area of less than four lines.

TOO MANY AREAS DEFINED

An attempt was made to define more than 11 display areas on a console; 11 is the maximum number.

System Action: The system does not execute the command.

Operator Response: Correct the command, and reissue it if desired. If the problem recurs, save the hard-copy log and contact your appropriate support personnel.

If the error occurred for a CONTROL A,NONE command, erase the display(s), then reissue the command.

IEE925I

K OPERAND op {FOR CRT ONLY|FOR NON CRT ONLY}

Explanation: K, TRACK, or STOPTR command operand op applies only to CRT consoles. If entered from a non-CRT, it must be routed to a CRT console. A MSGRT K was issued from a CRT device.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it if desired, D C,K may be entered for an explanation of the CONTROL command. The TRACK and STOPTR commands are valid only to CRT devices. The only way to direct a K command from one CRT device to another is to use the L = cca operand on the K command.

Problem Determination: Table I, items 2, 29.

IEE926I

{L = cca OPERAND INVALID|R = cc} error condition

Explanation: One of the following error conditions occurred as a result of using the L = cca or R = cc operand on the CONTROL (K) command (cca or cc in the message text is replaced with the invalid operands).

- cca NOT AN AREA - The area specified by the L = cca operand 1) was invalid, 2) does not exist, 3) was other than 'Z' for a non-CRT console, or 4) was 'Z' for a status display console.
- cc NOT A CONSOLE - The console ID specified by the L = cca or R = cc operand is not an existing or active console.
- cc FULL CAPABILITY - The console ID specified is not the requestor's own console, a message stream (MS) console, or status display (SD) console. No routing is allowed to a full capability (FC) console.

- **ON THIS COMMAND** - The L= operand was specified on one of the following commands:

K S	K D K C,E
K E,N	K D,N K C,I
K E	K D,N,HOLD K C,A
K E,SEG	K D,PFK
K E,PFK	K N,PFK

- **cc OUTPUT ONLY** - 1) An attempt was made to make a console full capability via the K V,USE=FC command. The console was an output only device. 2) An attempt was made to define areas via K A,ll command on a console which is in message stream mode.
- **DYNAMIC DISPLAY AREA** - The area specified by the L=cca operand contains a dynamic display.
- **cc SUBSYSTEM CONSOLE** - An attempt was made to route to a console under the control of the job entry subsystem.
- **cc STATUS DISPLAY** - An attempt was made to reroute messages to a status display console using the R=cc operand, or from a status display console using the L=cc operand.
- **cc HARDCOPY CONSOLE** - An attempt was made, using the L=cc operand, to reroute the message queue from a console designated as the hardcopy device.

System Action: The command is not executed.

Operator Response:

- **cca NOT AN AREA** - Change the area specification and reenter the command. If the problem recurs, a console switch may have taken place. If one has, reenter the command specifying the valid area for the alternate console.
- **cc NOT A CONSOLE** - Change the console ID specification and reenter the command. If the problem recurs, a console switch may have taken place. If one has, reenter the command specifying the alternate console's id.
- **cc FULL CAPABILITY** - Specify your own console or a message stream or status display console and reenter the command.
- **DYNAMIC DISPLAY AREA** - Specify another area and reenter the command.
- **ON THIS COMMAND** - Reenter the command without the L=cca command.
- **cc OUTPUT ONLY** - 1) Unless the system is resyngened, this device will not be able to serve as a full capability console, 2) The console may be altered to status display mode via the K V,USE=SD and the K A,ll command can be reentered.
- **cc SUBSYSTEM CONSOLE** - Change the console ID specification and reenter the command.

- **cc STATUS DISPLAY** - Change the console ID specification and reissue the command.
- **cc HARDCOPY CONSOLE** - If you want to reroute the message queue from a console designated as the hardcopy device, use the VARY command to assign the hardcopy function to a different device or to the system log (SYSLOG) and reissue the CONTROL Q command. Otherwise, change the console ID specification and reissue the CONTROL Q command.

Problem Determination: Table I, items 2, 29.

IEE927I

CONTROL REQUEST AMBIGUOUS-text

Explanation: The system cannot execute the CONTROL command as entered. You need to supply more information or correct the command, as indicated in the message text:

SPECIFY DISPLAY ID

A CONTROL C,D command was entered without an ID operand. To cancel a display with this command, the ID of the display to be terminated must be specified: CONTROL C,D,ID. The ID is at the extreme right-hand side of the control line of the display.

SPECIFY L OPERAND

A CONTROL command for an out-of-line display, such as a frame or erase command, was issued without the routing location parameter, L=cca, and more than one display exists on the screen. The display area ID of must be specified in an L operand.

SPECIFY OPERAND

A CONTROL command was issued that required additional operands or data.

DUPLICATE OPERAND

A keyword was specified more than once on a CONTROL V command.

System Action: The system does not execute the command.

Operator Response: Correct the command, as indicated in the message text, and reissue it.

Problem Determination: Table I, items 2, 11, 29.

IEE928I

DISPLAY AREA ID's FOR CONSOLE cc ARE id, id,...

Explanation: This message is issued in response to 1) the operator defining areas for console cc via K A,ll,ll, 2) the operator issuing K A,NONE to delete the screen areas on console cc, 3) the operator issuing K A or K A,REF to discover the areas presently defined to console cc, along with message IEE929I. The display area identifiers are listed in the order in which the areas were defined, from the bottom of the screen to the top.

System Action: Processing continues.

Operator Response: The operator may route displays to the areas defined by using the display area id, or for K A,NONE redefine some areas.

IEE929I - IEE934I

IEE929I K A, {NONE,L=cc}length,...,L=cc}

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a K A,REF command for console cc. It represents the CONTROL (K) command which defined the display areas for the console whose address is specified by cc.

System Action: Processing continues.

Operator Response: Change the display area definition via K A,II,II... command, if desired.

IEE930I MR [(D=[display op],[display op])],...

$$(L = \begin{Bmatrix} a \\ cc \\ cca \\ cc* \end{Bmatrix}) || (TR = A, L = \begin{Bmatrix} a \\ cc \\ cca \\ cc* \end{Bmatrix}) || (K, L = \begin{Bmatrix} a \\ cc \\ cca \\ cc* \end{Bmatrix}) ||$$

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a MR REF command. It represents the MSGRT (MR) command which specified the routing defaults currently in effect. If NONE appears, no routing defaults have been established. If no area id (a) was specified, an asterisk is displayed in the output.

System Action: Processing continues.

Operator Response: If desired, change the routing defaults with the MR command.

IEE931I cm op INSUFFICIENT STORAGE FOR COMMAND

Explanation: While attempting to fulfill the request specified by the cm, op command, a GETMAIN was issued requesting storage to build a control block and/or work area. The requested storage was not available. This condition may occur during definition of display areas or when routing to a console other than the requesting console.

System Action: The command cm op was not executed.

Operator Response: Reenter the command at a later time.

Problem Determination: Table I, items 2, 29.

IEE932I nnn

Explanation: A multiple line WTO macro instruction was issued with descriptor code 9 and no control line text was supplied. The number, nnn is used with the CONTROL (K) command to cancel the display.

System Action: SVC 35 has supplied this message as a control line. The number, nnn, is the display identification number.

Operator Response: None.

IEE933I DCMLIB OPEN FAILED - CODE xx - DEFAULT PFK DEFINITIONS USED

Explanation: When attempting to open the display control module library SYS1.DCMLIB in secondary storage, one of the following occurred:

- The system was unable to locate the library.
- The system was unable to open the library.
- The volume containing the library was off-line during IPL.

xx indicates why SYS1.DCMLIB could not be opened. The codes and their meanings follow:

- | xx | Meaning |
|----|--|
| 01 | SYS1.DCMLIB could not be found in the system catalog. |
| 02 | The volume containing SYS1.DCMLIB is not mounted. |
| 03 | SYS1.DCMLIB is not on the volume that the catalog indicates. |
| 04 | An I/O error occurred while opening the data set. |

System Action: The system provides a default set of PFKs (program function keys). Permanent PFK definitions are unavailable for console operation.

Operator Response: If the system default definitions are unsatisfactory, define each PFK on each console for the current IPL. The new definitions are effective for the current IPL only. Report this problem to the programmer responsible for the system.

Problem Determination: Table I, items 2 and 29.

IEE934I PFK UPDATE FAILED FOR CONSOLE cc - CODE xx
[- DEFAULTS IN USE]

Explanation: An error occurred on console cc. The system attempted to do one of the following:

- Read the permanent PFK (program function key) definition for the console while initializing the console. The system was attempting to read from the SYS1.DCMLIB data set.
- Write a new PFK definition for the console after the operator issued a CONTROL N,PFK command. The system was attempting to write into the SYS1.DCMLIB data set.

The code xx identifies the cause:

- | xx | Meaning |
|----|---|
| 01 | Virtual storage is unavailable for the PFK definitions. |
| 02 | SYS1.DCMLIB is not open. The system issued message IEE933I at IPL. Message IEE933I explains why the data set is not open. |
| 03 | The PFK definitions associated with console cc could not be found in SYS1.DCMLIB. |
| 04 | The system was initializing console cc. An I/O error occurred when the system attempted to read the PFK definitions for console cc. |
| 05 | An I/O error occurred while the system was attempting to write a new PFK definition to SYS1.DCMLIB for console cc. |
| 06 | A system error occurred while initializing the PFKs. |

If DEFAULTS IN USE does not appear in the message text, the default PFK definitions could not be initialized.

System Action: If an error occurs while the system is trying to read the PFK definitions from SYS1.DCMLIB during console initialization, a

default set of PFK definitions is provided. The permanent PFK definitions are unavailable for console operation until console cc is removed from console status and reinitialized. If a copy of the PFK definitions is in the COMM TASK private area at the time of a write error, the PFKs on the device are usable. However, further changes in the PFK definitions are not written to SYS1.DCMLIB. Therefore, the PFK definitions will not carry over to subsequent IPLs.

If DEFAULTS IN USE does not appear in the message text, all attempts to use or define the PFKs for console cc are rejected.

Operator Response: If an error occurs on a read from SYS1.DCMLIB during initialization and the PFK member of SYS1.DCMLIB cannot be repaired, define each PFK on the console for the current IPL. If an error occurs during a PFK update, the new definition is effective only for the current IPL. Report this problem to the programmer responsible for the system.

If the member of SYS1.DCMLIB containing the PFK definitions is repaired following an error, it can be restored to use by using the VARY command to remove the console from console state and then restoring it to console state.

Problem Determination: Table I, items 2 and 29.

IEE935I CONSOLE id UNUSABLE, {error}

Explanation: During IPL or in response to a command, multiple console support (MCS) cannot make a console, id in the message, active because of the error indicated in the message text:

DEVICE TYPE 'xx' NOT SUPPORTED

The specified device type is not supported. xx is the internal device-type code; it was not found in the console support table. This is probably a software error.

SCREEN SIZE NOT SUPPORTED:rrrXccc MODE:yy

The system does not support the screen size for the specified device. rrr is the number of rows and ccc is the number of columns on the screen of the device. yy is the device mode. Possible values are:

- 01 Device supports the 3270 extended data stream.
- 02 Device does not support the 3270 extended data stream.

System Action: The device cannot be used as a console. The system switches from this unusable console to its alternate console.

Operator Response: If the device is a 3290 Information Panel that has had its logical screen size modified, change the logical screen size to one of the values supported for operator consoles. See *System Commands* for a list of supported screen sizes. See *IBM 3290 Information Panel Description and Reference* to determine how to change the screen sizes. Notify the system programmer.

Problem Determination: Table I, items 2, 17a, 17b, 29.

IEE936I CONSOLE id INITIALIZATION ERROR - text

Explanation: During the initialization of console id, the system encountered an error. text may contain one of the following:

RC: rsn - 3277-2 ASSUMED

The device did not respond properly to a query so that MCS can determine the device's type, so MCS assumes that the device is a 3277. When the system issues this portion of the message it also includes an associated reason code rsn, which may be one of the following:

Reason

Code	Explanation
01	An I/O error occurred on the read partition query.
02	An I/O error occurred on a read modified while the system was trying to obtain the result of the read partition query.
03	The result of the read partition query contained a bad attention identifier (AID).
04	The usable-area structured field in the response to the read partition query could not be found.

System Action: MCS treats the console as if it were a 3277 model 2.

Operator Response: The console is operational but cannot be used fully. Notify your system programmer.

Problem Determination: Table I, items 2, 17a, 17b and 29.

RNUM(value) APPLIED

MCS uses the default RNUM value for the console.

SEG(value) APPLIED

MCS uses the default SEG value for the console.

AREA(value) APPLIED

MCS uses the default AREA value for the console.

System Action: MCS uses the appropriate default value value for either RNUM, SEG, or AREA.

Operator Response: If the default RNUM, SEG or AREA value is not acceptable, you can change them using either a CONTROL S or CONTROL A command.

Programmer Response: Determine whether the incorrect specification for RNUM, SEG or AREA originated in CONSOLxx. If it did, then correct the error.

Problem Determination: Table I, item 26c.

IEE944I SYNTAX ERROR IN OR FOLLOWING THE TEXT BEGINNING 'text' IN input INPUT

Explanation: The input to the SMF parameter checking routine contains a syntax error in one of the parameters. The input is one of the following:

PARMLIB - the SMF member of SYS1.PARMLIB specified for this IPL or the SMF member of

- SYS1.PARMLIB specified in a SET SMF command
- DEFAULT - the SMF-supplied default values for the SMF parameters
- REPLY - the text of the reply to message IEE357A
- SYSIN - input parameters for the SMF dump program

The message gives the location of the error in the input text.

System Action: SMF parameter checking ignores the parameter in error and continues processing. If required parameters are missing after all the available parameters are checked, the system uses the default values for the remainder of this IPL or for this execution of the SMF dump program. For all input except SYSIN, the system issues message IEE357A, which allows the parameters to be changed.

Operator Response: If message IEE357A is issued, respond as required to the message.

IEE945I UNRECOGNIZABLE OPTION/SUBOPTION 'text' IN input INPUT

Explanation: The input to the SMF parameter checking routine contains an unrecognizable parameter or subparameter. The input is one of the following:

- PARMLIB - the SMF member of SYS1.PARMLIB specified for this IPL or the SMF member of SYS1.PARMLIB specified in a SET SMF command
- DEFAULT - the SMF-supplied default values for the SMF parameters
- REPLY - the text of the reply to message IEE357A
- SYSIN - input parameters for the SMF dump program

The message gives the location of the error in the input text.

System Action: SMF parameter checking ignores the parameter and continues processing. If required parameters are missing after all the available parameters are checked, the system uses the default values for the remainder of this IPL or for this execution of the SMF dump program. For all input except SYSIN, the system issues message IEE357A, which allows the parameters to be changed.

Operator Response: If message IEE357A is issued, respond as required to the message.

IEE946I UNEXPECTED END OF TEXT IN input INPUT

Explanation: The input to the SMF parameter checking routine ended unexpectedly. The input is one of the following:

- PARMLIB - the SMF member of SYS1.PARMLIB specified for this IPL or the SMF member of SYS1.PARMLIB specified in a SET SMF command

- DEFAULT - the SMF-supplied default values for the SMF parameters
- REPLY - the text of the reply to message IEE357A
- SYSIN - input parameters for the SMF dump program

System Action: SMF processing continues. If required parameters are missing after all the available parameters are checked, the system uses the default values for the remainder of this IPL or for this execution of the SMF dump program. For all input except SYSIN, the system issues message IEE357A, which allows the parameters to be changed.

Operator Response: If message IEE357A is issued, respond as required to the message.

IEE947I 'text' SKIPPED DUE TO PREVIOUS ERROR

Explanation: The SMF parameter checking routine did not check the input text shown in the message because of an error described in a previous message.

System Action: SMF parameter checking continues. If required parameters are missing after all the available parameters are checked, the system uses the default values for the remainder of this IPL or for this execution of the SMF dump program. For all input except SYSIN, the system issues message IEE357A, which allows the parameters to be changed.

Operator Response: If message IEE357A is issued, respond as required to the message.

IEE948E INVALID keywd VALUE 'val' IN input INPUT

Explanation: During SMF initialization, the SMF parameter checking routine detected an invalid value 'val' in the SMFPRMxx member of SYS1.PARMLIB.

System Action: The SMF parameter checking routine ignores the erroneous value and continues processing. If keywd is a required parameter and is missing after all available parameters are checked, SMF uses a default value for it for the remainder of this IPL.

Operator Response: Notify the system programmer.

Programmer Response: If the default parameter value is acceptable, no action is necessary. Otherwise, change the value using the SET SMF or SETSMF command. Also, place the corrected value in the SMFPRMxx member of SYS1.PARMLIB.

Note: If keywd is SID, the default value for SID will be used. This default can be changed only by re-IPL.

IEE948I INVALID keywd VALUE 'val' IN input INPUT

Explanation: During processing of SMF parameters, the SMF parameter checking routine detected an invalid value 'val' for the indicated keyword in the input. input in the message is one of the following:

- PARMLIB**
The SMFPRMxx member of SYS1.PARMLIB. The member was specified at IPL time or in a SET SMF command.

DEFAULT

The SMF-supplied default value for the parameter.

REPLY

The reply to message IEE357A.

SYSIN

The input parameters for the SMF dump program.

System Action: The SMF parameter checking routine ignores the erroneous value and continues processing. If keywd is a required parameter and is missing after all available parameters are checked, SMF uses a default value for it for the remainder of this IPL or for this execution of the SMF dump program.

Operator Response: Notify the system programmer.

Programmer Response: If the default parameter value is acceptable, no action is necessary. Otherwise, change the value using the SET SMF or SETSMF command. Also, place the corrected value in the SMFPRMxx member of SYS1.PARMLIB.

Note: If keywd is SID, the default value for SID will be used. This default can be changed only by re-IPL.

IEE949I hh.mm.ss SMF DATA SETS [id]

NAME	VOLSER	SIZE(BLKS)	%FULL	STATUS
P-name	volser	size(blks)	%full	status
S-name				

Explanation: This message contains the status of all data sets that are being used to record SMF data. It is displayed during IPL, if requested in the current SMF member of SYS1.PARMLIB, or in response to a SET SMF or a DISPLAY SMF command.

The header line contains the following information:

hh.mm.ss

The time in hours (hh), minutes (mm), and seconds (ss). The value is 00.00.00 if the TOD clock is not working when the information is gathered for the display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command to cancel status displays written on typewriter or printer consoles or displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

The message text contains the following information for each SMF data set:

NAME

The name of the SMF recording data set. If the name is preceded by P, the data set is the primary SMF data set. If the name is preceded by S, the data set is a secondary SMF data set.

VOLSER

The volume serial number of the volume containing the SMF data set.

SIZE(BLKS)

The size of the data set, in the number of 4K-byte control intervals.

%FULL

The percentage of the data set that is full.

STATUS

The data set status as follows:

ACTIVE	The data set is now being used to record SMF data.
ALTERNATE	The data set is available for use to record SMF data.
DUMP REQUIRED	The data set must be dumped before it can be used to record additional SMF data.

System Action: SMF processing continues.

Operator Response: None.

IEE950I SMF SYS1.MANx DATA SET CANNOT BE {ALLOCATED|OPENED} RETURN CODE =rc ERROR CODE =ec [INFO. CODE =ic]

Explanation: SMF processing was unable to allocate or open SMF recording data set SYS1.MANx.

If allocation failed, the return code, error code, and information code from allocation processing are included in the message. See *SPL: System Modifications* for the explanation of these codes.

If open processing failed, the return code and error code from open processing are included in the message. See *VSAM Administration: Macro Instruction Reference* for the explanation of these codes. Message IEC161I precedes this message.

System Action: SMF processing continues but ignores the SYS1.MANx data set. If other SMF recording data sets are available, recording continues and message IEE360I is issued. Otherwise, no SMF recording is done.

Operator Response: None.

Programmer Response: See *SPL: System Modifications* for the appropriate response to the codes from allocation processing.

See *VSAM Administration: Macro Instruction Reference* for the appropriate response to the codes issued by open processing and the Data Management section of this manual for the explanation of message IEC161I.

Problem Determination: Table I, items 2, 34b.

IEE951I DSORG OF SYS1.MANx DATA SET IS NOT VSAM. DATA SET CANNOT BE USED.

Explanation: SMF initialization or SET SMF command processing found that recording data set SYS1.MANx (specified in the DSNNAME parameter in the current SMF member of SYS1.PARMLIB or in the reply to message IEE357A) is not a VSAM data set. All SMF recording data sets must be VSAM data sets.

System Action: SMF initialization or SET SMF command processing continues. If at least one valid SMF recording data set is available, recording continues and message IEE360I is issued. Otherwise, no SMF recording is done.

IEE

Operator Response: None.

Programmer Response: Respond with one of the following:

- Recreate the SYS1.MANx data set. See *System Management Facilities (SMF)* for information about creating SMF data sets.
- Modify the DSNNAME parameter in the current SMF member of SYS1.PARMLIB to include only VSAM data sets.

Problem Determination: Table I, items 2, 34b.

IEE952I ERROR DETECTED IN USER EXIT exitname. EXIT BYPASSED.

Explanation: SMF initialization or SET SMF command processing could not locate user exit routine exitname in the active link pack area queue or the link pack area directory.

System Action: SMF processing continues but user exit routine exitname is bypassed.

Operator Response: None.

Programmer Response: Determine if the routine is properly link edited into SYS1.LPALIB. If the module has been replaced since an MVS/System Product was installed, check the linkage editor output for the most recent change. If the correct version of the module is in SYS1.LPALIB, restart the system with a cold start (CLPA) to make the module available to the system.

If the module has not been replaced since an MVS/System Product was installed, check the output from the install process to be sure the module was correctly installed.

Problem Determination: Table I, items 2, 7a, 7d, 25c.

IEE953I INVALID CONTROL INTERVAL SIZE IN DATA SET SYS1.MANx

Explanation: SMF initialization or SET SMF command processing found that the control interval size for SMF data set SYS1.MANx is not 4096.

System Action: SMF initialization or SET SMF command processing continues but ignores the SYS1.MANx data set. If at least one valid SMF recording data set is available, recording continues. Otherwise, no SMF recording is done.

Operator Response: None.

Programmer Response: Recreate the SYS1.MANx data set using the access method services DEFINE utility and specify CONTROLINTERVALSIZE(4096). See *System Management Facilities (SMF)* for information about creating SMF data sets.

Problem Determination: Table I, items 2, 34b.

IEE954I BUFNUM VALUE HAS BEEN CHANGED TO xx

Explanation: SMF initialization or SET SMF command processing found that the maximum amount of SMF buffer space allowed in the system by the current SMF member of SYS1.PARMLIB is larger than the available space in one of the SMF recording data sets used for this IPL. The maximum number of buffers has been adjusted to xx, which corresponds to the size of the smallest recording data set. The change affects only this IPL.

System Action: SMF initialization or SET SMF command processing continues using the adjusted maximum number of buffers.

Operator Response: None.

Programmer Response: To check the size of all SMF data sets, use the access method services LISTCAT utility. The size is shown under the heading HI-ALLOC-RBA in the utility output. Compare this value to the product of 4096 times max, where max is the maximum number of buffers specified in the current SMF member of SYS1.PARMLIB.

If the buffer size is larger than a particular data set, do one of the following:

- Recreate the data set using the access method services DEFINE utility and specify a larger size. See *System Management Facilities (SMF)* for information about creating SMF data sets.
- Reduce the maximum number of allowable SMF buffers in the BUFNUM parameter of the current SMF member of SYS1.PARMLIB.

IEE955I SPECIFY IPL REASON

Explanation: SMF issues this message during IPL to request that the master console operator supply information about the current IPL. Message IEE956A follows this message allowing the operator to respond.

System Action: The IPL continues and message IEE956A is issued.

Operator Response: Reply to message IEE956A.

IEE956A REPLY - FTIME = HH.MM.SS, NAME = OPERATOR, REASON = (IPL REASON) OR U

Explanation: SMF issues this message during IPL to allow the master console operator to supply the following information about the current IPL:

- The time the system became inactive
- The master console operator's name
- The reason for the IPL

Message IEE955I or IEE957I precedes this message.

System Action: The SMF prompt routine waits for the operator to reply. When the reply is received, SMF generates a record (type 90) containing the information in the reply and continues with the IPL.

Operator Response: Reply with one of the following:

1. Enter the following parameters:
 - FTIME = hh.mm.ss, where hh.mm.ss is the time the system became inactive in the

format hours (hh), minutes (mm), and seconds (ss)

- NAME = name, where name is the operator's name (up to 20 characters in length)
- REASON = (text), where text is the reason for the IPL (up to 65 characters in length)

Use the standard replies defined for your installation, if available.

2. Enter U to continue processing.

IEE957I SYNTAX ERROR IN IPL REASON REPLY - RESPECIFY

Explanation: The reply to the preceding IEE956A message contained an invalid key word or value.

System Action: The SMF prompt routine reissues message IEE956A and waits for the operator to reply. When the reply is received, SMF generates a record (type 90) containing the information in the reply and continues with the IPL.

Operator Response: Enter the correct reply to message IEE956A.

IEE958I MAXIMUM NUMBER OF SUBSYSTEMS EXCEEDED

**SUBSYS name IGNORED
SET SMF TERMINATED. OLD OPTIONS
REMAIN IN EFFECT**

Explanation: One of the following occurred:

- During IPL, SMF initialization processing found that more than four subsystem name parameters were specified in the current SMF member of SYS.PARMLIB. The additional subsystem name parameters are ignored. The second line of the message appears for each rejected parameter.
- SET SMF command processing found that the total of the input subsystem name parameters and the subsystem name parameters that already exist in the SST (subsystem storage table) for this IPL is greater than four. The command is rejected.

Note: If the SST already contains four subsystem parameters, you can use the SET SMF command to change the subparameters on an existing subsystem, but you cannot replace an existing subsystem name with a new one. To do this, you must re-IPL the system.

System Action: If the message was issued during IPL, SMF initialization processing ignores the subsystem names specified in the message.

If the message was issued in response to a SET SMF command, processing terminates and the old SMF options remain in effect.

Operator Response: If you want to replace an existing subsystem name with a new one, re-IPL the system using an SMF member of SYS1.PARMLIB that contains the correct subsystem names.

Problem Determination: Table I, item 2.

IEE959I SYSTEM ERROR DURING SMF PROCESSING

Explanation: The SMF message processing routine, IEEMB824, was called to process a message intended for a data set; however, no DCB address for the data set was passed to the message processing routine, or the DCB for the data set was closed.

System Action: Processing continues. The message that was being processed is lost unless it is a message that also appears on the operator console.

Operator Response: Notify the system programmer.

Programmer Response: Contact your programming support personnel.

Problem Determination: Table I, items 2, 7a, 7d, 29.

IEE960I SYS1.MANx WILL NOT BE USED. DATA SET TOO SMALL.

Explanation: SMF initialization or SMF SET command processing found that recording data set SYS1.MANx is too small to hold the largest possible SMF record (32K) and the control information that is required to segment the record.

System Action: SMF initialization or SET SMF command processing continues but ignores the SYS1.MANx data set. If at least one valid SMF recording data set is available, recording continues and message IEE360I is issued. Otherwise, no SMF recording is done.

Operator Response: None.

Programmer Response: Recreate the SYS1.MANx data set using the access method services DEFINE utility and specifying a larger size. See *System Management Facilities (SMF)* for information about creating SMF data sets. Use the access method services LISTCAT utility to check the size of all SMF recording data sets. A data set is large enough if the LISTCAT output shows a HI-ALLOC-RBA value of at least 36863 for the data set. Recreate any data set that is too small.

Problem Determination: Table I, items 2, 34b.

IEE961I SMF INITIALIZATION FAILED

Explanation: SMF initialization processing encountered an error.

System Action: SMF processing schedules an SVC dump and terminates. IPL processing continues without SMF recording.

Operator Response: If SMF recording is essential, re-IPL the system.

Programmer Response: Examine the SVC dump and respond appropriately.

Problem Determination: Table I, items 2, 7a, 7d, 29, 33.

IEE962E SMF TERMINATED

Explanation: SMF processing terminated abnormally after encountering an error. Either a retry was not possible or was unsuccessful. The error is described in the preceding messages.

System Action: SMF processing terminates and an SVC dump is scheduled. System processing continues without SMF recording.

IEE

Operator Response: Notify the system programmer. If SMF recording is essential. You can issue a SET SMF to restart SMF. Otherwise, delete this message from the console screen.

Programmer Response: Examine the dump and respond to the preceding error messages.

Problem Determination: Table I, items 2, 16, and 29.

IEE962I SMF TERMINATED

Explanation: A SET SMF or DISPLAY SMF command was issued but SMF processing had previously terminated because of an error. (See the preceding SMF messages and the SVC dump for the cause of the error.)

System Action: Command processing terminates.

Operator Response: None.

IEE963I SMF RECOVERY ATTEMPTING RETRY

Explanation: SMF processing encountered an error and is attempting to continue processing.

System Action: SMF processing schedules an SVC dump and attempts to continue processing.

Operator Response: None.

Programmer Response: Examine the SVC dump and respond appropriately.

Problem Determination: Table I, items 2, 7a, 7d, 29, 33.

IEE964I SET SMF COMMAND ABENDED. {OLD OPTIONS REMAIN IN EFFECT|NEW OPTIONS IN EFFECT| OPTIONS IN EFFECT UNDETERMINABLE}

Explanation: SET SMF command processing terminated abnormally. If the command processor terminated before updating the SMF control table that contains the options for this IPL, the old options remain in effect for the remainder of the IPL.

If the command processor terminated after updating the control table, the new options specified in the SET command are in effect for the remainder of the IPL.

If the command processor terminated while updating the control table, the options in effect for this IPL cannot be determined.

Note: The DISPLAY command cannot be used to determine which options are in effect.

System Action: SET SMF command processing terminates. SMF processing continues, using whatever options are present in the control table when SET command processing terminated. An SVC dump is scheduled.

Operator Response: If the options in effect cannot be determined and it is important that the options in the new SMF member of SYS1.PARMLIB are implemented before further system processing takes place, schedule a re-IPL.

Programmer Response: Examine the SVC dump and take the appropriate action. If necessary, contact your programming support personnel.

Problem Determination: Table I, items 2, 7a, 7d, 29, 33.

IEE965I SET SMF COMMAND INOPERATIVE FOR REMAINDER OF IPL.

Explanation: SET SMF command processing has abnormally terminated twice during this IPL and is now inoperative.

System Action: SET SMF command processing is made inoperative for the remainder of this IPL.

Locate the preceding SET SMF error message and notify the system programmer.

Programmer Response: If it is necessary to use the SET SMF command, be sure the problem described in the preceding error message is resolved and re-IPL the system.

Problem Determination: Table I, items 2, 7a, 7d, 29.

IEE966I SYS1.MANx IS BEING FORMATTED.

Explanation: SMF initialization or SET SMF command processing found that SMF recording data set SYS1.MANx has not been formatted. Formatting is now taking place.

Note: To avoid having to reformat the data set during IPL or SET SMF command processing, ask the system programmer to use the SMF dump program when creating new SMF recording data sets.

System Action: SMF initialization or SET SMF command processing formats data set SYS1.MANx. This processing might take several minutes to complete, depending on the size of the data set. Normal IPL or SET processing resumes when formatting is complete.

Operator Response: None.

IEE967I hh.mm.ss SMF PARAMETERS [id] MEMBER = SMFPRMxx keywd [val] -- orig

Explanation: This message is issued in response to a DISPLAY SMF command. It can also be issued during SMF initialization processing or SET SMF command processing. The fields in the message are as follows:

hh.mm.ss

The time in hours (hh), minutes (mm), and seconds (ss). The value is 00.00.00 if the TOD clock is not working when the information is gathered for the display.

id

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command to cancel status displays written on typewriter or printer consoles or displayed in-line (not in a display area) on display (CRT) consoles. This identification number does not appear when the display is presented in a display area on a display console.

xx

The identifier of the current SMF parmlib member

keywd [val]

The SMF key word parameter and, if applicable, its value

orig

The origin of the key word parameter: PARMLIB, DEFAULT or REPLY

System Action: Message IEE357A is issued, allowing the parameters to be changed.

Operator Response: None.

IEE968I NOTIFICATION OF SUBSYS xxxx FAILED - text

Explanation: The system issued an SSI (subsystem interface) call to notify subsystem xxxx of a change in SMF parameters but could not complete the call for the reason (text) shown in the message text.

If SUBSYSTEM DOES NOT SUPPORT THIS FUNCTION appears, subsystem xxxx is not designed to process one or more of the function codes passed to it.

If SUBSYSTEM NOT OPERATIONAL appears, subsystem xxxx has been defined (that is, the system has built a subsystem communication vector table (SSCVT) for it), but the subsystem has not been initialized.

If SUBSYSTEM DOES NOT EXIST appears, subsystem xxxx is not defined.

If SYSTEM ERROR appears, a system error prevented completion of the SSI call.

System Action: Processing continues.

Operator Response: Check the spelling of the subsystem name in the list of SMF parameters. If you issued the SETSMF command, check the spelling of the subsystem name in the command.

Programmer Response: If SUBSYSTEM IS NOT OPERATIONAL or SUBSYSTEM DOES NOT EXIST appears and subsystem xxxx is necessary for your system operations, correct the error and re-IPL.

IEE969I SETSMF COMMAND ABENDED text

Explanation: The SETSMF command processor terminated abnormally. Possible values of text and the explanation of each follow:

If OLD OPTIONS REMAIN IN EFFECT appears, the command processor terminated before it updated the SMF control tables that list the SMF options for the current IPL. The old options remain in effect.

If NEW OPTIONS IN EFFECT appears, the command processor terminated after it updated the SMF control tables that list the SMF options in effect for the current IPL. The new options are in effect.

If OPTIONS IN EFFECT UNDETERMINABLE appears, the command processor terminated while it was updating the SMF control tables that list the SMF options for the current IPL. There is no sure way to determine which options are in effect; using the DISPLAY SMF command will have unpredictable results.

System Action: SMF processing continues, using the options in effect at the time the SETSMF command processor terminated. The system schedules an SVC dump.

Operator Response: If OPTIONS IN EFFECT UNDETERMINABLE appears, and you want to be sure that certain SMF parameters are in effect, re-IPL the system.

IEE970I SETSMF COMMAND NOT AUTHORIZED

Explanation: The operator entered the SETSMF command, but the SMFPRMxx parmlib member in effect includes the NOPROMPT option, which makes SETSMF an invalid operator command.

System Action: The system ignores the SETSMF command. Other processing continues.

Operator Response: None.

Programmer Response: To allow the operator to use the SETSMF command, include the PROMPT(LIST) or the PROMPT(ALL) option in the SMFPRMxx parmlib member.

IEE971I xxxx IS IGNORED, SETSMF CAN CHANGE ONLY ONE SUBSYSTEM

Explanation: The operator entered the SETSMF command with both the SUBSYS keyword and the SUBPARM keyword, and the keywords specified two different subsystem names. The SETSMF command processor ignores the second keyword, which specified subsystem xxxx. If both keywords appear on the command, they must specify the same subsystem name.

System Action: The SETSMF command processor makes the change specified on the first keyword. Processing continues.

Operator Response: To change SMF parameters for more than one subsystem, issue a separate SETSMF command for each subsystem.

Programmer Response: None.

IEE978E SMF NOW HAS nnnn BUFFERS

Explanation: SMF used all available buffers and had to obtain storage for 100 more buffers. In the message, nnnn is the total number of buffers SMF now has.

Normally, SMF writes buffers to the SMF data set as they are filled with data. SMF can fall behind in writing buffers because:

- Records are being presented to SMF faster than they can be written.
- SMF cannot write to the SMF data set due to operator intervention required on the device for an extended period of time.

Operator Response: If operator intervention is required on the device for the active data set, correct the problem or switch SMF to another data set.

Otherwise, notify the system programmer.

Programmer Response: If SMF has a valid data set on which it is actively recording when this message is issued, look for a program caught in a loop while writing SMF records and cancel the program.

If no active data set is available and none will be available for a long time, set SMF to NOACTIVE to stop SMF from trying to record.

IEE979W SMF DATA LOST - NO BUFFER SPACE AVAILABLE TIME = hh.mm.ss

Explanation: SMF used all its available buffers and cannot obtain more because it has used all available virtual storage below 16 megabytes in its address space. All records presented to SMF will be lost until buffers become available.

In the message, the time is given as the hour (00-23), the minute (00-59), and the second (00-59).

Before this message, SMF issued message IEE978E many times to indicate that SMF had obtained more and more buffers.

Operator Response: According to installation procedure, use SET SMF or SETSMF to send SMF recording. Notify the system programmer.

Programmer Response: If SMF has a valid data set on which it is actively recording when this message is issued, look for a program caught in a loop while writing SMF records and cancel it. If SMF needs a data set, provide one. If neither of these problems exist, contact your programming support personnel.

IEE980I SMF IS BEING RESTARTED

Explanation: The operator issued a SET SMF command when the SMF address space did not exist and SMF is not active. A new SMF address space is created using the system address space create routine.

Operator Response: No response is needed if SMF had previously terminated, as indicated by message

IEE480I and other messages associated with a failure that caused SMF to terminate. Otherwise, notify the system programmer.

Programmer Response: If this message had not been preceded by IEE480I, contact your programming support personnel. Note that an SMF failure may have occurred a long time before this restart.

IEE982I SMF EXIT exitnm NOW INACTIVE DUE TO ERRORS

Explanation: The SMF exit IEFU83 or IEFU84, as indicated by exitnm, abnormally terminated several times without a record being successfully written to the SMF data set.

System Action: SMF marks the exit as inactive and will no longer call the exit for records being written to the SMF data set.

Operator Response: Notify the system programmer.

Programmer Response: Determine why the exit routine abnormally terminated. If the exit acts only to suppress writing of certain SMF records, it may be possible to continue without the exit; records that would have been suppressed will instead be written to the SMF data set. However, if the system cannot run without the exit being called, stop SMF recording with the SET SMF or SETSMF command, correct the error and restart SMF.

Job Scheduler Messages (IEF)

Component Name	IEF	
Program Producing Message	Job scheduler	
Audience and Where Produced	For programmer: job log. For operator: console.	
Message Format	EFnnnI text xx IEFnnns nnn Message serial number. text Message text. xx Message reply identification (absent, if operator reply not required). s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required.	(in SYSPRINT) (on console)
Related Publications	<i>MVS/XA SPL: System Modifications, GC28-1152</i> <i>MVS/XA Message Library: System Codes, GC28-1157</i> <i>MVS/XA JCL, GC28-1148</i> <i>MVS/XA Operations: JES2 Commands, SC23-0064</i> <i>OS/VS Mass Storage System (MSS) Services: General Information, GC35-0016</i> <i>MVS/XA DADSM Diagnosis Reference, SY26-3904</i> <i>MVS/XA SPL: Debugging Handbook, LC28-1164 through LC28-1169</i> <i>MVS/XA SPL: System Macros and Facilities, GC28-1150 and GC28-1151</i> <i>MVS/XA Installation: System Generation, GC26-4009</i>	

IEF006I j j j RESTARTING AT xxxxxx yyyyyy aaaaa bbbbb

Explanation: During execution of a checkpoint restart for job **j j j**, the virtual storage indicated in the message text was requested.

In the message text:

xxxxxx

The lowest address in virtual storage.

yyyyyy

The highest address in virtual storage.

aaaaa

The lowest extended private area address.

bbbbb

The highest extended private area address.

System Action: If the requested areas are currently unavailable, restart is delayed until the areas are available.

Operator Response: Use the DISPLAY A command to determine if the required areas are occupied by system tasks or by other job step tasks.

If the area is occupied by another job step task, either allow the system task to continue and terminate (if a reader), or stop the system task (if a reader or writer).

If the area is occupied by another job step task, either allow the job step task to continue and terminate, or cancel the job step task.

IEF007I RESTART NOT SUCCESSFUL FOR j j j (xxx,[ddd])

Explanation: During execution of a checkpoint restart for job **j j j**, an error occurred.

In the message text, **ddd** identifies the unit address for tape errors and decimal **xxx** indicates why the restart was not successful:

xxx Explanation

- 031 A DD statement was DUMMY in the original execution of job **j j j** but is not DUMMY in the restart execution.
- 034 A DD statement was missing for the restarted step.
- 038 An uncorrectable input/output error occurred while reading the checkpoint data set.
- 230 The checkpoint data set was found not to be secure.
- 231 An error occurred during dynamic allocation of the checkpoint data set.
- 232 The checkpoint data set could not be successfully opened.
- 233 The checkpoint data set is partitioned and the specified entry could not be found.

- 235 A checkpoint entry record of undetermined type was encountered, or an END record was not found when expected.
- 237 A specified checkpoint entry could not be found.
- 238 An error occurred during dynamic allocation or dynamic deallocation for a private or implied catalog necessary for DSDR processing.
- 239 During a deferred restart a non-DUMMY DD entry was found for a VIO data set, or a dynamically allocated VIO data set was unallocated after the checkpoint was taken.
- 260 The scheduler work area (SWA) for this job resides above 16 megabytes. This indicates that the job is not eligible for checkpoint restart.

System Action: Restart for job *jjj* is terminated.

Programmer Response: If *xxx* is 031 or 034, probable user error. For 031, change the DD statement back to DUMMY. For 034, supply the missing DD statement. Then resubmit the job.

If *xxx* is 038, either restart at an earlier checkpoint or repeat the original execution, using a different volume. Then resubmit the job. However, if *xxx* is 038 and the restart was deferred, the restart may be attempted again after varying the device containing the checkpoint data set offline.

If *xxx* is or 230, a checkpoint data set was found not to be secure. Contact operations personnel to verify secure status of the volume.

If *xxx* is 231, refer to the accompanying IKJ message for the nature of the failure. Correct the error and resubmit the job.

If *xxx* is 232, resubmit the job.

If *xxx* is 233 or 237, verify the accuracy of CHECKID for the checkpoint entry in the RESTART parameter of the JOB statement; then resubmit the job.

If *xxx* is 235, resubmit the job, selecting another checkpoint entry.

If *xxx* is 238, verify status and contents of all private and implicit catalogs used by this job.

If *xxx* is 239, change VIO data sets to be DUMMY; then resubmit the job.

If *xxx* is 260, resubmit the job for a deferred checkpoint restart in a job class that will keep SWA below 16 megabytes.

Problem Determination: Table I, items 1, 3, 13, 29.

IEF010I CHECKPOINT RESTART OF JOB *jjj* ABENDED

Explanation: Job *jjj* was being initialized for checkpoint/restart and there was an abnormal termination while processing the checkpoint data set.

System Action: A dump is taken to the SYS1.DUMP data set. The job is flushed by the initiator.

Programmer Response: If the dump indicates a user error, correct the error and resubmit the job. If the

dump indicates a system error, see the problem determination section.

Problem Determination: Table I, items 1, 3, 4, 29.

IEF085I REGION UNAVAILABLE, ERROR CODE = *cde*

Explanation: It is not possible to obtain a region for the job step. The error code *cde* explains why the region could not be obtained:

- 08 A V=V region was requested. The specific start address you requested is outside the bounds of the extended private area.
- 16 A user requested a V=R (virtual=real) region. One of the following occurred:
- The requested V=R region could not be obtained because of long-fixed or damaged pages in the V=R region.
 - Storage within the requested V=R region was varied offline so there is not enough contiguous V=R storage available.
 - There is not enough SQA (system queue area) storage available for the system to complete the request.
- 20 Error code 20 may appear for one of several reasons:
- If you requested a V=V region, but there was not enough virtual storage in the region to cover your request.
 - Fragmentation of the LSQA, SWA or subpools 229 or 230 occurred, and it is impossible to obtain the region you requested.
 - The V=R region size you requested exceeds the global V=R area size.
- 24 The V=R region size that you requested exceeds the defined limits at your installation.

System Action: The step is terminated with a system completion code of 822.

Programmer Response: Resubmit the job. If *cde* is 08, it may be necessary to either decrease the size requested for the region or to submit the job to be run on a system with a larger amount of V=R storage available or a larger private area. For a V=V region storage above the line might become available by specifying a value greater than 16 megabytes.

If *cde* is 16, display storage (D M operator command) to determine if any offline storage is within the requested V=R region. If there is offline storage in the requested V=R region, vary the offline storage online before resubmitting the job.

If *cde* is 20, and if a V=V region with a size approximately equal to the private area was requested, it may be necessary to decrease the region size. Or, storage above the line might become available by specifying a value greater than 16 megabytes. See the system programmer for help in determining your region requirements.

If *cde* is 24, resubmit the job, requesting a region whose size is not greater than the limit set by the installation GETPART exit routine.

- Problem Determination:** Table I, items 1, 2, 3, 7a, 29.
- IEF086I ERROR IN SWA RECOVERY - RESTART CANCELED**
- Explanation:** During restart for the job, an error was encountered while merging control blocks from the job journal with those already in the Scheduler Work Area. A control block requiring updating was not found.
- System Action:** The error prevents successful completion of restart processing; the job is canceled.
- Programmer Response:** Resubmit the job as deferred step or checkpoint/restart.
- Problem Determination:** Table I, items 1, 3, 4, 29.
- IEF087I ERROR ON JOB JOURNAL - RESTART CANCELED**
- Explanation:** During restart for the job, an error was encountered in accessing the job journal. The error occurred during GET.
- System Action:** The error prevents successful completion of restart processing; the job is canceled.
- Programmer Response:** Resubmit the job as a deferred step or checkpoint/restart.
- Problem Determination:** Table I, items 1, 3, 4, 29.
- IEF089I ERROR ON WRITE TO JOB JOURNAL - JOB NOT ELIGIBLE FOR RESTART**
- Explanation:** An error was encountered while attempting to write to the job journal.
- System Action:** Processing of the job continues until completion. However, no more journaling will be done for this job.
- Programmer Response:** Ignore the message if the job is completed successfully. If the job fails, refer to message IEF168I for more information and the action to be taken.
- IEF090E PROTECT KEY UNAVAILABLE. jji PLACED ON HOLD Q**
- Explanation:** Job jji requested ADDRSPC=REAL for at least one step; all protection keys, 9 through 15, were currently assigned to other jobs that require unique protection keys. (The jobs that require unique protection keys are those that specify ADDRSPC=REAL for one or more steps.)
- System Action:** The job is placed on the HOLD queue.
- Operator Response:** Either release the job from the HOLD queue at a time when a protection key is available or cancel the job. Enter a DISPLAY A command to determine if there are fewer than 7 jobs reserving a protection key. If there are fewer than 7 jobs, consult Problem Determination below.
- Problem Determination:** Table I, items 2, 7c, and 29.
- IEF091I PROTECT KEY UNAVAILABLE. START ppp REJECTED**
- Explanation:** The program indicated in procedure ppp is a program that requires a unique protection key; all the protection keys, 9 through 15, were currently assigned to other jobs. (The jobs that require unique protection keys are those that specify ADDRSPC=REAL for one or more steps.)
- System Action:** The task is not started.
- Operator Response:** If the task is required, reenter the START command at a time when a protection key is available. Enter a DISPLAY A command to determine if there are fewer than 7 jobs reserving a protection key. If there are fewer than 7 jobs, consult Problem Determination below.
- Problem Determination:** Table I, items 2, 7c, and 29.
- IEF092I jji sss ppp WAITING FOR xxxK REAL STORAGE**
- Explanation:** During initiation of procedure step ppp of step sss of job jji, the requested V=R region of size xxxK could not be immediately obtained.
- System Action:** The initiator waits until the request can be satisfied.
- Operator Response:** No action is required, however, you may do one of the following:
- Enter a CANCEL command for other jobs which are running in V=R storage, in an effort to free V=R storage.
 - Enter a CANCEL command for job jji to terminate processing for that job.
- Report this message to the system programmer.
- Problem Determination:** Table I, items 1, 2, 3, 7a, 29.
- IEF096I jji - FAILED BEFORE JOB INITIATION - ABEND Scode**
- Explanation:** An ABEND occurred when the system tried to verify if the job was authorized. Scode is a system completion code that further describes the error.
- System Action:** The system sends a return code indicating a system error to the job entry subsystem. The job entry subsystem then takes action on the job.
- Operator Response:** None.
- Programmer Response:** If the job entry subsystem terminated the job, resubmit the job.
- Problem Determination:** Table I, items 1, 2, 3, 7a, 16, 28, 29.
- IEF097I USER userid [AND GROUP groupid] ASSIGNED**
- Explanation:** Under JES2, the system issues this message when the job is complete; under JES3 the system first sends the message to the system log and then issues the message when the the job is submitted. userid identifies the USER, and groupid identifies the GROUP.
- System Action:** The system processes the job, jji, using the userID and groupID you have assigned to it.

Operator Response: None.

IEF098I mem LINE num: PPT STMT IGNORED. NO OPERANDS SPECIFIED.

Explanation: On line number **num**, the system encountered an invalid PPT statement in **mem**, which is SYS1.PARMLIB member SCHEDxx; the PPT statement is invalid because it contains no operands.

System Action: The system continues processing with the next statement in **mem**; IPL will continue.

Operator Response: None.

Programmer Response: Check SYS1.PARMLIB member SCHEDxx for the invalid PPT statement.

IEF099I JOB jji WAITING FOR DATA SETS

Explanation: Job **jjj** requires data sets that are not available. These data sets are named in message IEF863I. When the data sets become available, the system will reserve them for the job and processing will continue.

System Action: Processing of the job is suspended until the data sets become available.

Operator Response: None required. However, if you want to terminate processing of the job, a CANCEL command may be issued.

IEF100I

ALLOCAS { **ERROR** } [{ **DURING CREATE,** }
 { **FAILED** } [{ **DURING INITIALIZATION,** }
 [{ **DURING PROCESSING,** }]]

ABEND = Scede, REASON = rc

Explanation: One of the allocation modules detected an error associated with allocation address space (ALLOCAS) processing. FAILED appears in the message text when the error causes the system to terminate the allocation address space.

If the system can determine when the error occurred, one of these phrases appears:

DURING CREATE

The error occurred while an allocation module was creating the allocation address space.

DURING INITIALIZATION

The error occurred while an allocation module was initializing the allocation address space.

DURING PROCESSING

The error occurred while an allocation module was doing one of the following:

- The module was preparing to execute a PC (program call) instruction to the allocation address space.
- The module was manipulating data in the allocation address space.
- The module was doing follow-up processing after executing a PT (program transfer) instruction back from the allocation address space.

In the **ABEND = Scede** field, **Scede** is the system completion code that describes the error. If the value

for **Scede** is 05C, **REASON = rc** appears, where **rc** is one of the following hexadecimal values:

rc	Explanation
01	System address space initialization denied the request to create the allocation address space.
02	The allocation address space received a non-zero return code from GETMAIN processing.
03	The display allocation tables manager received a request which, if processed, would cause the DALTUSE count to be less than zero.
04	An allocation module issued the POST macro instruction and the macro processing has entered the routine specified on the ERRET parameter.
05	An allocation module issued the ESTAE macro instruction, and the return code from ESTAE processing was not zero.

System Action: If ERROR appears in the message text, allocation processing continues normally. If FAILED appears, the system terminates the allocation address space and cannot execute the DISPLAY U.,ALLOCS command. In either case, the system takes an SVC dump and writes an error record to SYS1.LOGREC.

Operator Response: Notify the system programmer.

Programmer Response: Refer to system completion code cde in *V/S2 System Codes*. If the system terminated the allocation address space, that address space remains terminated until you re-IPL the system.

Problem Determination: Table I, items 2, 16, and 29.

IEF101I JOB jji CANCELED BY SYSTEM

Explanation: Job **jjj** requires at least one data set that is permanently unavailable, and possibly requires some data sets that are unavailable at present. Message IEF863I lists all the unavailable data sets, marking those that are permanently unavailable.

System Action: Since at least one of the required data sets is permanently unavailable, the job terminates.

Operator Response: None.

Programmer Response: Resubmit the job when the indicated data sets are available.

IEF125I jji-LOGGED ON [-TIME = hh.mm.ss]

Explanation: In response to a MONITOR command with JOBNAMES or SESS in its operand, this message indicates that a user has logged on to the system under time sharing and his session name is **jjj**.

If **T** is also specified in the operand of the command, then the time of day appears, where **hh** specifies the hour (00-23), **mm** specifies the minute (00-59), and **ss** specifies the second (00-59).

System Action: Session **jjj** is entering allocation.

Operator Response: No response required. However, if the user should not be logged on at this

time, issue CANCEL U=jjj command and the session will be terminated.

IEF126I **jjj-LOGGED OFF [-TIME=hh.mm.ss]**

Explanation: In response to a MONITOR command with JOBNAMES or SESS in its operand, this message indicates that the session **jjj** has terminated (been logged off of the system). This message is not issued if session **jjj** has terminated abnormally.

If T is also specified in the operand of the command, then the time of day appears, where **hh** specifies the hour (00-23), **mm** specifies the minute (00-59), and **sss** specifies the second (00-59).

System Action: Session **jjj** has completed termination.

Operator Response: None.

IEF127I **jjj sss [ppp] ddn[+ xxx] - NO SPACE PARAMETER OR ZERO SPACE REQUEST AT ABSTR ZERO**

Explanation: No SPACE parameter appears in a DD statement (ddn) defining a new direct access volume, or an absolute track request was made for no space (zero space) beginning at absolute track zero.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set is not new, correct the DISP parameter by specifying OLD, SHR, or MOD. If the data set is new, make sure that a SPACE parameter appears. Then rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7c, 25a, 29.

IEF128I **jjj sss [ppp] ddn[+ xxx] - INVALID REQUEST FOR ISAM INDEX**

Explanation: The control program is unable to allocate space for the index of a new indexed sequential data set for one of the following reasons:

- An embedded index was requested for the index or overflow area by a DD statement specifying the index quantity subparameter in its SPACE request.
- An embedded index was requested for multivolume prime area. The request was made by a DD statement specifying an index quantity in the SPACE parameter, DSNNAME=name(PRIME), and a device number greater than 1 in the UNIT parameter.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the faulty DD statement, and rerun the job. In the first case, delete the index quantity subparameter. In the second case, delete the index quantity

subparameter or change the device number subparameter to 1.

Problem Determination: Table I, items 2, 7c, 29.

IEF129I **jjj sss [ppp] ddn[+ xxx] - MULTIVOLUME INDEX NOT ALLOWED**

Explanation: The control program is unable to allocate a multivolume index for a new indexed sequential data set. A device number greater than 1 cannot be specified in the UNIT parameter of a DD statement specifying DSNNAME=name(INDEX).

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Delete the device number subparameter, or reduce it to 1. Then rerun the job.

Problem Determination: Table I, items 2, 7c, 29.

IEF130I **jjj sss [ppp] ddn[+ xxx] - DSNNAME ELEMENT WRONG - MUST BE INDEX, OVFLOW, OR PRIME**

Explanation: In one of the DD statements defining an indexed sequential data set, the element part of the DSNNAME parameter is other than PRIME, INDEX, or OVFLOW.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the element subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of this data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 1, 2, 3, 7c, 14, 29.

IEF131I **jjj sss [ppp] ddn[+ xxx] - MULTIVOLUME OVFLOW REQUEST NOT ALLOWED**

Explanation: A DD statement is requesting a multivolume overflow area for a new indexed sequential data set by specifying a device number greater than 1 in the UNIT parameter and DSNNAME=name(OVFLOW). This is not allowed.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the device number subparameter to 1. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

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**IEF132I jji sss [ppp] ddn[+ xxx] - SPACE PARAMETER
WRONG - CYL AND ABSTR CONFLICT**

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. One of the DD statements defining this data set specified ABSTR and specified CYL. Space for one area of an indexed sequential data set cannot be allocated using the CYL subparameter while the space for another area is allocated using the ABSTR subparameter.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of this data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

**IEF133I jji sss [ppp] ddn[+ xxx] - SPACE PARAMETER
WRONG - CYL AND CONTIG CONFLICT**

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. The CONTIG subparameter appears for a CYL request in one of the DD statements, while not in another. Space for one area of an indexed sequential data set cannot be allocated contiguously if space for another area is not.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the data set name appears in any VTOC, remove it using the DEFINE and DELETE commands. Rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

**IEF134I jji sss [ppp] ddn[+ xxx] - SUBPARAMETER
WRONG IN SPACE PARAMETER - MUST BE
CYL OR ABSTR**

Explanation: The SPACE parameter in a DD statement defining a new indexed sequential data set is incorrect. A subparameter other than CYL or ABSTR is present in the statement.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the invalid subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

**IEF135I jji sss [ppp] ddn[+ xxx] - PRIMARY SPACE
REQUEST MAY NOT BE ZERO**

Explanation: In a DD statement defining an indexed sequential data set, the primary space subparameter is zero. This is not a valid space request.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the primary space request to a non-zero positive value, and rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 29.

**IEF136I jji sss [ppp] ddn[+ xxx] - DUPLICATION IN
ALLOCATION - INDEX AREA REQUESTED
TWICE**

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the index area. Following the allocation of an index area requested by a DD statement containing DSNAMES=name(INDEX), either a DD statement containing DSNAMES=name(PRIME) requested an embedded index through an index quantity in its SPACE parameter, or another DD statement was found specifying DSNAMES=name(INDEX).

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Either eliminate the DD statement that specifies DSNAMES=name(INDEX) or eliminate the index quantity subparameter in the DD statement specifying DSNAMES=name(PRIME). List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

**IEF140I jji sss [ppp] ddn[+ xxx] - DIRECTORY SPACE
REQUEST LARGER THAN AMOUNT
AVAILABLE ON THIS VOLUME**

Explanation: The directory for a new partitioned data set was not allocated because the space requested for the directory by the SPACE parameter of the associated DD statement exceeded the space available on the specified volume.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter or request a different volume. Then rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7c, 25a, 29.

IEF141I jij sss [ppp] ddn[+xxx] - INDEX REQUEST MUST PRECEDE PRIME FOR ISAM DATA SET

Explanation: In the DD statement defining an indexed sequential data set, a statement containing `DSNAME=name(PRIME)` was found to precede a statement containing `DSNAME=name(INDEX)`.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Reorder the DD statements for the data set, making sure that INDEX is placed before PRIME. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 14, 29.

IEF142I jij sss [ppp] STEP WAS EXECUTED - COND CODE cde

Explanation: Step sss of job jij, or cataloged procedure step ppp invoked by job step sss of job jij, was executed. The condition code for the step is cde.

For started tasks, jij will always be the name of the procedure on the START command, ppp will not appear, and sss will be one of the following:

- The identifier, if one was specified on the START command
- The device number of the reader, if the START command was for RDR
- The same as jij, in all other cases

Note: This condition code originates from the contents of general purpose register 15 at the end of the step. If the last task of the step did not set a completion code in register 15, the cde field of the message is meaningless.

System Action: The system will continue to process further steps of the associated job if so allowed by the COND= parameter of subsequent EXEC statements.

Programmer Response: None.

IEF143I jij sss [ppp] ddn[+xxx] - LAST CONCATENATED DD CARD UNNECESSARY OR INVALID FOR THIS DATA SET

Explanation: In processing the DD statement defining an indexed sequential data set, it was found that at least four concatenated DD statements were present for the data set. The DD card(s) after the third card are unnecessary.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated, and the extra DD statements are not processed. If any non-ISAM data sets in the concatenation were allocated, they are deleted.

Programmer Response: Remove the extra DD statements. List the volume table of contents

(VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 14, 29.

IEF145I jij sss [ppp] ddn[+xxx] - SPACE REQUEST MUST BE ABSTR FOR DOS VOLUME

Explanation: In DD statement ddn defining an indexed sequential data set with multivolume prime area, the space for one of the prime volumes (except the first one) was requested on a volume where the DOS bit (bit 0 of the DS4VTOCI field) is set in the format 4 DSCB; however, the SPACE parameter for the DD statements that define the data set specified CYL.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Request space by coding ABSTR for the SPACE parameter or request a different volume. Execute the LISTCAT command to list the volume table of contents (VTOC) of each volume that will contain the data set. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then run the job again.

Problem Determination: Table I, items 1, 3, 7c, 25a, 29.

IEF165I cm

Explanation: Command cm was entered through the input stream.

System Action: If the operator is requested to authorize execution of commands entered through the input stream, message IEF166D follows to permit the operator to respond.

Operator Response: Respond to message IEF166D, if issued.

IEF166D REPLY Y/N TO EXECUTE/SUPPRESS COMMAND cm

Explanation: This message permits the operator to authorize execution of the command displayed in message IEF165I, which precedes this message.

Operator Response: If the command displayed in preceding message IEF165I is to be executed, enter REPLY xx,'Y'.

If the command displayed in preceding message IEF165I is not to be executed, enter REPLY xx,'N'.

IEF167I NO JOB JOURNAL OPTION SPECIFIED - RESTART CANCELED

Explanation: The job was abnormally terminated and was eligible for automatic restart but, as the NO-JOB Journal had been specified for this job, automatic restart was not possible.

System Action: The job is terminated.

Programmer Response: Resubmit the job for deferred restart, if desired. If automatic restart

IEF

support is desired for future submissions of this job, request that the installation run the job with the job journal option.

Problem Determination: Table I, items 1, 29.

IEF168I ERROR ON JOB JOURNAL - RESTART FOR JOB CANCELED

Explanation: The job has abnormally terminated and was eligible for automatic restart, but as there was an error on the job journal, automatic restart was canceled.

System Action: The job is terminated.

Programmer Response: Resubmit the job for deferred restart, if desired.

Problem Determination: Table I, items 1, 29.

IEF169I RESTART CANCELED FOR JOB jjj

Explanation: During an automatic restart of job jjj, one of the following occurred:

- While merging control blocks from the job journal with those already in the Scheduler Work Area, a control block requiring updating was not found.
- In accessing the job journal, an error occurred during GET.

System Action: The error prevents successful completion of restart processing; job jjj is canceled.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 4, 29.

IEF170I n jjj (53 bytes of message passed to WTP)

Explanation: Write-to-programmer was unable to complete processing. The n value indicates the reason for the failure. This message will be built and issued to hardcopy. In the message text, the fields are as follows:

n

- 1 No RPL pointer existed therefore cannot access ACB.
- 2 Enqueue to serialize execution of PUT failed.
- 3 PUT to system message data set failed.
- 4 Unpredictable ABEND.

jjj

Jobname or name of a system task.

System Action: Processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 3, 4, 15, and 29.

IEF172E jjj HELD, CPU (x) OFFLINE OR UNAVAILABLE FOR JOB SCHEDULING

Explanation: The first step of job jjj requires hardware features present only on processor x. Processor x is offline or unavailable for job scheduling because it will be taken offline when its currently scheduled jobs have completed.

System Action: The system places job jjj in a HOLD state.

Operator Response: Issue a VARY ONLINE command for processor x before releasing job jjj for the HOLD state.

Problem Determination: Table I, items 1, 2, 3, 7a, 29.

IEF173I jjj FAILED, CPU (x) OFFLINE OR UNAVAILABLE FOR JOB SCHEDULING

Explanation: One of the following occurred:

- Job jjj was initiated in response to a START command and requires hardware features present only on processor x.
- A step other than the first step of job jjj requires hardware features present only on processor x.

Processor x is offline or unavailable for job scheduling because it will be taken offline when its currently scheduled jobs have completed.

System Action: The system terminates the job.

Operator Response: If the message was issued for a job initiated by a START command, reissue the START command when the required processor is online and available for job scheduling. If the message occurs frequently, notify the system programmer.

Programmer Response: Resubmit the job, asking the operator to make sure the required processor is online and available for job scheduling.

Problem Determination: Table I, items 1, 2, 3, 7a, 29.

IEF174I SYSTEM ERROR BEFORE JOB INITIATION

Explanation: While this job was being processed an ABEND, program check, depression of the RESTART key, or a machine check took place before the job was initiated.

System Action: A return code indicating a system error is sent to the job entry subsystem. The job entry subsystem will decide what to do with the job, (probably terminate it). A record describing the error is written to SYS1.LOGREC. A dump is taken to the SYS1.DUMP data set on a program check or depression of the RESTART key.

Operator Response: None.

Programmer Response: Resubmit the job if it is terminated.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 28, 29.

IEF175I AMP KEY WORD xxxxxxxx DUPLICATE OR CONFLICTING PARM STEP NOT EXECUTED

Explanation: A duplicate or conflicting AMP keyword has been discovered by the AMP interpreter.

System Action: The job is terminated.

Programmer Response: Probable user error. Delete the duplicate keyword, or correct the conflicting keyword or keywords. Then rerun the job.

IEF176I WTR ddd WAITING FOR WORK,

```

{ CLASS =
  FORMS =
  WRITER =
  DEST =
  JOBID =
}

```

Explanation: The External Writer is waiting for work. The optional parameters indicate which selection criterion the External Writer is using to wait for work.

System Action: The External Writer is in a wait state until either a MODIFY or STOP command is received or until work is received from JES2 that satisfies the named selection criterion.

Operator Response: Verify that the selection criterion is valid, (the FORMS required is a valid form number, the DEST specified is still valid, or the WRITER name is valid). If WRITER = STDWTR was specified to the named External Writer in a MODIFY command, a WRITER = blank will appear in the message, indicating that a named writer is selecting data sets that have no writer name on their SYSOUT DD card.

IEF177I WTR ddd INVALID MODIFY KEY WORD

Explanation: The named External Writer received an invalid keyword in the last MODIFY command.

System Action: The External Writer does no more work until another valid MODIFY command is received. The External Writer is waiting for either a STOP or MODIFY command.

Operator Response: Enter a new valid MODIFY command or stop the writer.

IEF178I WTR ddd MODIFY PARAMETER INVALID.

Explanation: The named External Writer received an invalid MODIFY parameter.

System Action: The External Writer does no more work until another valid MODIFY command is received.

Operator Response: Enter a new valid MODIFY command or stop the writer.

Programmer Response: Check to see if the FORMS parameter was greater than 4 characters, or the WRITER or JOBID parameter was greater than 8 characters in length. Also verify that the MODIFY parameters contained valid characters.

IEF179I WTR ddd INVALID { JOBID j } { DEST xxxxxx }

Explanation: The named External Writer attempted to request a data set from JES2 with either a JOBID or DEST selection criteria and the JOBID or DEST was invalid to JES2.

System Action: The External Writer does no more work until another valid MODIFY command is received.

Operator Response: Enter a new valid MODIFY command or stop the writer.

IEF180I jij sss [ppp] - INSUFFICIENT REAL OR VIRTUAL STORAGE FOR ALLOCATION

Explanation: Allocation was unable to obtain sufficient main or virtual storage for processing.

System Action: The job is terminated.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF186I REGION UNAVAILABLE FOR RESTART, ERROR CODE = cde

Explanation: It is not possible to obtain a region for a checkpoint restart. The error code cde explains why the region could not be obtained:

- 08 The region parameter was increased so that the region could not be allocated or the configuration of the system changed so that the region could not be obtained:
 - For ADDRSPC = REAL, the size of the REAL area was decreased.
 - For ADDRSPC = VIRT, the size of the private area decreased because the size of the nucleus increased or the size of the SQA or the IPA increased.
- 16 If a REAL region was requested, either long-fixed or damaged pages in the REAL area made it impossible to obtain the required region.
- 20 Either a virtual or real region was requested. Fragmentation by LSQA, SWA, or subpools 229 or 230 has made it impossible to obtain the requested region (because no contiguous block of storage exists which could satisfy the request.)
- 24 A request for a V = R region could not be satisfied because the installation GETPART exit routine rejected the request.

System Action: The step is terminated with a system completion code of 822.

Programmer Response: Resubmit the job. If cde is 08, ensure that the configuration of the system on which the restart is to be done makes it possible to obtain the region owned when the checkpoint was taken, or if the requested region size was greater than the size of the region owned when the checkpoint was taken, decrease the region size.

If cde is 20, and if an ADDRSPC = VIRT region with a size approximately equal to the private area was requested, it will be necessary to decrease the

region size. See the system programmer for help in determining your region requirements.

If cde is 24, resubmit the job, requesting a region whose size is not greater than the limit set by the installation GETPART exit routine.

Problem Determination: Table I, items 1, 2, 3, 7a, 29.

IEF187I **jjj FAILED - SYSTEM ERROR IN INITIATOR**

Explanation: While job jjj was being processed, an ABEND, program check, depression of the RESTART key, or machine check occurred with the initiator in control.

System Action: One of the following actions occurs depending upon the status of the job at the time of the error:

- The job is terminated immediately.
- The step is terminated with a 922 system completion code.

In either case, a record describing the error is written to SYS1.LOGREC, unless the ABEND was an OPEN failure. A dump is taken to SYS1.DUMP when applicable.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 28, 29.

IEF188I **PROBLEM PROGRAM ATTRIBUTES ASSIGNED**

Explanation: The name of the program to be executed is a name which is designated to receive one or more special properties. However, the job has not satisfied all the requirements to obtain the properties.

System Action: The special properties whose requirements were not met were not assigned. Instead of these special properties, problem program attributes were assigned.

Operator Response: If no special properties are required, no action is necessary. If special properties are required and a JOBLIB or STEPLIB is being used, make sure that the program library is authorized, or notify the system programmer.

Programmer Response: Make sure that the special attributes 'started only' or '1-step only' are either satisfied or are not required for the assignment of the required special properties.

Problem Determination: Table I, items 1, 2, 3, 7a, 29.

IEF192I **jjj sss [ppp] ddn[+xxx] - NO ELIGIBLE DEVICE TYPE CONTAINS ENOUGH UNITS TO SATISFY REQUEST**

Explanation: There are not enough available devices of the type specified in the UNIT parameter of DD statement ddn to satisfy the request. If an esoteric unit name such as SYSDA is specified, no single device type within the esoteric has enough available devices.

Note: A device is not considered eligible to a telecommunications request if it is an active console,

is allocated, or is in use by a system function such as OLTEP, or a system utility.

Note: If 3330V devices were present in the collection of devices specified by the UNIT parameter and the Mass Storage System (MSS) was not initialized, the number of 3330V devices is subtracted from the number of devices available in the collection.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group (ddn).

System Action: The job is terminated.

Programmer Response: Probable user error if no MSS devices are in the device collection specified. If any MSS devices are in the collection, determine whether the MSS was initialized at the time the job ran. Make sure that the device type specified in the UNIT parameter can supply the number of devices needed. If necessary, change the UNIT parameter.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF193I **jjj sss [ppp] ddn[+xxx] - SPACE NOT OBTAINED BECAUSE OF PERMANENT I/O ERROR**

Explanation: Space on the direct access storage device (DASD) required by DD statement ddn could not be obtained because of one of the following errors:

- There is a permanent I/O error.
- There is an invalid format-1 DSCB.
- There is a structure error in the VTOC index.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group (ddn).

System Action: The job is terminated.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 25b, and 29.

IEF194I **jjj sss [ppp] ddn[+xxx] - VOLUME SEQUENCE NUMBER EXCEEDS NUMBER OF VOLUME SERIALS**

Explanation: The volume sequence count specified in DD statement ddn is greater than the number of volume serial numbers specified. One of the following has occurred:

- ddn has specified volume serial numbers in the VOL parameter. The sequence count exceeds the number of volume serials specified.
- ddn refers back to or is receiving a passed data set from another DD which specifies a number of volume serials that is less than the sequence count in ddn.
- ddn refers to a cataloged data set. The number of volume serials for that data set is less than the volume sequence count.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group (ddn).

System Action: The job is terminated.

Programmer Response: Probable user error. Check to make sure that the volume sequence count is equal to or less than the number of volume serials specified.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF195I jji sss [ppp] ddn[+xxx] - MAXIMUM NUMBER OF DEVICES FOR DD EXCEEDED

Explanation: The number of units requested by DD statement ddn was insufficient to permit mounting of all required volumes. When the scheduler attempted to increase the unit count so that a volume could be mounted, the maximum of 59 units per DD statement was exceeded.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group (ddn).

System Action: The job is terminated.

Programmer Response: Probable user error. If possible, change the program so that fewer volumes need to be mounted at the same time.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF196I text

Explanation: The text portion of this message has been generated during the process of starting the Master Scheduler and/or a job entry subsystem and is the actual JCL and messages that would be generated for the start process. It is put out based on the MSGLEVEL specification in the JCL.

System Action: The text has been written to hardcopy to make it available for future reference. The message id that could follow message IEF196I should be consulted for a further explanation of why the specific message was issued.

Programmer Response: Look up the separate message if available.

Problem Determination: Table I, items 2, 29.

**IEF197I SYSTEM ERROR DURING
 { ALLOCATION
 UNALLOCATION }**

Explanation: Allocation or unallocation error routines have been entered following a system failure that took place while this job was in allocation or unallocation. The system failure was one of the following:

- Depression of the RESTART key
- Machine check
- ABEND
- Program check

System Action: If an ABEND occurred or a program check or depression of the RESTART key occurred, a dump is taken to the SYS1.DUMP data set and a record describing the error is written to the SYS1.LOGREC data set.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 28, 29.

IEF198I jji sss [ppp] ddn [+xxx] - INSUFFICIENT UNRESTRICTED UNITS ELIGIBLE TO SATISFY REQUEST

Explanation: One of the following occurred:

- One or more devices have been requested on the UNIT parameter of DD statement ddn in step sss of job jji or cataloged procedure ppp, but there are not enough unrestricted units (devices) to satisfy the request. Devices marked restricted at system generation are not eligible for the request.
- JES3 selected a device that is both restricted and either JES3-managed or jointly managed (that is, managed by both MVS and JES3).

Restricted devices are defined in *Installation: System Generation*.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group (ddn).

System Action: Job jji is terminated.

Programmer Response: Probable user error. Make sure that the device type is correctly specified in the UNIT parameter.

If this message appears because JES3 selected a device that is restricted and either JES3-managed or jointly managed, ask the system programmer to remove the device from JES3 management.

Problem Determination: Table I, items 1, 3, 4, 7c, and 29.

IEF201I jji sss [ppp] - JOB TERMINATED BECAUSE OF CONDITION CODES

Explanation: Step sss of job jji, or cataloged procedure step ppp, terminated either normally or abnormally by issuing a RETURN or ABEND macro instruction that specified a completion code. This completion code satisfied a condition test specified by a code and operator subparameter in the COND parameter of the JOB statement.

System Action: The job was terminated, so the remaining steps in the job were not executed.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the JOB statement, if the problem program contained no errors.
- Submit for execution the remainder of the job, including the problem program if it contained an error.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF

IEF202I STEP - 'sss,' WAS NOT RUN BECAUSE OF cde

Explanation: If cde is CONDITION CODES, a problem program terminated by issuing a RETURN macro instruction that specified a completion code. This completion code satisfied a condition test (specified by a code, operator, and job step name subparameter) in the COND parameter of an EXEC statement.

If cde is COND=ONLY, the COND parameter of an EXEC statement specified ONLY, but no previous job steps had abnormally terminated.

In the message text, sss is the job step name of the EXEC statement containing the COND parameter.

System Action: The job step specified by the succeeding EXEC statement was not executed. The remainder of the job was or was not executed, depending on the condition tests specified in the EXEC statement for each step.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the succeeding EXEC statement, if the problem program contained no errors. Then execute the problem program, if it contained an error, and the job step that was not executed.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF209I VIRTUAL STORAGE UNAVAILABLE FOR jji.sss.ppp

Explanation: During execution of a checkpoint restart for procedure step ppp of step sss of job jji, all or part of the virtual storage for the restart job was not available for one of the following reasons:

- A deferred restart was being performed but the virtual storage area requested was larger than the area used originally. Since the original area was adjacent to the link pack area, the virtual storage area could not be increased.
- A deferred restart was being attempted on a different system, or the same system, with different IPL parameters such that the system queue area occupied part or all of the required region area.
- A deferred restart was being performed, but after IPL the link pack area had expanded into the required virtual storage area.

System Action: Restart for job jji is terminated.

Operator Response: Restart the system and run the job again. During system initialization, specify the same options as those used when the checkpoint was taken. If such a rerun fails or is not feasible, report this message and circumstances to the system programmer.

Programmer Response: Probable user error. Request the use of a system known to be adequate for restart.

Problem Determination: Table I, items 1, 2, 7a, 29.

IEF210I jji sss [ppp] ddn[+ xxx] - UNIT FIELD SPECIFIES INCORRECT DEVICE NAME

Explanation: In a DD statement, the unit name subparameter in the UNIT parameter was invalid:

- The unit was not defined when the system was generated.
- If a cataloged data set was being referenced, the unit field in the catalog entry is incorrect.
- No UNIT parameter was supplied for a non-cataloged, non-passed data set.
- The DISP parameter was omitted for an old data set. (In this case, the system assumes a disposition of NEW, and UNIT must be specified when defining new sets.)

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the unit name subparameter, and submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF211I jji sss [ppp] ddn[+ xxx] - DATA SET RESERVATION UNSUCCESSFUL

Explanation: Allocation processing was unable to reserve a data set for job jji. The type of request made by the job and the reason for the problem are as follows:

- A non-VIO, temporary, direct access data set was requested, but the data set name is the same as an existing system-generated data set name. (This check is not performed by job initiation processing.)
- An alias name was specified. After locating the real data set name in a catalog, allocation processing found that the data set is already reserved by another user.
- A generation of a GDG was requested. After locating the catalog-generated name for the generation, allocation processing found that the data set was already reserved by another user.
- All levels of a GDG were requested. When checking the individual levels, allocation processing found that one of the levels is already reserved by another user.

System Action: The job terminates to avoid impacting the availability of critical system resources.

Programmer Response: Probable conflict in use (share vs. exclusive) of data set. Resubmit the job for processing.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 25b, 29.

IEF212I jii sss [ppp] ddn[+ xxx] - DATA SET NOT FOUND

Explanation: In processing a DD statement, the job scheduler found one of the following:

- The data set name in the DSNNAME parameter did not contain all the levels of qualification, making it impossible to locate the cataloged data set.
- The data set name specified on the DCB parameter or on the REF subparameter of the VOLUME parameter was not cataloged or did not contain all the levels of qualification, making it impossible to locate the data set.
- The data set was not cataloged or passed.
- A level of index was either missing or incorrect in a generation data group.
- In a step, an attempt was made to receive a passed data set. However, the data set has been received as many times as it was passed.
- MOD, SHR, or OLD was specified on a DD statement requesting all levels of a GDG, but there are no levels.
- A data set cataloged in a user catalog was requested and there was no JOBCAT or STEPCAT DD in the JCL.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. If the data set name was specified incorrectly, correct it. If the DCB or VOLUME parameters were incorrect, correct them. If the data set was not cataloged, either catalog it or, on the DD statement, specify the volume serial number of the volume on which the data set resides. But, if the DD statement was correct, recatalog the data set.

Problem Determination: Table I, items 1, 2, 4, 7c, 25b, 29.

IEF213I jii sss [ppp] ddn[+ xxx] - UNDETERMINED ERROR PROCESSING CATALOGED DATA SET

Explanation: During allocation processing, an undetermined error was received from catalog management while attempting to retrieve volume and unit information for the data set name specified on DD statement ddn.

System Action: The job was terminated.

Operator Response: If a generation data group (GDG) level of index was coded for a non-GDG, remove the level of index and resubmit the job. Otherwise, this is probably a system error. Report this message to the system programmer.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 25d, 29.

IEF217I jii sss [ppp] ddn[+ xxx] - VOLUME CONTAINING PATTERN DSCB NOT MOUNTED

Explanation: In a DD statement, the data set name in the DSNNAME parameter specified either (1) a data set in a volume that was not mounted, or, (2) in a JES3 environment, a data set on a mounted volume that contains an incorrectly-placed pattern DSCB or model data set label.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Resubmit the job, making sure that the volume containing the data set is mounted before the job step is to be executed.

Problem Determination: Table I, items 1, 4, 7c, 25b, 29.

IEF218I jii sss [ppp] ddn[+ xxx] - PATTERN DSCB RECORD NOT FOUND IN VTOC

Explanation: In a DD statement, the data set name in the DSNNAME parameter specified a data set that did not exist in the volumes specified or a model DSCB did not exist on the catalog volume for a GDG request.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the volume table of contents (VTOC) for the data set control block (DSCB) specified in the DSNNAME parameter on the volume pointed to by the catalog. If the request is for a generation data group member, check the catalog volume VTOC for a DSCB for the GDG group. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 25b, 29.

IEF219I jii sss [ppp] ddn[+ xxx] - GDG GROUP NAME EXCEEDS 35 CHARACTERS

Explanation: In DD statement ddn, the data set name in the DSNNAME parameter was a generation data group (GDG) name longer than the maximum length of 35 characters. The extra length made it impossible to obtain the data set name's final qualifications from the catalog.

In the message text, + xxx refers to the relative position of a concatenated DD to the first DD for the concatenated group.

System Action: The job was terminated.

Programmer Response: Probable user error. Change the generation data group name so that it does not exceed 35 characters, and rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 25b, 29.

IEF

IEF221I **jjj sss [ppp] - PGM = *.DD - REFERENCED STEP WAS NOT EXECUTED - OR DATA SET TYPE INVALID**

Explanation: In an EXEC statement, the name of the program to be executed was specified by a reference to the data definition name of a DD statement in a previous step of the job. One of the following occurred:

- The previous step, which contained the DD statement, was not executed because a condition test specified in the COND parameter of the step's EXEC statement was satisfied.
- The data set was not direct access or virtual access, or it was a subsystem data set (SYSIN, SYSOUT, etc.).

System Action: The job is terminated.

Programmer Response: Probable user error. In the EXEC statement that refers to the DD statement in the previous step, include the condition tests specified in the previous step's EXEC statement or make sure that the data set is direct access or virtual access and not a subsystem data set. Then rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF225D **SHOULD jjj.sss.ppp [checkid] RESTART**

Explanation: Automatic restart was requested by procedure step ppp of step sss of job jjj and one of the following occurred:

- The step was abnormally terminated with a completion code that makes the step eligible to be restarted.
- The system failed.

If the checkpoint identification, checkid, is omitted in the message text, step restart was requested; if the checkpoint identification is present, checkpoint restart was requested.

Operator Response: If the checkpoint identification is the same as in a previous request for a restart by the same job, and if the job was previously terminated with the same completion code, it may be desirable to prevent another restart at the same checkpoint. Enter one of the following replies:

- REPLY xx,'YES' if automatic restart is to be authorized.
- REPLY xx,'NO' if automatic restart is to be denied, thus causing the system to dispose of data sets as if restart had not been requested.
- REPLY xx,'HOLD' if the job is to be held until the operator issues a RELEASE command, at which time automatic restart will be performed. (If it is desired to terminate the job, the CANCEL command should not be issued until after the RELEASE command has been issued.)

IEF229I **LRECL EXCEEDS 32K**

Explanation: The variable record extension (VRE) input or output logical record length exceeds 32,760 bytes. The output data set records were defined as variable spanned with machine code control characters, but the input records did not contain machine code control characters.

System Action: The External Writer closes its SYSOUT data set and ceases processing.

Programmer Response: If it is necessary to process records with a length greater than 32K bytes, do not request control characters for the External Writer's output data set unless control characters have been included in the input records.

Problem Determination: Table I, items 1, 2, 3, 13, 15, 29.

IEF233A **M ddd,ser,[labtyp],**

$$\left. \begin{array}{l} \text{jjj} \\ \text{jj,sss} \\ \text{jjj,sss,dsn} \\ \text{jjj,dsn} \end{array} \right\}$$

Explanation: M indicates that a volume is to be mounted on device ddd. The volume is required by job jjj or, if applicable, step sss of job jjj. (If this message is issued for a system task, sss will appear as a system task identifier.)

If a MONITOR DSNNAME command is active, the name, dsn, of a nontemporary data set requiring the volumes is also specified in the message text. The data set name will not be specified for data sets being deleted. If the data set name causes the message to exceed 70 characters, the data set name will appear on the second line of the message text.

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on device ddd.
- If ser is SCRATCH, a scratch volume is to be mounted. The scratch tape volume must have the type of label specified by labtyp: SL for standard label or standard user label, NSL for non-standard label, or NL for no label or by-pass label.
- If ser is PRIVAT, a scratch volume is to be mounted. It will be marked PRIVATE and demounted at the end of job jjj.
- If ser begins with L, the volume to be mounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

System Action: The task waits for the volume to be mounted if the device is direct access. If a scratch volume is to be mounted, all other jobs requiring the same device group will not be allocated until the operator responds to this message.

Operator Response: For tape, if ser is SCRATCH or PRIVAT, make sure that the file protect ring has been inserted in the volume.

Mount volume ser on the device; then ready device ddd. If a mount is requested for a device with non-removable volumes, ready the device in order to indicate that the volume is mounted. If the volume

cannot be mounted, enter a CANCEL command to terminate job *jjj*. Separate commands are necessary to cancel all jobs requiring volume *ser*.

IEF233D **M** *ddd,ser,[labtyp],* $\left\{ \begin{array}{l} \text{jjj} \\ \text{jjj,sss} \\ \text{jjj,sss,dsn} \\ \text{jjj,,dsn} \end{array} \right\}$

OR RESPOND TO IEF455D MESSAGE

Explanation: M indicates that a volume is to be mounted on device *ddd*. The mount is required for a dynamic allocation for step *sss* of job *jjj*.

If a MONITOR command is active, the name, *dsn*, of a nontemporary data set requiring the volume is also specified in the message text. The data set name will not be specified for data sets being deleted. If the data set name causes the message to exceed 70 characters, the data set name will appear on the second line of the message text:

- If *ser* is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If *ser* is SCRTCH, a scratch volume is to be mounted. A scratch tape volume must have the label type specified by *labtyp*: SL for standard label or standard user label, NL for no label or bypass label, or AL for ANSI label.
- If *ser* is PRIVAT, a private volume is to be mounted.
- If *ser* begins with an L, the volume to be mounted is unlabeled. The number after the L is an internal serial number assigned by the system in the form of *xxxxy*, where *xxx* is the data set number and *yy* is the volume sequence number for the data set.

System Action: The task waits for the volume to be mounted or for the operator to reply NO to message IEF455D. The job will not proceed until the operator responds to this message.

Operator Response: If the required volume is available, mount it and ready device *ddd*. If a mount is requested for a device with a non-removable volume, ready device *ddd*.

For tape, if *ser* is SCRTCH or PRIVAT, make sure the file protect ring has been inserted in the volume.

If for any reason the volume cannot be mounted, reply NO. A reply of NO to this message also serves as a reply of NO to any other mount message for step *sss* of job *jjj*.

IEF234E

$\left\{ \begin{array}{l} \text{K} \\ \text{D} \\ \text{R} \end{array} \right\}$ *ddd* $\left[\text{,ser} \left\{ \begin{array}{l} \text{PVT} \\ \text{PUB} \\ \text{STR} \end{array} \right\} , \left\{ \begin{array}{l} \text{jjj} \\ \text{jjj,sss} \end{array} \right\} \right] [\text{SPACE}=\text{prm}]$

Explanation: K indicates that the volume is to be demounted and returned to the library. R indicates that the volume on device *ddd* is to be

demounted and retained near the computer for use in the near future; D indicates that the volume is to be demounted and used subsequently as a scratch volume:

- If *ser* is a 6-digit number, it is the serial number of the volume, which contains labels.
- If *ser* begins with L, the volume to be demounted is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form *xxxxy*, where *xxx* is the data set number and *yy* is the volume sequence number for the data set.
- If *ser* is absent from the message text, the volume is unlabeled and is not being passed between job steps.
- PVT, PUB, and STR refer to the type of volume that was used: private, public or storage.

If a MONITOR SPACE command is active, the field SPACE = *cccc,tttt,aaaa/yyyy,zzzz* is specified where:

cccc

Is the total number of free cylinders on the volume.

tttt

Is the total number of tracks in addition to the free cylinders.

aaaa

Is the areas or extents dividing the cylinders and tracks.

yyyy

Is the maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz

Is the number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER
- LSPACE-UCB NOT READY

In the message text, *jobname jjj* may appear and step name *sss* will be given if a stepname was specified on the EXEC statement.

This message can occur if the volume does not have enough available space to meet an allocation request or if a data set already on the volume has the same name as the data set for which space is to be allocated.

System Action: The system marks the device as 'not READY'.

Operator Response: Demount the volume.

If K appeared, demount the volume and return it to the library. If D appeared in the message text, use the volume later when a scratch volume is requested.

IEF

If R appeared, retain the volume near the computer. If it is not externally marked with its serial number, mark the 6-digit or internally assigned number on the volume. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) In the message, *jjj* is the name of the job which needs the unit.

When the job that has allocated the retained volume ends, message IEF471I will be issued listing all retained volumes no longer needed by the job.

However, there are two cases in which message IEF471I is *not* issued when the job that has allocated the retained volume ends:

- Case 1 The device was permanently resident, and these three events occurred *before* the job ended:
- Message IEF234E appeared.
 - The operator issued the VARY *ddd* OFFLINE command for the device.
 - Message IEF281I (*ddd* NOW OFFLINE) appeared.
- Case 2 The device had the reserved mount attribute, and these three events occurred *before* the job ended:
- Message IEF234I appeared.
 - The operator issued the UNLOAD command for the device.
 - Message IEF282I (*ddd* NOW UNLOADED) appeared.

In these cases, return the volume to the library when the job ends.

Problem Determination: If an error occurs again during the listing of the parameters in the SPACE field, see Table I, items 2, 7c, 29.

IEF235D *jjj* sss WAITING FOR VOLUMES, TO CANCEL WAIT REPLY 'NO'

Explanation: The system was unable to satisfy the volume requests for a data set in step *sss* of job *jjj*. Message IEF690I precedes this message and indicates which volumes were unavailable.

System Action: The initiator for step *sss* will enter a wait state until the requested volumes have been unallocated by terminating tasks and are available for use. Other jobs requiring the same volumes cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, reply 'NO' to cancel the wait. If the allocation was requested on a DD statement, the job will be terminated. If the allocation was requested dynamically, a return code will indicate to the requester, that it was not successful.

IEF236I ALLOC. FOR *jjj* sss [*ppp*]

Explanation: The devices were allocated for step *sss* of job *jjj* or for cataloged procedure step *ppp*, that was executed by step *sss* of job *jjj*. The IEF237I messages, that follow this message, describe the device allocations.

In response to a MONITOR JOBNAMES command, this message will appear on the console *only* for the unit record devices being allocated.

Operator Response: None.

IEF237I *ddd* ALLOCATED TO *ddn*

Explanation: Device *ddd* is allocated to the data set defined in the DD statement whose name field contains *ddn*.

If *ddd* is DMY, then a DD DUMMY was allocated. If *ddd* is the name of a subsystem (JES2 or JES3 for example) then a SYSIN, SYSOUT or SUBSYS data set was allocated. If *ddd* is VIO, a paging space data set was allocated. If *ddd* is TRM, a terminal was allocated. If *ddd* is QNM, a QNAME data set was allocated.

In response to a MONITOR JOBNAMES command, this message will appear on the console (only) for the unit record devices allocated to data sets.

Operator Response: Check the unit record device to make sure it is ready and has the proper input decks, cards, or forms.

IEF238D *jjj* - REPLY [DEVICE NAME][,] ['WAIT'] OR 'CANCEL'

Explanation: The system cannot complete the allocation for the current step of job *jjj* with the devices currently available. Devices are needed for one or more of the DD statements in the step for one of the following reasons:

1. The DD statement specifically requested a unit or volume that is currently allocated to another job and is not shareable with this job.
2. The devices that could be allocated for this DD statement are not online and/or they are currently in use by another job and are not shareable with this job.

DEVICE NAME appears if there are eligible devices that are currently offline or are not accessible (message IEF247I is issued).

'WAIT' appears if the system determines it is reasonable to wait for the required device(s).

'CANCEL' always appears.

This message permits the operator to respond to preceding message IEF488I or IEF489I (and IEF247I).

System Action: The system action depends on the operator's response as follows:

- A reply of WAIT requests the system to suspend processing for this job until the required units and/or volumes are released. The wait does not take effect, however, until all DD statements that require devices for case two above have been processed and the operator has responded to message IEF433D. Message IEF489I will be

issued (or repeated) for any remaining DD statements, followed by message IEF247I (if applicable) and this message.

- A reply of a device name that appeared in the device list of message IEF247I causes the system to place the device online and attempt to allocate using this device.

Note: If the device that was originally requested by the DD statement or by the system becomes available before the device entered in reply to message IEF247I is brought online, the original device is used.

- A reply of CANCEL causes the system to terminate the job without further attempts to complete the allocation.

Note: If this message is issued when attempting to satisfy a dynamic allocation request, a reply of CANCEL causes only the allocation request to fail; it does not terminate the entire job.

If the reply was not valid for the options given in this message, message IEF490I is issued and this message repeated.

Operator Response: Refer to the installation procedure, choose one of the options given in this message, and enter the appropriate response as follows:

- REPLY xx,'ddd', where ddd is a device number that appeared in message IEF247I and can be brought online. If device ddd was listed as NOT ACCESSIBLE, a VARY CPU/CH/PATH command must precede the ddd response. (The DISPLAY MATRIX command will provide information concerning CPU and channel status.)
- REPLY xx,'WAIT' to cause the system to wait for devices and/or volumes to be freed.
- REPLY xx,'CANCEL' to terminate the job.

Note: One of the replies to to this message must be entered before processing continues for this job. Although a CANCEL command may be issued, the command will not take effect until all the DD statements that still need devices have been processed. (The reply may be specified in either upper-case or lower-case letters.)

IEF240I iii sss [ppp] - TASK I/O TABLE EXCEEDS TIOT LIMIT OF xxxk

Explanation: The task I/O table (TIOT) has exceeded its maximum allowable size. The TIOT is a system table built for each step; it contains an entry for each DD statement and for each unit associated with a DD statement. The size of the TIOT determines the maximum number of DD statements per job step. The following list shows the maximum number of DD statements allowed:

Size of TIOT	Maximum number of DD Statements allowed
16384 (16K)	816
24576 (24K)	1225
32768 (32K)	1635
40960 (40K)	2045

49152 (48K)	2454
57344 (54K)	2864
65536 (64K)	3273

The maximum may be exceeded for one of two reasons: the step JCL has explicitly requested too many DD statements and units, or because the system has generated DD statements and units beyond what the JCL explicitly requested.

Additional DD statements are generated when:

- All members of a generation data group are requested. A DD statement is generated for each member.
- A private catalog is needed to locate or catalog a data set. A DD statement is generated for the catalog if it was not defined in a JOBCAT or STEPCAT DD statement.
- A VSAM data set requires multiple device types. A DD statement is generated for each additional device type.
- JOBCAT or JOBLIB DD statements are associated with the job. The applicable DD statements are generated for each step.

The system sometimes increases the total number of units associated with a step by overriding JCL requests for volumes to share the same unit. This occurs when one of the volumes is not eligible for demounting:

- A volume has the permanently resident or reserved attribute.
- A volume is required by multiple DD statements (unless UNIT=AFF is specified for tape devices.)

System Action: The job is terminated.

Programmer Response: The total number of DD statements and units for the step must be reduced. If all data sets are not needed simultaneously, consider using dynamic allocation facilities.

Problem Determination: Table I, items 1, 3, 4, 7c, 13, 29.

IEF242I ALLOC. FOR iii sss [ppp] AT ABEND

Explanation: In the JOB statement, the allocation MSGLEVEL=0 was specified.

System Action: Since the problem program failed during execution, the system has overridden the previous specification and has assumed MSGLEVEL=1.

Unit allocation messages IEF237I will follow this message.

Programmer Response: None.

IEF244I

iii sss [ppp] - UNABLE TO ALLOCATE nnn UNIT(S)

AT LEAST nnn ALLOCATED UNIT(S) NEEDED AT LEAST nnn OFFLINE UNIT(S) NEEDED AT LEAST nnn ALLOCATED AND nnn OFFLINE UNIT(S) NEEDED

Explanation: The allocation for step sss of job iii cannot be completed with the devices currently available (online and not allocated). To recover from

this situation a total of nnn units must be varied online and/or become unallocated. Note that this total may include allocated units containing volumes which must be moved to an eligible unit to satisfy the allocation requirements for this step.

If the second line of the message appears the system has determined the minimum number of allocated and/or offline units required.

System Action: The system issues more detailed messages about each of the DD statements in this step that require further allocation action. Messages IEF488I, IEF489I, and IEF247I can be issued following this message.

Operator Response: None.

IEF245I **jjj sss [ppp] ddn[+ xxx] - INCONSISTENT UNIT NAME AND VOLUME SERIAL**

Explanation: This message appears when either one of the following two conditions exist:

1. The device types are inconsistent as a result of the UNIT parameter in a DD statement:
 - The SER subparameter of the VOLUME parameter specified the volume serial number of a volume that was mounted on a device that was not consistent with the device type specified.
 - The SER subparameter of the VOLUME parameter specified the same volume serial number as another DD statement; the device types were inconsistent.
2. Someone specified an invalid entry for the affinity index parameter in the device information table (DIT) build routine.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the erroneous parameter, and submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF246I **jjj sss [ppp] ddn[+ xxx] - INSUFFICIENT SPACE ON STORAGE VOLUMES**

Explanation: In a DD statement that requires a storage volume the SPACE parameter requested a greater quantity of tracks than was available on any eligible direct access storage volume.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it is incorrect, change it. Then submit the

job again. Notify a system programmer at your installation of the problem.

IEF247I **[jjj ddd-list OFFLINE] jjj ddd-list NOT ACCESSIBLE**

Explanation: The system was unable to allocate a device to a data set, as required for job jjj, and is attempting allocation recovery. In the message text, ddd-list is a listing of the devices.

In any system, device *ddd is a device that is pending offline but which is currently online and possibly allocated to another job. If the operator replies to message IEF238D with this device number, the device will be allocated to job jjj only if that device is eligible. When the device is not eligible, the message sequence IEF247I and IEF238D will be repeated if there is another device offline or pending offline. Note: A reply of a device that is pending offline (to message IEF238D) counteracts the previously issued vary offline command.

In any system, device ddd could be allocated if the operator could vary its status from offline to online.

The first line of the message text appears for eligible devices that are currently offline or that are pending offline (that is, devices which a VARY offline command has recognized but has not completely processed, in which case ddd is preceded by an asterisk (*); this line may appear more than once. The second line appears for eligible devices that are hierarchically offline (paths or CPU is offline); this line may appear more than once.

System Action: The system action depends on the operator response to message IEF238D, which follows this message.

Operator Response: Respond as indicated for message IEF238D, which follows this message.

Note: If you want to bring one of the devices that was listed as not accessible, online, you must issue the appropriate VARY command to bring the CPU or path to the device online before replying to message IEF238D.

Programmer Response: If the job was terminated, make any changes indicated by other messages, and submit the job again.

IEF251I **jjj sss [ppp] - JOB CANCELED (in SYSOUT) IEF251I **jjj JOB CANCELED (on console)****

Explanation: In response to a CANCEL command or a CANCEL response to message IEF238D, or a cancel indication returned by a subsystem in response to a request to allocate a subsystem data set, the system terminated job jjj. In the message text, ppp refers to the cataloged procedure step and sss to the job step that invoked the cataloged procedure.

Programmer Response: Correct any errors indicated by any other messages, and submit the job again.

Operator Response: None.

IEF253I jji sss [ppp] ddn[+xxx] - DUPLICATE NAME ON DIRECT ACCESS VOLUME

Explanation: In DD statement ddn, the data set name in the DSNAMES parameter was the same as a data set name already in the volume table of contents (VTOC) for the requested direct access volume.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set being specified is a new data set, select a unique name for it.

If the DD statement intended to specify the data set that is already on the direct access device, specify the OLD, SHR, or MOD subparameter in the DISP parameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7c, 25b, 29.

IEF254I jji sss [ppp] ddn[+xxx] - NO SPACE IN VTOC

Explanation: DD statement ddn requested space on a direct access volume for a new data set, but one of the following conditions exists:

- The volume table of contents (VTOC) for the requested volume did not have the minimum number of format-0 data set control blocks (DSCBs) required to allocate the data set.
- There was not enough space remaining in the VTOC index for a new entry.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Submit the job again, requesting space on a different volume.

Problem Determination: Table I, items 1, 3, 4, 7c, 25b, 29.

IEF256I jji sss [ppp] ddn[+xxx] - ABSOLUTE TRACK NOT AVAILABLE

Explanation: In DD statement ddn, the ABSTR subparameter of the SPACE request is asking that the data set be allocated in absolute tracks. The requested tracks are not available.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the beginning track address and quantity subparameters for validity. If they are correct, request different tracks or a different volume. Then resubmit the job.

Problem Determination: Table I, items 2, 7c, 25a, 29.

IEF257I jji sss [ppp] ddn[+xxx] - SPACE REQUESTED NOT AVAILABLE

Explanation: In DD statement ddn, the SPACE parameter requested a greater quantity of tracks than was available on the direct access volume requested.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it was incorrect, change it. If it was correct, change the request to a different volume. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7c, 25b, 29.

IEF258I jji sss [ppp] ddn[+xxx] - INVALID RECORD LENGTH SPECIFIED IN SPACE PARAMETER

Explanation: In DD statement ddn, the average record length subparameter in the SPACE parameter specified a length greater than the capacity of a track on the requested direct access device or volume.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the lengths of the records to make the average length no greater than the track capacity of the device or specify a device with a greater track capacity. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF260I jji sss [ppp] ddn[+xxx] - WRONG DSORG OR DISP

Explanation: During allocation of an indexed sequential data set, one of these error conditions was detected:

- A DD statement requiring that direct access space be obtained was found concatenated to a DD statement that indicated that the data set already existed.

Example: A concatenated DD statement specifies DISP=(NEW,KEEP), and a preceding DD statement for an ISAM data set specified DISP=(OLD,KEEP). Note that secondary dispositions are not checked for consistency.

- A DD statement specifying DSORG=IS or ISU was found concatenated to a DD statement (for the same data set) that specified a DSORG other than IS or ISU.
- A unit other than direct access was specified on a DD statement that specified DSORG=IS or ISU. ISAM data sets can reside only on direct access devices.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

IEF

Programmer Response: Correct the DISP or DSORG parameters that are in error and run the job again.

Problem Determination: Table I, items 2, 7c, 29.

IEF261I jji sss [ppp] ddn[+xxx] - NO PRIME AREA REQUEST FOR ISAM DATA SET

Explanation: None of the DD statements defining an indexed sequential data set specify DSNAME=name(PRIME).

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Supply a DD statement that specifies DSNAME=name(PRIME). List the volume table of contents (VTOC) of each volume involved using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 14, 29.

IEF262I jji sss [ppp] ddn[+xxx] - PRIME AREA MUST BE REQUESTED BEFORE OVFLOW

Explanation: The control program is unable to allocate the overflow area of a new indexed sequential data set because the overflow area request appears before the prime area request. That is, the control program read the DD statement specifying DSNAME=name(OVFLOW) before the DD statement specifying DSNAME=name(PRIME).

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Insert the DD statement specifying DSNAME=name(PRIME) before the DD statement specifying DSNAME=name(OVFLOW). List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of this data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7c, 14, 29.

IEF263I jji sss [ppp] ddn[+xxx] - SPACE REQUEST WRONG - MUST BE ON CYLINDER BOUNDARY

Explanation: The SPACE parameter of a DD statement defining an indexed sequential data set is incorrect. In the absolute track request (ABSTR), the beginning address subparameter does not specify a cylinder boundary, or it does not specify, in tracks, an integral number of cylinders.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the absolute track subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set, using the LISTCAT command. If the name of this data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

IEF264I jji sss [ppp] ddn[+xxx] - DUPLICATION OF THE DSNAME ELEMENT INVALID - SAME AREA REQUESTED TWICE

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the same area. Both DD statements specify the same element in the DSNAME parameter.

In the message text, +xxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the ISAM data set ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Eliminate one of the duplicating DD statements. List the volume table of contents (VTOC) of each volume that will contain the data set using the LISTCAT command. If the name of the data set appears in any VTOC, remove it using the DEFINE and DELETE commands. Then rerun the job.

Problem Determination: Table I, items 2, 7c, 14, 29.

IEF266I jji sss [ppp] ddn[+xxx] - INVALID JFCB POINTER

Explanation: During allocation, a JFCB pointer was found to have been zeroed.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable system error. Rerun the job.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF267I jji sss [ppp] ddn[+xxx] - DIRECTORY SPACE REQUEST IS LARGER THAN PRIMARY REQUEST

Explanation: In DD statement ddn, the space requested for the directory was not allocated because the directory quantity subparameter of the SPACE parameter requested more space than the primary quantity subparameter.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter, or increase the primary quantity subparameter. Then rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 25b, 29.

IEF272I jii sss [ppp] - STEP WAS NOT EXECUTED

Explanation: The control program did not execute step sss of job jii, or cataloged procedure step ppp invoked by job step sss, for one of the following reasons:

- An error appeared in a job control statement.
- A previous step abnormally terminated, but the current step did not specify EVEN or ONLY in the COND parameter of the EXEC statement.
- The step was being executed or terminated when system restart was required. To confirm this reason, look for message IEF236I (ALLOCATION FOR jii sss [ppp]) in the system output listing following SYSOUT data set information or following duplicate allocation messages for the step.
- The job step required input/output devices, volumes, or space that could not be allocated.
- The job containing the job step was canceled by the operator before the job step was initiated. To confirm this, look for message IEF450I on the console listing with a 222 ABEND.

System Action: When a job control statement contained an error or where allocation could not be made, the job was terminated.

Where system restart was required, the remainder of the steps in the job were not executed.

Programmer Response: Probable user error. Correct any errors, and submit the job or job step again.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF273I jii sss [ppp] ddn[+xxx] - INVALID USER LABEL REQUEST

Explanation: In DD statement ddn, a user label track was requested for a data set. However, the control program was unable to allocate space for the data set for one of the following reasons:

- The DSORG subparameter of the DCB parameter specified PO or IS.
- The SPACE parameter included a directory quantity subparameter.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. In the first case, specify PS or DA in the DSORG subparameter of the DCB parameter. In the second case, delete the directory quantity subparameter of the SPACE parameter. Then resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF274I jii sss [ppp] ddn[+xxx] - SPACE REQUEST REJECTED BY INSTALLATION EXIT, REASON CODE nnnn

Explanation: The space request specified on DD statement ddn was rejected by an installation exit processing the space request; nnnn is the reason code assigned by your installation. In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Refer to your installation procedures to determine the cause of the failure as indicated by reason code nnnn. Check the DD statement to ensure that it follows installation requirements for space requests. If it does not, change the DD statement and resubmit the job. If the DD statement is correct, notify your system programmer of the problem.

Problem Determination: Table I, items 1, 3, 4, 7c, and 29.

IEF275I jii sss [ppp] ddn[+xxx] - SPACE REQUEST CANNOT BE SATISFIED, INSTALLATION EXIT REASON CODE nnnn

Explanation: The space request specified on DD statement ddn could not be satisfied on any volume(s) eligible for the request; nnnn is the reason code assigned by your installation. In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Refer to your installation procedures to determine the cause of the failure as indicated by reason code nnnn. Check the DD statement to ensure that it follows installation requirements for space requests. If it does not, change the DD statement and resubmit the job. If the DD statement is correct, notify your system programmer of the problem.

Problem Determination: Table I, items 1, 3, 4, 7c, and 29.

IEF281I ddd NOW OFFLINE [-DEVICE IS BOXED]

Explanation: In response to a VARY command, device ddd has been placed offline.

If DEVICE IS BOXED appears, the device was boxed because of a hardware I/O error, or VARY ddd,OFFLINE,FORCE command processing, or VARY CH(x),OFFLINE,FORCE command processing.

When a device is boxed, these events occur:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. The device goes offline when these conditions occur, in this order:
 1. The device is no longer allocated to any job.

- Allocation processing allocates any device in the system.

If the device was offline, it remains offline.

System Action: Processing continues.

Operator Response: None.

IEF282I ddd NOW UNLOADED [-DEVICE IS BOXED]

Explanation: In response to an UNLOAD command, the system has unloaded a volume from device ddd.

If DEVICE IS BOXED appears, the device was boxed because of a hardware I/O error, or VARY ddd,OFFLINE,FORCE command processing, or VARY CH(x),OFFLINE,FORCE command processing.

When a device is boxed, these events occur:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. The device goes offline when these conditions occur, in this order:
 - The device is no longer allocated to any job.
 - Allocation processing allocates any device in the system.

If the device was offline, it remains offline.

System Action: Processing continues.

Operator Response: None.

**IEF283I dsn {NOT DELETED rc|UNCATALOGED}
VOL SER NOS = ser [z],ser [z],ser [z],ser [z],ser [z]
VOL SER NOS = ser [z],ser [z],ser [z].**

Explanation: A DD statement specified DELETE as the disposition of data set dsn, but the data set was not deleted from the volumes whose serial numbers, ser, are listed in the message text.

If the data set was not deleted from any of its volumes, the volumes listed are all of the volumes on which the data set resides. If the data set was partially deleted, message IEF285I precedes this message in the SYSOUT data set and lists the volumes from which the data set was deleted.

- If ser is a six-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all the volumes are listed. The last volume serial number is followed by a period.

UNCATALOGED in the message text indicates that data set dsn was not found on all the volumes listed in the catalog. It was deleted from the volumes listed in message IEF285I and was uncataloged.

The one-digit code, rc, explains why the data set was not deleted:

rc Explanation

1 The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.

4 No device was available for mounting during deletion, or the requested device is a mass storage system (MSS) virtual device.

Note: Under JES3, return code 4 might appear at job termination for a data set that was passed from a job step but was not received by the step where it was to be deleted. Return code 4 appears if one of the following has occurred:

- The data set was allocated to a permanently resident device that was online to MVS but offline to JES3.
- JES3 set up the data set on a device that was varied offline to JES3 before the data set could be deleted.

5 Too many volumes were specified for deletion; because of this, not enough storage was available to perform the specified deletion. Deletion may be accomplished in several job steps by specifying some of the volume serial numbers in each step.

6 Either no volumes were mounted or the mounted volumes could not be demounted to permit the remaining volumes to be mounted.

8 The SCRATCH routine returned a code, z following each volume serial number, explaining why the data set was not deleted from that volume. The values of z and their meanings are as follows:

- The data set was not found on the volume.
- The data set is security protected and the correct password was not given.
- The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
- An uncorrectable I/O error occurred in deleting the data set from the volume.
- The system was unable to have the volume mounted for deletion.
- The system asked the operator to mount the volume, but the operator did not. Or, when under MSS and JES3 environment, JES3 would not allow the virtual volume to be mounted.
- The data set cannot be deleted because it is currently in use.
- Either the caller is not authorized by RACF to access the data set, or the data set DSCB indicates that it is RACF-defined but no profile exists for the data set in the RACF data set. (This

code is generated only in systems containing the resource access control facility (RACF.)

- 9 The data set is associated with one or more RACF-defined entities. (This code is generated only in systems containing the resource access control facility (RACF).)

Programmer Response: Corrective action depends on the value of rc and z:

rc Action

- 1 Do not attempt to delete the data set.
- 4 Make sure that the correct volumes can be mounted. If JES3 is being used, be sure the device containing the data set is online to JES3.
- 5 Delete the data set in several job steps.
- 6 Make sure that the correct volumes can be mounted.
- 8 And z is 1, make sure that the correct volumes can be mounted.

And z is 2, supply the correct password.

And z is 3, do not attempt to delete the data set.

And z is 4, resubmit the job.

And z is 5, make sure that the correct volumes can be mounted.

And z is 6, make sure that the correct volumes can be mounted.

And z is 7, do not specify SHR as the disposition for the data set.

And z is 8, contact the installation RACF administrator to correct the problem by properly defining the data set or by providing correct RACF authorization.

And z is 9, have the owners of the RACF-defined entities delete the profiles from the RACF data set.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF285I

dsn dsp

VOL SER NOS = ser,ser,ser,ser,ser

VOL SER NOS = ser,ser,ser.

Explanation: The disposition, dsp, specified for the data set named dsn was accomplished for the volumes whose serial numbers, ser, are listed in the message text.

- If ser is blank, the volume is an unlabeled magnetic tape whose disposition is PASSED.
- The dsp is one of the following:

PASSED
KEPT
DELETED
CATALOGED
UNCATALOGED

RECATALOGED
SYSOUT
SYSIN
SUBSYS

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.
- If no VOL SER line is issued, the system disposed of either a VIO data set or a subsystem data set (For example SYSIN, SYSOUT, SUBSYS).

For data sets deleted by the TSO DELETE command, this message will show a disposition of KEPT in certain situations. To determine the actual disposition of the data sets, check the message sent by the DELETE command to the TSO terminal.

When this message is written to indicate the deletion of a passed, unreceived data set that was created at the beginning of the job, there might be another IEF285I message indicating that another temporary data set has been kept. This data set is actually a dummy data set occupying no space. It was allocated so SCRATCH processing could access the volume.

When the program being executed is IDCAMS, inexplicable IEF285I messages with system-generated temporary data set names and a disposition of KEEP appear frequently. The data sets do not exist and the names, which are generated when a program allocates a volume with a disposition of OLD or SHR, do not appear on any of the specified volumes. These messages should be ignored.

Five volume serial numbers are listed per line until all the volumes are listed. The last volume serial number is followed by a period.

Programmer Response: None.

IEF286I

jjj sss [ppp] ddn[+xxx] - DISP FIELD INCOMPATIBLE WITH DSNNAME

Explanation: The disposition specified in the DD statement does not agree with the status of the data set. The request was either a GDG request for a new data set that already exists, or a GDG request for an old data set that does not exist.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct either the disposition specified or the relative generation level requested and rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF287I -- IEF288I

IEF287I

dsn dsp w
VOL SER NOS = ser,ser,ser,ser,ser
VOL SER NOS = ser,ser,ser.

Explanation: The DISP parameter of a DD statement was CATLG or UNCATLG, but the system could not catalog or uncatalog the data set.

In the message text, dsn is the data set name and dsp is the disposition of the data set. If CATLG was specified in the DD statement, then dsp appears in the message text as NOT CATLGD (not cataloged) or NOT RECTLGD (not recataloged). If UNCATLG was specified in the DD statement, dsp appears in the message text as NOT UNCTLGD (not uncataloged).

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with L, the volume is unlabeled; the number after the L is an internal serial number assigned by the system to an unlabeled volume and is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all volumes are listed. The last volume serial number is followed by a period.

The w explains why the data set was not cataloged, recataloged, or uncataloged:

w Explanation

- 1 A control volume or user catalog was required and a utility program must be used to catalog the data set.
- 2 One of the following has occurred:
 - The data set to be cataloged had been cataloged previously. Either a catalog entry already exists for the DSNAME specified, or a catalog entry for an ALIAS of another data set matches the DSNAME specified.
 - The data set to be uncataloged could not be located.
 - A password was not given for writing the catalog.
 - An incorrect password was given for writing the catalog.
 - The data set name of a data set to be cataloged in a user catalog or CVOL has the same high level qualifiers as the name of a catalog entry that already exists in the user catalog or CVOL. For example, data set A.B.C.D cannot be cataloged in a CVOL if A.B or A.B.C is already in the catalog.
- 3 A specified index did not exist.
- 4 The data set could not be cataloged because space was not available in the catalog data set.
- 5 Too many volumes were specified for the data set; because of this, not enough storage was available to perform the specified cataloging.
- 6 The data set to be cataloged in a generation index is improperly named.

- 7 The data set to be cataloged was not opened and no density information was provided on the DD statement (for dual density tape requests only).
- 9 An uncorrectable input/output error occurred in reading or writing the catalog, or the catalog is expiration date protected but the purge date has not passed. This code is also generated in systems containing the resource access control facility (RACF) if the user was denied access to the catalog.
 - A The VTOC of a DOS volume could not be converted to OS format.

Programmer Response: If w is 9 resubmit the job.

If a RACF failure has occurred, contact the installation RACF administrator to get proper authorization.

If w is not 9, probable user error.

If w is 1, execute the required utility program, making sure the required control volume is mounted.

If w is 2 or 3, correct the DSNAME parameter of the DD statement, and submit the job step again.

If w is 2 and the catalog is password protected, supply the correct password to message IEC301A, if it was issued.

If w is 4, increase the size of the catalog data set or delete unused catalog entries, and use a utility program to catalog the data set.

If w is 6, and the data set name is dsn (G0000V00), do the following:

1. Using IEHLIST, list all the data set names for that GDG (generation data group).
2. Using IEHPRGM, rename the data sets in the same order as they exist, starting with G0001V00 or higher. Uncatalog the data sets using the original data set names, then catalog the data sets using the new names.

If the data set name is not dsn (G0000V00), correct the DSNAME parameter of the DD statement and submit the job step again.

If w is 9, resubmit the job, or catalog the data set using some alternate method, such as the IDCAMS utility.

If w is A, either scratch or move the split cylinder data set that is creating the error, and execute the job again.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF288I

dsn SYSOUT

Explanation: Data set dsn has been passed to the job entry subsystem (JES2 or JES3) and will be processed according to the SYSOUT parameters specified on a DD statement or on the SETPRT macro instruction. This message is issued whenever the SETPRT macro instruction causes a change in the printer specifications for a SYSOUT data set.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

IEF300I ddd WTR CLOSED - SUBSYSTEM INTERFACE ERROR xxxx/yyyy

Explanation: A serious error occurred either while the external writer was attempting to obtain a SYSOUT data set from JES2 or to dynamically allocate a SYSOUT data set received from JES2.

In the message, ddd is the device containing the SYSOUT data set, and xxxx/yyyy is the error code received by the external writer. Interpret the error code as follows:

- If yyyy = 0000, the IEFSSREQ macro instruction was issued, and xxxx is the return code (in register 15) from IEFSSREQ macro processing. See the description of the subsystem options block (SSOB) in *System Programming Library: Debugging Handbook* for the explanation of the register 15 return codes.
- If yyyy = FF00, the IEFSSREQ macro instruction was issued, and xxxx is the value of the SSOBRETN field in the subsystems option block (SSOB). See the description of the SSOB in *System Programming Library: Debugging Handbook* for the explanation of the return codes in SSOBRETN. These codes are listed under 'Process SYSOUT Data Sets Return Codes'.
- If yyyy is any value except 0000 or FF00, SVC 99 was issued; yyyy is the error reason code (S99ERROR), and xxxx is the return code in register 15 from SVC 99 processing. See *MVS System Programming Library: System Modifications* for the explanation of the SVC 99 error reason codes and return codes.

System Action: The external writer closed the output data set on device ddd and terminates.

Programmer Response: Respond as required for the error code that appears in the message. When the problem is corrected, enter the START XWTR command again.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF301I ddd WTR CLOSED

Explanation: In response to a STOP command, the External Writer closed its output data set on device ddd and stopped itself.

System Action: The External Writer is no longer active.

Operator Response: None.

IEF302A ddd WTR WAITING TO START aaaaaaa FOR JOBID j

Explanation: The External Writer is waiting for the operator to validate writer name aaaaaaa. The writer name was specified on a SYSOUT DD card in JOBID j.

System Action: The External Writer is in a wait state until it receives a response from the operator.

Operator Response: If the writer name is valid and is to be used by the External Writer, then enter REPLY xx,'U' and the External Writer will use the

name. If the writer name is invalid and the External Writer is not to use the name and is to bypass and delete this data set, enter REPLY xx,'N'. If the External Writer is to use another writer name, enter REPLY xx, 'N,ccccccc', where ccccccc is the other writer name. Finally, if aaaaaaa is not valid and the operator wants the External Writer to use the IBM-supplied default writer name, enter REPLY xx,'D' and the External Writer will use the default writer name to write the data set.

IEF303I ddd WTR CLOSED - OUTPUT ERROR

Explanation: The External writer closed its SYSOUT data set on device ddd and stopped itself, because of an uncorrectable input/output error while writing the data set. The data that was being written will be written on the device specified in the next START XWTR command that also specifies the data's selection criteria.

Operator Response: Enter another START XWTR command, specifying the same selection criteria of the data that was being written.

Problem Determination: Table I, items 2, 13, 30.

IEF307I ddd WTR CLOSED-OUTPUT DCB FAILED TO OPEN

Explanation: While processing a START XWTR command, the system was unsuccessful in opening the system output data set. In the message text, ddd is the unit address of the device assigned to the writer.

System Action: The External Writer will terminate itself.

Operator Response: Restart the writer.

Problem Determination: Table I, items 2, 7a, 29.

IEF311I NOP - SETPRT PARAMETER LIST INVALID

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, no operation was performed because the SETPRT parameter list was not valid.

System Action: The External Writer stops processing the input data set and goes on to process other input data sets.

Programmer Response: Make sure that the UCS/FCB parameters are correctly specified on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF314I SYSIO

Explanation: While an External Writer was writing a SYSOUT data set, one of the following was detected:

- An uncorrectable input/output error in reading the input data set.
- For an input data set containing blocked variable format records, a logical record that was too short; that is, less than 5 characters for blocked variable format with control characters or less than 4 characters for blocked variable format with no control characters.

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- For an input data set containing fixed or fixed blocked records, the BLKSIZE or LRECL of the data is not the same as the BLKSIZE or LRECL which describe the attributes of the data set.

System Action: The External Writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set does not have a blocked variable format record that is too short. Then recreate the data set by again executing the job step that produced it.

Problem Determination: Table I, items 1, 3, 4, 25b, of the volume containing the SYSOUT data set, 29.

IEF316I CCBAD

Explanation: While an External Writer was writing a SYSOUT data set, an invalid machine control character was detected in the input data set. The External Writer could not translate the character into an ASA character.

System Action: The External Writer stops processing the input data set and goes on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set contains valid control characters.

Problem Determination: Table I, items 1, 3, 4, 15, 29.

IEF318I `jjj sss [ppp] ddn[+xxx] 'UNIT=AFF' INVALID FOR REQUEST SPECIFYING NEW DIRECT ACCESS DATA SET`

Explanation: The AFF subparameter of the UNIT parameter was specified in a request for a new direct access data set. In the message text, ddn is the name of the DD statement defining the data set.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set is new, remove the AFF subparameter and ensure that the UNIT parameter specifies a unit address or unit type. Then run the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF321I INVALID SEGMENT

Explanation: In an input data set, a variable record extension (VRE) segment descriptor word is incorrect. For example, a beginning segment occurred before the end segment of the last logical record.

System Action: The External Writer closed its output data set and stopped itself.

Programmer Response: Probable user error. Make sure the segment descriptor words in the input data set are being created correctly. Then execute the job step again.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF322I NO FCB IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the FCB image on a 3211 printer, no image-id had been specified with the verification request.

System Action: The External Writer ignores the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the FCB image-ID to be verified. Make sure the FCB image-ID is correctly included following the FCB=keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEF323I NO FCB IMAGE-ID SPECIFIED FOR ALIGNMENT

Explanation: In response to a user request for alignment of the FCB forms on a 3211 Printer, no image-ID had been specified with the alignment request.

System Action: The External Writer ignores the request for alignment and continues with remaining requests.

Programmer Response: ALIGN should only be specified with the FCB image-ID to be aligned. Make sure the FCB image-ID is correctly included following the FCB=keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF324I NO UCS IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the UCS image on a 3211 Printer, no image-ID had been specified with the verification request.

System Action: The External Writer ignores the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the UCS-ID to be verified. Make sure the UCS image-ID is correctly included following the UCS=keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF325I OPERATOR CANCELED LOAD. UCS/FCB IMAGE-ID/CHAIN NOT AVAILABLE.

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, either the image could not be found in the image library (SVCLIB) or the requested chain was not available. Therefore, the operator canceled the load.

System Action: The External Writer stops processing the input data set and goes on to process other input data sets.

Programmer Response: Load the required image into the system library or respecify the image-ID on

the DD card to use an image and chain available at the installation.

Problem Determination: Table I, items 1, 2, 3, 15, 29. Execute System Utility IEHLIST, LISTPDS DSNAME= image library on volume which contains the image library; save output.

IEF326I PERMANENT I/O ERROR ON BLDL LOCATE ON UCS/FCB IMAGE IN SYSTEM LIBRARY

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffers on a 3211 printer for the input data set, a permanent I/O error was detected when the BLDL macro instruction was issued by data management to locate the character set image in the image library.

System Action: The External Writer closes its SYSOUT data set and automatically discontinues processing.

Operator Response: Enter another START XWTR command specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from XWTR. Execute system utility IEHLIST, LISTPDS, DSNAME= image library on volume which contains the image library; save output.

IEF327I WTR ddd CLOSED. PERMANENT I/O ERROR WHILE LOADING UCS/FCB BUFFER

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error persisted after two attempts were made to load the associated buffer.

System Action: The External Writer closes its SYSOUT data set on device ddd and stops itself.

Operator Response: Enter another START XWTR command, specifying the selection criteria of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WXTR.

IEF328I WTR ddd CLOSED. PERMANENT I/O ERROR ON UCS/FCB IMAGE VERIFICATION.

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error was detected when an attempt was made to display the character set image on the printer for visual verification.

System Action: The External Writer closes its SYSOUT data set on device ddd and stops itself.

Operator Response: Enter another START XWTR command, specifying the selection criteria of the data that was being written.

Problem Determination: Table I, items 2, 29.

IEF329I WTR ddd CLOSED. OPERATOR CANCELED LOAD. INCORRECT UCS/FCB IMAGE DISPLAYED FOR VERIFICATION.

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffers on 3211 printer for the input data set, the operator canceled the load because an incorrect image was displayed on the printer for visual verification.

System Action: The External Writer closes its SYSOUT data set on device ddd and stops itself.

Programmer Response: Insure that the requested train contains the graphics necessary to print the image-ID specified and that the image-ID and desired verification image are correctly defined.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF331I WTR ddd CLOSED. SETPRT NOP-UNCORRECTABLE OUTPUT ERROR ON PREVIOUS OPERATION.

Explanation: When the External Writer issued the SETPRT macro to load the UCS/FCB buffers on a 3211 printer for the input data set, no operation was performed due to an uncorrectable error in a previously initiated output operation.

System Action: The External Writer closes its SYSOUT data set on device ddd because of the uncorrectable output error, and stops itself.

Operator Response: Follow action specified for those companion messages which describe the nature of the uncorrectable error. Enter another START XWTR command, specifying the selection criteria of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WTR.

IEF337I jji sss [ppp] - UNABLE TO ACCESS LOCKED CATALOG

Explanation: The system made an unsuccessful attempt to access a catalog that was locked for recovery. The job does not have the proper authorization to perform this function.

System Action: The system terminates the job.

Operator Response: None.

Programmer Response: You can (1) obtain the proper authorization for the job and then resubmit the job or (2) wait until the catalog becomes unlocked and then resubmit the job.

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IEF338I

SCHEDxx LINE nnnn:**EDT string IGNORED**

UNRECOGNIZED KEYWORD VALUE NOT VALID

IEFEDTxx NOT LOADED

MEMBER NOT FOUND DIRECTORY I/O ERROR BLDL RETURN xxxx-yyyy LOAD RETURN CODE xxxx

DEFAULT EDT ID VALUE
xx USED
MISSING RIGHT PARENTHESIS
ON EDT STMT
DUPLICATE EDT STATEMENT
IGNORED
DUPLICATE EDT ID
KEYWORD IGNORED
NO OPERANDS SPECIFIED
ON EDT STMT

DEFAULT EDT PARAM:**IEFEDTxx NOT LOADED**

MEMBER NOT FOUND DIRECTORY I/O ERROR BLDL RETURN xxxx-yyyy LOAD RETURN CODE xxxx

DEFAULT EDT ID VALUE xx USED**EDT string IGNORED**

EXTRANEIOUS DATA FOUND VALUE NOT VALID

IEFEDTxx NOT LOADED

MEMBER NOT FOUND DIRECTORY I/O ERROR BLDL RETURN xxxx-yyyy LOAD RETURN CODE xxxx

Explanation: The system could not load the requested eligible device table (EDT). There are three error conditions for which the system may generate this message:

1. SCHEDxx LINE nnnn:

The system found an invalid EDT statement at record number nnnn in PARMLIB member SCHEDxx.

2. DEFAULT EDT PARAM:

The system found an error with the default EDT configuration identifier that it takes from the I/O configuration identifier specified on the IPL frame. The system uses this default EDT if it does not find any valid EDT statements during PARMLIB processing.

3. EDT string IGNORED**IEFEDTxx NOT LOADED**

The system found an error trying to process the reply to message IEF399A.

There is one more condition for which the system may generate this message: **DEFAULT EDT ID VALUE xx USED**, which indicates that the system is successfully using the default EDT configuration. In this case, the message is informational only, and simply identifies xx, the EDT configuration the system is using.

Along with the text for the three error conditions, there may be additional text to further explain the error:

EDT string IGNORED

The system found an EDT PARMLIB statement but did not process the statement, due to the invalid string.

IEFEDTxx NOT LOADED

The system could not LOAD an EDT with the configuration ID xx.

DEFAULT EDT ID VALUE xx USED

The system must use the default EDT id value xx.

MISSING RIGHT PARENTHESIS ON EDT STMT

The system encountered the end of the EDT statement, without finding a right parenthesis.

DUPLICATE EDT STATEMENT IGNORED

During parmlib processing, the system found more than one EDT statement. The system processes the first statement and ignores all subsequent duplicate statements.

DUPLICATE EDT ID KEYWORD IGNORED

The system encountered an additional EDT ID after it had already processed a valid EDT ID (the default value, or the ID specified in the SCHEDxx member). The system ignores all subsequent EDT IDs.

NO OPERANDS SPECIFIED ON EDT STATEMENT

The system did not find any operands on the EDT statement.

If the message display contains **EDT string IGNORED**, the reason why the system ignored the string is one of the following:

UNRECOGNIZED KEYWORD

The system did not find a left parenthesis immediately following the ID keyword. The system does not recognize the keyword as valid.

VALUE NOT VALID

The system encountered an invalid ID value. A valid value must be two alphanumeric characters.

EXTRANEIOUS DATA FOUND

The system encountered data other than the value parameter while processing the reply to message IEF339A.

If the message display contains **IEFEDTxx NOT LOADED**, the reason why the system did not load IEFEDTxx is one of the following:

MEMBER NOT FOUND

The system could not find the IEFEDTxx member of SYS1.NUCLEUS.

DIRECTORY I/O ERROR:

While the system was trying to read the directory, a permanent I/O error occurred.

BLDL RETURN xxxx-yyyy

If the system verifies the EDT ID parameter, it issues the BLDL macro to bring a copy of the directory entry for member IEFEDTxx into storage. This portion of the message display contains the return code xxxx and reason code yyyy from the BLDL macro. See *MVS Data Management Macro Instructions* for an explanation of the return and reason codes.

LOAD RETURN CODE xxxx

The system issued the LOAD macro, and this portion of the message display contains the return code xxxx from the LOAD macro. See *MVS/XA Supervisor Services and Macro Instructions* for an explanation of the return code.

System Action: Message IEF339A may follow this message. IEF339A requests that the operator respecify the EDT configuration ID. In any case, the system continues processing.

Operator Response: Follow the directions in message IEF339A to respecify another EDT.

IEF339A RESPECIFY EDT CONFIGURATION ID.

Explanation: A valid eligible device table (EDT) identifier does not exist, and message IEF339A prompts the operator for a valid identifier.

System Action: The system issues message IEF338I prior to message IEF339A. The contents of message IEF338I explain the problem with the EDT. The system then waits for the operator to respond to message IEF339A.

Operator Response: Respond to message IEF339A and respecify a valid EDT identifier.

Programmer Response: None.

IEF361I *jjj sss [ppp] - UNABLE TO ALLOCATE/OPEN PRIVATE CATALOG OR ALLOCATE CVOL*

Explanation: The system was unable to either allocate or open a required private catalog or allocate a control volume to resolve volume and unit requirements for a cataloged data set.

System Action: The job is terminated.

Programmer Response: List the master catalog to obtain further information about your private catalog.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF362I *jjj sss [ppp] - UNABLE TO CLOSE/UNALLOCATE PRIVATE CATALOG OR UNALLOCATE CVOL*

Explanation: The system was unable to unallocate or close a private catalog or unallocate a control volume which was needed to resolve volume and unit information for a cataloged data set.

System Action: The job is terminated.

Programmer Response: List the master catalog to obtain further information about your private catalog.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF363I *jjj sss [ppp] - INSUFFICIENT REAL OR VIRTUAL STORAGE FOR PROCESSING CATALOGED DATA SET*

Explanation: An attempt was made to retrieve volume and unit information for a cataloged data set, however, insufficient real or virtual storage was available to contain the retrieved information.

System Action: The job is terminated.

Programmer Response: Resubmit the job for processing.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF364I *jjj sss [ppp] - PERMANENT I/O ERROR PROCESSING CATALOGED DATA SET*

Explanation: An unrecoverable I/O error occurred when attempting to retrieve volume and unit information from the catalog.

System Action: The job is terminated.

Operator Response: Probable system error. Report this message to the system programmer.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF365I *jjj sss [ppp] ddn] + xxx] - INVALID REFERENCE TO A GENERATION DATA GROUP NAME*

Explanation: In the message text, ddn is the name of a DD statement which contained either VOL = REF = dsn or DCB = dsn where dsn is the name of a generation data group.

System Action: The job is terminated.

Programmer Response: Change the DD statement so that the referenced dsn is not the name of a generation data group.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF366I *jjj sss [ppp] ddn] + xxx] - RELATIVE GENERATION NUMBER SPECIFIED FOR GDG CONTAINS SYNTAX ERROR*

Explanation: In a DD statement, the relative generation number specified for a GDG in the dsname parameter contained a syntax error. One of the following guidelines was violated:

- The first character of a relative generation number must be +, -, or 0.
- A relative generation number prefaced with a + or - must be 1 or greater.
- A relative generation number cannot exceed 255.
- All characters of a relative generation number must be numeric (0-9).
- A relative generation number must be expressed in 1-3 numeric characters. It may be prefaced by a + or -, for example +101, -002, +4, -09, 000.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the relative generation number and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF367I – IEF376I

IEF367I **jjj sss [ppp] - I/O ERROR OBTAINING PATTERN DSCB**

Explanation: An uncorrectable I/O error occurred while attempting to obtain a data set control block (DSCB).

System Action: The job is terminated.

Programmer Response: Probable system error. None.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF369D **jjj,sss INVALID REPLY - MOUNT VOLUME OR REPLY 'NO'**

Explanation: The operator gave an invalid reply to message IEF455D. The only acceptable reply to that message is NO.

System Action: The task waits for the volume to be mounted or a reply of NO.

Operator Response: Either mount the volume requested in message IEF455D or reply NO to this message.

IEF371I **- jjj sss [ppp] ddn [+ xxx] - TELECOMMUNICATION DEVICE NOT ACCESSIBLE**

Explanation: DD statement ddn requested a telecommunication device for which no path is available by which the system can gain access. The device was requested either explicitly (UNIT=020) or by line group (UNIT=(TERMx=n)) and one of the first n devices in the group was not available.

System Action: The job is terminated.

Programmer Response: Make sure that the necessary devices are accessible (by issuing the appropriate VARY commands) and rerun the job.

Problem Determination: Table I, items 1, 4, 29.

IEF372I **jjj sss [ppp] ddn [+ xxx] - VOLUME FIELD CONTAINS REFERENCE TO A DD NOT PREVIOUSLY RESOLVED**

Explanation: In a DD statement (ddn in the message text), the VOLUME parameter contains a reference to a DD statement in a previous step. However, the previous step, which contains the referenced DD statement, was not executed because the condition test specified by the COND parameter of that step was satisfied.

System Action: The job was terminated.

Programmer Response: Probable user error. Include the same condition test specified in the EXEC statement of the step being referenced by ddn in the EXEC statement of the step containing DD statement ddn.

Problem Determination: Table I, items 2, 4, 7c, 29.

IEF373I **STEP/sss/START yyddd.hhmm**

Explanation: At step termination for SMF, this message indicates the time and date that step sss was started.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).

Programmer Response: None.

IEF374I **STEP/sss/STOP yyddd.hhmm**

CPU xxxxMIN xx.xx	SEC
SRB xxxxMIN xx.xx	SEC
REAL/VIRT xxxx K	SYS xxxx K
EXT xxxx K	SYS xxxx K

Explanation: At step termination for SMF, this message indicates the time and date that step sss was terminated, the step problem program CPU and SRB time, and the total storage used. yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).

For the CPU and SRB time, xxxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second).

REAL/VIRT xxxx K indicates the amount of storage used in the low address portion of the private area and SYS xxxx K the amount used from the top. The word REAL will be used if ADDRSPC=REAL was specified, otherwise, VIRT will be used.

EXT xxxx K indicates the amount of storage used in the extended private area and SYS xxxx K the amount used from the system area.

Programmer Response: None.

IEF375I **JOB/jjj/START yyddd.hhmm**

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was started.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).

Programmer Response: None.

IEF376I **JOB/jjj/STOP yyddd.hhmm CPU xxxxMIN xx.xxSEC SRB xxxxMIN xx.xxSEC**

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was terminated and the job problem program CPU and SRB time.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59). For the CPU and SRB time, xxxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second).

Programmer Response: None.

IEF382A ddd WTR WAIT DUE TO PAUSE

Explanation: In response to a MODIFY command with a PAUSE=DATA SET parameter, the External writer is waiting before starting to write a SYSOUT data set on device ddd.

The previous data set or messages are completed; that is, all lines or cards have been printed or punched and completely checked.

Operator Response: Perform any desired actions on device ddd; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

IEF383A ddd WTR, CHANGE FORM TO nnnn

Explanation: The External Writer is waiting for the operator to change the forms on device ddd to form number nnnn. This message appears only when a data set to be printed or punched needs forms different from the forms used for the data set just printed or punched by the External Writer.

The previous data set or messages are completed; that is, all lines have been printed or punched and completely checked.

Operator Response: Change the forms to form number nnnn; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

IEF402I {jjj/cm} FAILED - CODE Scde - IN ADDRESS SPACE z**IEF402I {jjj/cm} FAILED IN ADDRESS SPACE z SYSTEM ABEND Scde - REASON [- REASON CODE rc]**

Explanation: The system abnormally terminated address space z. Scde is the system completion code and rc is the associated reason code, if it exists.

The message text gives the job name jjj, if available; otherwise cm appears as START COMMAND, MOUNT COMMAND, or LOGON COMMAND. If the system cannot determine which command had been issued, cm will appear as COMMAND.

System Action: The system terminates address space z and the job or command.

Operator Response: If a START or MOUNT command failed, reissue the command.

Programmer Response: See *System Codes* for an explanation of Scde, correct the error, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 18, 29.

IEF403I jjj-STARTED [-TIME = hh.mm.ss]

Explanation: In response to a MONITOR command with JOBNAMES in its operand, this message indicates that the system has begun processing the job named jjj.

If T is also specified in the operand of the MONITOR command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59). The time, if specified, does not necessarily correspond to any time accounting time stamp.

Operator Response: None. However, if the job should not be executed at this time, issue a CANCEL command and the job will be bypassed.

IEF404I jjj-ENDED [-TIME = hh.mm.ss]

Explanation: In response to a MONITOR command with JOBNAMES in its operand, this message indicates that job jjj has terminated.

Note: If job jjj has been canceled by the operator and not by the system, this message will not be issued.

If T is also specified in the operand of the MONITOR command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

Operator Response: None.

IEF417I PROCLIB DEVICE I/O ERROR READING FOR JOB jjj

Explanation: During the processing of a request for a cataloged procedure, an input/output error occurred in reading or searching the SYS1.PROCLIB data set or a user procedure library.

System Action: Job jjj, which was being processed, was terminated. If the error occurred in reading the procedure library, the job scheduler also wrote message IEF603I in the SYSOUT data set; if the error occurred in searching the procedure library, the job scheduler also wrote message IEF614I in the SYSOUT data set.

Operator Response: If available, rerun job jjj.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF430I RESTART STEP NOT FOUND jjj

Explanation: During execution of a deferred restart for job jjj, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.

System Action: Restart for job jjj is terminated.

Operator Response: None.

IEF433D jjj - WAIT REQUESTED -- REPLY 'HOLD' OR 'NOHOLD'

Explanation: The operator has requested that the allocation for job jjj wait until the units and/or volumes necessary to complete the allocation are free. The allocation can release the devices that have already been allocated to job jjj and cannot be shared with other jobs or the devices can be held (remain allocated) until the job can be completely allocated.

System Action: The system action depends on the operator's response as follows:

- If the reply is HOLD, the system will not release any of the devices which have already been allocated to this job before it waits for the required units or volumes.

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- If the reply is NOHOLD, the system will release those devices which have been allocated to this job, but which cannot be shared with other jobs.

Operator Response: Refer to the installation procedures and enter the desired response as follows:

- Reply xx, 'HOLD' to have the system wait while holding the devices already allocated.
- Reply xx, 'NOHOLD' to have the system release the devices which are not shareable before it waits.

Note: The reply may be specified in either upper-case or lower-case.

IEF434D **jjj - INVALID REPLY. REPLY 'HOLD' OR 'NOHOLD'**

Explanation: The operator's reply to message IEF433D was not recognized as a valid option.

System Action: This message is repeated until a valid reply is received at which time the system will take the same action as specified for message IEF433D.

Operator Response: Probable user error. Make sure that the response to message IEF433D is either HOLD or NOHOLD and that it is spelled correctly. Enter the correct response as specified for message IEF433D.

IEF438I **SUBTASK OF ddd TERMINATED. SYSTEM COMPLETION CODE cde**

Explanation: Either a user-written writer or the IBM-supplied writer subtask of the External Writer abnormally terminated; therefore, the External Writer was unable to print or punch the SYSOUT data set. In the message text, ddd is the applicable unit name and cde is the completion code, in hexadecimal.

System Action: The External Writer terminated.

Operator Response: Enter another START XWTR command if anymore SYSOUT data sets are to be processed by the External Writer.

IEF447I **AMP KEY WORD keywd IS INVALID STEP WAS NOT EXECUTED**

Explanation: An invalid keyword keywd was specified on the AMP JCL parameter.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a valid keyword on the AMP JCL statement; then resubmit the job.

Problem Determination: Table I, items 1, 2, 7a, 13, 29.

IEF448I **AMP KEY WORD keywd VALUE val IS TOO LARGE STEP NOT EXECUTED**

Explanation: The value val specified for the AMP keyword keywd was larger than the maximum value allowed.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a value that is less than or equal to the maximum value allowed; then resubmit the job.

Problem Determination: Table I, items 1, 2, 7a, 13, 29.

IEF449I **AMP KEY WORD keywd REQUIRES A DECIMAL VALUE STEP NOT EXECUTED**

Explanation: The value specified for the AMP keyword keywd was not a decimal value.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a decimal value for the AMP keyword keywd; then resubmit the job.

Problem Determination: Table I, items 1, 2, 7a, 13, 29.

IEF450I **jjj sss [ppp] - ABEND {scde|ucde}
REASON = xxxxxxxx TIME = hh.mm.ss**

Explanation: A job step abnormally terminated during one of the following:

- Step sss of job jjj
- Step ppp of a cataloged procedure; job step sss of job jjj called the cataloged procedure

If a system completion code (scde) appears in the message text, the control program of the operating system terminated the job step. If a user completion code (ucde) appears in the message text, the user program terminated the job step. In either case (scde or ucde), the reason code is xxxxxxxx. xxxxxxxx is meaningful only if the REASON = keyword is coded on the ABEND macro instruction. If the operator entered the command MONITOR JOBNAME, T, the time appears in hours (hh), minutes (mm), and seconds (ss).

System Action: Job jjj terminates. The system issues message IEF472I to the SYSOUT data set.

Operator Response: None.

IEF451I **jjj sss [ppp] - ENDED BY CC cde[-TIME = hh.mm.ss]**

Explanation: A condition test specified in the COND parameter of a JOB statement was satisfied by the completion code cde for (1) step sss of job jjj, or (2) step ppp, which is part of a cataloged procedure called by job step sss of job jjj. Completion code cde consists of 4 decimal digits. This message is routed to any console that issued a MONITOR command with JOBNAME in its operand.

System Action: The job named jjj was terminated.

Operator Response: None.

IEF452I

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{ jii
  JOBFAIL } - JOB NOT RUN - JCL ERROR
  PPP      [- TIME = hh.mm.ss]

```

Explanation: If a jobname appears in the message text, the converter or interpreter detected an error in a job control statement, or the job was canceled while on the input queue. If the error was detected on a JOB statement, JOBFAIL will appear.

This message is also written if one of the following is true:

- Either message IEF099I or message IEF092I was issued and the operator canceled the job while it was waiting. The message is routed to any console that issued a MONITOR command with JOBNAMEs in its operand.
- jii was a TSO foreground job, therefore, it could not wait for data sets.
- Message IEF173I was issued for a step other than the first step of the job.

If a cataloged procedure name (ppp) appears, the procedure was specified in the first operand of a START command. In this case, either the procedure was not found in the system procedure library (SYS1.PROCLIB) or, if found, the procedure had an error in a job control statement; message IEE132I will always follow this message.

The actual error message appears in the system output (SYSOUT) data set.

In response to a MONITOR JOBNAMEs,T command, this message includes the time in the format hours (hh), minutes (mm), and seconds (ss).

System Action: If jii was canceled by the operator, all steps of the job, beginning with the step currently being processed, will be terminated. Otherwise, the job will not be initiated; no steps will be executed. If ppp appears, the START command will not be executed.

Operator Response: If jii appears, none. If ppp appears, either reenter the START command with the correct procedure name, or, if the procedure name is correct, have the system programmer check the procedure for errors.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF453I

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jii - JOB FAILED - JCL ERROR
[- TIME = hh.mm.ss]

```

Explanation: One of the following occurred:

- The initiator detected an error in a job control statement.
- There was a scheduler error during allocation.
- The system has been restarted after a system failure. Job jii was running when the failure occurred, but job jii did not request a restart. In this case, this message accompanies system completion code 2F3.

Note: This message might be issued to signal termination of job jii after the ABEND of one of the job steps. In this case, there might be no error in the job control language.

This message is routed to any console that issued a MONITOR JOBNAMEs command. If the T operand was specified in the command, the time appears in the message in the format hours (hh), minutes (mm), and seconds (ss).

System Action: Job jii terminates.

Operator Response: None.

IEF455D MOUNT ser ON ddd FOR jii,sss OR REPLY 'NO'

Explanation: Message IEF233D which requested a mount of volume ser on device ddd has been issued.

System Action: The task waits for the volume to be mounted or for a reply of 'NO'. The job cannot be terminated until the operator responds to this message or to message IEF233D.

Operator Response: Mount the volume as instructed in message IEF233D or reply 'NO'. If you reply 'NO', the device is allocated; however the internal representation to the system still indicates that volume ser is associated with device ddd. Both the volume and the device are available to the system but you might want to take the following steps to unload the device and thus adjust the system view of allocation:

1. Issue the DISPLAY U command for device ddd to see if there is a mount pending for volume ser.
2. If a mount is pending, issue the UNLOAD command to device ddd to give the system the correct information.

IEF456I jii sss [ppp] - DEVICE ALLOCATION UNABLE TO ESTABLISH ESTAE ENVIRONMENT

Explanation: ESTAE protection could not be established for either device allocation or unallocation processing. An attempt was made to issue the ESTAE macro, but it was unsuccessful.

System Action: The job is terminated.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 7d, 13, 29.

IEF458D jii sss WAITING FOR DATA SET. TO CANCEL WAIT REPLY 'NO'.

Explanation: An authorized dynamic allocation requires a data set that is in use by another job. The data set is named in message IEF863I.

System Action: Dynamic allocation waits for the data set to become available or for a reply of NO.

Operator Response: If you do not want dynamic allocation to wait for the data set, reply NO then the dynamic allocation request is failed.

IEF464I jii sss [ppp] ddn[+xxx] - DEVICE IS BOXED - CANNOT BE ALLOCATED

Explanation: A particular device was requested by DD statement ddn in one of the following:

- Step sss of job jii
- Cataloged procedure step ppp, which was called by job step sss of job jii

The device could not be allocated because some earlier processing (hot I/O processing or VARY

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ddd,OFFLINE,FORCE command processing, for example) boxed the device.

When a device is boxed, these events occur:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. The device goes offline when these conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.

If the device was offline, it remains offline.

If +xxx appears in the message text, it refers to the position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The job is terminated.

Operator Response: None.

Programmer Response: Resubmit the job when the device has been brought back online.

Problem Determination: Table I, items 1, 2, 13, and 29.

**IEF465I ijj sss [ppp] - UNABLE TO ALLOCATE
SUBSYSTEM DATA SET**

Explanation: The system could not allocate a SYSOUT or SYSIN data set for step sss of job ijj or cataloged procedure step ppp. One of the following occurred:

- The subsystem is inoperative.
- The user requested a deferred checkpoint restart. A SYSOUT or SYSIN DD statement used at the restart is different than the DD statement used at the checkpoint. For example, DUMMY was specified on the DD statement used at the restart, but not on the DD statement used at the checkpoint.
- A system error occurred.

System Action: The system terminates the job.

User Response: If the job has been restarted, make sure that the SYSOUT and SYSIN DD statements have not been changed since the checkpoint was taken. Otherwise, probable system error. Resubmit the job.

Problem Determination: Table I, item 2, 3, 4, 13, 29.

**IEF466I ijj sss [ppp] ddn[+xxx] - UNABLE TO RECOVER
FROM DADSM FAILURE**

Explanation: A scratch volume was required by several DD statements in step sss of job ijj or cataloged procedure step ppp that was called by job step sss of job ijj. When attempting to do DADSM on the volume for DD statement ddn, an error occurred. Allocation, therefore, attempted to scratch data sets that had been allocated to the volume for previous DD statements in the step so that a new volume could be tried. The scratch attempt failed.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable system error. Resubmit the job.

Problem Determination: Table I, items 1, 7c, 13, 29.

**IEF467I ijj sss [ppp] ddn[+xxx] - UNITS REQUIRED NOT
CURRENTLY AVAILABLE - WAITING NOT
ALLOWED**

Explanation: Another job is using the unit requested in the UNIT= parameter of DD statement ddn in (1) step sss of job ijj or (2) cataloged procedure step ppp, that was called by job step sss of job ijj. The system does not allow waiting for the unit to become available. If a step is trying to allocate more internal readers than the system defines, the system again does not allow waiting.

Examples of instances when waiting is not allowed are:

- For telecommunications lines.
- For TSO users at LOGON time.

In the message text, +xxx is the relative position of a concatenated DD in relation to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Try resubmitting the job or logging on again when the volume is available. If applicable, remove excess DD statements for internal readers.

Problem Determination: Table I, items 2, 13, 29.

**IEF468I ijj sss [ppp] - INSUFFICIENT REAL OR VIRTUAL
STORAGE FOR UNALLOCATION**

Explanation: Unallocation for (1) step sss of job ijj or (2) cataloged procedure step ppp, that was called by job step sss of job ijj, was unable to obtain sufficient storage for processing.

System Action: The job is terminated.

Programmer Response: Check the SYSOUT listing to determine if any of the data sets created in job ijj which should have been deleted were not. If necessary, delete these data sets. Then, resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

**IEF469I ijj sss [ppp] DATA SETS HAVE NOT BEEN
RELEASED**

Explanation: Data sets which were eligible to be released at the end of (1) step sss of job ijj or (2) cataloged procedure step ppp, that was called by job step sss of job ijj, could not be released. They will be released at the end of the job.

System Action: Data sets are released at the end of the job.

Programmer Response: None.

IEF470I **jjj sss [ppp] - UNALLOCATION FAILED**

Explanation: Unallocation processing was unable to complete for (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of job jjj.

System Action: The job is terminated.

Operator Response: Probable system error. None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEF471E **FOLLOWING VOLUMES NO LONGER NEEDED BY jjj ser,ser,...ser**

Explanation: The volumes listed in the message are no longer required by the job, and need no longer be retained. The operator had previously received either message IEF234E to retain the volumes or IEC502E to retain or keep the volumes. If the operator has not returned the volumes listed in the message to the appropriate library or pool, he should do so now.

System Action: Processing continues.

Operator Response: Return any volumes listed in the message to the appropriate library or pool, if not already returned.

IEF472I **jjj sss [ppp] - COMPLETION CODE - SYSTEM=scde USER=ucde REASON=xxxxxxx**

Explanation: One of the following terminated abnormally:

- Step sss of job jjj
- Step ppp of a cataloged procedure; job step sss of job jjj called the cataloged procedure

scde is the system completion code. ucde is the user completion code. xxxxxxx is the reason code.

xxxxxxx is meaningful only if the REASON= keyword is coded on the ABEND macro instruction.

System Action: The task terminates.

Programmer Response: If the system completion code is not zero, see *System Codes* for a description of the code scde.

Operator Response: None.

IEF473I **jjj sss [ppp] - ERROR ATTEMPTING TO SELECT OPTIMUM DEVICE FOR ALLOCATION**

Explanation: An optimum device could not be selected by the System Resources Manager for step sss of job jjj or cataloged procedure step ppp, that was called by job step sss of job jjj.

System Action: The job is terminated.

Programmer Response: Probable system error. Try resubmitting the job.

Problem Determination: Table I, items 13, 29.

IEF474I **jjj sss [ppp] ddn[+xxx] - UNIT OR VOLUME IN USE BY SYSTEM FUNCTION - CANNOT BE ALLOCATED**

Explanation: A volume or unit requested by DD statement ddn in (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of job jjj, could not be allocated because it was in use by a system function such as OLTEP, DSS, or a system utility.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DDD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Resubmit the job when the system function has completed.

Problem Determination: Table I, items 1, 2, 13, 29.

IEF475I **jjj sss [ppp] ddn[+xxx] - VOL ON INELIGIBLE PERMRES OR RSVD UNIT**

Explanation: DD statement ddn in (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of job jjj, has requested a volume that cannot be allocated. The volume is non-removable and is mounted on a device type which is not included in the set of devices eligible to the device type specified in the UNIT parameter of ddn.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the UNIT and VOLSER parameters to make sure that they are correct.

Problem Determination: Table I, items 1, 2, 13, 29. Have a list of the permanently resident and reserved devices available.

IEF476I **jjj sss [ppp] ddn[+xxx] - OVERLAPPING DATA SETS IN VTOC**

Explanation: The system attempted to allocate space for DD statement ddn on a volume for (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of jjj. The space management routines were interrupted during a previous allocation or deallocation before completing the updating of the volume table of contents (VTOC). This caused the VTOC conversion routine to be called for this space allocation. The VTOC conversion routine was unable to convert the VTOC because two data sets were allocated to the same space on the volume.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Scratch or one of the two data sets that are allocated to the same space. Then, resubmit the job.

Problem Determination: Table I, items 1, 4, 7b, 25b, 29.

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IEF477I jii sss [ppp] ddn[+xxx] - OVERLAPPING DOS SPLIT CYLINDER DATA SETS IN VTOC

Explanation: The system attempted to allocate space on a volume for DD statement ddn in (1) step sss of job jii or (2) cataloged procedure step ppp, that was called by job step sss of job jii. Space was previously allocated under the Disk Operating System (DOS). This caused the VTOC conversion routine to be called for this space allocation. The DOS VTOC could not be converted to a standard format VTOC because a split cylinder data set was located on cylinder zero or on the same cylinder as a non-split cylinder data set.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Either scratch or move the split cylinder data set that is causing the error. Then, resubmit the job.

Problem Determination: Table I, items 1, 4, 7b, 25b, 29.

IEF478I jii sss [ppp] ddn[+xxx] - VTOC ERROR MAY EXIST - ANALYZE VTOC LISTING

Explanation: The system attempted to allocate space on a volume for DD statement ddn in (1) step sss of job jii or (2) cataloged procedure step ppp, that was called by job step sss of job jii. The updating of the VTOC on this volume had previously been interrupted so an attempt was made to convert the VTOC. The attempt failed because module IGG0325Z had been modified to reject space allocation requests if VTOC updating had not completed. (For a description of this modification refer to the *DADSM Logic* manual.)

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Analyze the VTOC to determine the severity of the VTOC error. The VTOC may be converted by either removing the modification to IGG0325Z or resetting the DIRF bit to 0 and the DOS bit to 1 in the Format 4 DSCB and allocating a non-ISAM data set to the volume. Then, resubmit the job.

Problem Determination: Table I, items 1, 4, 7b, 25b, 29.

IEF479I jii sss [ppp] ddn[+xxx] - POSSIBLE VTOC ERROR ON 2ND OR LATER VOLUME OF ISAM PRIME DATA SET

Explanation: The system attempted to allocate space on a volume for DD statement ddn in (1) step sss of job jii or (2) cataloged procedure step ppp, that was called by job step sss of job jii. The updating of the VTOC on this volume had previously been interrupted so an attempt was made to convert the VTOC. The attempt failed because the data set being allocated was the second or subsequent volume of an ISAM PRIME data set.

In the message text, +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Analyze the VTOC to determine the severity of the VTOC error. The VTOC may be converted by resetting the DIRF bit to zero, setting the DOS bit to one in the Format 4 DSCB, and allocating a non-ISAM data set to the volume. Then, resubmit the job.

Problem Determination: Table I, items 1, 4, 7b, 25b, 29.

IEF480I jii sss [ppp] ddn[+xxx] - INVALID DESTINATION REQUESTED

Explanation: An invalid USERID has been specified in the DEST = parameter of DD statement ddn in (1) step sss of job jii or (2) cataloged procedure step ppp, that was called by job step sss of job jii.

In the message text, +xxx refers to the relative position of a concatenated DD in the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Check to make sure that a proper USERID was specified. Make necessary corrections and resubmit the job. If the error recurs, ensure that the USERID you are using is defined to the system.

Problem Determination: Table I, items 1, 4, 29.

IEF481I jii sss [ppp] ddn[+xxx] - SAME UNIT REQUESTED TWICE - CONFLICTS EXIST

Explanation: The UNIT = parameter of DD statement ddn in (1) step sss of job jii or (2) cataloged procedure step ppp, that was called by job step sss of jii, specified the same unit address as another DD statement for the step. The request cannot be allocated for one of the following reasons:

- Different volume serial numbers are specified on each of the requests.
- A use attribute conflict exists:
 - One request is public and the other in private.
 - One request is specific (volume serial specified) and the other is private and non-specific.
 - The address of a unit record device has been specified twice.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. If different volume serial numbers exist do one of the following:

- Change the address in the UNIT = parameter on one of the DD statements.
- Specify the same volume serial number on both DD statements.

- Specify UNIT=AFF in the second DD requesting the unit to the first DD requesting the unit.

If a use attribute conflict exists, either change the use attributes to avoid the conflict, or change one of the unit addresses.

If the address of a unit record device is specified twice, either change one of the unit addresses or, in the second DD requesting the unit, specify UNIT=AFF to the first DD requesting the unit.

Problem Determination: Table I, items 1, 4, 29.

IEF482I **jjj sss [ppp] ddn[+xxx] - PERMRRES/RESRV VOLUME ON REQUIRED UNIT**

Explanation: A volume requested by DD statement ddn in (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of job jjj, cannot be mounted because the unit address specified in the UNIT= parameter contains a permanently resident or reserved volume.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Specify another unit address or request the volume that is mounted on the unit.

Problem Determination: Table I, items 1, 4, 29.

IEF483I **jjj sss [ppp] ddn[+xxx] - REQUESTED DEVICE IS A CONSOLE**

Explanation: The unit address specified in the UNIT= parameter of DD statement ddn in (1) step sss of job jjj or (2) cataloged procedure step ppp, that was called by job step sss of job jjj, is invalid. The address specified is the address of an operator console.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the incorrect unit address.

Problem Determination: Table I, items 1, 4, 29.

IEF484I **jjj sss [ppp] ddn[+xxx] - MORE UNITS REQUIRED FOR REQUEST**

Explanation: DD statement ddn is a specific unit request which specifies more than one volume and either of the following conditions exists:

- The first volume specified is permanently resident or reserved.
- One of the volumes specified needs a unit by itself because that volume was also specified by another request in the same job step.

In the message text, jjj is the job name, sss is the step name, and ppp is the cataloged procedure step name called by job step sss. +xxx refers to the relative position of a concatenated DD in relation to the first DD of the concatenated group.

System Action: The job is terminated.

Programmer Response: Change the JCL to request an esoteric or generic name for more than one unit instead of a specific unit request, or, if the volume is reserved and you do not wish it to be, have the operator unload it.

Problem Determination: Table I, items 1, 4, 29.

IEF485I **jjj sss [ppp] [ddn] - VOLUMES REQUIRED NOT CURRENTLY AVAILABLE - WAITING NOT ALLOWED**

Explanation: One of the volumes requested in DD statement ddn is currently in use. Waiting is not allowed. An example of an instance when waiting is not allowed is for a TSO user at LOGON time.

System Action: The job is terminated.

Programmer Response: Try submitting the job or logging on again when the volume is available.

Problem Determination: Table I, items 2, 13, 29.

IEF488I **jjj - ddn[-#] MUST WAIT FOR UNIT ddd VOLUME ser ON UNIT ddd**

Explanation: The DD statement ddn (or the concatenated DD statement that is away from ddn in the concatenated group) has specifically requested the unit or volume listed. The unit/volume requested is, however, currently allocated to another job and is not shareable with this job. For the allocation to recover from this situation, it must wait for unit ddd to be unallocated.

System Action: This message is repeated for each DD requiring a specific unit or volume which is allocated and not shareable. The unit/volume requested in these messages will be followed by message IEF238D, requesting that the operator decide if the allocation should wait for the devices to be released or if the job should be canceled.

Operator Response: Respond as indicated to message IEF238D when it is issued.

IEF489I

jjj - xxx UNIT(S) NEEDED FOR ddd[-#]

jjj-sss-ddn[-#] NEEDS xxx UNIT[S] FOR VOLUME[S]: ser1 [, ser2 [,...seryy]] [SCRATCH-nn]PRIVAT-nn]

Explanation: DD statement ddn (or concatenated DD statement which is # away from ddn in the concatenated group) of the current step sss in job jjj, needs xxx units in order to continue processing. The message lists all of the particular volume serial numbers, ser1, ser2,...seryy, that the system knows. (If xxx equals yy, then SCRATCH and/or PRIVAT are omitted.) However, if the system does not know the serial numbers, nn will contain the number of private and/or scratch volumes requested.

System Action: The system issues message IEF238D, which lists the operator's options.

- If there are eligible devices:
 - wait until the devices are allocated, or
 - specify a device from the list that message IEF247I provides when that message is issued after IEF238D.
- If no devices are eligible, cancel the job.

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IEF490I – IEF502I

This set of messages (IEF489I, IEF238D, and IEF247I if it applies) is repeated for **dsn** until enough units are available to complete the allocation for this DD statement.

Operator Response: The system issues message IEF238D asking the operator to **REPLY DEVICE NAME, WAIT, OR CANCEL**. If you choose to respond with a device, choose one from the existing list found in message IEF247I.

IEF490I **jjj - INVALID REPLY. [DEVICE IS NOT ACCESSIBLE]**

Explanation: The operator's response to message IEF238D for job **jjj** is considered invalid for one of the following reasons:

- The reply was not recognized as one of the options given in the message.
- The device number given is not valid for the DD statement being processed.
- The device cannot be brought online for one of the following reasons: there is no path available by which the system can gain access to the device, the device is boxed, or the device cannot be assigned. If either of these is the cause of the message, **DEVICE IS NOT ACCESSIBLE** will appear in the message text.
- The device cannot be accessed physically. That is, the device does not exist, the power is off, the meter switch is disabled, and so forth.
- The device number is not valid for the first volume from the list shown in message IEF489I for a multi-volume data set.

System Action: Message IEF238D is repeated until a valid reply is received.

Operator Response: Check the following:

- The reply given was an option specified in the message.
- The option was spelled correctly.
- If the reply was a device number be sure that:
 - The device was listed in message IEF247I.
 - The appropriate VARY command has been issued if the device was listed as NOT ACCESSIBLE.
 - The device can be physically accessed.
 - The device is not boxed. Use the DISPLAY U command to find out.
 - If the device is a nondemountable DASD, it contains the first volume from the list in message IEF489I.

IEF491I **jjj sss [ppp] - DD GENERATIONS CAUSE TOTAL DD STATEMENTS TO EXCEED TIOT LIMIT OF xxxxK**

Explanation: The total number of DD statements that the system generates during allocation processing exceeds the maximum limit for a job step.

The reason why this problem occurred may be one of the following:

- A data set spanning multiple device types.
- A data set requiring an implied private catalog.
- A generation data group (GDG) request for all data sets in the group.

System Action: The system terminates the job.

Programmer Response: Decrease either the number of DD statements in the step or the number of DD requests of the type indicated in the preceding list. Resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF492I **jjj sss [ppp] ddn[+ xxx] - INVALID DATA SET NAME SPECIFIED ON JOBCAT OR STEPCAT STATEMENT**

Explanation: During allocation processing, a data set specified by the JOBCAT or STEPCAT DD statement was found not to be a VSAM user catalog. JOBCAT and STEPCAT are reserved DD names for describing VSAM user catalogs. Therefore, the DD statement cannot be a generation data group request for all levels of the GDG, multi-volume data sets, or a multi-device type data set.

System Action: The job is terminated.

Programmer Response: List the system catalog to obtain further information about your private catalog.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF493I **jjj sss [ppp] ddn[+ xxx] - INVALID PARAMETERS SPECIFIED FOR JOBCAT OR STEPCAT**

Explanation: An invalid JCL parameter was specified on either the JOBCAT or STEPCAT DD statement. JOBCAT and STEPCAT are reserved DD names for describing private catalogs, which must also be cataloged. Therefore, the request cannot specify volume or unit information, be a subsystem data set, specify deferred mounts, specify a disposition of NEW, be a GDG single request, be for a new data set, specify a disposition other than KEEP, or specify DUMMY.

System Action: The job is terminated.

Programmer Response: Probable user error. List the system catalog to obtain further information about your catalog.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF502I **DUPLICATE VOLUME SERIAL**

Explanation: A volume has been found with the same serial number as another volume.

System Action: The volume is unloaded and message IEF234E is issued.

Operator Response: Probable user error. Demount the volume in response to message IEF234E.

Problem Determination: Table I, items 2, 7c, 29.

IEF503I INCORRECT VOLUME LABEL OR I/O ERROR

Explanation: An error occurred when a volume label was being read. The error can be one of the following:

- An uncorrectable input/output error occurred.
- An unlabeled tape was mounted before it had been requested.
- A non-standard label tape was mounted but the user non-standard label handling routine rejected the label or no user non-standard label handling routine was provided.

System Action: The volume is unloaded and message IEF234E is issued.

Operator Response: Probable user error. If an uncorrectable input/output error was the problem and the message recurs for the same volume, make sure the label is correct.

If an unlabeled volume had been mounted before it was requested, this is the problem. Do not remount the volume until it is requested.

If a non-standard label volume was being used, check with a system programmer at your installation to make sure that a non-standard label handling routine exists, and if so, that the label is correct.

Problem Determination: Table I, items 2, 7c, 29.

IEF506I **ijj sss [ppp] ddn[+xxx] - NOT ENOUGH AVAILABLE STORAGE VOLUMES. 'VOLUME=PRIVATE' ASSUMED.**

Explanation: DD statement ddn of (1) step sss of job jjj, or (2) cataloged procedure step ppp, that was called by job step sss of job jjj, requested allocation of space for a new data set on a non-private volume; the statement did not specify a volume serial number.

There were not enough storage volumes to satisfy the request. The data set is allocated to a private volume.

In the message text, +xxx refers to the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

System Action: The system assumed VOLUME=PRIVATE and allocated space to the data set on that basis.

Programmer Response: None.

IEF510E VOLUME HAS ANS LABEL.

Explanation: A tape volume that has an American National Standard label was mounted in a system which does not support ASCII tape processing.

System Action: The tape volume is unloaded. A demount message, IEF234E, is issued to point out the device on which the wrong volume was mounted.

Operator Response: Set aside jobs that require ASCII tapes until a system that supports ASCII is available.

IEF572I **[jjj.sss] VOLUME VERIFICATION ERROR ON ser**

Explanation: The system issued a mount request to the 3850 for volume ser for a data set in step sss of job jjj. When the system verified the volume, it found that the volume label read did not match the name of the volume in the mount request, or an I/O error occurred while reading the volume label.

Note: jjj.sss is not in the message text if the error condition is detected during PRESRES processing or during the execution of the VARY and UNLOAD commands.

System Action: The system cancels the job if, during allocation, the label read was not as expected or an I/O error occurred while reading the volume label. Otherwise, the system issues a message and does not process the volume.

Operator Response: Report this error condition to the system programmer.

Programmer Response: If this message is preceded by message ICB194E for the same volume with restart code X'80' (invalid cell location), follow the recovery actions documented under message ICB504E, case 02 in *Mass Storage System (MSS) Messages*.

If this message is preceded by message IEA000I (with 28 bytes of sense data), the volume verification error is due to an I/O error.

If the failure was due to an I/O error and ser was not SCRATCH, you have two options:

- Option 1: if you want to avoid getting an ICB096I message for another virtual volume, and this is a convenient time to assign an alternate track, do the following:
 1. Use the PURGE command with the VOLID = parameter equal to ser to demount the volume. Vary offline the SSID shown in the previous IEA000I message.
 2. If the SSID is that of the drive with the primary or secondary tables pack, it is necessary to free the pack from tables use before processing. If the SSID is that of the drive with the secondary tables pack, run the COPYT command. If the SSID is that of the drive with the primary tables pack, run the SWAPT command to make the pack secondary tables pack, and then run the COPYT command. See *OS/VS Mass Storage System (MSS) Services: General Information* for information on restoring to the original configuration after the track in error was reassigned or the pack replaced. The pack with the error no longer contains the primary or secondary tables.
 3. Mount the staging pack on a read drive. Use the IEHDASDR utility to assign an alternate track. Remount the pack on an offline staging drive. Vary the SSID for the staging drive online. Restart the failing job step.
- Option 2: If you can specify the mount on another staging drive group to avoid the failing SSID, use the PURGE command with the VOLID = parameter equal to ser to demount

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the volume. Restart the failing step with the changed job control language.

If an I/O error occurred and ser is SCRTCH, do the following:

1. Vary the virtual unit address offline. The device is in the previous 28-byte IEA000I message.
2. Restart the failing step.
3. At a convenient time, reassign the track in error. To do this, mount the staging pack on a real drive, and use the IEHDASDR utility to assign an alternate track. Remount the pack on an offline staging drive and vary the SSID of the staging drive online.

If there was no preceding ICB194E or IEA000I message, the verification error was due to a mismatch between the volume label and the volume in the mount request. The MODIFYV command will change the volume label to match the volume information that is in the Inventory data set, Mass Storage Control tables, and the operating system. Do the following:

1. Issue the UNLOAD command to demount the volume.
2. If an MSS Access Method Services command was being attempted to correct a volume label mismatch flag condition, check to see if the deferred mount parameter was used in the DD statement. If the deferred mount parameter was not used, correct the JCL DD statement, and restart the failing step.
3. If a specific volume request (with job control language, by the catalog, or by load) for this volume caused the verification attempt, use the previous messages or the LISTMSVI command output to determine if the volume label mismatch flag is on. If the mismatch flag is on, the LISTMSVI command output will have a note (Note: Prior rename failed for above volume;) printed after the volume record of the volume that encountered the problem.
4. If the volume label mismatch flag is on, run the MODIFYV command with the deferred mount parameter specified in the JCL DD statement and with the serial number from the Inventory data set specified for both the volume parameter and the NEWSERIAL parameter to rewrite the volume label so that the volume label matches the volume name.
5. If the volume label mismatch flag is off, use the MODIFYV command to correct the improper volume label.

IEF584I [jjj.sss] 3850 MOUNT/DEMOUNT ERROR - ser
ON cuu RC = cde

Explanation: The mass storage volume requested for a data set in step sss in job jjj could not be mounted or demounted by the system. ser is the mass storage volume requested. The 3850 returned a reason code of cde for this request. Refer to *Mass Storage System (MSS) Messages* for the explanation of the reason code.

Note: jjj.sss is not in the message text if the error condition is detected during PRESRES processing or during the execution of the VARY or UNLOAD commands.

System Action: The system cancels the job for a mount or demount error in allocation. On all demount order errors, the unit specified in cuu is set offline. Otherwise, the system issues a message and does not process the volume.

Programmer Response: Refer to *Mass Storage System (MSS) Messages* for the reason codes and the proper action to take.

IEF601I INVALID STATEMENT IN PROCEDURE

Explanation: One of the following invalid statements was found in a procedure:

- JOB statement.
- A statement other than a job control statement; that is, a statement that does not begin with //.
- A DD * or a DD DATA statement in an instream procedure.
- A null statement or a delimiter.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by removing the invalid card. The invalid card will appear in the SYSOUT listing immediately before the error message if MSGLEVEL = 1 is coded on the job statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF602I EXCESSIVE NUMBER OF EXECUTE STATEMENTS

Explanation: More than 255 EXECUTE statements appear in one job. The maximum number of steps allowed in one job is 255.

System Action: The remaining job control statements for the job are scanned for syntax errors. The job is not executed.

Programmer Response: Probable user error. Divide the job into multiple jobs and submit them.

IEF603I PROCLIB DEVICE I/O ERROR READING FOR JOB

Explanation: During processing of a job that requested a cataloged procedure, an uncorrectable input/output error occurred in reading the SYS1.PROCLIB data set or a user procedure library.

System Action: The job being processed was terminated. The job scheduler also wrote message IEF417I on the console and the operator reran the job, if it was available.

Programmer Response: None.

IEF604I EXPDT SUBPARAMETER SPECIFIES ZERO DAYS VALUE

Explanation: A day number value of zero (000) was specified in the EXPDT subparameter of the LABEL parameter on a DD statement.

System Action: Processing continues. The data set is protected until the last day of the year prior to the year specified in the EXPDT subparameter.

Programmer Response: Verify the day number value. If it is incorrect, submit a job to correct the data set expiration date.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF605I UNIDENTIFIED OPERATION FIELD

Explanation: In a job control statement, either an operation field could not be found or the operation field could not be identified as a valid JCL verb or a valid operator command. This message is also issued if the flagged statement is a continuation of a statement containing syntax errors.

System Action: The system terminates the job. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Check that the operation field is spelled correctly and that it is preceded and followed by at least one blank. After correcting the error, submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF606I MISPLACED DD STATEMENT

Explanation: A DD statement between the JOB statement and first EXEC statement did not contain JOBLIB or JOBCAT in its name field. Possibly, JOBLIB or JOBCAT was misspelled or mispunched. Possibly, the operation field of the first EXEC statement was not correctly specified.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the DD or EXEC statement, or place the DD statement in the job step in which it belongs. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF607I JOB HAS NO STEPS

Explanation: The job control statements following a JOB statement did not include an EXEC statement.

This message is also issued if the job contains a PROC statement prior to any EXEC or SYSCHK DD statement but contains no PEND statement.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors. A dummy EXEC statement with EXECFAIL in its name field was inserted.

If a PEND statement was omitted, the remainder of the job was considered part of the instream procedure.

Programmer Response: Probable user error. Insert an EXEC or PEND statement or correct an EXEC or PEND statement containing errors that made it unrecognizable as applicable. Submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF609I INVALID OVERRIDE KEY WORD xxx

Explanation: An EXEC statement containing a PROC parameter specified two identical override keywords that both refer to the same step in a cataloged or instream procedure.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Change the override parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF610I PROCEDURE HAS NO STEP

Explanation: The job control statements in a procedure did not include an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by inserting an EXEC statement or correcting an EXEC statement that contained errors that made it unrecognizable. Submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

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IEF611I OVERRIDDEN STEP NOT FOUND IN PROCEDURE

Explanation: An EXEC or DD statement, which was to override a corresponding EXEC or DD statement in a cataloged or instream procedure, specified a step name that could not be found in the procedure. Probably, the step name was misspelled or the DD override statements did not appear in the same order as the corresponding statements in the procedure.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the step name in the EXEC or DD statement in the input stream, correct the order of the step names in the EXEC statement in the input stream, correct the order of the DD override statements in the input stream, or correct the procedure. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

**IEF612I PROCEDURE NOT FOUND
IEF612I PROCEDURE procedurename WAS NOT FOUND**

Explanation: The specified procedure could not be found in the SYS1.PROCLIB procedure library or in the instream procedure directory. Possibly, the procedure name was misspelled or the PEND statement ending the previous instream procedure was omitted.

System Action: The system terminates the job. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure name in the EXEC statement in the input stream, in the PROC statement in the input stream, or in the procedure library. If the procedure name is correct, insert a missing PEND statement. Also, make sure that an instream procedure appears in the job before any of the EXEC statements that call it. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF613I PROCEDURE WITHIN A PROCEDURE

Explanation: In a procedure, an EXEC statement contained a PROC parameter or a procedure name, implying a procedure within a procedure. A procedure cannot be specified within a procedure.

System Action: The job containing the EXEC statement that invoked the procedure is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Replace the invalid EXEC statement with either (1) the procedure that it called or (2) a valid EXEC statement containing a PGM parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF614I PROCLIB DEVICE I/O ERROR SEARCHING FOR PROCEDURE

Explanation: During processing of a job that requested a cataloged procedure, an uncorrectable input/output error occurred in searching the SYS1.PROCLIB data set or a user procedure library.

System Action: The job being processed was terminated. The job scheduler also wrote message IEF417I on the console and the operator reran the job, if it was available.

Programmer Response: None.

IEF615I EXCESSIVE PROCSTEP NAME xxx

Explanation: In an EXEC statement that specified a procedure, the name of a step to be overridden was longer than 8 characters.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the step name so that it consists of not more than 8 alphameric characters, with the first character alphabetic. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF616I SUBLIST WITHIN SUBLIST INCORRECT xxx

Explanation: In a job control statement, a subparameter list was specified within a subparameter list. This arrangement is invalid. Possibly, too many parentheses were used, so that a list appeared to be within a list.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF617I NO NAME ON FIRST DD STATEMENT AFTER EXEC STATEMENT

Explanation: The first DD statement following an EXEC statement did not contain a data definition name in its name field; that is, column 3 of the DD statement was blank. Possibly, the first statement for a concatenation of data sets was omitted.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Either put a data definition name in the name field of the DD statement or place it among other DD statements so that a proper concatenation is defined. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF618I OPERAND FIELD DOES NOT TERMINATE IN COMMA OR BLANK

Explanation: In a job control statement, the operand field does not terminate with one of the following:

- A comma after the last parameter in the card image, if the statement is to be continued in the next card image. The comma must be before column 72.
- A blank after the last parameter, if the statement is not to be continued. The blank may be in column 72 or any previous column.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the operand field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF619I SUBPARAMETER IN SYSOUT FIELD IS MUTUALLY EXCLUSIVE WITH SUBPARAMETER IN DEST FIELD

Explanation: The second positional subparameter (program name) of the SYSOUT keyword and the second positional subparameter (userid) of the DEST (destination) keyword appear in the same DD statement. This is an error because the program name subparameter and the userid subparameter are mutually exclusive.

System Action: The system terminates the job. The system scans the job's remaining job control statements for syntax errors.

Programmer Response: Probable user error. Correct the DD statement in error, that is, exclude either the the program name subparameter or the userid subparameter. Run the job again.

Problem Determination: Table I, items 1, 4, 7c, and 29.

IEF620I UNIDENTIFIABLE CHARACTER c text

Explanation: A job control statement contained an invalid character, c. All characters in a job control statement must belong to the character sets defined in JCL.

In the message, text is one of the following:

IN THE prm FIELD

prm was the last correctly specified keyword parameter preceding the error. The keyword must be followed by an equal sign to be considered correctly specified.

ON THE cntr STATEMENT

cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. For example, an error was detected in the name field of a statement.

IN THE prm1 SUBPARAMETER OF THE prm2 FIELD

prm1 is a minor keyword parameter associated with major keyword parameter prm2. For example, SER is a minor keyword parameter

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that appears only when associated with major keyword parameter VOLUME.

IN THE SYMBOLIC PARAMETER

The error was detected in the symbolic parameter.

IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER

The error was detected in the field that assigns a value to a symbolic parameter.

IN THE prm OVERRIDE FIELD

prm is an override keyword parameter on an EXEC statement.

System Action: The system terminates the job. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Correct any invalid characters, and submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF621I EXPECTED CONTINUATION NOT RECEIVED

Explanation: In a job control statement, continuation was indicated by a comma at the end of the operand or by a nonblank character in column 72, or both. However, the following card image was not a continuation.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Provide the missing continuation card, if it was lost. If no continuation was intended, correct the card so that column 72 is blank and the operand ends with a blank.

If the continuation card was present, correct it so that slashes (/) appear in columns 1 and 2, a blank appears in column 3, and the continuation of a comment begins anywhere after column 3 or the continuation of the operand begins in columns 4 through 16.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF622I UNBALANCED PARENTHESIS xxx

Explanation: In a job control statement, one of the following appeared:

- A valid left parenthesis not followed by a right parenthesis.
- A valid right parenthesis not preceded by a left parenthesis.
- A right parenthesis where it is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an

error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the error. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF623I SOURCE TEXT CONTAINS UNDEFINED OR ILLEGAL CHARACTERS xxx

Explanation: A job control statement contained one or more invalid characters. All characters in a job control statement must belong to the character sets defined in the publication *JCL*.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: If the statement contains any invalid characters, correct it. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF624I INCORRECT USE OF PERIOD xxx

Explanation: In a job control statement, a period appeared in a parameter or field in which a period is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is the most recently encountered valid override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF625I INCORRECT USE OF LEFT PARENTHESIS xxx

Explanation: In a job control statement, a left parenthesis appeared in a parameter or field in which a left parenthesis is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the

error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF626I INCORRECT USE OF PLUS xxx

Explanation: In a job control statement, a plus sign appeared in a parameter or field in which a plus sign is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

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System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF627I INCORRECT USE OF AMPERSAND xxx

Explanation: In a job control statement, an ampersand appeared in a parameter or field in which an ampersand is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF628I INCORRECT USE OF ASTERISK xxx

Explanation: In a job control statement, an asterisk appeared in a parameter or field in which an asterisk is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the

error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF629I INCORRECT USE OF APOSTROPHE xxx

Explanation: In a job control statement, an apostrophe was used incorrectly.

Single apostrophes are used to enclose certain parameters containing special characters or blanks. Two apostrophes within a parameter enclosed in apostrophes are used to represent an apostrophe.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.

- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the invalid use of the apostrophe. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF630I UNIDENTIFIED KEYWORD text

Explanation: In a job control statement, the scheduler found that:

- A character string followed a blank or comma and preceded an equal sign, but could not be recognized as a valid keyword. Either the keyword was misspelled, the equal sign was misplaced or, because of the absence of a right parenthesis after the previous major keyword, a valid major keyword was considered a minor keyword.
- A valid subparameter keyword appeared without the corresponding parameter keyword; for example, SER without VOLUME.
- A valid keyword was not consistent with the statement operation code; for example, DSNNAME in an EXEC statement.

text is one of the following:

The unidentified keyword

IN THE prm FIELD

prm was the last correctly specified keyword parameter preceding the error. The keyword must be followed by an equal sign to be considered correctly specified.

ON THE cntr STATEMENT

cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. For example, an error was detected in the name field of a statement.

IN THE prm1 SUBPARAMETER OF THE prm2 FIELD

prm1 is the most recently encountered minor keyword parameter associated with the major keyword parameter prm2, which precedes the error.

IN THE SYMBOLIC PARAMETER

The error was detected in the symbolic parameter.

IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER

The error was detected in the field that assigns a value to a symbolic parameter.

IN THE prm OVERRIDE FIELD

prm is an override keyword parameter on an EXEC statement.

System Action: The system terminates the job. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement, and submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF631I NUMBER OF DDNAMES EXCEEDS MAXIMUM

Explanation: In the DD statements for a step, the DDNAME parameter appeared in 6 or more DD statements. This parameter can appear in no more than 5 DD statements in a step.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Change the DD statements for the step so that 5 or fewer use the DDNAME parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF632I FORMAT ERROR xxx

Explanation: The converter or the interpreter detected an error in a parameter in a job control statement.

Examples of errors detected by the converter are:

- No enclosing parentheses appeared.
- A comma, right parenthesis, ampersand, or blank did not follow a right parenthesis in a SPACE parameter.
- The keyword specified is shorter than the required length.

Examples of errors detected by the interpreter are:

- Too many or too few levels of qualification were specified.
- An operator was missing in a COND parameter.
- The EVEN and ONLY subparameters were both specified in the COND parameter of the EXEC statement.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

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- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.
- IN THE prm FIELD, where the value specified for the particular prm was less than the acceptable length.

System Action: The job terminates. If the error was detected by the converter, the remaining job control statements are scanned for syntax errors. The scan also continues if the error was detected by the interpreter on a system using JES3. Otherwise, the scan stops.

Programmer Response: Probable user error. Correct the parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF633I PROGRAMMER NAME MISSING xxx

Explanation: The programmer's name, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a programmer's name. If a programmer's name had been specified, correct the order of the positional parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF634I ACCOUNT NUMBER MISSING xxx

Explanation: The account number, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify an account number. If an account number had been specified, check for a comma or a parameter before the account number; if one appears, remove it. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF635I JOBNAME MISSING xxx

Explanation: The job name, which must appear in the name field of a JOB statement, was missing.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a job name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF636I MISPLACED JOBLIB STATEMENT

Explanation: A DD statement containing JOBLIB in its name field appeared after an EXEC statement. Or a second JOBLIB DD statement appeared in the control statements for a job.

A JOBLIB DD statement, which defines a job library, can appear only immediately after a JOB statement and before the first EXEC statement in a job. Only one statement containing JOBLIB in its name field can appear in the statements for a job.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Place the JOBLIB DD statement immediately after the JOB statement. If two or more job libraries are to be used as one library, put blanks in the name fields of the concatenated DD statements. Place the concatenated DD statements immediately after the JOBLIB DD statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF637I EXCESSIVE ACCOUNT FIELD LENGTH xxx

Explanation: In a JOB or EXEC statement, the accounting information was longer than the 142 characters permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword

parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Shorten the accounting information. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF638I SPECIFIED NUMERIC EXCEEDS MAXIMUM ALLOWED xxx

Explanation: In a job control statement, a parameter or subparameter value contains a valid number of digits, but exceeds the maximum numeric limit.

For ISO/ANSI/FIPS tape labels, this message will occur if the user specified a value larger than 16383K on the DD statement LRECL parameter.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.

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- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or subparameter value. Then submit the job again.

For ISO/ANSI/FIPS tape labels, specify the DD LRECL value as nnnnnK (where nnnnn = 1 to 16383). This requires the problem program DCB macro to include the LRECL=OK or LRECL=nnnnnK format.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF639I INVALID CLASS DESIGNATION xxx

Explanation: In a job control statement, the class name specified as the operand of a parameter or subparameter was not one of a set of names or values acceptable for that parameter or subparameter.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the class name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF640I EXCESSIVE NUMBER OF POSITIONAL PARAMETERS xxx

Explanation: A job control statement contained too many positional parameters. A misplaced comma, a duplication, or a null operand field could cause such an error.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement, and submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF641I IMPROPER SUBPARAMETER LIST xxx

Explanation: A job control statement contains an incorrect subparameter list for a positional parameter. Either such a list is required and is missing, or is not permitted but is present.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

Note: A symbolic parameter consists of a single ampersand (&) followed by a maximum of 7 alphanumeric (A-Z and 0-9) and national (@, #, \$) characters. The first character after the ampersand must be alphabetic or national, that is, it cannot be a number.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF642I EXCESSIVE PARAMETER LENGTH xxx

Explanation: In a job control statement, a positional parameter was longer than permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

Note: A symbolic parameter consists of a single ampersand (&) followed by a maximum of 7 alphanumeric (A-Z and 0-9) and national (@, #, \$) characters. The first character after the

ampersand must be alphabetic or national, that is, it cannot be a number.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Shorten the parameter to the maximum permitted length or less. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF643I UNIDENTIFIED POSITIONAL PARAMETER xxx

Explanation: In a job control statement, a positional parameter that has certain permitted values was not recognized. It may be invalid, misspelled, or misspunched.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous positional parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF

IEF644I INVALID NUMERIC xxx

Explanation: In a job control statement, an alphabetic or special character appeared in a parameter that can contain only numeric characters.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF645I INVALID REFER BACK xxx

Explanation: In a job control statement, a parameter specified the name of a previous statement. However, a statement with that name was not found, or the statement contained the DYNAM parameter.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword

parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Check the spelling and punching of the parameter containing the reference and of the name in the statement to which it refers. Determine if the parameter containing the reference can validly contain a reference. After correcting the error, submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF646I**REQUIRED POSITIONAL PARAMETER MISSING xxx**

Explanation: In a job control statement, a required positional parameter or subparameter was not specified.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Insert the missing parameter or subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF647I FIRST CHARACTER OF NAME NOT ALPHABETIC OR NOT NATIONAL xxx

Explanation: In a job control statement, the first character in a name is not alphabetic or national. The name can be the name field, a procedure name in a parameter, a program name in a parameter, a data set name, or a part of a qualified data set name.

This message will also appear when a relative generation number of a generation data group is used without a plus or minus sign. For example, DSNAME=dsname(+1) is correct, whereas DSNAME=dsname(1) is incorrect.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

Note: A symbolic parameter consists of a single ampersand (&) followed by a maximum of 7 alphanumeric (A-Z and 0-9) and national (@, #, \$) characters. The first character after the ampersand must be alphabetic or national, that is, it cannot be a number.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field that assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The system terminates the job. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the name field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF648I INVALID DISP FIELD - xxx SUBSTITUTED

Explanation: In a DD statement, a subparameter specified in the DISP parameter is invalid:

- A disposition of KEEP is invalid for a temporary data set. In this case, xxx will appear as PASS. If a DSNAME parameter references a data set which has a disposition of DELETE, xxx will also appear as PASS.
- A disposition of CATLG is invalid for a data set whose data set name is enclosed in apostrophes. (In this case, xxx will appear as KEEP.)

System Action: The system changed the disposition of the data set to xxx. Processing continued.

Programmer Response: Probable user error. If the job is to be executed again, correct the invalid disposition.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF649I EXCESSIVE NUMBER OF DD STATEMENTS

Explanation: The number of DD statements in a job step exceeded the limit specified in the Allocation Default Module. An EXEC statement might be missing.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors. The system printed the message with each DD statement after the 1635th.

Programmer Response: Probable user error. Either remove the excess DD statement(s) or add a missing EXEC statement. Then submit the job again.

Problem Determination: Table I, items 1, 7c, 29.

IEF650I INCORRECT USE OF SLASH xxx

Explanation: In a job control statement, a slash appeared in a parameter or field in which a slash is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.

Note: A symbolic parameter consists of a single ampersand (&) followed by a maximum of 7 alphanumeric (A-Z and 0-9) and national (@, #, \$) characters. The first character after the ampersand must be alphabetic or national, that is, it cannot be a number.

- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF651I INCORRECT USE OF MINUS xxx

Explanation: In a job control statement, a hyphen (or minus sign) appeared in a parameter or field in which a hyphen is not permitted.

In the message text, xxx is one of the following phrases:

- IN THE prm FIELD, where prm was the last correctly specified keyword parameter preceding the error. (The keyword must be followed by an equal sign to be considered correctly specified.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF652I MUTUALLY EXCLUSIVE KEY WORDS - KEY WORD IN THE prm FIELD IS MUTUALLY EXCLUSIVE WITH KEY WORD ON THE cntr STATEMENT

Explanation: The job control statement indicated by cntr in the message text was flagged for one of the following reasons:

- The keyword indicated by prm in the message text and another keyword or positional parameter on the same statement are either mutually exclusive or identical.
- The DLM keyword was detected on the statement before the required asterisk (*) or DATA. Therefore, any other major keywords that might appear on the statement, except DCB, will be mutually exclusive with DLM.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement in error and run the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF653I SUBSTITUTION JCL - xxx

Explanation: In a cataloged procedure statement, one or more symbolic parameters were used. In the message text, xxx represents the text that results from the symbolic parameter substitution.

Programmer Response: None.

IEF654I MULTIPLE DDNAMES REFER TO ONE DD STATEMENT

Explanation: In the job control statements for a job step, two DD statements contain DDNAME parameters that specify the same name.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Either delete one of the DD statements or change the name in one of the duplicate DDNAME parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF655I DSNAMES INVALID WHEN SYSOUT SPECIFIED

Explanation: A DD statement contained a SYSOUT parameter and a DSNAMES parameter.

System Action: The DSNAMES parameter is ignored. Processing continues.

Programmer Response: Probable user error. If the job is to be executed again, correct the statement by removing the DSNAMES or SYSOUT parameter.

Problem Determination: Table I, items 1, 4, 7a, 29.

- IEF656I DD STATEMENT NAME INCONSISTENT WITH AMP**
- Explanation:** An invalid DDNAME was specified for the AMP keyword. The following ddnames are invalid: JOBLIB, STEPLIB, SYSABEND, SYSDUMP, or SYSCHK.
- System Action:** The system terminates the job, and scans the remaining job control statements for syntax errors.
- Operator Response:** Select a valid DDNAME or remove the AMP parameter; then submit the job again.
- Problem Determination:** Table I, items 1, 4, 7c and 29.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF657I THE SYMBOL xxxxx WAS NOT USED IN THE PROCEDURE INVOKED BY STATEMENT nnn**
- Explanation:** A value was assigned to symbolic parameter xxxxx in EXEC statement nnn that called a procedure or in PROC statement nnn of a called procedure. However, the symbolic parameter was not used in the procedure.
- Note:** A symbolic parameter consists of a single ampersand (&) followed by a maximum of 7 alphanumeric (A-Z and 0-9) and national (@, #, \$) characters. The first character after the ampersand must be alphabetic or national, that is, it cannot be a number.
- System Action:** The system terminates the job.
- Programmer Response:** Probable user error. Include the symbolic parameter in the procedure, or remove the value assignment from the EXEC statement or PROC statement.
- Problem Determination:** Table I, items 1, 3, 4, 7c, 29.
- IEF658I PROC VERB STATEMENT OUT OF SEQUENCE**
- Explanation:** A statement which specified PROC in its operation field was not the first statement in a procedure. The PROC statement is valid only as the first statement in a procedure.
- System Action:** The job is terminated.
- Programmer Response:** Probable user error. If a PROC statement is to be used, make sure that it appears only as the first statement in the procedure.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF659I MISPLACED SYSCHK DD STATEMENT**
- Explanation:** During execution of a deferred restart, it was found that a SYSCHK DD statement preceded the first EXEC statement in the resubmitted deck. However, the RESTART parameter of the JOB statement did not specify a checkpoint identification.
- System Action:** Restart is terminated.
- Programmer Response:** Probable user error. If checkpoint restart is desired, specify a checkpoint identification in the RESTART parameter of the JOB statement. If step restart is desired, remove the SYSCHK DD statement.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF660I MISSING SYSCHK DD STATEMENT**
- Explanation:** During execution of a deferred checkpoint restart, it was found that the RESTART parameter of the JOB statement specified a checkpoint identification. However, a SYSCHK DD statement did not precede the first EXEC statement in the resubmitted deck.
- System Action:** Restart is terminated.
- Programmer Response:** Probable user error. Place a SYSCHK DD statement before the first EXEC statement. Then resubmit the job.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF661I RESTART STEP NOT FOUND**
- Explanation:** During execution of a deferred restart, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.
- System Action:** Restart is terminated.
- Programmer Response:** Probable user error. Correct the RESTART parameter and resubmit the job.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF662I INVALID LABEL ON THE STATEMENT**

PROC
PEND
- Explanation:** The name in the name field of the PROC or PEND statement, as indicated in the message text, either is too long or contains an invalid character.
- System Action:** The job is terminated. The remaining job control statements for the job are scanned for syntax errors.
- Programmer Response:** Probable user error. Correct the name field of the statement. Then submit the job again.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF663I NO LABEL ON THE PROC STATEMENT**
- Explanation:** No name was specified in the name field of the PROC statement for an instream procedure.
- System Action:** The job is terminated. The remaining job control statements for the job are scanned for syntax errors.
- Programmer Response:** Probable user error. Specify a name in the name field of the PROC statement. Then submit the job again.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF665I EXCESSIVE NUMBER OF INSTREAM PROCEDURES**
- Explanation:** The job contains more than 15 instream procedures.
- System Action:** The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Make sure that no more than 15 instream procedures are specified in the job. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF666E ENF **FAILED** - SYSTEM
ERROR

AVAILABILITY MAY BE LIMITED

Explanation: If the message text specifies ENF FAILED, there has been an error in one of the event notification facility (ENF) modules. If the message text specifies ENF ERROR, one of the following occurred:

- An ENF listen queue had an invalid pointer.
- A program requested ENF, but the requester's event parameter list was destroyed after initial validation.

System Action: If the message text specifies ENF FAILED, ENF is no longer available to the system. If the message text specified ENF ERROR, one of the following occurs:

- If the event listen queue had an invalid pointer, the queue of listeners for that event is truncated at the last valid element.
- If the requester's event parameter list was destroyed, the ENF request is not processed.

Other system processing continues.

Operator Response: Report this message to the system programmer.

Problem Determination: Table I, items 2, 16, 18, 29, and 33.

IEF668I **PEND VERB STATEMENT OUT OF SEQUENCE**

Explanation: A PEND statement has been encountered which does not terminate an instream procedure; that is, it is not preceded by a valid PROC statement; or the procedure contains data, a DD * statement, or a DD DATA statement; or the PEND statement is an invalid continuation of the previous statement. The PEND verb is valid only as the last statement in the instream procedure.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: If the PEND statement is unnecessary, remove it. Otherwise, supply a correct PROC statement, remove from the instream procedure the data, DD * statement or DD DATA statement, or correct the previous statement. Resubmit the job.

IEF669I **INVALID REFER FORWARD TO DYNAM
DATA SET**

Explanation: The system has encountered a DD statement in which the DDNAME parameter specifies the name of a DD statement that contains a DYNAM parameter.

System Action: The job is terminated. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Either change the reference in the DDNAME parameter or delete the DYNAM parameter in the referenced DD statement. Submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 29.

IEF670I **NO VALUE ASSIGNED TO SYMBOLIC
PARAMETER ON PROC STMT VIA THE EXEC
STMT**

Explanation: A jobstep calling a cataloged procedure has not provided a value in its EXEC statement for a symbolic parameter contained in the PROC statement of the procedure. The symbol has no default value, and is therefore undefined.

Note: The symbolic parameter in question may have the same spelling as some valid EXEC statement keyword, such as REGION.

System Action: The job is terminated.

Programmer Response: Correct the error by giving the symbolic parameter a default value on the PROC statement, by making a value assignment for it on the EXEC statement, or by changing the name of the symbolic parameter.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF671I **MISPLACED JOBCAT DD STATEMENT**

Explanation: A JOBCAT DD statement appeared after an EXEC statement, or a second JOBCAT DD statement appeared in the control statements of the job.

A JOBCAT DD statement, which defines a user catalog for the job, must precede the first EXEC statement in a job. Only one statement containing JOBCAT in its name field may appear in the control statements of a job. If a JOBLIB DD statement appears in the same job, it must immediately precede the JOBCAT statement.

System Action: The job is terminated. The remaining control statements are scanned for syntax errors.

Programmer Response: Probable user error. Make sure that the JOBCAT DD statement immediately precedes the first EXEC statement. If two or more user catalogs are to be used as one catalog, put blanks in the name field of the concatenated DD statements, and make sure that the concatenated DD statements immediately follow the JOBCAT DD statement. Then run the job again.

IEF672I **DUPLICATE STEPCAT DD STATEMENT**

Explanation: Only one STEPCAT DD statement may appear in a job step; more than one was found.

System Action: The job continues processing using the first STEPCAT DD statement. The subsequent STEPCAT DD statements are ignored.

Programmer Response: Probable user error. Remove all duplicate STEPCAT DD statements. If two or more user catalogs are to be used as one catalog, put blanks in the name fields of the concatenated DD statements. Make sure that the concatenated DD statements are immediately after the STEPCAT DD statement and run the job again.

- IEF673I ADDRSPC = REAL INVALID ON THE cntr STATEMENT**
Explanation: An unauthorized user is attempting to acquire real storage. Currently, TSO is the only unauthorized user. In the message text, cntr is either JOB or EXEC.
System Action: The job continues processing using the first STEPCAT DD statement. The subsequent STEPCAT DD statements are ignored.
Programmer Response: Probable user error. Either remove the ADDRSPC keyword from the statement in error (allowing ADDRSPC to default to VIRT) or specify ADDRSPC = VIRT. Run the job again.
- IEF674I INVALID DYNAMNBR VALUE - 0 SUBSTITUTED**
Explanation: A non-numeric or value exceeding that specified in the Allocation Default Module was coded as a parameter of the DYNAMNBR keyword.
System Action: A default of 0 is set and the job is allowed to continue processing.
Programmer Response: Correct the value and resubmit the job if necessary.
Problem Determination: Table I, items 1, 4, 7a, 29.
- IEF675I PERFORM VALUE INVALID OR OMITTED - SYSTEM DEFAULT SUBSTITUTED**
Explanation: An incorrect value was coded as an object of the PERFORM keyword, or the PERFORM keyword was omitted. The value was non-numeric or exceeded 255. If an MVS/System Product is installed on the system, the value cannot exceed 999.
System Action: SRM uses the performance group number specified in the currently active IEAICSxx member of SYS1.PARMLIB, if available (the MVS/System Products only). Otherwise, SRM uses a system default. A default of one (1) is substituted for non-TSO jobs and two (2) for TSO jobs. The job is allowed to continue.
Programmer Response: Correct the value and resubmit the job if necessary.
Problem Determination: Table I, items 1, 4, 7a, 29.
- IEF676I PERFORM VALUE UNDEFINED TO SYSTEM - DEFAULT SUBSTITUTED**
Explanation: The value specified is not among the performance group values defined by the installation.
System Action: A default of one (1) is substituted for non-TSO jobs and two (2) for TSO jobs. The job is allowed to continue.
Programmer Response: Correct the value and resubmit the job if necessary.
Problem Determination: Table I, items 1, 4, 7a, 29.
- IEF677I WARNING MESSAGE(S) FOR JOB jjj ISSUED**
Explanation: While converting or interpreting the JCL for this job, an error was detected, but a system default was set. jjj identifies the jobname.
System Action: Warning messages are issued at the end of the JCL for job jjj.
Programmer Response: Check the warning messages to identify the default.
Problem Determination: Table I, items 1, 4, 7a, 29.
- IEF678I DEVICE I/O ERROR CONVERTING/INTERPRETING JCL**
Explanation: An uncorrectable input/output error occurred while processing a JCL statement.
System Action: The job being processed is terminated when the error occurs. Message IEF679I is written to the console and in response the operator reentered the job through the input stream.
Programmer Response: None.
- IEF679I DEVICE I/O ERROR CONVERTING/INTERPRETING JCL FOR JOB jjj**
Explanation: An uncorrectable input/output error occurred while processing a JCL statement. jjj is the jobname.
System Action: The job is terminated and message IEF678I is written in the SYSOUT data set to inform the programmer.
Programmer Response: Resubmit the job in the input stream.
Problem Determination: Table I, items 1, 2, 4, 7a, 29.
- IEF680I DEVICE I/O ERROR WRITING TO SYSTEM MESSAGE DATA SET FOR JOB jjj**
Explanation: An uncorrectable input/output error occurred while writing a JCL statement or diagnostic to a SYSOUT data set.
System Action: The job is terminated.
Programmer Response: Resubmit the job in the input stream.
Problem Determination: Table I, items 1, 2, 4, 7a, 29.
- IEF681I INVALID COPIES VALUE - DEFAULT OF ONE SUBSTITUTED**
Explanation: The value of the COPIES keyword is zero, greater than 255, or not a number.
System Action: A default value of one (1) is substituted and the job is allowed to continue.
Programmer Response: Correct the value and resubmit the job in the input stream if necessary.
Problem Determination: Table I, items 1, 4, 7a, 29.

IEF682I FREE VALUE INVALID - DEFAULT OF 'END' SUBSTITUTED

Explanation: A value other than CLOSE or END was specified as the object of the FREE keyword.

System Action: The default value, END is substituted and the job is allowed to continue processing.

Programmer Response: Correct the value and resubmit the job if necessary.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF683I ccc TERMINATED DUE TO scde ABEND REASON = xxxxxxxx

Explanation: An uncorrectable error occurred while the system was processing a JCL statement. ccc identifies the converter or interpreter. scde is the system completion (ABEND) code, xxxxxxxx is the reason code associated with the ABEND code or zero, if there is no reason code. xxxxxxxx is meaningful only if the REASON = keyword is coded on the ABEND macro instruction. See *System Codes*, for a description of the code scde and the reason code xxxxxxxx.

System Action: The job terminates.

Programmer Response: None.

Operator Response: Table I, items 1, 4, 7a, and 29.

IEF684I HOLD VALUE INVALID - DEFAULT OF 'NO' SUBSTITUTED

Explanation: An incorrect value was coded as the object of the HOLD keyword (neither YES nor NO was coded).

System Action: A default of 'NO' is set and the job is allowed to continue processing.

Programmer Response: Correct the value and resubmit the job if necessary.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF685I STATIC PLUS DYNAMIC DD COUNT EXCEEDS MAX DYNAMIC DD'S REDUCED

Explanation: In a job step, the sum of

- the number of DDs,
- the number of DD DYNAMs, and
- the value that is the object of the DYNAMNBR keyword

exceeds the value specified in the allocation default module.

System Action: The system reduces the number of dynamic DDs so that the number of DDs for the jobstep is now equal to the value specified in the allocation default module.

Programmer Response: Delete static DDs or DD DYNAM statements; or correct the DYNAMNBR value, and then resubmit the job if necessary.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF686I DDNAME REFERRED TO ON DDNAME KEY WORD IN PRIOR STEP WAS NOT RESOLVED

Explanation: A DD statement in the previous step or the last step of the job contains a DDNAME keyword parameter but the DD statement referred to by the parameter is not defined in that step.

Note: The statement number that precedes the message is not the number of the DD statement in error. The number is either:

- The number of the EXEC statement following the step containing the DD statement in error
- The number of the last DD statement in the job when the DD statement in error is in the last step of the job

System Action: The job continues to process. The DD statement containing the DDNAME keyword parameter is treated as a DD DUMMY statement.

Programmer Response: Probable user error. Check the spelling of the DDNAME parameter and ensure that the DD statement referred to by the parameter is included in the same step.

Problem Determination: Table I, items 1, 4, 7a, and 29.

IEF687I iij sss [ppp] ddn [+xxx] - REQUESTED VOLUME MOUNTED ON JES3 MANAGED UNIT

Explanation: In a DD statement, the volume specified in the VOLUME parameter or retrieved from the catalog is mounted on a JES3 managed unit and the unit parameter did not specify the name of a group of units managed by JES3. In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the unit parameter of the DD statement to specify the name of a JES3 managed unit. (This unit name may be obtained from the system programmer.) Then resubmit the job again.

Problem Determination: Table I items 1, 3, 4, 7c, and 29.

IEF688I iij sss [ppp] ddn [xxxxx] - NULLFILE AND DSNAME CONFLICT IN ISAM CONCATENATION

Explanation: A DD statement specifying DSORG = IS or ISU and NULLFILE was found concatenated to a DD statement that specified DSORG = IS or ISU and a dsname other than NULLFILE. In the message text, xxxxx refers to the relative position of a concatenated ISAM DD statement in relation to the first DD for the concatenation.

System Action: The job is terminated.

Programmer Response: Make the dsname for the DD statements in the concatenation either all NULLFILE or all not NULLFILE. Run the job again.

Problem Determination: Table I, items 2, 7c, 29.

IEF689I JOB *jjj* FAILED

JOBLIB
STEPLIB
PGM=*.DD

 DID NOT

OPEN

Explanation: The job step initiator issued an open for a DCB for the library on the specified DD statement, but open processing encountered an error and did not ABEND.

If PGM=*.DD is specified in the message text, the EXEC statement specified a backward reference to a DD statement that defined the program to be executed as a member of partitioned data set.

System Action: Job *jjj* is terminated.

Operator Response: None.

IEF690I FOLLOWING VOLUMES UNAVAILABLE
TO *jjj sss*

IEF690I ser1 ser2 ser9

Explanation: The system was unable to satisfy all the volume requests in step *sss* of job *jjj*. The volumes which were unavailable are listed in the following line or lines of the message. Nine volume serial numbers can be printed on one line.

System Action: The initiator for step *sss* issues message IEF235D and waits either for the volumes to become available as other jobs terminate or for a negative response to message IEF235D.

Operator Response: Respond as required to message IEF235D.

IEF691I *jjj sss [ppp] ddn [+ xxx]* - DATA SET/VOLUME
COULD NOT BE RACF PROTECTED - USER
NOT DEFINED TO RACF

Explanation: The dynamic allocation protection key was specified or the Protect Key work was coded on the DD statement (*ddn*), but it could not be honored because the user is not defined to RACF.

System Action: The job is terminated.

Programmer Response: If the DASD data set or tape volume protection is required, contact the RACF administrator for assistance in getting defined to RACF.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF700I *jjj sss [ppp]* - ENVIRONMENT CHANGED. NOW
UNABLE TO ALLOCATE

Explanation: A device which was available at the start of (1) step *sss* of job *jjj* or (2) cataloged procedure step *ppp*, that was called by job step *sss* of job *jjj*, cannot be allocated because it is now in use by a system function (such as OLTEP or a system utility) or because it is boxed.

System Action: The job is terminated.

Programmer Response: Resubmit the job when the device becomes available again.

Problem Determination: Table I, items 1, 2, 13, 29.

IEF701I *jjj sss [ppp] ddn [+ xxx]* - ERROR CHANGING
ALLOCATION ASSIGNMENTS

Explanation: It was necessary for device allocation to reassign certain allocations for (1) step *sss* or job *jjj* or (2) catalog procedure step *ppp*, that was called by job step *sss* of job *jjj*. During an attempt to unallocate a unit so that the reassignment could be done, an error occurred.

In the message text, *ddn* refers to the data set for which the rearrangement was being done. *+xxx* refers to the relative position of a concatenated DD in relation to the first member of the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable system error. Resubmit the job.

Problem Determination: Table I, items 1, 2, 13, 29.

IEF702I *jjj sss [ppp] ddn [+ xxx]* UNABLE TO ALLOCATE

Explanation: The system was unable to allocate at least one device to (1) step *sss* of job *jjj* or (2) cataloged procedure step *ppp*, that was called by job step *sss* of *jjj*. *ddn* is the name of the DD statement that specified the device collection, *+xxx* is the relative position of the concatenated DD to the first DD in the concatenated group (*ddn*).

In a DD statement, or combination of DD statements, the UNIT parameter(s) specified a device collection and specified more than the number of devices available within the collection.

Note: Under certain conditions, the number of devices available within the collection is reduced:

- If the mass storage system (MSS) is not initialized, 3330V devices in the collection are unavailable.
- Any devices in the collection that are boxed are unavailable.

System Action: The job is terminated.

Programmer Response: Check the UNIT parameter(s) to ensure that the device collections can supply the number of devices needed, taking into account the conditions noted above.

If necessary, change the UNIT parameters. Resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF703I - *jjj sss [ppp] ddn [+ xxx]* - NEW DATA SETS NOT
ALLOWED ON STACKED PACK FORMAT DOS
VOLUME

Explanation: A new data set was requested on a DOS stacked pack format volume by (1) step *sss* of job *jjj* or (2) cataloged procedure step *ppp*, that was called by job step *sss* of job *jjj*. In VS systems, new data sets cannot be created on such a volume. Only existing data sets may be used.

In the message text, *+xxx* refers to the relative position of a concatenated DD to the first DD in the concatenated group (*ddn*).

System Action: The job is terminated.

IEF

Programmer Response: Probable user error. Specify a different VOL=SER= parameter in DD statement ddn or make sure at least one nonstacked pack format volume is available.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

**IEF704I jji sss [ppp] ddn[+xxx] - UNABLE TO ACCESS
REQUIRED SYSCTLG DATA SET ON
CONTROL VOLUME**

Explanation: A control volume required to locate a cataloged data set could not be accessed for one of the following reasons:

- No SYSCTLG data set was contained on the required volume.
- A permanent I/O error occurred while catalog management was attempting to open the catalog.

It was impossible to locate the data set.

In the message text, ddn is the name of the DD statement that specified the cataloged data set name. +xxx refers to the relative position of a concatenated DD to the first DD in the concatenated group (ddn).

System Action: The job is terminated.

Programmer Response: Probable user error. In the first case, make sure that the correct SYSCTLG data set exists on the control volume specified in the master catalog.

In the second case, the job should be rerun.

Problem Determination: Table I, items 1, 2, 4, 7a, 25b, 25d, 29 or 30.

**IEF710I jji sss [ppp] - MSS MOUNT FAILED FOR VOL ser
ON ddd - rc.**

Explanation: An attempt by allocation to mount Mass Storage System (MSS) volume ser on device ddd failed. The attempt was made on behalf of (1) step sss in job jji or (2) cataloged procedure step ppp, that was called by job step sss of job jji. In the message text, rc is the MSS failure reason code. See *Mass Storage System (MSS) Messages* for a detailed explanation of the code.

System Action: The job terminates.

Operator Response: Report the error to the system programmer. If rc is 5, 6, 10, or 12, rerun the job when the MSS volume is available. The system will notify you when the volume is available.

Programmer Response: See *Mass Storage System (MSS) Messages* for the appropriate response.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

**IEF711I jji sss [ppp] - MSS UNLOAD FAILED FOR VOL
[ser] ON ddd - rc.**

Explanation: An attempt by allocation to unload Mass Storage System (MSS) volume ser from device ddd failed. If ser is not in the message, then an unload was issued for a unit on which allocation was unable to mount the device. The attempt was made on behalf of (1) step sss in job jji, or (2) cataloged procedure step ppp, that was called by step sss of job jji, or (3) an UNLOAD command. In

the message text, rc is the MSS failure reason code. See *Mass Storage System (MSS) Messages* for a detailed explanation of the MSS failure reason code.

This message should be recorded on the MSS hardcopy console. The Mass Storage Control tables may show the volume ser mounted on device ddd, even though the volume is indicated as demounted in the host UCB.

System Action: Processing continues. Even though there was an MSS failure, the system will disassociate the volume from the unit as indicated by message IEE734I.

Operator Response: Report the problem to the system programmer. Vary offline the device identified by ddd. Failure to do so can result in job failures.

Programmer Response: When the host/Mass Storage Control and Staging Adapter paths become available and ready, do the following:

1. Issue any command causing an order to be sent to the MSC (for example, a VARY or MOUNT). This will initialize the Mass Storage Control interface if it is not already initialized.
2. You must now ensure that all virtual unit addresses on which volumes may have been left mounted are online at the host level. Do not vary online any UCBs that must be left in the offline state for other reasons (for example, different errors or nonexistent UCBs). With this in mind, vary online all appropriate virtual unit addresses.
3. Mount an invalid volume (for example, M ddd,VOL = (SLXXXXXX)) on any online virtual unit address. Be sure the ddd (the virtual unit address) does not already have a volume mounted to it in the host UCB.
4. The response to the mount request should be message IEF710I with reason code 07. In this case all previous out of phase UCBs and mounted volumes reflected in the Mass Storage Control tables will be back in phase. In response to the invalid mount request, messages ICB402I, ICB411I, and another ICB411I are also issued; these messages can be ignored. Vary offline those UCBs that are not required.

If the response to the mount request was message IEF710I with reason code 03, the mount request ddd referenced an out of phase virtual unit address. The volume that was mounted has been demounted by the host operating system.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

**IEF712I jji sss [ppp] - MSS VERIFY FOR VOL ser ON ddd -
reason.**

Explanation: The system was unable to verify the label of volume ser on device ddd. The reason is one of the following:

- I/O ERROR - one of the following occurred:
 - The MSS cannot stage the requested volume because there is no space available in the referenced staging group drive.
 - I/O error reading the label of volume ser on device ddd.

- **WRONG VOL** - The label of the volume on device ddd contains a serial number other than the one requested. This condition can occur if the MSS volume has been associated with another volume serial.

System Action: The job terminates.

Operator Response: Report the problem to the system programmer.

Programmer Response: If this message is preceded by message ICB194E for the same volume with restart code X'80' (invalid cell location), follow the recovery actions documented under message ICB504E, case 02 in *OS/VS Message Library: Mass Storage System (MSS) Messages*.

If the reason in the message text is I/O ERROR and the problem is occurring because there is no space available in the referenced staging drive group, ask the operator to vary an SSID online and resubmit the job, or just resubmit the job at a later time. Otherwise, proceed as follows:

If the reason indicated in the message is I/O ERROR and ser was not SCRTCH, attempt to determine the failing SSID by checking the messages that preceded message ICB194E. ICB messages are documented in *OS/VS Message Library: Mass Storage System (MSS) Messages*.

If the SSID cannot be determined, attempt to mount the volume with the MOUNT command. If you cannot, use the PURGE command with VOLID = ser (the volume identified in the message text) to demount the volume, and restart the failing step.

If the SSID can be determined, you have two options:

- **Option 1:** If you want to avoid getting an ICB096I message for another virtual volume, and this is a convenient time to assign an alternate track, do the following:
 1. Vary the SSID offline.
 2. If the SSID is that of the drive with the primary or secondary tables pack, it is necessary to free the pack from tables use before proceeding. If the SSID is that of the drive with the secondary tables pack, issue the COPYT command. If the SSID is that of the drive with the primary tables pack, issue the SWAPT command to make the pack the secondary tables pack, and then issue the COPYT command. See *OS/VS Mass Storage System (MSS) Services: General Information* for information on restoring to the original configuration after the track in error was reassigned or the pack was replaced. The pack with the error no longer contains the primary or secondary tables.
 3. Mount the staging pack on a real drive. Use the IEHDASDR utility to assign an alternate track. Remount the pack on an offline staging drive. Vary the SSID of the staging drive online. Restart the failing job step.
- **Option 2:** If you can specify the mount request on another staging drive group to avoid the

failing SSID, use the PURGE command with VOLID = ser (the volume identified in the message text) to demount the volume. Restart the failing step with the changed JCL.

If the reason indicated in the message is I/O ERROR and ser was SCRTCH, do the following:

1. Vary the virtual unit address offline.
2. Restart the failing job step.

If the reason indicated in the message is WRONG VOL, the verification error was due to a mismatch between the volume label and the volume specified in the Mount request. A MODIFYV command will change the volume label to match the volume information that is in the Inventory data set, Mass Storage Control tables, and the operating system.

1. If an MSS Access Method Services command was being attempted to correct a volume label mismatch flag condition, check to see if the deferred mount parameter was used in the JCL DD statement. If deferred mount parameter was not used, correct the JCL DD statement, and restart the failing step.
2. If a specific volume request (with job control language, by the catalog, or by load) for this volume caused the verification attempt, use the previous messages or the LISTMSVI command output to determine if the volume label mismatch flag is on. If the mismatch flag is on, the LISTMSVI command output will have a note (Note: Prior rename failed for above volume;) printed after the volume that encountered the problem.
3. If the volume label mismatch flag is on, run the MODIFYV command with the deferred mount parameter specified in the JCL DD statement and with the serial number from the Inventory data set specified for both the volume parameter and the NEWSERIAL parameter to rewrite the volume label so that it matches the volume name.
4. If the volume label mismatch flag is off, use the MODIFYV command to correct the improper volume label.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF713I

jjj sss [ppp] - MSS VOLUME NOT AVAILABLE.

Explanation: Refer to message IEF710I on the JES job log for the volume serial number, the device number, and the failure reason code. The requested volume is presently mounted with the Exclusive attribute, or the Mass Storage System (MSS) device is not shareable, and currently the volume is already mounted and shareable. See *Mass Storage System (MSS) Messages* for a detailed explanation of the MSS reason code in IEF710I.

System Action: The job terminates.

Operator Response: Rerun the job when the MSS volume is available.

Programmer Response: Resubmit the job when the MSS volume becomes available. The operator will be notified when the volume becomes available.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF714I **jjj sss [ppp] - MSS VOLUME NOT DEFINED**

Explanation: This is a probable user error. The mass storage volume does not exist in the MSC's Volume Inventory Table. See *Mass Storage System (MSS) Messages* for a detailed explanation of reason code X'07'.

System Action: The job terminates.

Programmer Response: Correct the volume serial number if it was incorrectly specified, and restart the job. Otherwise, see reason code X'07' in *Mass Storage System (MSS) Messages* for further recovery actions.

IEF715I **jjj sss [ppp] - MSS VOLUME INACCESSIBLE.**

Explanation: Refer to message IEF710I in the JES job log for the volume serial number, device number and the MSS failure reason code. The volume cannot be accessed from the specified device number. See *Mass Storage System (MSS) Messages* for a detailed explanation of the MSS reason code in IEF710I.

System Action: The job terminates.

Programmer Response: See *Mass Storage System (MSS) Messages* to determine the cause of the error. For reason code 8, resubmit the job after correcting the JCL according to proper installation procedures. For reason codes 10 and 12, resubmit the job when the MSS volume becomes available.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF716I **jjj sss [ppp] - UNABLE TO MOUNT MSS VOLUME.**

Explanation: Message IEF710I or IEF712I precedes this message. Refer to IEF710I or IEF712I for the volume serial number and device number of the volume. The system cannot mount the volume because of a mass storage system (MSS) error. If IEF710I appears, it includes the reason code (reason for failure), which is documented in *Mass Storage System (MSS) Messages*.

System Action: The system terminates the job.

User Response: Report the problem to the system programmer. Resubmit the job after the system programmer has corrected the error indicated in IEF710I or IEF712I.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF717I **jjj sss [ppp] - MSS VOLUME NOT MOUNTED. MSVGP NAME DOES NOT EXIST.**

Explanation: Probable user error. The virtual volume group name (MSVGP) specified does not exist. See *Mass Storage System (MSS) Messages* for a detailed explanation of MSS reason code X'207'.

System Action: The job terminates.

Programmer Response: Correct the MSVGP name and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF718I **jjj sss [ppp] - MSS VOLUME NOT MOUNTED. SPACE OR MSVGP REQUIRED FOR NON-SPECIFIC REQUEST.**

Explanation: Probable user error. Either SPACE or MSVGP name must be specified on a nonspecific volume request to the Mass Storage System (MSS). See *Mass Storage System (MSS) Messages* for a detailed explanation of MSS reason code X'225'.

System Action: The job terminates.

Programmer Response: Resubmit the job, adding either a MSVGP name or SPACE specification to the request.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IEF719I **jjj sss [ppp] ddn [+xxx] - DATA SET PREVIOUSLY DEFINED ON THIS VOLUME.**

Explanation: A profile for the specified data set on this volume already exists in the resource access control facility (RACF) data set.

In the message text, +xxx indicates the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

Note: This message is generated only in systems containing the RACF facility.

System Action: The job is terminated.

Programmer Response: Change the data set name or volume serial, or have the installation RACF administrator delete (from the RACF data set) the profile for the specified data set on this volume. Then, resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 26b.

IEF720I **jjj sss [ppp] ddn [+xxx] - USER NOT AUTHORIZED TO DEFINE THIS DATA SET.**

Explanation: The user has been given the automatic data set protection characteristic without being given authorization to define data sets.

In the message text, +xxx indicates the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

Note: This message is generated only in systems containing the resource access control facility (RACF).

System Action: The job is terminated.

Programmer Response: Contact the installation RACF administrator to either remove the automatic data set protection characteristic from the user profile or authorize the user to define data sets. Then, resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c.

IEF721I **jjj sss [ppp] ddn [+xxx] - PROTECTION CONFLICT IN ISAM REQUESTS.**

Explanation: Automatic data set protection could not be performed because a concatenated ISAM DD statement contained one or more of the following errors:

- The data set status was not either NEW or MOD treated as NEW.

- The data set disposition or conditional disposition was DELETE.
- DSNAME specified a system-generated name.

In the message text, +xxx indicates the relative position of a concatenated DD in relation to the first DD in the concatenated group ddn.

Note: This message is generated only in systems containing the resource access control facility (RACF).

System Action: The job is terminated.

Programmer Response: Ensure that the above conditions for automatic data set protection are met by each DD statement of the concatenation. Then, resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c.

IEF722I

ijj - FAILED

USERID IS REQUIRED
 INVALID PASSWORD GIVEN
 EXPIRED PASSWORD GIVEN
 NEW PASSWORD NOT VALID
 USER NOT PART OF GROUP
 USER PROFILE NOT FOUND
 FAILED BY INSTALLATION
 USER ACCESS IS REVOKED
 OIDCARD IS REQUIRED
 GROUP ACCESS REVOKED
 RETURN CODE NOT VALID

Explanation: While job *ijj* was being processed, one of the following conditions was detected by the Resource Access Control Facility (RACF) program:

1. **USERID IS REQUIRED** - The installation requires a valid user ID and password on the JCL JOB statement. The system did not verify the ID as an authorized user ID.
2. **INVALID PASSWORD GIVEN** - The password supplied was not contained in the user's profile.
3. **EXPIRED PASSWORD GIVEN** - The user's password has expired. A new password must be provided for RACINIT to be successful.
4. **NEW PASSWORD NOT VALID** - The new password is not valid or is the same as the old password.
5. **USER NOT PART OF GROUP** - The GROUP specified is not valid for the user.
6. **USER PROFILE NOT FOUND** - The user was not defined by the system resource administrator.
7. **FAILED BY INSTALLATION** - The job was failed by the installation exit routine taken when the job was initiated.
8. **USER ACCESS IS REVOKED** Although the user is defined and the password is correct, the user's access has been revoked.
9. **OIDCARD IS REQUIRED** - The user is required to supply an operator ID magnetic

stripe card when entering the system. It is not possible to supply an OIDCARD with this batch job.

10. **GROUP ACCESS REVOKED** - The GROUP specified is a valid group for this user. However, the user's access to the group has been revoked.

11. **RETURN CODE NOT VALID** - On return from RACF an invalid return code was received.

Note: This message is generated only in systems containing the RACF facility.

System Action: The job is terminated, and no steps are executed. No RACF-protected resources are accessed.

Programmer Response: In case number 1, assign a proper user ID. In cases 2, 3, 4 and 5, execute the job again, specifying the correct value for PASSWORD or GROUP. If the problem persists, contact the RACF administrator at your installation.

In the last six cases, contact the RACF administrator for assistance.

Problem Determination: Table I, items 1, 2, 3, 4, 7d, 29.

IEF724I

ijj sss [ppp] - ALLOCATION OF STEPCAT(S) FOR DISPOSITION PROCESSING FAILED.

Explanation: An attempt to allocate and open the private catalogs specified by the STEPCAT DD statements during a JES warm start was unsuccessful.

System Action: The master catalog was used to attempt the catalog functions requested by the step.

Programmer Response: List the master catalog and STEPCAT catalogs, and correct the discrepancies in a subsequent job.

Problem Determination: Table I, items 1, 2, 3, 4, 8, 25, 34.

IEF725I

ijj sss [ppp] ddn (+xxx) - MSS VOLUME SELECTION FAILURE - rc

Explanation: An attempt by the Mass Storage System (MSS) to select a volume for DD statement ddn failed. See *Mass Storage System (MSS) Messages* for a detailed explanation of the (MSSC) Mass Storage System Communicator reason code rc.

In the message text, +xxx refers to the relative position of a concatenated DD statement to the first DD statement in the concatenated group ddn.

System Action: The job is terminated.

Operator Response: None.

Programmer Response: See *Mass Storage System (MSS) Messages* to determine the cause of the error in MSS.

Problem Determination: Table I, items 1, 2, 3, 4, 29, 35.

IEF

IEF726I `ijj sss [ppp] dddn (+xxx) - ALLOCATION REQUEST FAILURE - MSS NOT INITIALIZED`

Explanation: The device specified by the unit parameter, retrieved from the catalog, passed from an earlier step via a PASS disposition, retrieved from an earlier DD statement via volume reference (VOL = REF) used for the DD statement was eligible only to Mass Storage System (MSS) devices but the MSS is not initialized.

System Action: The job terminates.

Operator Response: None.

Programmer Response: Insure the Mass Storage System is initialized when the job runs or change the UNIT parameter to specify non-MSS devices.

Problem Determination: Table I, items 1, 2, 3, 4, 17, 29.

IEF731I `mem LINE num: PPT STMT [FOR PGMNAME name] [IGNORED. | ACCEPTED.] REASON = kwrc.`

Explanation: On line number `num`, the system detected an error on the PPT statement of `mem`, the SYS1.PARMLIB member SCHEDxx. If the system also found a program name on the invalid PPT statement, the message displays that program name where variable `name` appears. The message also contains a reason `kwrc` which further explains the problem.

`kw` indicates the keyword where the error occurred.

Key-word (kw)	Explanation
01	NO KEYWORD CAN BE DETERMINED
02	PGMNAME
03	KEY
04	CANCEL
05	NOCANCEL
06	SWAP
07	NOSWAP
08	PRIV
09	NOPRIV
10	DSI
11	NODSI
12	SYST
13	NOSYST
14	PASS
15	NOPASS
16	AFF
17	SPREF
18	LPREF
19	NOPREF

`rc` is the second half of `kwrc`, and indicates a decimal reason code for the error:

Reason Code (rc)	Explanation
04	A delimiter between keywords is either missing or misplaced.
08	The keyword is not valid.
12	Mutually exclusive keywords were specified.
16	The parameter is not valid.
20	A duplicate keyword is specified.
24	The keyword list is not valid.
28	A required program name is not specified.
32	The program name is not valid.
36	A duplicate keyword value is specified.
40	A right parenthesis is missing from the last keyword. In this case, the system will accept the PPT statement.

System Action: If 'IGNORED' appears in the message, the system does not add the PPT entry to the PPT; if 'ACCEPTED' appears, the system does add the entry to the PPT. In either case, processing continues.

Operator Response: None.

Programmer Response: Check SYS1.PARMLIB member SCHEDxx for the invalid PPT statement, and correct the error.

IEF732I `mem LINE num: DUPLICATE PPT STMT FOR PGMNAME name IGNORED.`

Explanation: The system encountered a PPT statement that contained `name`, a program name that was defined in a prior PPT statement in `mem`. The PPT statement with the duplicate `name` is on line number `num` of `mem`, the SYS1.PARMLIB member SCHEDxx.

System Action: The system ignores the second occurrence of `name` in SYS1.PARMLIB member SCHEDxx.

Operator Response: None.

Programmer Response: Remove the PPT statement which contains the duplicate `name`.

IEF734I `mem LINE num: [RESTART|NORESTART] [CODE cde|STATEMENT] [IGNORED|ACCEPTED]. REASON = kyrc`

Explanation: On line number `num`, the system encountered an improperly formatted code on a RESTART or NORESTART statement in `mem`, the SYS1.PARMLIB member SCHEDxx. Although more than one incorrect code may be on the statement, `cde` contains the first four characters of only the first incorrect code. The message contains a REASON which further describes the error; the REASON is in the form `kyrc` where `ky` is a numerical keyword and `rc` is a decimal reason code which further explains the problem.

If **ky** is decimal 01, it indicates that the system was processing unexpected data. The associated reason codes **rc** may be:

Reason	Explanation
08	Unrecognizable keyword. The system ignores the statements.
28	The keyword list is not valid, and the system ignores the statement.
44	The right keyword list delimiter is missing. The system processes the statement.
48	The system encounters data following the right keyword list delimiter, and processes the statement.

If **ky** is decimal 02, it indicates that the system was processing the 'CODES(' keyword on either the RESTART or NORESTART statement. The associated reason codes **rc** may be:

Reason	Explanation
16	The value for the code you specified is beyond the valid range; the system accepts the statement, up to the invalid code.
52	The code already exists. The system accepts the statement, up to the code you are trying to add.
56	The system cannot find the code you want to delete. It accepts the statement, up to the code you are trying to delete.
60	The keyword was previously specified on the statement the system is processing. The system accepts the statement, up to the duplicate keyword.

System Action: The system continues processing.

Operator Response: None.

IEF735I IEFSSNxx: PRIMARY KEYWORD PREVIOUSLY SPECIFIED IN IEFSSNyy.

Explanation: The primary keyword in SYS1.PARMLIB member IEFSSNxx was previously stated in the SYS1.PARMLIB member IEFSSNyy.

System Action: The system accepts the first specified primary subsystem name and ignores any subsequent primary subsystem names.

Operator Response: None.

Programmer Response: Check the SYS1.PARMLIB concatenation for IEFSSNxx, and remove the duplicate entry.

IEF736A SPECIFY PRIMARY SUBSYSTEM NAME

Explanation: The primary subsystem name is missing.

System Action: The system waits until the operator enters a primary subsystem name.

Operator Response: Enter the correct primary subsystem name.

IEF737I IEFSSNxx LINE nnnn: KEYWORD keyword IGNORED. NOT RECOGNIZED.

Explanation: An invalid **keyword** is specified in IEFSSNxx.

System Action: The system continues processing.

Operator Response: None.

Programmer Response: Update the incorrect keyword in SYS1.PARMLIB member IEFSSNxx.

IEF738I mem LINE num: [RESTART | NORESTART] STMT IGNORED. NO OPERANDS SPECIFIED.

Explanation: On line number **num**, the system encountered a RESTART or NORESTART statement in **mem**, which is the SYS1.PARMLIB member SCHEDxx. The statement is invalid because it contains no operands.

System Action: The system continues processing.

Operator Response: None.

IEF740I jjj sss [ppp] ddn [+ xxx] -DATA SET/VOLUME COULD NOT BE RACF PROTECTED. RACF NOT ACTIVE

Explanation: The Dynamic Allocation Protect Key was specified or the Protect Key word was coded on the DD statement (ddn), but could not be honored because Release 2 of the RACF Program Product was not installed or not active. In the message text jjj sss [ppp] ddn [xxx], has the following message:

- jjj - Jobname
- sss - Stepname
- ppp - Procstepname
- ddn - Data definition name
- + xxx - Refers to the relative position of a concatenated DD Statement for the data set ddn.

System Action: The job is terminated.

Programmer Response: If DASD data set or tape volume protection is required, contact the RACF administrator for assistance.

Problem Determination: Table I, items 1, 2, 3, 4, 7c, 29.

IEF741I jjj sss [ppp] ddn[+ xxx] - PROTECT REQUEST FAILED INVALID DATA SET/VOLUME SPECIFICATION

Explanation: If PROTECT was specified for a direct access data set, the data set must be a new, non-temporary data set. That is, the status of the data set is 'NEW' or 'MOD' treated as 'NEW'. Normal and abnormal dispositions if specified are other than DELETE, and the data set has a non-temporary data set name.

If PROTECT was specified for a tape volume, the tape label specification must be SL, AL, SUL, AUL, or NSL. Both the file sequence count and volume sequence count must be set to one (except for NSL), or must default to one, and the tape volume must have a volume use attribute of PRIVATE.

If any of the above conditions are not met the PROTECT request cannot be satisfied.

In the message text `jjj sss [ppp] ddn[+xxx]` has the following meaning:

- `jjj` - Jobname
- `sss` - Stepname
- `ppp` - Procstepname
- `ddn` - Data definition name
- `+xxx` - Refers to the relative position of a concatenated DD statement for the data set `ddn`.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the data set or volume description on the DD statement and resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7c, 29.

IEF742I `jjj sss [ppp] - STEP IN ALLOCATION BEFORE SYSTEM RESTART - NO AUTOMATIC RESTART.`

Explanation: Step `sss` of job `jjj` or cataloged procedure step `ppp`, that was called by job step `sss` of job `jjj`, was not executed because that step was in allocation when system restart was required.

Note: Message IEF450I is not issued when this message is issued.

System Action: The job is terminated.

Programmer Response: The job may be resubmitted for deferred restart at the step that was in allocation. However, the data sets for the step must be verified since it is unknown how much allocation has executed.

IEF743I `jjj FORCED - CODE SA22 - IN ADDRESS SPACE z`

Explanation: A FORCE command was issued for job `jjj`, and the job and address space were terminated with system completion code A22.

If the jobname is not available and the START, MOUNT, or LOGON command was issued, then `jjj` will appear as START, MOUNT, or LOGON. If the issuing command cannot be determined, `jjj` will appear as COMMAND.

System Action: The job and address space are terminated.

Operator Response: None.

Programmer Response: Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 16, 18, 29.

IEF744I `SUBSYSTEM NOT SPECIFIED`

Explanation: The SUBSYS keyword was specified but a subsystem name was not coded.

System Action: The job is terminated. The remaining Job Control statements for the job are scanned for syntax errors.

Programmer Response: Add the appropriate parameter to indicate the subsystem to process the request.

Problem Determination: Table I, items 1, 4, 29.

IEF745I `SUBSYSTEM ssss DOES NOT SUPPORT THE SUBSYSTEM KEY WORD`

Explanation: The subsystem specified with the SUBSYS keyword at the time the job was executed did not support the SUBSYS keyword on the DD statement. In the message text `sss` is the subsystem name.

System Action: The job is terminated. The remaining Job Control statements for the job are scanned for syntax errors.

Programmer Response: Consult the subsystem documentation to determine if the subsystem supports the JCL parameters. If the subsystem does support the JCL parameters, make sure that the subsystem has become fully operational on the processor on which the job will be read in.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29.

IEF746I `SUBSYSTEM ssss DOES NOT EXIST`

Explanation: The SUBSYS keyword specified is a syntactically correct subsystem name but the subsystem is not defined to the system. In the message text `sss` is the subsystem name.

System Action: The job is terminated. The remaining Job Control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Verify the spelling of the subsystem name with the system installation personnel.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29.

IEF747I `SUBSYSTEM ssss IS NOT OPERATIONAL`

Explanation: The subsystem is defined to the system but has not been initialized or has not become operational. Either the subsystem had an error in system initialization, or it has not been started by the operator. In the message text `sss` is the subsystem name.

System Action: The job is terminated.

Programmer Response: Probable operational, or system error. Insure that the operator has made the subsystem operational on the processor on which the job will execute prior to resubmitting the job.

Problem Determination: Table I, items 1, 2, 3, 4, 13, 29.

IEF748I `SUBSYSTEM NAME INVALID`

Explanation: A subsystem name was specified on the SUBSYS keyword which contained an invalid character or was longer than 4 characters.

System Action: The job is terminated. The remaining Job Control statements are scanned for syntax errors.

Programmer Response: Probable user error. Correct the subsystem name and resubmit the job.

Problem Determination: Table I items 1, 4, 29.

IEF749I JCL STATEMENT BUFFER CAPACITY EXCEEDED

Explanation: A SUBSYS keyword was specified with an excessive number of long subsystem parameters which when combined with other DD parameters generated exceptionally long internal text.

System Action: The job is terminated.

Programmer Response: Probable user error. Possible misplaced continuation card, or closing parenthesis. Consult subsystem documentation for proper specification of subsystem parameters. Correct the error and resubmit the job.

Problem Determination: Table I, items 1, 4, 7d, 29.

IEF750I SYSTEM ERROR IN PROCESSING SUBSYS DD PARAMETER

Explanation: A system error occurred in the processing of a DD statement containing a SUBSYS keyword parameter.

System Action: The job is terminated. The remaining Job Control statements for the job are scanned for syntax errors.

Programmer Response: None. System error, notify the installation System Programmer.

Problem Determination: Table I, items 1, 2, 4, 7d, 29.

IEF751I *ijj sss [ppp] dd* JOB FAILED BY SUBSYSTEM

Explanation: A request to allocate one or more SUBSYS requests resulted in a step level error that could not be associated to a particular DD card by the subsystem. A subsystem message describing the reason for failure follows this message.

System Action: The job is terminated.

Programmer Response: Probable user error. Consult the subsystem message; correct the error; and resubmit the job.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF752I *ijj sss [ppp] dd*[+xxx] REQUEST FAILED BY SUBSYSTEM

Explanation: Allocation of this data set was failed by the subsystem specified in the SUBSYS parameter. A subsystem message describing the reason for failure will follow. In the message text +xxx refers to the relative position of a concatenated DD statement in relation to the first DD statement in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable user error. Consult the subsystem message; correct the error; and resubmit the job.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF753I *ijj sss [ppp] dd*[+xxx] REQUEST FAILED - SUBSYSTEM DOES NOT SUPPORT ALLOCATION

Explanation: The subsystem specified in a SUBSYS parameter does not support the allocation of subsystem data sets. In the message text +xxx refers to the relative position of a concatenated DD statement in relation to the first DD statement in the concatenated group.

System Action: The job is terminated.

Programmer Response: Probable wrong subsystem name. Consult the subsystem documentation to determine if the subsystem supports the allocation of subsystem data sets via the SUBSYS parameter.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF754I *ijj sss [ppp] dd* [+xxx] REQUEST FAILED SUBSYSTEM IS NOT OPERATIONAL

Explanation: A request was made to allocate a subsystem data set but the specified subsystem was not operational. In the message text +xxx refers to the relative position of a concatenated DD statement in relation to the first DD statement in a concatenated group.

System Action: The job is terminated.

Programmer Response: Probable operational error. Ensure that the operator has made the subsystem operational on the processor on which the job will execute prior to running the job.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF755I *ijj sss [ppp] dd*[+xxx] REQUEST FAILED SUBSYSTEM DOES NOT EXIST

Explanation: A request was made to allocate a subsystem data set, but the subsystem is not defined to the system. In the message text +xxx refers to the relative position of a concatenated DD statement in relation to the first DD statement in the concatenated group.

System Action: The job is terminated.

Programmer Response: None. Probable installation error. Contact the installation System Programmer to ensure that the subsystem is installed on the processor on which the job is executed.

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF756I *ijj sss [ppp] dd*[+xxx] REQUEST FAILED - SYSTEM ERROR IN PROCESSING SUBSYS DD PARAMETER

Explanation: A system error occurred in the processing of a DD statement containing a SUBSYS keyword parameter. In the message text +xxx refers to the relative position of a concatenated DD statement in relation to the first DD statement in the concatenated group.

System Action: The job is terminated.

Programmer Response: System error. Notify the installation System Programmer.

IEF

Problem Determination: Table I, items 1, 2, 4, 7c, 29.

IEF757I ILLEGAL DATA SET NAME ON DD STATEMENT

Explanation: The data set name cannot consist of any special characters created by the 12-4-9 multi-punch or in any other way that converts the value of each character to X'04'.

System Action: The job terminates.

Programmer Response: Correct the data set name. Use other system functions to access the data set. For example, code an authorized program to read the JFCB. Change the data set name in the JFCB to the data set name containing the 12-4-9 multipunch, be sure that JFCBNWRT is off in the JFCB, and issue an OPEN (TYPE=J) macro instruction using the modified JFCB.

Problem Determination: Table I, items 1, 4, 7C, 29.

IEF758I SUBSYSTEM AVAILABILITY LIMITED

{ IEFJSSNT NOT FOUND
DESCRIPTION NOT FOUND IN SYS1.PARMLIB
ABEND DURING SUBSYSTEM INITIALIZATION }

Explanation: One or more subsystems are unavailable:

- If IEFJSSNT NOT FOUND appears, module IEFJSSNT could not be found in SYS1.LINKLIB or in a library concatenated to SYS1.LINKLIB via a LNKLSTxx member of SYS1.PARMLIB. IEFJSSNT contains a list of subsystem names and initialization entry points for those subsystems.
- If DESCRIPTION NOT FOUND IN SYS1.PARMLIB appears, one or more IEFSSNxx members, each naming one or more subsystems to be initialized, could not be found in SYS1.PARMLIB. The suffix values for the IEFSSNxx member names were specified to the system via the SSN system parameter.
- If ABEND DURING SUBSYSTEM INITIALIZATION appears, an ABEND occurred while the system was initializing one of the subsystems specified in IEFJSSNT or in an IEFSSNxx member of SYS1.PARMLIB.

System Action: If IEFJSSNT NOT FOUND appears, the system does not initialize the subsystems identified in IEFJSSNT. If DESCRIPTION NOT FOUND IN SYS1.PARMLIB appears, the system cannot initialize the subsystems identified in the missing IEFSSNxx members, but it does initialize subsystems identified in the IEFSSNxx members that it did find. If ABEND DURING SUBSYSTEM INITIALIZATION appears, the system does no more subsystem initialization.

In all three cases, other system initialization continues.

Operator Response: Notify the system programmer.

Programmer Response: If IEFJSSNT NOT FOUND appears, determine why IEFJSSNT could not be found. If DESCRIPTION NOT FOUND IN SYS1.PARMLIB appears, be sure that the

IEFSSNxx members are specified correctly on the SSN = parameter of IEASYSxx. If the missing subsystems are required for your system processing, re-IPL the system.

Problem Determination: If ABEND DURING SUBSYSTEM INITIALIZATION appears, print the SYS1.DUMP data set.

**IEF759I [xxxx] SUBSYSTEM UNAVAILABLE,
GETMAIN FAILED CODE=y
ABEND DURING INITIALIZATION**

Explanation: One or more subsystems or the subsystem hash table (SHAS) is unavailable. If GETMAIN FAILED CODE=y appears, the system issued the GETMAIN macro instruction to obtain storage for a control block, but the GETMAIN failed. The possible values for y and their meanings are:

Value for y	Explanation
1	The unsuccessful GETMAIN was for a SSCVT (subsystem communication vector table) for subsystem xxxx; the subsystem is unavailable.
2	The unsuccessful GETMAIN was for a SSVT (subsystem vector table) for subsystem xxxx; the subsystem is defined to the system, but is unavailable for subsystem interface requests.
3	The unsuccessful GETMAIN was for storage to build the SHAS (subsystem hash table). The subsystems are available, but the SHAS is not. The xxxx field is blank.
4	The unsuccessful GETMAIN was for storage to re-build the SAST (subsystem allocation sequence table) in order to add the names of subsystems specified in IEFSSNxx members of SYS1.PARMLIB. Subsystems specified in IEFSSNxx members are not available to process subsystem allocation requests. The xxxx field is blank.

If ABEND DURING INITIALIZATION appears, an ABEND occurred during one of the following:

- The system was initializing subsystem xxxx (that is, building a SSCVT (subsystem communication vector table) or a SSVT (subsystem vector table) for subsystem xxxx); the subsystem might be unavailable, depending on when the ABEND occurred.
- The system was executing the initialization routine specified for subsystem xxxx in module IEFJSSNT or in an IEFSSNxx member of SYS1.PARMLIB. The subsystem might be unavailable, depending on when the ABEND occurred.
- The system was building the SHAS (subsystem hash table). Subsystems are available, but the SHAS is not. The xxxx field is blank.
- The system was rebuilding the SAST (subsystem allocation sequence table). If the rebuilding process was not complete when the ABEND

occurred, subsystems specified in IEFSSNxx members of SYS1.PARMLIB are not added to the SAST and are not available for processing subsystem allocation requests. The xxxx field is blank.

System Action: If an ABEND occurred while the system was initializing a subsystem, the system takes a dump. However, if an ABEND occurred during execution of an initialization routine specified in IEFJSSNT or SYS1.PARMLIB, a dump occurs only if that initialization routine takes one. Other system initialization continues.

Operator Response: Notify the system programmer.

Programmer Response: If the unavailable subsystems are crucial for your system processing, correct the problem and re-IPL.

Problem Determination: If ABEND DURING INITIALIZATION appears, print the SYS1.DUMP data set.

**IEF760I ERROR IN xxxxxxxx, CODE = yyrc
incorrect record**

Explanation: One of the parameters on a record in the xxxxxxxx member of SYS1.PARMLIB contains an error. yyy is the position of the parameter relative to the beginning of the record. For example, if yyy is 003, the third parameter in the record is incorrect. rc is a hexadecimal reason code that identifies the error:

rc	Explanation
01	A delimiter is missing.
02	A quotation mark is missing.
03	The parameter length is invalid.
04	A required parameter is missing.
05	A field within single quotation marks should not be within quotation marks.
06	A subsystem name has a syntax error.
07	The number of parameters exceeds the maximum allowed.
08	A right parenthesis is missing.
09	A required item is missing.
0A	An item has invalid parentheses.
0B	Records conflict.
0C	A keyword is invalid.
0D	A duplicate keyword was specified.

The second line of the message text shows the first 70 characters of the record.

System Action: The system issues this message for the first incorrect parameter on a record. The system does not check the rest of the record; the record may contain other incorrect parameters. The system ignores the record in error and continues with the next record.

Operator Response: Notify the system programmer.

Programmer Response: Correct the error. If the information on the record is crucial for your system processing, reissue the command or re-IPL the system.

**IEF771I ddd [PENDING] OFFLINE,
{ASSIGNED TO ANOTHER SYSTEM|
ASSIGN FAILED, RETURN CODE = rc}**

Explanation: Assignable device initialization for device ddd failed for one of the following reasons:

ASSIGNED TO ANOTHER SYSTEM

The device is assigned to another system and cannot be accessed by this system.

ASSIGN FAILED, RETURN CODE = rc

The device could not be assigned because of an I/O error, as indicated by return code rc. Possible values for the return code are:

rc	Meaning
16	A timeout occurred when the system was performing I/O to assign device ddd.
20	Either (1) a permanent I/O error occurred when the system was trying to assign device ddd, or (2) device ddd is currently boxed (forced offline).

System Action: If PENDING appears in the message, device ddd is marked **pending offline** but remains allocated to this system. If PENDING is not in the message, the device is marked **offline** to this system.

If ASSIGNED TO ANOTHER SYSTEM appears in the message and the component to which the device is allocated tries to use it, this system will reject I/O to the device.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 2, 29.

**IEF772I ddd PENDING OFFLINE - MUST BE VARIED
OFFLINE TO JES3**

Explanation: A VARY OFFLINE command for device ddd failed because the device is managed by and online to JES3.

System Action: The device is reset to online status.

Operator Response: Issue a VARY OFFLINE command to vary the device offline to JES3.

Problem Determination: Table I, items 2, 29.

**IEF773I TIOT SIZE = xxxxK, MAXIMUM SINGLE
UNIT DD ENTRIES = zzzzzzzz**

Explanation: The message contains (1) the size of the Task I/O Table (TIOT), which the system programmer defined, and (2) the number of DD statements per jobstep that the system supports.

System Action: The system continues processing.

Operator Response: None.

**IEF774A TIOT SIZE INVALID. REPLY NUMBER IN
RANGE 16 - 64 OR U FOR DEFAULT**

Explanation: The programmer specified an invalid Task I/O Table (TIOT) size.

System Action: The specified TIOT size was not in the valid range of 16K to 64K. The system waits for the operator to either specify a correct size or accept the default size of 32K.

Operator Response: You can either respecify the TIOT size with a valid size in the range of 16 to 64, or enter U to accept the default size of 32K.

IEF811I DUPLICATE VERB AND LABEL 'insert text'

Explanation: A job control statement contained a verb and label that were duplicates of a verb and label on a previously specified job control statement. Verb and label specification must be unique prior to the first EXEC statement and within steps. In the message text, 'insert text' is one of the following:

PRIOR TO THE FIRST EXEC

The duplicate verb and label were encountered in a job control statement prior to the first EXEC statement.

WITHIN A STEP

The duplicate verb and label were encountered in a job control statement within a step.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Correct the error, and resubmit the job.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF812I JCL USAGE LIMITED - SYSTEM ERROR

Explanation: During converter/interpreter processing, an unexpected system error occurred; this error limited the use of JCL keywords or statements.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable installation error. Notify the system programmer.

Problem Determination: Table I, items 1, 2, 4, 7a, 7c, 29.

IEF813I verb STATEMENT OUT OF SEQUENCE

Explanation: In a procedure, a statement containing a JDT-defined verb preceded the first EXEC statement. Probably the JDT-defined verb statement is out of sequence.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Resequence the procedure.

IEF814I NO NAME ON FIRST DD STATEMENT AFTER verb STATEMENT

Explanation: The first DD statement following a non-DD verb statement did not contain a ddname in its name field. That is, column 3 of the DD statement was blank.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Either put a ddname in the name field of the DD statement, or place the DD statement among other DD statements so that a proper concatenation is defined. Resubmit the job.

IEF815I INVALID HEXADECIMAL VALUE IN THE prm FIELD

Explanation: In a job control statement, an alphabetic or special character appears in a parameter that can contain only hexadecimal characters (0-9, A-F). prm is the last correctly specified keyword preceding the error.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous parameter, then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF816I MASTER SCHEDULER JCL FOR THIS IPL TAKEN FROM MEMBER mem

Explanation: The master scheduler JCL contained in member mem is used to start the master scheduler address space.

System Action: The system starts the master scheduler address space.

Operator Response: None. This message is sent to hardcopy.

IEF817I PARAMETER LENGTH LESS THAN MINIMUM ALLOWED IN THE prm FIELD

Explanation: In a job control statement, a parameter was shorter than permitted. prm is the last correctly specified keyword parameter preceding the error.

System Action: The system terminates the job. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Lengthen the parameter to the minimum length or greater. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7c, 29.

IEF818E JCL USAGE LIMITED - 'text insert'

Explanation: During system initialization, an error occurred that could limit use of JCL. Some JCL jobs could fail because of unrecognized keywords or verbs, even though the keywords and verbs are recognizable under normal conditions.

In the message text, 'text insert' is one of the following:

MODULE name NOT FOUND

Where name is the name of the module that could not be located in SYS1.LINKLIB.

STORAGE UNAVAILABLE

Storage was not available in the master scheduler address space.

UNABLE TO SET UP RECOVERY ENVIRONMENT

An ESTAE failed in the master scheduler address space.

SYSTEM ERROR IN JCL INITIALIZATION

A system ABEND occurred during scheduler JCL facility (SJF) processing.

- System Action:** IPL continues; the system may have written a dump. Any JCL containing new keywords or verbs may fail.
- Operator Response:** Notify the system programmer. When current processing stops, restart the system to restart the master scheduler.
- Programmer Response:** When appropriate, re-IPL.
- Problem Determination:** Table 1, 2, 7a, 7d, 13, 16, 29, 33.
- IEF819I EXCESSIVE NUMBER OF POSITIONAL PARAMETERS IN SUBPARAMETER LIST IN THE prm FIELD**
- Explanation:** A job control statement contained too many parameters in a subparameter list. A misplaced comma, a duplication, or a null operand field could cause such an error. In the message text, prm is the last correctly specified keyword parameter preceding the error. Note that a keyword must be followed by an equal sign to be considered correctly specified.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. After correcting the error, resubmit the job.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF820I SPECIFIED NUMERIC LESS THAN MINIMUM ALLOWED IN THE prm FIELD**
- Explanation:** In a job control statement, the value of a parameter or subparameter is less than the minimum value allowed. In the message text, prm is the last correctly specified keyword parameter preceding the error. Note that a keyword must be followed by an equal sign to be considered correctly specified.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. After correcting the error, resubmit the job.
- Problem Determination:** Table 1, Items 1, 4, 7c, 29.
- IEF821I END OF {PROC|JOB} ENCOUNTERED BEFORE END OF CNTL GROUP**
- Explanation:** A job specified a CNTL verb but did not specify a corresponding ENDCNTL verb before the end of a procedure or the end of the job.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Provide the missing ENDCNTL verb corresponding to a previously specified CNTL verb, or remove the extra CNTL verb. Resubmit the job.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF822I KEYWORD xxxx NOT SUPPORTED {BEFORE|AFTER} FIRST EXEC STATEMENT**
- Explanation:** In a job control statement, keyword xxxx was incorrectly specified before or after the first EXEC statement.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. Place the keyword in proper relation to the first EXEC statement. Resubmit the job.
- Problem Determination:** Table I, items 1, 4, 7c, 29.
- IEF823I NUMBER OF LEVELS EXCEEDS MAXIMUM IN THE prm FIELD**
- Explanation:** The number of qualification levels in a parameter exceeds the allowable limit. prm is the last correctly specified keyword parameter preceding the error. Note that a keyword must be followed by an equal sign to be considered correctly specified.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. Correct the name field, then submit the job again.
- Problem Determination:** Table I, items 1, 7c, 15, 29.
- IEF824I LENGTH OF LEVEL xx EXCEEDS yy IN THE prm FIELD**
- Explanation:** The length of the qualification level within a parameter exceeds the allowable limit. xx is the number of the level in error, yy is the limit, and prm is the last correctly specified keyword parameter preceding the error.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. Correct the name field, then submit the job again.
- Problem Determination:** Table I, items 1, 7c, 15, 29.
- IEF825I INVALID CHARACTER IN THE prm FIELD**
- Explanation:** In a job control statement, a character within a qualification level is not valid. prm is the last correctly specified keyword parameter preceding the error. Note that a keyword must be followed by an equal sign to be considered correctly specified.
- System Action:** The system terminates the job. The remaining job control statements are scanned for syntax errors.
- Programmer Response:** Probable user error. Correct the name field, then submit the job again.
- Problem Determination:** Table I, items 1, 7c, 15, 29.

IEF861I FOLLOWING RESERVED DATA SET NAMES UNAVAILABLE TO jjj

Explanation: During job initiation, job jjj requested the use of one or more data sets that are currently unavailable. The data sets are reserved for other jobs currently executing in the system. Message IEF863I follows, listing the data set names.

System Action: Processing of the job named jjj is suspended.

Operator Response: None.

IEF863I DSN = dsn {PERMANENTLY}

Explanation: Data set name dsn is not available to the job named in preceding message IEF861I. This message will appear for each data set name that is not available.

System Action: One of the following messages will be issued to explain the status of the job:

- IEF099I JOB jjj WAITING FOR DATA SETS
- IEF452I xxx JOB NOT RUN - JCL ERROR [TIME = hh.mm.ss] message IEF452I will be written if the job is a TSO LOGON, which would have to wait for data sets.
- IEF458D JJJ sss WAITING FOR DATA SET. TO CANCEL WAIT REPLY 'NO'.
- IEF101I JOB jjj CANCELLED BY SYSTEM

Operator Response: None.

IEF923I ELIGIBLE DEVICE TABLE edtid mm/dd/yy hh.mm [ll]

Explanation: This message indicates which EDT (eligible device table) is being processed by the eligible device table verification routine. An explanation of each field in the message text follows:

edtid	The eligible device table identifier (specified at SYSGEN or EDTGEN)
mm/dd/yy	Date on which the stage II assembly of the EDT occurred in month/day/year format.
hh.mm	Time at which the stage II assembly occurred in hours.minutes format.
ll	The level of the eligible device table. Not specified for an MVS/370 version of the EDT.

System Action: The EDT verification routine continues processing.

Operator Response: None.

Programmer Response: None.

IEF924I UCB FOR UNIT ddd AT adr IS INCORRECT DEVICE TYPE

Explanation: The eligible device table verification utility program found that the device type in the UCB at unit address adr does not match the unit specification for device ddd in the eligible device table (EDT). The IODEVICE macro instruction for unit address adr in the eligible device table generation input stream is incorrect.

System Action: Eligible device table verification utility processing continues.

Operator Response: Save the console sheet and notify the system programmer.

Programmer Response: Correct the device specification in the appropriate IODEVICE macro instruction and rebuild the EDT, or modify the device type in the UCB to match the EDT.

IEF925I NO UCB FOR UNIT ddd AT adr

Explanation: The EDT (eligible device table) verification utility program found that the EDT contains an entry for device type ddd, but there is no corresponding UCB for the unit at unit address adr.

System Action: Eligible device table verification utility processing continues.

Operator Response: Save the console sheet and notify the system programmer.

Programmer Response: Review IODEVICE macro instruction in the eligible device table generation input stream for the unit in error, make the appropriate correction or deletion, and rebuild the EDT.

IEF926I EDT CORRESPONDS TO UCBS

Explanation: The eligible device table verification utility program found that the eligible device table (EDT) correctly describes all the UCBS it references.

Note: For a TP device, the utility program verifies only the device class and not the device type. Therefore, this message can appear when the TP device types in the EDT and the corresponding UCBS do not match.

System Action: Eligible device table verification utility processing continues.

Operator Response: None.

Programmer Response: None.

IEF927I WRONG LEVEL ELIGIBLE DEVICE TABLE edtid mm/dd/yy hh.mm

Explanation: The EDT (eligible device table) verification routine found an EDT that was not in MVS/Extended Architecture format. This can happen if an SU64 multiple EDT user fails to rebuild all MVS/370 EDTs with the MVS/Extended Architecture version of the EDTGEN macro instruction. An explanation of each field in the message text follows:

edtid	Identifies which eligible device table.
mm/dd/yy	Date on which the stage II assembly of the EDT occurred in month/day/year format.
hh.mm	Time at which the stage II assembly occurred in hours.minutes format.

System Action: If a batch user invoked the EDT verification routine, the EDT verification process is suppressed and the routine returns return code 16. If the EDT routine is invoked during IPL, the system goes into a wait state, code X'200', reason code 0001.

Operator Response: Re-IPL using either no MLPA (modified link pack area) member or an MLPA member that directs the system to an MVS/Extended Architecture EDT.

Programmer Response: Rerun the job using the level of the EDT that is valid for the level of the operating system being used.

IEF928I ELIGIBLE DEVICE TABLE REFERENCES UNDEFINED FOR UCB(s)

Explanation: The EDT (eligible device table) verification routine found devices in the EDT that do not have a UCB (unit control block) in the nucleus of the system being IPLed. The system issues this message only if the EDT verification routine is invoked at IPL time. One or more IEF925I messages, identifying UCBs, precede this message.

System Action: The EDT verification routine processing is complete. The system goes into a wait state, code X'200', reason code 0002.

Operator Response: Re-IPL using either no MLPA (modified link pack area) member or an MLPA member that points to an EDT that matches the UCBs in the system being IPLed.

Programmer Response: None.

System Programmer Response: Either do an EDTGEN to match the current IOGEN or do another IOGEN to define the desired devices.

IEF929I EDT xx NOT LOADED. {NON-ALPHAMERIC CHARACTERS|LOAD SVC ABEND CDE cde RSN CDE rsnc}

Explanation: The eligible device table (EDT) was invoked as a problem program and was unable to load the EDT for one of two reasons:

- The identifier specified as a parm on the EXEC statement was not two alphanumeric characters.
- The member IEFEDTxx could not be loaded. xx is the alphanumeric identifier.

The message also includes the system completion code and associated reason codes from the LOAD SVC. See *MVS/XA System Codes* for further details.

System Action: The system continues processing and the EDT Verification program issues a return code of either 24 or 28.

Operator Response: None.

Programmer Response: Take the following actions:

- Correct the JCL and run the job again.
- Refer to the LOAD reason code rsnc for a description of the problem.

IEF



System Utilities Messages (IEH)

Component Name	IEH
Program Producing Message	System Utilities: IEHATLAS, IEHINITT, IEHLIST, IEHMOVE, IEHPROGM.
Audience and Where Produced	For operator: console. For programmer: SYSPRINT data set.
Message Format	IEHnnns text (in SYSPRINT) xx IEHnnns text (on console) xx Message reply identification (absent, if operator reply not required). nnn Message serial number, which is coded to indicate the utility program. 1nn IEHLIST 2nn IEHPROGM 3nn and 4nn IEHMOVE 6nn IEHINITT 9nn IEHATLAS s Type code: I Information; no operator action is required. D Decision; operator must choose an alternative. A Action; operator must perform a specific action. text Message text.
Related Publications	<i>MVS/XA System Data Administration</i> , GC26-4010 <i>MVS/XA JCL</i> , GC28-1148 <i>MVS/XA Data Administration: Utilities</i> , GC26-4018

IEH

IEHLIST Program Messages

IEH101I NO CATALOG ON SPECIFIED VOLUME

Explanation: No catalog exists on the volume identified in the LISTCTLG statement.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure that the correct volume is specified. (If a volume was not specified, the system residence volume is assumed.) If the volume was correct, insert a LISTVTOC statement for the other system volumes to determine where the SYSCTLG data set resides.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH102I THIS VOLUME DOES NOT CONTAIN DATA SET dsn

Explanation: Data set dsn specified in the LISTVOC or LISTPDS statement is not contained in the specified volume's table of contents.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure

that the data set name and volume are specified correctly. (If a volume was not specified, the system residence volume is assumed.) If the volume and data set name are correct, insert a LISTVTOC statement for the other system volumes to determine where the data set resides.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH103I INVALID CONTROL STATEMENT - xxx

Explanation: A utility control statement is invalid. In the message text, xxx is the entire invalid statement.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct any improper specifications and/or misspelled keywords. Resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH104I – IEH112I

IEH104I THE PDS ORGANIZATION DOES NOT APPLY FOR DATA SET **dsname**

Explanation: Data set **dsname** specified in the LISTPDS statement is not partitioned.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure that the data set name specified is correct. If the name is correct, insert a LISTVTOC FORMAT statement specifying the data set name and volume; the true data set information will then be listed.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH105I ILLEGAL NODE POINT SPECIFIED, OR INCONSISTENT CATALOG STRUCTURE FOUND - REQUEST TERMINATED

Explanation: Either the node point identified in the LISTCTLG statement is invalid, or an incorrect catalog structure exists.

System Action: The request is ignored. The return code is 8.

Programmer Response: Ensure that the node point specified in the LISTCTLG statement is correct, or that no inconsistencies occur in the catalog structure.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 15, 29. Execute Data Facility Data Set Services (dump to printer) for the catalog data set, and save the output.

IEH106I UNAVAILABLE DEVICE TYPE OR VOLUME I.D. SPECIFIED

Explanation: Either the VOL parameter of the control statement is invalid, or the volume specified cannot be mounted.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure that a DD statement is included for the volume, the VOL parameter of the control statement is specified correctly, and the volume is mounted.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH107I JOB TERMINATED - I/O ERROR ON SYSIN

Explanation: An input/output error occurred while reading the SYSIN data set; additional input statements cannot be read.

System Action: The program is terminated. The return code is 16.

Programmer Response: Resubmit the job with all the control statements that were not processed on the initial pass.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH108I REQUEST TERMINATED - PERMANENT I/O ERROR WHILE READING DATA SET

Explanation: A permanent input/output error occurred while reading a volume table of contents, a catalog, or a partitioned data set.

System Action: The program is terminated. The return code is 12.

Programmer Response: Resubmit the job.

Operator Response: None.

Problem Determination: Table I, Items 1, 2, 3, 13, 29. Execute the same IEHLIST operation for some option other than the failing one (that is, if using LISTVTOC FORMAT, attempt IEHLIST VTOC DUMP; if using LISTPDS FORMAT, attempt LISTPDS DUMP; if using LISTCTLG, attempt LISTCTLG NODE= for the failing node) and save the output. Execute the program (dump to printer) for the failing data set (VTOC, SYSCTLG, or PDS), and save the output. Execute Data Facility Data Set Services (dump to printer) for the failing data set (VTOC, SYSCTLG, or PDS), and save the output.

IEH109I SYSIN CANNOT BE OPENED – CHECK SYSIN DD CARD

Explanation: Either the SYSIN DD statement was omitted from the job step, or the SYSIN ddname is incorrect.

System Action: The program is terminated. The return code is 16.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH110I JOB TERMINATED - INVALID DCB PARAMETER

Explanation: The SYSIN DD statement specified a block size that was not a multiple of the specified logical record length.

System Action: The program is terminated. The return code is 16.

Programmer Response: Probable user error. Correct the BLKSIZE parameter on the SYSIN DD statement.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH112I MEMBERS OF SPECIFIED PDS NOT CREATED BY LINKAGE EDITOR – DUMP OPTION OUTPUT GENERATED

Explanation: The directory entry is less than 34 bytes, indicating that this member was not created by the Linkage Editor.

System Action: Processing continues as if the DUMP option was specified for this member. The program will attempt to format subsequent member(s) if they exist.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH113I UNABLE TO OPEN DATA SET dsn

Explanation: The data set **dsn**, specified in the LISTPDS statement, cannot be opened.

System Action: The system ignores the request, and issues a return code of 8.

Programmer Response: Probable user error. Ensure that the correct volume containing data set **dsn** is allocated to the job via the DD statement. Correct the error and resubmit the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH114I THE LAST CVAF CALL ENDED WITH CVSTAT = nnn

Explanation: The return code 4 from a common VTOC access facility (CVAF) macro was unexpected. CVSTAT = nnn refers to the CVAF status code identified by nnn.

System Action: Program execution is terminated. The return code from IEHLIST is 8.

Programmer Response: See CVAF status codes below.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

Following is a list of the CVAF status codes with their meaning:

- 1 Data set name not found.
- 2 The argument supplied is outside the VTOC extents or the range of relative byte addresses of the VTOC index.
- 4 An invalid parameter was supplied.
- 5 The DSN keyword was omitted.
- 6 The user is not authorized to perform this function.
- 7 Buffer list was omitted.
- 8 The data extent block was invalid or omitted or not open to the VTOC.
- 9 The user is not authorized to specify IOAREA = KEEP, or an I/O area was supplied, but either it is not authorized or the CVAFVOL macro was specified.
- 10 The function is not supported on OS VTOC.
- 11 The DSCB is not format-0 and VERIFY = YES was specified.
- 12 MAPRCDS = YES and/or IXRCDS = KEEP was specified, but it is an OS VTOC.
- 13 IXRCDS = KEEP was not specified for CVAFDSM ACCESS = IXADD or IXDLT.
- 14 The CTAREA keyword was omitted.
- 15 The UCB is invalid: The volume is not mounted or it is a VIO unit, not DASD.
- 17 The DSCB length is invalid for the function requested. The valid length is 96 for CVAFDIR ACCESS = WRITE,

VERIFY = YES; 140 for CVAFSEQ reading in data set name sequence; or 96 for CVAFSEQ reading in physical sequence.

- 19 UCB was omitted and the CVAF I/O area was not supplied.
- 22 The data set name supplied is already in the index.
- 23 The DSN supplied (44x'FF') is invalid.
- 24 The ARG keyword was not supplied.
- 25 Conflicting or incomplete information was specified in the space table for a CVAFDSM ACCESS = ALLOC, MAP = VOLUME request.
- 27 The VTOC index is full. No free VTOC index records (VIRs) are available and a VTOC index entry record (VIER) split is required.
- 28 The SPACE keyword was omitted from a CVAF macro.
- 29 CVAFDSM ACCESS = ALLOC was specified, but no format-0 DSCB is available (MAP = VTOC); or the VTOC index is full (MAP = INDEX); or no volume space is available (MAP = VOLUME).
- 30 CVAFDSM ACCESS = ALLOC was specified, but CCHHR (MAP = VTOC), or RBA (MAP = INDEX), or volume space extent (MAP = VOLUME) is already allocated.
- 31 CVAFDSM ACCESS = ALLOC was specified, but the CCHHR supplied is outside the VTOC extents (MAP = VTOC); or the RBA is outside the VTOC index extents (MAP = INDEX); or the volume space extent (MAP = VOLUME) is invalid or outside the volume.
- 32 End of data. This means:
 - For CVAFDSM ACCESS = MAPDATA, there are no more free extents in the volume pack space map (VPSM).
 - For CVAFSEQ, there are no more names in the index or DSCBs in the VTOC.
 - For indexed access, there is no DSN in the VTOC index with a higher or higher-or-equal key than that supplied.
 - For physical sequential access, no DSCB in the VTOC has a higher argument than that supplied.
 - For a multiple DSCB request, the last DSCB in the VTOC was read and more DSCBs were requested.
- 33 The EXTENT keyword was omitted, or the number supplied is 0.
- 34 CVAFDSM ACCESS = RLSE was specified, but the format-0 DSCB is already free (MAP = VTOC); or the VTOC index entry record (VIER) is already unallocated (MAP = INDEX); or the volume space extent is already unallocated (MAP = VOLUME).
- 42 The VRF data to be written is too long.
- 43 The buffer list supplied is for VTOC index records (VIRs), but a DSCB buffer list is required.

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- 44 No buffer list entry was found.
- 45 The DSCB buffer length in a buffer list entry is invalid (neither 96 nor 140), or the VIR buffer length is not equal to the VIR size in the VTOC information block.
- 46 Neither the TTR nor the CCHHR bit is set in a buffer list entry for a 140-byte DSCB CVAFDIR ACCESS= WRITE request.
- 47 Either the TTR bit, the CCHHR bit, or the RBA bit can be set in the buffer list entry. More than one of these bits has been set.
- 48 The DSCB and the VIR bits have both been set in the buffer list header.
- 49 The RBA bit is set in a buffer list entry for a DSCB buffer list.
- 50 The TTR bit or the CCHHR bit is set in a buffer list entry, but the buffer list header indicates that it is a VIR buffer list.
- 52 The combination of MAP and COUNT is not supported.
- 53 MAP was omitted.
- 54 A VIR buffer list is chained to or from a DSCB buffer list.
- 55 The caller is unauthorized. The VTOC information block was not initialized.
- 56 MAPRCDS= YES was not specified, but it is required.
- 57 The address of a DSCB buffer list was supplied, but the address of a VIR buffer list is required in the MAPRCDS and IXRCDS keywords of a CVAF macro.
- 58 Neither the VIR bit nor the DSCB bit is set in the buffer list header.
- 60 The setting of the allocate option byte in the SPACE parameter is invalid or conflicting.

IEH115I DSCB-4 FIELD DS4VTOCI CONTAINS AN INVALID VALUE

Explanation: The DOS and index bits in DS4VTOCI (bits 0 and 7 respectively) should both be on for an indexed VTOC; or both off for a nonindexed VTOC; or only the DOS bit should be on, indicating that format-5 DSCBs do not contain free-space information. IEHLIST found only the index bit on in DS4VTOCI, which is invalid.

The situation can be caused by moving an indexed VTOC volume to a system without indexed VTOC programming support. The DOS bit caused the DADSM Allocate or Extend component to process the volume with the DOS VTOC convert routines, and set the DOS bit to zero.

System Action: Program execution is terminated. The return code from IEHLIST is 8.

Programmer Response: Use the Device Support Facility (DSF) to rebuild the VTOC index data set.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEHPROGM Program Messages**IEH201I INVALID REQUEST. STATEMENT IGNORED**

Explanation: In the utility statement preceding this message, the operation is invalid.

System Action: The request is ignored. Processing continues with the next change submitted, if any. The return code is 8.

Programmer Response: Probable user error. Correct the invalid operation on the preceding statement and rerun the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH202I INVALID KEYWORD OR CONTROL STATEMENT SYNTAX

Explanation: In the utility statement preceding this message, the required keyword is incorrect, or the continuation does not start in column 16.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH203I THE SYSCTLG DATA SET IS NOT AVAILABLE OR FORMS A LOOP

Explanation: Either no catalog exists on the volume specified by the CVOL parameter of the control statement, the CVOL is not properly cataloged in the master catalog or the volumes are incorrectly connected to each other.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25a, 25d, 29.

IEH204I STATUS OF THE REQUESTED TASK CANNOT BE DETERMINED AN UNDEFINED ERROR CODE HAS BEEN ENCOUNTERED

Explanation: The return code returned by a system macro instruction is invalid.

System Action: The request is ignored. The return code is 8.

Programmer Response: Contact your service representative for assistance if this message occurs.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH205I INFORMATION IN CONTROL STATEMENT IS {REDUNDANT|NOT SUFFICIENT}

Explanation: In the utility statement preceding this message, either an invalid parameter was specified, or all the required parameters were not specified for the operation requested.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH206I CVOL IS NOT DIRECT-ACCESS

Explanation: In the utility statement preceding this message, the volume specified in the CVOL parameter is not a direct access volume.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the device-type specification in the CVOL parameter of the preceding statement and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH207I STATUS OF USERS REQUEST TO {SCRATCH | RENAME } DATA SET dsn VOLUME ID ACTION TAKEN REASON ser xxx yyy END OF LISTING OF DATA SETS TO BE SCRATCHED OR RENAMED

Explanation: An unusual condition occurred during a SCRATCH or RENAME operation. In the message text, the third line appears for each volume on which the data set resides. dsn is the data set name, ser is the serial number of the volume, xxxx is the action taken on the volume, and yyyy is the condition.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure that the data set name is specified correctly on the control statement.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25a, 29.

IEH208I LIST TRUNCATED TO 1 VOLUME FOR SCRATCH VTOC

Explanation: In the SCRATCH VTOC statement preceding this message, more than one volume was specified.

System Action: Only the data sets on the first volume specified are scratched; the remaining are ignored. The return code is 8.

Programmer Response: Probable user error. Insert a SCRATCH VTOC statement for each volume that was not processed and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH209I STATUS OF USERS REQUEST TO SCRATCH THE VOLUME TABLE OF CONTENTS DATA SET NAME dsn ACTION TAKEN xxxxx REASON yyyy END OF SCRATCH VTOC

Explanation: Either an unusual condition occurred during a scratch VTOC operation, or a data set was successfully scratched. In the message text, dsn is the data set name, xxxxx is the action taken on the data set, and yyyy is the condition.

System Action: Processing continues.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25a, 29.

IEH210I REQUEST CANNOT BE SERVICED

Explanation: An unusual condition occurred during a catalog or index operation. Following this message is a more specific message describing the error condition in detail.

System Action: The request is ignored. The return code is 0 when there is an attempt to uncatalog a data set that is not cataloged; in all other cases, the return code is 8.

Programmer Response: Probable user error. Respond as indicated to the message that follows this message.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH211I REQUIRED VOLUME COULD NOT BE MOUNTED

Explanation: One of the following occurred:

- No device was allocated for the required volume; that is, the serial number of the required volume was not found in the unit control block, and no other volume allocated to the job could be unloaded to allow the mounting of the required volume.
- A device type was specified which is either nonexistent or not included for the system during system generation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Ensure that the volume serial number specified on the DD statement is the same as the volume serial number specified on the control statement.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH212I I/O ERROR ON SYSIN DATA SET - JOB TERMINATED

Explanation: An uncorrectable input/output error occurred while the SYSIN data set was being read.

System Action: The program is terminated. The return code is 8.

Programmer Response: Resubmit the job.

Operator Response: None.

IEH

- Problem Determination:** Table I, items 1, 3, 15, 29.
- IEH213I JOB TERMINATED - INVALID BLOCKSIZE SPECIFIED IN SYSIN DCB**
- Explanation:** In the SYSIN DD statement preceding this message, the block size specified is not a multiple of the logical record length (that is, it is not a multiple of 80).
- System Action:** The program is terminated. The return code is 16.
- Programmer Response:** Probable user error. Correct the error and resubmit the job.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29.
- IEH214I CONTINUATION CARD EXPECTED - REQUESTS CANNOT BE SERVICED.**
- Explanation:** The statement preceding this message is not a valid continuation statement; that is, the previous statement contains a non-blank character in column 72, indicating that a continuation statement is to follow.
- System Action:** The request is ignored. The return code is 8.
- Programmer Response:** Probable user error. Correct the error and resubmit the job.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29.
- IEH215I SYNTAX ERROR ENCOUNTERED IN NAME FIELD OF CONTROL STATEMENT – PROCESSING IS CONTINUED**
- Explanation:** In the statement preceding this message, the name field contains one of the following errors:
- The first character is not alphabetic.
 - A character was encountered that is not alphameric or national.
 - The name field is longer than 8 characters.
- System Action:** Processing continues. The return code is 4.
- Programmer Response:** Probable user error. Correct the error and resubmit the job.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29.
- IEH216I SYSIN CANNOT BE OPENED - CHECK SYSIN DD CARD**
- Explanation:** Either the SYSIN DD statement was inadvertently omitted from the job step, or it was included, but the ddname was coded incorrectly.
- System Action:** The program is terminated. The return code is 16.
- Programmer Response:** Probable user error. Correct the error and resubmit the job.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29.
- IEH217I ERROR ENCOUNTERED IN A NAME, INDEX, ALIAS, OR MEMBER FIELD OF THE CONTROL STATEMENT ... REQUEST IGNORED**
- Explanation:** Either a nonalphabetic character was found as the first character of a name, alias, or index level; an index level or member name has a length greater than eight characters; or a nonalphameric character was used in the name, index, alias, or member.
- System Action:** The request is ignored. The return code is 8.
- Programmer Response:** Probable user error. Correct the error and resubmit the job.
- Operator Response:** None.
- Problem Determination:** Table I, items 3, 15, 29.
- IEH218I JOB TERMINATED. SIX INVALID PASSWORDS WERE SUPPLIED**
- Explanation:** A maximum of five invalid passwords are allowed for each job step.
- System Action:** The program is terminated. The return code is 16.
- Programmer Response:** Probable user error. Resubmit the request not satisfied and supply valid passwords.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29. If attempting to add, replace, or delete entries in the PASSWORD data set, use the LIST utility statement to list the entries associated with the invalid passwords.
- IEH219I I/O ERROR IN THE PASSWORD DATA SET**
- Explanation:** An uncorrectable input/output error occurred while reading or writing the PASSWORD data set.
- System Action:** The program is terminated. The return code is 12.
- Programmer Response:** See Problem Determination below.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 3, 15, 29. Execute IEHLIST program to list the VTOC of the system residence volume. Use the DUMP mode and set DSNNAME=PASSWORD. Have the resulting listing available for review by your systems programmer or service representative.
- IEH220A jobname, stepname, 'utility statement' REPLY WITH 'PASSWORD1' 'PASSWORD2' 'CPASSWORD'**
- Explanation:** The specified password on the utility statement is invalid or missing and must be supplied by the operator.
- System Action:** The program enters the wait state until the operator responds.
- Programmer Response:** Provide operator with correct password.
- Operator Response:** Enter REPLY xx, 'password', where password is the password supplied by the programmer for the job, step, and utility statement

names in the message. The password can consist of up to eight characters. If no password was supplied, enter blanks for the password or simply two single quotes, as follows: `REPLY xx,"`

Problem Determination: Table I, items 1, 3, 15, 29. If attempting to add, replace, or delete entries in the PASSWORD data set, use the LIST utility statement to list the entries associated with the invalid passwords.

IEH221I THE PASSWORD DATA SET IS FULL

Explanation: Either the PASSWORD data set is too small to hold all necessary entries, or it contains unused entries.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Either re-create the PASSWORD data set with larger extent, or delete the unused entries.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29. Execute IEHLIST to list the VTOC of the system residence volume. Use the DUMP mode and set `DSNAME=PASSWORD`. Have the resulting listing available.

IEH222I UNABLE TO ALTER PROTECTION STATUS OF DATA SET

Explanation: The volume on which the specified data set resides cannot be accessed. The volume is not online, volume information on the utility control statement is invalid or missing, the data set was allocated in this job the specified data set is in use by another job or the data set is not supported (as a VSAM data set).

System Action: The PASSWORD data set is updated, but the protection status of the data set in the data set control block (DSCB) is not altered. The return code is 8.

Programmer Response: Probable user error. Action is required only if the protection status in the DSCB is incorrect.

If protection is being added and the protection status of the data set was not specified when the data set was created, or if the protection status of a data set is being changed between read/write protection and read-without-password protection:

1. Provide a data definition statement that defines the mountable volume on which the data set resides.
2. Change the protection status in the DSCB, using a REPLACE utility statement for the entry just added or changed in the PASSWORD data set. Supply the new protection status, and make sure the volume information is correct.

If protection is being deleted and the data set has not been scratched:

1. Provide a data definition statement that defines the mountable volume on which the data set resides.

2. Add the entry just deleted to the PASSWORD data set using an ADD utility statement.
3. Scratch the data set if desired.
4. Delete the entry again from the PASSWORD data set using a DELETEP utility statement.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH223I THE PASSWORD DATA SET DOES NOT EXIST

Explanation: The PASSWORD data set must reside on the system residence volume before using IEHPROGM to add, delete, or replace entries.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Allocate a PASSWORD data set, and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29. Execute IEHLIST to list the VTOC (FORMAT mode) of the system residence volume. Have the resulting listing available.

IEH224I WARNING UNABLE TO ALTER PROTECTION STATUS OF TAPE DATA SETS

Explanation: IEHPROGM cannot modify the label of a tape data set.

System Action: The PASSWORD data set is updated, but the protection status of the data set in the tape label is not altered. The return code is 8.

Programmer Response: Action is required only if the protection status in the tape label is incorrect. If protection is being added, use job control language (LABEL parameter) to set the desired protection status in the tape label when rewriting the data set. If protection is being deleted, use IEHINITT to relabel the tape and delete protection.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 29.

IEH225I DUPLICATE ENTRY EXISTS IN THE PASSWORD DATA SET

Explanation: The password to be assigned has already been assigned to this data set.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Either select a new password, or delete the previously assigned password, before attempting to assign the same password.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29. Use the LIST utility statement to list the entry in the PASSWORD data set associated with this password and data set name.

IEH226I LOCATE MACRO FAILED. LOCATE RETURN CODE = xx.

Explanation: An error occurred during execution of the LOCATE macro issued to search the catalog for a data set name. The return code from the LOCATE macro is xx.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. To interpret the return code, refer to the publication *System-Data Administration*. Correct any errors and resubmit the ignored request.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25d, 29.

IEH227I OBTAIN MACRO FAILED. OBTAIN RETURN CODE = xx

Explanation: An error occurred during execution of the OBTAIN macro issued to search the VTOC for a DSCB. The return code from the OBTAIN macro is xx.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. (To interpret the return code, refer to the publication *System-Data Administration*. Correct any errors and resubmit the ignored request.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25b, 29.

IEH228I INVALID {CPASSWORD | PASSWORD1 | PASSWORD2} SPECIFIED

Explanation: More than two invalid passwords have been supplied for the specified password in the utility statement preceding this message or PASSWORD1 was invalidly specified in the utility control statement.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Resubmit the ignored request and supply a valid password.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 15, 29. If attempting to add, delete, or replace an entry in the PASSWORD data set, use the LIST utility statement to list the entry in the PASSWORD data set.

IEH229I INVALID PARAMETER IN PARM FIELD OF EXEC CARD

Explanation: An invalid parameter was found either in the PARM field of the EXEC statement or in the PARAM field of the LINK or ATTACH macro.

System Action: Default values are assigned to the invalid parameters. Processing continues. The return code is 4.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH230I VTOC NOT CONVERTED FROM DOS TO OS DATA SET NOT CATALOGED OR INDEX NOT BUILT ... UNUSUAL END

Explanation: The VTOC cannot be converted to OS format because one of the following conditions exists in the VTOC structure:

- A split cylinder extent resides on cylinder zero.
- A split cylinder extent resides on the same cylinder as the VTOC.
- A split cylinder extent resides on the same cylinder as a non-split cylinder extent.
- The VTOC contains overlapping data sets.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the VTOC structure and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 25c, 29.

IEHMOVE Program Messages

IEH301I INCLUDE OP NOT VALID

Explanation: The INCLUDE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b, 25c, 29.

IEH302I EXCLUDE OP NOT VALID

Explanation: The EXCLUDE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b, 25c, 29.

IEH303I REPLACE OP NOT VALID

Explanation: The REPLACE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b, 25c, 29.

IEH304I SUBORDINATE REQ-SKIPPED

Explanation: One of the following conditions occurred:

- The INCLUDE, EXCLUDE, REPLACE, or SELECT statement preceding this message is not preceded by a MOVE or COPY statement.
- The MOVE/COPY request is being ignored for the reason given in the preceding message.
- The data set is being loaded for the reason given in the preceding message.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH305I MULTIPLE KEYWORD ERROR

Explanation: In the statement preceding this message, duplicate or conflicting keywords are specified.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH306I MISPLACED KEYWORD ERROR

Explanation: A MOVE/COPY control statement contains a misplaced keyword.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH307I KEYWORD NOT PERMITTED

Explanation: In the statement preceding this message, a keyword is invalid.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH308I INVALID PARAMETER ERROR

Explanation: A parameter is invalid in (1) the statement preceding this message, or in (2) the parm information in the exec card.

System Action: The request is ignored. The return code is 8. If the parm information in the exec card is invalid, the return code is 16.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH309I SYNTAX ERROR

Explanation: The syntax of the statement preceding this message is invalid.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH310I LENGTH ERROR

Explanation: In the statement preceding this message, a keyword value contains too many characters (for example, DSNNAME=NINECHARS contains more than eight characters), or the EXPAND keyword does not specify a number in the decimal range 1-99.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH311I INCOMPLETE REQUEST

Explanation: The statement preceding this message does not contain adequate information to perform the MOVE/COPY operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH313I DATA SET dsn HAS AN INCORRECT FORMAT FOR UNLOADED DATA SET

Explanation: The format of unloaded data set dsn is incorrect; therefore, the data set cannot be moved or copied. The records are apparently out of sequence.

System Action: The request is ignored. The return code is 8.

IEH

Programmer Response: Make sure that the correct tape or direct-access device is mounted, and that the data has not been altered.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 26b, 29. Have the unloaded data set available.

IEH315I UNABLE TO FIND FROM VOLUME

Explanation: The 'FROM' volume cannot be located. Possibly, the FROM keyword was missing from the MOVE or COPY statement, or the CVOL keyword was specified, but the data set was not cataloged.

System Action: The request is ignored. The return code is 8.

Programmer Response: If the data set is not cataloged, ensure that the FROM keyword is included on the MOVE or COPY statement. Also, make sure that a DD statement for the 'FROM' device exists and is compatible with the utility control information.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format I: trace option – TRACE=SSCH, IO.

IEH316I MODEL DSCB FOR GENERATION DATA GROUP CANNOT BE WRITTEN

Explanation: An error (possibly, a permanent input/output error) occurred during an attempt to create the model data set control block (DSCB) for a generation data group, or there was no unused DSCB available in the VTOC.

System Action: The request is ignored. The return code is 8.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b, 29. Table II, Format I: trace option – TRACE=SSCH, IO.

IEH319I MEMBER mem NOT MOVED/COPIED. DUPLICATE NAME IN OUTPUT DATA SET

Explanation: A member with the same name as member mem is contained in the output partitioned data set; therefore, the member is not moved or copied.

System Action: The request is ignored. The return code is 4.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH320I MEMBER mem NOT FOUND IN DATA SET dsname

Explanation: Member mem cannot be located in the partitioned data set dsname. Perhaps the data set name or member name was incorrectly specified.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH321I MEMBER mem NOT MOVED/COPIED. OUTPUT DIRECTORY IS FULL

Explanation: The directory of the output partitioned data set is full; therefore, member mem cannot be moved or copied.

System Action: The request is ignored. The return code is 8.

Programmer Response: Increase the size of the directory, and selectively MOVE or COPY the member.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH322I I/O ERROR ENCOUNTERED IN MEMBER mem OF INPUT DATA SET dsname

Explanation: A permanent input/output error occurred while reading member mem of input data set dsname.

System Action: The request is ignored. The return code is 8.

Programmer Response: Ensure that the input data set is valid.

Operator Response: None.

Problem Determination: Table I, items 1, 11, 22, 25b, 25c, 29. Table II, Format I: trace option – TRACE=SSCH, IO. Have the failing data set available.

IEH323I I/O ERROR ENCOUNTERED IN MEMBER mem OF OUTPUT DATA SET dsname

Explanation: A permanent input/output error occurred while writing member mem of data set dsname.

System Action: The request is ignored. The return code is 8.

Programmer Response: Retry the operation. If the operation fails a second time with this same error message, in all probability the failure is due to a hardware error. Ensure the quality of the hardware medium on which the dataset resides. Resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format I: trace option – TRACE=SSCH, IO.

IEH325I INVALID CATLG REQUEST IGNORED

Explanation: In the statement preceding this message, the specified receiving volume is not a direct access device.

System Action: The moved or copied data set is not cataloged on the specific volume. The return code is 8.

Programmer Response: Probable user error. Correct the preceding statement so that the receiving volume is direct access or delete the CATLG keyword.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH326I I/O ERROR ENCOUNTERED IN OUTPUT DATA SET dsname

Explanation: A permanent input/output error occurred while writing data set dsname.

System Action: The request is ignored. The return code is 8.

Programmer Response: Retry the operation. If the operation fails a second time with this same error message, in all probability the failure is due to a hardware error. Ensure the quality of the hardware medium on which the dataset resides. Resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SSCH, IO.

IEH327I A TTRN IN THE USER DATA FIELD OF THE DIRECTORY HAS NOT BEEN UPDATED

Explanation: A TTRN was not updated for the member named in the following message. A TTR in the source directory points to a record that is not in the member being copied.

System Action: The member is copied.

- If copying from direct access to direct access, the invalid TTR will be the same in the receiving directory as it was in the source directory.
- If loading, the invalid TTR is zero in the receiving directory.

The program then attempts to copy the next member.

Programmer Response: Correct the invalid TTR. This may require that the proper TTR be placed in both the source and receiving directories, or that the source member be re-created and recopied. Check for an end-of-file record embedded within the source member.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Submit IEHLIST for both the source and receiving data sets with the LISTPDS option specified. Submit IEHLIST for both the source and receiving data sets with the LISTVTOC option specified

(DUMP format). Submit Data Facility Data Set Services to dump the source data set to SYSPRINT or to tape.

IEH328I A TTR IN THE NOTELIST RECORD HAS NOT BEEN UPDATED

Explanation: A TTR in the notelist record for the member named in the following message was not updated. The TTR is either pointing to a record that is not within this member or to a record within the member that is after the notelist record.

System Action: The member is copied. However, the invalid TTR will be the same in the receiving notelist as it was in the source notelist. The program then attempts to copy the next member.

Programmer Response: Correct the invalid TTR. This may require that the correct TTR be placed in both the source and receiving notelists, or that the source be re-created and recopied.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Submit IEHLIST for both the source and receiving data sets with the LISTPDS option specified. Submit IEHLIST for both the source and receiving data sets with the LISTVTOC option specified (DUMP format). Submit Data Facility Data Set Services to dump the source data set to SYSPRINT or to tape.

IEH329I A TTR IN A NOTELIST CANNOT BE UPDATED

Explanation: The TTR does not point to any record contained in the copied member that precedes the notelist or that follows a previous notelist (if any).

System Action: The member is unloaded, but the TTR will not be updated during a reload. The program then attempts to unload the next member.

Programmer Response: Correct the invalid TTR in the source notelist and unload the data set again.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Use Data Facility Data Set Services to dump the source data set to SYSPRINT.

IEH331I USER LABELS ARE NOT MOVED/COPIED. NO USER LABEL TRACK ALLOCATED FOR INPUT

Explanation: A previously allocated data set did not provide a user label track.

System Action: User labels are ignored. Normal MOVE/COPY processing continues.

Programmer Response: For the COPY operation, if user label information is desired, scratch the data set on the receiving volume and preallocate the data set correctly. For the MOVE operation, if user label information is desired, rebuild the user labels.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 4, 22, 25b, 29.

IEH

IEH332I PERMANENT I/O ERROR WHILE READING USER INPUT HEADER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The open routine encountered a permanent input/output error while attempting to read user input header labels.

System Action: IEHMOVE returns to the user, points to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Operator Response: None.

Problem Determination: Table I, item 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the data set with the failing labels available.

IEH333I PERMANENT I/O ERROR WHILE READING USER INPUT TRAILER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The end-of-volume routine encountered a permanent input/output error while attempting to read user input trailer labels.

System Action: IEHMOVE returns to the user, points to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Operator Response: None.

Problem Determination: Table I, item 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the data set with the failing labels available.

IEH334I PERMANENT I/O ERROR WHILE WRITING USER OUTPUT HEADER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The open routine encountered a permanent input/output error while attempting to write user output header labels.

System Action: IEHMOVE returns to the user, points to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Operator Response: None.

Problem Determination: Table I, item 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the data set with the failing labels available.

IEH335I PERMANENT I/O ERROR WHILE WRITING USER OUTPUT TRAILER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The close routine encountered a permanent input/output error while attempting to write user output trailer labels.

System Action: IEHMOVE returns to the user, points to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Operator Response: None.

Problem Determination: Table I, item 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the data set with the failing labels available.

IEH336I AN UNCORRECTABLE ERROR OCCURRED WHILE READING DATA SET dsname

Explanation: The data event control block (DECB) for input data set dsname indicated that an error, other than an input/output error or record length check, occurred for the record just read.

System Action: The function is terminated. The return code is 8.

Programmer Response: Ensure that the input data set is specified correctly.

Operator Response: None.

Problem Determination: Table I, items 1, 22, 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the failing data set available.

IEH339I I/O ERROR ENCOUNTERED IN INPUT DATA SET

Explanation: A permanent input/output error occurred while reading the input data set.

System Action: The request is ignored. The return code is 8.

Programmer Response: Ensure that the input data set is valid.

Operator Response: None.

Problem Determination: Table I, items 1, 22, 29. Have the failing data set available.

IEH346I CATALOG CANNOT BE LOCATED, OR CONTROL VOLUMES ARE CONNECTED TO EACH OTHER

Explanation: In the statement preceding this message, no catalog exists on the specified control volume, or the control volumes are connected to each other incorrectly.

System Action: The request is ignored. The return code is 8.

Programmer Response: Make sure that there is a catalog on the specified volume, and that the control volumes are correctly connected to each other.

Problem Determination: Table I, items 1, 13, 22, 25d, 29.

IEH348I NO DATA SETS FOUND FOR DSGROUP SPECIFIED

Explanation: No data sets with the DSGROUP name given were located in the catalog.

System Action: The request is ignored. The return code is 4.

Programmer Response: Catalog the data sets using access method services.

Operator Response: None.

Problem Determination: None.

- IEH349I UNABLE TO MOUNT VOLUME ser xxxx**
Explanation: No device was allocated for the volume whose serial number is ser. In the message text, xxxx is the action taken.
System Action: The request is ignored. The return code is 8.
Programmer Response: Ensure that a DD statement for the device exists, and that it is consistent with the utility control statements.
Operator Response: None.
Problem Determination: Table I, items 1, 2, 13, 22, 29.
- IEH351I DATA SET dsname NOT CATALOGED. SPACE NOT AVAILABLE IN THE CATALOG**
Explanation: The catalog is full; therefore, data set dsname cannot be cataloged.
System Action: The data set is not cataloged. The return code is 8.
Programmer Response: Increase the size of the catalog and catalog the data set.
Operator Response: None.
Problem Determination: Table I, items 1, 13, 22, 29. Execute Data Facility Data Set Services to obtain a printed copy of the catalog, and save the output.
- IEH351I SUFFICIENT SPACE NOT AVAILABLE FOR ALL DATA SETS IN DSGROUP**
Explanation: The space needed to contain the entries for all the data sets in the DSGROUP could not be obtained.
System Action: The request is ignored. The return code is 4.
Programmer Response: Specify a more exclusive DSGROUP name.
Operator Response: None.
Problem Determination: None.
- IEH354I DATA SET dsname NOT CATALOGED. INDEX STRUCTURE INCONSISTENT.**
Explanation: Either the index structure is invalid, or the catalog already has an entry for data set dsname. Therefore, the data set cannot be cataloged.
System Action: The data set is not cataloged. The return code is 4.
Programmer Response: If the data set is not already cataloged, catalog it.
Operator Response: None.
Problem Determination: Table I, items 1, 13, 22, 25d, 29.
- IEH354I DSGROUP CATALOG SEARCH FAILED. RETURN CODE xx**
Explanation: An error occurred during execution of the VSAM CATLG macro for generic locate. The return code for VSAM catalog management is xx.
System Action: The request is ignored. Return code is 4.
Programmer Response: Probable user error. To interpret the return code, refer to the explanation of message IDC3009. Correct any errors and resubmit the request.
Operator Response: None.
Problem Determination: Table I, items 1, 3, 15, 25d, 29.
- IEH356I DATA SET dsname CATALOG SEARCH FAILED. RETURN CODE xx**
Explanation: An error occurred during execution of the VSAM CATLG macro for locate. The return code from VSAM catalog management is xx.
System Action: The data set is not moved/copied. Processing continues with the next data set in the DSGROUP. Return code is 4.
Operator Response: None.
Problem Determination: Table I, items 1, 3, 15, 25d, 29.
- IEH357I DATA SET AMASTCAT NOT CATALOGED. AMASTCAT NOT ALLOWED**
Explanation: No VSAM catalog should be named AMASTCAT; therefore, AMASTCAT cannot be cataloged.
System Action: AMASTCAT is not cataloged. The return code is 4.
Programmer Response: Rename the VSAM catalog and catalog the new name.
- IEH358I DATA SET dsn NOT CATALOGED. INVALID RETURN CODE FROM CATALOG**
Explanation: An invalid condition code was returned from catalog; therefore, the data set name, dsn, cannot be cataloged.
System Action: The data set is not cataloged. The return code is 4.
Programmer Response: Catalog the data set, if it is not already cataloged.
Problem Determination: Table I, items 1, 13, 22, 29.
- IEH361I DATA SET dsname NOT MOVED/COPIED TO VOLUME(S)**
Explanation: An abnormal condition (such as an input/output error) occurred. Therefore, data set dsname could not be moved or copied.
System Action: Processing continues with the next function to be performed. The return code is 4.
Programmer Response: Ensure that the input data set is valid.
Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH362I DATA SET dsname NOT MOVED/COPIED TO VOLUME(S)

Explanation: An abnormal condition (such as an input/output error) occurred; therefore, data set dsname could not be scratched.

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Scratch the data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH363I DATA SET JUST COPIED WAS NOT SUCCESSFULLY UNCATALOGED

Explanation: A permanent input/output error occurred during the uncatlog operation; therefore, the data set was copied but not uncatlogged.

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Uncatalog the data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH364I THE DATA SET JUST COPIED WAS NOT SUCCESSFULLY CATALOGED

Explanation: The data set was copied but not cataloged on the "TO" volume for one of the following reasons:

- A catalog data set being sought by the IEBCOPY utility does not exist on the specified volume.
- The existing index structure does not permit the cataloging of the data set.
- No space is available in the catalog.
- A permanent input/output error occurred during the catalog operation.
- The data set is already cataloged on the receiving volume.

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH365I DATA SET dsname MAY STILL EXIST ON VOLUME(S)

Explanation: An unusual condition (such as a permanent input/output error) occurred during the scratch operation; therefore, data set dsname was moved but not scratched from the source volume(s).

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Scratch the data set, if required.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH366I THE DATA SET JUST MOVED MAY EXIST WITH AN INTERNALLY GENERATED NAME ON VOLUME(S)

Explanation: An unusual condition (such as a permanent input/output error) occurred; therefore, a specified rename operation was not successful. An internally generated name may have been assigned to the moved data set.

System Action: Processing continues with the next function to be performed. The return code is 8.

Programmer Response: Use the AMASPZAP service aid to change the dsname field of the format-1 DSCB from **TEMP... to the required name.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH367I THE DATA SET JUST MOVED WAS NOT SUCCESSFULLY UNCATALOGED

Explanation: A permanent input/output error occurred during the uncatlog operation; therefore, the data set was moved but not uncatlogged.

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Uncatalog the data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option – TRACE=SSCH, IO.

IEH368I THE DATA SET JUST MOVED WAS NOT SUCCESSFULLY RECATALOGED

Explanation: Either an input/output error occurred during the catalog operation, or the existing index structure in the catalog does not permit the cataloging of the data set. Therefore, the data set was moved, but the catalog was not updated.

System Action: Processing continues with the next function to be performed. The return code is 4.

Programmer Response: Recatalog the data set.

Operator Response: None.

- Problem Determination:** Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option - TRACE=SSCH, IO.
- IEH372I I/O ERROR ENCOUNTERED IN WORK DATA SET**
- Explanation:** A permanent input/output error occurred while reading or writing the work data set. Possibly, secondary space was specified in the SYSUT1 DD statement.
- System Action:** The MOVE/COPY request is ignored. The return code is 12.
- Programmer Response:** Check the SYSUT1 DD statement. Leave out any space specification. Use the POWER parameter if necessary.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SSCH, IO.
- IEH373I UNABLE TO MOUNT VOLUME ser. SOME INCLUDE OR REPLACE REQUESTS IGNORED**
- Explanation:** The volume whose serial number is ser cannot be mounted.
- System Action:** The INCLUDE and REPLACE requests referring to the specified volume are ignored. The return code is 8.
- Programmer Response:** Ensure that a DD statement for the volume exists.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 2, 13, 22, 29.
- IEH374I DATA SET dsname NOT FOUND ON VOLUME ser. INCLUDE OR REPLACE REQUEST IGNORED**
- Explanation:** Data set dsname does not reside on the volume whose serial number is ser.
- System Action:** The INCLUDE or REPLACE statements that refer to data set dsname are ignored. The return code is 8.
- Programmer Response:** Probable user error. Ensure that the DD statement for the indicated volume is correct.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 13, 22, 25a, 29.
- IEH375I DATA SET dsname IS NOT PARTITIONED. INCLUDE OR REPLACE REQUEST IGNORED**
- Explanation:** Data set dsname is not partitioned.
- System Action:** The INCLUDE request, or the "including" part of the REPLACE request, is ignored. The return code is 8.
- Programmer Response:** Ensure that the data set is valid.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 13, 22, 25b, 25c, 29.
- IEH376I RECORD CHARACTERISTICS NOT COMPATIBLE xxxx. INCLUDE OR REPLACE REQUEST IGNORED**
- Explanation:** Attribute xxxx of the output data set is not compatible with that of the input data set.
- System Action:** The INCLUDE request, or the "including" part of the REPLACE request, is ignored. The return code is 8.
- Programmer Response:** Ensure that the record characteristics of the input and output data sets are compatible.
- Operator Response:** None.
- Problem Determination:** Table I, items 25b, 25c, 29.
- IEH377I DATA SET dsname REQUIRES TRACK OVERFLOW FEATURE. INCL/REPL REQUEST IGNORED**
- Explanation:** The data set dsname was originally written with track overflow. The source device does not support the track overflow feature.
- System Action:** The INCLUDE or REPLACE request for this data set is ignored. The program continues. The return code is 8.
- Programmer Response:** Change the JCL to specify a device that supports track overflow.
- Operator Response:** None.
- Problem Determination:** Tape I, items 1, 4, 25b, 29.
- IEH380I MEMBER mem NOT FOUND IN DATA SET dsname. INCLUDE OR REPLACE REQUESTS IGNORED**
- Explanation:** Member mem is not contained in partitioned data set dsname.
- System Action:** The INCLUDE request, or the "including" part of the REPLACE request, is ignored. The return code is 8.
- Programmer Response:** Ensure that the control statements are correct.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 13, 22, 25c, 29.
- IEH381I ERROR ENCOUNTERED IN SCRATCHING WORK FILES**
- Explanation:** Either a work file could not be located, or an input/output error occurred during the scratch operation. Therefore, the work file(s) could not be scratched.
- System Action:** The MOVE/COPY request is ignored. The return code is 12.
- Programmer Response:** Ensure that a SYSUT1 DD statement exists and specifies a sufficient amount of space. If the POWER = n parameter is used, ensure that the space is equivalent to 80xn tracks.
- Operator Response:** None.
- Problem Determination:** Table I, items 1, 13, 22, 25a, 25b, 29. Table II, Format 1: trace option - TRACE=SSCH, IO.

IEH383I – IEH435I

IEH383I INVALID DEVICE NAME

Explanation: In the statement preceding this message, a device name is invalid.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH384I GENERIC DEVICE NAME ERR

Explanation: In the statement preceding this message, a device name is invalid.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH385I SELECT OP NOT VALID

Explanation: The SELECT statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH388I UNABLE TO ALLOCATE IEHMOVE WORK FILES

Explanation: IEHMOVE was unable to allocate space for the work files. Either no SYSUT1 DD statement was included with the job step, or there was insufficient space on the direct access volume assigned to the SYSUT1 DD statement.

System Action: The program is terminated. The return code is 12.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29.

IEH389I I/O ERROR ENCOUNTERED IN INPUT DATA SET

Explanation: A permanent input/output error occurred while reading the input data set.

System Action: The request is ignored. The return code is 8.

Programmer Response: Ensure that the input data set is specified correctly.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25b 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the input data set available.

IEH390I INVALID DATA SET NAME SPECIFIED IN RENAME-PARAMETER

Explanation: A dsname containing invalid characters or a subname exceeding eight characters is specified in the RENAME parameter.

System Action: Processing continues with the next function to be performed, if any. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH401I through IEH432I DATA SET dsname {UNLOADED | NOT MOVED/COPIED} xxxx

Explanation: Data set dsname was unloaded or was not moved or copied for the reason indicated by xxxx.

System Action: The data set is unloaded, or the MOVE/COPY request is ignored, as applicable. The return code is 4.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH433I DATA SET NOT MOVED/COPIED BECAUSE INCLUDE, EXCLUDE, SELECT, OR REPLACE REQUEST WHILE LOADING/UNLOADING

Explanation: INCLUDE, EXCLUDE, SELECT, or REPLACE requests cannot be processed while loading or unloading a data set.

System Action: The MOVE/COPY request is ignored. The return code is 4.

Programmer Response: Either correct the cause of the UNLOAD indicated by message IEH405I, or remove the INCLUDE, EXCLUDE, SELECT, or REPLACE requests following the IEHMOVE control statement.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH435I ERROR ENCOUNTERED WHILE ANALYZING THE SYSCTLG DATA SET

Explanation: One of the following conditions has occurred:

- An input/output error occurred while the system was reading the SYSCTLG data set.
- An invalid name was specified either as the name of an INCLUDE or EXCLUDE statement or as a value in the DSGROUP= or CATALOG= parameter. A name is invalid if it does not exist in the specified catalog, or if it contains syntax errors.

- An error occurred while the system was trying to obtain a model DSCB for a generation data group.
- A structural error exists in the catalog.

System Action: The request is ignored. The return code is 8.

Programmer Response: Make sure that the SYSCTLG data set is valid, and that the names specified in the CATALOG= and DSGROUP= parameters and the INCLUDE and EXCLUDE statements are correct.

Problem Determination: Table I, items 1, 13, 22, 25a, 25d, 29. Table II, Format I: trace option – TRACE=SSCH, IO. Execute Data Facility Data Set Services to list the contents of the SYSCTLG data set.

IEH436I DATA SET dsname, VOLUME ser, NOT SCRATCHED DUE TO I/O ERROR

Explanation: An uncorrectable input/output error occurred in data set dsname on the volume whose serial number is ser.

System Action: The data set is moved, but not scratched. The return code is 8.

Programmer Response: Scratch the data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format I: trace option – TRACE=SSCH, IO.

IEH440I RECFM AND BLKSIZE ARE INCONSISTENT

Explanation: The record format (RECFM) and/or block size (BLKSIZE) specified for the unloaded data set are not the same as those specified for the receiving data set. IEHMOVE will not reblock or change record format while performing a load or unload operation.

System Action: The request is ignored. The return code is 8.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Execute IEBPTPCH to print the first block of the unloaded data set and save the output.

IEH442I USER LABEL I/O ERROR CAUSED TERM

Explanation: An uncorrectable I/O error occurred when:

- A standard user label exit was present, and the error occurred during label processing.
- A user totaling exit was present, and the error occurred while IEHMOVE was writing data on the output data set.

System Action: The program is terminated. The return code is 12.

Programmer Response: If further handling of the error is desired, the user exit should be expanded to examine the standard status information and then issue an appropriate message.

Operator Response: None.

Problem Determination: None.

IEH450I REQUEST TERMINATED BECAUSE DATA SET SPANS MORE THAN 5 VOLUMES

Explanation: The data set extends over the maximum of five volumes; therefore, the data set is not moved or copied.

System Action: The request is ignored. The return code is 8.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH451I TRACK OVERFLOW FEATURE REQUIRED ON DEVICE THAT DOES NOT HAVE TRACK OVERFLOW FEATURE

Explanation: A data set to be moved or copied was originally written with track overflow, but the source device does not support the track overflow feature.

System Action: The request is ignored. The return code is 8.

Programmer Response: Change the job control language to specify a device that supports track overflow.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH452I THE DATA SET BEING MOVED/COPIED IS MARKED UNMOVABLE. UNMOVABLE DATA MUST BE UPDATED BEFORE ITS NEXT USE

Explanation: A data set being moved or copied from one direct access device to another contains location dependent information; that is, the unmovable bit in the DSORG field of the data set control block (DSCB) is on.

System Action: The data set is moved, and processing continues.

Programmer Response: Update the location dependent information in the moved or copied version of the data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 25a, 29.

IEH453I through IEH455I DATA SET dsname {UNLOADED | NOT MOVED/COPIED} xxxx

Explanation: Data set dsname was unloaded or was not moved or copied for the reason indicated by xxxx.

System Action: The data set is unloaded, or the MOVE/COPY request is ignored, as applicable. The return code is 4.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

IEH

Problem Determination: Table I, items 1, 13, 22, 29. It may also be necessary to contact the installation security administrator to resolve the problem.

IEH460I INVALID DATA SET ORGANIZATION

Explanation: One of the following error conditions occurred: the source data set is not a partitioned, physical sequential, or direct access (BDAM) data set. Therefore, the data set cannot be processed by IEHMOVE.

System Action: The MOVE/COPY request is ignored. The return code is 12.

Programmer Response: Correct the data set organization specified in the data set control block (DSCB).

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 25a, 29.

IEH461I UNABLE TO OPEN {INPUT | SYSIN} DATA SET

Explanation: Either no DD statement was provided to define the input or SYSIN data set, or the block size specified for the data set is not a multiple of the logical record length.

System Action: The MOVE/COPY request is ignored. The return code is 12.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH462I NO RECORD FOUND OCCURRED READING DATA SET dsname.

Explanation: One of the following conditions was encountered while reading a direct organization data set:

- The record format of the data set is fixed (F), and a track within the data set is not completely filled with records.
- The record format is variable (V) or undefined (U), and not all tracks were initialized when the data set was created.
- An uncorrectable error occurred.

System Action: Message IEH361I is also issued. The return code is 8.

Programmer Response: Ensure that the data set conforms to the standards of a direct organization data set.

Operator Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option – TRACE=SSCH, IO. Have the data set available.

IEH470I CVOL NOT PERMITTED. DATA SET ASSUMED TO BE CATALOGED IN MASTER CATALOG

Explanation: The parameter CVOL was encountered while scanning a MOVE, COPY, INCLUDE, or REPLACE statement. SYSCTLG data sets are no longer supported. IEHMOVE will attempt to locate the data set through the master catalog.

System Action: IEHMOVE will attempt to locate the data set through the master catalog. If unable to locate, message IEH471I will be issued. The return code is 8.

Programmer Response: The CVOL parameter should be removed from the affected control statement as soon as possible.

Operator Response: None.

Problem Determination: None.

IEH471I DATA SET NOT FOUND IN CATALOG

Explanation: A data set assumed to be cataloged (because of CVOL parameter) was not found in any available VSAM catalog.

System Action: The MOVE/COPY request is ignored. The return code is 12.

Programmer Response: If the data set should be cataloged, execute access method services to catalog the data set. If the data set should not be cataloged, specify the from volume with the keyword FROM=. In any case, the parameter CVOL should be removed.

Operator Response: None.

Problem Determination: None.

IEH472I CANNOT HONOR CATLG REQUEST. DATA SET NOT CATALOGED.

Explanation: For a COPY DSNAME or COPY PDS request, all of the following are true:

- The source data set is cataloged (FROM = device = list is not specified).
- The receiving data set is not to be renamed (RENAME = is not specified).
- CVOL processing has not been explicitly requested (CVOL = is not specified).

Since IEHMOVE has located the source data set through the catalog and the receiving data set has the same name, the master catalog operation would be unsuccessful. Therefore, the request is ignored.

System Action: The COPY operation will proceed. The CATLG request is ignored. The return code is 8.

Programmer Response: The CATLG parameter should be removed from the affected control statement as soon as possible.

Operator Response: None.

Problem Determination: None.

IEH473I DATA SET WILL BE CATALOGED IN MASTER/USER CATALOG.

Explanation: In a COPY DSNAMES, COPY PDS, COPY DSGROUP, or COPY VOLUME request, a CATLG parameter (implying a request to catalog in a SYSCTLG data set) has been encountered. Since CVOL is no longer supported, cataloging will proceed in the master catalog. If a user catalog is available, the cataloging will take place in the user catalog rather than in the master catalog.

System Action: The COPY operation will proceed. The return code is 4.

Programmer Response: If the cataloging operation is unsatisfactory (takes place in the master catalog rather than in a user catalog), uncatalog the data set and recatalog in the proper catalog using access method services.

Operator Response: None.

Problem Determination: None.

IEH474I data set or data space name HAS DATA ORGANIZATION THAT CANNOT BE MOVED/COPIED.

Explanation: The above is an ISAM data set or VSAM data space, which is not supported by IEHMOVE.

System Action: MOVE/COPY request is ignored. If VOLUME operation or DSGROUP operation, the return code is 4. If DSNAMES or PDS operation, the return code is 12.

Programmer Response: If ISAM or VSAM, use access method services to copy the data set/space.

Operator Response: None.

Problem Determination: None.

IEH475I data set name IS A MULTIVOLUME DATASET AND HAS NOT BEEN MOVED/COPIED.

Explanation: The data set is part of a multivolume data set (DS1IND80 'Last volume on which data set resides' was not on, in the DSCB) and only one volume was specified. If it is the last part of a multivolume data set, the MOVE/COPY will proceed normally without any message.

System Action: The MOVE/COPY request is ignored. If a VOLUME operation, the return code is 4 and operation continues with the next data set. If a DSNAMES operation, the return code is 12.

Programmer Response: To move a multivolume data set, use a MOVE/COPY DSNAMES and specify all volumes that the data set resides on in the control statement and DD statement. **Note:** A maximum of five volumes can be specified.

Operator Response: None.

Problem Determination: None.

IEH476I MINIMUM BUFFER SPACE UNAVAILABLE - SINGLE BUFFERING USED

Explanation: The minimum of 2 input and 2 output buffers for enhanced IEHMOVE move/copy performance could not be obtained because space was not available.

System Action: The system uses a single buffer for the move/copy operation. IEHMOVE performance remains unchanged.

Operator Response: None.

Programmer Response: Specify or increase the value in the REGION parameter of the JOB or EXEC statement to allow sufficient buffers so that IEHMOVE multiple buffering can be used. See JCL for information on specifying the REGION parameter.

Problem Determination: None.

IEH477I BUFFER ALLOCATION STATISTICS FOR SEQUENTIAL DATASET MOVE/COPY OPERATION ARE:

INPUT buffers = xx - OUTPUT BUFFERS = yy

BUFFER SPACE OBTAINED = nnnK

INCREASE JCL REGION PARAMETER BY mmmK TO OBTAIN MAXIMUM BUFFERS

Explanation: The number of buffers that the system allocated for input and output are xx and yy. The system obtained a buffer size of nnnK. The last line of the message appears only when the region size specified is not sufficient to obtain the maximum number of buffers.

System Action: The data sets were copied/moved using enhanced IEHMOVE multiple buffers.

Operator Response: None.

Programmer Response: If nnnK is less than the maximum, performance may be improved by increasing the value of the REGION parameter as indicated in the last line of the message. See JCL for information on specifying the REGION parameter.

Problem Determination: None.

IEH

IEHINITT Program Messages

IEH601I INVALID CONTROL STATEMENT

Explanation: The construction of the control statement preceding this message is invalid.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. Correct the construction of the preceding statement, and resubmit the job to label those tapes that were bypassed.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH602I – IEH609I

IEH602I INVALID KEYWORD

Explanation: In the control statement preceding this message, a keyword is incorrect.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. Correct the keyword on the preceding statement, and resubmit the job to label those tapes that were bypassed.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH603I INVALID PARAMETER VALUE

Explanation: In the control statement preceding this message, a parameter is incorrect.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. Correct the parameter on the preceding statement, and resubmit the job to label those tapes that were bypassed.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH604I OPERATOR SUPPRESSED VOLUME LABEL ser

Explanation: The tape that was to be labeled with serial number ser was not mounted by the operator.

System Action: The current serial number is reserved for the unmounted tape, and the next number is used for the next tape to be labeled.

Programmer Response: Probable user error. Find out why the tape was not mounted and take any indicated action. Check the console log for additional background.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH605I INVALID DEVICE ALLOCATED ON ddd

Explanation: Device ddd was removed from operation; that is, it is either unacceptable or not online.

System Action: The device is removed from the list of devices allocated to this job step by the associated DD statement. The return code is 8.

Programmer Response: Probable user error. Ensure that the parameters on the applicable DD statement are correct.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH606I PERMANENT I/O ERROR ON ddd

Explanation: A permanent input/output error was encountered on device ddd.

System Action: The device is removed from the list of devices allocated to this job step by the associated DD statement. The return code is 8.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH607I ALLOCATED DEVICES EXHAUSTED

Explanation: All devices allocated to this job step (specified in DD statement associated with the control statement being processed) have been eliminated as mountable devices.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. If message IEH606I precedes this message, ensure that the parameters on the applicable DD statement are correct.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH608I I/O ERROR ON SYSIN. JOB TERMINATED.

Explanation: A permanent input/output error was encountered while the SYSIN data set was either being opened or being read.

System Action: The job is terminated. The return code is 16.

Programmer Response: Probable user error. Ensure that the DCB parameters on the SYSIN DD statement are correct, particularly the BLOCKSIZE specification. If the DD statement is correct, the error probably occurred when the data set was being read.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH609I INVALID DEVICE SPECIFIED FOR ASCII LABELING

Explanation: The tape to be initialized in ASCII code is not mounted on a 9-track unit.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. Change the corresponding DD statement to specify a 9-track unit and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH610I INVALID PARM OR PARM LIST PASSED TO IEHINITT

Explanation: An invalid parameter is coded in the EXEC statement or in the parameter list passed by a LINK or ATTACH macro.

System Action: The job is terminated. The return code is 16.

Programmer Response: Probable user error. Check the parameters passed to IEHINITT for validity, and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH611I INVALID DENSITY SPECIFIED, DEFAULT VALUE USED

Explanation: The density specified in the DCB parameter of the DD statement is invalid for the unit requested.

System Action: The default density value for the unit requested is used.

Programmer Response: Probable user error. If the labels are to be written at a different density than the default value, change the density value in the DCB parameter, and relabel the tape(s).

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH612I INVALID VALUE FOR ACCESS CODE

Explanation: A character other than uppercase A-Z was specified as the access code for ANSI tape.

System Action: Processing continues with the next INITT statement.

Programmer Response: Probable user error. Check the access code value on the indicated statement. Change to uppercase A-Z.

Operator Response: None.

Problem Determination: Table 1, items 1,3,4.

IEH613I ACCESS KEYWORD INVALID FOR NON-AL TAPE

Explanation: The ACCESS keyword was specified without LABTYPE=AL being specified. The result is an access code-protected standard label tape which is invalid.

System Action: Processing continues with next INITT command. Return code is 8.

Programmer Response: Probable user error. Either specify LABTYPE=AL or remove ACCESS=xxx.

Operator Response: None.

Problem Determination: Table 1, items 1,3,4.

IEH614I Invalid character in SERIAL/OWNERID

Explanation: An invalid character was found in the parameter for the 'SER' or the 'OWNER' keywords. The valid character set differs for SL and AL labels. For more information, see the publication *Data Administration: Utilities*.

System Action: Processing continues with the next INITT control statement. The return code is 8.

Programmer Response: Probable user error. Correct the parameter value on the preceding statement and resubmit the job to label those tapes that were bypassed.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEHATLAS Program Messages**IEH900I SUCCESSFUL COMPLETION. AN ALTERNATE TRACK HAS BEEN ASSIGNED. COMPLETION CODE = 00**

Explanation: An alternate track has been assigned, and data has been transferred from the bad track to the alternate track.

System Action: The job step is terminated.

Programmer Response: None.

Operator Response: None.

Problem Determination: None.

IEH901I SUCCESSFUL COMPLETION. NO ALTERNATE TRACK ASSIGNED. COMPLETION CODE = 00

Explanation: The utility successfully rewrote the record in error.

System Action: The job step is terminated.

Programmer Response: None.

Operator Response: None.

Problem Determination: None.

IEH902I I/O ERROR IN ALTERNATE TRACK ASSIGNMENT. COMPLETION CODE = 16

Explanation: Input/output errors occurred while attempting to assign an alternate track; therefore, no alternate track was assigned. The number of attempts at assigning the alternate track is equal to the number of alternate tracks available at the time the ATLAS SVC was called or 10% of the number of assigned alternate tracks, whichever is less.

System Action: The program is terminated. The return code is 16.

Programmer Response: Use Device Support Facilities to analyze or format the volume.

Operator Response: None.

Problem Determination: If analyze or format fails, see Table I, item 30.

IEH903I REQUIRED DD CARD MISSING. COMPLETION CODE = 16

Explanation: Either the SYSUT1 or SYSIN data set could not be opened. The DD statement defining the data set was not included in the input stream.

System Action: The job step is terminated.

Programmer Response: Probable user error. Correct the error and resubmit the job.

IEH

IEH904I – IEH912I

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH904I INVALID DCB PARAMETERS FOR SYSIN. COMPLETION CODE = 16

Explanation: SYSIN DCB block size was not a multiple of LRECL (80 bytes).

System Action: The job step is terminated.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH905I INVALID OR MISSING CONTROL CARD KEYWORD. COMPLETION CODE = 16

Explanation: The control card keyword is missing or is invalid as it appears. The entire control card may be missing. Check for a misspelled keyword or a character in column 1.

System Action: The job step is terminated.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH906I INVALID CHARACTER IN USER-INPUT RECORD. COMPLETION CODE = 16

Explanation: A character in the user input record cannot be translated into valid internal code (that is, the character is other than 0-9 or A-F).

System Action: The job step is terminated.

Programmer Response: Probable user error. Examine the TRACK or VTOC utility control statement for 10 bytes of hexadecimal information. Check the input record for valid hexadecimal information. Correct and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH907I DEVICE DOES NOT HAVE SOFTWARE ASSIGNABLE ALTERNATES. COMPLETION CODE = 16

Explanation: The device specified in the UCB has no remaining software assignable alternates.

System Action: The job step is terminated.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, item 30.

IEH908I ALL ALTERNATE TRACKS FOR THIS DEVICE HAVE BEEN ASSIGNED. COMPLETION CODE = 16

Explanation: The format 4 DSCB shows that this device has no alternate tracks available for assignment.

System Action: The job step is terminated.

Programmer Response: None.

Operator Response: None.

Problem Determination: Table I, item 30.

IEH909I REQUESTED STORAGE IS NOT AVAILABLE COMPLETION CODE = 16

Explanation: Necessary storage for a work area was not available at the time the GETMAIN was issued.

System Action: The job step is terminated.

Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH910I MESSAGE TEXT PROVIDED BY SYNADAF MACRO I/O ERROR. COMPLETION CODE = 16

Explanation: A permanent error was detected while reading the SYSIN data set.

System Action: The job step is terminated.

Programmer Response: Correct the error condition indicated in the message text. Ensure that the DCB parameters on the SYSIN DD statement are correct.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH911I TRACK ADDRESS PROVIDED DOES NOT BELONG TO DATA SET. COMPLETION CODE = 16

Explanation: The address of the record provided on the control card does not belong to the specified data set.

System Action: The job step is terminated.

Programmer Response: Probable user error. Examine the utility control statement to ensure that the cylinder and track address are within the extents of the SYSUT1 data set. If in doubt, use IEHLIST to list the VTOC. The extents of the data set are listed.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH912I INCORRECT NUMBER OF CHARACTERS IN USER-INPUT RECORD. COMPLETION CODE = 16

Explanation: Too few or too many data statements are in the input stream. Check for incorrect record length.

System Action: The job step is terminated.

Programmer Response: Probable user error. Check the data statements for the accurate number of

hexadecimal characters. The input record must be the same length as the record being replaced.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 15, 29. Have documentation available showing the original record before failure (backup data).

IEH913I CONDITION OTHER THAN DATA CHECK OR MISSING ADDRESS MARKER. COMPLETION CODE = 16

Explanation: An invalid sense byte indication has been detected for the user's channel program or for another channel program to process data on the bad track. IEHATLAS cannot correct the error condition.

System Action: The job step is terminated.

Programmer Response: Surface analyze the volume using Device Support Facilities.

Operator Response: None.

Problem Determination: Table I, item 30.

IEH914I FORMAT 4 DSCB CANNOT BE READ. COMPLETION CODE = 16

Explanation: A permanent I/O error was detected when reading the format 4 DSCB. Information concerning the number of alternates available or the address of the next alternate available cannot be retrieved.

System Action: The job step is terminated.

Programmer Response: Surface analyze the volume using Device Support Facilities.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH915I RECORD IN ERROR IS FORMAT 4 DSCB COMPLETION CODE = 16

Explanation: IEHATLAS could not successfully rewrite the format 4 DSCB record. No alternative track information is available.

System Action: The job step is terminated.

Programmer Response: Surface analyze the volume using Device Support Facilities.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 28, 29.

IEH916I ERROR FOUND IN COUNT FIELD OF LAST RECORD ON TRACK. COMPLETION CODE = 16

Explanation: Count field information cannot be recovered for the last record on a track unless that record is the error record input to the utility, or the CCHHRKDD has been passed to the ATLAS SVC (86). IEHATLAS also requires information regarding track overflow records.

System Action: The job step is terminated.

Programmer Response: Either IEHATLAS or the ATLAS SVC (86) should be given as input to the CCHHRKDD of the last record. Track overflow

information is also required if the last record is part of a track overflow data set.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH917I HA OR R0 ERRORS. COMPLETION CODE = 16

Explanation: The ATLAS SVC (86) does not accept an R0 error record unless the SVC was entered by the utility. An I/O error in HA or R0 prevents further use of the track on which the error exists.

System Action: The job step is terminated.

Programmer Response: Surface analyze the volume using Device Support Facilities.

Operator Response: None.

Problem Determination: Surface analyze the volume using Device Support Facilities. Table I, items 1, 3, 13, 29.

IEH918I ERROR/ERRORS ENCOUNTERED ALTERNATE ASSIGNED. COMPLETION CODE = 16

Explanation: One or more errors were encountered while transferring the data from the bad track to the alternate track. Such a condition does not prevent assignment of an alternate track.

System Action: The job step is terminated.

Programmer Response: Use Data Facility Data Set Services to dump the alternate track and check for data validity.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 14, 15, 29.

IEH919I ALTERNATE TRACK ASSIGNED. I/O ERROR IN RE-EXECUTING USER CHANNEL PROGRAM. COMPLETION CODE = 16

Explanation: An alternate track has been assigned, but, because the user's channel program could not be re-executed, the error condition still exists for the original record in error.

System Action: The job step is terminated.

Programmer Response: Submit the AMASZAP service aid program to dump the data set to check data validity on the alternate track. If the user's channel program cannot be successfully re-executed, submit IEHATLAS to update in place the defective record.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH920I THE DEVICE DOES NOT SUPPORT TRACK OVERFLOW. COMPLETION CODE = 16

Explanation: Track overflow support was not included in the device at system generation time.

System Action: The job step is terminated.

Programmer Response: There is a track overflow indication in the DCB, but the UCB indicates that the device does not support track overflow.

Operator Response: None.

IEH

IEH921I – IEH924I

Problem Determination: Table I, items 1, 13, 17a, 29.

IEH921I NO ERROR IN SPECIFIED VTOC RECORD. COMPLETION CODE = 00

Explanation: The user's VTOC record was read without error. No alternate track was assigned.

System Action: The job step is terminated.

Programmer Response: None.

Operator Response: None.

Problem Determination: None.

IEH922I ERROR/ERRORS ENCOUNTERED CANNOT BE HANDLED. NO ALTERNATE ASSIGNED. COMPLETION CODE = 16

Explanation: The conditions which produce this message are:

- Count field errors on more than three records.
- An error on an EOF record when it is not the record specified by the utility program.
- An error in the KDD of the count field of a record other than the specified error record.

Do not move direct-access volumes to more than one other device. Bad volumes may cause damage to devices.

System Action: The job step is terminated.

Programmer Response: Check the return parameter list to determine the record numbers of error records. The last record indicated in the list is the record which caused the unrecoverable condition. If three error records have been listed, then the possibility exists that a fourth read count error was also encountered. Move the volume to another

drive and resubmit the job. If the problem still exists, the data cannot be recovered, and the volume should be restored.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH923I NO ERRORS FOUND ON TRACK. NO ALTERNATE ASSIGNED. COMPLETION CODE = 16

Explanation: The ATLAS SVC successfully read the indicated error track, and therefore, did not assign an alternate track.

System Action: The job step is terminated.

Programmer Response: Probable user error. The cylinder and track address passed to the ATLAS SVC must specify a track containing an error record.

Operator Response: None.

Problem Determination: Table I, items 1, 15, 29. Have the assembly listing of the program that calls SVC 86 available.

IEH924I VIRTUAL DEVICES ARE NOT SUPPORTED

Explanation: A volume was detected with the Virtual Device or Virtual Volume flag turned on in its associated UCB.

System Action: Processing continues with the next control card.

Programmer Response: Probable user error; a virtual unit should not be specified. Specify a real device.

Operator Response: None.

Problem Determination: Table I, items 1, 3, 11, 29.

System Generation Messages (IEI)

Component Name	IEI
Program Producing Message	Assembler program during expansion of system generation macro instructions
Audience and Where Produced	For system programmer: assembler listing in SYSPRINT data set.
Message Format	<p>s, ***IEImacnnn text</p> <p>s</p> <p>Severity code:</p> <p>0 Warning message; the condition indicated may cause errors in new system.</p> <p>5 Error message; error is in coding of a system generation macro instruction.</p> <p>7 Error message; message is produced by GENERATE macro instruction.</p> <p>mac</p> <p>Indication of system generation macro instruction being processed when error was detected:</p> <p>AFF AFFINITY DAT DATAMGT IOD IODEVICE</p> <p>CHA CHANNEL DTS DATASET SCH SCHEDULR</p> <p>CKP CKPTREST EDI EDIT SVC SVCTABLE</p> <p>CON CONSOLE EDT EDTGEN TSO TSO</p> <p>CTR CTRLPROG GEN GENERATE UNI UNITNAME</p> <p>nnn</p> <p>Message serial number.</p> <p>text</p> <p>Message text.</p>
Related Publications	<i>MVS/XA Installation: System Generation, GC26-4009</i>

IEImacnnn text

Explanation: Error: The error indicated by the message text is a coding error in the system generation macro instruction, mac. The message serial number, nnn, identifies the message.

For the CHANNEL, and IODEVICE macro instructions, the message text begins with either the name field of the macro instruction or, if the name field was omitted, the sequential identification number provided by the system.

Examples of these messages are:

```
5,*** IEI102 CHANNEL2-ADDRESS
VALUE NOT SPECIFIED
5,*** IEI102 CHAN#2-ADDRESS
VALUE NOT SPECIFIED
```

The first example illustrates a message for a CHANNEL macro instruction. "CHANNEL2" is the name field of the macro instruction.

The second example illustrates the same message, but in this case, the name field was omitted and "CHAN#2" was supplied by the macro instruction.

System Action: The assembler program did not produce a job stream in the SYSPUNCH data set. The program analyzed all remaining system generation macro instructions and printed any other required messages. Either message IEIGEN113 or IEIGEN116 was printed, followed by the message: GENERATION TERMINATED. Then the system generation process was abnormally terminated.

Severity Code: 5

Programmer Response: Probable user error. Correct the errors indicated and begin the system generation process from the start of Stage I.

Problem Determination: Table I, items 17a, 29. Have the hardware configuration available.

IEIEDT000 EDTGEN MACRO PREVIOUSLY INVOKED

Explanation: The EDTGEN macro instruction was previously invoked in this job step.

System Action: Processing terminates for this occurrence of the EDTGEN macro instruction. Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: If the first occurrence of the EDTGEN macro instruction is correct, continue with Stage II. If not, remove the extraneous macro instruction and resubmit Stage I.

IEIEDT001 GENERATE MACRO PREVIOUSLY INVOKED

Explanation: The GENERATE macro instruction was previously invoked in this job step. Either the macro instruction itself was part of the input stream or the EDTGEN macro instruction was present (EDTGEN processing includes GENERATE processing.)

System Action: Processing terminates for this occurrence of the GENERATE or EDTGEN macro instruction. Stage I of eligible device table generation processing continues.

Severity Code: 5

IEIEDT002 – IEIEDT010

Programmer Response: If the first occurrence of the GENERATE or EDTGEN macro instruction is correct, continue with Stage II. If not, remove the extraneous macro instruction and resubmit Stage I.

IEIEDT002 DATA SET NAME indexed-dsn ON DSN PARAMETER INVALID - rc

Explanation: The DSN parameter on the EDTGEN macro instruction contains an invalid data set name. The reason code (rc) indicates why the data set name is invalid. The values of rc are as follows:

- 1 - The data set name exceeds 17 characters in length.
- 2 - The data set name is not indexed (qualified).

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Correct the data set name in the DSN parameter and resubmit the job.

IEIEDT003 VOLUME SERIAL volser ON DSNVOL PARAMETER INVALID

Explanation: The volume serial number specified in the DSNVOL parameter of the EDTGEN macro instruction contains more than six characters.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Correct the volume serial number in the DSNVOL parameter and resubmit the job.

IEIEDT004 DEVICE TYPE device-type ON DSNVOL PARAMETER INVALID

Explanation: The device type specified in the DSNVOL parameter of the EDTGEN macro instruction does not match a direct access device type in an IODEVICE statement within this job.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: If the device type specified in the DSNVOL parameter is incorrect, correct it and resubmit the job. If the device type is correct, include an IODEVICE statement in the job for the device type and resubmit the job.

IEIEDT005 DATA SET NAME dsname IN OBJDSN PARAMETER INVALID

Explanation: The OBJDSN parameter of the EDTGEN macro instruction contains an invalid data set name. The reason code indicates why the data set name is invalid. The values of rc are as follows:

- 1 - The data set name exceeds 13 characters in length.
- 2 - The data set name is not indexed by 'SYS1'.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Correct the data set name in the OBJDSN parameter and resubmit the job.

IEIEDT006 CHECK PARAMETER check INVALID

Explanation: The CHECK parameter of the EDTGEN macro instruction contains the invalid value shown in the message as check. Valid values are 'YES' and 'NO'.

System Action: Stage I of eligible device table generation processing continues. The default YES is used, and a job step is included in the Stage II job stream to check the new eligible device table (EDT) against the UCBs in the system.

Severity Code: 5

Programmer Response: If you do not want to verify the new EDT during Stage II of the generation process, rerun Stage I, specifying NO for the CHECK parameter.

IEIEDT008 OCLASS PARAMETER oclass INVALID

Explanation: The OCLASS parameter in the EDTGEN macro instruction contains the invalid value shown in the message as oclass.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Supply a valid oclass value for the OCLASS parameter. A valid value consists of a letter from A through Z or a number from 0 through 9. Resubmit the job.

IEIEDT009 JCLASS PARAMETER jclass INVALID

Explanation: The JCLASS parameter in the EDTGEN macro instruction contains the invalid value shown in the message as jclass.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Supply a valid jclass value for the JCLASS parameter. A valid consists of a letter from A through Z or a number from 0 through 9. Resubmit the job.

IEIEDT010 DIAGNOS PARAMETER diag INVALID

Explanation: The DIAGNOS parameter in the EDTGEN macro instruction contains the invalid value shown in the message as diag. Valid values are 'YES' and 'NO'.

System Action: Stage I of eligible device table generation processing continues. The default YES is used, and Stage II job stream is produced even if errors are present in the input stream.

Severity Code: 5

Programmer Response: If you do not want a job stream to be produced when errors are present in the input stream, rerun Stage I, specifying NO for the DIAGNOS parameter.

IEI EDT011 QUIT SWITCH SET PRIOR TO EDTGEN MACRO

Explanation: One or more errors were detected before the EDTGEN macro instruction was expanded. The errors, which can cause problems during Stage II of eligible device table generation processing, are described in the preceding messages.

System Action: Stage I of eligible device table generation processing terminates.

Severity Code: 5

Programmer Response: Correct the errors as indicated in the preceding messages and resubmit the job.

IEI EDT012 QUIT SWITCH SET IN EDTGEN MACRO

Explanation: One or more errors were detected during expansion of the EDTGEN macro instruction. The errors, which can cause problems during Stage II of eligible device table generation processing, are described in the preceding messages.

System Action: Stage I of eligible device generation processing terminates.

Severity Code: 5

Programmer Response: Correct the error as indicated in the preceding message and resubmit the job.

IEI EDT013 DIAGNOSTIC OVERRIDE SPECIFIED ERROR MESSAGES ARE INTERPRETED AS WARNINGS

Explanation: One or more errors have occurred during expansion of a macro in Stage I of eligible device table generation processing. Each error is described in a preceding message. Because diagnostic override was requested, processing continues; however, the resulting job stream might not be valid.

System Action: Stage I of eligible device table generation processing continues.

Severity Code: 5

Programmer Response: Carefully review the output of Stage I processing for any errors. If you question the validity of the output, correct each error described in a preceding message and resubmit the job.

IEI GEN113 QUIT SWITCH PRIOR TO GENERATE MACRO

Explanation: One or more errors, indicated by messages, were detected before the GENERATE macro instruction was expanded.

Severity Code: 7

Programmer Response: Correct the errors indicated and begin the system generation process from the start of Stage I.

IEI GEN116 QUIT SWITCH SET IN GENERATE MACRO

Explanation: One or more errors were detected during the expansion of the GENERATE macro instruction.

Severity Code: 7

Programmer Response: Correct the errors indicated and begin the system generation process from the start of Stage I.

7,* GENERATION TERMINATED *****

Explanation: The system generation process was abnormally terminated.

Severity Code: 7

Programmer Response: None. This message follows message IEI GEN113 and/or message IEI GEN116.

Warning Messages

IEI

IEI macnnn text

Explanation: The message text indicates a condition in macro instruction mac that may cause errors in the new system. The message serial number nnn identifies the message. **For example:**

```
0,*** IEI GEN940 CTRLPRG
MACRO DEFAULTED
```

Explanation: The indicated macro instruction was not specified and the default options were taken.

Severity Code: 0

Programmer Response: None.

```
0,***IEI GEN933 CONSOLE MACRO,
CONSOLE ADDRESS
xxx, DISPLAY AREAS DEFAULTED TO
LENGTH 14
```

Explanation: The dimensions for the status displays for this console were not specified; the default value was used.

Severity Code: 0

Programmer Response: None.

***,text - *,text**

Informative Messages

***,text**

Explanation: This type of message documents the options selected for the new system through the system generation macro instructions. All options are described, whether the selection was explicit or implicit.

****macro name**component
name**component ID****

Explanation: A message of this type appears before any PUNCH statements that were produced by the macro expansion. The macro name is the name of the macro instruction that produced any succeeding PUNCH statements. The component name is the name of the component group responsible for maintaining the particular macro expansion. The component ID is the identification to be used in reporting trouble if a problem is isolated to the code produced by the particular macro expansion.

Linkage Editor and Loader Messages (IEW)

Component Name	IEW
Program Producing Message	Linkage Editor and Loader
Audience and Where Produced	For programmers: SYSPRINT data set.
Message Format	<p>IEWnnns xxx—text Message serial number, which is coded to indicate the program. 0nn Linkage editor program 1nn Loader program</p> <p>s Severity code (linkage editor program): 0 Informational message: appears when control statement is printed as a result of LIST option. 1 Warning message: condition may cause error during execution of output module; output module is marked executable. 2 Error message: condition may make execution of output module impossible; output module is marked not executable, unless LET option was specified; module processing is continued. 3 Error message: condition will make execution of output module impossible; output module is marked not executable; module processing is continued. 4 Error message: no recovery form error condition is possible; output module is not produced; module processing is terminated; only output is diagnostic messages.</p> <p>Severity code (loader program): 0 Informational message: condition that will not cause an error during execution of the loaded module. 1 Warning message: condition that may cause an error during execution of the loaded module. 2 Error message: error that could make execution of the loaded module impossible. Processing continues. 3 Error message: error that will make execution of the loaded module impossible. Processing continues. 4 Error message: error condition from which no recovery is possible. Processing continues. I Information: no operator action is required.</p> <p>xxx The word “WARNING” or “ERROR” will be displayed to indicate the nature of the message.</p> <p>text Message text.</p>
Related Publications	<i>MVS/XA Linkage Editor and Loader Users Guide, GC26-4011</i>

IEW0000 (control statement)

Explanation: The control statement is printed as a result of the LIST option.

IEW0012 ERROR—INPUT CONTAINS INVALID TWO-BYTE RELOCATABLE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: A relocatable A-type or V-type address constant of less than 3 bytes has been found in the input.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Check assembler language input for V-type address constants, which cannot be relocated. Delete or correct the invalid address constant.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0022 ERROR—INPUT CONTAINS INVALID V-TYPE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: A V-type address constant of less than 4 bytes has been found in the overlay structure.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Either (1) specify a length of 4 bytes for all V-type address constants; or (2) if a 3-byte V-type address constant refers to a symbol within its overlay segment, you can assemble it as an A-type address constant with an EXTRN statement. One method of isolating an invalid address constant is (1) link edit with OVLY and XREF options specified; (2) link edit again without the OVLY option; and (3) compare the external reference lists. Any reference appearing in the second run and not in the first is invalid in an overlay structure.

IEW

Problem Determination: Table I, items 6b, 6f, 22, 23, 29. Have the output used to isolate the address constant available.

IEW0033 ERROR—INVALID ENTRY POINT FROM END CARD, NO ENTRY POINT ASSIGNED.

Explanation: The entry point for the program was specified as a relative address in an END card. The entry point that was specified appeared to be valid when the END card was processed; however, the entry point was found to be invalid when the entry point of the load module was being determined.

System Action: No entry point is assigned.

Programmer Response: Check object module input for completeness. Then, either specify an entry point name on the ENTRY control statement; or, if entry points were specified at compilation or assembly, make sure the object module containing the desired entry point precedes all other object modules with assembled or compiled entry points.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0043 ERROR—INPUT CONTAINS INVALID EXTERNAL SYMBOL ID.

Explanation: END card is probably mispunched.

System Action: The invalid item is ignored.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) re-create any module that has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic IEW0043 should recur and isolate the incorrect module. Re-create the module, and rerun the step.

Problem Determination: Table I, items 6b, 6f, 9a, 9b, 29. Have available the output used to isolate the module as described above.

IEW0053 ERROR—ENTRY STATEMENT SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an ENTRY statement is not a control section or an entry name.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Correct the ENTRY control statement, or make sure that the control section containing the entry point is included in the input and has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0063 ERROR—END CARD SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an END statement is not a control section or an entry name.

System Action: No entry point is assigned.

Programmer Response: Check that the entry point control section or entry name has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement. Check the module containing the entry point for completeness.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0073 ERROR—ENTRY STATEMENT SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point specified is in a segment other than the root segment. Either (1) the module containing the entry point was placed in a segment other than the root segment by means of the INSERT statement, or (2) the entry point is incorrectly specified on the ENTRY statement.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Either correct the ENTRY control statement, or move the module containing the entry point to the root segment.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0083 ERROR—END CARD SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the symbol specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0093 ERROR—END CARD ENTRY POINT ADDRESS PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the address specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the

root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0102 ERROR—INVALID ENTRY POINT ON END CARD, ENTRY, POINT IGNORED.

Explanation: A possible entry point for the program was specified as a relative address in an END card. When the END card was processed, the control section identification of the specified entry point was found to be invalid.

System Action: The entry point is ignored. The first valid entry point encountered is used; if there is none, no entry point is assigned.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) re-create any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0102 should recur and isolate the incorrect module. Re-create the module, and rerun the step.

Problem Determination: Table I, items 3, 6b, 6f, 9a, 13, 29. Have available the output used to isolate the module.

IEW0113 ERROR—OUTPUT MODULE CONTAINS NO CONTROL SECTIONS IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: There are no control sections in the root segment. Either (1) all control sections originally in the root segment have been deleted, or (2) there were no control sections originally in the root segment, or (3) an OVERLAY statement preceded the input.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Place at least one control section in the root segment.

Problem Determination: Table I, items 6b, 6f, 9b, 29. Save the root segment module and its associated listings.

IEW0123 ERROR—NO ESD ENTRIES, EXECUTION IMPOSSIBLE.

Explanation: There are no external symbol dictionary entries. There are no control sections in the output.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check other messages issued for cause of error (that is, invalid input from object module). Ensure that at least one control section appears in the input and is not deleted by the REPLACE control statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9a, 13, 22, 23, 29.

IEW0132 ERROR—SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE.

Explanation: An external reference is unresolved at the end of input processing. None of the following is specified: restricted no-call, never-call, or NCAL.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Check that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the needed module or alias to one of the input data sets. Make sure the SYSLIB data set DD statement has been specified, if needed. If resolution is not desired, specify NCAL, never-call, or restricted no-call. If the reference was found in a control section replaced by another control section not containing that same reference, delete the reference, or specify NCAL, never-call, or restricted no-call.

Problem Determination: Table I, items 1, 6b, 6f, 9b, 13, 22, 23, 25c, 29.

IEW0143 ERROR—NO TEXT.

Explanation: No text remains in the output module. Either (1) all the control sections originally in the input are deleted, or (2) there are no control sections that originally contained text.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check other messages issued for cause of error (that is, invalid input from object module). Ensure that at least one control section contains text and is not deleted by the REPLACE control statement or by automatic replacement.

Problem Determination: Table I, items 1, 6b, 6f, 9a, 9b, 13, 29. Save a module containing text.

IEW0152 ERROR—INVALID OVERLAY STRUCTURE, NO CALLS OR BRANCHES MADE FROM ROOT SEGMENT.

Explanation: There are no calls or branches from the root segment to a segment lower in the tree structure. Other segments cannot be loaded.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Make sure the root segment contains a control section that refers to at least one other segment in the overlay structure by means of a V-type address constant.

Problem Determination: Table I, items 1, 6b, 6f, 9b, 13, 29. Have a root segment module that calls another segment available with its associated listing.

IEW0161 WARNING—EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED—XCAL WAS SPECIFIED.

Explanation: There is a valid exclusive branch-type reference; The XCAL option is specified for this job step.

System Action: Processing continues.

Programmer Response: Normally, no response is necessary. You can check that the printed

branch-type references between exclusive segments are correct according to your overlay structure.

Problem Determination: If you suspect that the message fails to appear when it should, or appears incorrectly, see Table I, items 6b, 6f, 9b, 29. Have modules that contain the calls and symbol available with associated source listings.

IEW0172 ERROR—EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: A valid branch-type reference is made from a segment to an exclusive segment: The XCAL option is not specified.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either (1) rearrange the overlay structure to place both segments in the same path, or (2) specify the XCAL option.

Problem Determination: Table I, items 6b, 6f, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0182 ERROR—INVALID EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: There is an invalid exclusive branch-type reference from a segment to a symbol in an exclusive segment.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either (1) place the segments in the same path, or (2) place a V-type address constant in a common segment.

Problem Determination: Table I, items 6b, 6f, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0201 WARNING—OVERLAY STRUCTURE CONTAINS ONLY ONE SEGMENT—OVERLAY OPTION CANCELLED.

Explanation: There are no OVERLAY statements in the input.

System Action: The overlay option is canceled.

Programmer Response: Probable user error. Either place OVERLAY statements in the input, or remove the OVLY option from the EXEC statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9b, 13, 29.

IEW0212 ERROR—EXPECTED CONTINUATION CARD NOT FOUND.

Explanation: A linkage editor control statement specifying a continuation (nonblank in column 72) is not followed by a continuation card.

System Action: The card is not processed as a continuation, but as normal input.

Programmer Response: Probable user error. Either remove the nonblank character in column 72 or insert the necessary continuation record.

Problem Determination: Table I, items 6b, 6f, 13, 29.

IEW0222 ERROR—CARD PRINTED CONTAINS INVALID INPUT FROM OBJECT MODULE.

Explanation: One of the following occurred during the processing of an object module:

- A record of invalid type was encountered.
- A text (TXT) record was encountered in which the data length (columns 11-12) is invalid or mispunched.
- An invalid, probably mispunched relocation dictionary (RLD) record was encountered in an object module.

System Action: The record in error is ignored, and processing continues.

Programmer Response: (1) Remove all extraneous records from the input to the linkage editor. (2) Ensure that linkage editor control statements are placed either before or after object modules. (3) Ensure that all records in the object module have a 12-2-9 punch in column 1. (4) Ensure that all records in the object module contain one of the following in columns 2-4: ESD, SYM, TXT, RLD, or END. (5) Locate the TXT or RLD record having the invalid or mispunched data; regenerate the object module, or investigate the punching device or generating processor for malfunctions.

Problem Determination: Table I, items 6b, 6f, 22, 29.

IEW0234 ERROR—INPUT FROM LOAD MODULE IS INVALID.

Explanation: Either (1) the linkage editor has encountered a text record (in an input load module) that is larger than the load module buffer; (2) the linkage editor has read a member that does not contain a valid load module; (3) the programmer specified a region size that is too small to contain the largest load module; or (4) an EXPAND operation failed when the resulting text record was too large to be contained in the load module buffer.

System Action: In case 3, the system terminates the operation; in all other cases, processing continues and the resulting output module is non-executable.

Programmer Response: In cases 1 and 4, specify value2 of the SIZE parameter as a number equal to or greater than the size of the largest text record in any input load module. (Value2 must be equal to or greater than one-half the size of the value2 in the link edit of any input load module.) You may also have to increase the value1 of the SIZE parameter, or increase the region size, or increase both. Then, run the job step again.

In case 2, check for correct DD statements for all of the input data sets. If no DD statements need correction, then you must try to isolate the incorrect load module by completing the following procedures in order.

1. Specify the NCAL option and run the job step again. If message IEW0234 reappears, the incorrect load module is in primary input; otherwise, it is in SYSLIB input.
2. Execute the linkage editor with INCLUDE and NAME statements for each load module in

either primary or SYSLIB input, depending on the result of procedure 1.

3. When you have isolated the incorrect load module by completing procedure 2, recreate that module and run the job step once again.

In case 3, increase the region size, and resubmit the job.

If the problem recurs for any of the cases, do the following before calling your programming support personnel:

- If an incorrect load module was created, execute the service aid program, AMBLIST, using the OUTPUT = MODLIST option of the LISTLOAD function, and save the resultant listing.
- Make sure that the failing job step ran with the XREF and LIST options.

Problem Determination: Table I, items 6b, 6f, 13, 29.

IEW0241 WARNING—EXTERNAL SYMBOL PRINTED IS DOUBLY DEFINED—ESD TYPE DEFINITIONS CONFLICT.

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

System Action: References to the name are resolved with respect to the first occurrence of the name.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, execute the following functions of the service aid program AMBLIST. Load module symbols can be printed using the LISTLOAD function, specifying the OUTPUT = XREF option. Object module symbols can be printed using the LISTOBJ function of the service aid program.

Problem Determination: Table I, items 6b, 6f, 14, 22, 29.

IEW0254 ERROR—TABLE OVERFLOW—TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: This message appears when either the CESD table or the order table has overflowed. The CESD table for the load module being created overflows for one of two reasons:

- the table has reached its design limit of 32768 entries; or
- the table has reached the maximum number of entries set by the linkage editor.

Similarly, the order table for this link edit overflows for one of the following reasons:

- the table has reached its design limit of 32768 bytes;
- the table has reached the maximum number of bytes set by the linkage editor; or

- the number of operands on the ORDER control statement exceeds one third of either the design limit or the limit set by the linkage editor. (Each operand on the ORDER statement requires three bytes in the order table.)

System Action: Processing terminates.

Programmer Response: Probable user error. Check that no unnecessary modules or control statements are included in the input. Then, perform one of the following operations, depending on which condition caused the overflow.

- If the CESD table has reached its design limit, reduce the number of external symbols in the input by eliminating alternate entry points, or by combining control sections, subroutines, or common areas.
- If either the CESD or the order table has reached the maximum number of entries or bytes set by the linkage editor, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.
- If the order table has reached its design limit, reduce the number of operands on the ORDER statement.

Problem Determination: Table I, items 6b, 6f, 29.

IEW0264 ERROR—TABLE OVERFLOW—INPUT LOAD MODULE CONTAINS TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: Before the linkage editor could process all of the external symbols in an input load module, one of three conditions has occurred: (1) the ESD table has reached its design limit of 32768 entries; (2) the ESD table has reached the maximum number of entries set by the linkage editor; or (3) an input ESD record contains invalid data.

System Action: Processing terminates.

Programmer Response: Probable user error. Depending on which condition caused the table to overflow, either (1) break down any large input module into a number of smaller modules so that the ESD table will not reach its design limit; (2) reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary; or (3) check that the input object modules are complete and valid.

Problem Determination: Table I, items 6b, 6f, 9a, 29.

IEW0272 ERROR—LOAD MODULE FROM LIBRARY SPECIFIED UNACCEPTABLE.

Explanation: When the load module was created, it was marked not editable.

System Action: The load module was not accepted as input.

Programmer Response: Probable user error. If the module is unacceptable because it is marked not editable, it must be re-created before it can be input to the linkage editor. Execute the IEHLIST utility program, using the LISTPDS function with the

FORMAT option, to print out the module's directory entry and show the not editable indicator.

Problem Determination: Table I, items 6b, 6f, 29.

IEW0284 ERROR—DDNAME PRINTED CANNOT BE OPENED.

Explanation: The specified data set cannot be opened. The DD statement defining the data set is missing.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) supply the missing DD statement, or (2) correct erroneous information on the DD statement. If the linkage editor was invoked by a macro instruction such as LINK rather than through the EXEC statement, make sure the ddname list, if passed, was correct.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, format 3.

IEW0294 ERROR—DDNAME PRINTED HAD SYNCHRONOUS ERROR.

Explanation: Either (1) a physical uncorrectable I/O error occurred, or (2) an object module is missing an END card as the last card, or (3) if the data definition name that was printed is for a DD statement that defines a blocked input data set of fixed format, an input record larger than the specified block size or logical record length was found, or (4) the data set may be too full for STOW to write an EOF mark.

System Action: Processing is terminated. The data definition name in the name field of the DD statement for the input data set was printed after the message code. If an input/output error occurred, the information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD EXIT, jobname, stepname, unit address, device type, ddname, operation attempted, error description, block count or BBCCHHR, and access method.

Programmer Response: For any fixed format, specify the correct block size. If the block size was correct and the data set was an input data set, re-create or restore the data set. For condition (4), compress the data set, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEW0302 ERROR—INVALID STATEMENT—SCAN TERMINATED.

Explanation: Either (1) there is an error on a linkage editor control statement, or (2) an OVERLAY control statement was encountered and the OVLY attribute was not specified on the EXEC statement.

System Action: A statement in error is accepted as input up to the point of the error; the OVERLAY statements are ignored, and the module is not in overlay format.

Programmer Response: Probable user error. Either (1) correct the error, if necessary, or (2) specify OVLY on the EXEC statement.

Problem Determination: Table I, items 1, 6b, 6f, 3, 13, 29.

IEW0314 ERROR—MAXIMUM NUMBER OF REGIONS (4) EXCEEDED.

Explanation: There are 5 or more regions specified in this overlay structure.

System Action: Processing is terminated.

Programmer Response: Probable user error. Reduce the number of regions in the overlay structure to 4.

Problem Determination: Table I, items 6b, 6f, 29.

IEW0324 ERROR—MAXIMUM NUMBER OF SEGMENTS EXCEEDED.

Explanation: The number of segments exceeded 255.

System Action: Processing is terminated.

Programmer Response: Reduce the number of segments in the overlay structure to 255, or less.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0332 ERROR—MAXIMUM NUMBER OF ALIASES (64) EXCEEDED, EXCESS IGNORED.

Explanation: More than 64 aliases were specified for the output load module.

System Action: The excess aliases are ignored.

Programmer Response: Probable user error. Either (1) reduce the number of aliases, or (2) create a second copy of the module under a different name with the additional aliases specified.

Problem Determination: Table I, items 6b, 25b, 29.

IEW0342 ERROR—LIBRARY SPECIFIED DOES NOT CONTAIN MODULE.

Explanation: STOW returned a nonzero return code for one of the following reasons.

1. The library specified on an INCLUDE or LIBRARY statement does not contain the module.
2. Permanent I/O error encountered while searching the directory.
3. Insufficient virtual storage available.

System Action: Any references to the module are not resolved. The output load module is marked not executable unless the LET option has been specified.

Programmer Response: Probable user error. Correct the library or module name on the DD, INCLUDE, or LIBRARY control statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 25b, 29.

IEW0354 ERROR—TABLE OVERFLOW—TOO MANY CALLS BETWEEN CONTROL SECTIONS.

Explanation: There are too many V-type address constants referring to external symbols in a program that is structured in overlay. The table recording these V-type address constants has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor.

System Action: Processing terminates.

Programmer Response: Probable user error. If the table has reached its design limit, then either (1) reduce the number of V-type address constants by combining control sections; or (2) change V-type address constants that do not refer across segments to A-type address constants with EXTRN statements. If the table has reached the maximum number of entries set by the linkage editor, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0364 ERROR—TABLE OVERFLOW—INPUT TEXT EXCEEDED MAXIMUM OR TOO MANY CHANGES OF ORIGIN IN INPUT.

Explanation: This message appears when one of three conditions has occurred.

1. The text of a single control section exceeds 512 times the block size for the SYSUT1 or SYSLMOD data set.
2. Either the text I/O table or the text note list table has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor. (The linkage editor uses these tables to account for the text of a load module.)
3. The load module created by this link edit step exceeds the design limit of 16 megabytes.

System Action: Processing terminates.

Programmer Response: Probable user error. Depending on which condition caused the overflow, perform one of the following sets of responses.

For case 1, complete these steps:

1. Verify that all input object modules have ESD records;
2. Increase the linkage editor's buffer space by increasing both value1 and value2 of the SIZE parameter, also proportionally increasing the region or partition size; and
3. Place output and SYSUT1 data on a device with the largest available track size, and ensure that value2 of the SIZE parameter is at least two times larger than the track size of the output or SYSUT1 dataset.

For case 2, if the table has reached its design limit, complete these steps:

1. Reduce the number of ORG statements specified in assembler language routines;
2. Break down the link edit step into a number of link edit steps, with each step performing only part of the necessary function;
3. Sort object module text in ascending address sequence.

Otherwise, if the table has reached the maximum number of entries set by the linkage editor, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.

For case 3, break down the link edit step into a number of link edit steps, with each step performing only part of the necessary function.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0374 ERROR—TABLE OVERFLOW—INPUT CONTAINS TOO MANY RELOCATABLE ADDRESS CONSTANTS OR TOO MANY CONTROL SECTIONS CONTAINING SUCH CONSTANTS.

Explanation: The table that records relocatable address constants has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor.

System Action: Processing terminates.

Programmer Response: Probable user error. If the table has reached its design limit, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary. If the table has reached the maximum number of entries set by the linkage editor, reduce the number of relocatable address constants, possibly by combining two or more control sections into one.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0382 ERROR—TEXT RECORD ID IS INVALID, CARD IGNORED.

Explanation: The ID of the text record refers to an invalid external symbol dictionary entry; that is, it does not refer to a section definition entry or a private code entry. The input deck may be out of sequence or incomplete.

System Action: The record is ignored. Processing continues.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) re-create any module that has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic IEW0382 should recur and isolate the incorrect module. Re-create the module, and rerun the step.

Problem Determination: Table I, items 6b, 6f, 9a, 9b, 13, 29. Have available the output used to isolate the module as indicated above.

IEW0394 ERROR—MEMBER NOT STORED IN LIBRARY—PERMANENT DEVICE ERROR.

Explanation: This is either an input/output error or no space was allocated for the library directory.

System Action: Processing terminates.

Programmer Response: Check the SYSLMOD data set to make sure it is a partitioned data set with space allocated for a directory. If necessary, restore the library to a different volume, and rerun the job. Execute the IEHLIST utility program, using the LISTVTOC function to print out the data set control block for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 13, 29. Have the output from a run with the library on a different volume available.

IEW0404 ERROR—MEMBER NOT STORED IN LIBRARY—NO SPACE LEFT IN DIRECTORY.

Explanation: All the directory blocks allocated when the output data set was created have been used.

Programmer Response: Probable user error. Either (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it; or (2) use a utility program to copy the library, allowing for more directory entries. Edit the member into the new library. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the data set control block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0412 ERROR—ALIAS NOT STORED IN LIBRARY—NO SPACE LEFT IN DIRECTORY.

Explanation: All directory blocks allocated when the output data set was created have been used.

System Action: The ALIAS is not stored in the specified library; however, the member can be referred to by the member name.

Programmer Response: Probable user error. Either (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it, or (2) use a utility program to copy the entire library (except the member whose alias was not stored), and allow for more directory entries. Edit the member into the new library. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the data set control block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0421 WARNING—MEMBER NOT STORED IN LIBRARY—IDENTICAL NAME IN DIRECTORY, WILL TRY TO STORE UNDER 'TEMPNAME'.

Explanation: The output module name has been used previously in the library. The replace function is not specified.

System Action: An attempt is made to store the output module into the library under the name TEMPNAME.

Programmer Response: Probable user error. Either (1) reprocess, using a different name in the SYSLMOD DD statement or NAME statement; or (2) reprocess, and specify the replacement function for the name originally specified in the SYSLMOD DD statement or the NAME statement. Execute the IEHLIST utility program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0432 ERROR—LIBRARY NAME PRINTED CANNOT BE OPENED, DD CARD MAY BE MISSING.

Explanation: The DD statement that defines the library is probably missing. This message also results when a sequential data set (encountered in the processing of an INCLUDE statement) cannot be opened.

System Action: Processing continues without input from the specified library.

Programmer Response: Probable user error. Either supply the missing DD statement, or correct erroneous information on the DD statement. Execute the IEHLIST utility program using the LISTVTOC statement to print out the data set control block for the data set that cannot be opened.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Table II, format 3.

IEW0444 ERROR—TABLE OVERFLOW—TOO MANY DOWNWARD CALLS.

Explanation: There are too many V-type address constants that refer to segments lower in the tree structure. Therefore, the entry list table that records downward calls has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor.

System Action: Processing terminates.

Programmer Response: Probable user error. If the table has reached its design limit, reduce the number of segments in the overlay structure. If the table has reached the maximum number of entries set by the linkage editor, reset the linkage editor's table size by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0454 ERROR—TABLE OVERFLOW—SEGMENT CONTAINS TOO MANY DOWNWARD CALLS.

Explanation: The indicated segment in the overlay structure contains too many V-type address constants that refer to segments lower in the tree structure. The maximum number of downward calls is equal to one subtracted from the result of the SYSLMOD record size divided by 12.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the size of an output load module record by specifying SYSLMOD as a library with a larger block size, or (2) incorporate some of the called control sections in the requesting segment, or (3) divide the requesting segment into two or more segments.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0461 WARNING—SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

Explanation: The NCAL option, restricted no-call, or never-call function was specified for the external reference.

System Action: The automatic library call mechanism does not attempt to resolve the external reference.

Programmer Response: Normally, no response is necessary. Check that the reference is valid and not the result of a keypunch or programming error. If you wish the reference resolved, either (1) add the needed module to the primary or included input data sets; (2) remove the NCAL option, if specified; (3) remove the LIBRARY statement specifying restricted no-call or never-call; or (4) if an input load module contained a never-call reference, re-create the load module without specifying never-call.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9a, 9b, 13, 29. Have available each object module that contains a call to the reference, and the associated source listing.

IEW0472 ERROR—INVALID ALIAS ENTRY POINT IN OVERLAY STRUCTURE.

Explanation: The specified alias entry point is not in the root segment.

System Action: The entry point for the member name is used.

Programmer Response: Probable user error. Respecify the alias, entry point, or overlay structure.

Problem Determination: Table I, items 6b, 6f, 9, 29. Have the module containing the alias entry point and its associated listing available.

IEW0484 ERROR—TABLE OVERFLOW—TOO MANY EXTERNAL SYMBOLS AFFECTED BY RELOCATION.

Explanation: There are too many symbols being relocated. Therefore, the delink table used during linkage editor relocation has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor.

System Action: Processing terminates.

Programmer Response: Probable user error. If the table has reached its design limit, break down the link edit step into a number of link edit steps, with each step performing only part of the necessary function. If the table has reached the maximum number of entries set by the linkage editor, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0492 ERROR—NAME CARD FOUND IN LIBRARY, CARD IGNORED.

Explanation: A NAME statement has been encountered in an included data set or an automatic call library. NAME statements may be placed only in the primary input.

System Action: The record is ignored. Processing continues.

Programmer Response: Remove the NAME statement from the library or sequential data set. Reprocess if the load module is incorrect. Execute the IEBTPCH utility program or print out all included and automatic call library modules.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0502 ERROR—ALIAS NOT STORED IN LIBRARY—PERMANENT DEVICE ERROR.

Explanation: Because of an input/output error, the alias could not be stored in the library directory.

System Action: The load module has already been stored.

Programmer Response: Execution of the module is possible using the member name or aliases already stored. The module can be link edited again with the new alias specified. If message IEW0502 appears again, restore the library to a different volume and rerun the job. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the data set control block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Have the output from a run with the library on a different volume available.

IEW0512 ERROR—INCLUDE STATEMENT SYNTAX CONFLICTS WITH RECORD FORMAT OF SPECIFIED DATA SET—DD NAME PRINTED.

Explanation: The INCLUDE statement syntax conflicts with the characteristics of the data set specified on the DD statement.

System Action: The specified module is ignored.

Programmer Response: Probable user error. Either (1) specify a member name on the INCLUDE or DD statement if the data set is partitioned; or (2) remove all member names from the INCLUDE statement if the data set is not partitioned. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the specified data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0522 ERROR—SPECIFIED DATA SET HAS UNACCEPTABLE RECORD FORMAT—DDNAME PRINTED.

Explanation: The record format of the specified data set is not type U or F and cannot be processed by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Correct the data set specification. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the rejected data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0532 ERROR—BLOCKSIZE OF LIBRARY DATA SET EXCEEDED MAXIMUM—DDNAME PRINTED.

Explanation: The block size of the specified library data set cannot be handled by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Either (1) decrease the block size of the data set, (2) rerun in a larger region or partition, (3) increase value2 of the SIZE parameter to allow for larger buffers, and, if necessary, increase value1 and region size accordingly. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the specified data set. For information on block size, region size, and SIZE parameter values, see *Linkage Editor and Loader User's Guide*.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0543 ERROR—IDENTICAL NAME IN DIRECTORY.

Explanation: The member name already exists in the directory. In the case of a member, an attempt was made to store under TEMPNAME; however, TEMPNAME was also found in the directory.

System Action: The output module is not stored under this member name.

Programmer Response: Probable user error. Either (1) specify a unique member name for the module on the NAME control statement or the SYSLMOD DD statement, or (2) specify the replace function on the NAME statement. Execute the IEHLIST utility

program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0552 ERROR—COMMON PRINTED EXCEEDED SIZE OF CONTROL SECTION WITH IDENTICAL NAME.

Explanation: A named COMMON area has been encountered that is larger than a control section with the same name.

System Action: The linkage editor uses the length specified for the control section. Processing continues.

Programmer Response: Ensure that no named COMMON area is larger than the control section initializing it. FORTRAN programmers should make sure that any named COMMON in a BLOCK DATA subprogram is at least as large as any named COMMON with the same name in any other FORTRAN program or subprogram with which the BLOCK DATA subprogram is to be link edited. To isolate the problem, you can run the step with the NCAL option specified. If the error recurs, the long COMMON occurs in the primary data set or in an included data set. Otherwise, it occurs in a module from the automatic call library. In either case, execute the following functions of the service aid program AMBLIST. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XREF option to list all load module symbols in the appropriate input data sets. Check the listings for all modules that contain the named COMMON in question, and correct the lengths.

Problem Determination: Table I, items 6b, 6f, 14, 29.

IEW0564 ERROR—INVALID TEXT ORIGIN—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: Text has been found that has an origin address outside the limits of the control section to which it belongs.

System Action: Processing is terminated.

Programmer Response: A text record in an object module input to the link edit has an invalid text origin address, probably mispunched. List the object module using the LISTOBJ function of the AMBLIST service aid program.

Examine the ADDR= field of the TXT records to locate the invalid address. Re-create the object module, then reattempt the link edit.

Problem Determination: Table I, items 3, 4, 9a, 27, 29.

IEW0572 ERROR—COMMON PRINTED AND SUBROUTINE HAVE IDENTICAL NAME.

Explanation: This message appears only when the linkage editor is processing an object program originally written in FORTRAN. It is issued when a COMMON defined in the program has the same name as a subroutine.

System Action: Processing continues. The output

module is marked not executable unless the LET option is specified.

User Response: Change the name of either the COMMON or the subprogram so that the names are no longer the same. Compile and link edit the program again.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29. Save the linkage editor output listing.

IEW0581 WARNING—INVALID MEMBER NAME—WILL TRY TO STORE UNDER “TEMPNAME.”

Explanation: The member name to be assigned to the output load module was taken from the SYSLMOD DD statement, but the name was found to be invalid.

System Action: An attempt is made to store the output module into the library under the name TEMPNAME.

Programmer Response: Correct the member name on the SYSLMOD DD statement to conform to the rules for a name on the NAME control statement.

Problem Determination: Table I, items 1, 3, 4, 6b, 27, 29.

IEW0594 ERROR—INPUT DATA SET BLOCKSIZE IS INVALID.

Explanation: The block size for the primary input data (SYSLIN) is not an even multiple of the logical record length, or exceeds the allowable maximum.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Determine whether the values specified in the SIZE parameter are sufficient to accommodate the blocking factor of the primary input data set (SYSLIN). Blocking factors are discussed under “SIZE Option” in *Linkage Editor and Loader User’s Guide*. If the SIZE values are not large enough, increase them and execute the linkage editor step again. The region for the job step must be large enough to allow the size values specified, as described under “EXEC Statement—REGION Parameter,” in *Linkage Editor and Loader User’s Guide*. If the region is not large enough, increase the REGION parameter before executing the linkage editor step again.

If the blocking factor is greater than 40 to 1, or is not a multiple of the logical record length, correct the BLKSIZE field, or re-create the data set, or both. Execute the linkage editor step again. If possible, execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the specified data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0602 ERROR—INPUT FROM OBJECT MODULE IS INVALID—END CARD MISSING.

Explanation: The END card of an object module being processed by the linkage editor is missing.

System Action: Linkage editor processing continues. The load module produced is marked not-executable unless the LET option has been specified.

Programmer Response: If input to the linkage editor was in the form of an object deck, verify that the last card is an END card (END in columns 2, 3, and 4). If the card is not an END card, recompile or reassemble the source program. If input to the linkage editor was not in the form of an object deck, recompile or reassemble the source program with the DECK option specified.

In either case, verify that the last card is an END card. Rerun the linkage editor step using the object deck. Execute the service aid program, AMBLIST, using the LISTOBJ function and save the resultant listing of the questionable object module.

Problem Determination: Table I, items 1, 3, 13, 22, 23, 29.

IEW0614 ERROR—LENGTH NOT SPECIFIED FOR EXTERNAL SYMBOL PRINTED.

Explanation: An object module contained a control section that had a length field containing zero in its external symbol dictionary (ESD) entry, and either (1) the control section was not last in the object module, or (2) the length was not specified on the END card.

System Action: The module was not processed, and the linkage editor terminated processing.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) re-create any module that has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0614 should recur and isolate the incorrect module. Re-create the module, and rerun the step.

Problem Determination: Table I, items 3, 6b, 6f, 9a, 9b, 13, 22, 23, 29.

IEW0622 ERROR—ADDRESS CONSTANT REFERENCES NULL UNNAMED CONTROL SECTION.

Explanation: An address constant has been found that references a symbol defined in an unnamed control section having a length of zero.

System Action: The processing of the input RLD record is terminated at the invalid item. Processing resumes with the next record.

Programmer Response: Either re-create the input (referencing) module, by eliminating or changing the reference, or re-create the referenced module, by eliminating or redefining the symbol being referenced.

Problem Determination: Table I, items 1, 3, 4, 9a, 9b, 23, 27, 29.

IEW0630 ERROR—DDNAME PRINTED HAD SYNCHRONOUS ERROR—XREF ABORTED.

Explanation: A permanent input/output error occurred while attempting to produce a cross-reference table. The output module was successfully edited.

System Action: The information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD

IEW

EXIT, jobname, stepname, unit address, device type, ddname, operation attempted, error description, block count or BBCCHHR, access method.

Programmer Response: Rerun the linkage editor step. If possible, execute the IEHLIST utility program, using the LISTVTOC function to print out the data set control block for the data set specified in the SYNAD output.

Problem Determination: Table I, items 1, 3, 13, 29. Save the output from the SYNADAF macro instruction.

IEW0642 ERROR—SYMBOL PRINTED APPEARED ON CONTROL STATEMENT BUT WAS NOT MATCHED.

Explanation: Either (1) a control section name or common name appearing on an ORDER or PAGE control statement was not found in the primary or additional input sources; or (2) alignment or sequencing of a label reference (such as a FORTRAN ENTRY statement) was specified.

System Action: The name is ignored. Processing continues.

Programmer Response: Probable user error. Either (1) include the specified control section or common area in the input, or delete the name from the control statement; or (2) verify that only control section or common area names are specified on the control statement.

Have available the job stream and associated output listings.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29.

IEW0652 ERROR—CONFLICT IN ORDER SPECIFIED FOR SYMBOL PRINTED.

Explanation: A control section or common area was named more than once on one or in a series of ORDER statements. After a name appears once, any subsequent use of the name is invalid unless the name appears as the last operand on one ORDER statement and as the first operand on the next.

System Action: The first use of the name determines the order of the control section or common area in the output load module. Any subsequent use of the name is ignored, as is the balance of the control statement it appears on. Any control sections or common areas named on the balance of the statement are included in the output load module but are not sequenced. Linkage editor processing continues.

Programmer Response: Probable user error. Correct the ORDER statement so the name appears only once or appears as the last operand on one statement and the first operand on the next.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29.

IEW0664 ERROR—SIZE VALUE SPECIFIED NOT LARGE ENOUGH FOR TABLE REQUIREMENTS—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: The space available for minimum internal tables was insufficient.

System Action: Linkage editor processing terminates.

Programmer Response: Rerun the linkedit, increasing the space available to the linkage editor by increasing VALUE1 (or decreasing VALUE2) of the SIZE option, making sure the region or partition size is also increased if necessary.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

Explanation: The linkage editor has added the data specified on the IDENTIFY control statement to the IDR record for the control section indicated.

System Action: Processing continues.

Programmer Response: None. This message is for information only.

IEW0682 ERROR—CONTROL SECTION NAME ON AN IDENTIFY CONTROL STATEMENT IS INCORRECT OR THE STATEMENT IS MISPLACED—IDENTIFY DATA IGNORED.

Explanation: The control section named on the IDENTIFY control statement either (1) does not exist in the load module, or (2) had not been read in by the linkage editor by the time it encountered the IDENTIFY statement.

System Action: The data specified on the IDENTIFY statement is ignored. Linkage editor processing continues.

Programmer Response: Probable user error. Check the IDENTIFY statement to verify that the control section name has been specified correctly and that the IDENTIFY statement has been placed correctly in the input. Verify that the required control section has been included in the input to the linkage editor step. Correct the input, and rerun the linkage editor step.

Problem Determination: Table I, items 1, 3, 6a, 6b, 6f, 13, 29.

IEW0694 ERROR—TABLE OVERFLOW—SIZE VALUE SPECIFIED NOT LARGE ENOUGH FOR CSECT IDR INPUT—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: The space available for CSECT identification records was insufficient for the actual input. The indicated table (the user data table, zap data table, or translator table) has overflowed for one of two reasons: the table has reached its design limit of 32768 entries, or has reached the maximum number of entries set by the linkage editor.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. If the table has reached its design limit, break down the link edit step into a number of smaller link edit steps, with each step performing only part of the necessary function. If the table has reached the maximum number of entries set by the linkage editor, reset the linkage editor's table space by increasing value1 (or decreasing value2) of the SIZE parameter, also increasing the region or partition size if necessary.

Problem Determination: Table I, items 1, 6b, 6f, 29.

IEW0704 UNRECOVERABLE ERROR DETECTED IN CSECT IDR INPUT—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: An unrecoverable error was detected while processing an input module containing CSECT identification (IDR) records. The cause of the error was a load module IDR record that contained an invalid code in its subtype field (the third byte of the record).

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Examine all data sets containing input load modules. Check all secondary input sources (either defined by the SYSLIB DD statement or specified on an INCLUDE statement). If any user modifications were made to any record other than text in any of these modules, re-create any affected modules from the source or object level and execute the linkage editor step again. Execute the LISTLOAD function of the service aid program, AMBLIST, specifying the OUTPUT= BOTH option to list all load modules in the input to the linkage editor. Execute the service aid program, AMBLIST, with the LISTIDR function to list CSECT IDR records for all members of the SYS1.LINKLIB data set that was cataloged on the system at the time of the error.

Problem Determination: Table I, items 1, 3, 6b, 13, 22, 29.

IEW0714 ERROR—MEMBER NOT STORED IN LIBRARY—STOW WORKSPACE UNAVAILABLE.

Explanation: The conditional GETMAIN macro instruction issued by the STOW routine to obtain work space in virtual storage was unsuccessful (that is, not enough contiguous virtual storage was available).

System Action: The member is not stored in the specified library; linkage editor processing is terminated.

Programmer Response: Rerun the linkage editor job step. The error may be a temporary one caused by fragmentation of virtual storage. If the problem persists, check for user-written programs or user-written SVC (supervisor call) routines that may be executing concurrently with the linkage editor and causing virtual storage fragmentation, as would occur when a GETMAIN macro is issued without a FREEMAIN in an uncontrolled loop.

Problem Determination: Table I, items 1, 2, 3, 13, 29. Table II, format 1, using TRACE=SVC.

IEW0722 ERROR—INVALID ALIAS NAME.

Explanation: An ALIAS name has been specified that either does not begin with an alphabetic character, \$, #, @, or 12-0 punch, or contains a character that is not alphameric, \$, #, @, or 12-0 punch.

System Action: The ALIAS name is ignored.

Programmer Response: Correct the invalid character(s) in the ALIAS name according to the rules above, and rerun the link edit job step.

Problem Determination: Table I, items 3, 4, 6b, 20, 27, 29.

IEW0731 WARNING—ALIAS MATCHES MEMBER NAME—ALIAS IGNORED.

Explanation: An ALIAS name has been specified that duplicates the member name of the output load module.

System Action: The ALIAS name is ignored.

Programmer Response: Either (1) delete the ALIAS name, or (2) make the ALIAS name unique.

IEW0740 THE INDICATED ACTION WAS TAKEN FOR AN EXPAND REQUEST.

Explanation: The linkage editor has increased the size of a control section or named common section by the number of bytes specified in an EXPAND control statement. Details of the expansion are provided in the message text that appears immediately following the EXPAND control statement.

System Action: Processing continues.

Programmer Response: None. This message is for information only; no error has occurred and no response is required.

IEW0751 WARNING—INVALID AMODE/RMODE COMBINATION FOUND IN MODE CONTROL STATEMENT—IGNORED.

Explanation: An invalid combination of AMODE and RMODE parameters was specified on the MODE control statement.

System Action: Processing continues but the MODE control statement is ignored as a source of AMODE/RMODE data applicable to the output load module.

Programmer Response: Either (1) remove the MODE control statement, or (2) correct the MODE control statement so that the combination of AMODE/RMODE specifications is valid.

Problem Determination: Table I, items 1, 3, 4, 6a, 6b, 13, 15, 20, 27, 29.

IEW0761 WARNING—INVALID AMODE/RMODE COMBINATION FOUND IN PARM FIELD—IGNORED.

Explanation: An invalid combination of AMODE and RMODE parameters was specified in the PARM field of the EXEC statement.

System Action: Processing continues, but the PARM field of the EXEC statement is ignored as a

source of AMODE/RMODE data applicable to the output load module.

Programmer Response: Either (1) remove the AMODE and RMODE specification(s) from the PARM field, or (2) correct the PARM field so that the combination of AMODE/RMODE specifications is valid.

Problem Determination: Table I, items 1, 3, 4, 6a, 13, 15, 27, 29.

IEW0771 WARNING—AMODE/RMODE DATA IN MODE CONTROL STATEMENT INCOMPATIBLE WITH OVLY OPTION—IGNORED.

Explanation: The AMODE and/or RMODE parameters specified on the MODE control statement are incompatible with the overlay option.

System Action: Processing continues, but the MODE control statement is ignored. The overlay load module is assigned an AMODE of 24 and an RMODE of 24.

Programmer Response: Either (1) remove the mode control statement, or (2) remove the OVLY option from the PARM field of the EXEC statement.

Problem Determination: Table I, items 1, 3, 4, 6a, 6b, 13, 15, 20, 27, 29.

IEW0781 WARNING—AMODE/RMODE DATA IN PARM FIELD INCOMPATIBLE WITH OVLY OPTION—IGNORED.

Explanation: The AMODE and/or RMODE parameters specified in the PARM field of the EXEC statement are incompatible with the overlay option.

System Action: Processing continues, but the AMODE and/or RMODE data in the PARM field of the EXEC statement is ignored. The overlay load module is assigned an AMODE of 24 and an RMODE of 24.

Programmer Response: Either (1) remove the AMODE and/or RMODE options from the PARM field of the EXEC statement, or (2) remove the OVLY option from the PARM field of the EXEC statement.

Problem Determination: Table I, items 1, 3, 4, 6a, 13, 15, 27, 29.

IEW0791 WARNING—INVALID AMODE/RMODE COMBINATION IN ESD DATA FOR THE NAMED CSECT—IGNORED.

Explanation: An invalid AMODE/RMODE combination, 24/ANY, was found in the ESD data.

System Action: Processing continues, but the control section is processed as having an AMODE of 24 and an RMODE of 24.

Programmer Response: Either (1) correct the ESD data to indicate a valid AMODE/RMODE combination, or (2) recompile/reassemble the source program to obtain an object module without the erroneous AMODE/RMODE indicators, or (3) correct the processor generating the object module to provide only valid AMODE/RMODE indicators.

Problem Determination: Table I, items 1, 3, 4, 6a, 6b, 9a, 13, 15, 27, 29.

IEW0801 WARNING—TABLE OVERFLOW—TOO MANY EXTERNAL SYMBOLS —MAP—XREF ABORTED

Explanation: There are too many external symbols for the module MAP.

System Action: Processing continues without MAP or XREF.

Programmer Response: Increase Value 2 of the SIZE parameter to allow for larger buffers. If necessary, increase the Value 1 and region size accordingly. For information on the region size and the size value parameters, see *Linkage Editor and Loader*.

IEW0813 ERROR—OUTPUT MODULE CONTAINS SPLIT RELOCATABLE ADDRESS CONSTANT, SIZE VALUE 2 SPECIFIED NOT LARGE ENOUGH, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: When a split relocatable address constant requires processing, the maximum sysmod record length must be equal to or less than half the load module text buffer size. The maximum sysmod record size is larger than half the text buffer size.

System Action: The system does not relocate the split relocatable address constant, and marks the load module non-executable.

Programmer Response: Increase VALUE 2 of the size parameter.

IEW0824 ERROR - DDNAME PRINTED HAD BLDL ERROR.

Explanation: A permanent I/O error occurred while attempting a BLDL.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Ensure that the ddname-defined data set is partitioned. If it is, recreate or restore the data set and rerun the job step. If it is not, correct the error.

Problem Determination: Table I, items 1, 6A, 25C, 29.

IEW0984 ERROR—SYSPRINT BLOCKSIZE EXCEEDS MAXIMUM—LINKEDIT PROCESSING TERMINATED.

Explanation: The block size specified for the SYSPRINT data set cannot be handled by the linkage editor.

System Action: The data set is not opened. Linkage editor processing terminates.

Programmer Response: Probable user error. Either (1) decrease the block size of the data set, or (2) decrease value2 of the SIZE option to allow for a larger SYSPRINT buffer, and if necessary, increase value1 accordingly. Increase the region or partition size correspondingly, if necessary. Rerun the linkage editor step. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the SYSPRINT data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0994 ERROR—SYSPRINT DD CARD MISSING—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: The SYSPRINT data set cannot be opened.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. The SYSPRINT DD statement is probably missing. Supply the missing SYSPRINT DD statement, and execute the job step again.

Problem Determination: Table I, items 1, 3, 7, 7a (SYS1.LINKLIB), 13, 29. Table II, format 3.

Problem Determination: Execute the failing job step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 3, 6a, 9b, 13, 22, 23, 29.

IEW1024 ERROR—DDNAME CANNOT BE OPENED.

Explanation: The SYSLIN data set cannot be opened. The DD statement defining the data set is missing or incorrect.

System Action: Processing terminates. The loader returns to the caller with a condition code of 16.

Programmer Response: Probable user error. Either (1) supply a missing SYSLIN DD statement, (2) correct erroneous information on the SYSLIN DD statement, or (3) make sure the correct DDNAME has been specified for the SYSLIN data set. If the loader was invoked by a macro instruction such as LINK, rather than through the EXEC statement, make sure that the SYSLIN ddname, if passed, is correct.

Problem Determination: Table I, items 1, 29. Either have the output of the SYSGEN of the loader available, or execute the AMASPZAP service aid program with the DUMPT IEWLOADR IEWLDDDEF statement, and save the resulting dump of the loader default ddnames.

Loader Program Messages

IEW1001 WARNING—UNRESOLVED EXTERNAL REFERENCE (NOCALL SPECIFIED).

Explanation: The NCAL, NOCALL, or NORES option or never-call function was specified for the external reference.

System Action: The SYSLIB data set is not searched if the NCAL or NOCALL option has been specified. The link pack area queue is not searched if the NORES option has been specified. Neither the SYSLIB data set nor the link pack area queue is searched if the ER is marked 'never-call' from a previous linkage editor run.

Programmer Response: Normally, no response is necessary. If you wish the reference resolved, either (1) add the needed module to the SYSLIN input data set; (2) remove the NOCALL, NCAL, or NORES option, if specified; or (3) if an input load module contained a never-call reference, re-create the load module without specifying never-call.

Problem Determination: Run the failing step, using the linkage editor instead of loader, and save the resulting output. Table I, items 6a, 9b, 13, 23, 29. Have available each object module that contains a call to the reference.

IEW1034 ERROR—DDNAME HAD SYNCHRONOUS ERROR.

Explanation: A physical uncorrectable input/output error occurred. If it occurred on a blocked data set, the block size may have been specified incorrectly.

System Action: The message supplied by the SYNADAF macro was printed. Processing was terminated.

Programmer Response: For any fixed format, specify the correct block size. If the block size was correct and the data set was an input data set, re-create or restore the data set.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 29.

IEW1012 ERROR—UNRESOLVED EXTERNAL REFERENCE.

Explanation: The external reference was not found on the SYSLIB-defined data set or in the link pack area.

System Action: No attempt is made to execute the module unless the LET option is specified.

Programmer Response: Probable user error. Make sure that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the needed module or alias to either (1) the SYSLIB data set, (2) the link pack area, or (3) the SYSLIN input data set. Make sure the SYSLIB DD statement has been specified if needed. If the needed module is in a SYSLIB or SYSLIN partitioned data set, execute the IEHLIST utility program using the LISTPDS statement to print out the data set directory.

IEW1044 ERROR—UNACCEPTABLE RECORD FORMAT (VARIABLE ON INPUT).

Explanation: Only object module (FIXED record format) and load module (UNDEFINED record format) data sets are accepted by the loader.

System Action: Processing was terminated. The loader returns to caller with a condition code of 16.

Programmer Response: Probable user error. (1) Make sure that the record format specification is correct. The record format may have been misspelled. (2) Make sure that the correct data set has been specified. Execute the IEHLIST utility program using the LISTVTOC statement to print out the data set control block for the input data sets, and save the resulting output.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 6a, 29.

IEW

IEW1053 ERROR—I/O ERROR WHILE SEARCHING LIBRARY DIRECTORY.

Explanation: A permanent I/O error occurred while attempting a BLDL.

System Action: Automatic library call processing is terminated.

Programmer Response: Ensure that the SYSLIB defined data set is partitioned. If it is, re-create or restore the data set and rerun the job step.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 6a, 25c, 29.

IEW1072 ERROR—BLKSIZE IS INVALID.

Explanation: In the specified data set, the BLKSIZE was not an integral multiple of LRECL.

System Action: BLKSIZE was rounded up to the next higher multiple of LRECL and processing continued.

Programmer Response: Probable user error. Change BLKSIZE to be an integral multiple of LRECL. If the data set was an input data set, execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block, and save the resulting output.

Problem Determination: Table I, items 1, 29.

IEW1082 ERROR—INVALID LENGTH SPECIFIED.

Explanation: The length of a control section in an object module was not specified in either its FSD entry or on the END record, and text was received for the control section.

System Action: The total length of the text received was used.

Programmer Response: Check if an END record in any object module is missing or has been replaced. If so, re-create the object module and rerun the job.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 13, 22, 23, 29.

IEW1093 ERROR—NO TEXT RECEIVED.

Explanation: No valid text has been received for the loaded module.

System Action: The loader returns to the caller with a condition code of 12.

Programmer Response: Probable user error. (1) Make sure that the SYSLIN data was specified correctly. (2) Check other error messages issued for cause of error (for example, invalid record). Correct the error, and rerun the job step. Execute the service aid program, AMBLIST, using the LISTOBJ function and save the resultant listing of the questionable input module. Have all SYSLIN input available.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 6a, 29.

IEW1102 ERROR—DOUBLY DEFINED ESD.

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

System Action: References to the name are resolved with respect to the first occurrence of the name.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, execute the following functions of the service aid program AMBLIST. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XREF option to list all load module symbols. Object module symbols can be printed using the IEBTPCH utility program with the PRINT statement.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 29. Have all object and load module input available.

IEW1112 ERROR—INVALID 2-BYTE ADCON.

Explanation: A relocatable A-type or V-type address constant of less than 3 bytes has been found in the input.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Check assembler language input for Y-type address constants, which cannot be relocated. Delete or correct the invalid address constant.

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 9a, 29. Have object module input and associated listings available.

IEW1123 ERROR—INVALID RECORD FROM LOAD MODULE.

Explanation: An unrecognizable type record was found while reading a load module.

System Action: The record is ignored and processing continues.

Programmer Response: (1) Check that all input data sets are specified correctly on DD statements. (2) If load module input occurs in the SYSLIN data set, rerun the step with the NOCALL option specified. If error message IEW1123 recurs, the incorrect load module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect load module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect load module. When the incorrect load module is isolated, re-create it and rerun the job step.

Problem Determination: Execute the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 9b, 29.

IEW1132 ERROR—INVALID ID RECEIVED.

Explanation: Input contains an invalid external symbol ID.

This error is the result of the following conditions:

1. The SD for an ID does not appear in the input module.
2. Text is received before the external symbol dictionary (ESD) defining it is received.
3. An RLD is received before the ESDs to which it pertains.
4. The ID defining the entry point on the END card is not a defined SD, PC, or LR ESD type.

System Action: The invalid item is ignored.

Programmer Response: (1) Check that input object modules are complete and that assembly or compilation errors did not occur when object modules were generated. (2) Rerun the step with the NOCALL option specified. If error message IEW1132 recurs, the incorrect module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect module. When the incorrect module is isolated, re-create it and rerun the step.

Problem Determination: Run the failing step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 9b, 29. If an incorrect object module was created, have the module and its associated listing available.

IEW1141 WARNING—CARD RECEIVED NOT AN OBJECT RECORD.

Explanation: The card read has a blank in column one.

System Action: The card is ignored.

Programmer Response: Probable user error. Check input for a blank card or linkage editor control card. If other errors occur, re-create all object modules that have been in card form.

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 1, 3, 6a, 13, 29.

IEW1152 ERROR—INVALID RECORD FROM OBJECT MODULE.

Explanation: An unrecognizable record type was received while reading an object module.

System Action: The card is ignored.

Programmer Response: Probable user error. Check object module input for invalid records. Column 1 should contain a 12-2-9 punch. Columns 2 through 4 should contain a TXT, RLD, ESD, END, or SYM identifier. Remove incorrect records or re-create the module, and rerun.

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 9a, 29. Have object module input available.

IEW1161 WARNING—NO ENTRY POINT RECEIVED.

Explanation: No entry point was specified in the parameter field or END card. The END card entry point specification could be incorrect (that is, invalid ID, bad column alignment, etc.). The parameter field specification could also be incorrect.

System Action: The first assigned address is used as the entry point.

Programmer Response: Probable user error. (1) Specify the entry point name in the loader parameter list, EP=. If the entry point occurs in load module input, this parameter must be specified. (2) If you cannot use the EP= parameter and the entry point occurs in an object module, make sure that the module is included in the SYSLIN or SYSLIB input, and that an entry point was specified during compilation or assembly.

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 29. Have the module containing the entry point and its associated listing available.

IEW1173 ERROR—ENTRY POINT RECEIVED BUT NOT MATCHED.

Explanation: The entry point name specified in the parameter field or on an END card was not matched to an incoming LR, SD, or PC.

System Action: The first assigned address is used as the entry point address.

Programmer Response: Probable user error. (1) Check to see if the EP= parameter was specified correctly. (2) Check to see if the module containing the entry point is included in either the SYSLIN or SYSLIB input. (3) Check other messages issued for the cause of error (that is, invalid record).

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 9a, 9b, 29.

IEW1182 ERROR—NO END CARD RECEIVED.

Explanation: An END card is missing for an input object module.

System Action: Processing continues.

Programmer Response: Probable user error. Check input object modules. The last record of each should have a 12-2-9 punch in column 1 and the END identifier in columns 2 through 4. If an END record is missing, re-create the module and rerun.

Problem Determination: Rerun the step, using the linkage editor instead of the loader, and save the resulting output. Table I, items 6a, 9a, 29. Have object module input available.

IEW1194 ERROR—AVAILABLE STORAGE EXCEEDED.

Explanation: The amount of virtual storage available to the loader is insufficient to allow construction of the required tables and loaded program.

System Action: The loader returns to the caller with a completion code of 16.

Programmer Response: Probable user error. (1) Increase the SIZE parameter, or (2) make sure the

REGION specification is sufficient, or (3) make sure that sufficient virtual storage is available to satisfy the SIZE specification. Either have the output of the SYSGEN of the loader available or execute the AMASPZAP service aid program with the DUMPT IEWLOADR IEWLDDDEF statement, and save the resulting dump of the loader's default SIZE value.

Problem Determination: Table I, items 1, 6a, 13, 29.

IEW1204 ERROR—TOO MANY EXTERNAL NAMES IN INPUT MODULE.

Explanation: The external symbol ID is too large to fit in the translation table.

System Action: Processing is terminated. The loader returns to the caller with a completion code of 16.

Programmer Response: If the program is large and/or complex, either (1) run the step using the linkage editor, or (2) break down the large program module into a number of smaller routines. If the program is not particularly large or complex, check other messages issued for the cause of error. Object module input may be incomplete or mispunched. Re-create the object modules, and rerun the job.

Problem Determination: Table I, items 6a, 9a, 9b, 13, 29.

IEW1214 ERROR—IDENTIFICATION FAILED—DUPLICATE PROGRAM NAME FOUND.

Explanation: When trying to identify the loaded program to the system, the IDENTIFY routine found a duplicate program name in the user's region or partition or in the link pack area.

System Action: Processing is terminated. The loader returns to the caller with a condition code of 16.

Programmer Response: Probable user error. Specify a unique program name, using the NAME option, or let the loader default the name to **GO. Rerun the job.

Problem Determination: Table I, items 3, 13, 29. Execute the IEBTPCH utility program to obtain a listing of the SYS1.PARMLIB data set. Save the output.

IEW1224 ERROR—IDENTIFICATION FAILED.

Explanation: The IDENTIFY routine located an error in the parameter list passed to it by the loader. The appropriate IDENTIFY macro instruction support may not be included in the operating system.

System Action: Processing is terminated. The loader returns to the caller with a condition code of 16.

Programmer Response: Verify that the appropriate IDENTIFY macro instruction support is included in the system. The release level of the IDENTIFY macro instruction should be the same as the release level of the loader.

Problem Determination: Table I, items 3, 13, 29.

IEW1232 ERROR—COMMON EXCEEDS SIZE OF CSECT WITH SAME NAME.

Explanation: A named COMMON area has been encountered that is larger than the control section with same name.

System Action: The loader uses the length of the control section. Processing continues.

Programmer Response: Ensure that no named COMMON area is larger than the control section initializing it. FORTRAN programmers should make sure that any named COMMON in a BLOCK DATA subprogram is at least as large as any named COMMON with the same name in any other FORTRAN program or subprogram with which the BLOCK DATA subprogram is to be link edited. To isolate the problem, you can run the step with the NCAL option specified. If the error recurs, the long COMMON occurs in the primary data set. Otherwise, it occurs in a module from the automatic call library. In either case, execute the following functions of the service aid program AMBLIST. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XRFF option to list all load module symbols in the appropriate input data sets. Check the listings for all modules that contain the named COMMON in question, and correct the lengths.

Problem Determination: Table I, item 9.

IEW1241 WARNING—INVALID AMODE/RMODE COMBINATION FOUND IN PARM FIELD—IGNORED.

Explanation: An invalid combination of AMODE and RMODE parameters was specified in the PARM field of the EXEC statement.

System Action: Processing continues, but the PARM field of the EXEC statement is ignored as a source of AMODE/RMODE data for the loaded module.

Programmer Response: Either (1) remove the AMODE and RMODE specification(s) from the PARM field, or (2) correct the PARM field so that the combination of AMODE/RMODE specifications is valid.

Problem Determination: Table I, items 1, 3, 4, 6a, 13, 15, 27, 29.

IEW1251 WARNING—INVALID AMODE/RMODE COMBINATION IN ESD DATA FOR THE NAMED CSECT—IGNORED.

Explanation: An invalid AMODE/RMODE combination, 24/ANY, was found in the ESD data.

System Action: Processing continues, but the control section is processed as having an AMODE of 24 and an RMODE of 24.

Programmer Response: Either (1) correct the ESD data to indicate a valid AMODE/RMODE combination, or (2) recompile/reassemble the source program to obtain an object module without the erroneous AMODE/RMODE indicators, or (3) correct the processor generating the object module to provide only valid AMODE/RMODE indicators.

Problem Determination: Table I, items 1, 3, 4, 6a, 9a, 13, 15, 27, 29.

IEW1262 ERROR—INVALID 3-BYTE ADCON.

Explanation: A 3-byte address constant cannot be relocated, because it requires more than the 24 bits available for relocation.

System Action: Processing continues but the 3-byte address constant is not relocated.

Programmer Response: Either (1) redefine the address constant, as a 4-byte address constant, or (2) specify an RMODE of 24 bits for the loaded module.

Problem Determination: Table I, items 1, 3, 4, 6a, 9a, 9b, 13, 15, 19, 21, 22, 23, 27, 29.

IEW1271 WARNING—INCONSISTENT RMODE DATA—RMODE = 24 FORCED.

Explanation: The loading of the module was initiated above the 16-megabyte virtual storage line because the external symbol dictionary (ESD) data for the first control section encountered indicated an RMODE of ANY. However, a control section has been encountered that indicates an RMODE of 24 in the ESD data.

System Action: The loading of the module above the 16-megabyte virtual storage line is stopped, and loading is restarted below the 16-megabyte virtual storage line.

Programmer Response: Either (1) specify an RMODE and an AMODE (if necessary) in the PARM field of the EXEC statement for the loaded module; (2) cause the control section that indicates an RMODE of 24 in the ESD data to be the first control section encountered; or (3) recode and/or recompile/reassemble the source program for the control section that has an RMODE of 24, making the RMODE = ANY.

Problem Determination: Table I, items 1, 3, 4, 6a, 9, 13, 15, 27, 29.

IEW1991 ERROR—USER PROGRAM HAS ABNORMALLY TERMINATED.

Explanation: This message is issued by the loader when it determines that the loaded program has terminated abnormally.

System Action: Loaded program execution is terminated abnormally, and control is returned to the loader. (Unless the user has included a SYSUDUMP DD statement for the loaded program, this message is the only indication that the program has terminated abnormally.)

Operator Response: None.

Programmer Response: To obtain a dump to aid in determining the cause of the abnormal termination, include a SYSUDUMP DD statement for the loaded program and rerun the job.

Problem Determination: Table I, items 3, 13, 29.

SMF Dump Program Messages (IFA)

Component Name	IFA
Program Producing Message	SMF Dump Program IFASMFDP
Audience and Where Produced	For programmer: SYSPRINT. For operator: console.
Message Format	xx IFAnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: A Action; operator must perform a specific action. I Information; no operator action is required. text Message text.
Related Publications	<i>MVS/XA SPL: Initialization and Tuning Guide, GC28-1149</i> <i>MVS/XA SPL: System Macros and Facilities, LC28-1150 and LC28-1151</i> <i>MVS/XA SPL: System Management Facilities (SMF), GC28-1153</i> <i>MVS/XA SPL: TSO, GC28-1173</i> <i>MVS/XA VSAM Administration Guide, GC26-4015</i> <i>MVS/XA VSAM Administration: Macro Instruction Reference, GC26-4016</i>

IFA001I DCB OPEN FAILED FOR DUMPIN DATA SET
Explanation: The data set defined by the DUMPIN DD statement failed to be opened successfully. Message IEC130I is also issued if the DD statement is missing.
System Action: The job step is terminated.
Programmer Response: Probable user error. Provide a DD statement if it is missing and run the job again.
Problem Determination: Table I, items 1, 4, 29, (if the DD statement is present).

IFA002I DCB OPEN FAILED FOR DUMPOUT DATA SET
Explanation: The data set defined by the DUMPOUT DD statement failed to be opened successfully. Message IEC130I is also issued if the DD statement is missing.
System Action: The job step is terminated.
Programmer Response: Probable user error. Provide a DD statement if it is missing.
Problem Determination: Table I, items 1, 4, 29, (if the DD statement is present).

IFA004I OUTPUT BLOCKSIZE IS SMALLER THAN INPUT
Explanation: The blocksize of the input data set is greater than the blocksize of the output data set.
System Action: The job step is terminated.
Programmer Response: Make sure the output blocksize is not smaller than the input blocksize.

Problem Determination: Table I, items 1, 4, 29.

IFA005I PERMANENT I/O ERROR DIAGNOSIS err
Explanation: A permanent I/O error has occurred on the DUMPIN or DUMPOUT data set. The error description portion is error diagnosis produced by the SYNADAF error analysis routine.
System Action: The job step is terminated.
Programmer Response: Correct the error condition indicated in the message text.
Problem Determination: Table I, items 1, 13, 29.

IFA006A REQUEST MADE TO DUMP ACTIVE SMF DATA SET - REPLY CANCEL
Explanation: The SMF dump program is attempting to dump the active SMF data set. This request is invalid and must be canceled because SMF records would have been lost.
System Action: The SMF dump program enters a wait pending the operator's reply.
Operator Response: Enter REPLY xx,'CANCEL' to acknowledge the cancelation of the SMF dump program. If the wrong SMF data set was specified in the dump program, enter the program to dump the correct data set.

To dump the currently active data set, enter the SWITCH SMF or HALT EOD command from the console. Either command will activate the inactive SMF data set if it is empty and free the currently active one for dumping. If the inactive SMF data set is full, it must be dumped prior to issuing the above commands or data will be lost.

IFA

Problem Determination: Table I, items 2, 29. Have a copy of the SMF dump procedure.

IFA007I SMF DUMP CANCELLED

Explanation: This message is issued to notify the operator that a program attempting to dump the SMF data set has been canceled.

System Action: The program IFASMFDP is canceled.

Operator Response: Enter the SMF dump program to dump the correct SMF data set. If a dump of the active SMF data set is desired first enter a SWITCH SMF or HALT EOD command from the console. Either command will activate the inactive SMF data set if it is empty and free the currently active one for dumping via the SMF dump program IFASMFDP. If the inactive SMF data set is full, it must be dumped prior to entering the above commands or data will be lost.

Problem Determination: Table I, items 2, 29. Have a copy of the SMF dump procedure available.

IFA008I SMF DUMP CANCELLED - REQUEST MADE TO DUMP ACTIVE DATA SET

Explanation: This message is issued to notify the programmer that the SMF dump program attempted to dump the active SMF data set and has been canceled.

System Action: The job step is terminated.

Programmer Response: If the wrong SMF data set was specified in the dump program, enter the program to dump the correct data set. If you want to dump the currently active data set, that data set must be made inactive by the operator before the request will be honored, (because SMF records would be lost).

Problem Determination: Table I, items 1, 2, 4, 29. Have a copy of SMF dump procedures available.

IFA009I INVALID RECORD ENCOUNTERED. TTR = xxxxxx. DUMP TERMINATED.

Explanation: While processing the input data set, SMF dump processing encountered a segmenting error. Records longer than 4K are segmented and they must have the correct segment flags or the system issues this message. xxxxxx is the track and record number of the record that caused the error.

System Action: SMF dump processing terminates.

Programmer Response: Analyze the SMF record for invalid data.

Problem Determination: Table I, items 2, 3, 4, 13, 29, and 36a or b.

IFA010I SMF DUMP PARAMETERS
IFA010I keywd [val] -- orig

Explanation: This message lists the options in effect for the SMF dump program. It includes the option (keywd), its value (val), if applicable, and the origin (orig) of the option (SYSIN or DEFAULT).

System Action: SMF dump processing continues.

Programmer Response: None.

IFA011I SMF SYSIN DATA SET
{inddname|outddname}
CANNOT BE {OPENED|READ|WRITTEN
TO|CLOSED}

IFA011I {JOB TERMINATED|
NO FURTHER PROCESSING OF THIS DATA
SET}

IFA011I [RETURN CODE = rc
{FEEDBACK CODE = fc|ERROR CODE = ec}]

Explanation: The SMF dump processor was unable to open, read, write to, or close the indicated data set. In the message, inddname is the ddname in a SYSIN INDD parameter; outddname is the ddname in an OUTDD parameter.

The last line of the message appears when the error occurred while processing a VSAM data set. Explanations of the return code, feedback code, and error code appear in *VSAM Administration: Macro Instruction Reference*. This message might be accompanied by a VSAM error message that further identifies the problem.

System Action: The SMF dump job terminates if the CLEAR or ALL option was specified for any VSAM input data set and the error occurred for an output data set. In all other cases, dump processing continues, but there is no further processing of the indicated data set. (If the indicated data set is an output data set, data is dumped to the output data sets not affected by the error.)

Programmer Response: Check the JCL for the job. Be sure it includes a DD statement for each input and output ddname specified in the SYSIN parameters as well as a SYSIN DD statement. If DUMPIN or DUMPOUT (the default ddname for the input or output data set) appears in the message, include a DD statement with the same ddname. Check that each DD statement correctly defines the data set.

If the JCL is correct and the message contains VSAM codes, see *VSAM Administration: Macro Instruction Reference*, for the appropriate response to the return code and the VSAM section of this manual for the explanation of the accompanying VSAM message.

Correct the problem and rerun the SMF dump program, if required.

Problem Determination: Table I, items 1, 4, 13, 22.

IFA012I DSORG FOR inddname CANNOT BE
DETERMINED

IFA012I {JOB TERMINATED|
NO FURTHER PROCESSING OF THIS DATA
SET}

Explanation: SMF dump processing could not determine whether the indicated data set is a VSAM or QSAM data set. In the message, inddname is the ddname of an input data set specified in a SYSIN INDD parameter.

System Action: If the CLEAR or ALL option was specified for this data set, or for any input VSAM data set, the SMF dump job terminates. Otherwise, processing continues, although there is no further processing of this data set.

- Programmer Response:** Check the JCL for the job. Be sure it includes a DD statement for the specified ddname and that the DD statement correctly defines the data set.
- Correct the problem and rerun the SMF dump program to process the input data set.
- IFA013I** **'CLEAR' OPTION IS VALID ONLY FOR VSAM DATA SETS. OPTION IGNORED FOR DDNAME inddname**
- Explanation:** The input for the SMF dump program specified a CLEAR or ALL parameter for a QSAM data set. The program can only clear a VSAM data set that is used for SMF recording. In the message, **inddname** identifies the DD statement for the input data set.
- System Action:** SMF dump processing continues. The clear request is ignored.
- Programmer Response:** None. It is not necessary to clear a QSAM data set that is used later as an output data set for SMF dump processing. If you want to clear the data set, use the standard system utilities.
- IFA014I** **SMF DUMP INITIALIZATION FAILED. JOB TERMINATED**
- Explanation:** SMF dump processing was unable to establish an ESTAE recovery environment.
- System Action:** SMF dump processing terminates.
- Programmer Response:** Rerun the SMF dump program. If the problem recurs, contact your programming support personnel.
- Problem Determination:** Table I, items 1, 4, 7a, 13, 22, 29.
- IFA015I** **SMF DUMP TERMINATED ABNORMALLY. NO DATA SETS WERE CLEARED.**
- Explanation:** SMF dump processing was unable to open the SYSPRINT data set.
- System Action:** SMF dump processing terminates.
- Operator Response:** Notify the system programmer.
- Programmer Response:** Check the JCL for the job. Be sure it includes a SYSPRINT DD statement and that it defines the correct data set.
- Problem Determination:** Table I, items 1, 4, 13.
- IFA016I** **ERROR DETECTED IN USER EXIT exitname. EXIT BYPASSED.**
- Explanation:** The SMF dump program could not load user exit routine **exitname**, or an error occurred while the exit routine was executing. Other error messages might precede this message.
- System Action:** SMF dump processing continues, but user exit routine **exitname** is bypassed.
- Programmer Response:** If the exit routine could not be loaded, be sure the routine resides in an area that is searched by the system when modules are requested. The VS2 module search sequence is described in the *Initialization and Tuning Guide*.
- If the problem occurred while the exit routine was executing, check the exit routine for errors.
- Problem Determination:** Table I, items 1, 4, 13, 22, 25c.
- IFA017I** **ERROR IN SMF DUMP SUMMARY REPORT. REPORT TERMINATED.**
- Explanation:** The SMF dump program could not write the summary activity report.
- System Action:** SMF dump processing terminates. All the data sets have been dumped and/or cleared as requested.
- Programmer Response:** Check the JCL to be sure a SYSPRINT DD statement was included.
- Problem Determination:** Table I, items 1, 4, 13.
- IFA018I** **SMF DATASET inddname HAS BEEN SUCCESSFULLY CLEARED.**
- Explanation:** The SMF dump program has successfully cleared the SMF recording data set identified by the ddname **inddname**.
- System Action:** SMF dump processing continues.
- Programmer Response:** None.
- IFA019A** **CLEAR FUNCTION IS NOT AUTHORIZED IN THIS ENVIRONMENT**
- Explanation:** The CLEAR function of the SMF dump program was requested, but the user is not APF-authorized. APF authorization is required to invoke the CLEAR function. For further information concerning APF authorization, see *System Macros and Facilities*.
- Note:** APF authorization is not required to invoke the DUMP function or to obtain a summary activity report.
- System Action:** SMF dump processing continues but no SMF recording data sets are cleared.
- Programmer Response:** The installation might want to allow APF authorization for the SMF dump program in a TSO environment. See *SPL: TSO* for information on executing authorized programs.

Environment Recording Messages (IFB)

Component Name	IFB
Program Producing Message	Input/output environment recording routines, OBR and SVC 76
Audience and Where Produced	For operator: console.
Message Format	<p>xx IFBnnns text.</p> <p>xx Message reply identification (absent, if operator reply not required).</p> <p>nnn Message serial number.</p> <p>s Type code: D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required.</p> <p>text Message text.</p>
Related Publications	<i>MVS/XA SYS1.LOGREC Error Recording, GC28-1162</i>

IFB010D ENTER 'IPL REASON, SUBSYSTEM ID' OR 'U'

Explanation: This message requests the operator to provide one of the following:

- The reason for the IPL.
- The device or program (subsystem) responsible for the IPL restart.
- U - to continue operation with default values.

System Action: RDE waits pending the operator's reply.

Operator Response: Enter a reply in the format REPLY xx,'rr,ss' where xx is the reply id, rr is the RDE IPL reason code, and ss is the subsystem ID code. For an explanation of the IPL reason codes and subsystem ID codes, see *SPL: SYS1.LOGREC Error Recording*.

IFB020I INVALID REPLY TO IFB010D

Explanation: The reply to message IFB010D is incorrect.

System Action: Message IFB010D is reissued to allow the operator to reenter his reply.

Operator Response: Either enter the IPL reason code and subsystem ID code in the proper format or reply 'U' to select default values, in response to message IFB010D. For an explanation of the IPL reason codes and subsystem ID codes, see *SPL: SYS1.LOGREC Error Recording*.

IFB030I SYS1.LOGREC I/O ACCESS ERROR,sens,stat,hh.mm.ss

Explanation: Probable hardware (channel or device) error. SYS1.LOGREC was accessed either to read or write a record on SYS1.LOGREC, and an uncorrectable input/output error occurred. Sens is the first two sense bytes for the error condition, stat is the status portion of the channel status word (CSW), and hh.mm.ss is the time in hours, minutes, and seconds.

System Action: The SVC 76 routine does not attempt to retry the I/O operation. If the routine was attempting to write the record, the record is lost. However, SVC 76 does attempt any subsequent I/O access attempts to read or write any subsequent records on SYS1.LOGREC.

Operator Response: Execute the IFCEREP1 service aid program to dump SYS1.LOGREC and save its existing contents. Then execute the IFCDIP00 service aid program to reinitialize the SYS1.LOGREC data set.

Programmer Response: If the SYS1.LOGREC data set reinitialization attempt failed, reallocate the data set on the system residence volume, using the IFCDIP00 service aid program.

Problem Determination: Table 1, items 2, 30.

IFB040I SYS1.LOGREC AREA IS FULL, hh.mm.ss

Explanation: The SYS1.LOGREC data set is full and cannot contain further environment records. At least one record has been lost.

System Action: Processing continues, but further environment records will be lost.

Operator Response: Execute the IFCEREP1 program to dump and zero the SYS1.LOGREC data set.

IFB

IFB050I – IFB070I

IFB050I SYS1.LOGREC FORMAT ERROR, hh.mm.ss

Explanation: The header record of the SYS1.LOGREC data set is missing or invalid.

System Action: Processing continues.

Operator Response: Execute the IFCDIP00 service aid program to rewrite the header record and reinitialize SYS1.LOGREC.

IFB060E SYS1.LOGREC NEAR FULL

Explanation: The SYS1.LOGREC data set has reached 90% of its capacity for data.

System Action: Processing continues.

Operator Response: Execute the IFCEREPI service aid to dump and zero the SYS1.LOGREC data set. Continued processing, without the data set being dumped, may cause the data set to become full. To

compile a history of hardware failures, do the following:

- Save the IFCEREPI output.
- Save the master console listing.

IFB070I LOGREC CANNOT BE ACCESSED. RECORD IS LOST.

Explanation: SYS1.LOGREC cannot be accessed because the device on which the data set is mounted is unavailable.

System Action: The system continues processing but does not write any more environment records to SYS1.LOGREC.

Operator Response: Verify that the device on which SYS1.LOGREC is mounted is available.

IFCDIP00 Program Messages (IFC)

Component Name	IFC
Program Producing Message	Service Aids: IFCDIP00
Audience and Where Produced	For the operator (IFCDIP00 program): console.
Message Format	xx IFCnnnI text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. text Message text.
Comments	Some IFC messages are produced by EREP modules IFCEREP0 and IFCEREP1. Those messages are documented in <i>OS/VS, DOS/VSE, VM/370 EREP Messages</i> , GC38-1045.
Related Publications	<i>MVS/XA SYS1.LOGREC Error Recording</i> , GC28-1162

IFC001I **D = devtyp N = x F = trck* L = trck* S = recd** DIP COMPLETE**

Explanation: Produced by the IFCDIP00 program during the initialization of the SYS1.LOGREC data set, this message describes the limits of the data set.

In the message text, devtyp is the device type containing the SYS1.LOGREC data set; x is the hexadecimal representation of the device type code; in F = trck, trck is the address of the first track of the extent; in L = trck, trck is the address of the last track of the extent; and recd is the starting address of the record entry area within the data set. The asterisk indicates that hexadecimal representation causes 8-character printout, and two asterisks indicate that hexadecimal representation causes 10-character printout.

Operator Response: None.

IFC002I **{INVALID INPUT| SYS1.LOGREC CANNOT BE OPENED}**

Explanation: The SERERDS DD statement may be incorrectly coded.

Operator Response: Probable user error. Correct the DD statement then execute the IFCDIP00 program again.

Problem Determination: Table I, items 2 and 29. Execute the AMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN = SYS1.LOGREC in the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC003I **{I/O ERRORS| SYS1.LOGREC HEADER WRITE ERROR}**

Explanation: An uncorrectable input/output error occurred while the IFCDIP00 program was writing the SYS1.LOGREC header record.

System Action: IFCDIP00 program execution terminates.

Operator Response: Execute the IFCDIP00 program again.

Problem Determination: Table I, items 2, 29. Execute the AMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN = SYS1.LOGREC in the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC004I **SYS1.LOGREC ALLOCATION TOO SMALL FOR FRAMES**

Explanation: While formatting the SYS1.LOGREC data set, the IFCDIP00 program found that the data set was too small. Probably, the initial track allocation was insufficient.

System Action: Some frames will be lost. No space for error records.

Programmer Response: Probable user error. Request more space for the SYS1.LOGREC data set with the SPACE parameter of its DD statement. Rerun the IFCDIP00 job.

Problem Determination: Table I, items 2, 29. Execute the AMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN = SYS1.LOGREC in the SYSLIB DD statement, and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC

IFC005I **SYS1.LOGREC FRAME WRITE ERROR,
DD = FRAMESxx**

Explanation: An uncorrectable error occurred while writing a frame from the service record file (SRF) defined by the FRAMESxx DD statement to the SYS1.LOGREC data set.

System Action: The SYS1.LOGREC data set will contain all frames written successfully until the error occurred. No further attempt will be made to write remaining frames to SYS1.LOGREC.

Programmer Response: If it is necessary to edit MCH and CCH records via FRAMES, IFCDIP00 must be rerun.

Operator Response: Execute the IFCDIP00 program again.

Problem Determination: Table I, items 2, 29. Execute the AMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC006I **SERVICE RECORD FILE CANNOT BE
OPENED, DD = FRAMESxx**

Explanation: The service record file (SRF) cannot be accessed to obtain frames, either because the FRAMESxx DD statement that defines the SRF is incorrect, or because a hardware problem exists.

System Action: SYS1.LOGREC is formatted as if no frames exist. The "FRAMES" indicator in the data set header will be set to zero.

Operator Response: Call your Field Engineer. Processing of MCH and CCH records by IFCEREP1 will result in machine/channel independent information being formatted, followed by a hexadecimal dump of the record.

IFC007I **SRF I/O ERROR SENSE = ssss,
CSW = cccccccccccc, DDNAME = dddddddd,
DD = FRAMESxx**

Explanation: An error was encountered while reading frames from the service record file (SRF) defined by the FRAMESxx DD statement.

ssss - The first two sense bytes stored in the IOB.

cccccccccccc - The low order 7 bytes of the channel status word.

ddddddd - The data definition (DD) name for the SRF being interrogated.

System Action: No further attempt will be made to read frames. SYS1.LOGREC will be initialized with whatever frames were successfully written, and the last frame flag in the last frame will be turned on, even if it is not the last frame of a logical set of frames.

IFC008I **MORE THAN 50 FRAMES IN SET,
DD = FRAMESxx**

Explanation: The maximum number of frames in a set was exceeded. The frames are contained in the service record file (SRF) defined by the FRAMESxx DD statement. Either there has been an error in the service processor in responding to I/O requests to the SRF, or the last engineering change has provided a set of frames larger than the maximum number expected.

System Action: The first fifty frames will be accepted as valid and written on SYS1.LOGREC.

Operator Response: Call your Field Engineer. Processing of MCH or CCH records by the 50 frames may result in an incomplete or erroneous edit of logout information.

IFC009I **INVALID LOGREC DEVICE**

Explanation: The SERERDS DD statement, which defines the SYS1.LOGREC data set, specifies a device that the system does not support for SYS1.LOGREC.

System Action: IFCDIP00 terminates processing without initializing SYS1.LOGREC.

Operator Response:

1. Rerun IFCDIP00 referencing a device valid for SYS1.LOGREC on the SERERDS DD statement.
2. Use an updated copy of IFCDIP00 that reflects a valid direct access device for SYS1.LOGREC.

IFC155I **FRAME SET MISSING, DD = FRAMESxx**

Explanation: A set of machine check or channel check frames cannot be found on the service record file (SRF) defined by the FRAMESxx DD statement.

System Action: Processing for the SRF is terminated.

Programmer Response: Ensure that the FRAMESxx DD statement defines a valid SRF. If the problem cannot be determined, notify the system programmer.

Problem Determination: Table I, items 2, 29.

IFC156I **INVALID PARM FIELD**

Explanation: PARM=FRAMES was not correctly specified on the EXEC statement.

System Action: The job step is terminated; the return code is 16.

Programmer Response: Probable user error. Respecify the PARM parameter correctly.

IFC157I **VERBAGE FAILURE**

Explanation: An error has occurred while preparing to read the service record file (SRF).

System Action: SYS1.LOGREC is not correctly initialized with frames. (IFCEREP1 will not be able to process MCH and CCH records correctly.)

Programmer Response: Ensure that the FRAMESxx DD statements are correctly specified. Rerun

IFCDIP00 and, if the problem persists, notify the system programmer.

Problem Determination: Table I, items 2, 29.

IFC158I MORE THAN 16 FRAMES DD STATEMENTS

Explanation: PARM = FRAMES is specified on the EXEC statement and more than 16 FRAMESxx DD statements were found.

System Action: The FRAMESxx DD statements in excess of 16 are not processed; the return code is 8.

Programmer Response: Probable user error. Ensure that one FRAMESxx DD statement is specified of each SRF but do not exceed the maximum of 16.

IFC159I UNABLE TO READ CPU ID, DD = FRAMESxx

Explanation: An error occurred while attempting to read the processor identifier (CPUID) for the service record file (SRF) defined by the FRAMESxx DD statement.

System Action: The specified SRF is not processed.

Programmer Response: Ensure that the FRAMESxx DD statement defines a valid SRF. If you cannot locate the problem, notify the system programmer.

Problem Determination: Table I, items 2, 29.

**IFC160I NO FRAMES DD STATEMENTS,
PARM = FRAMES IGNORED**

Explanation: PARM = FRAMES is specified on the EXEC statement, but no FRAMESxx DD statements were found.

System Action: Processing continues with PARM = FRAMES ignored.

Programmer Response: Probable user error. Ensure that a FRAMESxx DD statement is specified for each service record file (SRF) in use.

Online Test Executive Program (OLTEP) Messages (IFD)

Component Name	IFD
Program Producing Message	Online test executive program
Audience and Where Produced	For the programmer: SYSPRINT data set. For the operator: console.
Message Format	IFDnnnI text (in SYSPRINT) xx IFDnnns text (on console) nnn Message serial number. text Message text. xx Message reply identification (absent, if operator reply not required). s Type code: D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required.
Related Publications	MVS/XA OLTEP, GC28-1161

IFD100I [nnn] message

Explanation: This message is issued by an OLT. In the message text, nnn is a three-digit serial number unique to each message within the OLT or related family of OLTs. The message may be one of the following:

NOT ALL SELECTED ROUTINES WERE RUN
Not all the routines specified in the response to message IFD105D (ENTER-DEV/TEST/OPT) were executed. Either the routines do not exist, or the test section terminated before the routines were able to run.

TEST OUTPUT

A test section is running and producing output. Because the Parallel Print (PP) option was selected, OLTEP sends this output to the console as well as to the output data set. Contents depends on the value specified with the option.

- PP(0)-header only
- PP(1)-header, description, comments
- PP(2)-header, results
- PP(3)-header, description, comments, results

If no value was specified with the option, PP(2) is assumed.

Operator Response: None.

IFD101D [nnn] message

Explanation: This message is issued by an OLT program (test section). The OLT program requires the operator to perform some action or to make a decision before testing can continue. If nnn appears in the message text, it is a three-digit serial number unique to each message within the OLT or the related family of OLTs.

System Action: OLTEP waits for the operator to respond.

Operator Response: Respond as indicated in the message text.

IFD102I LTS RUNNING IN [IN A M.P. SYSTEM]

Explanation: The Online Test Executive Program (OLTEP) has been loaded. *Note:* OLTEP is the executive program for the Online Test System (OLTS).

System Action: OLTEP processes the first OLTEP control statement (if any), or issues message IFD105D.

Operator Response: If OLTEP is running in a multi-processing system, you can enter the 'CPUAFFN=' verb in response to message IFD105D. This will allow you to select the CPU from which the I/O to a device will be initiated.

IFD103I UCB NOT READY BIT ON, uuuuuuuu TESTS BYPASSED

Explanation: The not-ready bit in the unit control block for device uuuuuuuu is set to 1.

System Action: OLTEP will bypass all tests on device uuuuuuuu. If another device was specified in the test definition, OLTEP will schedule testing of that device.

Operator Response: Ready device uuuuuuuu and enter a VARY OFFLINE command so that the system sets the 'ready' bit. Request the same test again when OLTEP issues message IFD105D. If this message is repeated when device uuuuuuuu is readied, vary the device online, then offline and retry. *Note:* The OLTEP job may have to be canceled and restarted.

IFD

IFD104E TO FORCE COMMUNICATION WITH OLTEP EXECUTIVE, ENTER ANY CHAR

Explanation: This message enables the operator to stop a test in order to enter a new test definition or terminate the job step.

Operator Response: Do not reply immediately. Reply when and if you want to stop a test in order to enter a new test definition or terminate the job step. *Note:* Any outstanding immediate reply messages must be responded to before the reply to this message will take effect.

To stop the running of a test, enter REPLY xx,'Y' is any character on the console keyboard. OLTEP will suspend testing and issue message IFD105D. If you respond by defining new test, OLTEP will reissue message IFD104E before the new test is started.

Note that you can reply to message IFD104E at any time before the end of the job step. If you do not reply to the message, it is not reissued.

IFD105D ENTER-DEV/TEST/OPT/

Explanation: OLTEP is asking the operator what he wants to do next. The operator can define the next test to be run, or specify an optional OLTEP verb to perform a specific function. He can also ask for help in defining the next test.

Operator Response: Enter the next test definition (ask for help if necessary), or specify an optional OLTEP verb to perform a specific function. For full information on how to enter a test definition or how to enter an optional OLTEP verb, refer to the publication *OLTEP*.

To define the next test, enter

REPLY xx,'devices/tests/options/'.

This reply is a test definition: it specifies the devices to be tested, the tests to be run, and the OLTEP options to be applied.

Be sure to specify each device as a four-digit unit address or a 1-8 character symbolic name. For full information on how to enter a test definition, refer to the publication *OLTEP*.

To ask OLTEP for help in defining a test, enter REPLY xx,'PROMPT yyyy', where yyyy is one of the following:

- DEV - device field
- TEST - test field
- OPT - option field
- ALL - all of the above

OLTEP will issue messages that give examples of correct device, test, and option specifications. OLTEP will then reissue message IFD105D to let you define the next test.

Note: Rather than ask OLTEP for help, you can get the same information by referring to this manual for descriptions of messages IFD147I, IFD148I, and IFD149I. To have OLTEP perform a specific function, enter one of the following: to terminate the job step, enter REPLY xx,'CANCEL'; to indicate that the OLTs should be run in real or virtual storage, enter REPLY xx,'mode=y' where y is r for real storage or v for virtual storage; to establish communication with the OLT, enter REPLY

xx,'talk' to equate device numbers, enter REPLY xx,'equ': to select a specific processor from which testing is to take place, enter REPLY xx,'cpuaffn=z' where z indicates the ID of the specific processor; to activate RETAIN/370, enter REPLY xx,'rei'; and to terminate RETAIN/370, enter REPLY xx,'stoprei'.

IFD106I INPUT DATA DOES NOT CONTAIN 3 SLASHES

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because it does not contain three slashes as field delimiters. For example,

devices/tests/options

should be

devices/tests/options/

Note: If you reply to message IFD168E and the RETAIN/370 interface terminates before the response is transmitted to the remote specialist, you may receive first message IFD105D, then this message, then IFD105D again. In that case, you should ignore this message.

System Action: OLTEP will issue message IFD105D to permit a new test definition to be entered.

Operator Response: Probable user error. Respond as indicated to message IFD105D. If the test definition is correct, make sure that the sequence of events described in the NOTE above has occurred. Cancel the job, requesting a dump.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD107I OPTIONS ARE xxx,....,xxx

Explanation: A correct test definition has been entered. The test definition specifies or implies the OLTEP options indicated by the xxx fields in the message.

System Action: Testing continues.

Operator Response: None.

IFD108I INVALID ENTRY IN DEV FLD-xx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an error in the device field. The error is of type xx, which may be any of the following:

- 01 - invalid delimiter
- 02 - invalid address: invalid character between addresses
- 04 - field omitted: previous DEV entry invalid
- 06 - invalid range of device numbers

System Action: OLTEP issues message IFD161I, which explains how to request help in entering the device field. OLTEP then issues message IFD105D to permit either a request for help or a new test definition.

Operator Response: Probable user error. Respond as indicated to message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD109I

uuuuuuuu {OFFLINE|ONLINE,}
{UNALLOCATED|ALLOCATED|ASSIGNED}
WILL NOT BE TESTED

Explanation: Device uuuuuuuu has been presented to OLTEP for testing. OLTEP determined that the device is unsuitable for testing for one of the following reasons:

- The device status is **OFFLINE** or **ONLINE**. Only certain DASD and local 3270 graphics devices controlled through BTAM can be tested online. All other devices presented to OLTEP for testing must first be offline.
- The device is allocated or unallocated in the operating system. Only certain DASD and local 3270 graphics devices controlled through BTAM can be tested when allocated to another user in the system. All other devices presented to OLTEP must be unallocated in the system.
- OLTEP was not able to gain access to a device because it was already assigned.

System Action: OLTEP bypasses testing the device.

Operator Response: In cases where the device is online or offline and allocated, or online and unallocated, the device must be freed from any possible users. Enter a VARY ONLINE command for the device. The device can then be presented to OLTEP for testing by responding to message IFD105D.

Notes:

1. When OLTEP is the only active task in the system, OLTEP must be terminated and restarted for a VARY command to take effect. If another initiator is available, the starting of a dummy job will also initiate the VARY command.
2. For a device allocated to a teleprocessing access method, the device must be freed from the access method and then a VARY OFFLINE command entered in the operating system. The device can then be presented to OLTEP.
3. For the 3705 under VTAM control, a VARY OFF command must be entered from VTAM and then a VARY OFFLINE command entered in the operating system. The device can then be presented to OLTEP.

IFD110I

TESTABLE DEVICES MAY NOT EXCEED 16

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), more than 16 devices were selected for testing.

System Action: OLTEP will test the first 16 devices that meet test requirements; the others will be ignored.

Operator Response: None. Devices not tested at

this time can be respecified the next time that OLTEP issues message IFD105D.

IFD111I

NO DEVICES AVAILABLE FOR TEST

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), OLTEP has been asked to test one or more devices. The devices may not exist, have no UCBs or CDSs, or cannot be tested because they are online or allocated in the operating system. This message is also issued if a symbolic device is entered in response to message IFD105D but no //SYMSYM DD statement is found in the input job stream, or if a device was incorrectly specified.

System Action: OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: Make sure that devices are specified correctly in the test definition; a device must be specified as a four-digit unit address or a 1-8 character symbolic name. Vary offline any of the devices that are online. (The VARY OFFLINE command will take effect when the operating system terminates or initiates a jobstep. If no jobs are being run concurrently with OLTEP, you must terminate OLTEP to let the VARY command take effect.)

Allocated devices must be freed from their current user before OLTEP can test them.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD112I

INVALID ENTRY IN TEST FLD-xx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an error in the test field. The error is of the type xx, which may be any of the following:

- 01 - invalid delimiter: device section repeated
- 04 - field omitted: previous test entry was invalid
- 05 - invalid test type (contains both letters and numerics) or other characters
- 06 - invalid test sections (name not alphabetic)
- 07 - invalid range of test sections
- 08 - invalid specification of test section routine (more than one test section is specified)
- 09 - invalid test section routine (not numeric)
- 10 - invalid range of test section routines

System Action: OLTEP issues message IFD161I, which explains how to request help in entering the test field. OLTEP then issues message IFD105D to permit either a request for help or a new test definition.

Operator Response: Probable user error. Respond as indicated to message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD

IFD113D CAN CTL PGM ON MULT-ADDR DEV uuuuuuuu BE DESTROYED REPLY Y OR N

Explanation: OLTEP has been asked to test a multi-address device. The testing may destroy the control program for the multi-address device. OLTEP requests permission to test the device.

System Action: The system waits for the operator to reply.

Operator Response: Reply Y to allow testing; reply N to discontinue testing.

IFD114I ALL GRAPHICS ON CONTROL UNIT NOT OFFLINE

Explanation: OLTEP has been asked to test one or more IBM 2250 graphic display units. These units cannot be tested, because other 2250s on the same control unit are online to the operating system.

System Action: OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: Vary all devices on the control unit offline; request the same test again when OLTEP issues message IFD105D. (The VARY OFFLINE command will take effect when the operating system terminates or initiates a job step. If no jobs are being run concurrently with OLTEP, you must terminate OLTEP to let the VARY command take effect).

IFD115I INVALID ENTRY IN OPT FLD-xxxxxxxxxx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an invalid entry in the option field. The first ten characters of the invalid entry appear in the xxxxxxxxxx field of the message text.

This message also occurs if the RE option is entered when RETAIN is not active.

System Action: OLTEP issues messages IFD161I, which explains how to request help in entering the option field. OLTEP then issues message IFD105D, to permit either a request for help or a new test definition.

Operator Response: Probable user error. Respond as indicated to message IFD105D or cancel the job, requesting a dump.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD117I SECTION xxxxyyy NOT FOUND

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), OLTEP has been asked to run one or more sections of test xxxxx.

System Action: OLTEP bypasses the test section.

Operator Response: Probable user error. Make sure the OLT has been edited into the OLT data set specified by the OLTCDSDD DD statement. If you are using the NST OLTEP data set, make sure the OLT has been added to the data set specified by the NSTOLTDD DD statement (for a 4341 processor only).

Problem Determination: Table I, items 2, 4, 29. If the program has been included in the OLT data set, execute the IEHLIST utility program to list the data set directory and save the listing.

IFD118I UNREADABLE TAPE LABEL-uuuuuuuu

Explanation: OLTEP has been asked to test device uuuuuuuu which is an IBM 3400 magnetic tape unit. Because of a permanent I/O error, OLTEP cannot determine whether a standard label scratch tape is mounted.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Message IFD137I indicates the nature of the error (for example, the device may not be loaded). If you can correct the error, enter REPLY xx,'R' in response to message IFD139D; OLTEP in turn will try again to read standard labels from the tape.

If you cannot correct the error, probable hardware error. Enter one of the following responses to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed with the test, using the mounted volume as a scratch tape; if the volume contains data or labels, they may be destroyed.

Problem Determination: Table I, item 30.

IFD119I NON-STANDARD TAPE LABEL-uuuuuuuu

Explanation: OLTEP has been asked to test device uuuuuuuu, which is an IBM 3400 magnetic tape unit. Because the mounted volume does not have standard labels, OLTEP cannot determine whether the volume is a scratch tape. Device uuuuuuuu may not be the one that the operator intended to test; the operator may have made a typing error entering the test definition.

System Action: OLTEP issues message IFD139D.

Operator Response: Make sure that the correct device was specified in the test definition. If it was not, this is probably a user error; enter REPLY xx,'B' in response to message IFD139D, and specify the correct device the next time message IFD105D is issued.

If the correct device was specified in the test definition, and the volume mounted on device uuuuuuuu is not a scratch tape, remove the volume and replace it with a scratch tape. Then respond to message IFD139D as indicated below:

- If you mount a scratch tape with standard labels, enter REPLY xx,'R' in response to message IFD139D. OLTEP in turn will read the volume and data set labels to make sure that the tape can be used as a scratch volume.
- If you mount a scratch tape with no labels or with nonstandard labels, enter REPLY xx,'P' in response to message IFD139D. OLTEP will then proceed with the test. Data and labels may be destroyed.

If the volume mounted on device uuuuuuuu has standard labels, or if you cannot mount a scratch

volume, enter REPLY xx,'B' in response to message IFD139D and call your support personnel.

IFD120D CAN VOL DATA ON uuuuuuuu BE DESTROYED, REPLY YES OR NO

Explanation: Device uuuuuuuu is an IBM 3330 or 3340 disk storage device or an IBM 2305 fixed-head storage device. OLTEP is asking whether it can run tests that may destroy data stored on the device.

System Action: OLTEP waits for the operator to reply.

Operator Response: If OLTEP is permitted to destroy all data stored on the device, enter REPLY xx,'YES'. OLTEP will make the entire volume available for testing. When testing is complete, you must use the IBCDASDI utility program to reinitialize the volume.

If the data on the volume must be preserved, enter REPLY x,'NO'. OLTEP will test the device in File Protect Mode; no write testing will be performed, and no data will be destroyed.

IFD121I xx MESSAGE CANCELED BY OLTEP

Explanation: The operator has not replied to message IFD104E and OLTEP can no longer accept a reply.

System Action: OLTEP has canceled the message, making a reply impossible.

Operator Response: Ignore the canceled message.

Note: If the system provides multiple console support (MCS), message IFD121I is preceded by message IEE600I (ACCEPTED REPLY TO MSG xx IS S).

IFD122I VOL ON uuuuuuuu {SECURITY PROTECTED|UNEXPIRED DATE}

Explanation: OLTEP has been asked to test device uuuuuuuu, which is an IBM 3400 magnetic tape unit or an IBM 3330 or 3340 device. The volume mounted on the device has standard labels and is offline. The volume is data-protected, contains a security-protected data set, or a data set with an unexpired date. OLTEP cannot use this volume as a scratch tape for testing the device. Device uuuuuuuu may not be the one that the operator intended to test; the operator may have made a typing error entering the test definition.

System Action: OLTEP issues message IFD139D.

Operator Response: Make sure that the correct device was specified in the test definition. If it was not, this is probably a user error; enter REPLY xx,'B' in response to message IFD139D, and specify the correct device the next time message IFD105D is issued.

If the correct device was specified in the test definition, and the volume mounted on device uuuuuuuu is not a scratch volume, remove the volume and replace it with a scratch volume that does not contain a security-protected data set. Then enter REPLY xx,'R' in response to message IFD139D. OLTEP will try again to recognize the volume as a scratch volume.

If the volume mounted on device uuuuuuuu was not security-protected or if you cannot mount a scratch

volume, enter REPLY xx,'B' in response to message IFD139D and call your support personnel.

IFD124I CEPACK NOT ON uuuuuuuu, VALID = ser

Explanation: OLTEP has been asked to test unit uuuuuuuu which is an IBM 3330 or 3340 direct access device. The volume label does not indicate a CEPACK.

System Action: OLTEP issues message IFD139D.

Operator Response: If possible, replace the mounted volume with a CEPACK. Then respond to message IFD139D as indicated below.

If you can mount a CEPACK, enter REPLY xx,'R' in response to message IFD139D. OLTEP will verify that the volume is a CEPACK and proceed with the test.

If a CEPACK is not available to be mounted, enter one of the following responses to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode; the test will not destroy data on the volume unless you give permission in a later response to message IFD120D.

IFD125I UNREADABLE LABEL ON uuuuuuuu

Explanation: OLTEP attempted unsuccessfully to read the label of the volume on device uuuuuuuu, which is a 3330 or 3340.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Respond to messages IFD137I and IFD139D as follows:

Message IFD137I indicates the nature of the error. If you can correct the error, enter REPLY xx,'R' in response to message IFD13D. OLTEP will try again to read the volume label. If you cannot correct the error, this is probably a hardware error. Enter one of the following response to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode; tests will not destroy data on the volume unless you give permission in a later response to message IFD120D.

Problem Determination: Table I, item 30.

IFD127I NO CDS FOR uuuuuuuu

Explanation: OLTEP cannot locate the CDS for device uuuuuuuu.

System Action: Device uuuuuuuu is bypassed for testing.

Operator Response: Probable user error. If the CDS for device uuuuuuuu has not been included in the OLT (OLTCDSDD) or REMOTE (SYMSYM) data set, make sure that it is edited before running this device on OLTEP. If you are using the NST OLTEP data set, make sure the CDS for device uuuuuuuu has been included in the data set (NSTOLTDD) (for a 4341 processor only). Also, be sure the device was

IFD

specified as a four-digit unit address or a 1-8 character symbolic name.

Problem Determination: Table I, items 25, 29.

IFD129I FIRST ERROR COMMUNICATION xxxxxxxx yyyy UNIT uuuuuuuu [aaaaaaaa]

Explanation: Routine yyyy of OLT program xxxxxxxx has detected an error on device uuuuuuuu. (OLT program xxxxxxxx performs routine yyyy of the test.) Because the first error (FE) communication option is in effect, OLTEP will issue message IFD105D to let the operator determine whether testing should continue. aaaaaaaaa is used if a symbolic name is applicable.

System Action: OLTEP issues message IFD105D.

Operator Response: Look for diagnostic information which will be issued by the OLT program. If the PP option has been specified, this information will appear on the console as the text of message IFD100I; otherwise, the information will be routed to the SYSOUT data set. After you have determined the cause of the error and have taken the appropriate corrective action, you can choose to do one of the following:

- You may resume testing with the same option in effect by entering REPLY xx,'/' in response to message IFD105D. The first error option will not occur again during this OLT section.
- You may resume testing with different options by entering REPLY xx,'/yyy,yyy,.../' where yyy is an OLTEP option. (For a list of OLTEP options, refer to the description of message IFD149I.) Any option that is not specifically changed remains in effect. Thus, the FE option remains in effect unless you specify NFE; however, message IFD129I will not be issued again during this OLT section.
- You may define a new test or terminate the job step; to do this, refer to the description of message IFD105D.

Problem Determination: If you are unable to correct the error described by message IFD100I, or if you are unable to determine the nature of the error, see Table I, item 29.

IFD130I INTERVENTION REQ uuuuuuuu

Explanation: OLTEP has been asked to test device uuuuuuuu. The device is not ready; operator intervention is required.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Ready the device; then enter REPLY xx, R in response to message IFD139D. OLTEP will test the device again to see if it is ready. If the device remains not ready, OLTEP will issue the same messages again.

If you cannot successfully ready the device, you can either proceed with the test or bypass it. To proceed with the test, enter REPLY xx,'P' in response to message IFD139D. If you are testing an IBM 3330 or 3340 direct access device, testing will proceed in File Protect Mode; data on the device will not be destroyed unless you give permission in response to a later issuance of message IFD120D.

To bypass the test, enter REPLY xx,'B' in response to message IFD139D.

Problem Determination: Table I, item 30.

IFD134I WARNING- DASD VOLUME LABELED CEPACK NOT PROTECTED FROM WRITE

Explanation: This message warns that if a direct access volume with the volume serial number CEPACK is mounted, OLTEP will use that volume for a scratch volume if it's address is entered in a test definition.

System Action: OLTEP issues message IFD105D, asking for a test definition.

Operator Response: Before responding to message IFD105D, make sure that the volumes with a serial number of CEPACK are meant for OLTEP's use; any data on those volumes may be lost.

IFD137I CSW xyyyyyyyyyyyyyy SNS sns

Explanation: An error occurred during execution of OLTEP data protection. This message displays sense data resulting from the error condition (indicated in the message test by sns) and the low-order bytes of the channel status word (CSW).

System Action: OLTEP issues message IFD139D.

Operator Response: Examine the sense data and the flag bytes of the CSW to determine what action, if any, can be performed to correct the error. (Note that some of the sense data may be invalid; the number of valid sense bytes depends on the device type.) Respond as indicated to message IFD139D.

IFD138I DEV uuuuuuuu NOT OPERATIONAL, CC=3

Explanation: OLTEP has been asked to test device uuuuuuuu. The device is not operational or does not exist. In the message text, CC=3 represents the condition code resulting from an SIO instruction.

System Action: OLTEP issues message IFD139D.

Operator Response: If device uuuuuuuu does not exist, enter REPLY xx,'B' in response to message IFD139D. Enter the correct device the next time message IFD105D is issued. If device uuuuuuuu exists but is not loaded, mount a C.E. volume or scratch volume and ready the device. If the device exists but is not ready, make it ready. In both cases, enter REPLY xx,'R' in response to message IFD139D; OLTEP will again test for an operational device.

If you cannot make the device operational, this is probably a hardware error. Enter one of the following:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode and attempt to perform the specified test; testing, if successful, will not destroy data, unless you give permission in response to a later issuance of message IFD120D.

Problem Determination: In both cases, see Table I, item 30.

IFD139D REPLY

```

{
  B TO BYPASS, R TO RETRY
  B TO BYPASS, R TO RETRY, P TO
  PROCEED
  B TO BYPASS, R TO RETRY, P TO
  PROCEED (MAY DESTROY DATA)
  R TO RETRY, P TO PROCEED
}
    
```

Explanation: An input/output operation has resulted in a permanent error condition. The cause and nature of the error has been given in messages issued previously.

System Action: The system action depends on the operator's response.

Operator Response: Respond as indicated in the messages issued previously. If you can, remove the cause of the error and enter REPLY xx,'R'; OLTEP will try again to perform the interrupted operation. If you cannot remove the cause of the error, enter REPLY xx,'B' to bypass testing of the device, or REPLY xx,'P' to proceed without retrying the unsuccessful operation.

IFD140I uuuuuuu VARIED OFFLINE BY OLTEP

Explanation: OLTEP has found device uuuuuuuu online. Therefore, it has varied this device offline to the operating system so that the device can be tested. The device will remain offline after OLTEP termination until it is varied online again through the issuance of a VARY command from the operator's console.

System Action: None.

Operator Response: None.

IFD144D TIME-OUT, NO INTERRUPT-UNIT uuuuuuuu.
REPLY WAIT OR CANCEL

Explanation: OLTEP is testing a device. Thirty seconds have elapsed since the start of an I/O operation; no interruption has occurred to signal completion of the operation. The interruption may have been lost due to a device error; OLTEP is asking whether to cancel the operation or to wait for its completion.

System Action: OLTEP waits for the operator to reply.

Operator Response: To wait for I/O completion, enter REPLY xx,'WAIT'. This will cause the system to wait for 30 seconds and then reissue this message. To cancel the I/O operation and continue testing, enter REPLY xx,'CANCEL'.

Note: This message will appear only if the interval timer is working, and the operating system includes the interval timer option.

IFD145D IS uuuuuuu OFFLINE TO ALL SHARING
SYSTEMS, REPLY YES OR NO

Explanation: Device uuuuuuuu is an IBM 3330 or 3340 disk storage device or an IBM 2305 fixed head storage device; it may be sharable by two or more computing systems.

The device is offline to the system where OLTEP is running. OLTEP is asking if that device is also offline to the other sharing systems.

System Action: OLTEP waits for the operator to reply.

Operator Response: Determine whether the device is offline to all operating systems that may share the device.

If it is, enter REPLY xx,'YES'; OLTEP will issue message IFD120D to allow you to decide whether data on the device can be destroyed.

If the device is not offline to all operating systems, enter REPLY xx,'NO'; OLTEP will test the device in File Protect Mode. No write testing will be performed, and no data will be destroyed.

IFD146I SEE SRL - ONLINE TEST EXECUTIVE PROGRAM

Explanation: In response to message IFD105D, the operator asked OLTEP for help in entering a test definition. OLTEP has issued one or more messages to provide examples or correct device, test, and option specifications. In this message, OLTEP refers the operator to the SRL publication *OLTEP*.

System Action: OLTEP reissues message IFD105D.

Operator Response: For additional help, refer to the publication indicated by the message. Then enter a test definition in response to message IFD105D (or terminate the job step).

IFD147I text

The following are examples of the message text.

IFD147I EXAMPLES OF DEVICE FIELD
 IFD147I 0181/ TEST DEVICE 181
 IFD147I 0185-187/ TEST DEVICES 185, 186, AND 187
 IFD147I CHICAGO1.TP2/ TEST SYMBOLIC TP DEVICES CHICAGO1 AND TP2
 IFD147I .NDR/ NO DEVICE REQUIRED FOR TEST
 IFD147I / (SLASH ALONE) TEST PREVIOUSLY SELECTED DEVICE(S)

Explanation: In response to message IFD105D, the operator asked for help in entering the device field of a test definition. In this message, OLTEP shows the operator how to specify the devices to be tested.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD148I text

The following are examples of the message text.

IFD148I EXAMPLES OF TEST FIELD
 IFD148I 2400/ TAPE TESTS (T2400A-T2400Z)
 IFD148I 2400A/ SEC. A OF TAPE TEST 2400
 IFD148I 2400C,2/ RTN. 2,SEC. C, TEST 2400
 IFD148I 2400A-C,E,G/ SEC. A,B,C,E, AND G OF TEST 2400
 IFD148I IOEPZZ/ SEC. ZZ OF EDIT-PRINT FUNCTION
 IFD148I R2540AA/ SEC. AA OF READER TEST 2540
 IFD148I / (SLASH ALONE) RUN PREVIOUSLY SELECTED TESTS

Explanation: In response to message IFD105D, the operator asked for help in entering the test field of a

IFD

test definition. In this message, OLTEP shows the operator how to specify the test to be run.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD149I text

The following are examples of the message text.

IFD149I	TABLE OF OPTIONS		
IFD149I	TO REQUEST	TO OMIT BY	
IFD149I	OPTION	OPTION	DEFAULT
IFD149I	TESTING LOOP	TL	NTL
IFD149I		TL (VALUE)	VALUE - 1-32767
IFD149I	ERROR LOOP	EL	NEL
IFD149I		EL (VALUE)	VALUE - 1-32767
IFD149I	ERROR PRINT	EP	NEP
IFD149I	CONTROL PRINT	CP	NCP
IFD149I	PARALLEL PRINT	PP	NPP
IFD149I		PP (LEVEL)	LEVEL - 0-3
IFD149I	PRINT	PR	NPR
IFD149I	FIRST ERROR	FE	NFE
IFD149I	COMMUNICATION		
IFD149I	MANUAL	MI	NMI
IFD149I	INTERVENTION		
IFD149I	REMOTE FE	RE	NRE
IFD149I	CONTROL		
IFD149I	TRACE OPTION	TR	NTR
IFD149I	EXTERNAL DATA	EXT =	
IFD149I	EXAMPLES OF OPTION FIELD		
IFD149I	PP.NMLRE/		
IFD149I	EP.TL(50).FE.EXT = A.B/		

Explanation: In response to message IFD105D, the operator asked for help in entering the option field of a test definition. This message shows the operator how to specify options.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD152D uuuuuuu MUST BE VARIED OFFLINE - THEN ENTER P TO PROCEED OR B TO BYPASS

Explanation: An attempt was made to test a device that has dynamic pathing active or buffered logging information present. The operator must issue a system VARY OFFLINE command to remove the device from the path group or to save the buffered logging information.

System Action: OLTEP waits for the operator reply.

Operator Response: Issue a VARY OFFLINE command to take the test device offline. Enter P to proceed with testing or B to bypass that device.

IFD154I DEVICE uuuuuuu CDS/UCB CLASS INCOMPATIBILITY TESTING BYPASSED

Explanation: An unrecognizable device class was found in the CDS; the device (uuuuuuu) is not tested.

System Action: Execution is bypassed for device uuuuuuuu.

Operator Response: Correct the CDS and run the device test again.

IFD155I TEST SECTIONS MAY NOT EXCEED 26

Explanation: Too many test sections were specified in a test definition (OLTEP control statement or reply to message IFD105D).

System Action: OLTEP will run (or try to run) the first 26 test sections specified in the test definition. OLTEP will ignore the remaining sections.

Operator Response: None. Test sections not run at this time can be respecified when OLTEP next issues message IFD105D.

IFD156I DEVICE uuuuuuu STATUS CHANGED, BYPASS TESTS

Explanation: OLTEP has suspended testing of device uuuuuuuu. During the test, the device status was changed from online to offline, and an allocation for write space was requested by the OLT.

System Action: OLTEP bypasses the device.

Operator Response: If the device status has changed from online to offline, no action is necessary. Reenter the device in response to message IFD105D.

IFD157I CATASTROPHIC ERROR DEVICE uuuuuuu[aaaaaaaa]

Explanation: OLTEP has suspended testing of device uuuuuuuu. The device is not ready, or for some other reason cannot be tested. When present, aaaaaaa indicates the symbolic name.

System Action: OLTEP issues message IFD105D.

Operator Response: Make sure that the device is ready. If it is not, make it ready and enter REPLY xx, '/' in response to message IFD105D.

If the device is ready, look for diagnostic information which will be issued by the OLT program. If the PP option has been specified, this information will appear on the console as the text of message IFD100I; otherwise, the information will be routed to the SYSOUT data set.

After you have determined the nature and cause of the error and have taken the appropriate corrective action, you can choose to resume testing by entering REPLY xx, '/' in response to message IFD105D. If you cannot correct the error, enter a new test definition or terminate the job step (use the procedure outlined in the description of message IFD105D).

Problem Determination: Table I, item 30.

IFD158I ww xxxxx {yyy|y \$} UNIT uuuuuuuu aaaaaaaa
{V=V|V=R} [CPU=id]

Explanation: New section yyy or old section y \$ of test xxxxx has been started or terminated for unit uuuuuuuu for symbolic terminal aaaaaaaa. (If test definition specifies NDR (no device required), the phrase UNIT uuuuuuuu does not appear.)

The ww field is one of the following:

- S**
Section has been started.
- T**
Section has been terminated.
- *T**
Section has been terminated; device errors were detected.

If V=V appears in the message text, it indicates that the OLT is in virtual storage. If V=R appears in the message text, it indicates that the OLT is in real storage. If OLTEP is running in a multi-processing system, id will indicate which CPU initiates I/O to a device. id was either specified via the CPUAFN = verb or is the default CPU = id selected by OLTEP.

Operator Response: None.

Note: This message is issued only when the Control Print (CP) option is in effect.

IFD160I INSUFFICIENT CORE

Explanation: An OLT program has required more main storage than is available.

System Action: OLTEP returns control to the OLT program with an error return code. Testing will proceed if the OLT program can recover from the error condition; otherwise, testing will terminate.

Operator Response: If you can provide additional main storage, cancel the job and reschedule it in a larger region or partition.

IFD161I FOR HELP ENTER PROMPT xxxx TO NEXT
DEV/TEST/OPT/ MESSAGE

Explanation: OLTEP has issued message IFD108I, IFD112I, or IFD115I to diagnose an error in the test definition. The error is in the xxxx field, where xxxx is DEV, TEST, or OPT. This message explains how to request help in correcting the error.

System Action: OLTEP issues message IFD105D.

Operator Response: Respond as indicated to message IFD105D. For help, enter REPLY xx, 'PROMPT xxxx'.

IFD162I UNIT uuuuuuuu, DSNAME = dsn COULD NOT BE
SCRATCHED

Explanation: OLTEP is testing an IBM 2305 fixed-head file. An OLT program has created a data set on the device, and OLTEP has tried unsuccessfully to scratch the data set.

System Action: OLTEP continues processing.

Programmer Response: Probable hardware error.

Execute the IEHPROGM utility program to scratch the data set.

Problem Determination: Table I, item 30.

IFD173I REPLY xx NOT VERIFIED

Explanation: OLTEP is unable to verify the reply ID specified by the remote specialist in his reply to a message.

System Action: Processing continues.

Operator Response: The remote specialist must reenter his response, making sure that he specifies the correct reply ID.

IFD174I UNABLE TO RESTORE LABEL ON DEVICE
uuuuuuuu

Explanation: OLTEP has completed testing of device uuuuuuuu, which is an IBM 3400 magnetic tape unit. A standard-label scratch tape is mounted, but testing has destroyed the labels or the device is not ready. OLTEP has tried unsuccessfully to create new labels on the tape.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Probable hardware error. Respond as indicated to messages IFD137I and IFD139D.

Message IFD137I indicates the nature of the error, which may be, for example, that the device is not loaded. If you can correct the error, enter REPLY xx, 'R' in response to message IFD139D. OLTEP will try again to write standard labels on the tape.

If you cannot correct the error, enter REPLY xx, 'B' in response to message IFD139D. OLTEP will leave the tape unlabeled. You must relabel the tape before you can use it again as a standard-label scratch tape.

Problem Determination: Table I, item 30.

IFD176I MUTUALLY EXCLUSIVE OPTIONS HAVE
BEEN SELECTED

Explanation: In responding to message IFD105D when Retain/370 was active, the operator selected options RE and MI; these options are mutually exclusive.

System Action: OLTEP issues message IFD161I and reissues message IFD105D.

Operator Response: Probable user error. In responding to message IFD105D, select either option RE or option MI, but do not specify both.

Problem Determination: Table I, items 2, 29.

IFD178I MESSAGE xx ANSWERED BY REMOTE

Explanation: This message is issued to the on-site console to indicate that the remote specialist has replied to message IFD104E, IFD105D or IFD101D. In the message text, xx represents the reply ID of message IFD104E, IFD105D or IFD101D.

System Action: Processing continues.

Operator Response: None.

IFD

IFD179I – IFD227I

IFD179I NO UCB FOR ADDRESS uuuuuuuu

Explanation: OLTEP has been asked to test device uuuuuuuu. There is no UCB (unit control block) for this address.

System Action: OLTEP bypasses the device.

Operator Response: Probable user error. Make sure that uuuuuuuu is the correct address for the device to be tested. If the address is wrong, enter the correct address when OLTEP next issues message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD180I UCB NOT CONNECTED FOR DEVICE ddd

Explanation: Test device ddd was specified in response to message IFD105D. OLTEP found that there is no UCB associated with device ddd.

System Action: The testing of device ddd is bypassed.

Programmer Response: Choose another test device.

Problem Determination: Table I, items 2, 17, 30.

IFD200I TEST xxxxxxxx EXCEEDS AVAILABLE CORE SPACE

Explanation: The unit test specified in the xxxxxxxx field exceeds the size of the area allocated to the unit test.

System Action: Processing continues with the next OLT.

Operator Response: None.

IFD201I DEVICE DESCRIPTORS DO MEET xxxxxxxx REQUIREMENTS

Explanation: The unit test xxxxxxxx specified in the test field contains device descriptors to be checked but no device has been entered in response to message IFD105D.

System Action: OLTEP terminates the test and reschedules the next test.

Operator Response: None.

IFD202I READ AN INVALID REP CARD

Explanation: An invalid REP statement was encountered during a load. A character was misspelled, punctuation was incorrect or the format was wrong. If you are using the NST OLTEP data set, this message indicates an invalid REP statement or an invalid CDS statement (for a 4341 processor only).

System Action: The request to load the OLT or the CDS is ignored.

Programmer Response: Probable user error. Correct the REP statement and replace the existing copy of the module by running OLTEP's editor program again. If you are using the NST OLTEP data set, correct the REP statement or the CDS statement and replace the module by running the UPDATE utility program (for a 4341 processor only).

Problem Determination: Table I, items 23, 29.

IFD203I EOF OCCURRED BEFORE READING END CARD

Explanation: While processing a load request, OLTEP detected the end-of-file before the logical end of the requested module. The module may have been incorrectly added or replaced on the library.

System Action: The request to load the requested module (OLT) is ignored.

Programmer Response: Probable user error. Obtain a complete copy of the requested module and replace the existing copy by running OLTEP's editor program. If you are using the NST OLTEP data set, replace the existing copy of the module by running the UPDATE utility program.

IFD205I I/O ERROR WHEN LOADING TEST

Explanation: A permanent I/O error occurred while attempting to load a module.

System Action: The module is not loaded.

Operator Response: Attempt to run the test again.

Problem Determination: Verify that the drive that the library is mounted on has not been experiencing I/O failures. Table I, items 2, 4, 25c, execute the IEHDASDR program with the DUMP option, using the address obtained from 25c, 29.

IFD210I ROUTINE xxxx BYPASSED, MANUAL INTV REQUIRED

Explanation: OLT program routine xxxx requires manual intervention by the operator, but the manual intervention (MI) option was not specified in the test definition.

System Action: Routine xxxx is not executed.

Operator Response: If you wish to run routine xxxx, the next time you reply to message IFD105D specify routine xxxx in the test field and MI in the option field of your test definition.

IFD212I CANNOT DATA PROTECT DEVICE uuuuuuuu

Explanation: OLTEP attempted unsuccessfully to verify the class and type of device uuuuuuuu.

System Action: OLTEP issues message IFD120D.

Operator Response: Respond to message IFD120D as indicated below:

If OLTEP is permitted to destroy all data stored on the device, enter REPLY xx,'YES'.

If data on the volume must be preserved, enter REPLY xx,'NO'. OLTEP will bypass testing the device.

IFD227I INSUFFICIENT SUPPORT FOR xxxxxxxx-yy

Explanation: The OLT xxxxxxxx requires program support level yy not contained in this version of OLTEP.

System Action: The OLT is not scheduled. The next OLT is scheduled.

Operator Response: None.

IFD229I OLT CANCELED FOR \$MODE REQUEST
Explanation: OLTEP does not support the \$MODE macro.
System Action: Processing continues with the next unit test.
Operator Response: None.

IFD231I xxxxxxxx CANNOT RUN ON uuuuuuuu
Explanation: The unit test specified in the xxxxxxxx field can not be run on device uuuuuuuu. The device descriptors associated with the device are not compatible with those required by the unit test.
System Action: Processing continues with the next unit test.
Operator Response: None.

IFD243D ARE SHARED DEVS USED BY OTHERS, REPLY YES OR NO
Explanation: This message is requesting the CU TEST user to verify that all devices shared by this system with other systems (the devices listed in message IFD244I) are logically disconnected from other sharing systems. (As the result of CDS checks on the listed devices, it was assumed that these devices are shared.)
System Action: A NO response allows testing to proceed normally. A YES response will send a return code 08 to the online test (OLT), and OLTEP will reject that particular CU TEST request.
Programmer Response: Verify that all devices listed in message IFD244I are logically disconnected from (offline to) other sharing systems. Reply NO only if all devices are disconnected from sharing systems. Reply YES if there are devices which cannot be disconnected or if there are devices having a shared status of available.

IFD244I THE FOLLOWING CU TEST DEVS ARE {ASSUMED CPU SHARED|ONLINE/NON-BTAM ALLOCATED} ddd,ddd,....,ddd
Explanation: The message indicates one of the following:

1. ASSUMED CPU SHARED

The listed devices are assumed to be shared with another system. (The CDS for the device indicates the device is shared, or the lack of a CDS forces the CU TEST function to assume the device is shared.)

2. ONLINE/NON-BTAM ALLOCATED

The devices in the list resulting were found to be online or allocated and not under BTAM control; therefore, the devices could not be tested.

In any case, ddd,ddd,....,ddd indicates the list of shared or online devices. The devices listed apply only to the associated message text.

System Action: The system action depends on the text of the message:

In case 1, the list of shared devices is followed by message IFD243D, requesting the operator to examine the shared devices and make sure that they are disconnected from the sharing system(s).

In case 2, the CU TEST facility is not honored for online/non-BTAM devices. A return code of 08 is sent to the OLT.

Operator Response: In case 1, logically disconnect any shared devices from sharing system, and reply to message IFD243D. In case 2, vary the non-BTAM devices offline, and reenter the D/T/O/OLTEP command.

IFD248I THIS OLT FORCED TO RUN IN VIRTUAL, IT SHOULD RUN REAL

Explanation: This message follows message IFD158I. It indicates that the executing OLT does not possess virtual capability and should be run in real storage. Results of this OLT could be in error; this fact must be considered when examining the output.

System Action: OLTEP attempts to run the OLTs in virtual storage.

Operator Response: None. If valid results are desired for this test, it must be run when OLTEP is started in real (V = R) storage.

IFD251I DUPLICATE ENTRIES IN DEVICE FIELD

Explanation: Duplicate device numbers or symbolic device names were entered in the device field of the response to message IFD105D.

System Action: OLTEP reissues message IFD105D.

Operator Response: Reenter the reply to message IFD105D, eliminating one of the duplicate addresses or names.

IFD252I SYMBOLIC NAMES AND UNIT ADDRESSES MIXED IN DEVICE FIELD

Explanation: The operator has entered a combination of symbolic names and device numbers in response to message IFD105D. Mixed entries are not allowed.

System Action: Message IFD161I is issued, followed by message IFD105D.

Operator Response: Respond to message IFD105D with a valid entry.

IFD253I OLT SUB MODULE mod NOT FOUND IN LIBRARY

Explanation: An OLT has requested that a sub (PLINK) module be loaded. This module was not resident in the OLT library.

System Action: The OLT receives a nonzero return code and may or may not terminate itself.

Operator Response: Obtain the missing module and edit it into the OLT library using the OLTEP Editor. If you are using the NST OLTEP data set, add the missing module to the NST library by using the UPDATE utility program (for a 4341 processor only).

IFD255I – IFD273I

IFD255I message

Explanation: This is a communications message from an on-site C.E. to the remote specialist, or vice versa.

System Action: Processing continues.

Operator Response: If applicable, respond as indicated in the message text.

IFD260I CPUAFFN = VERB VALID IN M.P. SYSTEM ONLY

Explanation: The verb CPUAFFN = has been entered in reply to message IFD105D. OLTEP has determined that it is not being run in a multi-processing system and therefore cannot perform the action that this verb is requesting.

System Action: OLTEP reissues message IFD105D, ignoring this verb request.

Operator Response: None. Continue with the next test definition.

IFD261I INVALID CPU ID ENTERED

Explanation: OLTEP has been asked to set a CPU affinity in a multi-processing system. It has determined that the requested CPU is not in this system.

System Action: OLTEP issues message IFD263D.

Operator Response: None.

IFD262I SELECTED CPU NOT AVAILABLE

Explanation: OLTEP has been asked to set a CPU affinity in a multi-processing system. It has determined that the CPU being requested is not available at this time.

System Action: OLTEP issues message IFD263D.

Operator Response: None.

IFD263D REPLY CPUAFFN = X or NONE, WHERE X = CPU ID, NONE FOR DEFAULT

Explanation: OLTEP has detected an error while attempting to set a CPU affinity. Refer to preceding message IFD261I or IFD262I for an explanation of the error. OLTEP requires an alternate CPU id.

System Action: Waits for the operator to make a valid response to this message.

Operator Response: Select an alternate CPU from which the I/O to a device is to be performed, or allow OLTEP to select a default CPU.

IFD264D SYSTEM RESOURCE NOT AVAILABLE, REPLY CPUAFFN = /CAN/NONE

Explanation: OLTEP attempted to set a selected or defaulted affinity in a multi-processing system. OLTEP was unable to obtain exclusive use of a system resource. This indicates that the VARY CPU, VARY CHAN, or QUIESCE function is active.

System Action: None.

Operator Response: Wait for active function to complete and reply with CPUAFFN = xx (where xx is a valid CPU ID) or reply with NONE for OLTEP selection of default affinity. If no wait is desired, reply with CANCEL to terminate OLTEP.

IFD271I CHPID xx IS INVALID

Explanation: Channel path identifier xx was entered in response to message IFD105D. CHPID xx is not a valid value for the test device or is not a hexadecimal value in the range 00 to FF.

System Action: This message is followed by messages IFD273I and IFD274D or message IFD275I. If messages IFD273I and IFD274D are issued, message IFD273I lists the available CHPID values for the device and message IFD274D prompts the user for a valid value.

If message IFD275I is issued, no CHPID values are available.

Programmer Response: If messages IFD273I and IFD274D are issued, examine the available CHPID values listed in message IFD273I. Choose one and specify that value as a reply to message IFD274D. If message IFD275I is issued, that is, no CHPID values are available, choose another test device.

Problem Determination: Table I, items 2, 30.

IFD272I CHPID xx IS NOT AVAILABLE

Explanation: Channel path identifier xx was entered in response to message IFD105D. CHPID xx is not available for the test device.

System Action: This message is followed by messages IFD273I and IFD274D or message IFD275I. If messages IFD273I and IFD274D are issued, message IFD273I lists the available CHPID values for the device and message IFD274D prompts the user for a valid value.

If message IFD275I is issued, no CHPID values are available.

Programmer Response: If messages IFD273I and IFD274D are issued, examine the available CHPID values listed in message IFD273I. Choose one and specify that value as a reply to message IFD274D. If message IFD275I is issued, that is, no CHPID values are available, choose another test device.

Problem Determination: Table I, items 2, 30.

IFD273I AVAILABLE CHPIDs FOR DEVICE ddd ARE: xx, yy, ...

Explanation: This message lists the CHPIDs (xx, yy, ...) that are valid and available for device ddd. The list contains a maximum of 8 values.

System Action: Message IFD274D follows this message, prompting the user to enter a valid CHPID value for test device ddd.

Programmer Response: Examine the list of CHPID values. Choose one and specify it in reply to message IFD274D.

Problem Determination: Table I, items 2, 30.

- IFD274D** **REPLY xx OR NONE - WHERE xx = CHPID, NONE FOR DEFAULT**
Explanation: This message prompts for a valid CHPID value, chosen from the values listed in message IFD273I.
System Action: The system waits for the reply. If the reply is xx, a CHPID value, the system tests the value to determine if it is valid and available.
If the reply is none, the system chooses an available channel path to the device.
Programmer Response: Reply with a CHPID chosen from the list in message IFD273I or reply NONE to let OLTEP choose a CHPID value.
Problem Determination: None.
- IFD275I** **NO CHPID AVAILABLE FOR ddd**
Explanation: There are no available channel paths to device ddd. Device ddd was entered in response to message IFD105D.
System Action: The testing of device ddd is bypassed because there is no I/O path to the device.
Programmer Response: Choose another test device.
Problem Determination: Table I, items 2, 17, 30.
- IFD276I** **TEST PROCEEDING FOR DEVICE ddd USING CHPID xx**
Explanation: Test device ddd, using CHPID xx, has passed all validity and availability checks. The OLT (online test) is being scheduled to test the device.
System Action: I/O is executed on CHPID xx.
Note: This message does not appear when GPD = NO is specified in response to message IFD105D.
Programmer Response: None.
Problem Determination: None.
- IFD310I** **OLT VIRTUAL CCW TRANSLATION ERROR - rc**
Explanation: The IOS CCW translator, which was going to translate the data areas, discovered an error and issued the following return code (rc):
- X'80' - PAGE FIX error.
 - X'90' - Could not translate CCWs.
 - X'D0' - Data or CCW address is out of area spanned by region validity map.
- System Action:** The I/O operation is not started and the OLTEP scheduler will terminate the OLT.
Operator Response: OLTEP and this OLT should be run in real storage.
- IFD313I** **TEST CANCELED, ATTEMPTED TO WRITE ON A FILE PROTECTED DEVICE**
Explanation: An attempt was made by the OLT to write on a file-protected device.
System Action: The unit test is terminated. Processing continues with the next unit test.
Operator Response: None.
- IFD327I** **EXT =**
Explanation: The EXT option is in effect.
System Action: Processing continues.
Operator Response: None.
- IFD373I** **WARNING, EQUATING CDS TO SHARED DEV COULD DESTROY DATA**
Explanation: OLTEP has been asked to enter the CDS EQUATING function. Equating a non-shared device CDS to a shared device may cause data to be destroyed.
System Action: OLTEP issues message IFD394D, asking for the entry of the devices to be equated.
Operator Response: Before responding to message IFD394D, make sure that no conflict exists between the shared status of the device CDS and the device; then reply.
- IFD394D** **ENTER DEV EQUATES/END/CLR**
Explanation: The user has entered EQU to invoke the CDS equate function. He may enter equates in the CDS equate resident table, end CDS equating or clear the CDS equate resident table, or a combination of any of these, separated by a slash.
System Action: OLTEP waits for the operator to reply.
Operator Response: Enter the desired reply.
Example: REPLY xx,'CLR/181 = 182/END' clears the CDS equate resident table, equates 181 to 182, indicates the end of the table, and requests a printout of the resident table.
- IFD395I** **ACTIVE EQUATES SELECTED {NONE|text}**
Explanation: This message is issued when END is entered in reply to message IFD394D or after IFD398I is issued. The message displays the contents of the CDS equate resident table.
System Action: OLTEP issues message IFD396D for confirmation of equates.
Operator Response: Reply to message IFD396D.
- IFD396D** **ARE EQUATES CORRECT? YES/NO**
Explanation: This message follows message IFD395I and allows verification of equated device numbers and normal completion of equate functions.
System Action: OLTEP waits for the operator to reply.
Operator Response: Determine if any more equates are to be entered. If CDS equating is complete and OLTEP is to be resumed, enter REPLY xx,'YES'. If updates or changes are to be made to the CDS equate resident table, enter REPLY xx,'NO' and message IFD394D will be issued.

IFD397I – IFD415I

IFD397I INVALID ENTRY text

Explanation: An entry made in response to message IFD394D was invalid. The entry field in error will appear in the text portion of the message.

System Action: OLTEP reissues message IFD394D for a new reply.

Operator Response: Enter the correct reply to message IFD394D.

IFD398I EQUATED DEVICES EXCEED 16

Explanation: Sixteen valid entries were already in the CDS equate resident table when an attempt was made to enter more.

System Action: OLTEP stops entries to the resident table, issues message IFD395I to display the contents of the resident table, and issues message IFD394D and IFD396D to allow corrections or verification.

Operator Response: Reply to message IFD394I.

IFD399I EQUATED DEV ADDRESS AND \$CUTEST ARE MUTUALLY EXCLUSIVE

Explanation: An OLT has issued the \$CUTEST macro when equated device numbers were in the table.

System Action: A non-support return code is returned to the OLT.

Operator Response: Attempt to rerun the test section with the equate table empty.

IFD400I TP LINE CONNECTION, LINE = xxxxxxxx, TERMINAL = yyyyyyy

Explanation: OLTEP is testing remote teleprocessing equipment, and the above message is the output for each TP test where:

LINE = address of the line
TERMINAL = symbolic name of the terminal.

System Action: Processing continues.

Operator Response: None.

IFD405I OPERATOR CALL REQUIRED, TELEPHONE NUMBER NOT IN CDS

Explanation: OLTEP is testing remote teleprocessing equipment. The telephone number for the terminal to be tested is not in the configuration data set; therefore, the operator must establish the line connection by placing a call to that terminal.

System Action: If the call has not been made within 4 minutes, the line connection terminates with message IFD407I.

Operator Response: If the telephone number is known, place a call to the terminal.

IFD406I OPERATOR CALL TERMINAL ON NUMBER xxx

Explanation: OLTEP is attempting to test a terminal. To continue with the line connection, the operator must call the terminal.

System Action: If the call has not been made within 4 minutes, the line connection terminates with message IFD407I.

Operator Response: Place a call to the terminal on the number displayed.

IFD407I OPERATOR CALL NOT COMPLETED WITHIN TIME LIMITS

Explanation: OLTEP is attempting to test a terminal, and the operator has been requested to call that terminal. The call was not placed to the terminal within the allotted time (4 minutes) after message IFD405I or IFD406I appeared.

System Action: Line connection for that terminal is not made.

Operator Response: None.

IFD408I uuuuuuuu RETURNED A CC = 3, NOT OPERATIONAL

Explanation: The OLT under execution by OLTEP requested that a remote terminal communication line be enabled. OLTEP attempted to enable the line, but the line/terminal is non-operational.

System Action: OLTEP returns control to the OLT with an error return code.

Operator Response: Make sure that the communication line is in the system and is operational (powered up).

Problem Determination: Table I, items 1, 2, 13, 30.

IFD412I CCW CHAIN TERMINATED ON xxx

Explanation: The displayed CCW chain, used for a line connection, has terminated due to an I/O error.

System Action: The line connection is not made, and message IFD137I is issued with sense and CSW status.

Operator Response: Make sure that the terminal is operational and retry the procedure.

IFD413I REQUIRED CDS POINTER NOT PRESENT

Explanation: The OLT did not specify the configuration data set for this device.

System Action: Line connection is not made.

Operator Response: None.

IFD415I REQUIRED DATA INCORRECT OR MISSING IN CDS

Explanation: One of the following CDS errors occurred:

- An invalid CCW line connection code between 00 and 08
- The set mode bytes were not present and the connection code required them
- The number of digits exceeds 20
- The dial digit count equals zero
- The terminal was not symbolically named

System Action: The line connection is not made.

Programmer Response: Correct the CDS file to include all the necessary information.

- IFD450I RTN xxx, ID yy, AT nnnnnnnn, RC##**
- Explanation:** This message is issued by OLTEP whenever an OLT returns to OLTEP when:
- The TRACE option is active in response to message IFD105D.
 - Return code handling is active (an * will appear in front of the message text).

In the message text xxx is the routine number, yy is the last two digits of the OLTEP module name in the user's request, nnnnnnnn is the location branched to for service in the OLT, and ## is the return code.

System Action: Processing continues.

Operator Response: None.

- IFD467I ddd IN USE BY ANOTHER SYSTEM COMPONENT OR NOT AVAILABLE**
- Explanation:** OLTEP has been asked to test device ddd, but this device is currently being used by another system component or is unavailable for testing at this time.
- System Action:** OLTEP bypasses running the selected tests against device ddd.
- Operator Response:** None.

- IFD468I DDDD MUST BE OFFLINE - VARY OFFLINE REENTER TO TEST**
- Explanation:** OLTEP has been asked to test a 3850 DASD using an address that is virtual or convertible as staging. The device is online and must be offline.
- System Action:** OLTEP does not allow testing of DDDD. It proceeds with data protection for the next device in the list or reissues IFD105D.
- Operator Response:** VARY DDDD offline and reenter the request to OLTEP in response to IFD105D.

- IFD469D ENTER SSID {S0XX|S8XX} for {DDDD|3830} OR CANCEL**
- Explanation:**
- OLTEP has been asked to test 3850 DASD DDDD and needs the SSID in order to VARY OFF TEST (ICBVAR function) for test purposes.
 - OLTEP has been asked to test a 3830. After having verified that all unit addresses accessible through the 3830 are offline, and having varied off the SSID of the device entered in response to IFD105D, OLTEP needs the 3830 SSID in order to VARY it off.

System Action: OLTEP waits for operator reply and checks it for correct syntax. For example, OLTEP expects an S0XX reply for DASD testing, an S8XX for 3830 testing, or a CANCEL reply to bypass testing.

An incorrect reply causes the message to be reissued.

Note: For 3830 testing, the message is issued twice: once to get the DASD SSID, once to get the 3830 SSID.

Operator Response:

- Reply XX, 'S0nn' when the DASD SSID is asked for.
- Reply XX, 'S8nn' when the 3830 SSID is asked for.
- Reply XX, 'CANCEL' if testing should be bypassed.

IFD470I ICBVARY ERROR CODE nn - text

Where nn - text can be one of the following:

31 - S0XX DOES NOT EXIST

Explanation: The SSID given to OLTEP by the operator in response to IFD469D is not recognized by 3850. The ICBVARY request by OLTEP has been rejected.

System Action: OLTEP assumes the possibility of an incorrect SSID having been given by the operator in response to IFD469D and reissues IFD469D.

Operator Response: Verify which SSID should be given and respond to IFD469D.

36 - DDDD INVALID FOR S0XX

Explanation: OLTEP passed DDDD and S0XX to ICBVARY to vary off test. DDDD was the device number given to OLTEP in response to IFD105D. S0XX was the SSID given to OLTEP in response to IFD469D. 3850 has determined that DDDD is not valid for S0XX.

System Action: OLTEP assumes that DDDD is the correct device number but that the SSID S0XX is incorrect for that device. OLTEP reissues IFD469D.

Operator Response: Determine which is correct: DDDD or S0XX. If DDDD is correct, enter correct S0XX in response to IFD469D. If DDDD is incorrect, reply CANCEL to IFD469D, and give correct DDDD when IFD105D is reissued.

nn - VARY ON VIRTUAL SXXX FAILED

Explanation: OLTEP attempted to return an SSID to its virtual state. Sxxx can be either a DASD (S0xx) or 3830 (S8xx). ICBVARY has returned an error code indicating the request has been rejected. This message can occur at data protection time or during cleanup. If it occurs at data protection time, it is preceded by IFD468I.

System Action: OLTEP continues processing. The SSID is left in its off state.

Operator Response: Determine reason for the VARY failure, using the VARY error code. Once corrected, the SSID can be varied on virtual using operator commands to the system.

nn UNEXPECTED - 3830 TESTING BYPASSED

Explanation: OLTEP attempted to VARY OFF the 3830 SSID given in response to IFD469D. OLTEP received an unexpected error code.

System Action: OLTEP assumes possibility of an incorrect SSID having been given in response to IFD469D, and reissues IFD469D.

Operator Response: Check correctness of SSID and reason for error code. Respond to IFD469D with correct SSID or CANCEL.

nn UNEXPECTED - DDDD BYPASSED

Explanation: OLTEP has received an unexpected error return from the ICBVARY function as a result of trying to vary off test the SSID given in response to IFD469D.

System Action: OLTEP does not allow testing of device DDDD which is the device number that the operator wanted to test and for which the SSID has been given.

Operator Response: Determine reason for ICBVARY failure to vary off test. nn is the reason code given to OLTEP by ICBVARY.

IFD472I CANNOT VARY OFF MORE THAN 1 3830

Explanation: OLTEP has one 3830 SSIS varied off in the 3830 Mass Storage System, and has been requested to vary off another.

System Action: OLTEP does not allow more than one 3830 SSID to be varied off at a time. A return code is given to the OLT indicating the 3830 cannot be tested.

Operator Response: Allow OLTs to terminate testing of the varied off 3830 SSID, then reply to IFD105D with unit address associated with the second 3830 to be tested. OLTEP will vary on the first 3830 during cleanup, and the new (second) 3830 SSID will be allowed.

IFD473I INTERFACE INIT STATUS nnnnnnnn UNKNOWN

Explanation: An OLT has been requested to test an MSS section but the MSS initialization OLT (T3850I) has not yet been run. (T3850I sets MSS status bits in the section control table for use by both OLTEP and the OLTs.)

System Action: OLTEP issues message IFD474I to inform the user where to find MSS interface initialization information. OLTEP then issues message IFD139D which allows MSS initialization to be bypassed at the user's option.

Operator Response: Respond to message IFD139D as indicated below:

- REPLY xx,'B' to allow OLTEP to bypass the MSS device testing and return to IFD105D (at which time OLT T3850I should be invoked prior to further MSS testing).
- REPLY xx,'P' to allow OLTEP to proceed with the MSS device testing. Testing may destroy data.

IFD474I SEE MSS MLM FOR OLT T3850I

Explanation: This message is issued in conjunction with IFD473I. The message informs the user where to find MSS interface initialization information. (See description of message IFD473I.)

System Action: OLTEP issues message IFD139D which allows MSS initialization to be bypassed at the user's option.

Operator Response: Reply to message IFD139D as indicated in message IFD473I.

IFD475I INTERFACE nnnnnnnn INITIALIZED {FUNCTIONALLY|DIAGNOSTICALLY}

Explanation: An OLT has been requested to test an MSS section. the MSS initialization OLT T3850I has already been run, and the interface has been initialized functionally or diagnostically. This is an information only message.

System Action: Processing continues.

Operator Response: None.

IFD476I INTERFACE nnnnnnnn DIAGNOSTICALLY INITIALIZED

Explanation: An OLT to test an MSS section has abnormally terminated or been canceled, or a different device has been entered in response to IFD105D, or OLTEP is terminating and the MSS interface is currently diagnostically initialized (as reflected in the MSS status bits set in the section control table by the MSS initialization OLT T3850I.)

This is an undesirable condition.

System Action: OLTEP issues message IFD477I which explains how to initialize the MSS interface section functionally. Processing continues.

Operator Response: None.

IFD477I TO INITIALIZE FUNCTIONALLY, RUN OLT T3850I

Explanation: This message is issued in conjunction with IFD476I. The message explains how to initialize the MSS interface section functionally. (See description of message IFD476I.)

System Action: Processing continues.

Operator Response: OLT T3850I should be invoked in response to message IFD105D.

IFD501I xxxxxxxx BYPASSED, INVALID TEST

Explanation: OLTEP has been asked to run an invalid test (xxxxxxx). That test is being withdrawn from use.

System Action: OLTEP bypasses the test. Processing continues with the next OLT.

Operator Response: None.

IFD502I NO DEVICE DESCRIPTORS FOR DEVICE

Explanation: The operator entered an OLT for which there was no CDS (configuration data set).

System Action: Message IFD105D is issued.

Operator Response: Respond to message IFD105D.

IFD503I HIGHEST SELECTED ROUTINE NOT FOUND

Explanation: In response to message IFD105D, the operator enter 180/2400A,1-9//. Either the routine did not exist, or before completion of these routines the operator terminated the OLT.

System Action: Message IFD105D is issued.

Operator Response: Respond to message IFD105D.

IFD8901 DEVICE xxx THAT WAS BEING TESTED BY OLTEP CANNOT BE RESET

Explanation: While OLTEP was testing device xxx, that device suffered an error during the process of deactivation. xxx will remain assigned to OLTEP, but is inaccessible to the rest of the system.

System Action: OLTEP will finish processing the OLT you requested.

Operator Response: Have your system programmer reset the UCBNALLOC bit in the UCB.

IFD8991 OLTEP INITIALIZATION CONFLICTS, OLTEP MUST TERMINATE - rc

Explanation: A conflict occurred during OLTEP initialization causing OLTEP to terminate. The return code, rc, indicates why OLTEP terminated:

- 01 One of the following is true:
 - A. You tried to start two OLTEPs in the same system. The second OLTEP terminated.
 - B. You attempted to run OLTEP in virtual storage. OLTEP could not be made non-swappable.
 - C. OLTEP modules (IFDOLTxx) in SYS1.LINKLIB are not authorized.
- 02 One of these conditions exists:
 - A. Dummy CDS entry 'TCDSMDUM' does not exist in the OLT CDS data set.
 - B. If you are using the NST OLTEP data set, the CDS entry 'ZXLOCAL' does not exist in the data set.
- 03 OLTEP cannot get a minimum of 12K bytes of real/virtual storage for the OLT, or OLTEP cannot get 4K bytes of real/virtual storage for NST.
- 04 Either the name of the OLT/symbolic CDS data set being initiated or the name of the NST OLTEP data set being initiated is not an authorized name in SYS1.PARMLIB, or OLTEP in SYS1.LINKLIB is not authorized. If the latter is true, message IFD102I does not appear on the console.
- 05 OLTEP has been unable to set a default CPU affinity.

System Action: OLTEP returns control to the operating system.

Operator Response: If the return code is:

- 01
 - A. Do not attempt to start a second OLTEP until the first OLTEP job has been completed.
 - B. Run OLTEP job in real storage. See OLTEP SRL for requirements for running in real storage.
 - C. Re-linkedit OLTEP modules specifying AC=1 as linkage editor parameter.

02

A. Perform LISTPDS on the OLT data set and then rebuild this data set, using the SOSM facility and the OLTEP editor program (IFDOLT99), to include TCDSMDUM.

B. If you are using the NST OLTEP data set, use the UPDATE utility program to include the CDS entry 'ZXLOCAL'.

03 Consult the OLTEP SRL to insure that OLTEP is running in a large enough region (76K or, for NST, 80K).

04 Either run IEBUPDTE to place the name of the unauthorized data set in the IEAAPF00 member of SYS1.PARMLIB, or add OLTEP modules to the system using the AC=1 parameter in the linkage editor characteristics.

05 Retry OLTEP when a processor is available for which OLTEP can set a default CPU affinity.

Note: NST applies to a 4341 processor only.

IFD9001 INVALID INPUT, REJECTED - text

Explanation: This message is issued by the OLTEP editor, the punch module or the loader module. The message is followed by the 80-byte record it read in the text portion of the message.

System Action: If issued by the editor or punch, the system rejects the card as an input data record and processing continues. If issued by the loader, the load function is discontinued.

Operator Response: If issued by the editor or punch, correct the card in error and resubmit the job. If issued by the loader (while running OLTEP), execute the IEHDASDR program to obtain a copy of the module from the private library and notify the system programmer.

IFD9011 ddN DDCARD FAILED TO OPEN ***ERROR*******

Explanation: This message is issued by the OLTEP editor and punch modules. A data set could not be opened. The ddname which failed for OPEN is identified in the message text.

System Action: The job is terminated.

Operator Response: Probable user error. Correct the JCL and resubmit the job.

IFD9021 mod WAS CORRECTLY {ADDED [V] | PUNCHED | REPLACED [V]}

Explanation: Module mod was either replaced or added to the data set or was correctly punched from the data set. The V, if present, indicates that the module, mod, has virtual capabilities.

System Action: Processing continues.

Operator Response: Save the output listing for further information.

IFD903I - IFD911I

IFD903I xxxxxxxx WAS NOT STORED ***ERROR***
[NO SPACE LEFT IN
DIRECTORY|PERMANENT I/O ERROR]

Explanation: The OLTEP editor attempted to update the PDS directory via the STOW macro instruction, but an error occurred.

System Action: The job is terminated.

Operator Response: Notify the system programmer.

IFD904I SEQ ERR EXP=yyyy RECD=zzzz MODULE mod
NOT STORED

Explanation: The OLTEP editor found a card sequencing error in the input object deck. The expected (yyyy) and received (zzzz) card sequence numbers, and the module name (mod) containing the sequence error are included in the message text.

System Action: The module is not stored. Processing continues with the next module.

Operator Response: Correct the sequence error and resubmit the module for editing.

IFD905I mod MODULE NOT ON DATA SET, PUNCH
BYPASSED

Explanation: A punch request could not be processed because module (mod) does not exist on the data set.

System Action: Module (mod) is not punched.

Programmer Response: Execute the IEHLIST utility program to determine if module (mod) is on the data set and save the listing.

IFD906I REP ERR mod BYPASSED - text

Explanation: The OLTEP editor found an error in a REP card for module (mod). The failing card is listed on the text portion of the message.

System Action: Module (mod) is not stored. Processing continues.

Operator Response: Correct the failing card and resubmit the job.

IFD907I THE FOLLOWING MODULES WERE
DIRECTED TO THE {OLT AND LOCAL CDS
DATA SET|SYMBOLIC (REMOTE) CDS DATA
SET}

Explanation: This message indicates which data set received modules from the OLTEP editor.

System Action: Processing continues.

Operator Response: None.

IFD908I ORDER ERROR mod BYPASSED - text

Explanation: The input to the OLTEP editor contained an ordering error. Examples: A REP card was encountered after an RLD card; a TEXT card was encountered after a REP card. The card out of order will appear in the text portion of the message.

System Action: Module (mod) is not stored.

Operator Response: Correct the order error and resubmit the deck for editing.

IFD909I {SYS1.LPALIB|SYS1.LINKLIB|SYS1.SVCLIB}
CANNOT BE USED FOR ONLINE TEST LOAD
MODULES JOB TERMINATED

Explanation: This message is issued by the OLTEP editor when an invalid library is specified in the data definition (DD) statement.

System Action: The job is terminated.

Operator Response: Notify the system programmer.

IFD911I CANNOT LOAD MODULE mod, INVALID
CONTROL RECORD

Explanation: This message is issued by the OLTEP loader when an invalid control record is read. Example: non-ESD, TXTHDR, CDS, RLD, REP, or END card was read.

System Action: OLTEP bypasses this OLT and schedules the next OLT for execution.

Operator Response: Contact the system programmer.

Programmer Response: Execute the IEHDASDR utility program to obtain a dump of the bad module. If possible, re-edit the module.

Machine-Check Handler, Dynamic Device Reconfiguration, and Missing Interrupt Handler Messages (IGF)

IGF

Component Name	IGF
Program Producing Message	Machine-check handler program, dynamic device reconfiguration program, and missing interrupt handler.
Audience and Where Produced	For operator: console.
Message Format	<p>IGFnns text</p> <p>nnn Message serial number.</p> <p>s Type code: I This message supplies information about the error recovery attempt. W The system has been placed in wait state by MCH. E This message supplies error recovery information and indicates that operator action is required, but that the action may be delayed until convenient.</p> <p>Type code (dynamic device reconfiguration program): A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required.</p> <p>text Message text.</p>
Related Publications	<p><i>JES3 System Programming Library: Installation Planning and Tuning, SC23-0041</i></p> <p><i>MVS/XA Operations: System Commands, GC28-1206</i></p>

IGF500I SWAP xxx TO yyy -

<p>OPERATOR I/O ERROR PAGING I/O ERROR</p>

IGF500D REPLY 'YES', DEVICE, OR 'NO'

Explanation: The message is a repeat for verification of a SWAP command entered by the operator or a request to move volume as a result of a permanent I/O error on device xxx. PAGING I/O ERROR indicates that a duplexed paging request has received an I/O error.

If JES3 is in use on your system and device xxx is the same as device yyy, see the restrictions for using DDR (dynamic device reconfiguration) that are documented in *JES3 System Programming Library: Installation Planning and Tuning*.

If the device number is not allowed in reply, device xxx is a shared direct access storage device. It can only be removed and replaced on a spare drive on the same control unit and readied with the address plug xxx.

System Action: The system continues processing. The operator-initiated request will not complete until the operator responds to the message. The 'YES' or 'DEVICE' reply invokes the DDR function. The 'NO' reply causes a permanent I/O error to be posted for device xxx, operator SWAP command to be canceled as appropriate.

Operator Response:

- If a SWAP to device yyy is desired, reply 'YES'.

- If a SWAP is desired, but device yyy is not acceptable, enter the channel unit address of the device to which the volume on xxx is to be moved. Make sure that the device has an available path before entering this reply.
- If a SWAP is not desired, enter reply 'NO'.
- If PAGING I/O ERROR appears in the message text, one or more jobs will almost certainly be terminated if a 'NO' response is given.

Note:

- When continuing with the SWAP, either by answering 'YES' or a three-character device number, do not move the volume until the 'PROCEED' message, IGF502E, is issued or data set integrity may be lost.
- If device xxx is a 3340/3344 device with the fixed-head feature, device yyy must also have the fixed-head feature.
- If you are using magnetic tape units and xxx contains reels of different tape densities for input, be sure that xxx and yyy have the same dual density capability.
- If device yyy was offline, the system might request operator intervention (via message IEA000A) before it can issue message IGF502E. If so, mount a scratch tape. It will be unloaded, and then message IGF502E will be issued.

IGF502E – IGF512I

Caution: If the volume is a direct access storage device, care must be taken to insure that no head-disk interference (“head crash”) problem exists.

Problem Determination: Table I, items 2, 30.

IGF502E PROCEED WITH SWAP OF xxx TO yyy

Explanation: DDR is waiting for the operator to swap volumes.

System Action: The system continues operation.

Operator Response: Move the volume on device xxx to device yyy. If a volume is on yyy, move that volume to xxx. Make both devices ready. For disk swaps, when xxx and yyy are the same device, make the device not ready and then make it ready. For tape swaps, insure that xxx and yyy have been rewound and unloaded before you make the devices ready.

IGF503I ERROR ON ddd, SELECT NEW DEVICE

Explanation: A permanent I/O error has occurred during DDR tape repositioning which was in process in response to a SWAP request to ddd. The error occurred positioning the tape from load point on ddd. This message is followed by IGF509D to allow the operator to respond.

System Action: The tape is rewound and unloaded. The system continues operation.

Operator Response: Specify a new device number to replace ddd in response to message IGF509D, or reply ‘NO’. If the reply is ‘NO’, the associated job must be canceled by the operator since the tape is not positioned correctly.

IGF505I SWAP FROM xxx TO yyy COMPLETE

Explanation: The tape SWAP requested for the volume originally on xxx is now complete. This message does not appear for direct access devices or for unit record devices.

System Action: The system continues operation.

Operator Response: None.

IGF509I SWAP ddd -

OPERATOR I/O ERROR PAGING I/O ERROR

IGF509D REPLY DEVICE, OR ‘NO’

Explanation: If OPERATOR appears in the message text, the SWAP was requested by the operator. No valid ‘TO’ device is known and a response is required. This message follows a SWAP command when the ‘TO’ device is invalid for a SWAP.

If I/O ERROR or PAGING I/O ERROR appears in the message text, the SWAP is a result of a permanent I/O error. The I/O recovery procedures may be repeated on a new device. PAGING I/O ERROR indicates that a duplexed request has received an I/O error.

System Action: The system continues processing. The SWAP will not complete until the operator responds with one of the indicated replies.

Operator Response: If the DDR function is desired, reply with the three-character primary device

number of the same type as ddd. A deallocated device on a different channel is usually preferred. Make sure that the device has an available path before replying to this message. If the DDR function is not desired, reply ‘NO’.

Note:

- If PAGING I/O ERROR appears in the message text, a ‘NO’ reply to the request will almost certainly result in an abnormal termination for one or more jobs.
- When continuing with the swap by answering a three-character device number, do not move the volume until the ‘PROCEED’ message, IGF502E, is issued or data set integrity may be lost.
- When swapping a 3340/3344 device with the fixed-head feature, be sure that the “TO” device also has the fixed-head feature installed.

Caution: If the volume is a direct access storage device, care must be taken to insure that no head-disk interference (“head crash”) problem exists.

For tape swaps, if you reply ‘NO’ to this message and this message was preceded by message IGF503I, DDR will unload the you should not re-ready this particular tape because the system will not reposition it before writing a label on it during CLOSE processing. A non-labeled scratch tape should be mounted to satisfy CLOSE.

IGF511A WRONG VOLUME MOUNTED ON ddd, MOUNT ser,

[AL],	nnn
[NL],	
[NSL],	
[SL],	

Explanation: In performing a swap, the volume that had been on the “from” device was not put on ddd. This message appears only for tape swaps.

System Action: The system continues operation.

Operator Response: Remove the volume on ddd and replace it with the correct volume serial, label type (AL, NL, NSL, or SL), and sequence number (nnn). This message can be repeated as many as five times if a wrong volume is consistently mounted, then IGF509D is issued allowing you to reply ‘NO’ to the swap request or select another device.

IGF512I SWAP FROM ddd TERMINATED -

NO USER FOUND ERP IN PROGRESS OPEN/CLOSE/EOV IN PROGRESS BLOCKCOUNT UNRELIABLE CANCELED BY OPERATOR INVALID USER EXIT CATASTROPHIC ERROR INVALID DEVICE CANCELED BY USER JES3 ERROR
--

Explanation: During a swap, DDR has encountered a condition that prevents successful completion of the swap request from device ddd. The various conditions depend on the variable portion of the

message text. Following is a list of the possible conditions and their meanings:

NO USER FOUND - DDR was unable to locate the user of the device after the swap commenced. The user of the device has terminated, or the user's control blocks could not be located.

ERP IN PROGRESS - While attempting to rewind and unload the "FROM" tape involved in an operator-requested swap, an error recovery procedure (ERP) was found to be in progress.

OPEN/CLOSE/EOV IN PROGRESS - DDR has found that the user of the "FROM" tape is in the process of OPEN, CLOSE, or EOV. The position of the tape is not known.

BLOCKCOUNT UNRELIABLE - If the user of the tape is using the EXCP macro for I/O, he did not code the REPOS=Y parameter in his DCB macro. As a result, the blockcount is not considered to be accurate and DDR cannot reposition the tape.

If the user of the tape is using the basic sequential access method, DDR has encountered a condition where the tape is open for the CNTRL macro format and the blockcount is zero.

As a consequence, DDR cannot determine the position of the tape. This message also appears for all access methods if an attempt is made to SWAP a NL tape opened for the MOD disposition.

CANCELED BY OPERATOR - This message is confirmation that the operator has replied 'NO' to message IGF500D or IGF509D. The swap from ddd is not completed.

INVALID USER EXIT - The installation-written NSLREPOS routine has returned an invalid return code to DDR.

CATASTROPHIC ERROR - DDR has encountered a machine check, program check, or ABEND which it cannot retry. The current swap from ddd is terminated.

INVALID DEVICE - The device ddd entered as the "FROM" device in the swap command is invalid.

CANCELED BY USER - The installation-written NSLREPOS routine has indicated that the swap is to be terminated.

JES3 ERROR - A terminating error has occurred in a DDR/JES3 subsystem exit routine. The current swap from ddd is terminated.

BY DEVICE SUPPORT MODULE - The device support module could not validate the swap.

ERROR ON RD BLKID - DDR received a unit check in response to a Read Block ID command before the actual swap. The tape position cannot be determined, nor can the degree of data buffering be calculated.

ERROR ON RD BUFFER - DDR received a unit check in response to a Read Buffer command before the actual swap. The buffered data, which had not yet been written to tape, but had been sent from the host processor, cannot be retrieved.

INADEQUATE STORAGE - During DDR processing before the actual swap, the storage for saving the buffered data was insufficient.

DEVICE FORCED OFFLINE - The error occurred during an operator-initiated swap. The tape subsystem is boxed (forced offline).

System Action: Processing continues.

Operator Response: The response by the operator depends on the text of the message. Responses to each of the conditions are detailed below:

NO USER FOUND - Issue a DISPLAY U command to determine if the "FROM" tape is allocated. If it is not, no one using the tape and you need not use DDR to move the volume on it. If the tape is allocated, reissue the swap command to retry the swap. For a swap requested by the system as a result of a permanent error, no further action is necessary.

ERP IN PROGRESS - If a system-initiated DDR request does not occur as a result of a permanent error, reissue the SWAP command to retry the swap.

OPEN/CLOSE/EOV IN PROGRESS - Reissue the SWAP command after the OPEN, CLOSE, or EOV processing is complete. This would involve making required volume mounts prior to issuing the SWAP command.

BLOCKCOUNT UNRELIABLE - If the user is using EXCP level I/O, he must correct the program so that it maintains an accurate blockcount and ensure that the DCB macro is coded with REPOS=YES. This will allow DDR to support the I/O for both operator requests and upon the occurrence of errors.

If the user is known to be using BSAM, or the tape is NL, opened for the MOD disposition, you may attempt to reissue the SWAP command after tape motion has taken place.

CANCELED BY OPERATOR - If the tape is an emulator tape, no action is required since DDR does not support emulator tape.

INVALID USER EXIT - Contact the system programmer to make sure that the NSLREPOS program is in the system. If it is, make sure that a valid return code (0, 4, 8, 12, 16, or 20) is being returned to DDR and that no programming errors exist in NSLREPOS.

CATASTROPHIC ERROR - This may result when the application that had originally held an allocation for device ddd either terminates or issues a close against ddd while DDR is processing the swap. If this is the case, then a SVC dump for a program check in DDR accompanies this message. Give this dump to the system programmer.

INVALID DEVICE - Reissue the SWAP command using a valid device for the "FROM" device.

CANCELED BY USER - No action is required.

JES3 ERROR - If the swap was initiated through a SWAP command, you may attempt to reissue the command. If, however, the swap was requested by the system as a result of a permanent error, the affected user has been posted with a permanent error.

BY DEVICE SUPPORT MODULE - No action is required.

ERROR ON RD BLKID - No action is required.

ERROR ON RD BUFFER - No action is required.

INADEQUATE STORAGE - No action is required.

Problem Determination: Table I, items 2, 5a, 7d, 16, 18, 29.

IGF513I DEVICE ddd INVALID FOR SWAP -

{
 MOUNT PENDING
 UNIT REFERENCE INVALID
 UNSUPPORTED USE
 INCOMPATIBLE
 NOT OPERATIONAL
 NOT ALLOCATED
 DEVICE TYPE INVALID
 JES3 INCOMPATIBLE
 }

Explanation: Device ddd was specified for a swap either in the SWAP command or in response to message IGF500D or IGF509D. However, the device cannot be used for one of the reasons listed above. The meaning of each of the parameters is as follows:

MOUNT PENDING - DDR found that the 'TO' device has a mount outstanding for it. The device cannot be used as an alternate for the 'FROM' device because of a conflict with device allocation.

UNIT REFERENCE INVALID - A device was specified in response to message IGF500D or IGF509D or was entered as the 'TO' device in a SWAP command, however, no corresponding device could be found in the list of devices defined at system generation.

UNSUPPORTED USE - A condition exists on device ddd which temporarily prevents a swap from taking place, although the indicated device is supported for a swap.

INCOMPATIBLE - The 'TO' device specified in response to message IGF500D or IGF509D or in the original SWAP command was not compatible with the 'FROM' device. The device selected as the 'TO' device does not have the same features as the 'FROM' device, or is not in the same device class. This message also appears if an attempt is made to swap a shared DASD to an address other than itself.

NOT OPERATIONAL - No paths were available to ddd or a CC=3 on an SIO was received from device ddd.

NOT ALLOCATED - The 'FROM' tape ddd in the SWAP command is not allocated to any user.

DEVICE TYPE INVALID - Device ddd is of a device type not supported by DDR for swaps.

JES3 INCOMPATIBLE - The 'TO' device specified in response to message IGF500D or IGF509D or in the original SWAP command was not compatible with the 'FROM' device from JES3's point of view.

System Action: The command is not executed; processing continues.

Operator Response: The response depends on which one of the operands appeared in the text of the message. Respond as follows for each of the messages:

MOUNT PENDING - For swaps initiated by a SWAP command; reenter the command after the

mount request is satisfied if the device is the 'FROM' device. If the device is the 'TO' device for either swaps requested by the system or those initiated by a SWAP command, reenter another device or 'NO' to the IGF509D message which follows this one.

UNIT REFERENCE INVALID - Reenter a device number known to the system or 'NO' to the IGF509D message which follows this one. You can determine what devices are known to the system using the DISPLAY U command.

UNSUPPORTED USE - Reenter the SWAP command using a supported device if ddd is the 'FROM' device. Otherwise, reenter the address of a device supported by DDR to the IGF509D message which follows this one or enter 'NO'.

DDR does not permit swaps under the following conditions:

- Offline 'FROM' device.
- Devices under control of OLTEP.
- Integrated Emulator tapes in original second-generation format (RECFM=U) coded on DCB.
- NSL tapes if the user exit NSLREPOS is unavailable.
- Tape swaps where the 'TO' device is allocated.
- Unit record devices in ready status.

INCOMPATIBLE - Reply to message IGF509D which follows this message with a device compatible to the 'FROM' device or reply 'NO'.

Compatible devices are:

Disk swaps supported:

3330 to 3330
 3330 mod 11 to 3330 mod 11
 3340 to 3340

Unit Record swaps supported:

1403 to 1403
 1443 to 1443
 3211 to 3211
 3505 to 3505
 3525 to 3525

The following tape swaps are supported:

7-track to 7-track
 9-track (single or dual density) to 9-track (single or dual density), provided that the density in use on the xxx unit is a valid density specification for the yyy unit.

Note: If a 7-track tape drive is being used at 200 BPI, you must assure that the 'TO' device has 200 BPI feature.

Note: Volumes on 3400 series tape drives may only be moved to other 3400 series drives. However, volumes on 2400 series tape drives may be moved to either 2400 series drives or 3400 series drives.

NOT OPERATIONAL - Make the physical change necessary to have a path to the device. Then issue the appropriate VARY command to allow the device to be reached. The reply to message IGF509D which follows this one can only be entered after performing these steps.

NOT ALLOCATED - Since the tape is not allocated, you need not use DDR to move the tape.

DEVICE TYPE INVALID - Reply to the IGF509D messages with the CUA of one of the following devices:

Tape: 3410, 3411, 3420 (all models)

Disk: 3330, 3330 mod 11, 3340

Unit Record: 1403, 1443, 3211, 3505, 3525

JES3 INCOMPATIBLE - Reply to message IGF509D (which follows this message), supplying a device compatible to the 'FROM' device from JES3's point of view, or reply 'NO'. For information on JES3 device compatibility refer to *JES3 System Programming Library: Installation Planning and Tuning*.

IGF514I CAUTION: ENSURE THAT THERE IS NO HEAD OR DISK PACK INTERFERENCE

Explanation: The permanent I/O error occurring on a direct access storage device (in the previous message) with channel unit address xxx may be due to a defective disk drive or pack.

System Action: The system continues operation. The SWAP request does not complete until the operator responds to the succeeding reply message.

Operator Response: The disk drive or pack may be defective. If so, moving the pack or installing a different pack on the same drive will propagate the damage. Do not physically move the pack until both the pack and the drive have been inspected. Damage is indicated by a strange noise prior to turning the drive off. Another indication of damage to the device is a brown powder (dust) on disk surfaces or within the pack enclosure. Visually inspect the disk surfaces before removing the pack from the drive.

Problem Determination: Contact the appropriate hardware support area if there is *any* indication of damage. Table I items 18, 30. If after SWAP, an additional permanent I/O error occurs; or there are additional indications of problems *do not swap the pack again*.

IGF910W UNRECOVERABLE MACHINE FAILURE, RE-IPL SYSTEM

Explanation: One of the following errors has occurred:

- A machine check interruption has occurred on the only online processor and the associated machine check interruption code is invalid. This will result in an A26 wait state.
- A threshold of hard machine checks has occurred on the only online processor, or a hard machine check has been detected on the only online processor while a previous machine check was being processed, and recovery is not possible. This will result in an A01 wait state.
- A program check has been detected on the only online processor, while a previous machine check was being processed, and recovery is not possible. This will result in an A23 wait state.
- A loop has been detected on the only online processor, while a previous machine check was

being processed, and recovery is not possible. This will result in an A24 wait state.

System Action: The system enters a disabled wait state.

Operator Response: Probable hardware error. Re-IPL the system.

Problem Determination: Table I, items 11, 18, 30.

IGF912W EXTENDED STORAGE FAILURE, RE-IPL SYSTEM

Explanation: A hardware error exists in extended storage.

System Action: The system enters a disabled wait state.

Operator Response: Probable hardware error; re-IPL the system.

Problem Determination: Table I, items 11, 18, 30.

IGF931E nnn {SR } EVENTS HAVE OCCURRED ON
 {DG } CPU x,
 STATUS = { QUIET }
 { RECORD }

Explanation: The nnn field shows the number of machine check interruptions of the specified type that have occurred on processor x.

One of following identifies the type of machine check interruption:

SR System Recovery
 DG Degradation

The recording mode for that class of interruptions is indicated. QUIET indicates that the threshold value for RECORD = nnn mode has been reached and that the recording mode of the indicated event has been changed to QUIET. RECORD indicates that the count is equal to a multiple of the the reporting frequency (4 unless the reporting frequency has been changed by use of the MODE command) and that the recording mode of the indicated event remains RECORD = ALL.

System Action: Processing continues in the mode indicated.

Operator Response: Report this message to the system programmer and run the EREP service aid and retain the output.

Problem Determination: Table I, items 18, 30.

IGF953I EVENT- type {CPU = x}{VF = x}
 MODE- { QUIET }
 { RECORD = nnn }
 { RECORD = ALL }

CNT = nnn [INTERVAL = nnnn]
 [REPORT = nnn]

Explanation: The hardware error recovery status is presented in response to the MODE STATUS command and contains the following information:

- The event type is one of the following:
 SR System Recovery
 DG Degradation
 PD Instruction Processing Damage

IGF

- SD System Damage
 - IV Machine Check Interrupt indicates an invalid PSW or register
 - TC Time-of-day clock damage
 - PT Processor timer damage
 - CC Clock comparator damage
 - VS Vector facility source
- The CPU x is the address associated with a processor for that event.
 - The Mode is QUIET, RECORD = nnn, or RECORD = ALL. QUIET mode indicates no recording of hardware failures (applies only to SR and DG events). RECORD mode indicates that recording of hardware errors will continue until the count equals nnn, the threshold value. When this occurs for SR and DG events, message IGF931I will be issued and the respective processor will be placed in QUIET mode for the respective event. When the threshold value is reached for PD, SD, IV, TC, PT, or CC events, ACR (Alternate CPU Recovery) will be invoked to take the respective processor offline. When the threshold value is reached for VS events, the vector facility will be taken offline and message IGF970E will be issued. RECORD = ALL mode indicates that hardware errors will be recorded. For SR and DG events, message IGF931I will be issued whenever the count reaches a multiple of the reporting value. The default reporting value is 4.
 - CNT = nnn indicates the number of events that have occurred since the current counting interval began. For SR and DG events, the current interval is the time of the last IPL or the last time since IPL that the MODE command was issued for this event and processor. For PD, SD, IV, TC, PT, CC, and VS events, the beginning of the current counting interval is controlled by the value of INTERVAL.
 - INTERVAL is the length of time used in counting PD, SD, IV, TC, PT, CC, or VS EVENTS. Each time a hardware error occurs, if the time INTERVAL (in seconds) has elapsed since the counting interval began, a new counting interval is begun, and the current count reset to 1.
 - REPORT = nnn indicates that the reporting value of the respective event type is nnn (recording mode is RECORD = ALL). Whenever the count of the respective event (SR, DG, or En) reaches a multiple of nnn, message IGF931I will be issued.

System Action: Processing continues.

Operator Response: None.

IGF955I MODE { QUIET
RECORD = ALL
RECORD = nnn } FOR type

EVENTS ON {CPU|VF} = { x
ALL }

[INTERVAL = nnnnn]
[REPORT = nnn]

Explanation: In response to a MODE command, the recording mode of the indicated event class on the specified CPU was changed to the indicated state:

- The Mode is QUIET, RECORD = nnn, or RECORD = ALL. QUIET mode indicates no recording of hardware failures (applies only to SR and DG events). RECORD mode indicates that recording of hardware errors will continue until the count equals nnn, the threshold value. When this occurs for SR and DG events, message IGF931I will be issued and the respective processor will be placed in QUIET mode for the respective event. When the threshold value is reached for PD, SD, IV, TC, PT, or CC events, ACR (Alternate CPU Recovery) will be invoked to take the respective processor offline. When the threshold value is reached for VS events, the vector facility will be taken offline and message IGF970E will be issued. RECORD = ALL mode indicates that all hardware errors will be recorded. For SR and DG events, message IGF931I will be issued whenever the count reaches a multiple of the reporting value. The default reporting value is 4.
- The event type is one of the following:
 - SR System Recovery
 - DG Degradation
 - PD Instruction Processing Damage
 - SD System Damage
 - IV Machine Check Interrupt indicates an invalid PSW or register
 - TC Time-of-day clock damage
 - PT Processor timer damage
 - CC Clock comparator damage
 - VS Vector source
- EVENTS ON CPU = x means that the indicated event is being monitored on processor x. EVENTS ON CPU = ALL means the indicated event is being monitored on all processors.
- EVENTS ON VF = x means that the indicated event is being monitored on the processor attached with Vector Facility (VF) x.
- INTERVAL is the length of time used in counting PD, SD, IV, TC, PT, CC, or VS events. Each time a hardware error occurs, if the time INTERVAL (in seconds) has elapsed since the counting interval began, a new counting interval is begun, and the current count reset to 1.

- **REPORT = nnn** indicates that the reporting value of the respective event type is nnn (recording mode is **RECORD = ALL**). Whenever the count of the respective event (SR and DG) reaches a multiple of nnn, message IGF931I will be issued.

System Action: Processing continues.

Operator Response: None.

IGF957A MANUALLY STOP PROCESSOR(x) SO THAT ACR CAN PROCEED. REPLY U WHEN THE STOP HAS BEEN PERFORMED

Explanation: Processor x issued a malfunction alert, but the system was unable to stop processor x. This message asks the operator to manually stop the processor so that ACR (alternate CPU recovery) can remove it.

System Action: The system waits for the operator to reply.

Operator Response: Stop processor x and then reply U to this message. If you are unable to stop the processor, do not reply U. Instead, follow your installation's procedures for hardware problem diagnosis.

Programmer Response: None.

IGF958I MODE COMMAND REJECTED, prm PARAMETER INVALID

Explanation: The indicated parameter is invalid for the **MODE** command as specified.

System Action: Processing continues; the **MODE** command is rejected and has no effect.

Operator Response: Reissue the **MODE** command.

IGF959I MODE COMMAND REJECTED, CPU SPECIFIED IS

**{ INVALID
OFFLINE }**

Explanation: The **MODE** command was rejected. Either the processor specified was invalid, (the processor number was greater than F or **ENABLE** was specified for a processor on which **ENABLE** is not supported), or the processor specified was offline.

System Action: Processing continues; the **MODE** command is rejected and has no effect.

Operator Response: Reissue the **MODE** command. Be sure that the processor specified is online, that the processor number specified is 0-F, and that the processor supports the parameter specified. See *System Commands* to determine which processor(s) support the specified parameter.

IGF970E VF x NOW OFFLINE. UNRECOVERABLE ERROR DETECTED.

Explanation: The machine check handler detected a Vector Facility (VF) failure, and disconnected the failing VF.

System Action: The system takes the failing VF offline, and then continues processing. If there was any vector work running at the time of the failure, the system terminates the work.

Operator Response: You can issue the **DISPLAY M=CPU** command to find out if there are other VFs for existing jobs in the configuration. If there are available VFs in the configuration, the system will dispatch your VF work on the processor with the available VF.

If there are no VFs available, the system no longer executes your work. The system then issues message **IRA700I**. See the explanation of this message for further information.

Problem Determination: Table I, items 18 and 30.

IGF971E RECOVERY INITIATED FOR

**{ STORAGE FAILURE
SPF }**

[AT ADDRESS adr] ON CPU x

Explanation: A storage error was detected or an error was detected in the storage protect feature protection key for a storage block. If the location of the failing portion of storage can be determined, its address (in hexadecimal characters) is indicated in the message.

System Action: The system schedules the appropriate processing program's functional recovery routine to effect recovery; processing continues.

Operator Response: Report this message to the system programmer.

Programmer Response: To help identify hardware errors, run the **EREP** service aid program and retain the output.

Problem Determination: Table I, items 18, 30.

IGF972E RECOVERY INITIATED FOR PROCESSOR FAILURE ON CPU x

Explanation: A machine check interruption has occurred on the indicated processor and the machine check interruption code indicates that either instruction processing damage or system damage has occurred or that the registers or PSW were not valid.

System Action: The system schedules the appropriate processing program's functional recovery routine if necessary to affect recovery; processing continues.

Operator Response: Report this message to the system programmer.

Programmer Response: To help identify hardware errors, run the **EREP** service aid program and retain the output.

Problem Determination: Table I, items 18, 30.

IGF973W – IGF973W

IGF973W 'MULTIPLE ACR ATTEMPTS BY CPU nn'

Explanation: A hardware error occurred on one processor, causing an attempt to recover by ACR. However, because of a previous hardware error on another processor, the machine check handler found an ACR already in progress.

System Action: The machine check handler issued this message, then put the system into disabled wait state 050.

Operator Response: Probable hardware errors. Re-IPL. If the problem persists, contact your hardware support personnel.

Checkpoint/Restart Messages (IHJ)

Component Name	IHJ
Program Producing Message	Checkpoint/restart
Audience and Where Produced	For operator: consoles. For programmer: system output for the job.
Message Format	xx IHJnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: I Information; no operator action is required. text Message text.
Related Publications	<i>MVS/XA Checkpoint/Restart User's Guide</i> , GC26-4012 <i>MVS/XA Integrated Catalog Administration: Access Method Services Reference</i> , GC26-4019 <i>MVS/XA VSAM Catalog Administration: Access Method Services Reference</i> , GC26-4075

IHJ000I CHECKPOINT *jjj* [,*sss* [*ppp*]] (*ddn*) NOT TAKEN (*xxx* [-*www*]) [MODULE = *modid*]

Explanation: During execution of a CHKPT macro instruction, an error occurred before the checkpoint routine wrote any part of a checkpoint entry.

The variables in the message text are explained as follows:

Variable Explanation

jjj	is the jobname
sss	is the stepname
ppp	is the procedure step name
ddn	is the data definition name of the checkpoint data set (which is omitted if <i>xxx</i> is 001)
xxx	indicates why the checkpoint entry was not written
www	when it appears, further describes the problem
modid	is the module in which an error was detected

Detailed descriptions of the possible values for *xxx* and *www* appear at the back of this section, under the heading 'Reason Codes for IHJ Messages.'

System Action: A checkpoint entry was not written. The current checkpoint is not eligible for restart, but all previous valid checkpoints are eligible for deferred restarts, and the last valid checkpoint entry is eligible for automatic restart. In some cases, an SVC dump will be written.

If MOD is not the disposition of the checkpoint data set and if this is the first issuance of the CHKPT macro instruction after the data control block for the data set was opened, then all

checkpoint entries in the data set are lost. (The data control block may have been opened by the programmer or as a result of this checkpoint request.) However, if *xxx* is 001, no entries are lost.

If *xxx* is 048, the system terminates media manager processing.

Programmer Response: See reason codes for IHJ messages in this chapter. After correcting the problem, resubmit the job, if appropriate.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ001I *jjj* (*ddn,ddd,ser*) INVALID CHECKPOINT checkid (*xxx*[-*m-rc*])

Explanation: During execution of a CHKPT macro instruction, an error occurred while the checkpoint routine was writing a checkpoint entry.

In the message text, *jjj* is the jobname, *ddn* is the data definition name of the checkpoint data set, *ddd* is the device number, *ser* is the serial number of the volume containing the data set, *checkid* is the checkpoint identification, and *xxx* indicates why the checkpoint was invalid. When they appear, *m* and *rc* are explained in Modules and Return Codes for IHJ Messages.

System Action: A partial invalid checkpoint entry was written. The current checkpoint is not eligible for restart, but all previous checkpoints are eligible for deferred restarts, and the last valid checkpoint entry is eligible for automatic restart. In some cases, an SVC dump will be written.

Programmer Response: See reason codes for IHJ messages in this chapter. After correcting the problem, resubmit the job, if appropriate.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ002I **jjj [,sss [.ppp]] (ddn,ddd,ser) ERROR checkid (xxx) [MODULE = modid]**

Explanation: During execution of a CHKPT macro instruction, an error occurred. However, a checkpoint entry was written successfully.

In the message text, **jjj** is the jobname, **sss** is the stepname, **ppp** is the procedure step name, **ddn** is the data definition name of the checkpoint data set, **ddd** is the device number, **ser** is the serial number of the volume containing the data set, **checkid** is the checkpoint identification, and **xxx** indicates the cause of the error. **modid** is the module in which the error was detected.

System Action: A valid checkpoint entry that can be used to perform a deferred restart was written.

Programmer Response: See reason codes for IHJ messages in this chapter. After correcting the problem, resubmit the job, if appropriate.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ003I **jjj,sss [.ppp] ABEND cde DETECTED DURING CHECKPOINT [IN MODULE modid]**

Explanation: While taking a checkpoint, the ESTAE exit routine of checkpoint/restart was entered.

In the message text, **jjj** is the job name, **sss** is the stepname, **ppp** is the procedure step name, and **modid** is either the module in which an error was detected, or the last module in the checkpoint/restart component that had control. A service which **modid** called may have abnormally terminated.

System Action: Message IHJ000I, IHJ001I, or IHJ002I will accompany this message to indicate the state of the current checkpoint. Other messages may also accompany this message. An SVC dump is written in cases where the abnormal termination itself is not sufficient to correct the problem, and a previous recovery routine has not already collected diagnostic information. A return code is loaded into register 15 and a reason code into register 0, and control is returned to the caller of checkpoint.

Operator Response: See *System Codes* for code cde, and see the accompanying messages.

Programmer Response: See *System Codes* for code cde, and see the accompanying messages.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ004I **jjj [,sss [.ppp]] (ddn, dd, ser)**

{ CHKPT checkid
CHECKPOINT SUCCESSFUL. ID = checkid **}**

Explanation: A CHKPT macro instruction was executed successfully; no errors occurred.

In the message text, **jjj** is the jobname, **sss** is the stepname, **ppp** is the procedure step name, **ddn** is the data definition name of the checkpoint data set, **ddd** is the device number, **ser** is the serial number of the

volume containing the data set, and **checkid** is the checkpoint identification.

System Action: A valid checkpoint entry was written. A restart was requested.

Programmer Response: If a deferred restart is to be performed, code the checkpoint identification (checkid in the message text) in the RESTART parameter of the JOB statement.

If multiple checkpoint data sets were used, use **ddn** in the message text to determine the name of the data set containing the desired checkpoint entry. Code the data set name in the DSNAME parameter of the SYSCHK DD statement.

If the checkpoint data set is multivolume, indicate on the SYSCHK DD statement the volume containing the checkpoint data set that is the first (or only) volume containing the data set. That is, code the serial number (ser in the message text) in the VOLUME=SER parameter or, if the data set is to be retrieved using the catalog, code the volume in the volume sequence subparameter of the VOLUME parameter. Then resubmit the job.

IHJ005I **jjj [, sss [.ppp]] (ddn, ddd, ser) CHECKPOINT**

{ WITH POSSIBLE ENQUEUES SUCCESSFUL.
SUCCESSFUL WITH POSSIBLE SPECIAL REQUIREMENTS. **}**

ID = checkid (xxx) [MODULE = modid]

Explanation: A CHKPT macro instruction was executed successfully. However:

- Your program could be enqueued upon resources. The ENQ macro instruction was issued by either the problem program, the BDAM READ macro instruction with exclusive control, the RESERVE macro instruction, or the BDAM WRITE macro instruction with variable-length (V) or undefined (U) record format. Note that the enqueues will not be reestablished if restart occurs.
- Or checkpoint was unable to complete the check for enqueued resources, due to insufficient storage or due to an error detected by the QSCAN service.

In the message text, **jjj** is the jobname, **sss** is the stepname, **ppp** is the procedure step name, **ddn** is the data definition name of the checkpoint data set, **ddd** is the device number, **ser** is the serial number of the volume containing the data set, **checkid** is the checkpoint identification, and **xxx** is the reason code giving more specific information about the condition. **modid** is the module in which an error was detected.

System Action: A valid checkpoint entry was written and is eligible for a deferred or automatic restart.

Programmer Response: Ensure that the program reestablished the enqueues upon restart, provide more storage for checkpoints, or determine what the problem is with QSCAN service. After correcting the problem, resubmit the job, if appropriate.

IHJ007I RESTART NOT SUCCESSFUL FOR **jjj** (**xxx** [-**m-rc**] [-**www**] [**ddd**] [MODULE = **modid**])

Explanation: During execution of a checkpoint restart for job **jjj**, an error occurred.

The variables in the message text are explained as follows:

Variable	Explanation
xxx	The reason code for the error; under the heading 'Reason Codes for IHJ Messages,' a detailed explanation and programmer response appear for the value of xxx .
m	A module ID that corresponds to a module name; under the heading 'Modules and Return Codes for IHJ Messages,' a module name appears for the value of m .
rc	The return code issued by module m ; under the heading 'Modules and Return Codes for IHJ Messages,' an explanation for the value of rc appears under the module ID m .
www	An additional information code for VSAM.
ddd	A tape device number.
modid	The module in which the error was detected.

In most IHJ007I messages, **m**, **rc**, and **www** do not appear.

System Action: Restart for job **jjj** terminates.

Programmer Response: Find the value of **xxx** under the heading 'Reason Codes for IHJ Messages,' and follow the programmer response for that reason code. Then resubmit the job, if appropriate.

Problem Determination: Table I, items 1, 2, 3, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ008I **jjj** RESTARTED

Explanation: A checkpoint restart for job **jjj** has completed successfully.

System Action: Processing of job **jjj** continues.

Operator Response: None.

IHJ009I ERROR ON **ddname**

Explanation: This message gives the **ddname** of the DD statement that caused the error; the error is described in message IHJ007I.

System Action: The system issues message IHJ007I next.

Programmer Response: See message IHJ007I.

Problem Determination: See message IHJ007I.

IHJ011I **jjj**, **sss** [-**ppp**] ABEND **cde** DETECTED DURING

{
CHECKPOINT
RESTART IN MODULE **modid**
}

Explanation: While taking a restart, the ESTAE exit routine of checkpoint/ restart was entered.

In the message text, **jjj** is the job name, **sss** is the stepname, **ppp** is the procedure step name, and **modid** is either the module in which an error was detected, or the last module in the checkpoint/restart component that had control. A service which **modid** called may have abnormally terminated.

System Action: Messages IEF007I and IHJ007I will accompany this message. Other messages may also accompany this message. An SVC dump is written in cases where the abnormal termination itself or the accompanying messages are not sufficient to correct the problem and a previous recovery routine has not already collected diagnostic information. The task terminates with system completion code 13F.

Operator Response: See *System Codes* for code **cde**, and see the accompanying messages.

Programmer Response: See *System Codes* for code **cde**, and see for the accompanying messages.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ012I RECURSIVE ERROR IN ESTAE ROUTINE.

Explanation: While handling an abnormal termination, an error occurred in the ESTAE routine for checkpoint/restart.

System Action: Another attempt will be made to handle the abnormal termination. If it cannot be handled, or another occurs, the task is terminated.

Programmer Response: Use the diagnostic information provided by the first error message to solve the problem. If the second error occurred before the diagnostic information for the first error was saved, use the information from the second error to solve the problem.

Problem Determination: Table I, items 1, 2, 3, 5, 6, 7, 13, 16, 18, 29, 32, and/or 33 as appropriate.

IHJ101I [**jjj**, **sss** [-**ppp**]] USER NOT [RACF] AUTHORIZED TO DASD DATA SET = **dsn,volser**

Explanation: Although you were authorized by RACF to access the data set at the time it was opened, you are not authorized at the time of restart.

In the message text, **jjj** is the job name, **sss** is the stepname, **ppp** is the procedure step name, and **volser** is the volume serial number.

System Action: Restart will be terminated with system completion code 13F.

Programmer Response: Obtain authorization to the data set from the data set owner, and resubmit the job.

Problem Determination: Table I, items 1, 3, 5, 29, 44.

IHJ

IHJ102I [jjj,sss [-ppp]] {ENVIRONMENT|USER} NOT RACF AUTHORIZED TO TAPE VOLUME = volser

Explanation: You are not authorized to access a RACF-protected tape volume at the time of the restart.

In the message text, **jjj** is the job name, **sss** is the stepname, **ppp** is the procedure step name, and **volser** is the volume serial number.

System Action: Restart will be terminated with system completion code 13F.

Programmer Response: Obtain authorization to access the RACF-protected tape, and resubmit the job.

Programmer Response: Cancel the time interval before issuing the CHKPT macro instruction, and restore the interval after a restart.

009 The CHKPT macro instruction was issued in an exit routine other than the end-of-volume exit routine, or an RB of an unacceptable type was found on the RB chain. (Return code - 08)

Programmer Response: Ensure that the CHKPT macro instruction is not issued in an exit routine other than the end-of-volume exit routine.

010 A graphic data control block (DCB) has been detected but is not supported in checkpoint restart. (Return code - 08)

Programmer Response: Ensure that the CHKPT macro instruction is not issued while graphic DCBs are open.

011 The current task was a subtask. (Return code - 08)

Programmer Response: Ensure that the CHKPT macro instruction is not issued when multiple tasks (created by the ATTACH macro instruction) exist.

012 The current task has subtasks. (Return code - 08)

Programmer Response: Ensure that the CHKPT macro instruction is not issued when multiple tasks (created by the ATTACH macro instruction) exist.

013 At the time the checkpoint was attempted, the job had issued the PCLINK macro instruction with the STACK option, but had not issued a corresponding PCLINK macro instruction with the UNSTACK parameter. (That is, the PCLINK stack was not empty.) (Return code - 08)

Programmer Response: Ensure that the PCLINK stack is empty.

014 A reply to a WTOR macro instruction was not received. (Return code - 08)

Programmer Response: Issue a WAIT macro instruction after the WTOR macro instruction, or a DOM macro instruction for any outstanding WTORs before the CHKPT macro instruction.

015 An incorrect checkpoint identification length or format was encountered. (Return code - 08)

Programmer Response: When supplying a checkpoint identification, ensure that the length and format are correct.

016 The checkpoint data set device type was not magnetic tape or direct-access. (Return code - 08)

Programmer Response: Take checkpoints only to tape or DASD.

017 Insufficient storage was available to check for ENQs via the GQSCAN macro.

Programmer Response: Provide a larger storage area.

018 GQSCAN found an abnormal condition. (Return code - 10)

Programmer Response: See the information provided by the GQSCAN service to locate and correct the problem.

019 Either MACRF=W was not specified for the checkpoint data control block (DCB), or the data control block was opened by your program, but was not opened for output. (Return code - 08)

Programmer Response: Ensure that the DCB for the checkpoint data set has MACRF=W and, if opened, is opened for output.

Reason Codes for IHJ Messages

xxx

or

www Explanation

000 Possible enqueue error. (Return code - 10)

Programmer Response: Ensure the program reestablished the enqueues upon restart.

001 A checkpoint parameter list error was encountered. (Return code - 08)

Programmer Response: Correct the parameter list.

002 The DD statement for the checkpoint data set is missing. (Return code - 08)

Programmer Response: Ensure that the DD statement is correct and is included.

003 Insufficient space was available for a work area. (Return code - 08, or abend code - 13F)

Programmer Response: Use a larger storage area. If the IEALIMIT routine has been modified, it may be necessary to alter it to request less storage.

004 Open failed for checkpoint data set. (Return code - 0C)

Programmer Response: Locate the problem and correct it.

005 The checkpoint data set key length was not equal to zero. (Return code - 08)

Programmer Response: Ensure that the checkpoint data set is not a keyed data set.

006 The checkpoint data set record format was not U. (Return code - 08)

Programmer Response: Ensure that the record format is U.

007 The data control block (DCB) for the checkpoint data set was opened for other than basic sequential access method (BSAM) or basic partitioned access method (BPAM) processing, or MACRF=W was not specified in the DCB. (Return code - 08)

Programmer Response: Ensure that only BSAM or BPAM is used.

008 The time interval specified in the STIMER macro instruction had not elapsed. (Return code - 08)

- 020 I/O error during open of CHKPT data set. (Return code - 0C)
Operator Response: Locate the cause of the I/O error and correct the problem.
- 021 LABEL was coded in the DD statement for the checkpoint data set with a value other than SL or SUL. Other values for the LABEL parameter must not be used in a checkpoint data set DD statement. (Return code - 08)
Programmer Response: A tape data set to be used for creating a checkpoint data set must have standard labels. Correct the JCL and/or tape label.
- 022 An error occurred while reading DD name table system control blocks from the scheduler work area (SWA). (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 023 An uncorrectable input/output error occurred while writing the checkpoint data set. (Return code - 0C, or abend code - 13F)
Operator Response: Locate the cause of the I/O error and correct it.
- 024 A data set has more than five volumes but there is no JFCBX. (Abend code - 13F)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 025 An error occurred while reading or writing a job control table (JCT) from the scheduler work area (SWA). (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 026 Execution of a STOW macro instruction was unsuccessful; a permanent input/output error occurred. (Return code - 0C)
Operator Response: Locate the cause of the I/O error and correct it.
- 027 End-of-volume occurred while writing a checkpoint data set entry on a direct-access volume and secondary allocation was requested and allocated, or end-of-volume occurred twice while writing a checkpoint data set entry on tape. (Return code - 08)
Programmer Response: Ensure that all volumes (or DASD extents) have enough room for more than one checkpoint entry.
- 029 The OPTCD subparameter of the DCB parameter was coded incorrectly. The value coded is not acceptable for a checkpoint data set. ANSI translation on checkpoint data set is not allowed. (Return code - 08)
Programmer Response: Correct the indicated error and resubmit the job.
- 030 An uncorrectable I/O error occurred while quiescing pending I/O requests. The I/O error occurred on a QSAM or BSAM data set with EROPT not equal to ACCEPT. (Return code - 0C)
Programmer Response: Code EROPT = ACCEPT (on your DD statement or DCB) for QSAM and BSAM data sets, or locate the cause of the I/O error and correct it.
- 031 An uncorrectable I/O error occurred while reading from the checkpoint data set. (Abend code - 13F)
Programmer Response: Locate the cause of the I/O error and correct it. If all restrictions are met for a deferred restart, you can submit a deferred restart. Either restart at an earlier checkpoint or repeat the original execution, using a different volume.
- 032 DISP=SHR was specified for an ISAM data set at checkpoint time. (Return code - 08)
Programmer Response: Do not specify DISP=SHR for ISAM data sets.
- 033 The tape cannot be repositioned to a data set or record because the block count in the DCB is negative. A negative block is valid only when the tape is (1) labeled NL or BLP and (2) is open for RDBACK.
- 034 A DD statement was missing for the restart step. (Abend code - 13F)
Programmer Response: Supply the missing DD statement.
- 035 Wrong length record detected when reading checkpoint data set. (Abend code - 13F)
Programmer Response: Locate and correct the problem. Be alert for a possible security violation.
- 036 Checkpoint received a non zero return code from the MVS Supervisor concerning the number of SSCR records it needs for data. (Return Code 0C)
Programmer Response: See the section Modules and Return Codes For IHJ Messages.
- 037 Checkpoint received a non zero return code after requesting that the MVS Supervisor fill in the SSCR records with checkpoint data. (Return Code 0C)
Programmer Response: See the section Modules and Return Codes For IHJ Messages.
- 038 Restart received a non zero return code when it passed the SSCR records, containing MVS Supervisor's checkpoint data. (Abend code - 13F)
Programmer Response: See the section Modules and Return Codes For IHJ Messages.
- 040 An uncorrectable input/output error occurred while reading standard volume labels. (Abend code - 13F)
Programmer Response: Locate the cause of the I/O error and correct it.
- 041 CHKPT was issued with a VSAM data set open for create mode processing and no reposition specified. (Return code - 08)
Programmer Response: Ensure that a checkpoint is not issued when this condition exists, or correct this condition.
- 042 An error occurred during repositioning for a VSAM data set. (Return code - 0C)
Programmer Response: Locate the error and correct it.
- 043 CHKPT was issued with an entry-sequenced data set open for output, an immediate-upgrade set open over it, and reposition required. NRE or NRC must be specified. (Return code - 08)
Programmer Response: Locate the error and correct it.
- 044 CHKPT was issued for a relative-record data set open for create mode direct processing. (Return code - 08)
Programmer Response: Ensure that a checkpoint is not issued when this condition exists, or correct this condition.

- 045 CHKPT was issued with a VSAM data set open with the GSR option. (Return code - 08)
Programmer Response: Ensure that a checkpoint is not issued when this condition exists, or correct this condition.
- 046 A checkpoint is not allowed if any of the VSAM data sets in the region are utilizing the Control Block Update Facility processing, or if any of the VSAM data sets in the address space, region, or partition are associated with an alternate index that was using the enhanced share option 4 processing. (Return code - 08)
Programmer Response: Change the data set to be DISP=OLD or close the data set prior to issuing the CHKPT.
- 047 CHKPT was attempted with a VSAM data set open in a region that was using the CBIC option. (Return code - 08)
Programmer Response: Ensure that a checkpoint is not issued when this condition exists, or correct this condition.
- 048 A CHKPT macro instruction was issued for a media manager CONNECT. Media manager processing is terminated. (Return code - 08)
Programmer Response: Remove the CHKPT macro instruction.
- 050 A volume serial number at restart is not the same as it was when the checkpoint was taken. (Abend code - 13F)
Programmer Response: Ensure that the volumes used at checkpoint are the same at restart and that units are available to mount them.
- 051 A SPIE exit was active when a CHKPT request was made. (Return code - 08)
Programmer Response: Do not issue a CHKPT request from a SPIE exit.
- 052 A module, which was loaded in the link pack area (LPA) or the nucleus and was being used by job jjj when the checkpoint was taken, is not in the LPA or nucleus at restart. (Abend code - 13F)
Programmer Response: Ensure that the nucleus and LPA are the same at restart as when the checkpoint was taken.
- 053 The module has a different entry point address in the link pack area (LPA) or nucleus at restart than it did when the checkpoint was taken. (Abend code - 13F)
Programmer Response: Ensure that the nucleus and LPA are the same at restart as when the checkpoint was taken.
- 054 A primary address space ID and/or secondary address space ID is not the same as the home address space ID. Cross memory addressing was active when a checkpoint was requested. (Return code - 08)
Programmer Response: Do not issue the CHKPT macro when in cross memory mode.
- 055 VSMREGN failed. (Return code - 0C)
Programmer Response: Information about this problem should have been provided by the VSMREGN service of VSM (virtual storage manager).
- 056 VSMLIST failed. (Return code - 0C)
Programmer Response: Information about this problem should have been provided by the VSMLIST service of VSM (virtual storage manager).
- 057 Checkpoint DD statement is concatenated. (Return code - 08)
Programmer Response: Checkpoint data sets must not be concatenated.
- 058 A bad parameter list was passed to IHJGLU00. (Return code - 14, or abend code - 13F)
Programmer Response: Use the diagnostic information provided by checkpoint/restart to locate and correct the problem.
- 059 An unexpected return code was received by IHJGLU00. (Return code - 0C, or abend code - 13F)
Programmer Response: Use the diagnostic information provided by checkpoint/restart to locate and correct the problem.
- 060 An error occurred while reading or writing a JFCB from the SWA. (Return code - 0C, or abend code - 13F)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 061 Caller of CHKPT was in secondary addressing mode. (Return code - 08)
Programmer Response: Do not issue the CHKPT macro when in cross memory mode.
- 062 An error occurred while reading or writing a SIOT from the SWA. (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 063 Data set repositioning error occurred on a tape. (Abend code - 13F)
Programmer Response: Either restart at an earlier checkpoint or repeat the original execution, using a different volume.
- 066 An error occurred while reading or writing a SCT from the SWA. (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 067 An error occurred while reading or writing a JFCBX from the SWA. (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 068 An error occurred while reading or writing a GDG name table from the SWA. (Return code - 0C)
Programmer Response: This is probably an error in the SWA manager. Contact your software support personnel.
- 069 Too much VSMLIST data; user's storage is fragmented beyond checkpoint's capabilities. (Return code - 08)
Programmer Response: Reduce the region size, change the program to reduce storage fragmentation, or increase the size of extended private storage.
- 074 An unacceptable input/output error occurred while reading a data set control block (DSCB). This message is also issued if a data set was being scratched or deleted. (Abend code - 13F)
Programmer Response: If it is during restart and the restart was deferred, the restart may be attempted again. If a preceding input/output error message for the restarted job identified the device in error, locate and correct the error. Ensure that no data set has been scratched or deleted.

- 075 STOW encountered a full directory on the checkpoint data set. (Return code - 08)
Programmer Response: Increase the size of the directory for the checkpoint data set.
- 076 A direct-access data set (other than the system input data set) being processed for input did not occupy the same extent as it did originally; that is, discrepancies were found in comparing the space allocations described in the data extent block (DEB) and the data set control block (DSCB). (Abend code - 13F)
Programmer Response: Ensure that no input data set (other than the system input data set) has been expanded, or rewritten, in its original volume.
- 077 An error occurred during ISAM OPEN processing. (Abend code - 13F)
Programmer Response: See accompanying messages to correct the problem.
- 078 Checkpoint was not on a 31-bit supervisor while restart is. (Abend code - 13F)
Programmer Response: Restart the job in the same processing environment as the one in which it was checkpointed.
- 079 DUMMY was specified for an open data set and either the data set was not being processed by the basic or queued sequential access methods or the checkpoint at which restart was to occur was established in an end-of-volume exit routine for the data set. (Abend code - 13F)
Programmer Response: Ensure that DUMMY is specified only for data sets being processed by the queued or basic sequential access methods. Also, ensure that restart is not to occur at a checkpoint that was established in an end-of-volume exit routine for a data set that has been made DUMMY.
- 080 A compatibility interface data set was made DUMMY at restart. (Abend code - 13F)
Programmer Response: Do not make compatibility interface data sets DUMMY.
- 081 The checkpoint job or step specified ADDRSPC=REAL (V=R) and the restarting job or step did not, or vice versa. (Abend code - 13F)
Programmer Response: Ensure that the V=R status of both the checkpoint and restarting job or step are the same. That is, if ADDRSPC=REAL was specified at checkpoint time, it can only be specified (and must be specified) at restart time.
- 082 The TCAM control program was not active at restart, but a TCAM DCB was opened at checkpoint. (Abend code - 13F)
Programmer Response: Ensure that the TCAM control program region is active and is large enough to add control blocks.
- 083 The value specified in the QNAME parameter on the DD statement is not defined in the TCAM table.
Programmer Response: Correct the DD statement or define the QNAME value in the TCAM table.
- 084 The process entry specified in the QNAME parameter on the DD statement is already being used by another application program.
Programmer Response: Restart the job when the specified QNAME is not being used.
- 085 A GETMAIN failed during TCAM restart.
Programmer Response: Provide more storage.
- 086 An abend occurred during a checkpoint or restart. (Return code - 08, or abend code - 13F)
Programmer Response: Use the diagnostic information provided to correct the error.
- 087 Restart found that the record order on the checkpoint data set is incorrect. (Abend code - 13F)
Programmer Response: Use the diagnostic information provided to correct the error. Be alert for a possible security violation.
- 088 Restart found that storage was not allocated as expected. (Abend code - 13F)
Programmer Response: Use the diagnostic information provided to correct the error.
- 090 Checkpoint or restart detected an error internal to checkpoint/restart. (Return code - 14)
Programmer Response: Use the diagnostic information provided to correct the error.
- 091 Checkpoint/restart detected an error while building a message for the operator. (Return code - 14, or abend code - 13F)
Programmer Response: Use the diagnostic information provided to correct the error.
- 092 An error occurred during basic partitioned access method (BPAM) processing. For example, an error was detected after the convert routine or after reading the directory blocks. (Abend code - 13F)
Programmer Response: Locate the problem and correct it.
- 094 Nucleus routines or tables have moved or been deleted since checkpoint. (Abend code - 13F)
Programmer Response: Resubmit the job on the same system with the same nucleus and LPA on which the checkpoint was taken.
- 095 A control block chaining error occurred.
- 096 An error occurred during use of the STOW macro instruction to delete a member from the directory. (Abend code - 13F)
Programmer Response: Locate the cause of the error and correct it.
- 097 An unacceptable input/output error occurred in your installation's non-standard label (nsl) routine. (Abend code - 13F)
Programmer Response: Locate the cause of the I/O error and correct it.
- 098 Insufficient devices were available for restart. (Abend code - 13F)
Programmer Response: Ensure that the UNIT parameter of the DD statement accurately reflects the device requirements for the data set.
- 099 A data set association block (DSAB) is missing at restart. (Abend code - 13F)
Programmer Response: Probable system error. Locate and correct the problem.
- 100 MSS error occurred during mount processing. See IEC466I for explanation. (Abend code - 13F)

- 101 An uncorrectable input/output error occurred while reading a volume label on a direct-access device. (Abend code - 13F)
Programmer Response: Locate the cause of the I/O error and correct it.
- 103 A subsystem checkpoint record (SSCR) was written, but the corresponding DCB is not in the open data set table at restart. (Abend code - 13F)
Programmer Response: Probable error in checkpoint/restart. Contact your software support personnel.
- 104 An I/O error occurred while repositioning to the correct data set on tape. (Abend code - 13F)
Programmer Response: Locate the cause of the I/O error and correct it.
- 181 An error occurred during execution of the VSAM restart preformat routine. yyy is the value from RPLERRCD. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, refer to the RPL error codes in the *VSAM Administration: Macro Instruction Reference*.
- 182 An error occurred during execution of the VSAM restart verify routine. yyy is the value from RPLERRCD. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, refer to the RPL error codes in the *VSAM Administration: Macro Instruction Reference*.
- 183 An error occurred during execution of the VSAM restart put routine. yyy is the value from RPLERRCD. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, refer to the RPL error codes in the *VSAM Administration: Macro Instruction Reference*.
- 184 An error occurred during execution of the VSAM restart index put routine. yyy is the value from RPLERRCD. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, refer to the RPL error codes in the *VSAM Administration: Macro Instruction Reference*.
- 185 VSAM open error during restart. yyy is the VSAM open error code. (Abend code - 13F)
Programmer Response: See message IEC161I or IEC252I.
- 186 VSAM close error. yyy is the VSAM close error code. (Return code - 0C)
Programmer Response: The error is for VSAM only. See message IEC161I or IEC252I.
- 190 An error occurred while attempting to obtain catalog information for the cluster identified by the ddname in message IHJ009I. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, see messages IEC331I and IDA3009I, if issued.
- 191 An error occurred while attempting to mount volumes for the ddname identified by message IHJ009I. (Abend code - 13F)
Programmer Response: Increase the number of units allocated for the ddname.

The error is for VSAM only. For additional information, see message IEC161I or IEC252I, if issued.
- 193 Checkpoint was taken during create mode, but at restart time the data set was no longer in create mode. (Abend code - 13F)
Programmer Response: A restart is not allowed. Take the checkpoint after the data set is loaded.
- 194 The catalog entries for a VSAM upgrade path have been altered since checkpoint. (Abend code - 13F)
Programmer Response: If the upgrade path can be restored to its condition at checkpoint, the restart may be resubmitted.
- 195 Insufficient storage is available for a VSAM restart. (Return code - 0C, or abend code - 13F)
Programmer Response: Increase the available storage.
- 196 The catalog for one or more VSAM data sets has been updated, indicating that another job successfully processed the data set after the checkpoint was taken. Restart cannot restore the data set to its checkpoint status. (Abend code - 13F)
Programmer Response: Override the condition, and allow restart by coding AMP=CROPS=NCK in the DD statement for the data set. Be aware, however, that changes might have been made to the data between the time the checkpoint was taken and when restart is attempted. A data set that has been extended to span volumes since the checkpoint was taken cannot be restarted.

The error is for VSAM only. For additional information, see message IEC161I or IEC252I, if issued.
- 197 A restart is not allowed for control block update facility (CBUF) processing. (Abend code - 13F)
Programmer Response: Do not issue the CHKPT macro instruction while using CBUF processing.
- 198 A VSAM data set expanded to a new volume after the checkpoint was taken. (Abend code - 13F)
Programmer Response: The checkpoint cannot be restarted. For a deferred restart, resubmit the job selecting a checkpoint taken after the data set expanded to the new volume.

The error is for VSAM only. For additional information, see message IEC161I or IEC252I, if issued.
- 199 An error occurred during BLDVRP processing in VSAM restart. yyy is the return code from the BLDVRP request. (Abend code - 13F)
Programmer Response: The error is for VSAM only. For additional information, see the *VSAM Administration Guide*.
- 200 A PURGE I/O request failed. (Return code - 0C)
Programmer Response: Locate and correct the error.
- 201 PGFIX failed; this is an uncorrectable error. (Abend code - 13F)
Programmer Response: Probable system error. Contact your software support personnel.
- 202 SETLOCK failed; this is an uncorrectable error. (Return code - 0C, Abend code - 13F)
Programmer Response: Probable system error. Contact your software support personnel.
- 203 An illegal attempt has been made to invoke RESTART SVC routines. (Abend code - 13F)

- Programmer Response:** Only the scheduler may invoke RESTART. Remove either the JCL or program logic that attempts to execute RESTART.
- 204 Unsuccessful WIJOURN. This checkpoint is unavailable for automatic restarts; however, deferred restarts are possible if the VIO data sets are made DUMMY. (Return code - 0C)
- Programmer Response:** An error occurred while checkpointing VIO data sets to the job journal. Deferred restarts may be accomplished on the subject checkpoint entry; however, the VIO data sets must be made DUMMY. Locate and correct the error.
- 205 Unsuccessful WIJOURN. This and previous checkpoints taken during this step are ineligible for automatic restarts; however, deferred restarts are possible if the VIO data sets are made DUMMY. An automatic restart cannot occur until a new and successful checkpoint is taken. (Return code - 0C)
- Programmer Response:** An error occurred while checkpointing VIO data sets to the job journal. Deferred restarts may be accomplished on the subject checkpoint entry; however, the VIO data sets must be made DUMMY. Locate and correct the error.
- 206 A VTAM ACB was open when a CHKPT was attempted. (Return code - 08)
- Programmer Response:** Ensure that all VTAM ACBs are closed prior to issuing CHKPT.
- 207 A failure occurred in the subsystem interface when checkpointing or restarting subsystem data sets. (Return code - 0C, or abend code - 13F)
- Programmer Response:** Probable subsystem error. Contact your software support personnel.
- 208 Your new checkpoint data set is not empty. The integrity of this pre-data is uncertain and therefore, unusable. (Return code - 08)
- Programmer Response:** If the new checkpoint data set is a sequential data set, the failure occurred as a result of the data set being opened for MOD and residual data was found to exist. Either remove the MOD disposition, reinitialize the data set to an empty status, or reallocate the data set. If the data set is a partitioned data set, the failure occurred as a result of residual members existing in the directory. Either scratch the members or reallocate the data set.
- 209 You have two or more DCBs open to your new checkpoint data set. (Return code - 08)
- Programmer Response:** Remove the logic that violates this restriction, or change the DD statement for the checkpoint data set.
- 210 Your checkpoint data set was defined with DISP = SHR. (Return code - 08)
- Programmer Response:** Change the JCL to reflect a disposition other than SHR for the checkpoint data set.
- 211 An attempt to create a new checkpoint data set has failed due to an insecure volume. (Return code - 08)
- Programmer Response:** The candidate volume for a checkpoint data set was rejected by the operator as being insecure. Contact installation personnel and verify the eligibility of the volume for creating checkpoint data sets.
- 213 Your checkpoint data set is a subsystem data set. Subsystem data sets cannot be used as checkpoint data sets. (Return code - 08)
- Programmer Response:** Correct the JCL and resubmit the job.
- 214 Your new checkpoint data set exists on a shared direct-access device. Concurrent opens cannot be controlled; therefore, the data set is unacceptable. (Return code - 08)
- Programmer Response:** Contact operations personnel to ensure that this does not occur.
- 215 An error occurred while restoring the purged I/O operations. A checkpoint entry was successfully written; however, continuation of your program may produce errors. (Return code - 18)
- Programmer Response:** Locate and correct the error.
- 216 Residual subpool allocations in your region have prevented a successful reallocation of your checkpoint-time region image. (Abend code - 13F)
- Programmer Response:** Locate and correct the error.
- 219 There is a password error for a password-protected tape data set. (Abend code - 13F)
- Programmer Response:** Obtain the proper password for the password-protected data set.
- 220 The data set control block (DSCB) address of a data set to be repositioned has changed since the checkpoint was taken. (Abend code - 13F)
- Programmer Response:** If possible, return the volume to the condition it was in at checkpoint.
- 221 The wrong password was given for a password-protected data set that was to be repositioned. (Abend code - 13F)
- Programmer Response:** Obtain the proper password for the password-protected data set.
- 222 The tape data set name, recorded in header label 1, has changed since the checkpoint was taken. (Abend code - 13F)
- Programmer Response:** If possible, return the volume to the condition it was in at checkpoint.
- 224 SAM-SI (non-CI) data set was open at checkpoint. (Return code - 08)
- Programmer Response:** Ensure that all SAM-SI (non-CI) data sets are closed prior to issuing CHKPT.
- 240 A recovery (ESTAE) environment could not be established. (Return code - 0C, or abend code - 13F)
- Programmer Response:** Probable system error. Contact your software support personnel.
- 241 An indeterminate error occurred when processing VSAM data sets. (Return code - 0C, abend code - 13F)
- Programmer Response:** Locate and correct the error using the diagnostic information provided.
- 242 A machine check occurred while checkpointing or restarting VSAM data sets. (Return code - 0C, or abend code - 13F)
- Programmer Response:** If the machine check was transitory, resubmit the job. Otherwise, have the problem fixed before resubmitting the job.
- 243 An invalid SSCR record was encountered in the checkpoint data set entry when repositioning VSAM data sets. (Abend code - 13F)

Programmer Response: Resubmit the job, selecting another checkpoint entry. Be alert for a possible security violation.

- 250 IMAGELIB data set open when checkpoint taken.
(Return code - 08)

Programmer Response: Ensure that all IMAGELIB DCBs are closed prior to issuing CHKPT.

- 251 A data set that was not a checkpoint data set at checkpoint time was found to be open to a secure checkpoint data set at restart time. (Abend code - 23F)

Programmer Response: Ensure the proper data set volume was mounted at restart time. Also, verify the status of the subject volume by contacting the operations personnel. Be alert for a possible security violation.

- 252 In a job using more than one checkpoint data set, one of the checkpoint data sets (not the one used for restart) was deemed not secure. (Abend code - 23F)

Programmer Response: Ensure the proper data set volume was mounted at restart time. Also, verify the status of the subject volume by contacting the operations personnel. Be alert for a possible security violation.

- 255 A RACF processing error occurred during restart.
(Abend code - 23F)

Programmer Response: See IHJ101I or IHJ102I for information. Be alert for a possible security violation.

Modules and Return Codes for IHJ Messages

When checkpoint/restart issues messages IHJ001I and IHJ007I with reason codes 36, 37, or 38, variables **m** and **rc** might appear. **m** designates a module id, which corresponds with a module name; **rc** designates a return code issued by module **m**. The return codes are in decimal format.

m	Explanation
01	Module IEAVCKRS - Supervisor Control Checkpoint/Restart Router
	rc Explanation
08	The number of requested SSCRs for the second checkpoint invocation does not match the number requested in the first checkpoint invocation.
02	Module IEAVSPI - SPIE/ESPIE Checkpoint/Restart Exit Routine
	rc Explanation
255	IEAVSPI requested a negative number of SSCRs.
03	Module IEAVCRVF - Vector Checkpoint/ Restart Exit Routine
	rc Explanation
04	The pointer to the subject task's VSSA is invalid.
08	The vector SLIH determines that there are no eligible vector processors with an attached Vector Facility (VF) online.
12	The vector SLIH could not obtain a VSSA for the task.
16	The VF section size recorded during the checkpoint is not equal to the VF section size during the restart.
20	In the time interval between checkpoint and the restart, the mapping of the VSSA changed.
24	There are no processors with an attached VF in the complex.
28	An unexpected error occurred in IEAVCRVF.
32	VF status has been lost due to a machine check.
255	IEAVCRVF requested a negative number of SSCRs.

TSO Messages (IKJ)

Component Name	IKJ
Program Producing Message	Time Sharing Option
Audience and Where Produced	For programmer: SYSOUT data set. For operator: console.
Message Format	IKJnnnI text (in SYSOUT) xx IKJnnns text (on console) nnn Message serial number. text Message text. xx Message reply identification (absent, if operator reply not required). s Type code: I Information; no operator action is required.
Comments	Some IFC messages are produced by EREP modules IFCEREP0 and IFCEREP1. Those messages are documented in OS/VS, DOS/VSE, VM/370 EREP Messages.
Related Publications	<i>MVS/XA TSO Guide to Writing a Terminal Monitor Program or Command Processor</i> , GC28-0648 with SD23-0258 <i>MVS/XA TSO Terminal User's Guide</i> , GC28-0645 with SD23-0258 <i>MVS/XA Operations: JES2 Commands</i> , SC23-0064 <i>MVS/XA SPL: System Modifications</i> , GC28-1152 <i>MVS/XA System-Data Administration</i> , GC26-4010 <i>MVS/XA DADSM Diagnosis Reference</i> , SY26-3904 <i>TSO Terminal Messages</i> , GC28-1310

IK J

TSO Programmer and Operator Messages (IKJnnns)

IKJ000I cm userid
Explanation: The command verb and operand identified by cm were entered from a TSO terminal by a user identified by userid.

System Action: The command, cm, is processed.

Operator Response: None.

IKJ005I TS START REJECTED - MEMBER OF SYS1.PARMLIB NOT FOUND
Explanation: The member name specified either explicitly by the operator or by default could not be found in SYS1.PARMLIB.

System Action: Time sharing initialization processing terminates.

Operator Response: Reenter the MODIFY command and either omit the member name or specify it correctly. Omitting the member name causes the system to search for member IKJPRM00.

IKJ006I I/O ERROR READING SYS1.PARMLIB

Explanation: An I/O error occurred when an attempt was made to read a member of SYS1.PARMLIB.

System Action: Time sharing initialization processing will continue using defaults for time sharing system parameter values.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 25c, 26c, 29.

IKJ007I TS START REJECTED - TIME SHARING IS IN PROGRESS

Explanation: A TS=START MODIFY command was entered when time sharing was already active.

System Action: The extra command is ignored.

Operator Response: None.

IKJ019I TIME SHARING IS INITIALIZED

Explanation: Time sharing initialization is complete.

System Action: LOGONs will now be accepted.

Operator Response: None.

IKJ021I – IKJ145I

IKJ021I TS STOP REJECTED - TIME SHARING IS NOT IN PROGRESS

Explanation: A TS=STOP MODIFY command was entered when time sharing was not active.

System Action: The command is ignored.

Operator Response: None.

IKJ024D TS STOP IN PROGRESS - REPLY 'U', OR 'FSTOP'

Explanation: A TS=STOP MODIFY command was entered when stop processing was already in progress from a previous command.

System Action: Normal stop processing will continue until a reply is received.

Operator Response: Reply 'U' to allow time sharing to complete normally. This will allow users to receive all messages queued for them. If the system seems unable to complete normally, reply 'FSTOP' and time sharing will terminate immediately.

IKJ139I BROADCAST DATA SET NOT USABLE, I/O SYNAD ERROR

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, in accessing the data set a read/write failure was encountered.

System Action: Processing is terminated; messages may or may not have been saved in SYS1.BROADCAST. SYS1.BROADCAST-independent processing has been completed.

Operator Response: Report this message to the system programmer.

Programmer Response: Determine and remove the cause of the I/O error.

IKJ140I BROADCAST DATA SET NOT USABLE, CANNOT OPEN DATA SET

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, SYS1.BROADCAST could not be opened.

System Action: Processing terminates and no messages are saved in SYS1.BROADCAST. SYS1.BROADCAST-independent processing is completed.

Operator Response: Report this message to the system programmer.

Programmer Response: The master scheduler TIOT must contain a DD entry for the broadcast data set. The ddname on this entry must be SYSLBC.

IKJ141I BROADCAST DATA SET NOT USABLE, INSTALLATION MUST REFORMAT

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, the broadcast data set is not in release 2 format or has not been initialized.

System Action: Processing terminates and no messages are saved in SYS1.BROADCAST. SYS1.BROADCAST-independent processing is completed.

Operator Response: Report this message to the system programmer.

Programmer Response: Use the SYNC subcommand of ACCOUNT to initialize the broadcast data set and synchronize it with the UADS. The SYNC subcommand can be issued in the foreground or in the background using the TMP in the background.

IKJ142I INVALID USERID(S) userid userid ...userid

Explanation: A userid list, in an operator SEND command, contained an entry which was not a seven-character maximum alphameric string.

System Action: Processing continues; the syntactically unacceptable recipients specified in the insert are ignored. If there are no other errors, the message will be sent to or saved for valid recipients.

Operator Response: Examine the text of the SEND command for syntax errors. Issue another SEND command to route the message to the intended recipients who were ignored by the original SEND command processing.

IKJ143I USERIDS AFTER 20TH IGNORED

Explanation: An operator SEND command was issued which specified more than 20 valid userids. The first 20 userids will be processed, but all others will be ignored.

System Action: Processing continues, but the message has not been sent to or saved for userids after the 20th valid userid.

Operator Response: Issue another SEND command to route the message to the intended recipients who were ignored by the original SEND command processing.

IKJ144I UNDEFINED USERID(S) userid userid ... userid

Explanation: An operator SEND command was issued which required saving mail for a specific user; however, the specified userids are not represented in the mail directory of SYS1.BROADCAST.

System Action: Processing continues, but the message has not been sent to or saved for the unauthorized users.

Operator Response: Report this message to the system programmer.

Programmer Response: If the unauthorized user is represented in the UADS (User Attribute Data Set), then the UADS and broadcast data set should be synchronized; see SYNC subcommand of ACCOUNT. The ACCOUNT command may also be used to authorize userids for TSO.

IKJ145I IKJEFXSR ESTAE ERROR, CODE rc

Explanation: This message is issued if there is a non-zero return code from ESTAE in IKJEFXSR, where rc is the return code.

Return Code Explanation

04	ESTAE OV was specified with a valid exit address, but the current exit is either nonexistent, not owned by the user's RB, or is not an ESTAE exit.
----	--

- 08 BRANCH = YES was issued for the current SVRB with a create request; the previous BRANCH = YES exit is canceled and the new exit is made the current exit.
- 0C Cancel or an exit address equal to zero was specified, and either there are no exits for this TCB, the most recent exit is not owned by the caller, or the most recent exit is not an ESTAE exit.
- 10 An unexpected error was encountered while processing this request.
- 14 ESTAE was unable to obtain storage for an SCB.
- System Action:** IKJEFXSR returns to IEEVIPL with a return code of zero.
- Operator Response:** None.
- IKJ146I mod NOT FOUND BY IKJEFXSR IN LPA.**
- Explanation:** The specified module was not found in LPA.
- System Action:** Processing of IKJEFXSR continues normally.
- Operator Response:** Notify the system programmer.
- IKJ147I IKJEFXSR ABNORMAL TERMINATION, ABEND cde.**
- Explanation:** IKJEFXSR terminated with an ABEND indicated by cde.
- System Action:** IKJEFXSR returns to IEEVIPL.
- Operator Response:** None.
- IKJ402I TCAM PROCEDURE DOES NOT SUPPORT TIME SHARING**
- Explanation:** The procedure used to start TCAM specifies a message control program which will not support time sharing or a mixed-environment message control program which has no time sharing terminals.
- System Action:** The request to modify TCAM to start time sharing is ignored.
- Operator Response:** To start time sharing, the current TCAM procedure must be halted and a new one started which supports time sharing. If such a procedure cannot be found, notify the installation programmer.
- IKJ403I LINE GROUP FOR DD ddn NOT OPENED**
- Explanation:** The IBM-supplied TSO-TCAM message control program was unable to open the DCB for the line group data set that specified ddn as its ddname.
- System Action:** Execution of the MCP continues with the telecommunications lines defined in this line group unavailable for use.
- Operator Response:** Check the JCL used to execute the MCP to be sure that no desired DD statements are missing.
- IKJ404I TS START REJECTED - INSUFFICIENT COMMON STORAGE AVAILABLE**
- Explanation:** There was insufficient virtual storage available in the common area to support time sharing.
- System Action:** The request to modify TCAM to start time sharing is rejected.
- Operator Response:** The operator may wish to try his request again later. Common storage usage may drop enough to permit time sharing to be started. In any case, the installation programmer should be informed of the problem.
- Programmer Response:** Determine if the heavy common storage usage was due to some exceptional condition. If not, enlarge the size of this area.
- IKJ405I TIME SHARING ENDED**
- Explanation:** Time sharing support in TCAM has ended.
- System Action:** Time sharing is terminated.
- Operator Response:** None.
- IKJ407I INVALID TIOC PARAMETER - xxx = yyy - IGNORED**
- Explanation:** The indicated parameter expression is invalid on a TIOC parameter record.
- System Action:** The invalid entry is ignored. If the intended parameter value is not specified on any other entry, the default value will be used.
- Operator Response:** The installation programmer should be informed.
- Programmer Response:** The invalid entry should be inspected for misspelling or conflict with other parameters and corrected appropriately.
- IKJ408I MEMBER 'IKJPRM00' NOT FOUND**
- Explanation:** The default member name 'IKJPRM00' could not be found on SYS1.PARMLIB.
- System Action:** Time sharing initialization processing continues using defaults for time sharing system parameter values.
- Operator Response:** None.
- IKJ409I SYSTEM ERROR - TIME SHARING TERMINATED**
- Explanation:** A system error occurred, causing time sharing to terminate.
- System Action:** A diagnostic dump is taken to the SYS1.DUMP data set if this data set is available. Time sharing support is then terminated.
- Operator Response:** Time sharing may be started again if desired.
- Programmer Response:** Before calling your programming support personnel, print the dump taken to SYS1.DUMP.
- Problem Determination:** Table I, items 2, 29.

IKJ413I – IKJ556I

IKJ413I TIME SHARING NOT SUPPORTED ON AN ASCB-BASED TCAM

Explanation: For a MODIFY procname, TS = START command, procname must identify a CVT-based TCAM. Either the MODIFY command specifies an incorrect procname or TCAM was started as an ASCB-based TCAM, which does not support time sharing.

System Action: The system does not start the time sharing option (TSO).

Operator Response: If the MODIFY command specified the correct procname, notify the system programmer. Otherwise, correct the procname.

Programmer Response: See the description of the BASED operand for the INTRO operand in *ACF/TCAM Installation Reference*.

IKJ414I UNABLE TO OPEN SYS1.PARMLIB

Explanation: The SYS1.PARMLIB data set either could not be opened or could not be allocated.

System Action: Time sharing initialization processing continues using defaults for time sharing system parameter values.

Operator Response: None.

Problem Determination: Table I, items 3, 25a, 29.

IKJ550I USERIDS REFORMATTED

userid userid ... userid

Explanation: The specified modification has been accomplished on the noted userid members.

System Action: Processing continues.

Operator Response: Enter the next command.

IKJ551I NOT ENOUGH MAIN STORAGE TO

{ EXECUTE REFORMAT
REFORMAT USERID userid }

Explanation: A GETMAIN request was unsuccessful.

System Action: For userid space failure, UADSREFM continues processing any userids remaining in the UADS directory. Otherwise, all UADSREFM processing terminates.

Operator Response: Rerun the job in a larger region.

IKJ552I UTILITY SYSTEM ERROR +

{ STAE
PUTLINE
ENQ
DEQ
ACCOUNT-READ
ACCOUNT-GETSPACE
ACCOUNT-WRITE
BACKSPACE } ERROR CODE nn

Explanation: A failure has occurred in a service function. A code (nn) of 12 indicates an invalid parameter list was supplied to the service routine. A

code of nn represents an invalid code with no assigned significance.

System Action: If the error is STAE, BPS, or ENQ on SYSUADS, UADSREFM processing terminates. Otherwise, processing for the current userid is terminated and UADSREFM continues to process any userids remaining in the UADS directory.

Programmer Response: Rerun the job.

Problem Determination: Table I, item 30.

IKJ553I UNABLE TO EXECUTE REFORMAT +

{ SYSUADN RDJFCB FAILURE
SYSUADS RDJFCB FAILURE
NONIDENTIFIABLE BLOCKSIZE FOR
IDENTICAL SYSUADS/SYSUADN
SYSUADS BLOCKSIZE TOO SMALL }

Explanation: An error occurred in allocation or in reading the JFCB.

System Action: UADSREFM processing continues.

Programmer Response: Check the allocation and reallocation if required. Rerun the job.

Problem Determination: Table I, item 30.

IKJ554I { SYSUADN } DATA SET NOT USABLE +

{ SYSUADS
CANNOT OPEN DATA SET
STOW I/O ERROR CODE rc
SYNAD ERROR synad info }

Explanation: A failure was encountered in a service function.

System Action: UADSREFM processing is terminated.

Operator Response: Rerun the job.

Problem Determination: Table I, item 30.

IKJ555I UNABLE TO REFORMAT userid,

{ USERID IN USE
BLOCKSIZE TOO SMALL }

Explanation: The specified member is currently in use or the blocksize allocation is insufficient for the specified member.

System Action: Processing for the specified userid is terminated. UADSREFM continues to process any userids remaining in the UADS directory.

Programmer Response: Attempt the reformat again after using the ACCOUNT command functions to rebuild the specified userid, individually.

IKJ556I USERID userid NOT FOUND

Explanation: The service routines were unable to read the specified name.

System Action: Processing for the specified userid is terminated. UADSREFM continues to process any userids remaining in the UADS directory.

Programmer Response: Cross-check for the correct name (using the ACCOUNT-LIST or ACCOUNT-LISTIDS).

Problem Determination: Table I, items 30.

IKJ557I UADSREFM ENDED DUE TO ERROR + SYSTEM COMPLETION CODE cde

Explanation: An error resulting in an ABEND (cde) occurred during UADSREFM member processing.

System Action: UADSREFM processing is terminated.

Operator Response: Rerun the job.

Problem Determination: Table I, item 29.

IKJ558I UNABLE TO CLOSE {SYSUADS} DATA SET {SYSUADN}

Explanation: A failure occurred in the CLOSE function.

System Action: UADSREFM processing is terminated.

Operator Response: Rerun the job.

Problem Determination: Table I, item 30.

IKJ570I SEND NOT SUPPORTED IN THIS SYSTEM

Explanation: A SEND command was issued; however, the time sharing option was not included in the system at system generation time. Therefore, the SEND command is not operative.

System Action: The SEND command is rejected.

Operator Response: None.

IKJ572I USER userid NOT LOGGED ON, MESSAGE CANCELED

Explanation: In a SEND command which does not include the LOGON parameter, a userid was specified which is not currently logged on the time sharing system. The message specified in the SEND command is not issued to the user with the userid specified in the message text. The message is issued to those users with userids which are logged on.

System Action: The message specified in the SEND command is issued to the users, with userids specified in the SEND command, who are currently logged on.

Operator Response: No response is required. If a message is to be sent to users with userids which are not logged on, enter the SEND command and include the LOGON parameter.

IKJ573I SEND SYNTAX ERROR. COMMAND REJECTED

Explanation:

- The command contains embedded blanks.
- A delimiter is missing such as a comma after the message text, an equal sign after the key word 'USER', or a parenthesis around the userid list.
- The command contains an unidentifiable key word.
- Quotation marks around the message text are missing.
- The length of the message text is less than one character.

System Action: The SEND command is rejected.

Operator Response: Reenter the SEND command correctly.

IKJ574I NO SPACE IN BROADCAST DATA SET FOR

{MAIL
NOTICES}

Explanation: The portion of the Broadcast data set needed to contain a SEND message record is full:

1. MAIL - The SEND command specified 'USER' and 'LOGON', but no free space is available in the user mail section of the Broadcast data set to contain the SEND message.
2. NOTICES - The SEND command specified 'LOGON' and did not specify 'USER', no free space is available in the Broadcast notice section to contain the SEND message.

System Action: The SEND message is sent to all specified users currently logged on. However, the message is not saved in the Broadcast data set for those users not currently logged on.

Operator Response: Case 1 is a temporary situation. Space will be available in the mail section of the Broadcast data set as soon as a user for whom a message is intended enters a LOGON or LISTBC command. For case 2, it is necessary to free a Broadcast message number by issuing a SEND command with the 'DELETE' parameter specified.

IKJ575I DATA SET SYS1.BROADCAST NOT USABLE

Explanation: A SEND command was issued but the Broadcast data set could not be used for one of the following reasons:

1. The volume containing the SYS1.BROADCAST data set was not mounted.
2. An input/output error occurred during SEND processing of the SYS1.BROADCAST data set.

System Action: If 'USER' was specified in the SEND command, the message is issued to the specified users currently logged on to the time sharing system. Otherwise, processing in the Broadcast data set is terminated at the point the error is detected.

Operator Response: For case 1, make sure that the volume containing the SYS1.BROADCAST data set is mounted. For case 2, reenter the SEND command.

Problem Determination: Table I, items 25a, 29.

IKJ576I NO BROADCAST MESSAGE

Explanation: One of the following occurred when a SEND command was issued:

- If the parameter msgno was specified, either there was no Broadcast notice message for the particular message number specified, or the message number specified exceeded the maximum value set at system generation time.
- If the LIST parameter was specified (without msgno) there were no Broadcast notice messages in the Broadcast data set.

System Action: None.

Operator Response: None.

IK J

IKJ578I – IKJ586I

IKJ578I BROADCAST MSGNO = nn

Explanation: A SEND command has been issued with the 'LOGON' parameter specified. The SEND message text is entered in the Broadcast data set with the message number nn.

System Action: A message is entered in the Broadcast data set and is assigned message number nn.

Operator Response: None.

IKJ579I CANNOT EXECUTE SEND

Explanation: The SEND command handling routines are unable to perform their functions for one of the following reasons:

- There is an insufficient amount of storage available.
- An internal error has occurred in one of the SEND modules.

System Action: SEND processing is terminated at the point the error is detected.

Operator Response: Reenter the SEND command.

Problem Determination: Table I, items 11, 29.

IKJ580I MESSAGE TRUNCATED TO 115 CHARACTERS

Explanation: A SEND command specified message text that was greater than the maximum of 115 characters allowed.

System Action: The message text is truncated to 115 characters.

Operator Response: None.

IKJ581I SEND UNSUCCESSFUL. SEND IS NOT ACTIVE.

Explanation: In the SEND PARMLIB control block, the installation indicated that SEND be deactivated.

System Action: SEND processing terminates.

Operator Response: To make SEND operational, have your system programmer code an exit, or re-IPL with the SEND PARMLIB command specifying OPERSEND(ON) to activate SEND.

Programmer Response: To make SEND operational, you may want to code an initialization exit for SEND that changes the SEND PARMLIB control block to indicate that SEND is active.

IKJ582I SEND UNSUCCESSFUL. MESSAGES CANNOT BE STORED FOR USER(S) useridlist AT THIS TIME.

Explanation: The installation indicated in the SEND PARMLIB control block that messages are not to be saved for the users specified by **useridlist**.

System Action: The system does not save messages for the specified users.

Operator Response: To allow messages to be saved for the specified users, have your system programmer code an exit, or re-IPL with the SEND

PARMLIB command specifying SAVE(ON) to allow messages to be saved.

Programmer Response: To allow messages to be saved for the specified users, you may want to code an initialization exit or pre-save exit for SEND that changes the SEND PARMLIB control block to indicate that messages can be saved.

IKJ583E SEND TERMINATED. THE MESSAGE LOG COULD NOT BE ALLOCATED. +

IKJ583E DYNAMIC ALLOCATION ERROR CODE OF xxxx AND INFORMATION REASON CODE OF rsnr FOR USERID userid.

Explanation: SVC 99 could not allocate the user log for **userid**. **xxxx** and **rsnr** are the SVC 99 return codes for this error.

System Action: The system does not save messages for the specified user, and SEND processing terminates.

Operator Response: Use the SVC 99 return codes to determine and correct the error that occurred. Then reissue the SEND command.

IKJ584I INSTALLATION EXIT instexit REQUESTED TERMINATION. +

IKJ584I REASON CODE X'xxxxxxxx'.

Explanation: The installation exit **instexit** requested termination and a message to be issued by specifying a return code of 12. This message is accompanied by the following message displaying the reason code, **xxxxxxxx**, that the exit returned to the invoker.

System Action: The invoker of the installation exit terminated.

Operator Response: Check the list of exit reason codes for this particular exit to determine the problem.

IKJ585I EXIT NAME exitname WAS NOT FOUND.

Explanation: The exit name **exitname** could not be found in the proper system control block.

System Action: The invoker of the installation exit terminates.

Operator Response: Notify your system programmer that this message appeared for **exitname**.

IKJ586I ERROR OCCURRED WHILE INVOKING EXIT exitname. +

IKJ586I ABEND CODE code REASON CODE X'xxxxxxxx'.

Explanation: An ABEND occurred while attempting to invoke installation exit **exitname**; ABEND code **code** and reason code **xxxxxxxx** are given.

System Action: The invoker of the installation exit terminates.

Operator Response: Notify your system programmer that this message appeared for **exitname**, and provide the ABEND and reason code information.

IKJ603I TSOLOGON { TERMINATED
ATTEMPTING RETRY }
INSTALLATION EXIT { ABEND cde
ERROR }

Explanation: A routine provided by the installation's systems programmer to augment or modify IBM's standard LOGON processing has failed. If the failure took the form of a system abnormal termination, the word ABEND appears in the message text, and code cde is the system completion code and an indication as to whether LOGON is attempting retry or terminating because of the ABEND. Otherwise, the word ERROR appears in the message text, code cde is the error code developed by TSO LOGON upon analysis of the parameters returned by an exit routine and LOGON will always terminate. The error codes and their meaning are as follows:

Code	Explanation
004	The address of the control switch buffer passed to the preprompt EXIT was altered during exit execution.
008	The control switches buffer length passed to the preprompt EXIT was altered during exit execution.
012	The length of the control switches returned by the preprompt EXIT was longer than the buffer or less than zero.
016	The address of the command buffer passed to the preprompt EXIT was altered during exit execution.
020	The command buffer length passed to the Pre-Prompt Exit was altered during exit execution.
024	The length of the command returned by the preprompt EXIT was longer than the buffer or less than zero.
028	The address of the userid buffer passed to the preprompt EXIT was altered during exit execution.
032	The userid buffer length passed to the Pre-Prompt Exit was altered during exit execution.
036	The length of the userid returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
040	The preprompt EXIT returned a zero length userid for LOGON processor use.
044	The preprompt EXIT returned an unauthorized userid for LOGON processor use.
048	The address of the password buffer passed to the preprompt EXIT was altered during exit execution.
052	The password buffer length passed to the Pre-Prompt Exit was altered during exit execution.
056	The length of the password returned by the preprompt EXIT was longer than the buffer or less than zero.

060	The preprompt EXIT returned an unauthorized password for LOGON processor use.
064	The address of the account buffer passed to the preprompt EXIT was altered during exit execution.
068	The account buffer length passed to the Pre-Prompt Exit was altered during exit execution.
072	The length of the account returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
076	The preprompt EXIT returned an unauthorized account for LOGON processor use.
080	The address of the procedure name buffer passed to the preprompt EXIT was altered during exit execution.
084	The procedure name buffer length passed to the preprompt EXIT was altered during exit execution.
088	The length of the procedure name returned by the preprompt EXIT was longer than the buffer or less than zero.
092	The preprompt EXIT returned a zero length name for LOGON processor use.
096	The preprompt EXIT returned an unauthorized procedure name for LOGON processor use.
100	The preprompt EXIT returned a region size outside the bounds supported by TSO for LOGON processor use.
104	The preprompt EXIT returned an unauthorized region size for LOGON processor use.
108	The address of the JCL buffer passed to the preprompt EXIT was altered during exit execution.
112	The JCL buffer length passed to the preprompt EXIT was altered during exit execution.
116	The length of the JCL returned by the preprompt EXIT was longer than the buffer or less than zero.
120	The preprompt EXIT returned less than two JCL card images for LOGON processor use.
124	The preprompt EXIT returned a partial JCL card image for LOGON processor use.
128	The address of the PSCB accounting data buffer passed to the preprompt EXIT was altered during exit execution.
132	The PSCB accounting data buffer length passed to the preprompt EXIT was altered during exit execution.
136	The length of the PSCB accounting data returned by the preprompt EXIT was longer than the buffer or less than zero.

- 140 The address of the First Attribute buffer passed to the preprompt EXIT was altered during exit execution.
- 144 The First Attribute buffer length passed to the preprompt EXIT was altered during exit execution.
- 148 The length of the First Attribute returned by the preprompt EXIT was longer than the buffer or less than zero.
- 152 The address of the Second Attribute buffer passed to the preprompt EXIT was altered during exit execution.
- 156 The Second Attribute buffer length passed to the preprompt EXIT was altered during exit execution.
- 160 The length of the Second Attribute returned by the preprompt EXIT was longer than the buffer or less than zero.
- 164 The address of the Generic Group buffer passed to the preprompt EXIT was altered during exit execution.
- 168 The Generic Group buffer length passed to the preprompt EXIT was altered during exit execution.
- 172 The length of the Generic Group returned by the preprompt EXIT was longer than the buffer or less than zero.
- 176 The address of the UPT buffer passed to the preprompt EXIT was altered during exit execution.
- 180 The UPT buffer length passed to the preprompt EXIT was altered during exit execution.
- 184 The length of the UPT returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 188 The address of the ECT buffer passed to the preprompt EXIT was altered during exit execution.
- 192 The ECT buffer length passed to the preprompt EXIT was altered during exit execution.
- 196 The length of the ECT returned by the preprompt EXIT was longer than the buffer or less than zero.
- 200 The address of the DEST userid buffer passed to the preprompt EXIT was altered during exit execution.
- 204 The DEST userid buffer length passed to the preprompt EXIT was altered during EXIT execution.
- 208 The length of the DEST userid returned by the preprompt EXIT was longer than the buffer or less than zero.
- 212 The preprompt EXIT returned a zero length DEST userid for LOGON processor use.
- 216 The preprompt EXIT returned a DEST userid that was not defined to the subsystem.

- 220 The preprompt EXIT returned a performance group value which was not between 1 and 255 inclusive.
- 224 The preprompt EXIT returned an unauthorized performance group value for LOGON processor use.
- 228 The preprompt EXIT returned a performance group value which was not defined to the system.
- 232 The subsystem encountered an error while attempting to validate the DEST userid returned by the preprompt EXIT.
- 236 The subsystem interface encountered an error while attempting to validate the DEST userid returned by the preprompt EXIT.
- 250 The address of the new password buffer passed to the pre-prompt exit was altered during exit execution.
- 254 The new password buffer length passed to the pre-prompt exit was altered during execution.
- 258 The length of the new password buffer returned by the pre-prompt exit was longer than the buffer or less than zero.
- 262 The pre-prompt exit returned an unauthorized new password for logon processor use.
- 266 The address of the group identification buffer passed to the pre-prompt exit was altered during exit execution.
- 270 The group identification buffer length passed to the pre-prompt exit was altered during exit execution.
- 274 The length of the group identification buffer returned by the pre-prompt exit was longer than the buffer or less than zero.
- 278 The pre-prompt exit returned an unauthorized group identification for logon processor use.

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System Action: The system issues message IKJ56452I to the terminal of the user whose LOGON failed. A dump is taken for error analysis and error recording is taken to the LOG data set. The message text indicates whether LOGON will retry or terminate.

Operator Response: Notify the system programmer of this message.

Problem Determination: Table I, items 2, 13, 29.

IKJ605I

TSOLOGON TERMINATED. TO MANY

ATTEMPTS. USER

userid
UNKNOWN

Explanation: TSO LOGON denied a user with the identification userid access to the TSO subsystem because the user exceeded the limit, specified at system generation time, of attempts to enter a valid set of LOGON operands.

- IKJ701I** **TSO PARMLIB MEMBER IKJTSO00 NOT FOUND.**
Programmer Response: Correct the error indicated by reason code rc.
Explanation: TSO PARMLIB member IKJTSO00 does not exist.
System Action: The system continues to IPL.
Operator Response: None.
Programmer Response: If you wish to use IKJTSO00, create the member by copying it from SYS1.SAMPLIB(IKJTSO00) to SYS1.PARMLIB(IKJTSO00). Otherwise, no response is necessary.
- IKJ702I** **THE TSO PARMLIB IKJTSO00 CONTAINS A RECORD THAT IS TOO LONG.**
Explanation: In TSO PARMLIB member IKJTSO00, the command record's length exceeds the maximum number of bytes (32763).
System Action: The system ignores the command record, and continues to IPL.
Operator Response: None.
Programmer Response: After the system has IPLed, correct the bad record and re-IPL.
- IKJ703I** **THE TSO PARMLIB MEMBER IKJTSO00 CONTAINS AN INCORRECT KEYWORD.**
Explanation: TSO PARMLIB member IKJTSO00 contains an invalid keyword; *valid* keywords are: NAMES, NONE, OPERSEND, USERSEND, SAVE, CHKBROD, and LOGNAME.
System Action: The system ignores the record containing the invalid keyword, and continues to IPL.
Operator Response: None.
Programmer Response: After the system has IPLed, correct the invalid keyword and re-IPL.
- IKJ704I** **COMMAND SCAN WAS PASSED INVALID PARAMETERS.**
Explanation: The command keyword itself is valid, but the value supplied for that keyword is not valid.
System Action: The system ignores the record with invalid keyword value, and continues to IPL.
Operator Response: None.
Programmer Response: After the system has IPLed, correct the keyword value and re-IPL.
- IKJ705I** **A COMMAND FOUND IN TSO PARMLIB MEMBER IKJTSO00 IS NOT VALID.**
Explanation: The COMMAND SCAN routine found an invalid command in IKJTSO00; *valid* commands are: AUTHCMD, AUTHPGM, AUTHTSF, NOTBKGND, and SEND.
System Action: The system ignores the record with the invalid command, and continues to IPL.
- Operator Response:** None.
Programmer Response: After the system has IPLed, correct the bad record and re-IPL.
- IKJ706I** **AN ERROR OCCURRED WHEN READING THE TSO PARMLIB MEMBER IKJTSO00.**
Explanation: TSO PARMLIB member IKJTSO00 could not be properly read.
System Action: The system continues to IPL, but no PARMLIB support is available.
Operator Response: Notify your system programmer.
Programmer Response: Contact programming support personnel.
- IKJ707I** **THE TSO PARMLIB MEMBER IKJTSO00 IS EMPTY.**
Explanation: TSO PARMLIB MEMBER IKJTSO00 contains no data.
System Action: The system continues to IPL.
Operator Response: None.
Programmer Response: If you wish to use IKJTSO00, create the member by copying it from SYS1.SAMPLIB(IKJTSO00) to SYS1.PARMLIB(IKJTSO00). Otherwise, no response is necessary.
- IKJ708I** **ERROR OCCURRED WHILE PROCESSING TSO PARMLIB MEMBER IKJTSO00.**
Explanation: This message always appears with message IKJ709I, which further explains the error.
System Action: The system continues to IPL.
Operator Response: None.
Programmer Response: Refer to message IKJ709I for the appropriate programmer response.
- IKJ709I** **END OF FILE OCCURRED AFTER CONTINUATION FOUND.**
Explanation: For TSO PARMLIB member IKJTSO00, one of two situations was encountered:
 - an end of file appeared in the middle of a continued line; or
 - a line was continued past the end of the PARMLIB member.**System Action:** The system ignores the bad record, and continues to IPL.
Operator Response: None.
Programmer Response: Correct the TSO PARMLIB member, and re-IPL.

PL/I Syntax Checker Messages (IKM)

Component Name	IKM
Program Producing Message	PL/I syntax checker
Audience and Where Produced	For remote operator and programmer: terminal.
Message Format	IKMnnn 11111111 text nnn Message serial number. 11111111 Data set line number of the line in which the error was detected. Leading zeroes and blanks are suppressed. text Message text.
Comments	Central operator may request that messages appear on his console.
Related Publications	<i>MVS/XA SPL: TSO Terminal User's Guide</i> , GC28-0645 with SD23-0258

IKM

IKM001 11111111 UNMATCHED STRING QUOTES IN THIS STATEMENT

Explanation: The quotation mark at the end of a character or bit string is missing. No more checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM002 11111111 UNMATCHED COMMENT BRACKETS IN THIS STATEMENT

Explanation: The character pair */ marking the end of a comment is missing. No more checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM003 11111111 STATEMENT NOT RECOGNIZED

Explanation: A statement (including prefixes) does not start with an identifier, semicolon, decimal integer, or left parenthesis; or, a statement (excluding prefixes) starts with a nonkeyword identifier but does not contain an equal sign or does not have an equal number of left and right parentheses on the left of the equal sign.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM004 11111111 LABEL MISSING FROM xxx STATEMENT

Explanation: The label that should prefix an ENTRY, PROCEDURE, or FORMAT statement is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM005 11111111 PREFIX NOT PERMITTED BEFORE xxx

Explanation: A condition prefix to an ELSE clause, or an ENTRY or DECLARE statement, is not permitted.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM006 11111111 CHECK/NOCHECK PREFIX NOT PERMITTED BEFORE THIS STMT

Explanation: The prefixes CHECK and NOCHECK may precede only a PROC or BEGIN statement.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM007 11111111 PREFIX OPTION FOLLOWS LABEL
Explanation: A condition prefix follows a label prefix. This is not permitted under the rules of PL/I. A condition prefix must always precede any label prefix.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM008 11111111 ILLEGAL STATEMENT FOLLOWS xxx
Explanation:
xxx = ON: An on-unit consisting of an IF, ON, DO, RETURN, PROCEDURE, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted.
xxx = IF or ELSE: A unit-1 or unit-2 branch of an IF statement consisting of an ON, DO, PROCEDURE, ENTRY, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted. The illegal statement is not checked further.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM009 11111111 INVALID LABEL BEGNG xxx
Explanation: A label is not an (conditionally subscripted) identifier.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM010 11111111 INVALID PREFIX OPTION xxx
Explanation: A condition prefix contains an invalid condition name. The checking continues after the next colon.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM011 11111111 LABEL NOT PERMITTED BEFORE xxx
Explanation:
xxx = ON: the on-unit in an ON statement may not have a label prefix.
xxx = ELSE: a label to an ELSE clause must not precede the word ELSE.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM012 11111111 INCOMPLETE IF STATEMENT, THEN NOT FOUND WHEN EXPECTED
Explanation: In an IF statement, the keyword THEN, or the entire THEN clause, is missing. The checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM013 11111111 ERROR IN xxx STATEMENT BEGNG yyy
Explanation:
xxx = ALLOCATE, FREE, DECLARE, OPEN, CALL, DO, GET, or PUT statements. An invalid symbol may be contained in one of these statements.
xxx = BEGIN. The BEGIN statement is incorrectly written (may have the option ORDER or REORDER in PL/I Version 5).
xxx = THIS. Error in an unclassified statement. Checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM014 11111111 INVALID CHAR xxx PRECEDING yyy
Explanation: The character is not a PL/I character. Checking of this statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM015 11111111 INVALID CHAR IN BIT STRING BEGNG xxx
Explanation: A bit string contains a character other than 0 or 1.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

- IKM016** 11111111 xxx MISSING AFTER yyy
Explanation: A delimiter (comma, colon, or right parenthesis) or an identifier is missing.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM017** 11111111 MISSING EQUAL SIGN IN DO SPECIFICATION
Explanation: A Type 3 DO statement or repetitive specification must have the following general form: DO variable = expression [...]; . This error terminates the checking of the DO specification.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM018** 11111111 SURPLUS COMMA AFTER xxx
Explanation: A comma should not separate the options in a GET, PUT, or DECLARE (ENVIRONMENT) statement.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM019** 11111111 A LETTER IMMEDIATELY FOLLOWS CONSTANT BEGNG xxx
Explanation: A constant may only be followed by one of the following: any of several special characters, e.g., a blank or semicolon; an arithmetic operator, a comparison operator, or a bit-string operator. This could not be internally translated so no further checking of the statement is performed.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM020** 11111111 INVALID PREFIX OPERATOR xxx PRECEDING yyy
Explanation: An expression begins with an operator other than `_`, `+`, `-`, (or an operand other than an identifier, a string, or a constant).
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM021** 11111111 CONSTANT BEGNG xxx IS TOO LONG
Explanation: A binary fixed point or integer constant has more than 31 digits, or a decimal fixed point or integer constant has more than 15 digits. A binary floating point constant has more than 53 digits in the mantissa part, or a decimal floating point constant has more than 16 digits in the mantissa part.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM022** 11111111 CONSTANT BEGNG xxx EXCEEDS MAXIMUM VALUE
Explanation: A floating point constant exceeds the value 7.205,759,403,792,793E75, which is the highest value allowed.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM023** 11111111 SOLITARY DECIMAL POINT FOUND IN OPERAND POSITION
Explanation: A period appears invalidly in an expression in an operand position.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM024** 11111111 EXPONENT MISSING IN CONSTANT BEGNG xxx
Explanation: The letter E in a floating point constant is followed by some character other than a digit, a plus or minus sign, or a decimal point.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM025** 11111111 EXPONENT TOO LONG IN CONSTANT BEGNG xxx
Explanation: A binary floating point constant has more than 3 digits in the exponent part, or a decimal floating point constant has more than 2 digits in the exponent part.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM026 11111111 DECIMAL POINT IN EXPONENT OF CONSTANT BEGNG xxx

Explanation: The exponent in a floating point constant contains a decimal point.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM027 11111111 CONSTANT BEGNG xxx HAS TOO MANY DECIMAL POINTS

Explanation: A fixed point constant or the mantissa part of a floating point constant contains more than one radix point. Sterling constants are not checked.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM028 11111111 CONFLICTING op OPTION

Explanation: The option named conflicts with a previously specified option.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM029 11111111 xxx OPTION REQUIRED

Explanation: The option named must be specified.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statements as part of a valid PL/I program.

IKM030 11111111 INVALID OPTION BEGNG op

Explanation: The option named is not a valid option keyword.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM031 11111111 EXPRESSION MISSING AFTER xxx

Explanation: An expression to the right of an equal sign or IF is missing. Checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

IKM032 11111111 INVALID ARGUMENT SPECIFIED FOR xxx

Explanation: The attribute or option named has an invalid argument or argument list.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM033 11111111 ARGUMENT MISSING AFTER xxx

Explanation: The argument that must follow the attribute or option named is missing, or the argument list is empty.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM034 11111111 MULTIPLE xxx yyy SPECIFIED

Explanation: The attribute or option named has been previously specified in this statement.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM035 11111111 NO FILE SPECIFIED IN OPEN/CLOSE STATEMENT

Explanation: The FILE option in an OPEN or CLOSE statement is missing. No more checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM036 11111111 ILLEGAL USE OR INCORRECT FORMAT OR REFER OPTION

Explanation: The REFER option is used in an illegal context or is specified in an invalid format.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

- IKM037** **11111111 FILE ORGANIZATION MISSING FROM ENVIRONMENT OPTION**
Explanation: The file organization is not specified in the ENVIRONMENT option.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM038** **11111111 CR OR DB IN FLOATING FIELD OF PICTURE BEGNG xxx**
Explanation: The CR or DB symbols must not be specified for the exponent of a floating field in a PICTURE specification.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM039** **111111111 CONFLICTING xxx ATTRIBUTE**
Explanation: The attribute named conflicts with a previously specified attribute. For DECLARE and ALLOCATE statements, checking goes on for the next level-one declare variable (i.e., if the conflicting attribute is inside a structure, no more checking of this structure is performed).
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM040** **11111111 xxx ATTRIBUTE NOT PERMITTED IN THIS CONTEXT**
Explanation: An ISUB dummy variable appears outside the context of a DEFINED attribute of a DECLARE statement; or the LIKE attribute is specified in an invalid context.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM041** **11111111 ERROR IN FORMAT LIST BEGNG xxx**
Explanation: Either 1) a format item does not start with an identifier or a decimal integer constant; 2) the identifier is not a valid format item keyword, or 3) the FORMAT item has an invalid format. Checking continues after the format list.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
- IKM042** **11111111 xxx MUST HAVE ENTRY ATTRIBUTE**
Explanation: The identifier named must be declared with an ENTRY attribute.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM043** **11111111 INVALID xxx ATTRIBUTE SPECIFIED FOR keyword**
Explanation: The attribute named is not a valid attribute keyword.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM044** **11111111 ILLEGAL BASE FOR DEFINED ITEM xxx**
Explanation: The item named is defined on an invalid base.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM045** **11111111 ERROR IN INITIAL ATTRIBUTE LIST BEGNG xxx**
Explanation: The INITIAL attribute list does not begin with a constant, a string, or a repetition factor; or a + or - sign is not followed by a constant.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table i, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM046** **11111111 INVALID CHAR xxx IN PICTURE BEGNG yyy**
Explanation: The picture specification identified contains one or more invalid characters.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM047 – IKM056

IKM047 11111111 ILLEGAL USE OF CHAR xxx IN PICTURE BEGNG yyy

Explanation: The character identified is valid but improperly used in a picture specification.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM048 11111111 EXPONENT FIELD MISSING IN PICTURE BEGNG xxx

Explanation: In the picture specification for a floating point number, the exponent field is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM049 11111111 EXPONENT FIELD TOO LARGE IN PICTURE BEGNG xxx

Explanation: In the picture specification for a floating point number, the exponent field has too many decimal positions.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM050 11111111 MORE THAN ONE SIGN CHAR IN PICTURE BEGNG xxx

Explanation: The numeric picture specification identified contains more than one (not drifting) sign character.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM051 11111111 INVALID SCALING FACTOR IN PICTURE BEGNG xxx

Explanation: In the picture specification for a fixed point number, the scaling factor is invalidly represented.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM052 11111111 INVALID USE OF SCALING FACTOR IN PICTURE BEGNG xxx

Explanation: A scaling factor may occur only in the picture specification for a fixed-point number.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM053 11111111 NO SCALING FACTOR PARENTHESES IN PICTURE BEGNG xxx

Explanation: The parentheses enclosing the integer of a scaling factor in the picture specification identified are missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM054 11111111 INVALID REPETITION FACTOR IN PICTURE BEGNG xxx

Explanation: The repetition factor in the picture specification identified is not an integer. A repetition factor in a picture specification must be a non-zero integer enclosed in parentheses.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM055 11111 MULTIPLE USE OF CHARACTER xxx IN PICTURE BEGNG yyy

Explanation: The characters E, K, and V may occur once only in a numeric picture specification.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM056 111111 NO DIGIT POSITION BEFORE EXPONENT IN PICTURE xxx

Explanation: A picture specification for a floating point number makes no allowance for the digits of a mantissa preceding the delimiter E.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

- IKM057** 1111111 PICTURE BEGNG xxx LONGER THAN 255 CHAR
Explanation: The picture specification identified exceeds the maximum length of 255 characters.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM058** 1111111 STERLING CHAR FOUND IN NON-STERLING PICTURE xxx
Explanation: One of the characters 8, 7, 6, P, G, H, or M is found but the character G did not start this picture specification.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM059** 1111111 ILLEGAL LEVEL NUMBER xxx
Explanation: A major structure name must be declared with the level number 1. Minor structures must be declared with level numbers greater than 1. Level numbers must be decimal integers.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM060** 1111111 PRECISION EXCEEDS xxx FOR PICTURE BEGNG yyy
Explanation: The precision implied by the picture specification for a fixed or floating point number exceeds the maximum default precision.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM061** 1111111 ILLEGAL ASTERISK AS SUBSCRIPT IN DEFINING LIST
Explanation: An asterisk is not allowed as a subscript in a defining list.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM062** 1111111 ELEMENT xxx IS ILLEGALLY DEFINED WITH ISUB
Explanation: ISUB variables may not be used to define a scalar variable on an array base.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM063** 1111111 ILLEGAL ISUB VALUE
Explanation: The value of an ISUB dummy variable is outside the range 1-32.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM064** 1111111 POSITION ATTRIBUTE ILLEGAL FOR DEFINED ITEM xxx
Explanation: A POSITION attribute may not be specified for a data item defined by ISUB variables on a base identifier.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM065** 1111111 SUBSCRIPTED BASE ILLEGAL FOR DEFINED ITEM xxx
Explanation: The base identifier on which a data item is defined may not be a subscripted name.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM066** 1111111 FORMAT LIST MISSING
Explanation: The format in a GET, PUT, or FORMAT statement is missing.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM067** 1111111 FORMAT LIST CONTAINS NO DATA FORMAT ITEM
Explanation: The format list in a GET or PUT statement must include a format item for the data item being transmitted.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM068 11111111 FORMAT ITEM xxx PERMITTED WITH OUTPUT ONLY

Explanation: The format item named may not be used in the format list of a GET statement.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM069 11111111 FORMAT ITEM xxx IS INVALID

Explanation: The format item named uses invalid characters or is incorrectly written. Checking continues after the end of the format list.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM070 11111111 NESTING OF FORMAT LIST EXCEEDS 20

Explanation: A format list in this statement is nested to more than 20 levels.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM071 11111111 INVALID DATA ITEM BEGNG xxx

Explanation: The data item is not a valid identifier or is incorrectly written.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM072 11111111 NO DATA SPECIFICATION OR CONTROL OPTION FOUND

Explanation: The data list and format list for a GET or PUT statement are missing.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM073 11111111 ARRAY BOUND FOR xxx IS TOO LARGE

Explanation: The upper and/or lower bound of one or more dimensions of an array exceeds the maximum value.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM074 11111111 *BOUNDS ARE MIXED WITH NON* BOUNDS

Explanation: Variable array bounds (denoted by asterisks) may not be mixed with non-variable bounds in a DECLARE statement.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM075 11111111 LOWER BOUND GREATER THAN UPPER BOUND FOR xxx

Explanation: An array is declared with a lower bound greater than the upper bound or with a single upper bound equal to or less than zero.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM076 11111111 EXTERNAL NAME BEGNG xxx LONGER THAN SEVEN CHAR

Explanation: An external name may not exceed seven characters in length.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

IKM077 11111111 IDENTIFIER BEGNG xxx IS TOO LONG

Explanation: An identifier has more than 31 characters.

Programmer Response: Probable user error.
 Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29.
 Compile your PL/I statement as part of a valid PL/I program.

- IKM078** 1111111 UNMATCHED PARENTHESES, xxx MISSING
Explanation: The left and right parentheses in the current statement are unbalanced; one or more left or right parentheses are missing. The statement is not checked further.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM079** 1111111 LEFT PARENTHESIS REQUIRED AFTER xxx
Explanation: The option named must be followed by one or more arguments enclosed in parentheses.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM080** 1111111 OPERAND MISSING BEFORE xxx
Explanation: An identifier or expression preceding the item named is missing. This error terminates checking of the expression in question.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM081** 1111111 INSUFFICIENT ARGUMENT SPECIFIED FOR xxx yyy
Explanation: The number of arguments specified in the statement named is insufficient.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM082** 1111111 ON CONDITION INVALID OR MISSING
Explanation: An ON condition is either missing or invalidly specified. Checking of the ON statement is terminated.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
- IKM083** 1111111 INVALID SET/IN CLAUSE SPECIFIED FOR xxx
Explanation: The clause following the SET or IN option is invalid.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM084** 1111111 VARIABLE IN LOCATE STATEMENT INVALID OR MISSING
Explanation: The LOCATE keyword is not followed by an unscripted, unqualified identifier.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM085** 1111111 FACTORING NOT PERMITTED ON ALLOCATE STATEMENT
Explanation: An ALLOCATE statement contains a list of two or more factored variables.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM086** 1111111 POINTER QUALIFIER AFTER POINTER QUALIFIER OR SUBSCRIPT
Explanation: A pointer in a pointer qualifier may not be pointer qualified or subscripted.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.
- IKM087** 1111111 OPERAND MISSING AFTER xxx
Explanation: An identifier or expression following the item named is missing. Checking is terminated.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

**IKM088 1111111 NO DIGIT POSITION IN PICTURE
BEGNG xxx**
Explanation: A picture specification must contain at least one digit position.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM089 1111111 INVALID OPERATOR xxx
Explanation: The operator is not valid for use in an expression.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM090 1111111 IDENTIFIER MISSING AFTER xxx
Explanation: An operator is missing after the item named. This error terminates the checking of the expression in question.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM091 1111111 OPERATOR MISSING BEFORE xxx
Explanation: An operator is missing after the item named. This error terminates the checking of the expression in question.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

**IKM092 1111111 ILLEGAL LEFT PART OF
ASSIGNMENT STATEMENT**
Explanation: An invalid operand appears to the left of the assignment symbol. Checking of the statement is terminated.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM093 1111111 INVALID DO SPECIFICATION
Explanation: The keyword TO or BY is multiply used, or the DO specification contains an illegal symbol.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM094 1111111 xxx MISSING IN yyy STATEMENT
Explanation: For example, the keyword TO or the label in a GO TO statement is missing.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

**IKM095 1111111 SEMICOLON NOT FOUND WHEN
EXPECTED**
Explanation: The semicolon marking the end of a logically complete statement is missing, or no semicolon is found for the last statement of the input buffers.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM096 1111111 INVALID EVENT NAME BEGNG xxx
Explanation: In a WAIT or input/output statement, the event name specified for the EVENT option is invalid.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

**IKM097 1111111 BREAK CHAR INVALID AT BEGNG
OF IDENTIFIER xxx**
Explanation: The identifier may not begin with a break character.
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.
Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM098 1111111 INVALID FORM OF INITIALIZATION FOR xxx

Explanation: The initialization specified in this statement does not comply with the rules of PL/I syntax.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM099 1111111 MORE THAN 3 LEVELS OF ENTRY NESTING

Explanation: The ENTRY attribute may not apply to more than three logical levels.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM100 1111111 INVALID REPETITION FACTOR IN INITIAL LIST

Explanation: The repetition factor, a decimal integer constant, must be enclosed in parentheses and must precede the value or character to which it relates.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM101 1111111 MORE THAN 63 TRUE LEVEL NUMBERS SPECIFIED FOR xxx

Explanation: A structure may have a maximum of 63 levels, including the major structure number 1.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM102 1111111 MORE THAN 32 DIMENSIONS SPECIFIED FOR xxx

Explanation: An array may have a maximum of 32 dimensions.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM

Auxiliary Storage Management Messages (ILR)

Component Name	ILR
Program Producing Message	ASM modules ILRMSG00, ILRTMRLG, and ILRTMI00
Audience and Where Produced	For operator: console.
Message Format	ILRnnns text nnn Message serial number. s Type code: A Action; operator must perform a specific action. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed. text Message text.
Related Publications	<i>MVS/XA SPL: System Macros and Facilities</i> , GC28-1150 <i>MVS/XA Diagnostic Techniques</i> , LY28-1199

ILR001I rc DYNAMIC ALLOCATION OF SYS1.STGINDEX FAILED, NO VIO JOURNALING

Explanation: ASM's task mode initialization routine was unable to successfully execute a dynamic allocation request to create a ddname of SYS1.STGINDEX. This operation is required to open SYS1.STGINDEX. In the message, rc indicates the dynamic allocation return code. For an explanation of this code, see *System Macros and Facilities*.

System Action: ASM will issue message ILR022A before continuing operation. If the operator enters REPLY xx,'U', ASM attempts to complete other non-VIO-related initialization procedures. Journaling requests for VIO data sets will be rejected by ASM. If warm start had been requested, jobs requiring VIO data sets journaled on the previous IPL will not be able to be restarted.

Operator Response: Report this message to the system programmer.

Programmer Response: Occurrence of this message indicates that SYS1.STGINDEX was inaccessible to dynamic allocation or a system error occurred. If warm start had been requested, the contents of SYS1.STGINDEX may still be retrievable if the problem is corrected and re-IPL is performed before any reply to message ILR022A.

In other cases, respond as indicated to message ILR022A, which follows this message.

Problem Determination: Table I, items 2, 11, 18, 24, 28, 29, 30, 34.

ILR002I INITIALIZATION OF SYS1.STGINDEX FAILED, NO VIO JOURNALING

Explanation: ASM's task mode initialization routine was unable to fully initialize the SYS1.STGINDEX data set for CVIO processing. To fully initialize SYS1.STGINDEX, ASM must:

- Open the data set.
- Write the time stamp record.
- Close the data set.
- Reopen the data set for normal processing.

If any of these operations fail, or if the ESTAE recovery routine receives control during any of these operations, this message is issued.

System Action: ASM will issue message ILR022A before continuing operation. If the operator enters REPLY xx,'U' to message ILR022A, ASM attempts to complete other non-VIO-related initialization procedures. Journaling requests for VIO data sets will be rejected by ASM.

Operator Response: Report this message to the system programmer.

Programmer Response: Respond as indicated to message ILR022A, which follows this message.

Problem Determination: Table I, items 2, 11, 18, 24, 28 29, 30, 34.

ILR003A WARM START FOR VIO FAILED. REPLY 'U' TO INVOKE CVIO PROCESSING

Explanation: ASM's task mode initialization routine was unable to restore the SYS1.STGINDEX data set and/or ASM control blocks to reflect the status of journaled VIO data sets from the previous IPL. To perform this function, ASM must:

- Open and verify SYS1.STGINDEX.
- Read all valid records containing ASPCTs.
- Update the PATs to reflect the external storage slots allocated to journaled VIO data sets.

ILR

If any of these operations fail, this message is issued.

System Action: ASM waits for a response from the operator. If the operator enters REPLY xx,'U', system operation continues and ASM switches to CVIO processing for SYS1.STGINDEX. If ASM is successful, VIO journaling will be possible for this IPL. However, any VIO data sets journaled on the previous IPL are lost, and jobs requiring these data sets will not be able to be restarted.

Operator Response: Report this message to the system programmer. At his direction, either take a stand alone dump and re-IPL, or enter REPLY xx,'U' to invoke CVIO processing.

Programmer Response: Occurrence of this message indicates a problem with SYS1.STGINDEX or its contents. A stand alone dump should reveal the problem. If SYS1.STGINDEX itself is the problem, it may be possible to correct the problem and re-IPL with the warm start option again, without losing the contents of SYS1.STGINDEX.

Problem Determination: Table I, items 2, 11, 18, 24, 28, 29, 30, 34.

ILR004I ASM UNABLE TO BUILD DATA SET NAME LIST, PAGEADD COMMAND UNUSABLE

Explanation: ASM's task mode initialization routine was unable to build the page and swap data set name lists required for the PAGEADD command processor. The PAGEADD command will not be able to function.

System Action: System operation continues with the PAGEADD command unusable.

Operator Response: Report this message to the system programmer.

Programmer Response: Occurrence of this message indicates that ASM's task mode initialization routine was unable to obtain subpool 241 space in the CSA. This situation may indicate a larger system problem with the CSA or a problem in the ILRTMI00 module. Correct the size of the CSA, if necessary. Otherwise, notify your programming support personnel.

Problem Determination: Table I, items 2, 18, 29.

ILR005I PLPA PAGE DATA SET FULL, OVERFLOWING TO COMMON DATA SET

Explanation: The PLPA page data set has become full. All subsequent writes for the PLPA will be sent to the COMMON page data set.

System Action: Processing continues with PLPA pages on the PLPA and COMMON page data sets.

Operator Response: Report this message to the system programmer.

Programmer Response: Occurrence of this message indicates that the size of the PLPA page data set is inadequate. Increase the size of the PLPA page data set before the next IPL, if desired.

Problem Determination: Table I, items 2, 18, 28, 34.

ILR006I COMMON PAGE DATA SET FULL, OVERFLOWING TO PLPA DATA SET

Explanation: The COMMON page data set has become full. All writes for the COMMON page data set will be sent to the PLPA page data set.

System Action: Processing continues with COMMON pages on the COMMON and PLPA page data sets. All subsequent write requests will be attempted to the COMMON page data set and only sent to the PLPA page data set if no space is yet available on the COMMON page data set.

Operator Response: Report this message to the system programmer.

Programmer Response: Occurrence of this message indicates that the size of the COMMON page data set is inadequate. Increase the size of the COMMON page data set before the next IPL.

Problem Determination: Table I, items 2, 18, 28, 34.

ILR007I DUPLEX PAGE DATA SET {BAD|FULL}, DUPLEXING SUSPENDED

Explanation: Either the DUPLEX page data set has become full, or the DUPLEX page data set has become unusable because of one of the following:

- Permanent I/O errors on the volume containing the DUPLEX data set.
- The cache of a cached auxiliary storage subsystem, such as a 3880 control unit, model 11, has hardware problems.

System Action: Processing continues, but duplexing of PLPA and COMMON pages has been suspended.

Operator Response: Report this message to the system programmer.

Programmer Response: If this message was issued due to a full data set, the size of the page data set allocated to duplex storage is inadequate. Increase the size of the DUPLEX page data set before the next IPL.

If this message was issued for an unusable page data set, correct or replace it before the next IPL.

See the ASM section of the *System Logic Library*, for information on unusable paging data sets.

Problem Determination: Table I, items 2, 18, 24, 28, 29, 30, 34.

ILR008W {PLPA|COMMON|LOCAL|DUPLEX} PAGE DATA SET ON VOL volser BAD, ASM UNABLE TO CONTINUE

Explanation: ASM is unable to continue because the system cannot access:

- Both the PLPA and DUPLEX page data sets.
- Any user LOCAL page data set. All LOCAL page data sets are unusable.
- Both the COMMON and DUPLEX page data sets.
- Either the PLPA or COMMON page data set. Duplexing was not active.
- The DUPLEX page data set. Both the PLPA and COMMON page data sets are full.

- Either the PLPA or COMMON page data set. The DUPLEX page data set has become full.
- The PLPA and COMMON page data sets because they have become full. Duplexing was not active.

System Action: The system is placed in wait state X'02E' or X'03C'.

Operator Response: Notify the system programmer. Make sure that the system is not trying to write to data sets that are on devices marked READ ONLY.

Programmer Response: Determine which page data sets or cached auxiliary storage subsystems are unusable, and correct or replace these data sets before the next IPL.

Problem Determination: Table I, Items 2, 18, 24, 28, 29, 30, 34.

ILR009E {SWAP|PLPA PAGE|COMMON PAGE|LOCAL PAGE} DATA SET ON VOL volser BAD

Explanation: ASM is unable to access a page or swap data set for one of the following reasons:

- A permanent I/O error occurred.
- No IORB-IOSB-SRB was available.
- A cached auxiliary storage subsystem has failed.

System Action: Processing continues without the unusable data set.

Operator Response: Tell the system programmer that the data set is unusable. For local or swap data sets, use the PAGEADD command, if possible, to add an equivalent data set; this action maintains system performance and, in some cases, system operation. Use the DOM macro instruction to remove the message from the screen.

Programmer Response: Correct or replace the unusable data set before the next IPL. See the ASM section of the *System Logic Library* for information on unusable paging data sets.

Problem Determination: Table I, items 2, 18, 24, 28, 29, 30, 34.

ILR010I {PLPA|COMMON} PAGE DATA {FULL|BAD}, ASM USING ONLY DUPLEX PAGE DATA SET

Explanation: ASM is using the DUPLEX page data set for all PLPA or COMMON reads and/or writes, for one of the following reasons:

- Message ILR009E was issued for the PLPA or COMMON page data set. All reads and writes for the PLPA or COMMON page data set will be done using the DUPLEX page data set.
- Message ILR009E was issued for the PLPA or COMMON page data set, and now the PLPA or COMMON page data set has become full. All writes for the COMMON or PLPA page data set will be done to the DUPLEX page data set.

System Action: The system continues processing using only the DUPLEX page data set.

Operator Response: Notify the system programmer.

Programmer Response: Correct or replace the unusable page data set or subsystem, according to message ILR009I, before the next IPL. See the ASM

section of the *System Logic Library* for information on unusable paging data sets.

Problem Determination: Table I, items 2, 18, 24, 28, 29, 30, 34.

ILR020I ASM ENQ FOR SYS1.STGINDEX FAILED. CVIO REQUIRED NEXT IPL

Explanation: The task mode initialization routine of ASM was unable to successfully enqueue on the SYS1.STGINDEX data set. The data set will not be exclusively accessible by ASM.

System Action: ASM will issue message ILR022A before continuing operation. If the operator responds REPLY xx,'U' to message ILR022A, ASM will not close SYS1.STGINDEX and VIO journaling will not be possible during this IPL. If warm start had been requested, all journaled VIO data sets will be lost.

Operator Response: Report this message to the system programmer.

Programmer Response: Respond as indicated to message ILR022A, which follows this message.

Problem Determination: Table I, items 2, 11, 18, 24, 28, 29, 30, 34.

ILR021I UNEXPECTED ERROR DETECTED DURING VIO INITIALIZATION PROCESSING

Explanation: An undetermined error occurred during execution of ASM's task mode initialization routine, and ASM's recovery routine (ESTAE) received control. VIO journaling and possibly the PAGEADD command processor will not be functional this IPL.

System Action: ASM will issue message ILR022A before continuing operation. If the operator enters REPLY xx,'U' to message ILR022A, ASM's task mode initialization routine will be bypassed. SYS1.STGINDEX may or may not be left open, but ASM will not process VIO journaling requests. If warm start had been requested, all journaled VIO data sets will be lost. The data set name list will not have been built.

Operator Response: Report this message to the system programmer.

Programmer Response: Respond as indicated to message ILR022A, which follows this message.

Problem Determination: Table I, items 2, 11, 18, 24, 28, 29, 30, 34.

ILR022A REPLY 'U' TO CONTINUE WITHOUT VIO JOURNALING

Explanation: ASM's task mode initialization routine or its recovery routine (ESTAE) has detected one or more problems that will prevent VIO journaling on this IPL. Message ILR001I, ILR002I, ILR020I, or ILR021I precedes this message.

System Action: ASM waits for a response from the operator. System operation continues only if the operator enters REPLY xx,'U' in response to this message.

If the operator does enter REPLY xx,'U', the corresponding system action is described under the message preceding this message.

ILR

Operator Response: Report this message to the system programmer. At his direction, either take a stand alone dump and re-IPL, or enter REPLY xx,'U'.

Programmer Response: Occurrence of this message and the preceding message indicate a probable system error. If your system does not require VIO journaling or the PAGEADD command, system processing may be continued by the operator responding REPLY xx,'U'. However, it is recommended that the operator take a stand alone dump and correct the problem before the next re-IPL.

Notify your programming support personnel on all occurrences of this message.

Problem Determination: Table I, items 2, 11, 18, 24, 28, 29, 30, 34.

ILR025E PAGING SPACE FOR VIO FULL, VIO MAY SPILL TO NON-VIO PAGE SPACE

Explanation: The local paging data sets that contain VIO pages (that is, the data sets not named on the NONVIO=system parameter) are full. Therefore, ASM (auxiliary storage manager) will direct VIO pages to NONVIO paging data sets until more space for VIO pages becomes available.

System Action: Processing continues.

Operator Response: Report this message to the system programmer.

Programmer Response: To avoid spilling any more VIO pages to NONVIO paging data sets, use the PAGEADD command to add another local paging data set. For a more permanent addition, modify the appropriate IEASYSxx member of SYS1.PARMLIB before you re-IPL so that it includes more local paging data sets.

Note: If VIO pages do spill to a NONVIO data set and you then remove that NONVIO data set from the system and try to do a warm start, the warm start will fail. NONVIO data sets to which VIO pages have spilled must be kept across warm starts.

ILR073W AUXILIARY STORAGE BACKING SLOT SHORTAGE, ASM UNABLE TO CONTINUE

Explanation: ASM (auxiliary storage management) has determined that there are not enough backing slots for master scheduler initialization.

System Action: The system is placed in wait state X'03E'.

Operator Response: Report the wait state to the system programmer.

Programmer Response: Probable user error. Increase the amount of auxiliary storage for system operation.

Problem Determination: Table I, items 2, 29, and 34.

Input/Output Supervisor (IOS)

Component Name	IOS
Program Producing Message	Input/output Supervisor
Audience and Where Produced	For operator: console. For programmer: SYSPRINT data set.
Message Format	<p>xx IOSnnns text</p> <p>xx Message reply identification (absent, if operator reply not required).</p> <p>nnn Message serial number.</p> <p>s Type code: A Action; operator must perform a specific action. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed.</p> <p>text Message text.</p>
Related Publications	<p><i>MVS/XA System Logic Library, I/O Supervisor, Part 1, LY28-1705, Part 2, LY28-1706</i></p> <p><i>MVS/XA System Logic Library, I/O Supervisor, Part 1, LY28-1705, Part 2, LY28-1706</i></p> <p><i>MVS/XA SPL: Debugging Handbook, LC28-1164 through LC28-1169</i></p>

IOS000I ddd,pp,err,cmd,stat, sens ,
[dcbctfd|op**term|cylntck],
[ser], [ijj]

Explanation: The I/O supervisor detected an uncorrectable input/output error. In systems with the GAM (graphics access method), the following items:

- the issuance of message IOS000I,
- unit checks,
- conditions that require operator intervention,

indicate one of the following conditions:

- Device **ddd** does not exist.
- Device **ddd** was included at system generation time but not attached to the system.

Notes:

1. For the 3480 Magnetic Tape Subsystem, the message may be followed by a second line that tells you to READY THE DRIVE, RELOAD CARTRIDGE, or UNLOAD CARTRIDGE.
2. For the 2302, 3330 mod 11, 3340, 3330, and 3851, two lines are required to contain the message.
3. Two consecutive commas or a blank field in the message text indicate that the value of a field could not be obtained or is contained on the next line of the message.

In the message text, the fields are:

ddd The device number in hexadecimal.

pp The channel path, in hexadecimal, over which the channel program was executing when the error occurred. In some error conditions, such as channel

control check, the exact path cannot be determined. In such cases, the "pp" field is omitted.

err

Description of the error based on status and sense information. Possible values of err are:

ASE - drive assigned elsewhere

BOC - bus out check

BOT - a BACKWARD BLOCK or READ BACKWARDS command was issued while the tape was at load point

CCC - channel control check

CDC - channel data check

CEM - CE message

CHC - chaining check

CMD - command reject

CPC - channel program check

DC0 - a write data check occurred for a previous WRITE command in the current channel program.

DC1 - a write data check occurred for a WRITE command in a previously completed channel program.

DCC - data converter check (for magnetic tapes only)

DCK - data check

DSE - DATA SECURITY ERASE command failure

IOS

EOT - physical end of tape.
 EQC - equipment check
 FPR - a WRITE command was issued to a tape that is write file-protected.
 ICC - interface control check
 IOE - input/output error (for I/O errors other than those already described in this list)
 IPL - IPL check (for 370x only)
 LDA - lost data (for telecommunications only)
 LDC - load display during loading.
 MAM - missing address marker (for direct access only)
 NCA - tape not capable. The density capabilities of the tape unit, tape control unit, and the mounted tape are not compatible. This can occur if:

- A tape volume is mounted on an incompatible tape unit. For example, an 800 BPI tape is mounted on a 1600 BPI only tape unit.
- An attempt is made to write from the load point in a density that is not compatible with the tape unit.
- A 1600 or 6250 tape unit is not able to read the ID burst in the load point area of the tape.

NIN - not initialized (for 3791 only)
 NPA - no microcode path available; the EC level of the control unit and the drive microcode do not match.
 NRF - no record found
 OFF - the drive is offline.
 OVR - overrun
 POS - the control unit ERP failed.
 PRC - channel protection check
 SAF - stand alone failure (for 3330 only)
 SEN - a unit check occurred during a sense operation (when this condition is present, the fields sens and dcbctfd or op**term or cylntck do not appear in the message text)
 SEQ - block ID sequence error.
 SIM - simulated channel error
 SNS - a unit check occurred during a sense operation. (When this condition is present, the sens field does not appear in the message text.)
 SKC - seek check (for direct access only)
 SUR - subsystem reset.

SUU - subsystem unit unusable
 TEN - tape tension lost.
 TLC - tape length check.
 TOT - time out (for telecommunications only)
 UEX - unit exception (for telecommunications only)
 UNC - unusual command (for 2540 card reader and punch only)
 UNL - operator unloaded the volume.
 UNX - an unexpected interrupt occurred.
 VOI - tape void detected.
 WRI - write inhibit switch should be checked (for direct access only)
 ERROR ON ERG - error on an erase gap command. This message is an indication that some residual data remained on the tape; a later reread through the erased area may indicate a noise record. Depending on the length of the noise record, a permanent error (read data check) may occur. The erase gap command may have been issued by error recovery procedures (ERP) while attempting to recover from a data check on a write command.
 INVALID CSW - the tape ERP is using an IOS Block (IOSB) in which the CCW address in the CSW is zero instead of an expected address.
 NOISE BLOCK - a noise record (a record whose length is less than 12 bytes) was recognized as a cause of a read data check. The noise record is ignored and another read is done without any repositioning.
 UNEX INTERV - the RESET key was depressed on a tape drive. Correct positioning of the tape cannot be guaranteed because the operator may have replaced or repositioned the tape.
 UNEX LOAD PT - load point was encountered while ERP was repositioning a magnetic tape.

cmd The command code, in hexadecimal, of the executing CCW (channel command word) when the error occurred. If the channel command word cannot be found, this field appears as **.

stat The status portion, in hexadecimal, of the subchannel status word (SCSW). If the part of the status that is the device status cannot be found, this field appears as **.

sens These two bytes appear, in hexadecimal, if a unit check condition is indicated in the stat field and the sense data is valid. For devices that give more than two

bytes of sense information, this field also contains the remaining sense bytes, in hexadecimal. For devices that give more than 8 sense bytes, this field is contained on the second line of the message. For the 3330, 3330 mod 11, 3340, and 2302, this field contains the 8 sense bytes for program errors. For the 3480, the **sens** field contains two asterisks (**).

Note: The message on the system console contains the sense-byte information from the last entry for direct access devices. The SYS1.LOGREC data set contains sense-byte information from the initial error condition.

dcbctfd The record count, in hexadecimal, not including label records. This field appears only for magnetic tape and indicates the number of records that the system counted preceding the error record. For the 3480, this field contains 32 sense bytes; field replaceable unit (FRU) sense bytes are shown within parentheses.

op The TP (teleprocessing) operation code, in hexadecimal. It describes the type of CCW (channel command word) being executed when the error occurred.

****** a delimiter between op and term

term The terminal identification characters, in hexadecimal. It may be either two bytes or one byte, depending on the terminal type. If it is one byte, it is left justified. If a dial line is being used with TCAM (telecommunications access method), the last four digits of the dial number are provided.

cylntrck Address, in hexadecimal, of the cylinder (cyln), and the track (trck) where the error occurred. If an error occurs when the system tries to obtain this data, the system substitutes the last seek address for this data. This field appears only for direct access devices that are disk or drum. On a data check or equipment check for a 2302, 3330, 3330 mod 11, or 3340, this field does not appear.

ser Serial number of the volume on which the error occurred. This field appears only for magnetic tapes or direct access devices.

jjj Job name.

Operator Response: Probable hardware error. For magnetic tape devices, the results of the operation are unpredictable. Each message should be considered as a warning that the system might fail.

Possible values of **err** and appropriate responses follow:

CMD The command is rejected. Correct and retry the command for 2302, 3330, 3330 mod 11, and tapes. If the command is a X'FF', this is probably a hardware failure.

OVR Overrun, a permanent hardware error. Customer engineer action is required.

BOC Bus out check, a permanent hardware error. Customer engineer action is required.

EQC Equipment check, a permanent hardware error. Customer engineer action is required.

ICC Interface control check, a permanent hardware error. Customer engineer action is required.

DCK Request an alternate utility program such as IEHATLAS to perform recovery/replace functions, and, if necessary, to assign an alternate track. If no alternate tracks are available, customer engineer action is required for the 2302, 3330, 3330 mod 11 and 3340.

WRI If the write inhibit switch is set on (to prevent the execution of write commands) and the volume should be written on, set the switch off and rerun the job. If the write inhibit switch is set on intentionally to prevent the execution of write commands, follow the procedures established by your installation (for the 2302, 3330, 3330 mod 11, and 3340).

Problem Determination: Table I, items 2, 30.

IOS001E ddd,INOPERATIVE PATH[S] xx[,xx,xx...]

Explanation: Device **ddd** is unexpectedly unable to operate on the channel paths identified by **xx**.

System Action: The system continues to use the device over paths that are currently operational. If the paths indicated by **xx** are made operational, without any intervening command that would modify path usage, the system will use these paths once again.

Operator Response: Attempt to determine why the device became unable to operate on the indicated paths. Things to check for include a disabled control unit, an altered switching unit, or a disabled channel path. If the problem cannot be resolved, vary offline the path(s) to the device. This prevents the channel from attempting to select paths that are not operational.

Problem Determination: Table I, items 2, 30.

IOS002A ddd, NO PATHS AVAILABLE

Explanation: Device **ddd** was selected for operation, but did not respond on any online path. **ddd** is the device number in hexadecimal.

System Action: In most cases, subsequent requests for I/O to **ddd** are queued and held pending (waiting) until **ddd** becomes available again.

Operator Response: An I/O interrupt is required to cause I/O requests to the device to be retried. Issue a VARY DEVICE ONLINE command for **ddd** to simulate an I/O interrupt and cause queued requests to be retried.

Problem Determination: Table I, items 2 and 30.



IOS003A ddd, INTERVENTION REQUIRED

Explanation: Device **ddd** requires manual intervention. **ddd** is the device number in hexadecimal.

System Action: I/O requests must wait until the problem is resolved.

Operator Response: Take action to resolve the problem, such as:

- Put paper in the printer.
- Feed cards in the reader.
- Ready the tape or direct access device.

Problem Determination: Table I, items 2 and 30.

IOS004I IOS RECOVERY FAILURE - AVAILABILITY OF I/O DEVICES UNKNOWN

Explanation: The IOS (input/output supervisor) was performing channel recovery and an error occurred. Some I/O devices may not be available for use.

System Action: The system continues processing. If a number of I/O devices are not available for use, system performance may suffer.

Operator Response: Notify the system programmer. If other installation procedures fail, let the system complete as much work as possible and re-IPL.

Problem Determination: Probable software error. Table I, items 2, 11, 18, and 29.

IOS019W I/O SUBSYSTEM IS NO LONGER OPERATIONAL - SYSTEM TERMINATED

Explanation: The I/O subsystem reported to MVS that it is no longer operational. Do not perform any more I/O operations.

System Action: The system is in wait state A19, which is not restartable.

Operator Response: Contact hardware support personnel.

Problem Determination: Probable hardware error. Table I items 2, 18, 30.

IOS050I CHANNEL DETECTED ERROR ON ddd,yy,cmd,stat

Explanation: A channel detected an error during operation of device **ddd**. In the message text, the fields are:

ddd Device number.
yy Channel path identifier (CHPID), if known.
cmd Failing command code, if known.
stat Device and subchannel status.

System Action: The system writes an error record in the SYS1.LOGREC data set.

Operator Response: If the error persists on one path to the device and the system has another path to the device, make sure that the other path is online, then vary offline the path with the persistent error.

If the error persists on all paths to the device or on the only path to the device, force the device offline.

Problem Determination: Probable hardware error. Table I, items 2, 18, and 30.

IOS062E ERROR ON CHANNEL PATH - STOP I/O REQUESTS FROM SHARING SYSTEMS

Explanation: An error has occurred involving one or more channel paths with reserved devices. To attempt recovery, other processors that share devices with the processor suffering the error must be stopped from initiating I/O requests to the reserved devices.

System Action: The channel path(s) are not used until recovery is complete. The recovery function waits until all sharing processors are stopped.

Operator Response: Stop the other processors that share devices from initiating I/O. Then restart the system that has the error. The system issues message IOS201E when the I/O on other processors that share devices can be started. (This action is the same as the action for wait state code 062.)

Problem Determination: Probable hardware error. Table I items 2, 18, 30.

IOS070E ddd, MOUNT PENDING

Explanation: The missing interrupt handler has detected a mount pending condition for device **ddd**.

System Action: The system continues processing other work. The mount remains pending.

Operator Response: Ready device **ddd**. If the unit is ready, issue a VARY ONLINE command so that mount processing may continue.

Problem Determination: Table I, items 2, 5a, 16, 24, 29 or 30.

IOS071I ddd, xx, jji, 'text insert'
IOS071E ddd,pp,jjj,text

Explanation: The missing interruption handler (MIH) found the condition indicated by the message text. The condition has existed for longer than the period of time specified by the installation as acceptable.

The message can also be issued because of one of the following:

- A recurring condition caused message IOS071I to be issued repeatedly.
- An MIH exit routine, which is available only for a 3851 Mass Storage Facility, indicated that the device is not to be reset by a Clear Subchannel instruction (CSCH).

In the message, the fields are as follows:

ddd The device number.

pp The channel path ID of the path with the missing channel end, device end, or both. MIH determines this path from the last path used by the subchannel. **pp** is asterisks (1) when no channel path is associated with the missing interruption or (2) when the last path used mask is zero. For START PENDING and IDLE WITH WORK QUEUED, **pp** is the last path used by the subchannel for the device.

jjj The name of the job associated with the device or null, if none.

text One of the following:

**MISSING CHANNEL AND DEVICE END
or MISSING DEVICE END**

A probable hardware error has occurred.

If the device is a 3851 Mass Storage Facility, there may be no problem. The time that the 3851 needs to provide a channel end and device end varies, depending on the request and the workload. Therefore, the system could issue this message, indicating that an interruption is overdue, when no problem exists.

System Action: MIH issues a Clear Subchannel instruction to reset the device, if it is other than a 3851.

START PENDING

A probable hardware error. The channel has an I/O request to process but the device is not active or is busy on another channel path interface.

System Action: MIH resets the device and restarts the I/O request, if the device is other than a 3851; MIH does not reset a 3851.

IDLE WITH WORK QUEUED

A hardware or software error has occurred. The system programming has work queued to device **ddd** but the channel has no active I/O requests.

System Action: MIH resets the device and passes an I/O request to the channel, if the device is other than a 3851; MIH does not reset a 3851.

HALT SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred.

System Action: MIH does not reset the device.

CLEAR SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred.

System Action: No further processing is done on device **ddd** until a clear subchannel interruption occurs.

Operator Response: Notify the system programmer. Then, for other than 3851 devices, respond according to the message text:

MISSING DEVICE END

Check device **ddd** for hardware problems. For example, look for the SELECT light on for a tape drive. Look for the SELECT LOCK light on for a disk device. Check for proper connections to control and switching units.

If you just finished rewinding a tape or mounting a volume, issue a VARY **ddd** ONLINE command to generate a simulated device end. Do not issue the VARY **ddd** ONLINE command under other circumstances; doing so could damage data on the device.

If you did not just finish rewinding a tape or mounting a volume, cancel the jobs that are using device **ddd**.

IDLE WITH WORK QUEUED

If this condition is recursive, that is, message IOS075E appears, notify the system programmer.

For a 3851, check the device. If it has an unrecoverable problem, use its clear switch. If the

3851 does not have a problem, do nothing. Remember that the time needed by the 3851 to provide a device and channel end varies, so that an interruption could seem to be overdue even when no problem exists.

Programmer Response: None.

Problem Determination: Table I, items 2, 5a, 16, 24, 29, 30.

IOS072E MIH TERMINATED, error

Explanation: The missing interruption handler (MIH) found the error indicated in the message:

INITIALIZATION FAILED

During MIH initialization, an unexpected program error occurred in MIH module IOSRMIHT. A dump accompanies this message.

INTERNAL PROCESSING ERROR

MIH executed the maximum number of retries while scanning the unit control blocks (UCB) for missing interruptions. The system writes a record to SYS1.LOGREC for each retry.

LSQA UNAVAILABLE

The local system queue area (LSQA) is too small to hold the MIH work area.

System Action: MIH processing terminates. MIH is not available for the duration of this IPL.

Operator Response: Notify the system programmer. After the problem is corrected, re-IPL the system to activate MIH.

Problem Determination: Table I, items 2, 16, 18, 29 or 30, 33.

IOS073E MIH MESSAGE PROCESSING TERMINATED

Explanation: Repeated errors have forced MIH message processing to terminate. The detection of missing interrupts may still continue.

System Action: A system dump is taken and a record is written to SYS1.LOGREC. Missing interrupt detection may continue but the operator is not informed of missing conditions.

Operator Response: Notify the system programmer.

Programmer Response: Follow the appropriate problem determination instructions.

Problem Determination: Table I, items 2, 16, 18, 29 or 30, 33.

IOS074E MIH LOGREC RECORDING PROCESSING TERMINATED

Explanation: Repeated errors have forced MIH to stop recording missing conditions on SYS1.LOGREC. Missing interrupt detection may continue.

System Action: A system dump is taken and a record is written to SYS1.LOGREC, if possible. Missing interrupt detection may continue but missing conditions are not recorded on SYS1.LOGREC.

Operator Response: Notify the system programmer.

Programmer Response: Follow the appropriate problem determination instructions.

Problem Determination: Table I, items 2, 16, 18, 29 or 30, 33.

IOS075E ddd, RECURRING MIH CONDITION FOR THIS DEVICE

Explanation: The missing interruption handler (MIH) has found a recurring missing interruption for device **ddd**.

MIH previously issued one of the following messages to describe a missing interruption.

IOS071I or IOS077E

In processing for this message, MIH issued a Clear Subchannel instruction to reset device **ddd**, but due to a hardware error, the device or condition was not reset. MIH continues to issue the Clear Subchannel instruction, unless the condition is a missing Clear Subchannel interruption.

IOS076E

One of the following occurred:

- A Clear Subchannel interruption is missing.
- An MIH exit routine requested that the device not be reset. Any operator action failed to clear the missing interruption.

System Action: The system writes an error record to SYS1.LOGREC.

Operator Response: Respond to the previous message.

If IOS075E recurs without intervening IOS071E or IOS077E messages, notify the system programmer. The Clear Subchannel instructions being issued by MIH are ineffective. In this case, vary device **ddd** offline; you may have to use the offline FORCE option.

Programmer Response: Perform the problem determination procedures for the previous IOS message.

IOS076E ddd,pp,ijj,text

Explanation: The missing interrupt handler (MIH) found the condition indicated by the message text. The condition has existed for longer than the period of time specified by the installation as acceptable.

The message can also be issued because of one of the following:

- A clear subchannel interruption is missing.
- An MIH exit routine for a 3851 Mass Storage Facility indicated that the 3851 is not to be reset.

In the message, the fields are as follows:

ddd The device number.

pp The channel path ID of the path with the missing channel end, device end, or both. MIH determines this path from the last path used by the subchannel. pp is asterisks (1) when no channel path is associated with the missing interruption or (2) when the last path used mask is zero. For START PENDING and IDLE WITH WORK QUEUED, pp is the last path used by the subchannel for the device.

ijj The name of the job associated with the device or null, if none.

text One of the following:

MISSING CHANNEL AND DEVICE END or MISSING DEVICE END

A probable hardware error has occurred.

If the device is a 3851 Mass Storage Facility, there may be no problem. The time that the 3851 needs to provide a channel end and device end varies, depending on the request and the workload. Therefore, the system could issue this message, indicating that an interruption is overdue, when no problem exists.

START PENDING

A probable hardware error. The channel has an I/O request to process but the device is not active or is busy on another channel path interface.

IDLE WITH WORK QUEUED

A hardware or software error has occurred. The system programming has work queued to device **ddd** but the channel has no active I/O requests.

HALT SUBCHANNEL INTERRUPT MISSING or CLEAR SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred.

System Action: If the missing interruption was not for a 3851, the system action for each of the message texts follows:

MISSING CHANNEL AND DEVICE END MISSING DEVICE END

A hardware error has probably occurred. MIH issues a Clear Subchannel to reset the device.

START PENDING

A hardware error has probably occurred. The channel has an I/O request to process but the device is not active or is busy on another channel path interface. MIH resets the device and restarts the I/O request.

IDLE WITH WORK QUEUED

A hardware or software error has occurred. The system has work queued to device **ddd** but the channel has no active I/O requests. MIH resets the device and passes an I/O request to the channel.

HALT SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred. MIH does not reset the device.

CLEAR SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred. No further processing is done on device **ddd** until a clear subchannel interruption occurs.

System Action: Processing continues.

Operator Response: For other than 3851 devices, respond according to the message text:

MISSING DEVICE END

Check device **ddd** for hardware problems. For example, look for the SELECT light on for a tape drive. Look for the SELECT LOCK light on for a disk device. Check for proper connections to control and switching units.

If you just finished rewinding a tape or mounting a volume, issue a VARY ddd ONLINE command to generate a simulated device end. Do not issue the VARY ddd ONLINE command under other circumstances; doing so could damage data on the device.

If you did not just finish rewinding a tape or mounting a volume, cancel the jobs that are using device ddd.

IDLE WITH WORK QUEUED

If this condition is recursive, that is, message IOS075E appears, notify the system programmer.

CLEAR SUBCHANNEL INTERRUPT MISSING

Notify the system programmer. You may need to contact your hardware support personnel.

For a 3851, check the device. If it has an unrecoverable problem, use its clear switch. If the 3851 does not have a problem, do nothing. Remember that the time needed by the 3851 to provide a device and channel end varies, so that an interruption could seem to be overdue even when no problem exists.

Programmer Response: None.

Problem Determination: Table I, items 2, 5a, 16, 24, 29, 30.

IOS077E ddd,pp,ijj,text

Explanation: The missing interruption handler (MIH) found the condition indicated by the message text. The condition has existed for longer than the period of time specified by the installation as acceptable. This condition was originally reported by message IOS071I, but is recurring; MIH also issues message IOS075E.

In the message, the fields are as follows:

ddd The device number.

pp The channel path ID of the path with the missing channel end, device end, or both. MIH determines this path from the last path used by the subchannel. pp is asterisks (1) when no channel path is associated with the missing interruption or (2) when the last path used mask is zero. For START PENDING and IDLE WITH WORK QUEUED, pp is the last path used by the subchannel for the device.

ijj The name of the job associated with the device or null, if none.

text One of the following:

MISSING CHANNEL AND DEVICE END
or **MISSING DEVICE END**

A probable hardware error has occurred.

START PENDING

One of the following has occurred.

- A probable hardware error. The channel has an I/O request to process but the device is not active or is busy on another channel path interface.
- In a loosely coupled multiprocessing complex, another processor reserved device

ddd for longer than the installation-specified time. The MIH in this processor will issue this message with START PENDING in the text.

IDLE WITH WORK QUEUED

A hardware or software error has occurred. The system programming has work queued to device ddd but the channel has no active I/O requests.

HALT SUBCHANNEL INTERRUPT MISSING

A hardware error has probably occurred.

System Action: In processing for this message, MIH issued a Clear Subchannel instruction to reset device ddd, but due to a hardware error, the device or condition was not reset. MIH continues to issue the Clear Subchannel instruction.

Operator Response: If MISSING DEVICE END appears in the message text, check device ddd for hardware problems. For example, look for the SELECT light on for a tape drive. Look for the SELECT LOCK light on for a disk device. Check for proper connections to control and switching units.

If you just finished rewinding a tape or mounting a volume, issue a VARY ddd ONLINE command to generate a simulated device end. Do not issue the VARY ddd ONLINE command under other circumstances; doing so could damage data on the device.

If you did not just finish rewinding a tape or mounting a volume, cancel the jobs that are using device ddd.

For other message texts, no operator response is needed.

Programmer Response: None.

Problem Determination: Table I, items 2, 5a, 16, 24, 29, 30.

IOS100I DEVICE ddd {BOXED|FORCED OFFLINE}
LAST PATH yy LOST
[text]

Explanation: An error has occurred involving channel path yy, the last channel path to device ddd. Device ddd is forced offline to prevent the system from allocating it.

If the message text ends with LAST PATH yy LOST, device ddd was not reserved or assigned when the channel path error occurred.

The variable text may contain information on the following conditions:

- Device ddd was reserved or assigned when the channel path error occurred.
- A partial update to the volume on device ddd may have occurred.
- Continued use of the volume may result in a data integrity problem. That is, data may be lost or written over.

The meaning of each message text choice follows:

RESERVE LOST

The reserve status of device ddd is lost. Other processors that share the device can access it.

CANNOT RE-RESERVE

Software recovery removed the reserve status from device **ddd** while other processors that share the device were stopped; software recovery could not re-reserve the device. When the other processors that share the device are restarted, they can access it.

STILL RESERVED

Device **ddd** is still reserved. Other processors that share the device cannot access it.

RESERVE MAY BE LOST or MAY BE RESERVED

A reserve or release to device **ddd** was in progress over channel path **yy** when the channel path error occurred. The volume on the device was not partially updated.

For **RESERVE MAY BE LOST**, the reserve status of the device may be lost. Other processors that share the device may be able to access it.

For **MAY BE RESERVED**, the device may still be reserved. Other processors that share the device may not be able to access it.

ASSIGN LOST

The assign status of device **ddd** is lost. Other processors that share the device can assign it.

CANNOT RE-ASSIGN

Software recovery removed the assign status from device **ddd** while other processors that share the device were stopped; software recovery could not reassign the device. When the other processors that share the device are restarted, they can assign it.

STILL ASSIGNED

Device **ddd** is still assigned. Other processors that share the device cannot assign it.

System Action: The system boxes the device. This means that:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

Operator Response: If the message text ends with **LAST PATH yy LOST**, do one of the following:

- If channel paths are available to device **ddd**, **VARY** them online.
- If no channel paths are available and the device has a volume that you can dismount, move the volume to an online device using the **DDR SWAP** command.
- You can issue the **VARY DEVICE ONLINE** command to bring the device online. However,

you must wait for the device to go entirely offline, since it was pending offline.

If the message text ends with one of the choices in the brackets, consult your installation's operating procedures.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS101I

DEVICE ddd {FORCED OFFLINE|BOXED} {text}

Explanation: Device **ddd** was reserved, was being reserved or released, or was assigned. However, an error occurred on the channel path for the reserve or assign. Either the device is no longer reserved or assigned or a channel path can no longer be used because of a permanent channel path error. The system forces the device offline so that it cannot be allocated.

The variable **text** may contain information on the following conditions:

- Device **ddd** was reserved or assigned when the channel path error occurred.
- A partial update to the volume on device **ddd** may have occurred.
- Continued use of the volume may result in a data integrity problem. That is, data may be lost or written over.

The meaning of each message text choice follows:

RESERVE LOST

The reserve status of device **ddd** is lost. Other processors that share the device can access it.

CANNOT RE-RESERVE

Software recovery removed the reserve status from device **ddd** while other processors that share the device were stopped; software recovery could not re-reserve the device. When the other processors that share the device are restarted, they can access it.

RESERVED ON FAILING PATH yy

Device **ddd** is still reserved on failing channel path **yy**. Other processors that share the device cannot access it.

RESERVE MAY BE LOST or MAY BE RESERVED ON PATH yy

A reserve or release to device **ddd** was in progress over channel path **yy** when the channel path error occurred. The volume on the device was not partially updated.

For **RESERVE MAY BE LOST**, the reserve status of the device may be lost. Other processors that share the device may be able to access it.

For **MAY BE RESERVED ON PATH yy**, the device may still be reserved. Other processors that share the device may not be able to access it.

ASSIGN LOST

The assign status of device **ddd** is lost. Other processors that share the device can assign it.

CANNOT RE-ASSIGN

Software recovery removed the assign status from device **ddd** while other processors that share the device were stopped; software recovery

could not reassign the device. When the other processors that share the device are restarted, they can assign it.

WAS RESERVED or WAS ASSIGNED

The status of device **ddd** is no longer reserved or assigned.

STILL RESERVED or STILL ASSIGNED

The status of device **ddd** remains reserved or assigned.

ASSIGNED ON FAILING PATH yy

Device **ddd** is still assigned on failing channel path **yy**. Other processors that share the device cannot assign it.

System Action: The system boxes the device. This means that:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

Operator Response: If the message text ends with one of the choices in the brackets, consult your installation's operating procedures.

Note: You can issue the VARY DEVICE ONLINE command to bring the device online. However, you must wait for the device to go entirely offline, since it was pending offline.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS102I **DEVICE ddd {BOXED|FORCED OFFLINE},
{OPERATOR REQUEST|PERMANENT ERROR}
[text]**

Explanation: When OPERATOR REQUEST appears in the message, the operator either:

- Issued the VARY ddd,OFFLINE,FORCE command.
- Replied CU to message IOS110A and specified device **ddd** as one of the devices that is attached to the control unit that was taken offline.
- Invoked the dynamic pathing validation in order to verify the state of the path group. If the system can no longer use the device, it will force the device offline.

When PERMANENT ERROR appears in the message, a device support routine detected a permanent error on device **ddd**.

If the message text ends with OPERATOR REQUEST or PERMANENT ERROR, device **ddd** was not reserved or assigned when it was forced offline.

The variable **text** may contain information on the following conditions:

- Device **ddd** was reserved or assigned when the channel path error occurred.
- A partial update to the volume on device **ddd** may have occurred.
- Continued use of the volume may result in a data integrity problem. That is, data may be lost or written over.

The meaning of each message text choice follows:

WAS RESERVED

Device **ddd** was reserved when it was forced offline and the release was successful. Other processors that share the device can access it.

STILL RESERVED

Device **ddd** was reserved when it was forced offline and the release was unsuccessful. Other processors that share the device cannot access it.

MAY BE RESERVED

A reserve or release to device **ddd** was in progress when the device was forced offline and the release was unsuccessful. The volume on the device was not partially updated. Other processors that share the device may not be able to access it.

WAS ASSIGNED

Device **ddd** was assigned when it was boxed and the unassign was successful. Other processors that share the device can assign it.

STILL ASSIGNED

Device **ddd** was assigned when it was boxed and the unassign was unsuccessful. Other processors that share the device cannot assign it.

NO PATHS

The online paths to the device did not respond when you invoked the dynamic pathing validation.

RESERVE LOST

System cannot locate a device that was specified as reserved.

System Action: If the device is reserved, an attempt is made to release it. If the device is assigned, an attempt is made to unassign it. The system then boxes the device. This means that:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

Operator Response: If the message text ends with OPERATOR REQUEST or PERMANENT ERROR and if device **ddd** has a dismountable

volume, move the volume to an online device and issue the DDR SWAP command.

Note: You can issue the VARY DEVICE ONLINE command to bring the device online. However, you must wait for the device to go entirely offline, since it was pending offline.

If the message text ends with one of the choices in the brackets, consult your installation's operating procedures.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

**IOS104I DEVICE ddd {BOXED|FORCED OFFLINE},
UNCONDITIONAL RESERVE FAILED**

Explanation: An error occurred on a channel path to device ddd. The device could only be accessed by that channel path. For example, there was a reserve or an allegiance on the channel path. An unconditional reserve command was attempted on another channel path to gain access to the device. The command failed.

System Action: The system boxes the device. This means that:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

Operator Response: Consult your installation's operating procedures. A partial update to the volume on device ddd may have occurred. Continued use of the volume may result in a data integrity problem. That is, data may be lost or written over.

Note: Although this processor cannot access the device, other processors that share device ddd can. The device can be brought back online via the vary device command.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

**IOS105I DEVICE ddd {BOXED|FORCED OFFLINE} BY
UNCONDITIONAL RESERVE PROCESSING**

Explanation: An error occurred on a channel path to device ddd. The device could only be accessed by that channel path. For example, there was a reserve or an allegiance on the channel path. The reply to message IEA427A did not request recovery or the device does not support the unconditional reserve command.

System Action: The system boxes the device. This means that:

- I/O on the device is terminated.
- Any new I/O requests result in permanent I/O errors.
- No new allocations are done for the device.
- If the device was online, it is marked pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

Operator Response: Consult your installation's operating procedures. A partial update to the volume on device ddd may have occurred. Continued use of the volume may result in a data integrity problem. That is, data may be lost or written over.

Note: Although this processor cannot access the device, other processors that share device ddd can. The device can be brought back online via the vary device command.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS106E VARY ddd OFFLINE TO JES3

Explanation: The system boxed device ddd and issued message IOS100I, IOS101I, or IOS102I to indicate why the device was boxed.

System Action: Because the device is owned by JES3 and had not been allocated by MVS, the system marked the device offline. The system will reject all subsequent requests for this offline device, indicating a permanent I/O error.

The data sets on the device might have been damaged, especially if the device is shared with other systems.

Operator Response: Issue a JES3 VARY OFFLINE for the device to keep JES3 from scheduling it. Consult your system programmer before using the device again.

Programmer Response: Check the data sets on the device for damage. If the device was boxed because of hot I/O, contact hardware support personnel. If the device was boxed for other reasons, instruct the operator to issue a VARY ONLINE command to return it to the system. For a device managed by JES3, use the JES3 VARY ONLINE. Note that a VARY channel or VARY PATH command will not bring the device online.

Problem Determination: Table I, items 2, 11, 18, 30.

IOS109E HOT I/O RECOVERY rrrrr INITIATED FOR ttttttt DEVICE ddd, CHPID cc

Explanation: Hot I/O (an unasked for I/O interruption that repeats because of a hardware malfunction) has been detected on device **ddd**, over channel path **cc**. The installation has specified the recovery action in the HIDT (hot I/O detection table).

ttttttt is the type and status of the device. Possible values are:

ttttttt	Status
RESERVED	Reserved
ASSIGNED	Assigned

If the **ttttttt** field is blank, the status of the device is 'Not Reserved.'

rrrrr is the recovery action obtained from the HIDT. Possible values are:

rrrrr	Meaning
BOX	Force the device offline.
CHP,K	Channel path recovery is attempted. If successful, the channel path remains online.
CHP,F	Force the channel path offline.

System Action: The system action depends on the value of **rrrrr**.

BOX The system boxes the hot device. That is, the system makes the device pending offline and subsequent I/O requests to the device are permanent errors. The device is left status pending so that the device cannot present any new interruptions to the system.

CHP,K The system attempts to recover channel path **cc**. If any devices are reserved or assigned on channel path **cc**, the system issues message IOS062E. If channel path recovery is successful, the system issues message IOS203I and leaves the channel path online. If channel path recovery fails, the channel path is forced offline and message IOS202I is issued.

CHP,F The system forces the channel path offline and issues message IOS202I. If any devices are reserved or assigned on channel path **cc**, message IOS062E is issued before message IOS202I.

Operator Response: If recovery action **rrrrr** is **BOX** and device **ddd** can be physically disabled, you should disable device **ddd**.

Note: For a DASD or assigned device, do not disable the control unit, because disabling could cause reserves or assigns to be lost.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30. Further information about the hot device can be found in the SYS1.LOGREC data set.

IOS110A IOS HAS DETECTED HOT I/O ON DEVICE ddd (NON-DASD). THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH xx. THE SCD IS AT aaaaaaaa. THERE ARE nnn DEVICES WITH HOT I/O ON CHP xx.

ENTER ONE OF THESE REPLIES TO TELL IOS HOW RECOVERY IS TO BE HANDLED:

NONE THIS REPLY TELLS IOS THAT (1) THE OPERATOR DID NOT PHYSICALLY REMOVE ANY DEVICE OF CONTROL UNIT (HE MAY OR MAY NOT HAVE RESET THE DEVICE) AND (2) IOS SHOULD NOT REMOVE ANY DEVICE AND NOT ATTEMPT ANY CHANNEL RECOVERY.

DEV THIS REPLY TELLS IOS TO LOGICALLY REMOVE (BOX) THE DEVICE. (THE OPERATOR MAY OR MAY NOT HAVE PHYSICALLY REMOVED THE DEVICE.)

CU THIS REPLY TELLS IOS THAT THE OPERATOR PHYSICALLY REMOVED THE CONTROL UNIT. THE REPLY MUST INCLUDE THE NUMBER OF EACH DEVICE ON THE CONTROL UNIT. FOR EXAMPLE, IF DEVICES 25E, 250 THRU 257 ARE ON THE CONTROL UNIT, REPLY:

CU,250:257,25E
OR
CU,25E,250:257

CHP,K THIS REPLY TELLS IOS (1) TO ATTEMPT RECOVERY FOR THE CHANNEL PATH NAMED IN THE MESSAGE, AND (2) IF RECOVERY IS SUCCESSFUL, TO KEEP THE CHANNEL PATH ONLINE.

CHP,F THIS REPLY TELLS IOS TO FORCE THE CHANNEL PATH OFFLINE.

Explanation: Hot I/O (an unexpected I/O interruption that repeats because of a hardware malfunction) has been detected on device **ddd**, which is not a DASD device. The last interruption for device **ddd** was over channel path **xx**.

System Action: Device **ddd** is left with its status pending. This prevents the device from presenting any additional interruptions until further operator action. The system waits for the operator to reply to the message. The action the system takes depends on the operator response, as follows:

Response System Action

NONE An interruption is simulated, pending status is cleared, and processing continues. The device remains online.

DEV The system boxes the device. That is, the system makes the device pending offline and subsequent I/O requests to the device are permanent errors. The device is left status pending so that the device cannot present any new interruptions to the system.



- CU The system boxes (see DEV above) the devices specified in the reply. The hot devices listed in the reply are boxed and left status pending.
- CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system issues message IOS203I, leaves the channel path online, and clears the pending status of the hot device. If the channel path recovery is not successful, the system issues message IOS202I. The channel path is forced offline. If channel path recovery did not clear the condition causing the device to go hot, hot I/O may soon reoccur on this device. If it does, the operator may need to reply DEV, CU, or CHP,F the next time this message occurs for this device.
- CHP,F The system forces the channel path offline and issues message IOS202I.

Operator Response: Consult your installation's operating procedures. Try to correct the problem at the lowest possible level. Levels, from lowest to highest, are:

1. Device, or control unit, or channel path, keep online.
2. Channel path, or force offline.

Reply with one of the following, as described in the message text, to notify the system of the action taken:

- NONE
- DEV
- CU and the device numbers
- CHP,K
- CHP,F

Note: If you reply DEV, you should also physically disable the device. Physical disabling is not required; however, if the device is logically removed, that is, boxed, without physically removing it, MIH conditions may appear for other devices on the channel path.

If necessary, contact hardware support personnel. When the device or channel path is repaired, it can be varied online.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30. Further information about the hot device can be found in the SYS1.LOGREC data set. The status collection data control block (SCD) address, aaaaaaaa, is supplied in the message text to help the system programmer determine the source of the problem.

IOS111A IOS HAS DETECTED HOT I/O ON {DASD|ASSIGNABLE} DEVICE ddd. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH xx. THE SCD IS AT aaaaaaaa. THERE ARE nnn DEVICES WITH HOT I/O ON CHP xx.

ENTER ONE OF THESE REPLIES TO TELL IOS HOW RECOVERY IS TO BE HANDLED:

NONE THIS REPLY TELLS IOS THAT (1) THE OPERATOR DID NOT PHYSICALLY REMOVE ANY DEVICE

OR CONTROL UNIT (HE MAY OR MAY NOT HAVE RESET THE DEVICE) AND (2) IOS SHOULD NOT REMOVE ANY DEVICE AND NOT ATTEMPT ANY CHANNEL RECOVERY.

- DEV **THIS REPLY TELLS IOS TO LOGICALLY REMOVE (BOX) THE DEVICE. (THE OPERATOR MAY OR MAY NOT HAVE PHYSICALLY REMOVED THE DEVICE.)**
- CHP,K **THIS REPLY TELLS IOS (1) TO ATTEMPT RECOVERY FOR THE CHANNEL PATH NAMED IN THE MESSAGE, AND (2) IF RECOVERY IS SUCCESSFUL, TO KEEP THE CHANNEL PATH ONLINE.**
- CHP,F **THIS REPLY TELLS IOS TO FORCE THE CHANNEL PATH OFFLINE.**

Explanation: Hot I/O (an unexpected I/O interrupt that repeats because of a hardware malfunction) has been detected on device ddd, which is either a DASD or assignable device. The device is not reserved or assigned. The last interrupt for this device was over channel path xx.

System Action: The device is left with its status pending. This prevents the device from presenting any additional interrupts until further operator action. The system waits for the operator to reply to the message. The action the system takes depends on the operator response, as follows:

Response	System Action
NONE	An interrupt is simulated, pending status is cleared and processing continues. The device remains online.
DEV	The system boxes the device. That is, the system makes the device pending offline and subsequent I/O requests to the device are permanent errors. The device is left status pending so that the device cannot present any new interrupts to the system.
CHP,K	The system attempts to recover the channel path. If any devices are reserved or assigned on this channel path, the system issues message IOS062E. If channel path recovery is successful, the system issues message IOS203I (see the description of message IOS203I) and leaves the channel path online. If the channel path recovery is not successful, the system issues message IOS202I (see the description of message IOS202I). Recovery has failed. The channel path is forced offline.
CHP,F	The system forces the channel path offline and issues message IOS202I. If any devices are reserved or assigned on this channel path, the system issues message IOS062E before issuing message IOS202I.

Operator Response: Consult your installation's operating procedures. Try to correct the problem at the lowest possible level. Levels, from lowest to highest, are:

1. device, or channel path, keep online
2. channel path, force offline

Reply with one of the following to notify the system of the action taken:

- NONE
- DEV
- CHP,K
- CHP,F

as described in the message text. If necessary, contact hardware support personnel. When the device or channel path is repaired, it can be varied online.

Note: In this situation the operator must not reset the control unit because this could cause reserves or assigns to be lost to other processors.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30. Further information about the hot device can be found in the SYS1.LOGREC data set. The SCD (status collection data control block) address, **aaaaaaaa**, is supplied in the message text to aid the system programmer or the CE in determining the source of the problem.

IOS112A

IOS HAS DETECTED HOT I/O ON {RESERVED|ASSIGNED} DEVICE ddd. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH xx. THE SCD IS AT aaaaaaaa. THERE ARE nnn DEVICES WITH HOT I/O ON CHP xx.

ENTER ONE OF THESE REPLIES TO TELL IOS HOW RECOVERY IS TO BE HANDLED:

NONE THIS REPLY TELLS IOS THAT (1) THE OPERATOR DID NOT PHYSICALLY REMOVE ANY DEVICE OR CONTROL UNIT (HE MAY OR MAY NOT HAVE RESET THE DEVICE) AND (2) IOS SHOULD NOT REMOVE ANY DEVICE AND NOT ATTEMPT ANY CHANNEL RECOVERY.

DEV THIS REPLY TELLS IOS TO LOGICALLY REMOVE (BOX) THE DEVICE. (THE OPERATOR MAY OR MAY NOT HAVE PHYSICALLY REMOVED THE DEVICE.)

CHP,K THIS REPLY TELLS IOS (1) TO ATTEMPT RECOVERY FOR THE CHANNEL PATH NAMED IN THE MESSAGE, AND (2) IF RECOVERY IS SUCCESSFUL, TO KEEP THE CHANNEL PATH ONLINE.

CHP,F THIS REPLY TELLS IOS TO FORCE THE CHANNEL PATH OFFLINE.

Explanation: Hot I/O (an unexpected I/O interrupt that repeats because of a hardware malfunction) has been detected on device **ddd**, which is on a reserved DASD device or an assigned device. The last interrupt for this device was over channel path **xx**.

System Action: The device is left with its status pending. This prevents the device from presenting any additional interrupts until further operator action. The system waits for the operator to reply to the message. The action the system takes depends on the operator response, as follows:

Response	System Action
NONE	An interrupt is simulated, pending-status is cleared, and processing continues. The device remains online.
CHP,K	The system attempts to recover the channel path. and issues message IOS062E. If channel path recovery is successful, the system issues message IOS203I (see the description of message IOS203I) and leaves the channel path online. If the channel path recovery is not successful, the system issues message IOS202I (see the description of message IOS202I). Recovery has failed. The channel path is forced offline.
DEV	The system boxes the device. That is, the system makes the device pending offline and subsequent I/O requests to the device are permanent errors. The device is left status pending so that the device cannot present any new interrupts to the system. The device may also be left in a reserved or assigned state. If this happens, other processors that share device dd cannot access the device.
CHP,F	The system forces the channel path offline and issues message IOS202I. If any devices are reserved or assigned on this channel path, the system issues message IOS062E before message IOS202I.

Operator Response: Consult your installation's operating procedures. Try to correct the problem at the lowest possible level. Levels, from lowest to highest, are:

1. channel path, keep online
2. channel path, force offline, or device

Reply with one of the following to notify the system of the action taken:

- NONE
- CHP,K
- DEV
- CHP,F

as described in the message text. If necessary, contact hardware support personnel. When the device is repaired, it can be varied online.

Note: In this situation the operator must not reset the control unit because this could cause reserves or assigns to be lost to other processors.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30. Further information about the hot device can be found in the SYS1.LOGREC data set. The SCD (hot I/O status collection data area) address **aaaaaaaa** is supplied in the message



text to aid the system programmer or the CE in determining the source of the problem.

IOS113W IOS RECOVERY FAILURE - RESERVES MAY HAVE BEEN LOST

Explanation: IOS (input/output supervisor) was performing channel recovery when an error occurred from which IOS could not recover. Reserved devices may have been released so data may be lost or damaged (written over).

System Action: The system terminates with wait state code 113.

Operator Response: Notify the system programmer. If no installation procedures exist, take a stand alone dump and re-IPL the system. You should re-IPL systems sharing devices with the system that suffered the error (the system that issued this message). This system may have inadvertently stolen reserved devices. This could even happen when the sharing systems are stopped because this system issued message IOS062E.

Problem Determination: Probable software error. Table I, items 2, 11, 18, 29.

IOS115A ddd, PAGE DATA SET -

{NO PATHS AVAILABLE|
ser NOT MOUNTED|
I/O ERROR READING VOLUME LABEL|
INTERVENTION REQUIRED}

Explanation: The page data set cannot be used for the reason given in the message. In the message, **ddd** is the unit address of the device and **ser** is the serial number of the volume containing the page data set. Message IEE125A follows this message.

System Action: The system waits for the operator to reply to message IEE125A. When the reply is received, the system resumes normal processing.

Operator Response: If NO PATHS AVAILABLE appears in the message, physically restore a path to the device. For example, turn on a control unit switch or a channel switch.

If 'ser NOT MOUNTED' appears in the message, mount the correct volume on device **ddd**.

If I/O ERROR READING VOLUME LABEL appears in the message, make sure the correct volume is mounted on device **ddd**.

If INTERVENTION REQUIRED appears in the message, ready the unit.

When the required action has been taken, reply to message IEE125A.

Problem Determination: Table I, items 2, 11, 30.

IOS116A MIH CONDITION PENDING ON PAGING DEVICE ddd

Explanation: IOS restart processing found an outstanding MIH (missing interrupt handler) condition on paging device **ddd**. Earlier, MIH processing tried unsuccessfully to issue a message describing the problem.

System Action: Processing continues.

Operator Response: If the device was just mounted (or was offline during IPL and has not been used),

issue a VARY **ddd** ONLINE command to cause a simulated device end.

Check the indicators on paging device **ddd** for hardware problems. On a disk device, for example, the SELECT LOCK indicator might be on. If you find the problem, follow the procedures for operators in the Principles of Operation Guide for the device.

Check control units or switching units for proper switch settings. If the problem remains, call hardware support personnel.

Programmer Response: None.

Problem Determination: Table I, items 13, 16, 23, and 29.

IOS120A DEVICE ddd SHARED [PR VOLID NOT READ.] REPLY 'CONT' or 'WAIT'

Explanation: Device **ddd** has not responded to a request to initiate I/O to validate a device path. The device could be a shared device that is presently reserved by a processor other than the processor from which the IPL is being performed. The device could also have a hardware function that causes direct access to appear busy. If device **ddd** is not shared, the volid has not been read.

System Action: The system action depends on the operator's response.

Operator Response: To wait until the device is released by the processor that is presently using it, enter REPLY xx,'WAIT'. To wait until the volid has been read, reply 'WAIT'. Normal processing will continue after the device is available. If you REPLY xx,'CONT', the request is purged and the device is marked offline. Do not execute any job that might require allocation of device **ddd**. If you execute such a job, the system might issue a mount message and subsequent operator action might result in a shared device being unavailable to the processor that originally reserved it.

Note: If the wait time is excessive, there might be a problem with the device. A hardware malfunction can cause the device to appear reserved.

Otherwise, enter REPLY xx,CONTINUE. This reply will result in the device being marked unavailable to the processor from which the IPL is being performed. Processing will continue. (If this reply is entered, do not execute any job that might require allocation of device **ddd**. If such a job is executed, a mount message will be issued and subsequent operator action might make the device unavailable to the processor that originally reserved it.)

Note: If the message appears frequently or if the wait time is excessive, notify the system programmer at the installation.

IOS150I DEVICE ddd NOW AVAILABLE FOR USE

Explanation: The channel has reported that the resources required for accessing device **ddd** are available.

System Action: The device is marked available for I/O requests.

Operator Response: Vary online device **ddd**.

- Problem Determination:** None.
- IOS151I DEVICE ddd NOT AVAILABLE FOR USE**
- Explanation:** The channel has reported that the resources required for accessing device ddd are not available.
- System Action:** The device is marked as not connected to the system and not available for I/O requests.
- Operator Response:** Vary offline device ddd.
- Problem Determination:** None.
- IOS160I CHANNEL REPORT WORDS LOST DUE TO OVERFLOW CONDITIONS**
- Explanation:** The channel indicates a channel report word overflow condition. One or more channel report words are lost and will not be reported to the system.
- System Action:** Channel report word processing continues.
- Operator Response:** System operation may be affected depending on the information in the last channel report words.
- Problem Determination:** None.
- IOS161I SUBCHANNEL sss, NO MATCHING UCB FOUND**
- Explanation:** The channel has provided a channel report word with subchannel number sss for which no UCB corresponding to sss was found.
- System Action:** The channel report word is treated as invalid and channel report word processing continues.
- Operator Response:** None.
- Problem Determination:** None.
- IOS162A CHPID xx ALERT, UNSOLICITED MALFUNCTION ALERT**
- Explanation:** While trying to service a request from a device, the channel subsystem encountered a malfunction before the identity of the device could be determined. The reporting channel path, xx in the message text, remains available to the channel subsystem.
- To alert the program, the channel subsystem has provided a channel path temporary channel report word (CRW).
- Operator Response:** Delete the message, and notify the system programmer.
- Programmer Response:** Contact hardware support personnel. Recovery of the device that caused the CRW to be generated may require external actions. Channel path xx can be used to help isolate the source of the error.
- IOS163A CHPID xx ALERT, NO ASSOCIATED SUBCHANNEL FOR DEVICE**
- Explanation:** While trying to service a request from a device, the channel subsystem could not associate a valid subchannel with that device. The reporting channel path, xx in the message text, remains available to the channel subsystem.
- To alert the program, the channel subsystem has provided a configuration alert temporary channel report word (CRW).
- Operator Response:** Delete the message, and notify the system programmer.
- Programmer Response:** Contact hardware support personnel. Recovery of the device that caused the CRW to be generated will require external actions to associate the device with a valid subchannel.
- IOS190I ddd, DISMOUNT VOLUME ser**
- Explanation:** Module IOSVDAVV found incorrect volume ser mounted on direct access device ddd. The volume label on volume ser does not match the volume label in the unit control block (UCB).
- System Action:** The system issues message IOS192A.
- Operator Response:** Dismount volume ser from device ddd, then respond to message IOS192A.
- IOS191I ddd, I/O ERROR READING VOLUME LABEL, cm, stat, sensbbbbbb**
- Explanation:** A permanent I/O error occurred when the system tried to read the volume label for the volume mounted on device ddd. In the message text, the fields, in hexadecimal, are:
- | | |
|---------------|---|
| ddd | Device number. |
| cm | Operation code of the channel command word (CCW) executing when the error occurred. |
| stat | Status portion of the subchannel status word (SCSW). |
| sens | First two sense bytes for the error condition. |
| bbbbbb | Remaining sense data. |
- Note:** The message will give no sense data if a unit check did not occur.
- System Action:** The system issues message IOS192A.
- Operator Response:** Dismount the volume on device ddd. Then respond to message IOS192A.
- Problem Determination:** Table I, items 2, 3a.
- IOS192A ddd, MOUNT VOLUME volser OR FORCE DEVICE OFFLINE**
- Explanation:** The system issues this message after IOS191E or if the volume mounted on device ddd does not have a volume serial of volser.
- System Action:** The system will not start I/O requests to device ddd until the operator mounts the correct volume.
- Operator Response:** Do one of the following:
- Mount volume volser on device ddd.

- Force device **ddd** offline using the VARY DEVICE OFFLINE, FORCE command.
- Cancel the job that needs volume **volser** on device **ddd**.

Problem Determination: Table I, items 2, 30.

IOS201E START PROCESSORS STOPPED FOR MESSAGE IOS062E - RESERVES {INTACT|LOST}

Explanation: The system has recovered from the error mentioned in message IOS062E; the error required the operator to stop the processors that share devices with this system. RESERVES INTACT in the message text means that all reserved devices were successfully recovered. RESERVES LOST means that one or more devices reserved for this system were forced offline.

System Action: The system issues other messages to tell the operator which devices are no longer reserved for this system. system. Then the system issues message IEE125A

Operator Response: Start the stopped processors.

If RESERVES LOST appears, notify the system programmer, then follow installation procedures. If the procedures fail, re-IPL the stopped systems that share the devices that are no longer reserved for this system.

Then respond to message IEE125A.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS202I CHANNEL PATH yy FORCED OFFLINE DEVICE IS: {ddd|UNKNOWN}

Explanation: A hardware error has resulted in the loss of channel path **yy**. The error is permanent. External intervention is required to recover the channel path. If the device is unknown or no device is involved, UNKNOWN appears in the message text.

System Action: The channel path is forced offline. Other messages reflect the status of the devices using the channel path.

Operator Response: None.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS203I CHANNEL PATH yy SUCCESSFULLY RECOVERED - DEVICE IS: {ddd|UNKNOWN}

Explanation: An error occurred on channel path **yy** involving device **ddd**. However, channel path recovery was successful. The system can use the channel path. If the device is unknown or no device is involved, UNKNOWN appears in the message text.

System Action: The system uses the channel path.

Operator Response: If the system issues this message often for the same channel path (**yy** is often the same), you may CONFIG channel path **yy** offline to prevent the operating system from using it. If device **ddd** is causing the system to invoke channel path recovery, force it offline.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS250I PATH yy BROUGHT ONLINE FOR DEVICE ddd

Explanation: An error occurred that would have resulted in the system forcing device **ddd** offline because it lost its last path. But, device **ddd** had one or more offline paths available. That is, the paths are offline to the device but the corresponding channel paths are online to the system. So the system brings path **yy** online only for device **ddd**.

System Action: The system brings an available path, **yy**, online only for device **ddd**. Future I/O requests involving device **ddd** use channel path **yy**.

Operator Response: None.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS251I PATH yy TAKEN OFFLINE FROM DEVICE ddd

Explanation: An error has occurred on channel path **yy**. The system reinitialized channel path **yy**, causing path **yy** to be removed from the dynamic pathing group for device **ddd**. The system then was unable to put path **yy** back into the dynamic pathing group for device **ddd** (refer to message IOS444I, which precedes this message). Path **yy** was taken offline from device **ddd** because, otherwise, the device would have an online path that is not in the device's dynamic pathing group.

System Action: The system takes path **yy** offline only for device **ddd**.

Operator Response: None.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS306I adr, I/O ERROR, cmd, pp, stat, [ser,] [sens]

Explanation: The nucleus initialization program (NIP) issued an I/O request to the device at the unit address **adr**, on the path **pp**. In the message text:

- **adr** is the unit address
- **cmd** is the I/O command that caused the error
- **pp** is the channel path identifier
- **stat** is the SCSW status bytes
- **ser** is the volume serial number, if the volume serial number is available. If the volume serial number is not available, the field **ser** is blank.
- **sens** is a second message containing sense data which follows the first IOS306I message.

The I/O request included a command that resulted in an unsuccessful I/O completion. The SCSW status bytes and the first two bytes of sense data are included as a diagnostic aid and may be used to determine the cause of the I/O failure. The sense data appears only for errors involving a unit check in the device status. The volume serial number appears only when the volume is on a direct access device and, as mentioned before, only when it's available.

System Action: If the I/O request is critical to the system initialization process, the system issues message IEA304W and enters a disabled wait state. Otherwise, processing continues.

Operator Response: Probable hardware error. Notify the system programmer.

Problem Determination: Table I items 2, 30.

IOS310A INVALID REPLY - RESPECIFY

Explanation: During nucleus initialization, the last reply entered through the console did not contain the information requested by the system.

System Action: The system ignored the reply just entered and waits for the reply to be respecified.

Operator Response: Enter the reply again.

IOS419I ERROR – IECIOSxx RECORD nnn error

Explanation: The missing interruption handler (MIH) found an error while processing record **nnn** in the IECIOSxx member of SYS1.PARMLIB. The error is one of the following:

INVALID DEVICE SPECIFIED ddd

A DEV = keyword in record **nnn** specified device **ddd**. Device **ddd** is not defined to the system.

INVALID KEYWORD yyy

Record **nnn** contains the keyword **yyy**, which is invalid.

System Action: MIH continues processing. The invalid part of record **nnn** is ignored, but the rest of the record is processed.

Operator Response: Notify the system programmer.

Programmer Response: Correct the invalid part of the record.

IOS427A ddd,yy, xxxxxx FAILURE. REPLY WITH UR, BOX OR NOOP.

Explanation: During I/O processing, the system detected a malfunction associated with device **ddd**, which was being accessed via channel path **yy**. If the system could not determine the channel path, ****** is substituted for the channel path identifier, **yy**. **xxxxxx** indicates where the failure occurred along the path to the device; valid values for **xxxxxx** are:

- CHANNEL PATH: Because of an interface control check (IFCC), the failure occurred in the channel path.
- CONTROL UNIT: This value appears for any malfunction other than a failing channel path. Possible causes of failure are: an inoperative control unit, a missing interrupt, or no operational paths.

A failure of this type could prevent the success of future operations. Because the reserved status (ownership) of device **ddd** is unknown, unconditional reserve processing will not proceed on this system.

System Action: The system holds all requests to the device until the operator responds to this message.

Operator Response: First, verify that the device is not reserved to another system; otherwise, *your reply*

may cause that system's reserve to be lost. Then decide which of the following actions to perform:

- Reply **UR** if you want to recover access to device **ddd**. *But first*, do one of the following to prevent the loss of data set integrity:
 - Make sure you stop all affected systems; or
 - Prevent all activity to the device by varying **ddd** offline on all sharing systems.

Then enter **UR** to recover access to device **ddd** through an alternate channel path. If no alternate path exists or the **UR** command fails on all alternate paths, the command is issued on the failing channel path.

For dynamic pathing devices, the system will determine whether the device is reserved to another system that you have stopped. If the device is reserved, the system does not invoke **UR** recovery, and issues message IOS430I. The system that is holding the reserve will detect any remaining hardware problem, and perform the necessary recovery. At this point, you may restart any stopped systems, or vary device **ddd** online.

If the UR command completes and recovery is successful, the system issues message IOS428I and allows any previously held requests to start. At this point, you may restart any stopped systems, or vary device **ddd** online.

If the UR command is unsuccessful, the system proceeds as if your reply was **BOX**, issues message IOS429I, then message IOS104I instead of IOS105I, and allows any previously held requests to start. At this point, you may restart any stopped systems, or vary device **ddd** online.

- Reply **BOX** if you want to box device **ddd**. The system will do the following:
 - terminate in permanent error any previously held I/O requests;
 - terminate in permanent error any new I/O requests;
 - prevent any new allocations to the device;
 - mark **ddd** pending offline, only if the device is online;
 - issue message IOS429I; and
 - issue message IOS105I.

ddd will go offline only if that device is no longer allocated to a job, and if allocation processing allocates any device in the system.

- Reply **NOOP** if you want to allow previously held requests to start. If the failure occurs again, the system will reissue message IOS427A.

IOS428I ddd,yy, HAS BEEN RECOVERED THROUGH CHANNEL PATH zz

Explanation: The unconditional reserve processing procedure successfully recovered device **ddd** through channel path **zz**, after a failure on channel path **yy**. If the system could not determine which channel path failed, ****** is substituted for the channel path identifier **yy**. Unconditional reserve processing was initiated by either

- an operator reply of **UR** to message IOS427A, or

- the system when it detected a malfunction associated with device **ddd**, and that the device was reserved to this system.

System Action: The system now allows all requests that were previously held to start; those requests were held because of unconditional reserve processing.

Operator Response: Probable hardware error along the failing channel path, **yy**; contact your hardware support personnel. You may also restart any stopped systems, or vary device **ddd** back online.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS429I ddd,yy, COULD NOT BE RECOVERED THROUGH AN ALTERNATE CHANNEL PATH

Explanation: The unconditional reserve processing procedure was not able to recover device **ddd** through an alternate channel path, after a failure on channel path **yy**. If the system could not determine which channel path failed, ****** is substituted for the channel path identifier **yy**. Unconditional reserve processing was initiated by either

- an operator reply of UR or BOX to message IOS427A, or
- the system when it detected a malfunction associated with device **ddd**, and that the device was reserved to this system.

The unconditional reserve processing procedure could not recover the device through an alternate channel path for one of the following reasons:

- No alternate channel paths were available for the device.
- All alternate channel paths were unsuccessful in recovery.
- The DASD hardware associated with **ddd** does not support the unconditional reserve command.
- The operator entered a reply of BOX to message IOS427A.

System Action: The system now allows all requests that were previously held to start; those requests were held because of unconditional reserve processing. If the device was boxed, the system terminates in permanent error all of these requests.

Operator Response: Probable hardware error along the failing channel path, **yy**; contact your hardware support personnel. You may also restart any stopped systems, or vary device **ddd** back online.

Problem Determination: Probable hardware error. Table I, items 2, 18, 30.

IOS430I ddd, RESERVED TO ANOTHER SYSTEM, UNCONDITIONAL RESERVE RECOVERY NOT INVOKED

Explanation: The system detected a malfunction along a channel path associated with device **ddd**, and also found that **ddd** was reserved to another system. Therefore, this system does not invoke unconditional reserve recovery; the system that is holding the reserve will detect any remaining hardware problem, and perform the necessary recovery.

System Action: The system continues to process requests for device **ddd**.

Operator Response: You may restart any stopped systems, or vary **ddd** back online. If the failure occurs again, then the system holding the reserve cannot recover the device, or is holding a long-time reserve. Contact your hardware support personnel.

IOS443I DYNAMIC PATHING NOT INITIALIZED – ESTAE REASON CODE rsnc

Explanation: During an IPL, dynamic pathing could not be initiated because a recovery routine could not be established. The possible values for the reason code **rsnc** are:

xx	Meaning
10	The system encountered an unexpected error while attempting to establish the recovery routine.
14	The system could not obtain storage for a control block while attempting to establish the recovery routine.

System Action: The system has not initialized dynamic pathing, on the devices supporting the feature, during IPL. Processing continues.

Operator Response: Notify the system programmer. If possible, vary offline the devices supporting dynamic pathing, then vary online the same devices to establish dynamic pathing.

Problem Determination: Table I, items 2, 13 and 29.

IOS444I DYNAMIC PATHING NOT [OPERATIONAL ON | REMOVED FROM] [DEVICE ddd | PATH (ddd,yy)]

Explanation:

ddd the device name in the UCENAME field
yy the channel path ID, for MVS/XA systems only

The operator entered a VARY command, or the system invoked channel path recovery processing. As part of reconfiguration processing or channel path processing, the dynamic pathing module, IECVDPATH, made an unsuccessful attempt to establish or remove a path or path group. An explanation of each of the possible message texts follows:

DYNAMIC PATHING NOT OPERATIONAL ON DEVICE ddd

One of the following occurred:

- IOS attempted to establish dynamic pathing for device **ddd**. IOS was not successful. The path group is not established.
- An attempt to remove a path from an established group was not successful:
 - Module IOSVDPDR disbanded the path group. That is, IOSVDPDR removed the path group ID from all of the paths to device **ddd**. Then, an attempt is made to regroup all the paths, except for the path originally intended to be removed. Because the attempt to regroup failed, dynamic pathing is not operational on device **ddd**.

DYNAMIC PATHING NOT OPERATIONAL ON PATH (ddd,yy)

An attempt to add path (ddd,yy) to the path group was not successful. Path (ddd,yy) is the path to device ddd on channel path yy.

DYNAMIC PATHING NOT REMOVED FROM DEVICE ddd

IOS attempted to remove the path group from device ddd. IOS was not successful.

DYNAMIC PATHING NOT REMOVED FROM PATH (ddd,yy)

IOS attempted to remove path (ddd,yy) from its path group. IOS was not successful. Path (ddd,yy) is the path to device ddd on channel path yy.

System Action: Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: If there are hardware entries for device ddd in SYS1.LOGREC, there is probably a hardware problem. If the path group ID information in the SYS1.LOGREC OBR-DPA record is invalid, there is probably a software problem. Contact your software support personnel.

Problem Determination: Table I, items 2, 13, 29, and 30.

IOS450E ddd,cc, text, PATH TAKEN OFFLINE

Explanation: The dynamic pathing validation service was invoked for dynamic pathing device ddd due to one of the following conditions:

- The system detected a malfunction associated with the device. That malfunction could prevent the successful execution of future requests to ddd.
- The logical or physical state of one or more channel paths to ddd was being changed because of an operator or system action.

The value of text further explains the error:

NOT OPERATIONAL

Via the sense path group ID command, the validation service attempted to obtain data about the state of channel path cc. The service's attempt failed because the channel path is not operational.

PERMANENT I/O

Via the sense path group ID command, the validation service attempted but failed to obtain data about the state of channel path cc. Probable causes of this failure are channel path errors or missing interrupts.

System Action: The system varies channel path cc offline, and removes cc from the dynamic path group.

Operator Response: Tell the system programmer about this failure, so the hardware problem can be corrected. After the programmer has corrected the problem, vary cc back online, and delete message IOS450E from the console.

Programmer Response: Follow your installation's procedure for correcting hardware problems. After the problem is corrected, tell the operator that channel path cc can be varied back online.

Problem Determination: Table I, items 2, 18, 30.

IOS451I ddd, BOXED, text

Explanation: The dynamic pathing validation service was invoked for dynamic pathing device ddd due to one of the following conditions:

- The system detected a malfunction associated with the device. That malfunction could prevent the successful execution of future requests to ddd.
- The logical or physical state of one or more channel paths to ddd was being changed because of an operator or system action.

The system boxed the device due to the error indicated by text:

NO ONLINE OPERATIONAL PATHS

The validation service detected that there are no online (logically available) channel paths that can be used to access device ddd. There are no online paths for one of the following reasons:

- Dynamic pathing validation analysis removed the last available online channel path.
- Via the sense path group ID command, the validation service attempted but failed to obtain data about the state of an online channel path. Probable causes of this failure are channel path errors, missing interrupts, or non-operational channel path conditions.

RESERVE LOST

Device ddd should be reserved, but the validation service detected that ddd is not reserved to any channel path, in or out of the dynamic path group, from this system.

ASSIGN LOST

Device ddd should be assigned (path partitioning), but the validation service detected that ddd is not assigned to any channel path, in or out of the dynamic path group, from this system.

DISBAND AND REGROUP OF PATH GROUP FAILED

Via the sense path group ID command, the validation service attempted to obtain data about the state of one or more, but not all, online channel paths. The service's attempt failed because of a channel path error, a missing interrupt, or a non-operational channel path condition. Attempts to remove the paths by rebuilding the dynamic path group were unsuccessful.

System Action: The system boxes device ddd by:

- terminating in permanent error any previously held I/O requests;
- terminating in permanent error any new I/O requests;
- preventing any new allocations to the device; and
- marking ddd pending offline, only if the device is online.

ddd will go offline only if that device is no longer allocated to a job, and if allocation processing allocates any device in the system.

Operator Response: Consult your installation's operating procedures. If a partial update to the volume on device **ddd** occurred, continued use of the volume may result in data being lost or written over. The loss of data integrity may occur because other processors that share the device can access it, even though this processor cannot. You can bring **ddd** back online by issuing the vary device command.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, and 30.

IOS452I ddd,cc, text

Explanation: The dynamic pathing validation service was invoked for dynamic pathing device **ddd** due to one of the following conditions:

- The system detected a malfunction associated with the device. That malfunction could prevent the successful execution of future requests to **ddd**.
- The logical or physical state of one or more channel paths to **ddd** was being changed because of an operator or system action.

The validation service's effect on the dynamic pathing group is indicated by **text**:

OPERATIONAL PATH ADDED TO PATH GROUP

The validation service found that online (logically available) channel path **cc** was not part of the dynamic path group, but **cc** should have

been part of the group. The validation service added **cc** back to the dynamic pathing group.

OPERATIONAL PATH REMOVED FROM PATH GROUP

The validation service found that offline (logically unavailable) channel path **cc** was part of the dynamic pathing group, but it should not have been part of the group. The validation service removed **cc** from the dynamic pathing group.

RESERVE PROPAGATED TO PATH GROUP

The validation service found that offline (logically unavailable) channel path **cc** held the reserve that should be held by only online (logically available) paths. The validation service successfully propagated the reserve condition to the online paths.

ASSIGN PROPAGATED TO PATH GROUP

The validation service found that offline (logically unavailable) channel path **cc** held the assign that should be held by only online (logically available) paths. The validation service successfully propagated the assign condition to the online paths.

System Action: The system successfully completes the particular action described in the variable **text**.

Operator Response: Determine whether the dynamic pathing group was affected by an external action, such as: IMLing the device, switching or disabling interfaces, disabling switches, and disconnecting or reconnecting channel path interface cables.

Programmer Response: None.

Problem Determination: Table I, items 2, 18, 30.

FORTRAN Syntax Checker Messages (IPD)

Component Name	IPD
Program Producing Message	FORTRAN syntax checker
Audience and Where Produced	For remote operator and programmer: terminal.
Message Format	<p>xx IPDnnn xxxxxxxx yyyyyy text</p> <p>xx Message reply identification (absent, if operator reply not required).</p> <p>nnn Message serial number.</p> <p>xxxxxxx Data set line number of the line in which the error was detected.</p> <p>yyyyyy Characters in error.</p> <p>text Message text.</p>
Comments	Central operator may request that messages appear on his console.
Related Publications	<i>MVS/XA TSO Terminal User's Guide</i> , GC28-0645 with SD23-0258

IPD000 SYSTEM OR SYNTAX CHECKER FAILURE

Explanation: While scanning the last statement, the syntax checker encountered a condition that should not occur. It may be a hardware, syntax checker, or operating system error.

Problem Determination: Table I, items 3, 29.

IPD002 UNRECOGNIZABLE STMT OR MISSPELLED KEYWD

Explanation: The statement was not a recognizable FORTRAN statement type, or a keyword of six or fewer characters was misspelled. An assignment statement with errors to the left of the '=' is unrecognizable.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD004 UNSIGNED INTEGER EXPECTED

Explanation: An invalid form, such as an integer constant preceded by a plus or minus sign, was encountered in the statement where (1) an unsigned integer is the only valid form, or (2) an unsigned integer or unsigned variable is the only valid form.

Programmer Response: Probable user error. Make the correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD006 EXPRESSION EXPECTED

Explanation: An expression is either missing or invalid in the statement where a valid one is expected. For example, each of these statements would receive this message:

1. A =
2. G (I,J) = C (I,)
3. X = Y + 2.0*(**2 + 6.28)

The source characters in error in the message would be: none for statement 1; ')' for statement 2; '**2 + 6.' for statement 3.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD008 POSSIBLY TOO MANY SUBSCRIPTS PRECEDE

Explanation: A list of eight or more (four or more in FORTRAN E) names within parentheses has been found following a symbolic name on the left side of the equal sign in an assignment statement or statement function definition. If the statement is a statement function definition, the message should be ignored.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD

IPD010 TOO MANY SUBSCRIPTS

Explanation: A list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name in a place where a subscripted variable reference would be valid.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD012) EXPECTED

Explanation: Either a required parenthesis was missing or there was no right parenthesis to match a left parenthesis.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD014 ARITH IF REQUIRES STATEMENT NUMBER LIST

Explanation: There was a missing or invalid statement number in the list of statement numbers after an arithmetic IF statement (FORTRAN G and H only).

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD016 INVALID EXPRESSION IN IF STATEMENT

Explanation: The expression within parentheses after the IF keyword of a logical or arithmetic IF statement was not recognizable as either a valid logical or arithmetic expression. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD018 UNRECOGNIZABLE STNMT AFTER LOGICAL IF

Explanation: The statement following the IF (logical expression) was not a recognizable FORTRAN statement type, or there was something other than blanks between the right parentheses at the end of the logical expression and the start of the statement. Some errors in arithmetic IF statements will cause this message to be issued. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD020 NON-ZERO INTEGER EXPECTED

Explanation: The indicated numeric constant is zero, not an integer constant, or both.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD022 ILLEGAL STATEMENT AFTER LOGICAL IF

Explanation: The statement following the IF (logical expression) is not one of the statement types permitted after a logical IF. The statement cannot be a DO, another logical IF, any non-executable statement, nor any of the DEBUG statements. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD026 DATA SET NUMBER EXPECTED

Explanation: An input/output statement had neither an unsigned non-zero integer nor a variable names in the correct position for the data set reference numbers.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD028 LENGTH SPECIFICATION INVALID

Explanation: In a type-statement, a length specification was missing or was incorrect for the type of statement specified for the variables or function. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD030 (EXPECTED

Explanation: A required left parenthesis is missing. This message is not issued for statements where parentheses are optional (assignment statements, for example), but is issued where a pair of parentheses is mandatory (as in FUNCTION, EQUIVALENCE, WRITE, etc.).

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD032 NAME EXPECTED

Explanation: A required name is missing or is preceded by characters that cannot begin a name. For example, all these statements will receive this message:

```
FUNCTION (A,B,C)
DIMENSION, X(20,30)
DEFINE FILE 8(10,20,U,3X)
```

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD034 DUMMY ARGUMENT EXPECTED

Explanation: A SUBROUTINE or FUNCTION statement has an argument that is invalid - a constant or an expression, for example. (This also applies to the ENTRY statement in FORTRAN G and H.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD036 ARRAY DIMENSIONS EXPECTED

Explanation: A DIMENSION statement gave either partial or no dimension information for one of its array names, or invalid characters were between the array name and the dimension information.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD038 / EXPECTED

Explanation: The first name in a NAMELIST statement was not preceded by a slash, or a name or list of data preceded by a slash was not followed by a slash. (COMMON, SUBROUTINE, FUNCTION, ENTRY, NAMELIST, DATA, INTEGER, REAL, LOGICAL, and COMPLEX statements in FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

IPD040 INVALID DATA TYPE

Explanation: Either the type of a datum in a type-statement did not agree with the type declared by the statement, the datum was missing, or, in an Implicit statement, the type specification was invalid (e.g., IMPLICIT REEL (D)). (Hexadecimal and both types of literal data are allowed in all type statements.) (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD042 STATEMENT NUMBER EXPECTED

Explanation: A FORMAT statement was not numbered or a form other than a statement number was encountered after the 'GO TO' in an unconditional GO TO statement. (In addition, in FORTRAN G and H, the invalid form could be in an ASSIGN or a CALL statement.)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD044 'TO' EXPECTED

Explanation: An ASSIGN statement did not have 'TO' in the required place. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD046 ARGUMENT EXPECTED

Explanation: A CALL statement has an invalid or missing argument in its argument list.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD048 DATA LIST EXPECTED

Explanation: A data statement contains no data list or the data list is separated from the variable list by invalid characters. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD050 RELATIONAL OPERATOR EXPECTED

Explanation: In a logical expression, an arithmetic expression was not followed by a relational operator. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD052 , EXPECTED

Explanation: In a statement with a relatively rigid form, such as EQUIVALENCE or DEFINE FILE, a comma was absent or preceded by invalid characters.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD054 OPERAND EXPECTED IN ARITH EXPRESSION

Explanation: An arithmetic operator was not followed by a valid arithmetic operand, or two operators occur together (as in A * -B).

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD

IPD056 OPERAND EXPECTED IN LOGICAL EXPRESSION

Explanation: A logical operator was not followed by a logical operand, or a logical operand was missing. An invalid logical operator, such as '.NOT..NOT.', also causes this message. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD058 I/O LIST ITEM EXPECTED

Explanation: A variable name did not follow a comma in the list of a READ or WRITE statement (or in FORTRAN G and H, a PUNCH or PRINT statement).

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD060 ' EXPECTED

Explanation: A FIND statement did not contain an apostrophe to separate the data set reference number from the expression describing the record to be found. This message is issued only if the omission of the apostrophe leaves a valid data set reference number. For example, 'FIND (10100)' would not cause this message because 10100 is not a valid data set reference number.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD062 INCORRECT PARAMETER - MUST BE E, L, OR U

Explanation: The data set control character in a DEFINE FILE statement was not an E, L or U.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD064 DEBUG PARAMETER EXPECTED

Explanation: A valid parameter did not follow a comma after a valid parameter in a DEBUG statement. (FORTRAN G only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD066 SUBSCRIPT EXPECTED

Explanation: A subscript was missing, not in one of the valid forms, or separated from the preceding comma or left parenthesis by invalid characters. (FORTRAN E only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD068 TOO MANY LEVELS OF PARENTHESES

Explanation: In a FORMAT statement, group repeat specifications were too deeply nested. FORTRAN E does not allow a group repeat specification within a group repeat specification. FORTRAN G and H do allow this, but allow no further nesting of group repeat specifications.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD072 INTEGER EXPECTED

Explanation: A numeric constant that was not an integer was found where an integer is required.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD074 COMPLEX NUMBER INVALID

Explanation: The two parts of a complex constant did not agree in length, or one or both parts was not a real constant. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD076 DELIMITER MISSING OR INVALID FORMAT CODE

Explanation: In a FORMAT statement, either a format code was invalid, a delimiter (such as the required comma or slashes between two literal format codes) was missing or the right parenthesis at the end of the FORMAT was missing.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD078 VARIABLE LIST EXPECTED

Explanation: In a DATA statement, a variable name (or list of variable names) did not occur (1) as the first item of the data statement, or (2) after a comma following a list of constants enclosed in slashes. This message is also issued when there are invalid characters between the DATA keyword or the comma and the list of variables. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD080 EXPECTED IN FORMAT CODE

Explanation: There was no period as required in the 'w.d' following the D, E, or F format code in a FORMAT statement.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table i, items 3, 15, 22, 29.

IPD082 NAME TOO LONG

Explanation: A symbolic name contains more than six characters, a keyword of seven or more letters at the beginning of a statement is misspelled, or a misspelled keyword follows the IF (logical expression) part of a logical IF statement. A missing delimiter may cause this message to be issued. Each of the following statements would produce this message:

```
38 CONTINUE
      SUBROUTINE X(ARG1 ARG2)
```

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD084 STATEMENT NUMBER INVALID

Explanation: The statement number field (positions 1-5 of the initial line of a statement) was zero or contained at least one character that was neither a digit nor a blank. Within a statement, this message is issued if a statement number is zero or contains too many digits.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD086 H-LITERAL INCOMPLETE

Explanation: The number of characters in the statement after the 'H' was smaller than the count before the 'H' in the H-literal.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD088 FIELD WIDTH NOT IN RANGE 1-255

Explanation: The field width specified in a format code was not in the required range.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD090 LITERAL EXCEEDS 255 CHARACTERS

Explanation: The number of characters between the apostrophes of a literal exceeds 255. In determining the number of characters enclosed, two adjacent apostrophes within the outermost apostrophes are counted as one character.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD092 STATEMENT ANALYSIS EXCEEDS TABLE LIMITS

Explanation: The statement was so complicated that the syntax checker ran out of space in its table. The statement cannot be checked by the syntax checker.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD094 END REQUIRES BLANK LABEL & CONTIN FIELDS

Explanation: Positions 1-6 of an END statement must be blank, and an END statement cannot have continuation lines.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD096 INVALID OR EXCESS SOURCE CHARACTERS

Explanation: The statement being checked completely satisfies the definition for that type of statement at some point before the last non-blank character in the statement. This may occur if a delimiter has been left out between elements of a statement.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD098 INVALID RANGE IN IMPLICIT STATEMENT

Explanation: An IMPLICIT statement contains a range of characters in which the last character of the range alphabetically precedes the first character of the range. Note that 'S' follows 'Z' in the alphabet. A character that is not alphabetic will also cause this message to be issued. (FORTRAN G and H only.)

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD100 FIRST LINE IS A CONTINUATION
Explanation: The first line scanned did not have 'C' in position one, nor did it have a blank or zero in position six.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD102 COMMENT LINE WITHIN STATEMENT
Explanation: A comment line was found between an initial line and a continuation line or between two continuation lines.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD104 TOO MANY CONTINUATION LINES
Explanation: The statement consisted of an initial line followed by more than 19 continuation lines.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD106 TOO MANY DECIMAL PLACES FOR FIELD WIDTH
Explanation: in a D, E, F, or G format code, the fractional portion ('d' of 'w.d') exceeded the total field width ('w' of 'w.d'). (G in FORTRAN G and H only.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD108 DECIMAL PLACES MUST BE SPECIFIED
Explanation: In a D, E, or F format code, fractional portion ('d' of 'w.d') was missing or was separated from the decimal point by invalid characters.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD110I) REQUIRED FOR IMPLIED DO
Explanation: In the input or output list of an I/O statement, a right parenthesis was not the first non-blank character after the parameters of an implied DO.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD112 DO VARIABLE CANNOT BE SUBSCRIPTED
Explanation: In an I/O list, a subscripted variable was used as the DO variable within an implied DO loop.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD114 DEBUG FACILITY NOT SUPPORTED
Explanation: One of the Debug Facility statements appeared in a FORTRAN H program. These statements are allowed only in FORTRAN G. They are diagnosed when FORTRAN H is being checked since FORTRAN G and H use the same syntax table. If FORTRAN E is being checked, these statements will be diagnosed as unrecognizable or as beginning with too long a name.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD116 EXPONENT MISSING OR INVALID
Explanation: The characters after the 'D' or 'E' in a double precision or real constant do not constitute a valid exponent.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD118 REAL CONSTANT MUST HAVE AT LEAST 1 DIGIT
Explanation: In a place where a numeric constant might be written, a decimal point was found followed by an E or D exponent, but there was no digit on either side of the decimal point.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD120 INTEGER TOO LARGE
Explanation: The magnitude of an integer constant exceeds 2147483647.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.

IPD122 CLOSING ' EXPECTED
Explanation: The end of the statement was reached without finding the closing apostrophe for a literal constant or literal format code. The opening apostrophe of the literal is the source character identified in the error message. (Only the literal format code is allowed in FORTRAN E.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

- IPD124 DATA ILLEGAL FOR DUMMY ARRAY**
Problem Determination: Table I, items 3, 15, 22, 29.
Explanation: An array was dimensioned in a REAL, INTEGER, LOGICAL or COMPLEX type-statement. One of the dimensions was a variable name, making the array a dummy array, but a slash, indicating the start of a list of data, was then encountered. Dummy arrays cannot be assigned initial data values.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD126 REAL NUMBER EXPECTED**
Explanation: A numeric datum of a type other than real was written in a REAL type-statement. (FORTRAN G and H only.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD128 INVALID CHARACTERS AFTER STOP OR PAUSE**
Explanation: Characters other than digits, or too many digits, follow the STOP or PAUSE in a STOP or PAUSE statement. (In FORTRAN G and H, a literal is also permitted to follow PAUSE and will not receive this diagnostic.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD130 REAL NUMBER OUTSIDE OF ALLOWABLE RANGE**
Explanation: A real number's magnitude, taking the value of the exponent into account, is outside the range 1.0E-79 to 9. (any fraction) E + 75.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD132 FORMAT STMT NO. OR ARRAY NAME EXPECTED**
Explanation: In a PRINT, PUNCH, or READ statement, no reference is made to a FORMAT statement or to an array containing a FORMAT. (FORTRAN G and H only.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD134 MISPLACED LENGTH SPECIFICATION PRECEDES**
Explanation: A FUNCTION statement in which the 'FUNCTION' is preceded by 'REAL', 'INTEGER', 'COMPLEX', or 'LOGICAL' has a length specification between the type and "FUNCTION." The length specification is invalid in that position and must be moved to the end of the function name.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD138 ARITH EXP EXPECTED AFTER RELATIONAL OP**
Explanation: A relational operator in a logical expression was not followed by a valid arithmetic expression. (FORTRAN G and H only.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD140 INVALID COMMA IN DO**
Explanation: An invalid comma was found after the statement number in a DO statement.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD142 = EXPECTED**
Explanation: In a DO statement, in which the statement number was followed by an invalid comma, the equal sign expected after the DO variable was not found.
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD144 LITERAL CONTAINS NO CHARACTERS**
Explanation: The closing apostrophe of a literal constant or literal format code occurred immediately to the right of the opening apostrophe. (Only the literal format code is allowed in FORTRAN E.)
Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.
Problem Determination: Table I, items 3, 15, 22, 29.
- IPD146 INVALID IF AFTER LOGICAL IF**
Explanation: A statement after the IF (logical expression) part of a logical IF statement was recognized as an IF statement, but was not a valid arithmetic IF statement as required. (FORTRAN G and H only.)

IPD158 – IPDnnn

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD158 TOO MANY SUBSCRIPTS PRECEDE

Explanation: A list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name on the left side of the equal sign in an assignment statement.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD160 'END' TOO FAR ON LINE

Explanation: The free-form END statement contains more than 66 characters, not including trailing blanks. (This message will not appear if the statement contains other errors.)

System Action: Processing continues.

Programmer Response: Probable user error. Make corrections as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPDnnn SYSTEM OR SYNTAX CHECKER FAILURE

(nnn = an even number from 162 through 254)

Explanation: While scanning the last statement, the syntax checker encountered a condition that should not occur. It may be a hardware, syntax checker, or operating system error.

Programmer Response: None.

Problem Determination: Table I, items 3, 19, 29.

System Resources Manager Messages (IRA)

Component Name	IRA
Program Producing Message	System Resources Manager
Audience and Where Produced	For programmer: system log data set. For operator: console.
Message Format	IRAnnnI text nnn Message serial number I Information; no operator action is required. text Message text.
Related Publications	<i>MVS/XA SPL: Initialization and Tuning Guide, GC28-1149</i>

IRA100I SQA SHORTAGE

Explanation: The system has detected a shortage of virtual system queue area.

System Action: The system will reject LOGON and START commands until the shortage is relieved.

Operator Response: Report this message to the system programmer.

Programmer Response: Occurrence of this message implies that the default size for system queue area may be too small. The default size may be increased by specifying the SQA system parameter during system initialization.

IRA101I CRITICAL SQA SHORTAGE

Explanation: The system has detected a critical shortage of virtual system queue area.

System Action: The system will reject LOGON and START commands until the shortage is relieved. Jobs which request more SQA than is available will be canceled.

Operator Response: Notify the system programmer of this message.

Programmer Response: Occurrence of this message implies that the default size for system queue area may be too small. The default size may be increased by specifying the SQA system parameter during system initialization.

IRA102I SQA SHORTAGE RELIEVED

Explanation: There is no longer a shortage of available system queue area.

System Action: LOGON and START commands are again permitted.

Operator Response: Report this message to the system programmer.

IRA103I SQA/ESQA HAS EXPANDED INTO CSA/ECSA BY xxxxx PAGES

Explanation: One of the following occurred:

- VSM (virtual storage management) allocated xxxxx pages of virtual storage from the CSA (common service area) to satisfy a request for virtual storage for the SQA (system queue area).
- VSM (virtual storage management) allocated xxxxx pages of virtual storage from the ECSA (extended CSA) to satisfy a request for virtual storage for the ESQA (extended system queue area).

The message is repeated when the expansion has increased by 16 pages.

System Action: None.

Operator Response: Report this message to the system programmer.

Programmer Response: Evaluate the system's requirement for system queue area and extended system queue area. The SQA system parameter specifies the maximum size of the virtual system queue area and extended system queue area at system initialization.

IRA104I SQA/ESQA EXPANSION INTO CSA/ECSA HAS BEEN RELIEVED

Explanation: One of the following is true:

- VSM (virtual storage management) is no longer using virtual storage from the CSA (common service area) to satisfy requests for virtual storage for the SQA (system queue area).
- VSM (virtual storage management) is no longer using virtual storage from the ECSA (extended common service area) to satisfy requests for virtual storage for the ESQA (extended system queue area).

System Action: None.

Operator Response: Report this message to the system programmer.

IRA

Programmer Response: Evaluate the system's virtual storage requirement for the system queue area and the extended system queue area. The SQA system parameter specifies the maximum size of the virtual system queue area and extended system queue area at system initialization.

IRA200I AUXILIARY STORAGE SHORTAGE

Explanation: The system has detected a shortage of available slots in the auxiliary storage paging space.

System Action: The system will reject LOGON, MOUNT, and START commands until the shortage is relieved. Initiators selecting new jobs and users with rapidly increasing auxiliary storage requirements will be kept from running until the shortage is relieved. Message IRA203I will be issued to identify the users with the most rapidly increasing auxiliary storage requirements.

Operator Response: Report this message to the system programmer.

Programmer Response: Since this message implies that the size of the paging space may be inadequate, more auxiliary storage should be allocated to the paging data sets during system initialization. Examine users of VIO and other jobs that have heavy auxiliary storage requirements for possible looping or extraordinary auxiliary storage requirements.

IRA201I CRITICAL AUXILIARY STORAGE SHORTAGE

Explanation: The system has detected a critical shortage of available slots in the auxiliary storage paging space.

System Action: The system will reject LOGON, MOUNT, and START commands until the shortage is relieved. Initiators selecting new jobs and users with rapidly increasing auxiliary storage requirements will be kept from running until the shortage is relieved. Message IRA203I will be issued to identify the users with the most rapidly increasing auxiliary storage requirements.

Operator Response: Report this message to the system programmer.

Programmer Response: Since this message implies that the size of the paging space may be inadequate, more auxiliary storage should be allocated to the paging data sets during system initialization. Examine users of VIO and other jobs that have heavy auxiliary storage requirements for possible looping or extraordinary auxiliary storage requirements.

IRA202I AUXILIARY STORAGE SHORTAGE RELIEVED

Explanation: There is no longer a shortage of auxiliary storage slots in the auxiliary storage paging space.

System Action: LOGON, START, and MOUNT commands are again permitted. Jobs delayed because of the shortage are now allowed to execute.

Operator Response: Report this message to the system programmer.

IRA203I nn% AUXILIARY STORAGE ALLOCATED TO uuu

Explanation: The system has detected a shortage of auxiliary slots in the auxiliary storage paging space. In the message text, uuu is the swappable user with the most rapidly increasing auxiliary storage requirements, and nn is the percentage of auxiliary storage allocated to uuu.

System Action: User uuu will be swapped out until either the shortage is relieved or there are no swappable users left in storage.

Operator Response: Report this message to the system programmer.

Programmer Response: Examine the validity of user uuu, and determine whether or not he should continue.

IRA300I IPS MEMBER IEAIPSxx INPUT ERROR NEAR COLUMN nnn. TEXT FOLLOWS:

IRA300I text

Explanation: The SET IPS command processor encountered an invalid installation performance specification parameter in member IEAIPSxx of the SYS1.PARMLIB data set. The IPS text containing the error is included in the message. If a parameter with multiple subparameters is in error, it is possible that an error message may appear for each subparameter. The syntax scan continues even after an error had been detected, and might produce additional error messages for the same specification, based on the rejection of the parameter previously found to be in error.

System Action: The SET IPS command processor rejects the IPS parameter and continues processing. When syntax checking is complete, the IPS is rejected. System processing continues using the existing IPS parameter values.

Programmer Response: Correct the errors in the IEAIPSxx member of SYS1.PARMLIB.

IRA301I IPS MEMBER IEAIPSxx message-text

Explanation: The SET IPS command processor encountered an invalid installation performance specification parameter in member IEAIPSxx of the SYS1.PARMLIB data set. The possible message texts are:

USES CONFLICTING FORMATS FOR DISPATCHING PRIORITY CONTROL

An IPS can use only one format for dispatching priority control:

- The APG format specifies or defaults the APG parameter in each period.
- The extended priority control format specifies APGRNG and optionally the TUNIT, TSPTRN, PVLDP, DP, FRQ, TSDP, and TSGRP parameters.

ERROR: APGRNG REQUIRED BEFORE PVLDP, FRQ OR A PERIOD

The APGRNG value(s) are required to process the M, R, or F value associated with the PVLDP, DP, FRQ, TSDP, or IOP parameters, and to assign a

default to DP. (The IOP parameter is applicable to the MVS/System Products only.)

ERROR: TSPTRN REQUIRED BEFORE TSGRP IS USED

The TSPTRN parameter must be specified in the IPS before any performance groups that use the time slicing parameters TSDP AND TSGRP.

ERROR: TSPTRN REQUIRES AT LEAST 2 TS GROUPS (INCL ASTERISK)

The time slice pattern must include at least two different time slice groups. One time slice group and an asterisk (*) is a valid specification.

ERROR: TIME SLICE GROUP nn NOT USED IN A VALID PERIOD

Each time slice group number specified in TSPTRN must also be specified in at least one period on the TSGRP parameter.

ERROR: BOTH WT AND KEY WORD (AOBJ, DOBJ, or FWKL) USED IN IPS

Throughout an IPS, only one format for domain descriptions can be used: either the weight value in the CNSTR parameter or a MPL target control parameter (AOBJ,DOBJ, or FWKL).

MISSING WORK LOAD LEVELS

The WKL parameter is required in the IPS.

MISSING DOMAIN nnn CONSTRAINT VALUE(S)

At least minimum and maximum values are required in the CNSTR parameter for a domain.

MISSING PERF GRP nnn OBJECTIVE

The OBJ key word is required in each performance group period.

MISSING DOMAINS IN FIRST PER OF PERF GRPS

The DMN key word is required in the first period of each performance group.

ERROR IN DMN nnn: CONFLICTING PARAMETERS SPECIFIED

No more than one of the following parameters are allowed in a domain: the weight value in the CNSTR parameter, AOBJ, DOBJ, or FWKL.

MISSING REQUIRED PERF GRP nnn

Performance groups 1 and 2 are required in the IPS.

MISSING PERF GRP nnn DURATION

The DUR parameter is required in all but the last period of a performance group that has more than one period.

ERROR IN PGN nnn: MISSING OR INVALID DP IN A PERIOD

The DP parameter is required in a period that uses the time slicing parameters TSDP and TSGRP.

ERROR IN PGN nnn: MISSING OR INVALID TSDP OR TSGRP

If either TSDP or TSGRP is specified in a period, they both must be specified.

ERROR IN PGN nnn: DP PRTY TYPE DIFFERS FROM TSDP TYPE.

The priority type (M, R, or F) used in the DP parameter of a period must be the same as that in the TSDP parameter of the same period.

ERROR IN PGN nnn: TSGRP NUMBER NOT FOUND IN TSPTRN

The TSGRP parameter in a period must specify a time slice group number that has been previously specified in the TSPTRN parameter.

ERROR IN PGN nnn: TSDP MUST BE GREATER THAN DP

The time slice dispatching priority specified in the TSDP parameter must be greater than the priority in the DP parameter of the same period.

ERROR IN PGN nnn: RTO ALLOWED ONLY IN THE FIRST PERIOD

The response time objective parameter can only be specified in the first period of the performance group.

VALUE NEAR COLUMN nn NOT WITHIN LIMITS. TEXT FOLLOWS: text

The CWSS, CPGRT, PWSS, or PPGRT parameter contains an invalid value. Valid values are 0 through 32,767. The IPS text containing the error is included in the message.

NEAR COLUMN nn FIRST VALUE EXCEEDS SECOND. TEXT FOLLOWS: text

The minimum (first) value for the CWSS, CPGRT, PWSS, or PPGRT parameter must be less than or equal to the maximum (second) value. The IPS text containing the error is included in the message.

EXPLICIT VALUE REQUIRED NEAR COLUMN nn. TEXT FOLLOWS: text

A parameter that requires a pair of values must include both values. The IPS text containing the error is included in the message.

ERROR: IOQ CANNOT APPEAR AFTER FIRST PERFORMANCE GROUP

The IOQ key word parameter must precede all performance group parameters.

ERROR: INVALID COMBINATION OF RTB OPTIONS NEAR COL nn. TEXT FOLLOWS text

The RTB parameter contains an invalid combination of options. See *Initialization and Tuning* for the description of the allowable combinations of options.

System Action: The SET IPS command processor rejects the IPS parameter and continues processing. When syntax checking is complete, the IPS is rejected. System processing continues using the existing IPS parameter values.

Programmer Response: Correct the errors in the IEAIPSxx member of SYS1.PARMLIB.

IRA302I OPT MEMBER IEAOPTxx INPUT ERROR NEAR COLUMN yy. TEXT FOLLOWS: text

Explanation: The SET OPT command processor encountered an invalid OPT parameter in member IEAOPTxx of the SYS1.PARMLIB data set. The OPT text containing the error is included in the message.

System Action: The SET OPT command processor rejects the OPT parameter and continues processing. When syntax checking is complete, the OPT is rejected. System processing continues using the existing OPT parameter values.

Programmer Response: Correct the error in the IEAOPTxx member of SYS1.PARMLIB.

IRA303I OPT MEMBER IEAOPTxx message-text

Explanation: The SET OPT command processor encountered an invalid OPT parameter in member IEAOPTxx of the SYS1.PARMLIB data set. The possible message texts are:

VALUE NEAR COLUMN nn NOT WITHIN LIMITS. TEXT FOLLOWS: text

The value specified for one of the parameters is outside the allowable range. The OPT text containing the error is included in the message.

NEAR COLUMN nn FIRST VALUE EXCEEDS SECOND. TEXT FOLLOWS: text

The first value of a parameter that requires a pair of values must be less than or equal to the second value of the pair. The first value is the low threshold and the second value is the high threshold. The OPT text containing the error is included in the message.

EXPLICIT VALUE REQUIRED NEAR COLUMN nn. TEXT FOLLOWS: text

A parameter that requires a pair of values must include both values. The OPT text containing the error is included in the message.

System Action: The SET OPT command processor rejects the OPT parameter and continues processing. When syntax checking is complete, the OPT is rejected. System processing continues using the existing OPT parameter values.

Programmer Response: Correct the error in the IEAOPTxx member of SYS1.PARMLIB.

IRA304I ICS MEMBER IEAICSxx INPUT ERROR NEAR COLUMN nn. TEXT FOLLOWS text

Explanation: The SET ICS = xx command processor encountered an invalid installation control specification parameter in member IEAICSxx of the SYS1.PARMLIB data set. The IEAICSxx text containing the error is included in the message.

System Action: The SET ICS = xx command processor rejects the IEAICSxx parameter and continues processing. When syntax checking is complete, member IEAICSxx is rejected. System processing continues. If an installation control specification was active when the command was issued, it remains active.

Programmer Response: Correct the error in the IEAICSxx member of SYS1.PARMLIB.

IRA305I ICS MEMBER IEAICSxx ERROR: message-text

Explanation: The SET ICS = xx command processor encountered an invalid installation control specification parameter in member IEAICSxx of the SYS1.PARMLIB data set. The possible message texts are:

name MUST BE PRECEDED BY SUBSYS KEYWORD

The indicated name is specified on a TRXNAME, USERID, or TRXCLASS parameter in member IEAICSxx but the parameter is not preceded by a SUBSYS parameter.

name MISSING REQUIRED PGN OR RPGN KEYWORD

The indicated name is specified on a TRXNAME, USERID, or TRXCLASS parameter in member IEAICSxx but the parameter is not followed by the PGN or RPGN key word parameter.

A REPORT PGN (RPGN) CANNOT EQUAL A CONTROL PGN

The same performance group number cannot be specified in both an RPGN parameter and a PGN or OPGN parameter in the same installation control specification.

DUPLICATE USE OF RPGN nnnn WITHIN A SUBSYSTEM

The same RPGN value nnnn cannot be used for more than one entry type within a single subsystem section in the installation control specification. The four entry types are SUBSYS, TRXNAME, USERID, and TRXCLASS.

MASK KEYWORD HAS BEEN SPECIFIED MORE THAN ONCE

The system allows only one MASK specification in an ICS parmlib member.

MASK KEYWORD SPECIFIED AS OTHER THAN FIRST KEYWORD IN ICS

The MASK keyword must be specified before any other ICS keyword.

ONLY AN RPGN KEYWORD MAY FOLLOW AN OTHERWISE ENTRY

OTHERWISE entries contain all mask characters, and can only be specified for report performance groups.

KEYWORD SPECIFICATION EXCEEDS MAXIMUM LENGTH

The length of the starting location and the number of characters exceeds the length of the accounting data.

System Action: The SET ICS = xx command processor rejects the IEAICSxx parameter and continues processing. When syntax checking is complete, member IEAICSxx is rejected. System processing continues. If an installation control specification was active when the command was issued, it remains active.

Programmer Response: Correct the error in the IEAICSxx member of SYS1.PARMLIB.

IRA400I PAGEABLE STORAGE SHORTAGE

Explanation: The system has detected a shortage of pageable real storage frames.

System Action: LOGON, MOUNT, and START commands will be rejected, and initiators selecting new jobs will be kept from running until the shortage is relieved. The current in-storage user with the greatest number of fixed frames will be swapped out. The user will remain swapped out until the shortage is relieved and until there are sufficient frames available to satisfy his current requirements. Message IRA403I will be issued identifying the heavy fixed page user. Refer to *Initialization and Tuning* for a description of the action taken by the system resources manager as a result of this shortage.

Operator Response: Report the message to the system programmer.

Programmer Response: Examine users of V=R storage and other jobs that have heavy page fix requirements for possible looping or for extraordinary page fix needs.

IRA401I CRITICAL PAGEABLE STORAGE SHORTAGE

Explanation: The system has detected a critical shortage of pageable real storage frames.

System Action: LOGON, MOUNT, and START commands will be rejected, and initiators selecting new jobs will be kept from running until the shortage is relieved. The current in-storage user with the greatest number of fixed frames will be swapped out. The user will remain swapped out until the shortage is relieved and until there are sufficient frames available to satisfy his current requirements. Message IRA403I will be issued identifying the heavy fixed page user.

Operator Response: Report the message to the system programmer.

Programmer Response: Examine users of V=R storage and other jobs that have heavy page fix requirements for possible looping or for extraordinary page fix needs.

IRA402I PAGEABLE STORAGE SHORTAGE RELIEVED

Explanation: There is no longer a shortage of pageable real storage frames.

System Action: LOGON, MOUNT, and START commands are again permitted. Jobs delayed because of the shortage are now allowed to execute. The heavy users of fixed frames that were swapped will not be allowed to execute until there are sufficient frames to satisfy their requirements.

Operator Response: Report this message to the system programmer.

IRA403I uuu SWAPPED TO RECLAIM REAL STORAGE; xxxxx PAGES yyyyy FIXED

Explanation: The system has determined that at the time of a pageable storage shortage, user uuu was the largest user of fixed frames, with xxxxx frames, yyyyy of those frames being fixed. The amount of fixed frames includes the user's LSQA.

System Action: User uuu is swapped out and will

not be allowed to execute until the shortage is relieved, and until there are sufficient frames available to satisfy his current requirements. When the user is swapped in again, message IRA501I is issued.

Operator Response: Report this message to the system programmer.

Programmer Response: Examine the validity of user uuu, and determine whether or not he should continue.

The operator may quiesce other system activity and allow user uuu to be swapped in again. Once he is swapped in, user uuu may be allowed to run to completion or may be canceled by the operator.

IRA500I SWAP IN FAILED DUE TO FIXED STORAGE REQUIRED FOR USER uuu - yy PAGES xx FIXED

Explanation: One of the following has occurred:

- The system has determined that a shortage of real pageable storage would occur if user uuu were swapped in. In the message, yy is the number of pages in the swap-in working set, and xx is the number of LSQA and fixed pages the user owned when the user was last swapped out.
- The system could not swap in user uuu because it was unable to allocate enough real storage to contain the number of pages (yy) in the swap-in working set. The xx field shows the number of LSQA and fixed pages user uuu owned when the user was last swapped out.

System Action: The system leaves user uuu swapped out and checks periodically to see if the user can be swapped in.

The system again considers the user for swap in when either of these conditions exists:

- The percentage of real storage that is fixed decreases enough to allow the user to be swapped in without causing a shortage of pageable storage
- The number of available frames of storage rises enough to accommodate the user's swap-in working set.

In either case, if the system attempts to swap in the user and the attempt is unsuccessful, this message is issued again. If the attempt is successful, message IRA501I is issued.

Operator Response: Notify the system programmer.

Programmer Response: Examine the validity of user uuu and determine whether or not he should continue. If the user should continue, you might have the operator quiesce other system activity to be sure the user is swapped in again. If the user should not continue, you can have the operator cancel the user. (The system must swap in the user in order to cancel him, but the user is given special consideration because the swap-in is for cancel processing.)

If no action is taken, the system continues to check periodically to see if the user can be swapped in (see System Action).

IRA501I – IRA603I

IRA501I USER uuu NOW SWAPPED IN

Explanation: One of the following conditions occurred:

- Message IRA500I was previously issued indicating that user uuu could not be swapped in.
- Message IRA403I was previously issued indicating that user uuu was swapped out in an attempt to relieve a pageable frame shortage.

The system attempted to swap in the user again and completed the swap in successfully.

System Action: User uuu is swapped in.

Operator Response: Notify the system programmer.

Programmer Response: If messages IRA403I or IRA500I and IRA501I are issued frequently for this user, check the fixed storage required for this and other applications.

IRA600I SRM CHANNEL DATA NOW AVAILABLE FOR [I/O SERVICE|ALL SRM FUNCTIONS]

Explanation: The channel measurement facility is now measuring DCTIs (device connect times). If ALL SRM FUNCTIONS appears in the message text, SRM (system resource management) is using the channel measurements in the CMB (channel measurement block).

System Action: If ALL SRM FUNCTIONS appears in the message text, the SRM device selection and I/O load balancing functions, use the data in the CMB (channel measurement block).

Note: If the current IPS (installation performance specifications) specifies IOSRVC = TIME, SRM is using DCTIs to measure I/O service.

Operator Response: If the system programmer has designated an IEAISPxx member of SYS1.PARMLIB, which specifies IOSRCV = TIME, to be used when device connection times are available, set to that IEAISPxx member.

Programmer Response: None.

IRA601I SRM CHANNEL DATA NO LONGER AVAILABLE FOR I/O SERVICE

Explanation: The channel measurement facility is not measuring DCTIs (device connection times) because of a failure in a channel or processor.

System Action: Because of the failure, SRM uses EXCP (execute channel program) counts from ASCBs (address space control blocks) to calculate I/O activity. The system issues message IRA602I to report the specific failure condition.

Operator Response: If the system programmer has designated an IEAIPSxx member of

SYS1.PARMLIB to be used when device connection times are not available, set to that IEAIPSxx member. Report this message to the system programmer.

System Programmer Response: Look for message IRA602I.

IRA602I xx, SRM CHANNEL MEASUREMENTS TERMINATED

Explanation: SRM has stopped the collection of channel measurement data in the CMB (channel measurement block) due to an error condition. The specific error condition is identified by the reason code, xx, as follows:

xx	Meaning
01	TOD (time of day) clocks out of synch
02	Channel timers out of synch
03	Storage check on channel access to CMB
04	Uncorrectable program error while SRM is processing measurement data
20	There is not enough virtual storage for the required measurement data areas
21	Unexpected zero measurement block index in a UCB (unit control block)
22	Protection or addressing exception on channel access to the CMB

The system can issue this message even though collection of CMB data is not currently active.

System Action: Processing continues, but the SRM functions, device selection and I/O load balancing, use algorithms that do not make use of CMB data. If device connection times were being collected, message IRA601I is issued.

Operator Response: None.

Programmer Response: None.

IRA603I xx, SERVICE PROCESSOR DATA NO LONGER BEING USED FOR CHANNEL UTILIZATION

Explanation: Channel utilization data can not be obtained from the service processor. In the message, xx indicates possible reasons why channel utilization data is not available. The values of xx and their meanings are as follows:

xx	Reason
08	A write error occurred
12	Hardware is not operational.

System Action: System Resource Manager (SRM) uses an alternate sampling method to obtain channel utilization data.

Operator Response: None.

IRA700I xxxxxxxx WAITING FOR AVAILABILITY OF
VF

Explanation: Jobname xxxxxxxx has been swapped out because it requires a Vector Facility (VF), and there are none currently online.

System Action: The system leaves job xxxxxxxx swapped out. When a VF is brought back online, the job automatically resumes processing.

Operator Response: You may try one of the following:

- Using the CONFIG command, try to bring a VF or a CPU with an attached VF online.
- If a VF will be available shortly, leave the job alone. When the VF is brought back online, your job will resume processing.
- If you can not bring a VF online, or one will not soon be available, you can either:
 1. Cancel the job.
 2. Hold, reset and cancel the job so you can run it later.



Global Resource Serialization Messages (ISG)

Component Name	ISG
Program Producing Message	Global Resource Serialization
Audience and Where Produced	For the operator and system programmer: on the console. For application programmer: in the SYSOUT data set.
Message Format	xx ISGnnns text xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: D Decision; the operator must choose an alternative. E Eventual action; the operator must perform action when he has time. I Information; no operator action is required. text Message text.
Comments	ISG messages can appear on one system as a result of global resource serialization processing on another system, including processing of the GRS = system parameter and global resource serialization operator commands.
Related Publications	<i>MVS/XA SPL: Initialization and Tuning Guide</i> , GC28-1149 <i>MVS/XA Operations: System Commands</i> , GC28-1206 <i>MVS/XA SPL: System Macros and Facilities</i> , GC28-1150 and GC28-1151 <i>MVS/XA System Logic Library, Global Resource Serialization</i> , LY28-1695

ISG001D GRS SYSTEM PARAMETER INVALID - REPLY JOIN, START, OR NONE

Explanation: The GRS system parameter is invalid. The only valid parameters are JOIN, START, or NONE.

System Action: The system waits for the operator to respond to this message.

Operator Response: If you do not want this system to be part of a global resource serialization complex, reply NONE.

If you want this system to be part of a global resource serialization complex, but no complex exists, reply START.

If you want this system to be part of the existing global resource sharing complex, reply JOIN.

Programmer Response: If the invalid parameter is part of an IEASYSxx member of SYS1.PARMLIB, correct the member.

ISG002D ERROR IN [SYS1.LINKLIB] RESOURCE NAME LISTS - RELOAD SYSTEM OR REPLY NONE

Explanation: Global resource serialization found a syntax error in one of this system's resource name lists (RNL) loaded from SYS1.LINKLIB:

- System inclusion RNL.
- Systems exclusion RNL.
- Reserve conversion RNL.

System Action: The system waits for the operator either to re-IPL or to reply NONE.

Operator Response: Notify the system programmer. If you want this system to continue without global resource serialization, reconfigure any shared devices so that resources that would have been protected by global resource serialization are protected by the configuration. Then reply NONE.

Programmer Response: If you want this system to be part of the global resource serialization complex, correct the error in the RNL and reload the system. The list or lists in error are identified in the GVTVFLAG field of the GVT (global resource serialization vector table).

ISG003I

```

{ SYSTEM sysname ASSISTING IN
  PROCESSING GRS JOIN OPTION
  SYSTEM sysname NOT ASSISTING IN
  PROCESSING GRS JOIN OPTION
}

```

Explanation: Because this system's GRS system parameter is JOIN, system **sysname**, an active global resource serialization system, is assisting in bringing this system into the global resource serialization complex and the global resource serialization ring.

However, if the message indicates that system **sysname** is not assisting in processing the JOIN option, then another active global resource serialization system will assist in bringing **sysname** into the global resource serialization complex and ring. If the JOIN option is not successfully processed, no additional attempt to process will be made.

System Action: Requests for global resources are suspended on this system and on system **sysname** until system **sysname** has finished bringing this

ISG

system into the global resource initialization complex and the global resource serialization ring. Message ISG004I appears on all systems in the ring when that process is complete.

Operator Response: None.

Programmer Response: None.

**ISG004I GRS COMPLEX { STARTED
JOINED BY SYSTEM sysname }**

Explanation: If STARTED appears in the message text, this system has successfully completed processing the GRS=START system parameter and is the only member of the newly-created global resource serialization complex and global resource serialization ring.

If JOINED BY SYSTEM sysname appears, system sysname has successfully completed processing its GRS=JOIN system parameter. Both system sysname and this system are members of the global resource serialization complex and the global resource serialization ring.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG005I GRS START OPTION INVALID –

**{ MULTIPLE GRS COMPLEXES EXIST
SYSTEM sysname ALREADY A GRS SYSTEM
MORE THAN 31 SYSTEMS KNOWN BY THIS
SYSTEM
SYSTEM sysname EXISTS IN A GRS COMPLEX }**

Explanation: The GRS=START system parameter is invalid for the reason given in the message text.

MULTIPLE GRS COMPLEXES EXIST

This system has CTC links to one or more systems in each of two or more separate global resource serialization complexes. For example, this system has links to system SYS01 and system SYS03, but system SYS01 belongs to one global resource serialization complex, and system SYS03 belongs to another.

SYSTEM sysname ALREADY A GRS SYSTEM

One of the following is true:

- This system has CTC links to a system that is described by all three of these statements:
 1. The system has the same system name (sysname) as this system.
 2. The system specified the GRS=START or GRS=JOIN system parameter.
 3. The system has not yet finished processing its GRS= system parameter.
- This system has the same name (sysname) as a system that is already part of the global resource serialization complex.

This condition can occur when you re-IPL this system if, during a previous IPL, the following events occurred:

- This system was an active global resource serialization system.

- This system failed and, in doing so, caused the global resource serialization ring to be disrupted.
- This system was unable to become an active global resource serialization system when one of the other global resource serialization systems issued the VARY GRS(ALL), RESTART command.

This system name is still known by systems in the global resource serialization complex.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

This system knows of more than 31 systems, each of which is in one of these categories:

- The system is in the global resource serialization complex.
- The system specified the GRS=START or GRS=JOIN system parameter, but the system has not yet finished processing that parameter.

SYSTEM sysname EXISTS IN A GRS COMPLEX

A global resource serialization complex already exists, and system sysname is part of that complex.

System Action: This system issues message ISG009D and waits for the operator to reply.

Operator Response: Consult this system programmer, and read the operator response section of message ISG009D. If none of the responses listed in that section describes your situation, respond as follows, depending on the text of message ISG005I:

MULTIPLE GRS COMPLEXES EXIST

If you want this system to join one of the existing global resource serialization complexes, physically disable this system's CTC links to all systems except the following:

- systems that are in the global resource serialization complex that this system is to join
- systems that are not in and will not be in any global resource serialization complex

Then reply JOIN.

SYSTEM sysname ALREADY A GRS SYSTEM

If this message appears because this system has the same system name as another system (sysname), reload this system with a different system name. Before using a different system name, be sure there is a GRSDEF statement for that system name in the appropriate GRSCNFnn member of SYS1.PARMLIB.

If this message appears because this system was part of the global resource serialization complex during a previous IPL, have the operator of an active global resource serialization system enter the VARY GRS(sysname),PURGE command. Then reply JOIN to message ISG009D.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

Modify this system's CTC links so that this system has connections to a maximum of 31

other systems. If one or more of those systems belong to an existing global resource serialization complex, and you want this system to join that complex, reply JOIN. If none of those systems are part of a global resource serialization complex, and you want this system to start one, reply START.

SYSTEM sysname EXISTS IN A GRS COMPLEX

Do one of the following:

- If you want this system to join the global resource serialization complex that system sysname is part of, reply JOIN.
- If you want this system to start a separate global resource serialization complex, reconfigure this system so that it does not have CTC links to any of the systems in the existing global resource serialization complex and is not sharing resources with any of those systems. Then reply START.

Programmer Response: Help the operator determine how to respond to message ISG009D.

If SYSTEM sysname EXISTS IN A GRS COMPLEX often appears when you IPL this system, change this system's GRS system parameter to JOIN.

ISG006I

GRS JOIN OPTION INVALID

**MULTIPLE GRS COMPLEXES EXIST
SYSTEM sysname ALREADY A GRS SYSTEM
MORE THAN 31 SYSTEMS KNOWN BY THIS
SYSTEM
SYSTEM sysname BELONGS TO A FULL GRS
COMPLEX
NO ACTIVE GRS SYSTEM
NO ACTIVE GRS SYSTEM,
DISRUPTION MAY BE IN PROGRESS**

Explanation: The GRS = JOIN system parameter is invalid for the reason shown in the message text.

MULTIPLE GRS COMPLEXES EXIST

This system has CTC links to one or more systems in each of two or more separate global resource serialization complexes. For example, this system has connections to system SYS01 and system SYS03, but system SYS01 belongs to one global resource serialization complex, and system SYS03 belongs to another.

SYSTEM sysname ALREADY A GRS SYSTEM

One of the following is true:

- This system has CTC links to a system that is described by all three of these statements:
 1. The system has the same system name (sysname) as this system.
 2. The system specified the GRS = START or GRS = JOIN system parameter.
 3. The system has not yet finished processing the GRS = system parameter.
- This system has the same name (sysname) as a system that is already part of the global resource serialization complex.

This condition can occur when you re-IPL this system if, during a previous IPL, the following events occurred:

- This system was an active global resource serialization system.
- This system failed and, in doing so, caused the global resource serialization ring to be disrupted.
- This system was unable to become an active global resource serialization system when one of the other global resource serialization systems issued the VARY GRS(ALL), RESTART command.

This system name is still known by systems in the global resource serialization complex.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

This system knows of more than 31 systems, each of which is in one of these categories:

- The system is in the global resource serialization complex.
- The system specified the GRS = START or GRS = JOIN system parameter, but the system has not yet finished processing that parameter.

SYSTEM sysname BELONGS TO A FULL GRS COMPLEX

The global resource serialization complex already includes 32 systems, the maximum. System sysname is one of the 32 systems.

NO ACTIVE GRS SYSTEM

No systems were found in the global resource serialization complex. Either no other global resource serialization system exists, or this system does not have a functional CTC link to an active global resource serialization system.

NO ACTIVE GRS SYSTEM, DISRUPTION MAY BE IN PROGRESS

Global resource serialization systems exist, but none of them are in an active state. All systems that responded are either inactive or quiesced. Either the complex is in a disrupted state, or there is no functional CTC link to an active global resource serialization system.

System Action: This system issues message ISG009D and waits for the operator to reply.

Operator Response: Consult the system programmer and read the operator response section of message ISG009D. If none of the responses listed in that section describes your situation, respond as follows, depending on the text of message ISG006I:

MULTIPLE GRS COMPLEXES EXIST

If you want this system to join one of the existing global resource serialization complexes, physically disable this system's CTC links to all systems except the following:

- systems that are in the global resource serialization complex that this system is to join

ISG

- systems that are not in (and will not be in) any global resource serialization complex

Then reply JOIN.

SYSTEM sysname ALREADY A GRS SYSTEM

If this message appears because this system has the same system name as another system (sysname), reload this system with a different system name. Before using a different system name, be sure there is a GRSDDEF statement for that system name in the appropriate GRSCNFnn member of SYS1.PARMLIB.

If this message appears because this system was part of the global resource serialization complex during a previous IPL, have the operator of an active global resource serialization system enter the VARY GRS(sysname),PURGE command. Then reply JOIN to message ISG009D.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

Modify this system's CTC links so that this system has connections to a maximum of 31 other systems. If one or more of those systems belong to an existing global resource serialization complex, and you want this system to join that complex, reply JOIN. If none of those systems are part of a global resource serialization complex, and you want this system to start one, reply START.

SYSTEM sysname BELONGS TO A FULL GRS COMPLEX

Ask the operator on system sysname to enter the DISPLAY GRS command. Confirm that each of the displayed QUIESCED systems are still operational. If one of the displayed systems can be purged from the global resource serialization complex, ask the operator on that system to enter the VARY GRS PURGE command. Then reply JOIN to message ISG009D.

(It is possible that a system failed, causing the global resource serialization ring to be disrupted, and, when the global resource serialization ring was rebuilt, the system was still not operational. However, that system continues to be known by systems in the global resource serialization complex until an operator enters the VARY GRS PURGE command for that system.)

If none of the displayed systems can be purged from the global resource serialization complex, this system cannot join that complex.

This system can start a second global resource serialization complex as described in message ISG009D.

NO ACTIVE GRS SYSTEM

Do one of the following:

- If there was a global resource serialization complex, but the ring was disrupted and you want this system to be part of that complex, wait until one of the systems in the complex issues and processes the VARY GRS(ALL), RESTART command. Then reply JOIN.
- If no global resource serialization complex exists, but the operator of some other

system plans to start one, you can wait until that system completes its initialization and then reply JOIN.

- If no global resource serialization complex exists, and you want this system to start one, reply START.
- If there is an active global resource serialization system but this system does not have a functional CTC link to that active system, establish a CTC link to that system. Then reply JOIN.

NO ACTIVE GRS SYSTEM, DISRUPTION MAY BE IN PROGRESS

Do one of the following:

- If there is a global resource serialization complex but the ring has been disrupted, wait until one of the systems in the complex issues a successful VARY GRS(ALL),RESTART command. Then reply JOIN.
- If there is an active global resource serialization system but this system does not have a functional CTC link to that active system, establish a CTC link to the system. (You may want to contact the system programmer for assistance.) Then reply JOIN.
- If all the systems in the complex are quiesced (that is, if an active system in the complex failed and is permanently stopped), restart the most up-to-date system using the REACTIVATE function of the VARY GRS RESTART command. Wait for the complex to stabilize, and then reply JOIN.

Programmer Response: If NO ACTIVE GRS COMPLEX often appears when you IPL this system, change your GRS system parameter to START.

ISG007I fc-rc ERROR PROCESSING GRS { START
JOIN
NONE }

OPTION

Explanation: This system encountered an error while processing the GRS system parameter. In the message text, the fc field contains a function code identifying the module that detected the error. The rc field contains a reason code:

fc Explanation

3E

rc Explanation

3F An undefined error occurred while this system was processing the GRS= system parameter (ISGNRSP).

80 The error occurred while this system was updating its system queues with information provided by an active global resource serialization system (ISGNRSP called module ISGCQMRG); rc is one of the following:

04 The version of global resource serialization in this system is not compatible with the version in the rest of the global resource serialization complex.

- 08 The inclusion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
- 0C The exclusion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
- 10 The RESERVE conversion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
- 14 A request from this system for a particular resource is not included in the queue information provided by the active system. There possibly is queue damage in the global resource queues of this system or the system assisting in bringing this system into the complex.
- 18 A request from this system for a particular resource is missing from this system's global resource serialization queues. There possibly is queue damage in the global resource serialization queues of this system or the system assisting in bringing this system into the complex.
- 1C The active global resource serialization system that provided this system with queue information indicated that all data has been sent, but this system still expects more data.
- 20 Internal queue update processing lost track of the type of item currently being processed.
- 24 Internal queue update processing found data in its buffer or in the ring's buffer that it did not expect to find.
- 28 Internal queue update processing expected to find more data (RIBE) in its buffer, but the buffer was empty.
- 2C Internal queue update processing reached the end of the ring's buffer before it reached the logical end of the data in the buffer.
- 34 Internal queue update processing found more data in the ring's buffer than it expected to find.
- 38 Internal queue update processing found a ring buffer that did not contain as many RIBs or RIBEs as indicated by the counts returned by QSCAN services.
- 3F An undefined error occurred during internal queue update processing (ISGCQMRG).
- 44 QSCAN services indicated failure during the queue scan process, or QSCAN services were invoked with a token but no data was returned.
- 86 The process of purging global resources from this system's global resource queues failed (entry point ISGGQS03 of module ISGGQSRV); probable system
- A2 ISGBCI indicated that the BUFRECV function was unsuccessful.
- A4 ISGBCI indicated that the BUFSEND function was unsuccessful.
- B2 ISGBCI indicated that the attempt to release ring serialization failed.
- A8 An error occurred while this system was attempting to broadcast a message to other active global resource serialization systems (the SENDCMD function of module ISGBCI); rc is one of the following:
- 0C The global resource serialization ring was disrupted before the broadcast was complete.
- 10 This system is no longer an active global resource serialization system.
- 14 This system broadcast the message but received no response.
- 3F An undefined error occurred.
- AE An error occurred while a system was attempting to add this system to the global resource serialization ring (the SENDCMD function of module ISGBCI); rc is one of the following:
- 0C Either the system attempting to add this system is no longer an active global resource serialization system, or the CTC link between the two systems is no longer functional.
- 10 Ring processing failed on this system.
- 14 This system sent the command but received no response within the established time limit.
- 20 An active global resource serialization system encountered an error while trying to add this system to the ring.
- 24 Another system in the global resource serialization complex has the same system name as this system.
- 28 The command requested that this system be added to the ring, but this system is already in the ring.
- 3F An undefined error occurred.
- 4C Either the system attempting to add this system is no longer an active global resource serialization system, or the CTC link between the two systems is no longer functional.
- 54 This system sent the command but received no response within the established time limit.
- 70 An active global resource serialization system encountered an error while trying to add this system to the ring. A second active global resource serialization system was chosen, and the second system also encountered an error while trying to add this system to the ring.
- B4 An error occurred while this system was attempting to obtain the status of the other systems in the global resource serialization

complex (the SNAPSHOT function of module ISGBCI); rc is one of the following:

- 10 This system cannot communicate with other global resource serialization systems.
- 3F An undefined error occurred.
- B6 An error occurred while this system was processing the GRS = NONE parameter (the STARTPOP function of module ISGBCI); rc is one of the following:
 - 10 Communication with other global resource serialization systems is not possible.
 - 3F An undefined error occurred.
- B8 An error occurred while this system was processing the GRS = START parameter (the STARTPOP function of module ISGBCI); rc is one of the following:
 - 10 Communication with other global resource serialization systems is not possible.
 - 3F An undefined error occurred.

System Action: This system issues message ISG009D and waits for your reply. This system tries to write error information to SYS1.LOGREC and the SYS1.DUMPxx data set. If the global resource serialization ring was disrupted, message ISG022E or ISG023E appears on the systems that are in the ring.

Operator Response: Be sure that this system still has CTC (channel to channel) links to systems that are in the global resource serialization complex.

Consult the system programmer, and reply to message ISG009D.

If the error occurred because the global resource serialization ring was disrupted, wait until one of the systems in the complex issues and processes the VARY GRS RESTART command. When the ring is rebuilt, reply JOIN to message ISG009D.

Programmer Response: Help the operator decide how to reply to message ISG009D.

Problem Determination: Table I, items 2, 7, 18, 29, 33, 43, and 55.

**ISG008E SYNTAX ERROR IN GRSCNFxx - RECORD
nnnnnn
TOLINT KEYWORD INVALID, TOLINT
KEYWORD IGNORED
ACCELSYS KEYWORD VALUE INVALID**

Explanation: The system recognized one of the following errors in parmlib member GRSCNFxx - RECORD nnnnnn:

**TOLINT KEYWORD INVALID, TOLINT
KEYWORD IGNORED**

The value specified for the TOLINT keyword is invalid. The TOLINT value, specified in seconds, must be greater than 0 and less than 86000 (24 hours).

ACCELSYS KEYWORD VALUE INVALID

The value specified for the ACCELSYS keyword is invalid. The ACCELSYS value must be greater than 1 and less than 100.

System Action: The system ignores the incorrect keyword or specification and the IPL continues.

If the TOLINT keyword is invalid, the system uses the values in GVTOLINT and GVTMEINT. These values are set by the installation (using the AMASPZAP service aid) or the system defaults (three minutes). Also, because the system ignores TOLINT, it can take longer to detect an overdue RSA-message.

If the ACCELSYS keyword is invalid, the system issues messages ISG044I, ISG007I, and ISG009D.

Operator Response: Notify the system programmer.

Programmer Response: If you want to use TOLINT, either correct the error in GRSCNFxx and then re-IPL the system, or re-IPL the system using a different parmlib member. If you do not want to use TOLINT, no action is required, but you should remove the TOLINT keyword.

If you want to use ACCELSYS, either correct the error in GRSCNFxx, or re-IPL the system using a different parmlib member. If you do not specify a value for the ACCELSYS keyword, the system uses the default (2).

If you do not want to re-IPL the system, instruct the operator to reply GRS = NONE to message ISG009D.

ISG009D RELOAD SYSTEM OR REPLY

**{ JOIN, START, OR NONE
JOIN OR NONE
NONE }**

Explanation: An error prevented this system from processing the GRS system parameter. This message follows message ISG005I, ISG006I, or ISG007I.

System Action: This system waits for the operator to reply.

Operator Response: Consult the system programmer and do one of the following:

- If you know what caused the error and you can correct it by reloading this system, do so. For example, you might have entered an incorrect value for GRSCNF = xx in response to message IEA906A SPECIFY GRSCNF PARM OR ENTER EOB.
- If JOIN appears in the message text, this system can still attempt to join the global resource serialization complex. Before you reply JOIN, correct the problem indicated in message ISG005I, ISG006I, or ISG007I.

Note: In some situations (for example, if queue damage exists), it might be necessary to reload all systems in the global resource serialization complex.

- If START appears in the message text, your system can start an additional global resource serialization complex even if one or more global resource serialization complexes already exist. Before you reply START, physically disable CTC links to every system that is in an existing global resource serialization complex and make sure that this system is not sharing any resources with those systems.

- If you do not want this system to participate in global resource serialization or if you need time to find and correct the error, reply NONE. This reply allows this system to continue to run, but without global resource serialization. If you find and correct the error, reload this system.

Caution: Before you reply NONE, reconfigure devices that this system shares with other systems so that your resources that would have been protected by global resource serialization are protected by the configuration.

- Otherwise, respond as indicated in message ISG005I, ISG006I, or ISG007I.

Programmer Response: Help the operator decide how to reply to this message.

ISG010E GLOBAL RESOURCE SERIALIZATION INOPERATIVE – ONLY LOCAL RESOURCE REQUESTS CAN BE PROCESSED

Explanation: If this message appears during system initialization, an error occurred while this system was processing the GRS system parameter. If the parameter was GRS=START, the error prevented this system from starting a global resource serialization complex. If the parameter was GRS=JOIN, the error prevented this system from joining the global resource serialization complex.

If this message appears after system initialization, an unrecoverable error occurred during global resource serialization processing.

System Action: This system processes requests for local resources, but does not process requests for global resources. Tasks that request global resources wait indefinitely.

Operator Response: Report this message to the system programmer.

Programmer Response: If you want this system to continue processing using only local resources, no response is required. If you want this system to process global resource serialization requests, ask the operator to re-IPL this system.

Problem Determination: Table I, items 2, 7, 18, 29, 33, and 55.

ISG011I SYSTEM sysname –

RESTARTING GLOBAL RESOURCE SERIALIZATION
QUIESCING GLOBAL RESOURCE SERIALIZATION
BEING PURGED FROM GRS COMPLEX
JOINING GRS COMPLEX

Explanation: The explanation for each of the possible message texts:

SYSTEM sysname RESTARTING GLOBAL RESOURCE SERIALIZATION

The operator of a global resource serialization system entered the VARY GRS(ALL),RESTART command or the VARY GRS(sysname),RESTART command. As a result, system sysname is in the process of resuming global resource serialization processing.

SYSTEM sysname QUIESCING GLOBAL RESOURCE SERIALIZATION

An operator entered the VARY GRS(sysname),QUIESCE command on this system or on another active system in the global resource serialization complex. System sysname is in the process of suspending global resource serialization processing.

SYSTEM sysname BEING PURGED FROM GRS COMPLEX

The operator entered the VARY GRS(sysname),PURGE command on this system. This system is removing system sysname from the global resource serialization complex.

SYSTEM sysname JOINING GRS COMPLEX

This system is assisting in bringing system sysname into the global resource serialization complex and the global resource serialization ring.

System Action: VARY processing continues.

Operator Response: None.

Programmer Response: None.

ISG012I { RESTART } REQUEST PASSED TO SYSTEM { QUIESCE } sysname

Explanation: An operator on one of the global resource serialization systems entered the VARY GRS command with the RESTART or QUIESCE parameter. Another system (system sysname) in the global resource serialization complex must do part of the VARY command processing.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG013I SYSTEM sysname –

RESTARTED GLOBAL RESOURCE SERIALIZATION
QUIESCED GLOBAL RESOURCE SERIALIZATION
PURGED FROM GRS COMPLEX

Explanation: The status of system sysname has changed within the global resource serialization complex. One of the following occurred:

SYSTEM sysname - RESTARTED GLOBAL RESOURCE SERIALIZATION

System sysname has resumed processing global resource requests, it is now a member of the global resource serialization ring.

SYSTEM sysname - QUIESCED GLOBAL RESOURCE SERIALIZATION

System sysname has suspended the processing of global resource requests and is no longer a member of the global resource serialization ring.

SYSTEM sysname - PURGED FROM GRS COMPLEX

System sysname is no longer a member of the global resource serialization complex.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG014I {VARY RESTART|VARY QUIESCE|VARY PURGE|VARY|JOIN} REQUEST {REJECTED|FOR SYSTEM sysname REJECTED|FROM SYSTEM sysname REJECTED} reason text

Explanation: One of the following occurred:

- The operator entered a VARY GRS command on this system or on a system that has a CTC link to this system. The system usually inserts the command operand (RESTART, QUIESCE, or PURGE) into the message text; otherwise, only VARY appears.
- A system attempted to join the global resource serialization (GRS) complex of which this system is a member. In this case, JOIN appears in the message.

GRS rejected the command or rejected the system's attempt to join. The reason appears in the reason text field.

If FOR SYSTEM sysname appears, the operator entered the command on this system. If FROM SYSTEM sysname appears, system sysname attempted to join the complex or issued the command.

The reason text field contains one of the following:

AN ACTIVE GRS SYSTEM EXISTS

The VARY GRS(ALL),RESTART command is rejected because the complex already has one or more active GRS systems.

COULD CAUSE RESOURCE INTEGRITY LOSS

This system's global resource queues are known to be obsolete. GRS does not allow this system to restart GRS on other systems or to assist other systems in joining the GRS complex. To do so could cause resource integrity loss.

DUPLICATE SYSTEM NAME

System sysname attempted to join the GRS complex or to restart GRS processing, but system sysname has the same name as a system that is already part of the complex.

GLOBAL RESOURCE QUEUES WERE DAMAGED

Because this system's global resource queues have been damaged, GRS does not allow this system to restart GRS processing on other systems or to assist other systems in joining the GRS complex. To do so could cause resource integrity loss.

GLOBAL RESOURCE SERIALIZATION INOPERATIVE

This system specified the GRS = NONE system parameter, and therefore cannot process the VARY GRS command.

GLOBAL RESOURCE SERIALIZATION COMMAND PROCESSOR INOPERATIVE

An error in the GRS command processor (ISGCMDR) prevents it from processing the VARY GRS command.

MULTIPLE GRS COMPLEXES EXIST

System sysname has CTC links to one or more systems in each of two or more separate GRS complexes. For example, system sysname has

CTC links to systems SYS01 and SYS03, but system SYS01 belongs to one GRS complex and SYS03 belongs to another.

NO LINK AVAILABLE

Either this system was helping system sysname join the GRS complex, or system sysname tried to restart GRS processing, but there is no functional CTC link between this system and system sysname.

NO RESTARTABLE INACTIVE GRS SYSTEMS

The VARY GRS(ALL),RESTART command cannot be processed because there are no inactive GRS systems that can be restarted by this system.

ONLY ACTIVE GRS SYSTEM

The operator entered the VARY GRS QUIESCE command. The command is rejected because this system is the only active GRS system in the GRS complex.

REQUEST CANCELED BY OPERATOR

The operator entered the VARY GRS(sysname),PURGE command. Message ISG016I appeared, indicating that system sysname owns or is waiting for global resources. The operator then cancelled the VARY GRS PURGE command by replying NO to message ISG017D.

SYSTEM ALREADY AN ACTIVE GRS SYSTEM

Either this system was helping system sysname join the GRS complex or system sysname tried to restart GRS processing. However, system sysname is already an active GRS system.

SYSTEM JOINING GRS COMPLEX

The VARY GRS(sysname),RESTART command or the VARY GRS(sysname),PURGE command is rejected because the specified system is in the process of joining the GRS complex.

SYSTEM NOT AN ACTIVE GRS SYSTEM

The VARY GRS QUIESCE command is rejected because the specified system is not an active GRS system.

SYSTEM NOT RESPONDING

If JOIN appears in the message text, this system was helping another system join the GRS complex, but can no longer communicate with that system. If VARY ...FOR SYSTEM sysname REJECTED appears, the operator on this system issued the VARY GRS RESTART command, but this system cannot communicate with system sysname. If VARY...FROM SYSTEM sysname REJECTED appears, system sysname issued the VARY GRS RESTART command, and then this system lost communication with system sysname.

SYSTEM REQUIRED IN GRS COMPLEX

The VARY GRS(sysname),QUIESCE command is rejected for system sysname. Full interconnectivity does not exist among the systems in the GRS complex, that is, every system does not have a CTC link to every other system. If system sysname were quiesced, the remaining active GRS systems could not form a GRS ring; they do not have the necessary CTC links.

For example, suppose you have four systems: A, B, C, and D. A has CTC links to B, C, and D and C has links to A, B, and D. But B has links only to A and C and D has links only to A and C. Because no CTC link exists between B and D, the systems do not have full interconnectivity.

If all four systems are active GRS systems (that is, they are all in the GRS ring), then system A or system C is required in the GRS complex. Systems B and D cannot form a GRS ring.

On the other hand, system B (or system D) could be quiesced, because the remaining systems have the CTC links needed to form a GRS ring.

If system B was first quiesced (and systems A, C, and D formed a GRS ring), then system A could be quiesced; systems C and D have the CTC links needed to form a GRS ring.

SYSTEM RESTARTING GLOBAL RESOURCE SERIALIZATION

The VARY GRS(sysname),PURGE command is rejected because system sysname is in the process of restarting GRS.

SYSTEM STILL AN ACTIVE GRS SYSTEM

The VARY GRS(sysname),PURGE command is rejected because system sysname is an active GRS system.

SYSTEM UNKNOWN TO GLOBAL RESOURCE SERIALIZATION

If this message appears in response to a VARY GRS command, the system specified in the command is not a GRS system. If JOIN appears in the message text, this system received a request to help another system join the GRS complex, but this system does not recognize the name of that system.

THIS SYSTEM NOT AN ACTIVE GRS SYSTEM

This system's status in the GRS complex changed from active to quiesced or inactive while this system was helping another system join the GRS complex or while this system was processing the VARY GRS command.

SYSTEM UNKNOWN TO GLOBAL RESOURCE SERIALIZATION

If this message appears in response to a VARY GRS RESTART and the specified system was previously removed from the complex by a VARY GRS PURGE command, the system must be re-IPLed with GRS=JOIN to rejoin the complex and the ring.

System Action: The VARY GRS command is ignored.

Operator Response: Use the DISPLAY GRS command to confirm that the information in this message text is correct. If it is, and you can correct the problem, do so. Then reenter the command. If the information in this message text is not consistent with the GRS display or if you cannot correct the problem, notify the system programmer.

Programmer Response: Find and correct the error. If the text of this message is not consistent with the GRS display, determine which system is reporting incorrect information. Do not enter GRS commands on that system, and re-IPL that system as soon as

you can. If the problem persists, you might need to leave that system out of the GRS complex or re-IPL each system in the GRS complex.

Problem Determination: Table I, items 2, 7, 11, 13, 18, 29, 55.

ISG015I fc-rc ERROR DURING

RESTART
QUIESCE
PURGE

[OF SYSTEM sysname]

Explanation: Your system encountered an error while it was processing the VARY GRS command with the option specified in the message text. If 'OF SYSTEM sysname' appears, the operator specified system sysname on the VARY GRS command or entered the VARY GRS(ALL),RESTART command. The fc and rc fields contain a function code and a reason code:

fc Explanation

3E

rc Explanation

3F An undefined error occurred during VARY GRS processing. The message text identifies the parameter specified on the VARY GRS command.

44 The error occurred as a result of a GQSCAN request (module ISGCRST or ISGCPRG made the request). rc is one of the following:

04 This system resumed processing a previous GQSCAN request. The return code indicated that there was no more data to be processed.

0C An abnormal situation occurred during GQSCAN service routine processing.

10 An invalid sysname was specified as input to the GQSCAN service routine.

3F An undefined error occurred during GQSCAN processing.

46

3F An undefined error occurred while this system was attempting to write a message to the operator.

4C

3F An error occurred when module ISGCPRG was attempting to free a group of message request blocks (MRBs) (the ISGSDAL function of module ISGCPRG).

62

3F An error occurred when module ISGCPRG was attempting to free a queue work block (QWB) (that is, in the ISGGOWBF function of module ISGCPRG).

6C

3F An error occurred when module ISGCPRG was attempting to purge global resources held or requested by the system being purged from the global resource serialization complex.

ISG

- 80 The error occurred while this system was updating its system queues with information provided by an active global resource serialization system (ISGCRST called module ISGCQMRG); rc is one of the following:
 - 04 The version of global resource serialization in this system is not compatible with the version in the rest of the global resource serialization complex.
 - 08 The inclusion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
 - 0C The exclusion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
 - 10 The RESERVE conversion resource name list defined for this system is not identical to the one that the global resource serialization complex is using.
 - 14 A request from this system for a particular resource is not included in the queue information provided by the active system. There possibly is queue damage in the global resource serialization queues of this system or the system assisting in bringing this system into the complex.
 - 18 A request from this system for a particular resource is missing from this system's global resource serialization queues. There possibly is queue damage in the global resource serialization queues of this system or the system assisting in bringing this system into the complex.
 - 1C The active global resource serialization system that provided this system with queue information indicated that all data has been sent, but this system still expects more data.
 - 20 Internal queue update processing lost track of the type of item currently being processed.
 - 24 Internal queue update processing found data in its buffer or in the ring's buffer that it did not expect to find.
 - 28 Internal queue update processing expected to find more data (RIBE) in its buffer, but the buffer was empty.
 - 2C Internal queue update processing reached the end of the ring's buffer before it reached the logical end of the data in the buffer.
 - 34 Internal queue update processing found more data in the ring's buffer than it expected to find.
 - 38 Internal queue update processing found a ring buffer that did not contain as many RIBs or RIBEs as indicated by the counts returned by GQSCAN services.
 - 3F An undefined error occurred during internal queue update processing (ISGCQMRG).
- 44 GQSCAN services indicated failure during the queue scan process, or GQSCAN services were invoked with a token but no data was returned.
- 86 The process of purging global resources from this system's global resource queues failed (entry point ISGGQS03 of module ISGGQSVR); probable system error.
 - A2 ISGBCI indicated that the BUFRECV function was unsuccessful.
 - A4 ISGBCI indicated that the BUFSEND function was unsuccessful.
 - B2 ISGBCI indicated that the attempt to release ring serialization failed.
- AO The error occurred while this system was attempting to add another system to the global resource serialization ring (the ADDSYS function of module ISGBCI); rc is one of the following:
 - 0C This system could not communicate with the system it was trying to add to the global resource serialization ring.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system could not build a global resource serialization ring that included the system it was trying to add.
 - 1C The system being added has the same name as a system in the global resource serialization complex.
 - 28 This system failed to temporarily suspend all global resource serialization processing; (that is, this system was not in RINGSTATE-SERIAL state).
 - 3F An undefined error occurred.
 - 68 This system failed to temporarily suspend all global resource serialization processing; (that is, this system was not in RINGSTATE-SERIAL state).
- A2 The error occurred while this system was attempting to receive a buffer of information from an active global resource serialization system (the BUFREC function of module ISGBCI); rc is one of the following:
 - 04 This system's buffer for receiving the data was too small.
 - 08 The system sending the data failed to temporarily suspend all global resource serialization processing; (that is, that system was not in RINGSTATE-SERIAL state).
 - 0C Either the system sending the data is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 The target system did not send the data within the established time limit.

- 3F An undefined error occurred.
- 4C Either the system sending the data is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
- 54 The target system did not send the data within the established time limit.
- A4 The error occurred while this system was trying to send a buffer of data to some other global resource serialization system (the BUFSEND function of module ISGBCI); rc is one of the following:
 - 04 The system receiving the data did not provide a buffer large enough for the data.
 - 08 This system failed to temporarily suspend all global resource serialization processing; (that is, this system was not in RINGSTATE-SERIAL state).
 - 0C Either the system receiving the data is no longer an active global resource serialization system, or the CTC link between the two systems is not working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 The system receiving the data did not indicate that it received the data within the established time limit.
 - 3F An undefined error occurred.
 - 4C Either the system receiving the data is no longer an active global resource serialization system, or the CTC link between the two systems is not working.
 - 54 The system receiving the data did not indicate that it received the data within the established time limit.
- A6 An error occurred while this system was attempting to remove a system from the global resource serialization complex (the DELSYS function of module ISGBCI); rc is one of the following:
 - 0C The system being removed is no longer a global resource serialization system.
 - 10 This system is no longer an active global resource serialization system.
 - 1C This system tried to remove a system that was still an active global resource serialization system.
 - 3F An undefined error occurred.
- A8 An error occurred while this system was attempting to broadcast a message to other active global resource serialization systems (the SENDCMD function of module ISGBCI); rc is one of the following:
 - 0C The global resource serialization ring was disrupted before the broadcast was complete.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system broadcast the message but received no response within the established time limit.
 - 3F An undefined error occurred.
 - 54 This system broadcast the message but received no response within the established time limit.
- AA An error occurred while this system was attempting to send a command to an active global resource serialization system (the SENDCMD function of module ISGBCI); rc is one of the following:
 - 0C Either the system to which to command was sent is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system sent the command but received no response within the established time limit.
 - 3F An undefined error occurred.
 - 4C Either the system to which the command was sent is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 54 This system sent the command but received no response within the established time limit.
- AC An error occurred while a system was attempting to remove this system from the global resource serialization ring (the SENDCMD function of module ISGBCI); rc is one of the following:
 - 0C Either the system trying to remove this system is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system sent the command but received no response within the established time limit.
 - 3F An undefined error occurred.
 - 4C Either the system trying to remove this system is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 54 This system sent the command but received no response within the established time limit.

- AE An error occurred while a system was attempting to add this system to the global resource serialization ring (the SENDCMD function of module ISGBCI); rc is one of the following:
 - 0C Either the system attempting to add this system is no longer an active global resource serialization system, or the CTC link between the two system is no longer working.
 - 10 Ring processing failed on this system.
 - 14 This system sent the command but received no response within the established time limit.
 - 20 An active global resource serialization system encountered an error while trying to add this system to the ring.
 - 24 Another system in the global resource serialization complex has the same system name as this system.
 - 28 The command requested that this system be added to the ring, but this system is already in the ring.
 - 3F An undefined error occurred.
 - 4C Either the system attempting to add this system is no longer an active global resource serialization system, or the CTC link between the two system is no longer working.
 - 54 This system sent the command but received no response within the established time limit.
 - 70 An active global resource serialization system encountered an error while trying to add this system to the ring. A second active global resource serialization system was chosen, and the second system also encountered an error while trying to add this system to the ring.
- B0 An error occurred while this system was attempting to restart an inactive or quiesced global resource serialization system (the SENDCMD function of module ISGBCI); rc is one of the following:
 - 0C The CTC link between the two systems is no longer working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system sent the command but received no response within the established time limit.
 - 24 Another system in the global resource serialization complex has the same system name as the system being restarted.
 - 3F An undefined error occurred.
 - 4C The CTC link between the two systems is no longer working.
 - 54 This system sent the command but received no response within the established time limit.
- B2
 - 3F An undefined error occurred in the SERRELS function of module ISGBCI.
- B8 An error occurred during the STARTPOP function of module ISGBCI while global resource serialization was processing a VARY GRS(ALL),RESTART command that the operator issued; rc is one of the following:
 - 10 This system cannot communicate with other global resource serialization systems.
 - 3F An undefined error occurred.
- B9 An error occurred during the STARTPOP with permission function of module ISGBCI while global resource serialization was processing a VARY GRS(ALL),RESTART command that the system issued; rc is one of the following:
 - 10 This system cannot communicate with other global resource serialization systems.
 - 3F An undefined error occurred.
- BA An error occurred while this system was attempting to remove a system from the global resource serialization ring (the SUBSYS function of module ISGBCI); rc is one of the following:
 - 0C Either the system being removed is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
 - 10 This system is no longer an active global resource serialization system.
 - 14 This system attempted to remove a system that is required in the global resource serialization ring. The active global resource serialization systems that would remain do not have the CTC links needed to build a global resource serialization ring.
 - 18 This system attempted to remove itself from the global resource serialization system.
 - 3F An undefined error occurred.
 - 4C Either the system being removed is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
- BB An error occurred during the GETCCS function of module ISGBCI; rc is one of the following:
 - 3F An undefined error occurred.
 - 50 Ring processing is inoperative because of an error in a PARMLIB member or a software error.
 - 6C This system already owns the CCS resource, so the GETCCS request is ignored.

BC An error occurred during the RELCCS function of module ISGBCI; rc is one of the following:

- 10 This system is no longer an active global resource serialization system.
- 54 This system sent the command but received no response within the established time limit.
- 64 The configuration change serialization resource (CCSR) is not owned, and no back-level system is present. The RELCCS request is ignored.

EA

- 3F An error occurred during execution of a FREEMAIN macro instruction (module ISGCRST).

EE

- 3F An error occurred during execution of a GETMAIN macro instruction (module ISGCRST).

System Action: Global resource serialization does not execute the VARY GRS command. This system writes error information to SYS1.LOGREC and the SYS1.DUMPxx data set.

Operator Response: Notify the system programmer.

Programmer Response: If you can, correct the error. Then ask the operator to reenter the command. If necessary, contact your software support personnel.

Problem Determination: Table I, items 2, 7, 18, 29, 33, 43, and 55.

ISG016I SYSTEM sysname OWNS OR IS WAITING FOR GLOBAL RESOURCES

Explanation: The operator entered a VARY GRS(sysname),PURGE command, but system sysname owns or is waiting for global resources.

System Action: The system issues message ISG017D and waits for the operator to reply.

Operator Response: Reply to message ISG017D.

Programmer Response: None.

ISG017D CONFIRM PURGE REQUEST FOR SYSTEM sysname – REPLY YES OR NO

Explanation: The operator entered the VARY GRS(sysname),PURGE command. Message ISG016I appeared to tell the operator that system sysname owns or is waiting for global resources. This message, ISG017D, asks the operator to confirm that system sysname should be purged.

System Action: The system waits for the operator to reply.

Operator Response: Consult your system programmer. Determine whether or not any requestors from system sysname are using any

global resources. If any requestors are, cancel the VARY GRS(sysname),PURGE command by replying NO. If no requestors from system sysname are using global resources, reply YES. Replying YES allows system sysname to be purged from the global resource serialization complex.

If you reply YES when requestors from system sysname are using global resources, resource integrity loss could occur. (When system sysname is purged, the global resources that it owns are made available to other systems in the global resource serialization complex. If one of those systems begins using those resources while system sysname is still using them, resource integrity loss could occur.)

Programmer Response: Help the operator decide how to reply to this message.

ISG018I REQUESTORS FROM SYSTEM sysname HAVE BEEN PURGED FROM RESOURCE NAMED xxx,yyy

Explanation: The operator entered the VARY GRS(sysname),PURGE command. Global resource serialization processing has identified the tasks on system sysname that were enqueued on resource xxx,yyy and has dequeued those tasks from the resource.

The xxx and yyy fields identify, respectively, the major name of the resource, and the first 24 bytes of the minor name of the resource. Because the yyy field includes only the first 24 bytes of the resource minor name, the message text might identify a group of resources.

System Action: Processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Determine if resource xxx,yyy has been damaged (that is, if resource integrity loss has occurred), and correct if necessary. The resource might be damaged if the following events occurred:

- When the operator entered the VARY GRS(sysname),PURGE command, system sysname owned or was waiting for global resources.
- This system issued messages ISG016I and ISG017D.
- The operator replied YES to message ISG017D while requestors from system sysname were still using global resources. The YES reply allowed system sysname to be purged from the global resource serialization complex.
- As part of purge processing, global resources that system sysname owned and was still using were made available to other global resource serialization systems.
- A requestor on one of those other global resource serialization systems began using one or more of the resources that system sysname was still using.

ISG

ISG020I hh.mm.ss GRS STATUS id
 LIST TYPE QNAME RNAME
 list type qname rname flag
 SYSTEM STATE COMM SYSTEM STATE
 COMM
 sysname state comm sysname state comm
 LINK STATUS TARGET LINK STATUS
 TARGET
 ddd status targsys ddd status targsys
 S=scope qname rname flag
 SYSTEM JOB ASID TCBADDR EXC/SHR
 OWN/WAIT
 sysname jobname asid tcbaddr exc/shr own/wait
 QNAME QNAME QNAME ... QNAME
 qname qname qname ... qname

[error condition]

[DISPLAYED STATUS IS tttt SECONDS OLD]

Explanation: The operator entered a DISPLAY GRS command. In response, the display in this message shows the systems in the same global resource serialization complex as this system.

The first line always appears. The fields in this line are:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59), or 00.00.00 if the time of day (TOD) clock is not working.

id

A three-digit decimal identification number. It is used with the CONTROL C,D command to cancel status displays being written on typewriter or printer consoles or being displayed inline (that is, not in a display area) on a display console.

If no error exists, the operands on the DISPLAY GRS command determine the contents of the rest of the display, as follows:

Operator entered DISPLAY GRS,RNL =

The display gives the contents of one or all the resource name lists (RNL). The second line (LIST TYPE QNAME RNAME) appears once, and the third line appears as many times as needed.

Operator entered DISPLAY GRS,SYSTEM

The display gives information about the following systems when this system is an active global resource serialization system:

- This system.
- The other active global resource serialization systems.
- The other global resource serialization systems to which this system has CTC links.

The display gives information about the following systems when this system is an inactive, quiesced, or restarting global resource serialization system:

- This system.
- The global resource serialization systems to which this system has CTC links.

- The active global resource serialization systems, if this system has a functional CTC link to one of the active systems.

The fourth line (SYSTEM STATE COMM) appears once, and the fifth line appears as many times as needed.

The last line, DISPLAYED STATUS IS tttt SECONDS OLD, appears if this system is waiting for the configuration change serialization resource (CCSR). tttt SECONDS OLD indicates the status of the systems at that time; to obtain current status, issue DISPLAY GRS. If tttt is 0001 seconds, some other task that does not own the ENQ resource performed a refresh.

Operator entered DISPLAY GRS,LINK

The display describes the CTC adapter status. The sixth line (LINK STATUS TARGET) appears once, and the seventh line appears as many times as needed to display all of the CTC links that this system has assigned to global resource serialization.

Operator entered DISPLAY

GRS,RES = (qname,rname)

The display lists resource information. The eighth line (S = scope ...), the ninth line (SYSTEM JOB ASID ...), and the tenth line appear as a group as many times as needed to display all the resources requested by the DISPLAY command.

Operator entered DISPLAY GRS,CONTENTION

The display gives resource contention information. The eighth line (S = scope ...), the ninth line (SYSTEM JOB ASID ...), and the tenth line appear as a group as many times as needed to display all resources in contention.

Operator entered DISPLAY GRS,RES = { *|qname }

The display lists the major names. The eleventh line (QNAME QNAME ... QNAME) appears once, and the twelfth line as many times as needed to display all qnames requested by the DISPLAY command.

Operator entered DISPLAY GRS,ALL

The display gives (1) the contents of system inclusion, systems exclusion, and reserve conversion RNLs, (2) resource contention information, (3) system information, and (4) the CTC adapter status. The second through tenth lines appear as needed.

Operator entered DISPLAY GRS

The display gives the system status and the CTC adapter status. The fourth line (SYSTEM STATE COMM) and the sixth line (LINK STATUS TARGET) appear once and the fifth and seventh lines appear as many times as needed.

The meanings of the variables in the display lines are:

LIST TYPE QNAME RNAME lines

The lines of information under this heading will appear as character data. If HEX was specified on the DISPLAY GRS command, each character is translated into two hexadecimal digits vertically underneath the character, the left hexadecimal digit in the first line underneath

and the right digit in the second line underneath.

The variables in the LIST TYPE QNAME RNAME lines are:

list

One of the following:

- INCL This RNL entry is contained in the system inclusion RNL.
- EXCL This RNL entry is contained in the systems exclusion RNL.
- CON This RNL entry is contained in the reserve conversion RNL.

type

One of the following:

- SPEC The RNL entry identifies a specific resource name.
- GEN The RNL entry identifies a generic resource name.

qname

The major name portion of the resource name in the RNL requested in the DISPLAY GRS command. Any unprintable characters or digits appear as blanks.

rname

The minor name portion of the resource name in the RNL requested in a DISPLAY GRS command. Any unprintable characters or digits appear as blanks. Any rname that exceeds 39 bytes is truncated.

flag

One of the following:

- T To indicate that the rname was truncated.
- blank If the rname was not truncated.

SYSTEM STATE COMM lines

sysname

The name of a system in the global resource serialization complex.

state

One of the following:

ACTIVE

The system is a member of the global resource serialization ring.

INACTIVE

The system was an active global resource serialization system when the global resource serialization ring was disrupted. The system's control blocks show that the ring no longer exists. The system's status will change to quiesced as soon as it communicates with a global resource serialization system that has become active again. The system will suspend any of its tasks that attempt to obtain or release global resources.

QUIESCED

The system has suspended its participation in the global resource

serialization ring. The system's control blocks show that a global resource serialization ring exists. The system will suspend any of its tasks that attempt to obtain or release global resources.

JOINING

The system is processing its GRS=JOIN system parameter. It is not yet a member of either the global resource serialization ring or the global resource serialization complex.

RESTARTING

The system was an inactive or quiesced global resource serialization system when the VARY GRS(ALL),RESTART or the VARY GRS(sysname),RESTART command was entered. It continues to be a member of the global resource serialization complex, but it is not yet a member of the global resource serialization ring.

ACTIVE + VARY

The system is an active global resource serialization system that owns the configuration change serialization resource (CCSR).

ACTIVE + WAIT

The system is an active global resource serialization system that is waiting to own the CCSR.

comm

The status of communication between this system and system sysname:

YES

This system has a functional CTC link to system sysname.

NO

This system does not have a functional CTC link to system sysname.

The comm field is blank in the display entry that describes this system.

If no active systems are detected in the GRS complex, the following message will appear after the status portion of the display:

No active systems responded; some systems may not be displayed.

LINK STATUS TARGET lines

ddd

The device number of a CTC adapter belonging to this system and assigned to global resource serialization.

status

The status of CTC ddd:

IN-USE

Global resource serialization is using this CTC.

ALTERNATE

Global resource serialization is not using this CTC, but it could do so.

DISABLED

Global resource serialization does not use this CTC, and ignores any communications from it.

QUIET

Global resource serialization sent a message asking the name of the system at the other end of this CTC, but received no response.

targsys

The system at the other end of this CTC. If blank, no system has responded since this system joined the global resource serialization complex.

S=scope qname rname flag lines

This line of information will appear as character data or, if HEX was specified on the DISPLAY GRS command, as hexadecimal data. The variables in this line are:

scope

The scope requested for the resource:

STEP
SYSTEM
SYSTEMS

qname rname

The major and minor names for the resource with the indicated scope. Any unprintable characters or digits appear as blanks. Any rname that exceeds 39 bytes is truncated.

flag

One of the following:

T To indicate that the rname was truncated.

blank If the rname was not truncated.

SYSTEM JOB ASID TCBADDR EXC/SHR

OWN/WAIT lines

The lines of information under this heading will appear as character data. If HEX was specified on the DISPLAY GRS command, each character is translated into two hexadecimal digits vertically underneath the character, the left hexadecimal digit in the first line underneath and the right digit in the second line underneath.

The variables in the SYSTEM JOB ASID TCBADDR ... lines are:

sysname

The name of the system that requested the resource identified on the DISPLAY GRS command.

jobname

The name of the job that requested the resources identified on the DISPLAY GRS command.

asid

The address space identifier, which is always in hexadecimal, for the address space that requested the resource.

tchaddr

The address of the task control block (TCB) that requested the resource identified on the DISPLAY GRS command.

exc/shr

One of the following:

EXCLUSIVE

Exclusive use of the resource was requested.

SHARE

Shared use of the resource was requested.

own/wait

One of the following:

OWNER

Indicates that this is an owner of the resource.

WAITING

Indicates that this task is waiting for the resource.

If an error occurred, one of the following appears in the message:

AN INVALID QEL HAS BEEN DETECTED. NO SYSTEM WILL BE ABLE TO JOIN OR RESTART INTO THE GLOBAL RESOURCE SERIALIZATION COMPLEX UNTIL THE PROBLEM IS CORRECTED.

Global resource serialization queue scanning services detected an invalid queue element (QEL) in the resource queues. Each QEL represents a requestor of a resource. Global resource serialization will prevent a system from joining a global resource serialization complex or from restarting global resource serialization.

FUNCTION INOPERATIVE - NO STATUS

This system cannot process the DISPLAY GRS command for one of these reasons:

- This system is not part of the global resource serialization complex. This system's GRS= system parameter is NONE, or this system is still processing the GRS= system parameter START or JOIN, or an error prevented this system from processing the GRS= system parameter.
- The global resource serialization command processor, ISGCMDR, has failed.

NO ENTRIES EXIST IN THE RESERVE CONVERSION RNL

Your system has an empty RESERVE conversion resource name list.

NO ENTRIES EXIST IN THE SYSTEM EXCLUSION RNL

Your system has an empty SYSTEMS exclusion resource name list.

NO ENTRIES EXIST IN THE SYSTEM INCLUSION RNL

Your system has an empty SYSTEM inclusion resource name list (RNL).

NO GRS LINKS

Your system has no CTC links assigned to global resource serialization. Your system is the only system in the global resource serialization complex.

NO REQUESTORS FOR RESOURCE**qname,rname**

No system has requested the resources specified by the DISPLAY GRS,RES command.

NO REQUESTORS FOR RESOURCE WITH QNAME qname

No system has requested any resource with the qname specified in the DISPLAY GRS,RES command.

NO RESOURCE CONTENTION EXISTS

Global resource serialization has determined that no resource contention exists when the command was entered.

NOT ENOUGH STORAGE TO COMPLETE THE REQUEST

The display is incomplete because the DISPLAY command processor could not obtain enough storage.

RNLS ARE NOT IN EFFECT

RNLS are not being used because global resource serialization is not active.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG021I

fc-rc ERROR IN GLOBAL RESOURCE SERIALIZATION FUNCTION

Explanation: An error occurred during global resource serialization processing. If fc is 00, this system is unable to function as an active global resource serialization system, and is no longer communicating with any other global resource serialization systems.

If fc is 01, an error occurred while a global resource serialization ENF exit routine was processing a VARY ddd,OFFLINE or VARY ddd,ONLINE command. (Device ddd is a global resource serialization CTC.) VARY command processing should complete normally. However, the status of the global resource serialization control blocks describing this CTC is uncertain.

The values in the fc and rc fields identify the error:

fc Explanation

00 Module ISGBTC is reporting the error:

rc Explanation

- 00 Recovery module ISGBFRCV was entered from ISGBRSR or ISGBSRR.
- 01 The RSA (ring-processing system authority message) failed a validity check.
- 02 There is an invalid value in the RSVWLOCK field of the RSV (ring-processing system vector table).
- 03 While attempting a CTC read, this system received a nonzero return code from ISGJFE (entry point ISGJGVBF).
- 04 While attempting a CTC write, this system received a nonzero return code from ISGJFE (entry point ISGJSNBF).

05 This system entered the RMTR (resource manager termination routine) for ring processing SRBs.

06 Data in the RSA (ring-processing system authority message) did not agree with data in the RSV (ring-processing system vector table).

08 Module ISGBSM detected invalid data in the RSA-message. This error might come from a data transmission error between global resource serialization systems or from a software error on any one of the systems in the global resource serialization complex.

The global resource serialization ring will be disrupted. The QWB (queue work block) request that was received in error will be resent by the originating system. If the request is still invalid (that is, if the error was not due to transmission failure), the abend may recur. A recurring abend indicates that one of the systems in the complex is seriously damaged.

09 Module ISGBSM detected an error condition in the received RSA-message. The data received does not correspond to the data previously sent from the output RSA-message.

The global resource serialization ring will be disrupted, and the RSA data for the detecting system will be resent by the originating system. If the data being sent is changed unexpectedly in transit through the ring, the abend will recur. A recurring abend indicates that one of the systems in the complex is seriously damaged.

0A Module ISGBSM detected an invalid global resource serialization SYSID assignment table as it was helping a joining system to enter the ring. The joining system will not be permitted to join.

4B ISGBTC is unable to page fix necessary global resource serialization control blocks.

4C ISGJENF0 passed a return code indicating that it could not establish one or more of the global resource serialization ENF exit routines.

01 Module ISGJENF0's ESTAE routine (entry point ISGJENFR) is reporting the error; rc is one of the following:

01 The error occurred in entry point ISGJENF1.

02 The error occurred in entry point ISGJENF2.

03 The error occurred in entry point ISGJENF3.

04 The error occurred in entry point ISGJRTRY.

ISG

System Action: If fc is 00, the system action is as follows:

If the error occurred during system initialization, this system issues messages ISG007I and ISG009D.

If the error occurred after system initialization, this system issues message ISG022E; SOFTWARE FAILURE appears in that message text.

If fc is 01, the system records the error in SYS1.LOGREC. If this is the first error of this type, the system retries at entry point ISGJRTRY. If this is a recursion, the system percolates to the next level recovery routine.

Operator Response: Notify the system programmer.

Programmer Response: Perform the actions listed under Problem Determination. If necessary, contact your programming support personnel.

Problem Determination: Table I, items 2, 7, 18, 29, 33, and 55.

ISG022E **SYSTEM sysname DISRUPTED GLOBAL RESOURCE SERIALIZATION DUE TO COMMUNICATION FAILURE - GLOBAL SOFTWARE RESOURCE REQUESTORS WILL BE SUSPENDED**

Explanation: An error caused this system to disrupt the global resource serialization ring, and therefore all active global resource serialization systems, including this system, become inactive global resource serialization systems.

If COMMUNICATION FAILURE appears, a CTC failed, and this message follows message ISG046E, which identifies the CTC. If SOFTWARE FAILURE appears, there is a logic problem in this system's global resource serialization processing, and this message follows a message that identifies the error (either ISG021I or ISG046E).

System Action: Message ISG022E or ISG023E appears on each of the systems that became inactive global resource serialization systems as a result of this error. An inactive global resource serialization system suspends any task that attempts to obtain or release global resources.

Operator Response: It is very important that you talk to the system programmer and the operators on the other global resource serialization systems before you take any recovery action. See the operator response section of message ISG023E.

Programmer Response: Help the operators on global resource serialization systems decide how to rebuild the global resource serialization ring. See the documentation for message ISG023E.

If this system does not become an active global resource serialization system when the global resource serialization ring is rebuilt, ask the operator on one of the active global resource serialization systems to enter the VARY GRS(sysname),PURGE command, where sysname is the name of this system. Then correct the error and reload (re-IPL) this system.

Problem Determination: Table I, items 2, 7, 18, 29, 33, 43, and 55.

ISG023E **GLOBAL RESOURCE SERIALIZATION HAS BEEN DISRUPTED – GLOBAL RESOURCE REQUESTORS WILL BE SUSPENDED**

Explanation: An error caused the global resource serialization ring to be disrupted. The list of possible causes includes (but is not limited to) the following:

- A CTC between two global resource serialization systems failed.
- There was a software error in global resource serialization processing on one of the global resource serialization systems.
- The operator on one of the active global resource serialization systems stopped the system without first entering the VARY GRS QUIESCE command.

System Action: All active global resource serialization systems, including this one, become inactive global resource serialization systems. An inactive global resource serialization system suspends any task that attempts to obtain or release global resources.

If a CTC failed or a software error occurred on one of the global resource serialization systems, message ISG022E may appear on that system.

Each system that was in the ring and that specified RESTART= YES in its GRSDEF statement automatically issues the VARY GRS(ALL),RESTART command. However, only of those systems actually performs the restart. The first system to receive permission to rebuild the ring from more than half the systems that were in the ring is the system that does the restart.

When that system has received permission from more than half the systems that were in the ring, it becomes an active global resource serialization system, issues message ISG024I, and attempts to rebuild the ring.

Message ISG025E appears on each of the other systems that were in the ring. If no system specified RESTART= YES and got permission to rebuild the ring from more than half the systems, message ISG025E appears on all of the systems that were in the ring.

Operator Response: Talk to the operators of other global resource serialization systems. If one of the systems is automatically rebuilding the global resource serialization ring and issues message ISG024I, allow automatic restart processing to complete. If any of the systems that were in the ring do not become active global resource serialization systems, notify the system programmer.

If none of the systems issues message ISG024I, you or the operator on one of the other global resource serialization systems must issue the VARY GRS(ALL),RESTART command.

It is very important that you talk to the system programmer and the operators on the other global resource serialization systems. You must coordinate your recovery actions with those of the other operators, especially your use of the VARY GRS(ALL),RESTART command. Failure to coordinate your efforts could cause resource damage.

Issue the DISPLAY GRS command on as many systems as necessary to find out which global resource serialization systems can communicate with other global resource serialization systems. If a system named in the display has NO in the COMM column, then that system cannot communicate with the system on which the command was issued.

Ask the system programmer to identify the system on which the VARY GRS(ALL),RESTART command should be entered. Observe these restrictions:

- Do not issue the command on a system that is unable to communicate with other global resource serialization systems. (An exception to this restriction: you have a global resource serialization ring with only two systems, the CTC link between them failed, and you want to restart global resource serialization on one of them.)
- Wait until command processing completes before you issue the command again.
- Wait until command processing completes on one system before entering the command on another system.

Programmer Response: If none of the systems that were in the disrupted global resource serialization ring issued message ISG024I (that is, no system automatically rebuilt the ring), choose the system on which the VARY GRS(ALL),RESTART command should be entered, and tell the operators.

There are no definite rules for making this choice. Generally, consider these factors:

- Choose the system that you would select to be the active global resource serialization system if you could have only one. Suppose the restart attempt is only partially successful and only the system on which the command is entered becomes an active global resource serialization system. That system could then use the global resources it owned at the time of error, plus any global resources that were not owned by any system. The systems that do not become active global resource serialization systems could use only those global resources they owned at the time of the error.
- Choose the system that can communicate with the greatest number of other global resource serialization systems.

If the global resource serialization ring is rebuilt successfully, but one or more global resource serialization systems do not become active global resource serialization systems, do the following for each of those systems:

- Make sure that the CTCs the system was using for global resource serialization processing (or alternate CTCs) are enabled.
- Identify an active global resource serialization system that can communicate with the system that did not become active. Ask the operator of the active global resource serialization system to enter the VARY GRS(sysname),RESTART command, where sysname is the name of the active or quiesced system.

You can enter the VARY GRS(*),RESTART command on the system, but do not do so unless the system's global resource serialization status is quiesced.

If the system becomes an active global resource serialization system when the GRS RESTART command is executed, no further action is needed.

- If the system still does not become an active global resource serialization system, ask the operator on one of the active global resource serialization systems to enter the VARY GRS(sysname),PURGE command for the system. Then correct the problem and re-IPL that system.

Problem Determination: Table I, items 2, 7, 18, 29, 33, 43, and 55.

ISG024I SYSTEM sysname INITIATED AUTO RESTART PROCESSING

Explanation: The global resource serialization ring was disrupted. This system is automatically rebuilding the global resource serialization ring.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG025E SYSTEM sysname1 UNABLE TO INITIATE AUTO RESTART PROCESSING

**THIS SYSTEM IS NOT AUTHORIZED
PERMISSION GRANTED TO SYSTEM sysname2
AN ACTIVE GRS SYSTEM EXISTS
NOT ENOUGH RESPONDING GRS SYSTEMS
SYSTEM ERROR**

Explanation: The global resource serialization ring has been disrupted. This system (sysname1) is unable to automatically rebuild the disrupted ring. The reason is shown in the message text:

THIS SYSTEM IS NOT AUTHORIZED

This system's GRSDEF statement (in the GRSCNFnn member of SYS1.PARMLIB currently in use) specifies RESTART=NO.

PERMISSION GRANTED TO SYSTEM sysname2

This system gave permission to system sysname2 to automatically rebuild the ring.

AN ACTIVE GRS SYSTEM EXISTS

At least one of the systems that was in the disrupted ring is again an active global resource serialization system and is rebuilding the ring.

NOT ENOUGH RESPONDING GRS SYSTEMS

This system cannot communicate with at least half of the systems that belong to the disrupted global resource serialization ring.

SYSTEM ERROR

A system error occurred. Other messages appearing before or after this message describe the error.

System Action: System sysname1 continues to be an inactive global resource serialization system.

However, system sysname1 may have a working CTC link to one or more of the other systems that were in the global resource serialization ring. If it

does, and one of those systems becomes an active global resource serialization system, system `sysname1` then becomes a quiesced global resource serialization system.

In either case, it suspends any task that attempts to obtain or release global resources.

Operator Response: Talk to the operators of the other systems that were in the global resource serialization ring. Find out if any system issued message ISG024I and is rebuilding the ring. (Of course, if AN ACTIVE GRS SYSTEM EXISTS appears in the text of message ISG025E, one of those other systems is rebuilding or has rebuilt the ring.)

If one of the other systems is automatically rebuilding the ring, allow automatic restart processing to complete. Restart processing is complete when the system rebuilding the ring has issued a status message (ISG013I or ISG015I) for each of the systems that were in the ring.

If none of the other systems is rebuilding the ring, either you or the operator on one of the other global resource serialization systems must issue the VARY GRS(ALL),RESTART command. Be sure to read the operator response section of message ISG023E before entering the command.

If this system does not become an active global resource serialization system when the ring is rebuilt, use the DISPLAY GRS command to see if this system can communicate with an active global resource serialization system. If it can, issue the VARY GRS (`sysname`),RESTART command for this system. If it cannot, notify the system programmer.

If you issue the VARY GRS RESTART command and this system still does not become an active global resource serialization system, notify the system programmer.

Programmer Response: See the documentation for message ISG023E.

ISG026I SYSTEM `sysname` WILL RESTART AS A RING OF ONE

Explanation: The operator entered the VARY GRS(`sysname`),RESTART command, and global resource serialization processing determined that `sysname` will restart as a ring of one. There are two conditions the current global resource serialization complex may be in:

1. there are no other active or restarting systems in the complex, and restarting `sysname` is safe; or
2. there is another active or restarting system in the complex, but `sysname` cannot communicate with it and therefore does not know about the other system. This split-ring condition may cause a resource integrity exposure requiring you to re-IPL the system.

System Action: The system issues message ISG027D and waits for the operator to reply.

Operator Response: Reply to message ISG027D.

Programmer Response: None.

ISG027D CONFIRM RESTART REQUEST FOR SYSTEM `sysname` - REPLY YES OR NO

Explanation: The operator entered the VARY GRS(`sysname`),RESTART command, and message ISG026I appeared to tell the operator that `sysname` will restart as a ring of one. Message ISG027D asks the operator to confirm that `sysname` should be restarted.

System Action: The system waits for the operator to reply.

Operator Response: By talking with your system programmer, determine the condition of the global resource serialization complex.

- If no other systems are active or restarting, reply YES and allow `sysname` to restart as a ring of one. Then, restart the other inactive global resource serialization systems according to your installation's guidelines.
- If there are other systems in the complex that have restarted and become active or are in the process of restarting, reply NO to cancel the VARY GRS(`sysname`),RESTART command. This will avoid a split-ring condition. Then make sure that the CTC links are functional to an active system, and try to restart `sysname` again by entering the command on either the active system or on `sysname`.

Programmer Response: Work with the operator to determine the condition of the global resource serialization complex.

ISG031E ENQ/DEQ CONTROL BLOCKS WERE DAMAGED, RESTORATION ATTEMPTED

Explanation: The ENQ/DEQ control blocks on the resource queues contained invalid data that caused the current ENQ or DEQ request to function incorrectly.

System Action: The system repairs the resource queues and might, in the process, delete one or more control blocks.

If the task that encountered the error was processing an ENQ request, the system terminates the task with system completion code 738; if the task was processing a DEQ request, the system terminates the task with system completion code 730.

Any subsequent tasks that issue ENQ request for resources associated with the damaged control blocks will be abnormally terminated with system completion code 838.

The system will process subsequent DEQ requests.

Operator Response: Notify the system programmer.

Programmer Response: Probable system error. If necessary, contact your software support personnel.

Problem Determination: Table I, items 2, 3, 4, 13, 16, 18, and 29.

ISG032E RESOURCE NAMED xxx,yyy MAY BE DAMAGED

Explanation: This message follows message ISG033E or ISG034E. Because of the error described in message ISG033E or ISG034E, the resource named xxx,yyy might be damaged.

The xxx field contains the 8-byte major name of the resource; the yyy field contains the first 24 bytes of the minor name. Because the yyy field includes only the first 24 bytes of the resource minor name, the message text might identify a group of resources.

This message appears for each resource over which the failed task has exclusive control.

System Action: The system issues a DEQ to remove the failed task from control of resource xxx,yyy and resets the step-must-complete status. Other processing continues.

Operator Response: Notify the system programmer.

Programmer Response: Determine whether resource xxx,yyy was damaged and correct if necessary.

ISG033E { UNIDENTIFIED TASK } { JS }
 { jjj sss } { ST } FAILED
 WHILE IN MUST COMPLETE STATUS

Explanation: Either the job step task (JS) or a subtask (ST) associated with the job name (jjj) and the step name (sss) failed while operating in step must complete status. If the job name or step name is unavailable, UNIDENTIFIED TASK replaces jjj sss.

System Action: The system issues message ISG032E to identify each resource over which the failed task had exclusive control. The 'must complete' status is reset.

Operator Response: Notify the system programmer that a 'must complete' task has failed.

Programmer Response: Locate the task that failed while operating in step-must-complete status. Correct the error and run the job again.

Problem Determination: Table I, items 2, 5a, 15, 16, 29.

ISG034E { JS } FAILED WHILE IN 'STEP MUST
 { ST } COMPLETE' STATUS DUE TO { Ucde }
 { Scde }

Explanation: Either the job step task (JS) or a subtask (ST) failed while operating in 'step must complete' status. The error that caused the failure is represented by the system (Scde) or the user (Ucde) completion code.

System Action: The system issues message ISG032E to identify each resource over which the failed task had exclusive control. The 'must complete' status is reset.

Programmer Response: Locate the task that failed while operating in 'step must complete' status to

determine the cause of the failure. Correct the error and run the job again.

Problem Determination: Table I, items 5a, 15, 16, 29.

ISG035E FAILURE REQUIRES DUMP OF ASID xxxx,yyyy, AND zzzz

Explanation: A task in address space xxxx failed while holding resources being used by a task in address space yyyy. The task in yyyy continued to use the resource despite the failure. zzzz is the global resource serialization (GRS) address space.

All three address spaces named in the message should be dumped because they may have data needed to determine why the task in yyyy is continuing to use the resources.

Operator Response: Make sure that the named address spaces are dumped. xxxx may have been dumped due to the original failure. Notify the system programmer.

Programmer Response: Contact your programming support personnel.

Problem Determination: Table I, items 2, 7, 11, 16, 29.

ISG041I SYSNAME SYSTEM PARAMETER INVALID

Explanation: The SYSNAME = sysname system parameter is invalid. The operator specified the parameter, either directly or by selecting an IEASYSxx member of SYS1.PARMLIB, in response to message IEA101A SPECIFY SYSTEM PARAMETERS. The sysname must be one to eight characters, each of which is alphameric or one of these national characters: \$, #, or @.

System Action: The system issues message IEA906A and waits for the operator to reply.

Operator Response: Enter SYSNAME = sysname, where sysname is a valid system name, in reply to message IEA906A.

Programmer Response: If the invalid system name is specified in an IEASYSxx member of SYS1.PARMLIB, correct IEASYSxx.

Problem Determination: Table I, items 2 and 26c.

ISG042I GRSCNF SYSTEM PARAMETER INVALID

Explanation: The GRSCNF = nn system parameter is invalid. The operator specified the parameter, either directly or by selecting an IEASYSxx member of SYS1.PARMLIB, in response to message IEA101A SPECIFY SYSTEM PARAMETERS.

System Action: The system issues message IEA906A and waits for the operator to reply.

Operator Response: Enter GRSCNF = nn in response to message IEA906A, where nn identifies a valid GRSCNFnn member of SYS1.PARMLIB.

Programmer Response: If the invalid value for GRSCNF = nn is specified in an IEASYSxx member of SYS1.PARMLIB, correct IEASYSxx.

Problem Determination: Table I, items 2 and 26c.

ISG

ISG043I GRSCNFnn CANNOT BE READ

Explanation: An I/O error prevented the system from reading the GRSCNFnn member of SYS1.PARMLIB.

System Action: The system stops processing GRSCNFnn, issues messages ISG007I and ISG009D, and waits for the operator to reply to ISG009D. Other system initialization continues.

Operator Response: If you want this system to be part of the global resource serialization complex, re-IPL this system after you correct the problem causing the I/O error.

Programmer Response: Help the operator decide how to respond to message ISG009D. Correct the problem causing the I/O error.

Problem Determination: Table I, items 2 and 30.

ISG044I SYNTAX ERROR IN GRSCNFnn - RECORD nnnnnn

Explanation: The system was reading record number nnnnnn of the GRSCNFnn member of SYS1.PARMLIB when it recognized a syntax error. The value for nnnnnn does not include records that are blank except for a character in column 72.

If nnnnnn is one greater than the number of records in GRSCNFnn, either there is no usable GRSDEF statement for this system or the last GRSDEF statement is missing a required keyword.

If nnnnnn identifies a valid record containing the GRSDEF keyword, the previous GRSDEF statement is missing a required keyword.

System Action: The system stops processing GRSCNFnn, issues messages ISG007I and ISG009D, and waits for the operator to reply to ISG009D. Other system initialization continues.

Operator Response: Notify the system programmer. Respond to message ISG009D.

Programmer Response: If you want this system to be part of the global resource serialization complex, either re-IPL this system after you correct the error in GRSCNFnn or re-IPL using a different GRSCNFnn member of SYS1.PARMLIB.

You should also check the spelling of the sysname that the operator responded to message IEA101A with. If this sysname is misspelled, re-IPL the system using the correct sysname.

Problem Determination: Table I, items 2 and 26c.

ISG045I ERROR IN GRSCNFnn, CTC ddd - NOT A CTC
ALREADY IN USE

Explanation: There is an error in the GRSCNFnn member of SYS1.PARMLIB. If NOT A CTC appears in the message text, GRSCNFnn specified CTC ddd, but there is no CTC with that device number.

If ALREADY IN USE appears, either GRSCNFnn specifies a CTC that some other subsystem is already using, or GRSCNFnn specifies the same CTC more than once on a single GRSDEF statement.

System Action: The system issues messages ISG007I and ISG009D and waits for the operator to reply to ISG009D.

Operator Response: Notify the system programmer. Determine how to respond to message ISG009D.

Programmer Response: If you want this system to be part of the global resource serialization complex, either re-IPL this system after you correct the error in GRSCNFnn or re-IPL using a different GRSCNFnn member of SYS1.PARMLIB.

ISG046E CTC ddd DISABLED DUE TO HARDWARE
SOFTWARE

**ERROR
CODE=rc.**

Explanation: This system was using CTC ddd for global resource serialization, but the CTC has been disabled. Either there is a hardware problem in CTC ddd, or a software error damaged the global resource serialization control blocks used to control CTC ddd. The CODE=rc field contains a reason code that identifies the error:

rc	Explanation
01	The CCW op-code received through CTC ddd is one that global resource serialization processing does not recognize and never uses.
02	This system entered an IOS CTC exit routine for an invalid condition.
03	There is no read IOSB (input/output supervisor block) available.
05	CTC write error.
06	CTC write IOSB is in use and there is no write request queued.
07	CTC read error.
08	The global resource serialization CTC driver recovery was entered during a CTC write operation.
09	The global resource serialization CTC driver recovery was entered during a CTC read operation.
0B	The CTC driver could not use the CTC because there were no paths to the device.
20	Recovery module ISGBFRCV was entered from ISGBSRR1.
21	The RSAIRCD (the ring-processing system authority identity message) failed a validity check.
22	There is an invalid value in the RSLWLOCK field of the RSL (ring-processing system link control block).
23	While attempting a CTC read, this system received a return code that indicates an error condition from ISGJFE (entry point ISGJGVBF).
24	While attempting a CTC write, this system received a return code that indicates an error condition from ISGJFE (entry point ISGJSNBF).

27 A write-immediate operation on the CTC did not complete within the specified time. This error is associated with system completion code 09A.

System Action: Global resource serialization processing ignores any data it receives on CTC ddd, and stops sending data through CTC ddd. If the error is the result of a hardware error, global resource serialization processing issues the VARY ddd,OFFLINE command for the CTC. The CTC has the DISABLED status in the global resource serialization display (message ISG020I). If CTC ddd was in use at the time the error occurred, the global resource serialization ring might be disrupted.

Operator Response: If HARDWARE ERROR appears and the reason code is 05 or 07, ask the system programmer to contact your hardware support personnel.

If HARDWARE ERROR appears and the reason code is 0B, the configuration might be wrong. Verify that all required channels are varied online and that your system was initialized with the correct GRSCNF = parameter.

For other reason codes, notify the system programmer.

After the error is corrected, issue the VARY ddd,ONLINE command to make the CTC enabled for use by global resource serialization.

Programmer Response: For reason codes other than those described under Operator Response, probable system error. If necessary, contact your programming support personnel.

Problem Determination: Table I, items 2, 7, 18, 29, 30, 33, 43, and 55.

ISG047I CTC ddd { ENABLED }
{ DISABLED }

Explanation: If CTC ddd ENABLED appears, either the operator or global resource serialization processing issued the VARY ddd,ONLINE command. The CTC is available for use by global resource serialization. Global resource serialization might have issued the command because the system at the other end of the CTC is trying to join the global resource serialization complex.

If CTC ddd DISABLED appears, either the operator or global resource serialization processing issued the VARY ddd,OFFLINE command. The CTC is no longer available for use by global resource serialization. Global resource serialization might have issued the command because of an I/O error.

System Action: Processing continues.

Operator Response: None.

Programmer Response: None.

ISG048I VARY OFFLINE FOR ddd DELAYED - CTC IN USE

Explanation: The operator tried to vary CTC ddd offline, but this system uses CTC ddd to send or receive the global resource serialization RSA (ring-processing system authority message).

System Action: The system marks CTC ddd pending offline.

Operator Response: If you want to change the status of the CTC from pending offline to online, issue the VARY ddd,ONLINE command. Message ISG047I appears when the CTC is back online.

If you want to take the CTC offline, you must use the VARY GRS(sysname),QUIESCE command for at least one of the systems using the CTC.

When at least one of the systems has the global resource serialization quiesced status, reissue the VARY ddd,OFFLINE command.

Programmer Response: None.

ISG061I GRSRNL SYSTEM PARAMETER INVALID

Explanation: The GRSRNL system parameter was syntactically incorrect. The operator specified the parameter, either directly or by selecting an IEASYSxx member of SYS1.PARMLIB, in response to message IEA101A.

System Action: The system issues message IEA332A, and waits for the operator to reply.

Operator Response: Enter GRSRNL = xx or (xx,yy,...) in response to message IEA332A, where xx or (xx,yy,...) identifies valid GRSRNLxx member(s) of SYS1.PARMLIB.

Programmer Response: If the invalid value for GRSRNL is specified in the IEASYSxx member of SYS1.PARMLIB, correct it.

Problem Determination: Table I, items 2, 26c.

ISG062I GRSRNLxx CANNOT BE READ

Explanation: An I/O error prevented the system from reading the GRSRNLxx member of SYS1.PARMLIB.

System Action: The system stops processing the GRSRNLxx member, issues message ISG009D, and waits for the operator to reply.

Operator Response: Notify the system programmer. Respond to ISG009D.

Programmer Response: If you want this system to be part of the global resource serialization (GRS) complex, correct the problem causing the I/O error and re-IPL. If you want this system to continue without GRS, reconfigure any shared devices so resources that would have been protected by global resource serialization are protected by the configuration and reply NONE in response to ISG009D.

Problem Determination: Table I, items 2, 30.

**ISG063I SYNTAX ERROR IN GRSRNLxx – RECORD
nnnnnn**

Explanation: The system was reading a record from the GRSRNLxx member of SYS1.PARMLIB when it recognized a syntax error. Record nnnnnn identifies the record relative to the beginning of the GRSRNLxx member.

The value for nnnnnn does not include records that are blank except for a character in column 72. If nnnnnn is one greater than the number of records in GRSRNLxx, either there was no usable RNLDEF statement or the last RNLDEF statement is missing a required keyword. If nnnnnn identifies a valid record containing an RNLDEF keyword, the previous RNLDEF statement is missing a required keyword.

System Action: The system stops processing the GRSRNLxx member, issues message ISG009D, and waits for the operator to reply.

Operator Response: Notify the system programmer. Respond to ISG009D.

Programmer Response: If you want this system to be part of the global resource serialization complex, either re-IPL the system after you correct the error in GRSRNLxx or re-IPL using a different GRSRNLxx member. If you want this system to continue without global resource serialization, reconfigure any shared devices so resources that would have been protected by global resource serialization are protected by the configuration and reply NONE in response to ISG009D.

Problem Determination: Table I, items 2, 26c.

ISG064I INVALID REPLY

Explanation: During nucleus initialization, the last reply entered through the console did not contain the information requested by the system.

System Action: The system ignores the reply just entered, issues message ISG009D, and waits for the operator to reply.

Operator Response: Reply to message ISG009D.

**ISG065D RELOAD SYSTEM OR REPLY U OR REPLY
NONE**

Explanation: During global resource serialization initialization, an error that could affect global resource serialization processing occurred. If this message is preceded by IEA301I, one of the specified GRSRNLxx members of SYS1.PARMLIB does not exist.

System Action: The system waits for the operator to reply.

Operator Response: Notify the system programmer. Reply to message ISG065D.

Programmer Response: If you want this system to be part of the global resource serialization complex, correct the problem and re-IPL. If you want this system to continue reading the other GRSRNL system parameters specified, reply U in response to ISG065D. If you want this system to continue without global resource serialization, reconfigure any shared devices so resources that would have been protected by global resource serialization are

protected by the configuration and reply NONE in response to ISG065D.

Problem Determination: Table I, items 2, 7.

**ISG066I RESOURCE NAMED xxx,yyy TEMPORARILY
EXCLUDED FROM GLOBAL PROCESSING**

Explanation: Global resource serialization has temporarily excluded the resource named xxx,yyy from global processing to allow IPL to continue with the IBM-supplied default resource name list (RNL) or the installation RNL.

The system processed a RESERVE request for resource xxx,yyy as a local ENQ with a hardware RESERVE, thereby excluding the global request from global processing.

In the message text, xxx is the 8-byte major name of the resource and yyy the first 24 bytes of the minor name.

Note: Because only the first 24 bytes of the resource minor name are given, the message text might not fully identify the resource.

System Action: Processing continues.

Programmer Response: Make sure the resource name specified in the message text is being serialized by global resource serialization according to your installation's requirements.

Problem Determination: Table I, items 2, 26c.

**ISG067I SOURCE OF RESOURCE NAME LISTS IS
library**

Explanation: Global resource serialization loads the resource name lists (RNL) from the SYS1.LINKLIB or SYS1.PARMLIB library. The library is specified by the LINKLIB keyword in the RNLDEF statement in the GRSRNLxx member of SYS1.PARMLIB, as follows:

- If GRSRNLxx omitted the LINKLIB keyword or specified LINKLIB(NO), the RNLs are loaded from a GRSRNLxx member of SYS1.PARMLIB.
- If GRSRNLxx specified LINKLIB(YES), the RNLs are loaded from the ISGGRNL0 member of SYS1.LINKLIB.

System Action: Processing continues.

Programmer Response: If the RNLs were loaded from the correct library, no response is needed. Otherwise, change the RNLDEF statement to select the correct library and re-IPL.

**ISG068I GRSRNL SYSTEM PARAMETER NOT
SPECIFIED OR SPECIFIED INCORRECTLY.**

Explanation: The GRSRNL system parameter was not specified during system initialization. The operator can specify the parameter, either directly or by selecting an IEASYSxx member of SYS1.PARMLIB, in response to message IEA101A. The GRSRNL system parameter is mandatory when GRS=START or GRS=JOIN has been specified during system initialization.

System Action: The system issues message IEA332A, and waits for the operator to reply.

Operator Response: Enter GRSRNL = xx or (xx,yy,...) in response to message IEA332A, where xx or (xx,yy,...) identifies valid GRSRNLxx member(s) of SYS1.PARMLIB.

Programmer Response: Supply a value for GRSRNL in the IEASYSxx member of SYS1.PARMLIB. This is a required parameter when the GRS system parameter is specified as JOIN or START.

Problem Determination: Table I, items 2, 26c.

ISG071E GRS TRACING WAS NOT ACTIVATED DUE TO A LACK OF STORAGE.

Explanation: ISGTINIT, the global resource serialization (GRS) trace module, could not get sufficient extended private pageable storage for the GRS trace table.

System Action: The system continues, without GRS tracing being activated.

Operator Response: Notify your system programmer, and ask for instructions on whether you should allow the system to continue, or whether you should request a smaller trace table size and re-IPL the system.

Programmer Response: For the GRS vector table ISGGVT and nucleus CSECT ISGGRS00, review any changes or super-zaps that involved the size of the GRS trace table.

ISG072E GRS TRACING WAS NOT ACTIVATED DUE TO AN ERROR IN LOADING THE TRACE MODULES.

Explanation: ISGNASIM, the global resource serialization (GRS) initialization module, could not successfully load the GRS trace modules.

System Action: The system continues, without GRS tracing being activated.

Operator Response: Notify your system programmer, and ask for instructions on whether you should allow the system to continue.

Programmer Response: Review the installation of ISGTINIT and ISGTTRAC, the GRS trace load modules, to be sure they were successfully installed.

ISG073E GRS TRACING WAS NOT ACTIVATED DUE TO AN UNEXPECTED ERROR.

Explanation: An unexpected error occurred during the initialization processing for the global resource serialization (GRS) trace.

System Action: The system continues, without GRS tracing being activated.

Operator Response: Notify your system programmer, and ask for instructions on whether you should allow the system to continue.

Programmer Response: Contact IBM for programming support.

ISG080E AUTO RESTART PROCESSING TERMINATED BY SYSTEM sysname. AN OPERATOR MUST ENTER A VARY-GRS RESTART COMMAND AND MUST RESPOND TO OPERATOR PROMPTS.

Explanation: Automatic rebuilding of the global resource serialization ring was terminated because some systems did not communicate with sysname. The non-communicating systems may have information about multi-system ENQ/DEQ activity that is needed to rebuild the global resource serialization ring.

System Action: AUTO RESTART is terminated. None of the systems will initiate AUTO RESTART.

Operator Response: Enter DISPLAY GRS to determine whether global resource serialization links have been disabled. Identify the systems that did not communicate (indicated by a NO in the COMM column of the display).

An operator on one of the systems should issue a VARY GRS RESTART command. This command might produce messages ISG081E and ISG082D. The operator should be prepared to stop some systems in response to message ISG081E, or to cancel the VARY GRS RESTART command by responding NO to message ISG082D.

Programmer Response: None.

ISG081E STOP ALL REQUIRED SYSTEMS BEFORE CONFIRMING REBUILD-RING COMPLETION. THESE SYSTEMS SHOULD NOT BE ALLOWED TO BECOME ACTIVE GRS SYSTEMS IF REBUILD-RING COMPLETION IS CONFIRMED.

Explanation: The operator entered a VARY GRS RESTART command to rebuild the global resource serialization ring, but the systems named in the ISG123I messages that preceded this message did not respond. These systems contain information about multi-system ENQ/DEQ activity that is needed to rebuild the ring. If the global resource serialization ring is rebuilt without this information, data used by the global resource serialization ring could be destroyed. To prevent this, the indicated systems must be stopped and re-IPLed once the RESTART RING operation is complete.

This message is followed by message ISG082D.

System Action: The system issues message ISG082D and waits for the operator to reply.

Operator Response: Stop the systems listed in the preceding ISG123I messages and prepare to respond to message ISG082D.

Programmer Response: None.

ISG082D CONFIRM REBUILD-RING FOR SYSTEM sysname - REPLY NO OR YES

Explanation: This message follows message ISG081E and one or more occurrences of message ISG123I. The VARY GRS RESTART command was issued on sysname, but the systems listed in the preceding ISG123I messages must be stopped before the global resource serialization ring can be rebuilt. Message ISG082D asks the operator whether the VARY GRS RESTART command should continue or be cancelled.

System Action: The system waits for the operator to reply.

Operator Response: Reply NO to terminate the VARY GRS RESTART command if

1. You are uncertain how to proceed. Consult the system programmer.
2. Some of the links used by global resource serialization are offline but will soon be online. Vary these links online and then re-enter the VARY GRS RESTART command. (Issue DISPLAY GRS to determine the state of the links used by global resource serialization. Some of these links might be marked DISABLED because they have been varied offline as the result of I/O errors.)

Reply YES to complete the VARY GRS RESTART command if

1. All the indicated systems have been stopped and will be re-IPLed.
2. You have been instructed to reply YES by the system programmer.

Programmer Response: None.

ISG083E GRS CANNOT SEND ACK-TAP SIGNALS TO SYSTEM sysname

Explanation: The system cannot send the required signal to **sysname** to report that it has successfully received the RSA-message.

System Action: Performance of **sysname** may be degraded.

Operator Response: Inform the system programmer. Use DISPLAY GRS to determine whether global resource serialization links to **sysname** have been varied offline or disabled because of I/O errors.

Programmer Response: Determine whether global resource serialization should be given additional links in order to prevent recurrence of this condition. Determine whether the performance of **sysname** is unacceptable.

This message is deleted if the global resource serialization ring is disrupted, if the issuing system is removed from the global resource serialization ring by a VARY GRS QUIESCE command, or if global resource serialization finds an alternate link.

ISG085E GRS IGNORED AN INCORRECT FAST-DEQ SLOT-COUNT VALUE

Explanation: CSECT ISGGRS00 was incorrectly changed by the use of the AMASPZAP service aid.

System Action: The system ignores the incorrect value.

Operator Response: Inform the system programmer.

Programmer Response: Change the incorrect value.

ISG086E C2-rc ERROR OCCURRED IN PROCESSING GRS {START|JOIN|NONE} OPTION. GRS PERFORMANCE MAY BE DEGRADED.

Explanation: The system encountered an insufficient-storage condition (rc=06) or an unexpected error (rc=04) initializing global resource serialization.

System Action: System initialization proceeds, but global resource serialization performance may be degraded. All DEQs for global resources must be seen by all systems before the resources are freed.

Operator Response: Inform the system programmer.

Programmer Response: Call IBM for support.

ISG100E SYSTEM sysname IS STILL AN ACTIVE GRS SYSTEM

Explanation: The VARY GRS PURGE command was issued for **sysname**, but **sysname** is an active global resource serialization system.

System Action: The system issues message ISG101D to determine whether the PURGE command should continue or be cancelled, and waits for the operator to reply.

Operator Response: Reply to message ISG101D.

Programmer Response: None.

ISG101D CONFIRM PURGE FOR ACTIVE SYSTEM sysname - REPLY NO OR YES

Explanation: This message follows message ISG100E. The VARY GRS PURGE command was issued for **sysname**, but **sysname** is still an active global resource serialization system. If **sysname** owns global resources and you reply YES, all of the resource requests for that system are freed, which can create a data integrity exposure.

System Action: The system waits for the operator's response. If you reply YES, **sysname** will be quiesced and then purged from the complex. All resource requests for **sysname** will be deleted. If you reply NO, the system issues message ISG102I, indicating that the command has been cancelled.

Operator Response: Consult the system programmer. Determine whether there are any requestors from **sysname** using global resources. If there are, reply NO to cancel the VARY GRS(**sysname**),PURGE command.

Note that if there are requestors from **sysname** using global resources, failure to discontinue the PURGE command will result in resource integrity loss.

If there are no requestors from **sysname** using global resources, reply YES to purge **sysname** from the global resource serialization complex.

Programmer Response: None.

ISG102I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - REQUEST CANCELLED BY OPERATOR

Explanation: The operator responded NO to message ISG101D.

System Action: The PURGE command is cancelled.

Operator Response: None.

Programmer Response: None.

ISG103I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - SYSTEM CANNOT PURGE ITSELF

Explanation: A VARY GRS PURGE command was issued on *sysname* to purge *sysname* from the complex. Global resource serialization does not allow a system to purge itself.

System Action: The PURGE command is cancelled.

Operator Response: To purge *sysname* from the complex, issue the VARY GRS PURGE command on another active system. If *sysname* is the only system left in the complex, you cannot perform a purge.

Programmer Response: None.

ISG104I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - SYSTEM REQUIRED IN GRS COMPLEX

Explanation: A VARY GRS PURGE command was entered to perform a purge of *sysname*. Because *sysname* is an active system, the system that received this message attempted to quiesce *sysname* before performing the purge. However, *sysname* could not be quiesced because it is required for the operation of the global resource serialization ring; that is, the other systems in the complex need *sysname* in order to communicate.

System Action: The system rejects the command.

Operator Response: Make sure that the required CTC link connections are enabled and online.

Programmer Response: Help the operator determine the link problem.

ISG106I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - THIS SYSTEM IS NOT AN ACTIVE GRS SYSTEM

Explanation: A VARY GRS PURGE command to perform a purge of *sysname* was entered on the system that received this message. The system that received this message is no longer an active system, and therefore cannot perform the purge.

System Action: The system rejects the command.

Operator Response: If a ring disruption was in progress when the command was entered, reissue the command on the same system once the ring has been rebuilt. If this system does not become active, enter the command on an active global resource serialization system.

Programmer Response: None.

ISG110E NO ACTIVE SYSTEMS WERE FOUND IN THE GRS COMPLEX. REACTIVATE SHOULD BE ATTEMPTED IF THERE ARE NO ACTIVE GRS SYSTEMS IN OPERATION. REACTIVATE MUST NOT BE ATTEMPTED IF THERE ARE ACTIVE SYSTEMS.

Explanation: A VARY GRS RESTART command was entered on the system that received this message, but all systems in communication with this system have been quiesced from global resource serialization.

System Action: The system issues message ISG111D to determine if the REACTIVATE function should proceed.

Operator Response: Respond to message ISG111D.

Programmer Response: None.

ISG111D CONFIRM REACTIVATE SHOULD BE ATTEMPTED - REPLY NO OR YES

Explanation: The system performed global resource serialization validity checks and found no active systems in the complex. This message prompts the operator for initial authority to override global resource serialization validity checks. Message ISG110E always precedes this message.

The decision to override global resource serialization validity checks may cause systems to damage data controlled by global resource serialization. Consult the system programmer each time this message appears unless you have been given explicit procedures for responding.

System Action: The current VARY GRS RESTART command is suspended, and the system waits for the operator to reply.

Operator Response: Issue DISPLAY GRS.

- Note which systems appear in the SYSTEM portion of the DISPLAY GRS display. Also note which systems do not appear. Be prepared to report any unusual conditions associated with the systems not listed (such as spin loop conditions, console lockouts, or recent SDUMPS) to the system programmer.
- Note which links appear as QUIET or DISABLED in the STATUS column of the DISPLAY GRS display. Be prepared to report any unusual conditions associated with those links (such as channel-path problems, messages from IOS, or the occurrence of message ISG046E) to the system programmer.
- Note all occurrences of messages ISG112I, ISG113I, and ISG114I (these messages may be issued one or more times). Note the system named in each message, and note any systems that are not mentioned in any of these messages. You will need this information in order to respond to message ISG117D, which prompts you for final authority to override global resource serialization validity checks.
- Respond as follows:
 1. Reply NO and reissue the VARY GRS RESTART command later. Messages ISG110E and ISG111D are reissued if they are still necessary.

2. Reply YES to this message only upon explicit instructions from the system programmer.

Programmer Response: Evaluate the state of all systems in the complex.

Instruct the operator to reply NO to this message if there are active or inactive global resource serialization systems in the complex that are expected to remain in the complex and should not be purged. These systems may have lost communication with this system or have been in a stopped or disabled state (such as an SDUMP or a spin loop).

Repair any communication problems. Wait for all systems in the complex to become enabled and restart any inactive systems. Then issue the VARY GRS RESTART command from an active system.

Instruct the operator to reply YES to this message only after evaluating the complex and verifying that all systems to remain in the complex are currently quiesced.

ISG112I SYSTEM *sysname* RESPONDED WITH GLOBAL RESOURCE STATUS - IT WILL BE PERMITTED TO RESTART AFTER REACTIVATE COMPLETES.

Explanation: *Sysname* responded to a status request from the reactivating system, and has confirmed that the reactivating system is quiesced. The reactivating system was in an active state more recently than *sysname* and has more up-to-date resource status than *sysname*.

System Action: The system issues message ISG117D and waits for the operator to reply.

Operator Response: Respond to message ISG117D. Note that *sysname* can rejoin the complex once this system has reactivated itself.

Programmer Response: None.

ISG113I NO RESPONSE RECEIVED FROM SYSTEM *sysname* - IT MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: *Sysname* did not respond to a status request from the reactivating system. There is no way for the reactivating system to know the state of *sysname*. The operator and the system programmer need to determine the actual state of the system and respond to message ISG117D accordingly.

System Action: The system issues message ISG117D and waits for the operator's response.

Operator Response: Determine the state of *sysname* and the reason it did not respond. Consult the system programmer.

Programmer Response: Work with the operator to determine the state of *sysname*. Check the links to *sysname*.

If you want *sysname* to remain in the global resource serialization complex, reply NO to message ISG117D, fix any link problems, and then reissue the RESTART command.

If you do not want *sysname* to remain in the global resource serialization complex, ensure that it is

stopped (no longer using global resources) and reply YES to message ISG117D.

ISG114I RESOURCE STATUS NOT RECEIVED FROM SYSTEM *sysname* - IT MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: *Sysname* responded to a status request from the reactivating system, but its response did not contain resource status information. *Sysname* might have more current resource information, but it cannot reactivate the ring.

System Action: The system issues message ISG117D and waits for the operator to reply.

Operator Response: Notify the system programmer.

Programmer Response: If you want the reactivation to proceed, stop *sysname* and then issue a re-IPL. Failure to take this precaution could cause a resource integrity exposure.

ISG115I IF ANY SYSTEMS WERE NOT LISTED IN THE PREVIOUS LIST, THEY ARE UNKNOWN TO THIS SYSTEM - THEY MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: Messages ISG112I, ISG113I, and ISG114I were issued for systems in the global resource serialization complex in preparation for requesting final authority to override global resource serialization validity checks. Any systems that were not listed in these messages did not respond to the status request, and must have joined the global resource serialization complex after the reactivating system had been quiesced.

See message ISG117D for further information.

System Action: The system issues message ISG117D and waits for the operator to reply.

Operator Response: Notify the system programmer.

Programmer Response: Determine if any systems were not listed in messages ISG112I, ISG113I, and ISG114I. If a system was not listed, and you want it to remain in the global resource serialization complex without a re-IPL, cancel the REACTIVATE command.

ISG116E STOP INDICATED SYSTEMS BEFORE CONFIRMING REACTIVATE COMPLETION. REPLY NO TO CANCEL REACTIVATE.

Explanation: The system has issued messages ISG112I, ISG113I, ISG114I, and ISG115I in preparation for requesting final authority to override global resource serialization validity checks. Message ISG117D always follows this message.

If the reactivation is to continue, all systems that are not going to participate in the reactivated complex must be stopped, leaving the reactivating system and those systems listed in message ISG112I.

System Action: The system issues message ISG117D and waits for the operator to reply.

Operator Response: Notify the system programmer.

Programmer Response: Gather information about the state of the complex (see message ISG117D).

ISG117D CONFIRM REACTIVATE SHOULD BE COMPLETED - REPLY NO OR YES

Explanation: This message follows ISG116E and prompts the operator for final authority to override global resource serialization validity checks. The decision to override global resource serialization validity checks can cause damage to global resources. Unless you have been given explicit rules for responding, consult the system programmer each time this message appears.

System Action: The VARY GRS RESTART command is suspended, and the system waits for the operator to reply.

Operator Response: Note which systems were named in messages ISG112I, ISG113I, and ISG114I and which systems throughout the complex were not named in these messages. Be prepared to verify that systems have been stopped, and to give instructions that a re-IPL must be issued for each of these systems.

Respond NO to this message and reissue the VARY GRS RESTART command later. Messages ISG110E through ISG117D will be reissued if necessary.

Programmer Response: Determine the status of all systems in the complex, referring to messages ISG112I, ISG113I, ISG114I, and ISG115I.

If you do not want the reactivation to continue, reply NO.

If you want the reactivation to continue, instruct the operator to stop all systems listed in messages ISG113I and ISG114I. Also stop those systems that were not listed in messages ISG113I and ISG114I). Quiesce the remaining systems, those systems listed in message ISG112I. Failure to take this precaution could cause a data integrity exposure. Then reply YES.

ISG118I REACTIVATE FUNCTION IS COMPLETE. SYSTEM *sysname* HAS RESTARTED AS A RING OF ONE SYSTEM.

Explanation: The operator responded YES to message ISG117D to reactivate the ring. The function has completed successfully, and the active ring (of one system) has been rebuilt.

Sysname is now in an active state, and the other systems are in a quiesced state.

System Action: None.

Operator Response: You can restart the systems listed in message ISG112I with the VARY GRS(*sysname*),RESTART command. You can purge the systems listed in messages ISG113I and ISG114I with the VARY GRS(*sysname*),PURGE command, and then re-IPL each of the systems within the new complex.

Programmer Response: None.

ISG119I VARY RESTART REQUEST FOR SYSTEM *sysname* IGNORED DUE TO OPERATOR RESPONSE

Explanation: The operator cancelled the RESTART request by responding NO to message ISG082D.

System Action: The RESTART command was cancelled.

Operator Response: None.

Programmer Response: None.

ISG120I VARY RESTART REQUEST FOR SYSTEM *sysname* IGNORED DUE TO STATE OF GRS COMPLEX

Explanation: The operator responded YES to message ISG082D to continue the reactivation in response to a RESTART command, but the state of the complex changed and the reactivation could not continue. Either an active system, an inactive system, or a system that was active after the reactivating system had entered its quiesced state was found.

System Action: The RESTART command and the reactivation are cancelled.

Operator Response: Determine which system caused the state of the complex to change.

Programmer Response: None.

ISG121I VARY RESTART REQUEST REJECTED - ENTER COMMAND ON SYSTEM *sysname*

Explanation: A VARY GRS RESTART command was entered on the system that received this message, but all responding systems in the complex were found to be quiesced. *Sysname* has more up-to-date global resource information than this system because it was in an active state more recently.

System Action: The system on which the command was entered rejects the command.

Operator Response: If there is no active system in the complex, enter the VARY GRS RESTART command from *sysname*.

If there is an active system in the complex, check the links between systems and correct any connectivity problems. Make sure the active system is able to respond (that is, it is not disabled because of a spin loop or an SDUMP, or in a stopped state). Then restart the system on which the VARY GRS RESTART command was entered from the active system.

Programmer Response: None.

ISG122I VARY RESTART REQUEST REJECTED - DUE TO STATE OF SYSTEM *sysname*

Explanation: A VARY GRS RESTART command was entered on the system that received this message. No active systems were found, and *sysname* reported a state of INACTIVE.

System Action: The system rejects the command.

Operator Response: If a ring disruption is in progress, wait until the complex is stable. If *sysname* is not brought automatically into the ring,

ISG123I – ISG123I

reissue the VARY GRS(*),RESTART command on this system.

If the ring does not rebuild, issue the VARY GRS(ALL),RESTART command on **sysname** to bring it and any other inactive systems to an active state.

Programmer Response: None.

ISG123I SYSTEM **sysname** GAVE NO RESPONSE - IT MUST BE STOPPED BEFORE CONFIRMING REBUILD-RING COMPLETION

Explanation: The operator entered a VARY GRS RESTART command to rebuild the global resource serialization ring, but **sysname** did not respond. **Sysname** contains information about multi-system ENQ/DEQ activity that is needed to rebuild the ring.

System Action: After one or more occurrences of message ISG123I, the system issues messages ISG081E and ISG082D.

Operator Response: Stop the system(s) indicated in message ISG123I, or prepare to terminate the VARY GRS RESTART command by replying NO to message ISG082D.

Programmer Response: None.

Data-in-Virtual Messages (ITV)

Component Name	Data-in-Virtual
Program Producing	Data-in-Virtual Message
Audience and Where Produced	For the user of IPCS: at the terminal and at the IPCS print file for some designated messages.
Message Format	<p>ITVnnnnnt text</p> <p>ITV Component identifier</p> <p>nnnnn Message serial number.</p> <p>t Type code: A Action; the user must perform a specific action. D Decision; the user must choose an alternative. E Error; the user must correct the error before continuing. I Information; no user action is required.</p> <p>text Message text.</p>
Related Publications	<p><i>MVS/XA Data Administration: Macro Instruction Reference, GC26-4014</i></p> <p><i>MVS/XA Integrated Catalog Administration: Access Method Services Reference, GC26-4019</i></p> <p><i>MVS/XA IPCS Logic and Diagnosis, LY28-1298</i></p> <p><i>MVS/XA IPCS Command Reference, GC28-1408</i></p> <p><i>MVS/XA Message Library: System Codes, GC28-1157</i></p> <p><i>MVS/XA SPL: Service Aids, GC28-1159</i></p> <p><i>MVS/XA SPL: System Macros and Facilities, Volumes 1 and 2, GC28-1150, GC28-1151</i></p> <p><i>MVS/XA SPL: System Modifications, GC28-1152</i></p> <p><i>MVS/XA TSO Guide to Writing a Terminal Monitor Program (TMP) or a Command Processor, GC28-1295</i></p> <p><i>MVS/XA TSO Terminal Messages, GC38-1046</i></p> <p><i>MVS/XA VSAM Catalog Administration: Access Method Services Reference, GC26-4075</i></p>

ITV001I DATA-IN-VIRTUAL TRACING TERMINATED DUE TO LACK OF STORAGE

Explanation: The system could not obtain storage for the data-in-virtual trace table or the data-in-virtual component trace table control area.

System Action: The system failed to obtain the correct amount of storage from SQA/ESQA, subpool 245. The required amount of storage was specified in the data-in-virtual information block extension (DIBX). If the amount specified in the DIBX was greater than 10 pages, the system then tried but failed to obtain a 10-page trace table. Data-in-virtual processing continues, with tracing turned off.

Operator Response: None.

Programmer Response: If you need data-in-virtual, determine the cause of the storage deficiency and re-IPL the system to activate tracing.

Problem Determination: Table I, items 29 and 54.

ITV002I DATA-IN-VIRTUAL TRACING IS USING A TABLE SIZE SMALLER THAN REQUESTED

Explanation: The data-in-virtual information block extension (DIBX) contained a request for a data-in-virtual trace table size which is greater than 10 pages. There was not enough storage in SQA/ESQA, subpool 245, to meet the request.

System Action: The system obtained a smaller, 10 page table, and the DIBX contains the new data-in-virtual trace table size. Data-in-virtual processing continues.

Operator Response: None.

Programmer Response: If the DIBX indicates a request for an SVC dump to be taken as the table is about to wrap, the smaller trace table size will cause the SYS1.DUMP datasets to fill up faster because the trace table will wrap more frequently and cause more dumps to be taken. If you need a larger table size, determine the cause of the storage deficiency, update the the DIBX with the trace table size you want, and re-IPL the system.

Problem Determination: Table I, items 29 and 54.

ITV



Problem Determination

Problem determination is the activity required to identify a failing hardware unit or program and determine who is responsible for support.

Problem determination is accomplished by using procedures specified by IBM. In some cases, these procedures may be initiated by a message or code which requires operator or programmer response. The response may include the requirement for additional problem-related data to be collected

and will attempt, where possible, to indicate "probable" failure responsibility.

Problem determination information is included for applicable messages and codes under the heading "Problem Determination." Standard problem determination actions are identified as items of Tables I and II. Unique actions are identified following the list of standard actions to be taken. In any case, it is intended that the specified actions be taken before calling IBM for support.

TABLE I

If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support.

1. If MSGLEVEL=(1,1) was not specified in the JOB statement, specify it and rerun the job.
2. Save the console sheet from the primary console. For systems with remote consoles, save the remote console sheet. In systems with Multiple Console Support (MCS), save a copy of the hard copy log.
3. Save the job stream associated with the job.
4. Save the system output (SYSOUT) associated with the job.
5. Make sure that the failing job step includes a:
 - a. SYSABEND DD statement.
 - b. SYSUDUMP DD statement.
 - c. PLIDUMP DD statement.
 - d. SYSDUMP DD statement.
6. Make sure that the PARM parameter of the EXEC statement specifies the following:
 - a. MAP
 - b. LIST
 - c. DIAG
 - d. MSG=AP
 - e. CORE, if applicable
 - f. XREF
 - g. DUMP
7. If SMP is used to make all changes to the system, execute the LIST CDS and LIST PTFBY functions of SMP to obtain a list of the current maintenance from the SMP control data set (CDS).

If any changes are made to the system without using SMP, execute the LISTIDR function of the AMBLIST service aid program to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the:

 - a. SYS1.LINKLIB data set.
 - b. SYS1.SVCLIB data set.
 - c. library containing the program that issued the message.
 - d. SYS1.LPALIB data set.
8. Execute the IMCJOBQD (stand-alone) or IMCOSJQD (system-assisted) service aid program to obtain a formatted copy of the contents of the SYS1.SYSJOBQE or SYS1.SYSWADS data sets, SWADS or the resident job list. (Not applicable for VS2 MVS.)

9. Execute the AMBLIST service aid program to obtain:
 - a. an object module listing, specifying the LISTOBJ function.
 - b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function.
10. Have a copy of the Message Control Program (MCP) available.
11. Execute the AMDSADMP service aid program to dump the contents of real storage and page data sets on magnetic tape.

After restarting the system, execute the appropriate function of the AMDPRDMP service aid program to print the required portion of the dump tape produced by AMDSADMP.

Save both the tape from AMDSADMP (should further information from the tape be required) and the listing from AMDPRDMP.
12. Execute the SEREP program, and save the resulting output.

(Note: The SEREP program is not supported on processors in the 4300 series.)
13. Save all the associated output.
14. The normal response to this message requests the programmer/operator to execute a specific program. Save all output from that program.
15. Save the program listing associated with the job.
16. Save the dump.
17. Have the system generation (SYSGEN) output available from:
 - a. Stage I
 - b. Stage II
18. Execute the EREP service aid, to dump the SYS1.LOGREC data set and save the resulting output.

For MSS, execute the following program to dump the SYS1.LOGREC data set:

 - a. Service aid IFCISDA0
 - b. Program ISDASDA0 with the DETAIL(ALL) parameter.
19. Save the assembly listing associated with the job.
20. Save the control cards associated with the job.
21. Save the compiler output associated with the job.
22. Save the source input associated with the job.
23. Save the source program listing associated with the job.

24. Run OLTEP diagnostics for the problem device and save the output.
25. Execute the IEHLIST system utility program to obtain a list of the:
 - a. volume table of contents of the associated volume, specifying the FORMAT option.
 - b. volume table of contents of the associated volume, specifying the DUMP option.
 - c. directory of the associated data set
 - d. (Not applicable for MVS.)
26. Execute the IEBPTPCH data set utility to print the:
 - a. directory of the applicable data set.
 - b. applicable data set.
 - c. applicable member.
 - d. applicable procedure.
27. Have the linkage editor/loader map available.
28. Save the associated volume.
29. Contact your programming support personnel.
30. Contact your hardware support personnel.
31. Save the trace output data set.
32. Print the GTF trace data set with the AMDPRDMP service aid program using the EDIT statement.
33. Print the associated SVC Dump data set, using the AMDPRDMP service aid with the GO statement.
34. Execute the access method services LISTCAT command to:
 - a. list the contents of the applicable catalog.
 - b. list the catalog entries for the applicable objects and any related objects.
35. Execute the following access method services command:
 - a. The MSS LISTMSF command for mountable volumes.
 - b. The MSS LISTMSF command with the CARTRIDGES parameter.
 - c. The PRINT command to list the contents of the mass storage volume control inventory data set.
 - d. The LISTMSVI command.
 - e. The LISTMSF command with the ALL parameter.
36. Execute the access method services PRINT command to print the repair work file.
37. Execute the AMASPZAP service aid program using the ABSDUMP statement to print the contents of the applicable:
 - a. Data set.
 - b. Track.
38. Execute the access method services AUDITMSS command with the following parameter:
 - a. The CHECK parameter.
 - b. The MAP parameter.
 - c. The READLABEL parameter.
39. Execute the access method services CHECKMSS command.
40. Execute the access method services COMPARET command.
41. Execute the access method services DUMPMSS command to dump the following:
 - a. Formatted mass storage control storage.
 - b. Mass storage control main storage.
 - c. Mass storage control extended storage.
 - d. Formatted Staging Adapter storage.
 - e. Staging Adapter main storage.
 - f. Staging Adapter extended storage.
 - g. Mass storage control tables.
42. Save the latest output from the Mass Storage Control Table Create program.
43. Display units for units associated with the problem area. If specific unit(s) is not known, display range of all virtual units. See your configuration path chart for address ranges.
44. Obtain the RACF profile of the associated data set, where applicable.
45. Stop the processor and use the hardware ALTER/DISPLAY facility to display:
 - a. all general purpose registers.
 - b. the PSW.
 - c. main storage locations 0 through 200 (hexadecimal) and 7000 through 7080 (hexadecimal).
46. If the AMDSADMP program resides on tape, save the tape. If the AMDSADMP program resides on disk, use the DUMP feature of IEHDASDR to print the SYS1.PAGEDUMP data set and cylinder 0 track 0 of this residence disk.
47. Save the output (listings) of the stage 1 and stage 2 AMDSADMP initialization jobs. ✓
48. Follow the procedures for item 9b of this table for load modules AMDSAPGE, AMDSAPRO and AMDSALDR of SYS1.LINKLIB. Use IEBUPDTE or IEBPTCH to print the AMDSADMP and AMDSADM2 macros from SYS1.MACLIB.
49. Save the AMDSADMP dump output (tape or listing).
50. If the program seems to be looping, use the display PSW feature of the hardware ALTER/DISPLAY facility along with the hardware instruction Step facility to trace the loop, instruction by instruction.
51. If there is an error in the contents of a page data set dump, restart the system using a different page data set, then dump the original page data set.
52. Use IEBCOPY to unload SYS1.IMAGELIB to tape.
53. Have a list of RACF-defined entities available.
54. Contact your IBM system engineer.
55. Save the console sheets from all active global resource serialization systems, and from any systems that are restarting or joining the global resource serialization complex.
56. Use the following instructions to find the IPL WTO buffer and locate a message in that buffer.

Before a stand-alone dump is taken:

 - a. Using the hardware ALTER/DISPLAY facility, read the address in storage location x'14'; this address points to the IPL diagnostic area.
 - b. Add x'28' to the address in location x'14'; the result is a 31-bit pointer to the virtual address of the IPL vector table (IVT).
 - c. Add x'E0' to the IVT address; the result is a 31-bit pointer to the IVTMQHP field of the IVT. IVTMQHP contains the address of the message queue header (MQH).
 - d. Add x'8' to the address of the MQH; the result is a 31-bit pointer to the youngest message queue element (MQE), which is the message you want to see.
 - e. Add x'A' to the address of the MQE; the result points to the MQETEXT field of the MQE. MQETEXT contains the text of the most recent message.

After a stand-alone dump has been taken and copied to DASD, you may use either ISPF browse or IPCS to find the buffer and locate a message:

- Using ISPF browse
 - a. Search the dump for the message string you want to locate. For example, if your system is in a wait state, code 055, you want to locate message IEA086W; so enter Find 'IEA086W'.
 - b. Repeat Find 'message ID' until you have located all occurrences of that message.
- Using IPCS
 - a. Enter the VERBX CPUDATA command to get the value in control register 1; this value points to the segment table.
 - b. Enter the EQUATE command to equate the segment table (SGT1) to the value in control register 1. Ignore the low-order byte; the segment table will always be on a page boundary. An example of this EQUATE command follows:

```
EQU SGT1 FFE000. ABSOLUTE STR(SGT)
```
- c. Enter EQU PSA0 0. ABSOLUTE to equate PSA0 to absolute location 0.
- d. Enter DROPD RECORDS(TRANSLATION) to reinitialize the dump so that IPCS can process virtual addresses in the dump.
- e. The IPL vector table (IVT) will always be at virtual storage address x'2000 1000'. Add x'E0' to the IVT address; the result is a 31-bit pointer to the IVTMQHP field of the IVT. IVTMQHP contains the address of the message queue header (MQH).
- f. Add x'8' to the address of the MQH; the result is a 31-bit pointer to the youngest message queue element (MQE), which is the message you want to see.
- g. Add x'A' to the address of the MQE; the result points to the MQETEXT field of the MQE. MQETEXT contains the text of the most recent message.

TABLE II

GTF for Problem Determination

Format 1: Tracing Without Prompting for Event Keywords

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message AHL100A the operator should type TRACE=opt, where opt is the trace option indicated for the particular message or code, within the text of his reply.

When data for the problem has been recorded, run the AMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).

Format 2: Tracing With Prompting for Event Keywords

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to the message AHL100A the operator should specify the trace options indicated for the associated message or code within the text of his reply. Then, in response to the message AHL101A, he should specify the event keywords also indicated with the associated message or code.

When data for the problem has been recorded, run the AMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).

Format 3: Specialized Tracing Action

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message AHL100A the operator should type 'TRACE=SYS,USR,SLIP'. The DD statement for a data set in error should specify DCB=DIAGNS=TRACE.

When data for the problem has been recorded, execute the EDIT function of AMDPRDMP specifying the options SYS, USR=FFF, and SLIP.

Format 4: Specialized Tracing Action for VSAM

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message AHL100A the operator should type 'TRACE=SYS,USR'. The DD statement for a data set in error should specify AMP=TRACE.

When data for the problem has been recorded, execute the EDIT function of AMDPRDMP specifying the options SYS and USR=(FFF,FF5).

TABLE III

If a problem occurs in JES3, one or more of the following steps may be taken to assist in determining the cause:

1. Take a stand-alone dump of the system by specifying DUMP=PRDMP on the OPTIONS card in the initialization deck and save the output (SYS1.DUMPnn).
2. Take a standard dump of the system by specifying DUMP=JES on the OPTIONS card in the initialization deck and save the output (JESABEND).
3. Take an operating system dump including the nucleus and SQA by specifying DUMP=MVS on the OPTIONS card in the initialization deck and save output (SYSABEND).
4. Save the MLOG listing or get a print of DLOG.
5. Provide listing of initialization deck (JES3OUT).
6. Provide console log from initialization.
7. Ascertain OS/V S level and JES3 PTF level.
8. Provide OS/V S nucleus LOADMOD map.
9. Issue *F T,L=linename, SNAPON and *X RJPSNPS.
10. Issue *F T,L-linename,TRCEON. This will give an RJP event trace on the MLOG console. Save MLOG output.
11. Take a system dump by placing an INTDEBUG,n, message-text\$\$ card in the initialization deck. The message-text field is compared for occurrences of the chosen message. The n field specifies the number of message occurrences before the system is dumped.
12. Issue *X DISPLAY and save output.
13. Issue *X DISPLAY,SNAPS and save the output.
14. Rerun job with *//*PROCESS CBPRNT* and save output.
 - a. After Interpreter DSP
 - b. After Main Service
 - c. After Input Service
15. Rerun job with EXEC PGM=JCLTEST and save output.
16. Rerun job with EXEC PGM=JSTTEST and save output.
17. Rerun job with TYPRUN=SCAN specified on JOB card and save output.
18. Issue *X DISPDJC when problem occurs and save output.
19. Restart system with specifying a start type of WA (Warm start with queue analysis) and save output (JES3SNAP).
20. Check SYMSG data set for error indications.
21. Provide a listing of the JES3 start up procedure, containing all JCL used to start the subsystem.
22. Save the IOERR trace that will be printed.
23. Rerun job with DEBUG=All immediately following PROCESS CI or PROCESS RI card.

TABLE IV

This section contains details for dumping interactive problem control system (IPCS) problem directory records and data set directory records.

Problem Directory Records

The problem directory contains information about each problem and the data sets associated with each problem. It is organized as a VSAM key-sequenced cluster containing four types of records: status records, data set association records, description records, and a seed value record. (For an explanation of a seed value record, see the *IPCS User's Guide and Reference*). The length of the key for the problem directory records is 14 bytes and the key is organized as follows:

Key Contents	Length in Bytes
xx	2
000	3
prob-id-suffix	5
rec-seq-num	4

where:

xx

defines the type of record as follows:

ST indicates a problem status record. There should be one status record for each problem.

DS indicates a data set association record. There can be zero to 10000 data set association records for each problem.

DE indicates a description record. There can be zero to 10000 description records for each problem.

SV indicates the seed value record. There is one seed value record for each cluster.

000

represents three EBCDIC zeros.

prob-id-suffix

represents the last five digits of the problem identifier. The prob-id-suffix is recorded in EBCDIC with the leading zeros specified. For the seed value record, this suffix contains zeros.

rec-seq-num

represents the record sequence number for the record. The number is recorded in EBCDIC with the leading zeros specified. For both the status record and the seed value record, the record sequence number is always 0000; for the data set association records and the description records, the number ranges from 0000 to 9999.

If the problem determination section for a message indicates the need to dump the appropriate problem directory records, all four record types should be requested. That is, the seed value record, the status record for the problem identifier in question and for the next problem identifier in sequence, and all the data set association records and description records for the problem identifier in question.

For example, if message BLS04000I is issued for the problem identifier XYZ00067, the following four IDCAMS PRINT statements satisfy the problem determination requirements.

```
PRINT INFILE(dname) OUTFILE(dname)
      FROMKEY(SV000000000000)
      TOKEY(SV000000000000) DUMP

PRINT INFILE(dname) OUTFILE(dname)
      DUMP FROMKEY(ST000000670000)
      TOKEY(ST000000680000)

PRINT INFILE(dname) OUTFILE(dname)
      FROMKEY(DS000000670000)
      TOKEY(DS000000679999) DUMP

PRINT INFILE(dname) OUTFILE(dname)
      FROMKEY(DE000000670000)
      TOKEY(DE000000679999) DUMP
```

For further information on using IDCAMS PRINT statements, see *access method services Reference*.

Data Set Directory Records

The data set directory contains information about each data set known to IPCS. It is organized as a VSAM key-sequenced cluster containing two types of records: base records and problem association records. The length of the key for the data set directory records is 61 bytes and the organization of the key depends on the type of record.

For base records:

Key Contents	Length in Bytes
B	1
dsname	44
membername	8
DSNnBASE	8

For problem association records:

Key Contents	Length in Bytes
B	1
dsname	44
membername	8
000	3
prob-id-suffix	5

where:

B indicates a base record.

dsname is the name of the data set, in EBCDIC, left justified with trailing blanks.

membername is the name of the member, in EBCDIC, left justified with trailing blanks. If there is no membername, this field contains 8 blanks.

DSNnBASE is the identifier for the data set base record (the 'b' represents a blank).

000 represents three EBCDIC zeros.

prob-id-suffix represents the last five digits of the problem identifier with which this data set is associated. The prob-id-suffix is recorded in EBCDIC, with the leading zeros specified.

If the problem determination section for a message indicates the need to dump the appropriate data set directory records, both record types should be dumped for the particular data set name in question. That is, the data set base record and all problem association records for that data set.

For example, if message BLS04005I is issued for data set name ABC.DUMP.DEC7 (no membername), the following two IDCAMS PRINT statements satisfy the problem determination requirements (the lowercase b is used to represent a blank):

```
PRINT INFILE(dname) OUTFILE(dname) DUMP
      FROMKEY('BABC.DUMP.DEC7bbbbbbbbbbbbbbbbbbbb
      bbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb)
      TOKEY('BABC.DUMP.DEC7bbbbbbbbbbbbbbbbbbbbbbbb
      bbbbbbbbbbbbbbbbbbbbbbbbbbbbbbb)

PRINT INFILE(dname) OUTFILE(dname) DUMP
      FROMKEY('PABC.DUMP.DEC7bbbbbbbbbbbbbbbbbbbb
      bbbbbbbbbbbbbbbbbbbbb00000000')
      TOKEY('PABC.DUMP.DEC7bbbbbbbbbbbbbbbbbbbbbbbb
      bbbbbbbbbbbbbbbbbbbbb00099999')
```

For further information on using IDCAMS PRINT statements, see *Access Method Services Reference*.

Appendix A. Message to Module Table

This table correlates message IDs with module numbers. For each message, three module numbers are listed: the module that detects the need for the message, the module that issues the message, and the module that contains the message.

If the message ID you require is not listed in this table, see the diagnostic aids documentation for the component that issues the message.

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
ADY001I	ADYSETP	ADYMSG	ADYMSGT	AHL065	SETEVENT	SETEVENT	SETEVENT
ADY002I	ADYSETP	ADYMSG	ADYMSGT	AHL066	SETEVENT	SETEVENT	SETEVENT
ADY003I	ADYSETP	ADYMSG	ADYMSGT	AHL067	SETEVENT	SETEVENT	SETEVENT
ADY005E	ADYSETP	ADYSETP	ADYSETP	AHL068	SETEVENT	SETEVENT	SETEVENT
ADY006E	ADYSETP	ADYSETP	ADYSETP	AHL070I	AHLGTFI	AHLGTFI	AHLTCTL2
ADY010E	ADYTRNS	ADYMSG	ADYMSGT	AHL071I	AHLGTFI	AHLGTFI	AHLTCTL2
ADY011E	ADYTRNS	ADYMSG	ADYMSGT	AHL100A	AHLTSCN	AHLTSCN	AHLTCTL2
ADY012I	ADYTRNS	ADYMSG	ADYMSGT	AHL101A	AHLTPMT	AHLTPMT	AHLTCTL2
ADY013I	ADYTRNS	ADYMSG	ADYMSGT	AHL102A	AHLTPMT	AHL103	AHLTCTL2
ADY014E	ADYTRNS	ADYTRNS	ADYTRNS	AHL103I	AHL103	AHL103	AHLTCTL2
ADY015I	ADYTRNS	ADYMSG	ADYMSGT	AHL104A	AHLTSCN	AHLTSCN	AHLTCTL2
AHL001A	AHLSCAN	AHLSCAN	AHLTCTL2	AHL105A	AHLTSCN	AHLTSCN	AHLTCTL2
AHL002A	AHLSCAN	AHLSCAN	AHLTCTL2		AHLTPMT	AHLTPMT	AHLTCTL2
AHL003A	AHLSCAN	AHLSCAN	AHLTCTL2	AHL106A	AHLTSCNL	AHLTSCN	AHLTCTL2
AHL004A	AHLSCAN	AHLSCAN	AHLTCTL2	AHL107A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL005I	AHLGTFI	AHLGTFI	AHLTCTL2	AHL108A	AHLTSCN	AHLTSCN	AHLTCTL2
AHL006I	AHLTMON	AHLTMON	AHLTMMMSG	AHL109A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL007I	AHLTMON	AHLTMON	AHLTMMMSG	AHL110A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL008A	AHLGTFI	AHLGTFI	AHLTCTL2	AHL111A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL013I	AHLGTFI	AHLGTFI	AHLTCTL2	AHL112A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL015I	AHLTMON	AHLTMON	AHLTMMMSG	AHL113A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL016I	AHLGTFI	AHLGTFI	AHLTCTL2	AHL114A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL018A	AHLTMON	AHLTMON	AHLTMMMSG	AHL115A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL019I	AHLTFI	AHLTFI	AHLTCTL2	AHL116A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL024I	AHLSCAN	AHLSCAN	AHLTCTL2	AHL117A	AHLTPMT	AHLTPMT	AHLTCTL2
AHL025I	AHLSCAN	AHLSCAN	AHLTCTL2	AHL118I	AHLTSYFL	AHLWTASK	AHLWTMSG
AHL026I	AHLWTASK	AHLWTASK	AHLWTMSG		AHLDIR	AHLWTASK	AHLWTMSG
AHL027I	AHLWTASK	AHLWTASK	AHLWTMSG		AHLTSYMS	AHLWTASK	AHLWTMSG
AHL038I	AHLWWRIT	AHLWWRIT	AHLWRMSG		AHLTUSR	AHLWTASK	AHLWTMSG
AHL039I	AHLWWRIT	AHLWWRIT	AHLWRMSG		AHLTSIO	AHLWTASK	AHLWTMSG
AHL040	GTRACE	GTRACE	GTRACE		AHLTPID	AHLWTASK	AHLWTMSG
AHL041	GTRACE	GTRACE	GTRACE		AHLTSYFL	AHLWTASK	AHLWTMSG
AHL042	GTRACE	GTRACE	GTRACE		AHLTEXT	AHLWTASK	AHLWTMSG
AHL044	GTRACE	GTRACE	GTRACE		AHLTFOR	AHLWTASK	AHLWTMSG
AHL045	GTRACE	GTRACE	GTRACE	AHL119I	AHLTXSYS	AHLWTASK	AHLWTMSG
AHL048	GTRACE	GTRACE	GTRACE		AHLWTASK	AHLWTASK	AHLWTMSG
AHL052	HOOK	HOOK	HOOK	AHL121I	AHLTCTL1	AHLTCTL1	AHLTCTL2
AHL053	HOOK	HOOK	HOOK	AHL122I	AHLTCTL1	AHLTCTL1	AHLTCTL2
AHL055	HOOK	HOOK	HOOK	AHL123I	AHLTCTL1	AHLTCTL1	AHLTCTL2
AHL057	AHLREAD	AHLREAD	AHLREAD	AHL124I	AHLTSCN	AHLTSCN	AHLTCTL2
AHL058	AHLREAD	AHLREAD	AHLREAD		AHLTPMT	AHLTPMT	AHLTCTL2
AHL060	SETEVENT	SETEVENT	SETEVENT	AHL125A	AHLTCTL1	AHLTCTL1	AHLTCTL2
AHL061	SETEVENT	SETEVENT	SETEVENT	AHL126A	AHLTSCN	AHLTSCN	AHLTCTL2
AHL062	SETEVENT	SETEVENT	SETEVENT	AHL127I	AHLTCTL1	AHLTCTL1	AHLTCTL2
AHL063	SETEVENT	SETEVENT	SETEVENT	AHL128I	AHLGTFI	AHLGTFI	AHLTCTL2
AHL064	SETEVENT	SETEVENT	SETEVENT	AHL129I	AHLGTFI	AHLGTFI	AHLTCTL2
				AHL130I	AHLGTFI	AHLGTFI	AHLTCTL2
					AHLTPMT	AHLTPMT	AHLTCTL2
					AHLTTAB	AHLTTAB	AHLTCTL2
					AHLTMON	AHLTMON	AHLTMMMSG
				AHL131I	AHLTCTL1	AHLTCTL1	AHLTCTL2
				AHL132I	AHLSETEV	AHLSETEV	AHLSETMG
				AHL133I	AHLSETEV	AHLSETEV	AHLSETMG
				AHL135A	AHLTPMT	AHLTPMT	AHLTCTL2
				AHL136I	AHLTCTL1	AHLTCTL1	AHLTCTL2

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
AHL138I	AHLTSCN	AHLTCTL1	AHLTCTL2	AMA121I	AMASZIOR	AMASZIOR	AMASZIOR
AHL140D	AHLTPMT	AHLTCTL1	AHLTCTL2	AMA122I	AMASPZAP	AMASZIOR	AMASZCON
AHL141D	AHLTPMT	AHLTCTL1	AHLTCTL2	AMA123I	AMASZIOR	AMASZIOR	AMASZIOR
AHL142D	AHLTPMT	AHLTCTL1	AHLTCTL2	AMA124I	AMASZIOR	AMASZIOR	AMASZCON
AHL143D	AHLTPMT	AHLTCTL1	AHLTCTL2	AMA125I	AMASZIOR	AMASZIOR	AMASZCON
AHL144D	AHLTPMT	AHLTCTL1	AHLTCTL2	AMA126I	AMASZIOR	AMASZIOR	AMASZCON
AHL145I	AHLTSELF	AHLTSELF	AHLMCER	AMA127I	AMASPZAP	AMASZIOR	AMASZCON
AHL146I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA128I	AMASPZAP	AMASPZAP	AMASZCON
AHL147I	AMDSYS07	AMDPRAPP	AHLTCCWM	AMA129I	AMASPZAP	AMASPZAP	AMASZCON
AHL148I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA130I	AMASPZAP	AMASPZAP	AMASZCON
AHL149I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA131I	AMASZIOR	AMASZIOR	AMASZCON
AHL150I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA132I	AMASZIOR	AMASZIOR	AMASZIOR
AHL151I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA133I	AMASZIOR	AMASZIOR	AMASZIOR
AHL152I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA134I	AMASZIOR	AMASZIOR	AMASZIOR
AHL153I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA135I	AMASPZAP	AMASZIOR	AMASPZAP
AHL154I	AHLTCCWG	AHLTCCWG	AHLTCCWM	AMA136I	AMASZDMP	AMASZDMP	AMASZDMP
AMA000I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB101I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA001I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB102I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA002I	AMAPTFLE	AMAPTFLE	AMAPTFLE		HMBLKLDMP	HMBLKERR	HMBLKMSG
	AMAPTF01	AMAPTFLE	AMAPTFLE		HMBLKOBJ	HMBLKERR	HMBLKMSG
AMA003I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB103I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA004I	AMAPTFLE	AMAPTFLE	AMAPTFLE		HMBLKOBJ	HMBLKERR	HMBLKMSG
AMA005I	AMAPTF01	AMAPTF01	AMAPTF01	AMB104I	HMBLKLDMP	HMBLKERR	HMBLKMSG
AMA006I	AMAPTF01	AMAPTF01	AMAPTF01		HMBLKIDR	HMBLKERR	HMBLKMSG
AMA007I	AMAPTF01	AMAPTF01	AMAPTF01		HMBLKXRF	HMBLKERR	HMBLKMSG
AMA008I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB105I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA009I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB106I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA010I	AMAPTF01	AMAPTF01	AMAPTF01	AMB107I	HMBLKCTL	HMBLKCTL	HMBLKCTL
AMA011I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB108I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA012I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB109I	HMBLKCTL	HMBLKCTL	HMBLKCTL
AMA013I	AMAPTF01	AMAPTF01	AMAPTF01	AMB110I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA014I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB111I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA015I	AMAPTFLE	AMAPTFLE	AMAPTFLE	AMB112I	HMBLKIDR	HMBLKERR	HMBLKMSG
AMA016I	AMAPTF01	AMAPTF01	AMAPTF01	AMB113I	HMBLKIDR	HMBLKERR	HMBLKMSG
AMA100I	AMASZIOR	AMASZIOR	AMASZCON	AMB114I	HMBLKIDR	HMBLKERR	HMBLKMSG
AMA101I	AMASZIOR	ANASZIOR	AMASZCON	AMB115I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA102I	AMASPZAP	AMASZIOR	AMASZCON	AMB117I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA103I	AMASPZAP	AMASZIOR	AMASZCON	AMB120I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA104I	AMASPZAP	AMASZIOR	AMASZCON	AMB121I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA105I	AMASPZAP	AMASZIOR	AMASZCON	AMB122I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA106I	AMASPZAP	AMASZIOR	AMASZCON	AMB123I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA107I	AMASPZAP	AMASZIOR	AMASZCON	AMB124I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA108I	AMASPZAP	AMASZIOR	AMASZCON	AMB125I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA109I	AMASPZAP	AMASZIOR	AMASZCON	AMB126I	HMBLKCTL	HMBLKERR	HMBLKMSG
AMA110I	AMASPZAP	AMASZIOR	AMASZCON	AMB127I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA111I	AMASPZAP	AMASZIOR	AMASZCON	AMB128I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA112I	AMASPZAP	AMASZIOR	AMASZCON	AMB129I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA113I	AMASPZAP	AMASZIOR	AMASZCON	AMB130I	HMBLKXRF	HMBLKERR	HMBLKMSG
AMA114I	AMASZIOR	AMASZIOR	AMASZCON	AMD001A	AMDSADM2	AMDSADM2	AMDSADM2
AMA115I	AMASZIOR	AMASZIOR	AMASZCON	AMD003I	AMDSADM2	AMDSADM2	AMDSADM2
AMA116A	AMASPZAP	AMASPZAP	AMASPZAP	AMD004A	AMDSADM2	AMDSADM2	AMDSADM2
AMA117D	AMASZIOR	AMASZIOR	AMASZIOR		AMDSATER	AMDSATER	AMDSATXT
AMA118I	AMASZIOR	AMASZIOR	AMASZIOR		AMDSAT80	AMDSATER	AMDSATXT
AMA119I	AMASPZAP	AMASZIOR	AMASZCON	AMD005I	AMDSADM2	AMDSADM2	AMDSADM2
AMA120I	AMASPZAP	AMASZIOR	AMASZCON	AMD008A	AMDSADM2	AMDSADM2	AMDSADM2

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
AMD009I	AMDSADM2	AMDSADM2	AMDSADM2	AMD060I	AMDSAPMT	AMDSAPMT	AMDSATXT
AMD010I	AMDSAAID	AMDSAAID	AMDSAAID		AMDSABLD	AMDSABLD	AMDSAMSG
AMD011A	AMDSADM2	AMDSADM2	AMDSADM2	AMD062I	AMDSAOSG	AMDSAOSG	AMDSAMSG
AMD012D	AMDSADER	AMDSATER	AMDSADER	AMD063I	AMDSAOSG	AMDSAOSG	AMDSAMSG
AMD014A	AMDSADM2	AMDSADM2	AMDSADM2	AMD064I	AMDSAOSG	AMDSAOSG	AMDSAMSG
	AMDSADER	AMDSATER	AMDSATXT	AMD065A	AMDSAPMT	AMDSAPRS	AMDSATXT
	AMDSATER	AMDSATER	AMDSATXT	AMD066I	AMDSAAUD	AMDSAAUD	AMDSATXT
	AMDSAT80	AMDSATER	AMDSATXT	AMD067I	AMDSAPMT	AMDSAPRS	AMDSATXT
AMD015A	AMDSASIO	AMDSASIO	AMDSATXT	AMD068I	AMDSADM2	AMDSADM2	AMDSADM2
AMD016I	AMDSAUCB	AMDSAUCB	AMDSATXT	AMD069I	AMDSADM2	AMDSADM2	AMDSADM2
AMD017I	AMDSAAUD	AMDSAAUD	AMDSATXT		AMDSAPGE	AMDSAPGE	AMDSATXT
AMD018I	AMDSAGTF	AMDSAGTF	AMDSATXT	AMD070I	AMDSASIN	AMDSASIN	AMDSATXT
	AMDSAMDM	AMDSAMDM	AMDSATXT	AMD071I	AMDSAXSM	AMDSAXSM	AMDSATXT
	AMDSAPGE	AMDSAPGE	AMDSATXT	AMD072I	AMDSAVCK	AMDSAPGE	AMDSATXT
	AMDSAVCK	AMDSAVCK	AMDSATXT	AMD073I	AMDSAVCK	AMDSAPGE	AMDSATXT
AMD019A	AMDSAPGE	AMDSAPGE	AMDSATXT	AMD074I	AMDSAVCK	AMDSAPGE	AMDSATXT
	AMDSADM2	AMDSADM2	AMDSADM2	AMD075I	AMDSAXSM	AMDSAAID	AMDSATXT
AMD022I	AMDSAMDM	AMDSAMDM	AMDSATXT	AMD150I	AMDPRCTL	AMDPRCTL	AMDPRCTL
	AMDSAGTF	AMDSAGTF	AMDSATXT	AMD151I	AMDPRRDC	AMDPRRDC	AMDPRRDC
	AMDSASIN	AMDSASIN	AMDSATXT		AMDPRRDC	AMDPRCOM	AMDPRRDC
AMD025I	AMDSAGTF	AMDSAGTF	AMDSATXT		AMDPRFRM	AMDPRCOM	AMDPRFRM
AMD029D	AMDSACON	AMDSACON	AMDSATXT		AMDPRCTL	AMDPRCOM	AMDPRPMG
AMD031I	AMDSATER	AMDSATER	AMDSATXT	AMD153I	AMDPRCTL	AMDPRCTL	AMDPRCTL
	AMDSAT80	AMDSATER	AMDSATXT	AMD154D	AMDPRCTL	AMDPRCTL	AMDPRCTL
AMD032I	AMDSATER	AMDSATER	AMDSATXT	AMD155D	AMDPRCTL	AMDPRCTL	AMDPRCTL
AMD033I	AMDSADER	AMDSATER	AMDSATXT	AMD156I	AMDPRCOM	AMDPRCOM	AMDPRCOM
	AMDSATER	AMDSATER	AMDSATXT	AMD162I	AMDPRPJB	AMDPRPJB	AMDPRPJB
	AMDSAT80	AMDSATER	AMDSATXT		AMDPRPJB	AMDPRCOM	AMDPRPJB
AMD034I	AMDSADER	AMDSATER	AMDSATXT	AMD163I	AMDPRCTL	AMDPRCOM	AMDPRCTL
	AMDSATER	AMDSATER	AMDSATXT	AMD164I	AMDPRCTL	AMDPRCOM	AMDPRCTL
	AMDSAT80	AMDSATER	AMDSATXT	AMD165I	AMDPRCTL	AMDPRCOM	AMDPRCOM
AMD035I	AMDSABLD	AMDSABLD	AMDSAMSG		AMDPRUIM	AMDPRCOM	AMDPRUIM
AMD042I	AMDSABLD	AMDSABLD	AMDSAMSG		AMDPRUIM	AMDPRUIM	AMDPRUIM
AMD043I	AMDSABLD	AMDSABLD	AMDSAMSG		AMDPRPMS	AMDPRPMS	AMDPRPMS
AMD045D	AMDSADM2	AMDSADM2	AMDSADM2		AMDPRPJB	AMDPRCOM	AMDPRPJB
	AMDSATER	AMDSATER	AMDSATXT		AMDPRUIM	AMDPRCOM	AMDPRUIM
AMD046I	AMDSABLD	AMDSABLD	AMDSAMSG		AMDPRPMS	AMDPRCOM	AMDPRPMS
AMD047A	AMDSADM2	AMDSADM2	AMDSADM2		AMDPRCTL	AMDPTCOM	AMDPRPMG
	AMDSATER	AMDSATER	AMDSATXT	AMD166I	AMDPRPJB	AMDPRPJB	AMDPRPJB
	AMDSAT80	AMDSATER	AMDSATXT		AMDPRPJB	AMDPRCOM	AMDPRPJB
AMD048I	AMDSADM2	AMDSADM2	AMDSADM2	AMD168I	AMDPRCTL	AMDPRCOM	AMDPRCTL
AMD049I	AMDSADM2	AMDSADM2	AMDSADM2	AMD170I	AMDPRCTL	AMDPRCOM	AMDPRCTL
	AMDSATER	AMDSATER	AMDSATXT	AMD171I	AMDPRCOM	AMDPRCOM	AMDPRCOM
AMD050A	AMDSADM2	AMDSADM2	AMDSADM2	AMD172I	AMDPRCOM	AMDPRCOM	AMDPRCOM
	AMDSATER	AMDSATER	AMDSATXT	AMD173I	AMDPRRDC	AMDPRCOM	AMDPRRDC
AMD051A	AMDSADM2	AMDSADM2	AMDSADM2	AMD174I	AMDPRLOD	AMDPRCOM	AMDPRLOD
	AMDSATER	AMDSATER	AMDSATXT	AMD175I	AMDPRRDC	AMDPRCOM	AMDPRRDC
AMD052I	AMDSABLD	AMDSABLD	AMDSAMSG	AMD177I	AMDPRSEG	AMDPRCOM	AMDPRPMG
AMD053I	AMDSABLD	AMDSABLD	AMDSAMSG	AMD178	AMDPRSEG	AMDPRCOM	AMDPRPMG
AMD054I	AMDSABLD	AMDSABLD	AMDSAMSG	AMD180I	AMDPRSEG	AMDPRCOM	AMDPRPMG
AMD055I	AMDSAPGE	AMDSAPGE	AMDSATXT	AMD181I	AMDPRSEG	AMDPRCOM	AMDPRPMG
AMD056I	AMDSAPGE	AMDSAPGE	AMDSATXT	AMD187I	AMDPRCTL	AMDPRCOM	AMDPRCTL
AMD057I	AMDSAGTF	AMDSAGTF	AMDSATXT	AMD199D	AMDPRCTL	AMDPRCTL	AMDPRCTL
AMD058I	AMDSAUCB	AMDSAUCB	AMDSATXT	AMD201I	AMDPRSCN	AMDPRCOM	AMDPRSMG
AMD059D	AMDSAPMT	AMDSAPMT	AMDSATXT	AMD202I	AMDPRSCN	AMDPRCOM	AMDPRSMG

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
BLS03104I	BLSCABLD	BLSUTRMV	BLSDMSGSGS		BLSFMD00	BLSUTRMV	BLSDMSGSGS
BLS03105I	BLSCAMRE	BLSUTRMV	BLSDMSGSGS		BLSFVRFY	BLSUTRMV	BLSDMSGSGS
BLS03106I	BLSCABLD	BLSUTRMV	BLSDMSGSGS	BLS04005I	BLSFLD00	BLSUTRMV	BLSDMSGSGS
	BLSCAMRE	BLSUTRMV	BLSDMSGSGS		BLSFMD00	BLSUTRMV	BLSDMSGSGS
BLS03107I	BLSCABLD	BLSUTRMV	BLSDMSGSGS	BLS04008I	BLSFDS00	BLSUTRMV	BLSDMSGSGS
	BLSCAMRE	BLSUTRMV	BLSDMSGSGS		BLSFPARS	BLSUTRMV	BLSDMSGSGS
BLS03108I	BLSCAAMS	BLSUTRMV	BLSDMSGSGS	BLS04009I	BLSFMD00	BLSUTRMV	BLSDMSGSGS
BLS03109I	BLSCAAMS	BLSUTRMV	BLSDMSGSGS	BLS04010I	BLSFAV00	BLSUTRMV	BLSDMSGSGS
	BLSCANAL	BLSUTRMV	BLSDMSGSGS		BLSFMD00	BLSUTRMV	BLSDMSGSGS
	BLSCANLI	BLSUTRMV	BLSDMSGSGS	BLS04011I	BLSEADPI	BLSUTRMV	BLSDMSGSGS
	BLSCFAMS	BLSUTRMV	BLSDMSGSGS	BLS04012I	BLSEADPI	BLSUTRMV	BLSDMSGSGS
BLS03110I	BLSCAAMS	BLSUTRMV	BLSDMSGSGS	BLS04014I	BLSELPFM	BLSUTRMV	BLSDMSGSGS
	BLSCANAL	BLSUTRMV	BLSDMSGSGS	BLS04015I	BLSELPFR	BLSUTRMV	BLSDMSGSGS
	BLSCANLE	BLSUTRMV	BLSDMSGSGS		BLSFLONE	BLSUTRMV	BLSDMSGSGS
	BLSCANLI	BLSUTRMV	BLSDMSGSGS	BLS04016I	BLSDIFP0	BLSUTRMV	BLSDIFP0
	BLSCFAMS	BLSUTRMV	BLSDMSGSGS	BLS04017I	BLSDIFP0	BLSUTRMV	BLSDIFP0
BLS03111I	BLSCAAMS	BLSUTRMV	BLSDMSGSGS	BLS04018I	BLSDIFP0	BLSUTRMV	BLSDIFP0
	BLSCFAMS	BLSUTRMV	BLSDMSGSGS	BLS04019I	BLSDIFP0	BLSUTRMV	BLSDIFP0
BLS03112I	BLSCADYN	BLSUTRMV	BLSDMSGSGS	BLS04040I	BLSDAPDR	BLSUTRMV	BLSDMSGSGS
	BLSCFDYN	BLSUTRMV	BLSDMSGSGS	BLS04041I	BLSEADPR	BLSUTRMV	BLSDMSGSGS
BLS03113I	BLSCAMRE	BLSUTRMV	BLSDMSGSGS		BLSEMDPR	BLSUTRMV	BLSDMSGSGS
BLS03114I	BLSCENDD	BLSUTRMV	BLSDMSGSGS		BLSFMD00	BLSUTRMV	BLSDMSGSGS
	BLSCREAS	BLSUTRMV	BLSDMSGSGS	BLS04042I	BLSEADPR	BLSUTRMV	BLSDMSGSGS
	BLSCGETT	BLSUTRMV	BLSDMSGSGS		BLSEDEL0	BLSUTRMV	BLSDMSGSGS
	BLSCPDIN	BLSUTRMV	BLSDMSGSGS		BLSELPCT	BLSUTRMV	BLSDMSGSGS
	BLSCPUTT	BLSUTRMV	BLSDMSGSGS		BLSELPDR	BLSUTRMV	BLSDMSGSGS
BLS03115I	BLSCSETT	BLSUTRMV	BLSDMSGSGS		BLSEMDPR	BLSUTRMV	BLSDMSGSGS
	BLSCENDD	BLSUTRMV	BLSDMSGSGS		BLSFGP00	BLSUTRMV	BLSDMSGSGS
	BLSCREAS	BLSUTRMV	BLSDMSGSGS		BLSFOPEN	BLSUTRMV	BLSDMSGSGS
	BLSCGETT	BLSUTRMV	BLSDMSGSGS		BLSFUP00	BLSUTRMV	BLSDMSGSGS
	BLSCPOIN	BLSUTRMV	BLSDMSGSGS	BLS04043I	BLSFVRFY	BLSUTRMV	BLSDMSGSGS
BLS03116I	BLSCPUTT	BLSUTRMV	BLSDMSGSGS		BLSEADPR	BLSUTRMV	BLSDMSGSGS
	BLSCENDD	BLSUTRMV	BLSDMSGSGS		BLSEDEL0	BLSUTRMV	BLSDMSGSGS
	BLSCREAS	BLSUTRMV	BLSDMSGSGS		BLSELPDR	BLSUTRMV	BLSDMSGSGS
	BLSCGETT	BLSUTRMV	BLSDMSGSGS		BLSELPFR	BLSUTRMV	BLSDMSGSGS
	BLSCPOIN	BLSUTRMV	BLSDMSGSGS		BLSELPDR	BLSUTRMV	BLSDMSGSGS
	BLSCPUTT	BLSUTRMV	BLSDMSGSGS		BLSEMDPR	BLSUTRMV	BLSDMSGSGS
BLS03117I	BLSCSETT	BLSUTRMV	BLSDMSGSGS		BLSEMDPI	BLSUTRMV	BLSDMSGSGS
	BLSCFAMS	BLSUTRMV	BLSDMSGSGS		BLSFGP00	BLSUTRMV	BLSDMSGSGS
	BLSCFDYN	BLSUTRMV	BLSDMSGSGS		BLSFMV00	BLSUTRMV	BLSDMSGSGS
BLS03118I	BLSCFDYN	BLSUTRMV	BLSDMSGSGS		BLSFPREA	BLSUTRMV	BLSDMSGSGS
BLS03119I	BLSCFAMS	BLSUTRMV	BLSDMSGSGS		BLSFPRES	BLSUTRMV	BLSDMSGSGS
BLS04000I	BLSEMDPR	BLSUTRMV	BLSDMSGSGS		BLSFUP00	BLSUTRMV	BLSDMSGSGS
	BLSFAV00	BLSUTRMV	BLSDMSGSGS		BLSFVRFY	BLSUTRMV	BLSDMSGSGS
	BLSFMD00	BLSUTRMV	BLSDMSGSGS	BLS04044I	BLSEADPI	BLSUTRMV	BLSDMSGSGS
BLS04001I	BLSEDEL0	BLSUTRMV	BLSDMSGSGS		BLSEMDPR	BLSUTRMV	BLSDMSGSGS
	BLSELPDR	BLSUTRMV	BLSDMSGSGS		BLSEMDPI	BLSUTRMV	BLSDMSGSGS
BLS04002I	BLSEDEL0	BLSUTRMV	BLSDMSGSGS		BLSFREAS	BLSUTRMV	BLSDMSGSGS
	BLSELPDR	BLSUTRMV	BLSDMSGSGS		BLSFUP00	BLSUTRMV	BLSDMSGSGS
BLS04003I	BLSEDEL0	BLSUTRMV	BLSDMSGSGS	BLS04045I	BLSEADPR	BLSUTRMV	BLSDMSGSGS
	BLSELPDR	BLSUTRMV	BLSDMSGSGS		BLSEDEL0	BLSUTRMV	BLSDMSGSGS
	BLSEMDPR	BLSUTRMV	BLSDMSGSGS		BLSEDEL0	BLSUTRMV	BLSDMSGSGS
	BLSFPARS	BLSUTRMV	BLSDMSGSGS		BLSELPCT	BLSUTRMV	BLSDMSGSGS
	BLSFPS00	BLSUTRMV	BLSDMSGSGS		BLSELPDR	BLSUTRMV	BLSDMSGSGS
BLS04004I	BLSEMDPR	BLSUTRMV	BLSDMSGSGS				

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	BLSEMDPR	BLSUTRMV	BLSDMSG	BLS04076I	BLSFSCRT	BLSUTRMV	BLSDMSG
	BLSFCLOS	BLSUTRMV	BLSDMSG	BLS04077I	BLSFSCRT	BLSUTRMV	BLSDMSG
	BLSFGP00	BLSUTRMV	BLSDMSG	BLS04078I	BLSFSCRT	BLSUTRMV	BLSDMSG
	BLSFUP00	BLSUTRMV	BLSDMSG	BLS04079I	BLSFSCRT	BLSUTRMV	BLSDMSG
BLS04046I	BLSDFPDR	BLSUTRMV	BLSDMSG	BLS04080I	BLSDC128	BLSUTRMV	BLSDMSG
					BLSDC600	BLSUTRMV	BLSDMSG
BLS04047I	BLSDFPDR	BLSUTRMV	BLSDMSG	BLS04081I	BLSDC070	BLSUTRMV	BLSDMSG
BLS04050I	BLSDADSD	BLSUTRMV	BLSDMSG	BLS04082I	BLSFUD00	BLSUTRMV	BLSDMSG
BLS04051I	BLSFLD00	BLSUTRMV	BLSDMSG		BLSFUP00	BLSUTRMV	BLSDMSG
	BLSFPLP00	BLSUTRMV	BLSDMSG	BLS04083I	BLSFAD00	BLSUTRMV	BLSDMSG
	BLSFMD00	BLSUTRMV	BLSDMSG				
BLS04052I	BLSFUD00	BLSUTRMV	BLSDMSG	BLS04084I	BLSFDEL	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS04085I	BLSFDEL	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS04086I	BLSFDEL	BLSUTRMV	BLSDMSG
	BLSFOPEN	BLSUTRMV	BLSDMSG	BLS04087I	BLSFDEL	BLSUTRMV	BLSDMSG
	BLSFUD00	BLSUTRMV	BLSDMSG	BLS04088I	BLSFDEL	BLSUTRMV	BLSDMSG
BLS04053I	BLSFDEL	BLSUTRMV	BLSDMSG	BLS04089I	BLSFALL	BLSUTRMV	BLSDMSG
	BLSFDRS	BLSUTRMV	BLSDMSG	BLS04090I	BLSFALL	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS04091I	BLSFPLP00	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS05100I	BLSEADPR	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS05101I	BLSEADPR	BLSUTRMV	BLSDMSG
	BLSFV00	BLSUTRMV	BLSDMSG	BLS05104I	BLSEADPR	BLSUTRMV	BLSDMSG
	BLSFV00	BLSUTRMV	BLSDMSG	BLS05301I	BLSELPDR	BLSUTRMV	BLSDMSG
	BLSFUD00	BLSUTRMV	BLSDMSG	BLS05400I	BLSEAUTH	BLSUTRMV	BLSDMSG
BLS04054I	BLSFREAS	BLSUTRMV	BLSDMSG	BLS05401I	BLSEDEL	BLSUTRMV	BLSDMSG
	BLSFUD00	BLSUTRMV	BLSDMSG	BLS05402D	BLSEDEL1	BLSUTRMV	BLSDMSG
					BLSFCONF	BLSUTRMV	BLSDMSG
BLS04055I	BLSFCLOS	BLSUTRMV	BLSDMSG	BLS06401I	BLSFCONF	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS06402I	BLSFVRFY	BLSUTRMV	BLSDMSG
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS07001I	BLSGX	BLSUTRMV	BLSGX
	BLSFDD00	BLSUTRMV	BLSDMSG	BLS07002I	BLSGX	BLSUTRMV	BLSGX
	BLSFUD00	BLSUTRMV	BLSDMSG				
BLS04060I	BLSFSD00	BLSUTRMV	BLSDMSG	BLS17001I	BLSQEXTI	BLSQEXTI	BLSQEXTI
BLS04061I	BLSFOD00	BLSUTRMV	BLSDMSG	BLS17002I	BLSQCFMT	BLSQCFMT	BLSQCFMT
BLS04062I	BLSFOD00	BLSUTRMV	BLSDMSG		BLSQIFMT	BLSQIFMT	BLSQIFMT
BLS04063D	BLSFOD00	BLSUTRMV	BLSDMSG	BLS17003I	BLSQCFMT	BLSQCFMT	BLSQCFMT
BLS04064I	BLSFOD00	BLSUTRMV	BLSDMSG	BLS17004I	BLSQCFMT	BLSQCFMT	BLSQCFMT
BLS04065I	BLSFPS00	BLSUTRMV	BLSDMSG	BLS17005I	BLSQCFMT	BLSQCFMT	BLSQCFMT
BLS04066I	BLSFNC00	BLSUTRMV	BLSDMSG	BLS17006I	BLSQECT	BLSQECT	BLSQECT
BLS04067D	BLSFNC00	BLSUTRMV	BLSDMSG	BLS17007I	BLSQECT	BLSQECT	BLSQECT
BLS04068I	BLSFAD00	BLSUTRMV	BLSDMSG	BLS17009I	BLSQECT	BLSQECT	BLSQECT
BLS04069I	BLSEADPR	BLSUTRMV	BLSDMSG	BLS17013I	BLSQECT	BLSQECT	BLSQECT
	BLSEMDPR	BLSUTRMV	BLSDMSG	BLS17040I	BLSQFORM	BLSQFORM	BLSQFORM
	BLSFAD00	BLSUTRMV	BLSDMSG	BLS18000I	BLSRASM7	BLSUTRMV	BLSRASM7
	BLSFMD00	BLSUTRMV	BLSDMSG	BLS18001I	BLSRASM7	BLSUTRMV	BLSRASM7
BLS04070I	BLSEADPR	BLSUTRMV	BLSDMSG	BLS18002I	BLSRASM7	BLSUTRMV	BLSRASM7
	BLSEADPI	BLSUTRMV	BLSDMSG	BLS18003I	BLSRASM7	BLSUTRMV	BLSRASM7
	BLSEMDPR	BLSUTRMV	BLSDMSG	BLS18004I	BLSRASM7	BLSUTRMV	BLSRASM7
BLS04071I	BLSCALOC	BLSUTRMV	BLSDMSG	BLS18005I	BLSRASM7	BLSUTRMV	BLSRASM7
	BLSCRTCB	BLSUTRMV	BLSDMSG	BLS18006I	BLSRCOMK	BLSUTRMV	BLSRCOMK
	BLSDFPDR	BLSUTRMV	BLSDMSG	BLS18007I	BLSRCOMK	BLSUTRMV	BLSRCOMK
BLS04072I	BLSCALOC	BLSUTRMV	BLSDMSG	BLS18008I	BLSRCOMK	BLSUTRMV	BLSRCOMK
	BLSCRTCB	BLSUTRMV	BLSDMSG	BLS18009I	BLSRCOMK	BLSUTRMV	BLSRCOMK
	BLSDFPDR	BLSUTRMV	BLSDMSG	BLS18010I	BLSRCOMK	BLSUTRMV	BLSRCOMK
BLS04073I	BLSFSCRT	BLSUTRMV	BLSDMSG	BLS18011I	BLSRDUSC	BLSUTRMV	BLSRDUSC
BLS04074I	BLSFSCRT	BLSUTRMV	BLSDMSG	BLS18012I	BLSRDUSC	BLSUTRMV	BLSRDUSC
BLS04075I	BLSFSCRT	BLSUTRMV	BLSDMSG	BLS18013I	BLSRDUSC	BLSUTRMV	BLSRDUSC

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
BLS18014I	BLSRDUSC	BLSUTRMV	BLSRDUSC	BLS18123I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18015I	BLSRFMOD	BLSUTRMV	BLSRFMOD	BLS18124I	BLSRDUIH	BLSUTRMV	BLSRDUIH
BLS18016I	BLSRFMOD	BLSUTRMV	BLSRFMOD	BLS18125I	BLSRDUIC	BLSUTRMV	BLSRDUIC
BLS18025I	BLSRFIND	BLSUTRMV	BLSRFIND	BLS18126I	BLSRDUIC	BLSUTRMV	BLSRDUIC
BLS18026I	BLSRFIND	BLSUTRMV	BLSRFIND	BLS18127I	BLSRDUIH	BLSUTRMV	BLSRDUIH
BLS18027I	BLSRFIND	BLSUTRMV	BLSRFIND	BLS18128I	BLSRDUIC	BLSUTRMV	BLSRDUIC
BLS18028I	BLSRFIND	BLSUTRMV	BLSRFIND	BLS18130I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18029I	BLSRCOMP	BLSUTRMV	BLSRCOMP	BLS18132I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18030I	BLSRCOMP	BLSUTRMV	BLSRCOMP	BLS18133I	BLSRDUOP	BLSUTRMV	BLSRDUOP
BLS18031I	BLSRCOMP	BLSUTRMV	BLSRCOMP	BLS18134I	BLSRDUSC	BLSUTRMV	BLSRDUSC
BLS18038I	BLSRSCAN	BLSUTRMV	BLSRSCAN	BLS18135I	BLSRDUDE	BLSRDUDE	BLSRDUDE
BLS18039I	BLSRSCAN	BLSUTRMV	BLSRSCAN	BLS18150I	BLSRRNCH	BLSUTRMV	BLSRRNCH
BLS18040I	BLSRENQA	BLSUTRMV	BLSRENQA	BLS18151I	BLSRRNCH	BLSUTRMV	BLSRRNCH
BLS18041I	BLSRENQA	BLSUTRMV	BLSRENQA	BLS18154I	BLSRDUOP	BLSUTRMV	BLSRDUOP
BLS18042I	BLSRENQA	BLSUTRMV	BLSRENQA	BLS18155I	BLSRCOTA	BLSUTRMV	BLSDMSG
BLS18043I	BLSRFIND	BLSUTRMV	BLSRFIND	BLS18156I	BLSRCOIN	BLSUTRMV	BLSDMSG
BLS18046I	BLSRAMDX	BLSUTRMV	BLSRAMDX	BLS18160D	BLSRDUIS	BLSUTRMV	BLSDMSG
BLS18048I	BLSRSALI	BLSUTRMV	BLSRSALI	BLS18161I	BLSRST01	BLSUTRMV	BLSRST01
BLS18050I	BLSRADDR	BLSUTRMV	BLSRADDR	BLS18162I	BLSRCOIN	BLSUTRMV	BLSDMSG
BLS18051I	BLSRADD1	BLSUTRMV	BLSRADD1	BLS18163I	BLSRCOPY	BLSUTRMV	BLSDMSG
BLS18052I	BLSRADD1	BLSUTRMV	BLSRADD1	BLS18164I	BLSRCOTA	BLSUTRMV	BLSDMSG
BLS18053I	BLSRADD1	BLSUTRMV	BLSRADD1	BLS18165I	BLSRCOTA	BLSUTRMV	BLSDMSG
BLS18054I	BLSRADDP	BLSUTRMV	BLSRADDP	BLS18166I	BLSRCOPY	BLSUTRMV	BLSDMSG
BLS18058I	BLSRSAPC	BLSUTRMV	BLSRSAPC	BLS18167I	BLSRCOHD	BLSUTRMV	BLSDMSG
BLS18059I	BLSRSAPC	BLSUTRMV	BLSRSAPC	BLS18168D	BLSRCOHD	BLSUTRMV	BLSDMSG
BLS18060I	BLSRDUIS	BLSUTRMV	BLSRDUIS	BLS18169I	BLSRCOPY	BLSUTRMV	BLSDMSG
BLS18061I	BLSRVSLD	BLSUTRMV	BLSRVSLD	BLS18170I	BLSRCOPY	BLSUTRMV	BLSDMSG
BLS18063I	BLSRENQK	BLSUTRMV	BLSRENQK	BLS18171I	BLSRCOPY	BLSUTRMV	BLSDMSG
BLS18064I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18172I	BLSRCOIN	BLSUTRMV	BLSDMSG
BLS18065I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18173I	BLSRCOHD	BLSUTRMV	BLSDMSG
BLS18066I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18174I	BLSRST01	BLSUTRMV	BLSRST01
BLS18067I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18175I	BLSRCOMP	BLSUTRMV	BLSRCOMP
BLS18068I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18176I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18069I	BLSRESRV	BLSUTRMV	BLSRESRV	BLS18177I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18070I	BLSRADD1	BLSUTRMV	BLSRADD1	BLS18178I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18071I	BLSQECT	BLSQECT	BLSQECT	BLS18179I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18072I	BLSQECT	BLSQECT	BLSQECT	BLS18180I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18073I	BLSQECT	BLSQECT	BLSQECT	BLS18181I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18074I	BLSRADDP	BLSUTRMV	BLSRADDP	BLS18182I	BLSRDUAL	BLSUTRMV	BLSRDUAL
BLS18075I	BLSRADD1	BLSUTRMV	BLSRADD1	BLS18183I	BLSRDUBF	BLSUTRMV	BLSRDUBF
BLS18076I	BLSRSCAN	BLSUTRMV	BLSRSCAN	BLS18185I	BLSRDUOP	BLSUTRMV	BLSRDUOP
BLS18077I	BLSRM077	BLSUTRMV	BLSRM077	BLS18186I	BLSRDUO2	BLSUTRMV	BLSRDUO2
BLS18081I	BLSR3270	BLSUTRMV	BLSR3270	BLS18187I	BLSRDUO3	BLSUTRMV	BLSRDUO3
BLS18082I	BLSR3270	BLSUTRMV	BLSR3270	BLS18188I	BLSRDUO4	BLSUTRMV	BLSRDUO4
BLS18087I	BLSRCOMP	BLSUTRMV	BLSRCOMP	BLS18189I	BLSRDUO5	BLSUTRMV	BLSRDUO5
BLS18090I	BLSRVPAS	BLSUTRMV	BLSRVPAS	BLS18190I	BLSRDUO5	BLSUTRMV	BLSRDUO5
BLS18092I	BLSRVPCP	BLSUTRMV	BLSRVPCP	BLS18191I	BLSRVAL	BLSUTRMV	BLSRVAL
BLS18094I	BLSRRNCH	BLSUTRMV	BLSRRNCH	BLS18192I	BLSRM192	BLSUTRMV	BLSRM192
BLS18095I	BLSRFMOD	BLSUTRMV	BLSRFMOD	BLS18193I	BLSRM193	BLSUTRMV	BLSRM193
BLS18100I	BLSRACC	BLSUTRMV	BLSRACC	BLS18194I	BLSRVALC	BLSUTRMV	BLSRVALC
BLS18102I	BLSRESCK	BLSUTRMV	BLSRESCK	BLS18195I	BLSRVALC	BLSUTRMV	BLSRVALC
BLS18104I	BLSRESGU	BLSUTRMV	BLSRESGU	BLS18196I	BLSRVALC	BLSUTRMV	BLSRVALC
BLS18114I	BLSRSADE	BLSUTRMV	BLSRSADE	BLS18197I	BLSRVALP	BLSUTRMV	BLSRVALP
BLS18116I	BLSRENQA	BLSUTRMV	BLSRENQA	BLS18198I	BLSRVALP	BLSUTRMV	BLSRVALP
BLS18122I	BLSRDUAL	BLSUTRMV	BLSRDUAL	BLS18199I	BLSRM199	BLSUTRMV	BLSRM199

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
BLS18200I	BLSRM200	BLSRM200	BLSRM200	BLS22007I	BLSVRB	BLSUTRMV	BLSVRB
BLS18205I	BLSRVALX	BLSUTRMV	BLSRVALX	BLS22008I	BLSVRB	BLSUTRMV	BLSVRB
BLS18206I	BLSRDUDE	BLSRDUDE	BLSRDUDE	BLS22012I	BLSVUCB	BLSUTRMV	BLSVUCB
BLS18210I	BLSRACCL	BLSUTRMV	BLSRACCL	BLS22018I	BLSVASCB	BLSUTRMV	BLSVASCB
BLS18211I	BLSRAMDX	BLSUTRMV	BLSRAMDX	BLS22020I	BLSVASCB	BLSUTRMV	BLSVASCB
BLS18212I	BLSRDUAL	BLSRDUAL	BLSRDUAL	BLS22021I	BLSVASCB	BLSUTRMV	BLSVASCB
BLS18213I	BLSRFIND	BLSRFIND	BLSRFIND	BLS22025I	BLSVASSB	BLSVASSB	BLSVASSB
BLS18214I	BLSRM214	BLSRM214	BLSRM214	BLS22029I	BLSVLCCA	BLSUTRMV	BLSVLCCA
BLS18215I	BLSRESST	BLSRESST	BLSRESST	BLS22033I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS18300I	BLSRM300	BLSUTRMV	BLSRM300	BLS22036I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS18301I	BLSRM301	BLSUTRMV	BLSRM301	BLS22037I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS18302I	BLSRM302	BLSUTRMV	BLSRM302	BLS22038I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS19000I	BLSSASCB	BLSUTRMV	BLSSASCB	BLS22039I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS19001I	BLSSASCB	BLSUTRMV	BLSSASCB	BLS22040I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS19002I	BLSSLCCA	BLSUTRMV	BLSSLCCA	BLS22041I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS19003I	BLSSPCCA	BLSUTRMV	BLSSPCCA	BLS22042I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS20000I	BLST08	BLSUTRMV	BLST08	BLS22043I	BLSVCVT	BLSUTRMV	BLSVCVT
BLS21002I	BLSUMONA	BLSUTRMV	BLSUMONA	BLS22052I	BLSVTCB	BLSUTRMV	BLSVTCB
BLS21003I	BLSUMONA	BLSUTRMV	BLSUMONA	BLS22054I	BLSVTCB	BLSUTRMV	BLSVTCB
BLS21006I	BLSUMONL	BLSUTRMV	BLSUMONL	BLS22055I	BLSVTCB	BLSUTRMV	BLSVTCB
BLS21007I	BLSUMONL	BLSUTRMV	BLSUMONL	BLS22073I	BLSVPCCA	BLSUTRMV	BLSVPCCA
BLS21020I	BLSUVSOP	BLSUTRMV	BLSUVSOP	BLS22080I	BLSVPGTE	BLSUTRMV	BLSVPGTE
BLS21021I	BLSUVSOP	BLSUTRMV	BLSUVSOP	BLS22083I	BLSVPSA	BLSUTRMV	BLSVPSA
BLS21022I	BLSUVSAR	BLSUTRMV	BLSUVSAR	BLS22084I	BLSVPSA	BLSUTRMV	BLSVPSA
BLS21024I	BLSUVSOQ	BLSUTRMV	BLSUVSOQ	BLS22085I	BLSVPSA	BLSUTRMV	BLSVPSA
BLS21025D	BLSUMON	BLSUTRMV	BLSUMON	BLS22107I	BLSVSGTE	BLSUTRMV	BLSVSGTE
BLS21030I	BLSUPARU	BLSUTRMV	BLSUPARU	BLS22111I	BLSVXTLS	BLSUTRMV	BLSVXTLS
BLS21031I	BLSUPROP	BLSUTRMV	BLSUPROP	BLS22112I	BLSVXTLS	BLSUTRMV	BLSVXTLS
BLS21032I	BLSUBLDL	BLSUTRMV	BLSUBLDL	BLS22114I	BLSVXTLS	BLSUTRMV	BLSVXTLS
BLS21033I	BLSUBLDL	BLSUTRMV	BLSUBLDL	BLS22117I	BLSVASXB	BLSUTRMV	BLSVASXB
BLS21034I	BLSUBLDL	BLSUTRMV	BLSUBLDL	BLS22118I	BLSVASXB	BLSUTRMV	BLSVASXB
BLS21043I	BLSUPROP	BLSUTRMV	BLSUPROP	BLS22141I	BLSVRTCT	BLSUTRMV	BLSVRTCT
BLS21044I	BLSUPROP	BLSUTRMV	BLSUPROP	BLS22142I	BLSVCVT2	BLSUTRMV	BLSVCVT2
BLS21045I	BLSUPUT	BLSUTRMV	BLSUPUT	BLS22144I	BLSVCVT2	BLSUTRMV	BLSVCVT2
BLS21051I	BLSUVSCR	BLSUTRMV	BLSUVSCR	BLS22148I	BLSVASTE	BLSUTRMV	BLSVASTE
BLS21052I	BLSUVSMR	BLSUTRMV	BLSUVSMR	BLS22151I	BLSVGVGT	BLSUTRMV	BLSVGVGT
BLS21053I	BLSU	BLSUTRMV	BLSU	BLS22155I	BLSVGVTX	BLSUTRMV	BLSVGVTX
BLS21054I	BLSU	BLSUTRMV	BLSU	BLS22159I	BLSVQCB	BLSUTRMV	BLSVQCB
BLS21055I	BLSUMON2	BLSUTRMV	BLSUMON2	BLS22167I	BLSVQHT	BLSUTRMV	BLSVQHT
BLS21056I	BLSUMON2	BLSUTRMV	BLSUMON2	BLS22170I	BLSVRSV	BLSUTRMV	BLSVRSV
BLS21058I	BLSUTSO	BLSUTRMV	BLSUTSO	BLS22187I	BLSVUCM	BLSUTRMV	BLSVUCM
BLS21061I	BLSUVSWB	BLSUTRMV	BLSUVSWB	BLS22189I	BLSVUCM	BLSUTRMV	BLSVUCM
BLS21062I	BLSUMOLD	BLSUTRMV	BLSUMOLD	BLS22192I	BLSVORE	BLSUTRMV	BLSVORE
BLS21066I	BLSUVSOQ	BLSUTRMV	BLSUVSOQ	BLS22303I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21067I	BLSUVSOQ	BLSUTRMV	BLSUVSOQ	BLS22304I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21068I	BLSUVSOQ	BLSUTRMV	BLSUVSOQ	BLS22305I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21069I	BLSUPGML	BLSUTRMV	BLSUPGML	BLS22306I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21070I	BLSUPGMU	BLSUTRMV	BLSUPGMU	BLS22307I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21071I	BLSUVSCA	BLSUTRMV	BLSUVSCA	BLS22308I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21075I	BLSUCLOS	BLSUTRMV	BLSUCLOS	BLS22309I	BLSVCSD	BLSUTRMV	BLSVCSD
BLS21077I	BLSUCLOS	BLSUTRMV	BLSUCLOS	CBP112I	CBPMLOGR	CBPMLOGR	CBPMLOGR
BLS21078I	BLSUOPEN	BLSUTRMV	BLSUOPEN	CBP115I	CBPMLOGR	CBPMLOGR	CBPMLOGR
BLS22002I	BLSVASVT	BLSUTRMV	BLSVASVT	CSV000I	CSVRBENQ	CSVABEND	CSVABEND
BLS22003I	BLSVASVT	BLSUTRMV	BLSVASVT	CSV001I	CSVSBRTN	CSVABEND	CSVABEND
BLS22004I	BLSVASVT	BLSUTRMV	BLSVASVT	CSV002I	CSVSBRTN	CSVABEND	CSVABEND

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
CSV003I	CSVGETMD	CSVABEND	CSVABEND	ERB103I	ERBLISTO	ERBMFMMPR	ERBMFLMV
CSV004I	CSVGETMD	CSVABEND	CSVABEND	ERB104I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV005I	CSVGETMD	CSVABEND	CSVABEND		ERBSESSC		
CSV006I	CSVXCTL	CSVABEND	CSVABEND	ERB200I	ERBMFMFC	ERBMFMMPR	ERBMFLMV
	CSVXXCTL			ERB201I	ERBMFMLN	ERBMFMMPR	ERBMFLMV
CSV007I	CSVXLOAD	CSVABEND	CSVABEND	ERB202I	ERBMFBPC	ERBMFMMPR	ERBMFLMV
CSV008I	CSVXCTL	CSVABEND	CSVABEND		ERBMFIZZ		
	CSVXXCTL			ERB203I	ERBSEIT	ERBMFMMPR	ERBMFLMV
CSV009I	CSVSBRTN	CSVABEND	CSVABEND	ERB204I	ERBTERMI	ERBMFMMPR	ERBMFLMV
CSV010I	CSVXLOAD	CSVABEND	CSVABEND	ERB205I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV011I	CSVGETMD	CSVABEND	CSVABEND	ERB206I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV012I	CSVSYNCH	CSVABEND	CSVABEND	ERB207I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV013I	CSVGETMD	CSVABEND	CSVABEND	ERB208I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV014I	CSVXLOAD	CSVABEND	CSVABEND	ERB209I	ERBTERMI	ERBMFMMPR	ERBMFLMV
CSV015I	CSVGETMD	CSVABEND	CSVABEND	ERB210I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV016I	CSVGETMD	CSVABEND	CSVABEND	ERB211I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV017I	CSVGETMD	CSVABEND	CSVABEND	ERB212I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
	CSVSBRTN			ERB213I	ERBTERMI	ERBMFMMPR	ERBMFLMV
CSV018I	CSVXLOAD	CSVABEND	CSVABEND	ERB214I	ERBMFDPC	ERBMFMMPR	ERBMFLMV
CSV019I	CSVGETMD	CSVABEND	CSVABEND		ERBTERMW		
	CSVRBBLD			ERB215I	ERBMFDPC	ERBMFMMPR	ERBMFLMV
CSV020I	CSVGETMD	CSVABEND	CSVABEND		ERBTERMW		
CSV021I	CSVGETMD	CSVABEND	CSVABEND	ERB216I	ERBTERMW	ERBMFMMPR	ERBMFLMV
CSV022I	CSVXLOAD	CSVABEND	CSVABEND	ERB217I	ERBMFTSO	ERBMFMMPR	ERBMFLMV
CSV023I	CSVGETMD	CSVABEND	CSVABEND	ERB218I	ERBMFTSO	ERBMFMMPR	ERBMFLMV
CSV024I	CSVGETMD	CSVABEND	CSVABEND	ERB221I	ERBMFQOP	ERBMFMMPR	ERBMFLMV
CSV027I	CSVGETMD	CSVABEND	CSVABEND	ERB222I	ERBMFQOP	ERBMFMMPR	ERBMFLMV
CSV028I		CSVABEND	CSVABEND	ERB224I	ERBMFQOP	ERBMFMMPR	ERBMFLMV
CSV101I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB225I	ERBMFQOP	ERBMFMMPR	ERBMFLMV
CSV102I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB226I	ERBSESSC	ERBMFMMPR	ERBMFLMV
CSV103I	CSVVFCRE	CSVVFCRE	CSVVFCRE		ERBRMFPP		
CSV104I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB227I	ERBSESSC	ERBMFMMPR	ERBMFLMV
CSV105I	CSVVFRSH	CSVVFRSH	CSVVFRSH	ERB228I	ERBTERMI	ERBMFMMPR	ERBMFLMV
CSV106I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB229I	ERBSESSC	ERBMFMMPR	ERBMFLMV
CSV107I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB230I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV108I	CSVVFCRE	CSVVFCRE	CSVVFCRE		ERBMFMFC		
CSV109I	CSVVFRSH	CSVVFRSH	CSVVFRSH	ERB231I	ERBMFCTL	ERBMFMMPR	ERBMFLMV
CSV110I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB232I	ERBMFALL	ERBMFMMPR	ERBMFLMV
CSV111I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB234I	ERBESTAE	ERBMFMMPR	ERBMFLMV
CSV112I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB235A	ERBESTAE	ERBMFMMPR	ERBMFLMV
CSV113I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB236I	ERBESTAE	ERBMFMMPR	ERBMFLMV
CSV114I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB242I	ERBRMFPP	ERBMFMMPR	ERBMFLMV
CSV115I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB243I	ERBRMFPP	ERBMFMMPR	ERBMFLMV
CSV116I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB244I	ERBMFP79	ERBMFMMPR	ERBMFLMV
CSV117I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB245I	ERBRMFPP	ERBMFMMPR	ERBMFLMV
CSV118I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB246I	ERBMFPLC	ERBMFMMPR	ERBMFLMV
CSV119I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB248I	ERBMFPDU	ERBMFMMPR	ERBMFLMV
CSV120I	CSVVFCRE	CSVVFCRE	CSVVFCRE		ERBMFPIR		
CSV128I	CSVVFCRE	CSVVFCRE	CSVVFCRE	ERB249I	ERBMFPLC	ERBMFMMPR	ERBMFLMV
CSV300I	IEWFETCH	IEWFETCH	IEWFETCH	ERB252I	ERBDUCHA	ERBMFMMPR	ERBMFLMV
ERB100I	ERBMFMFC	ERBMFMMPR	ERBMFLMV		ERBDUCPU		
	ERBSESSC				ERBDUDEV		
ERB101I	ERBMFRGM	ERBMFMMPR	ERBMFLMV		ERBDUPAG		
ERB102I	ERBMFCTL	ERBMFMMPR	ERBMFLMV		ERBDUPSP		
	ERBMFMFC			ERB253I	ERBMFPDU	ERBMFMMPR	ERBMFLMV

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
ERB259I	ERBMFPER ERBMFXCB	ERBMFMPR	ERBMFLMV	ERB819I	ERB3GDSI ERB3GVSC	ERBMFMPR	ERBMFLMV
ERB260I	IGX00007 ERBMFIZZ	ERBMFMPR	ERBMFMPR	ERB820I	ERB3GVSC	ERBMFMPR	ERBMFLMV
ERB261I	IGX00007 ERBMFTMA	ERBMFMPR	ERBMFMPR	ERB821I	ERB3GVSC	ERBMFMPR	ERBMFLMV
ERB262I	ERBMFIDA	ERBMFMPR	ERBMFMPR	ERB849I	ERB3RTBR	ERBMFMPR	ERBMFLMV
ERB263I	ERBCNFGC	ERBMFMPR	ERBMFMPR	ERB850I	ERB3RTBR	ERBMFMPR	ERBMFLMV
ERB264I	ERBMFIZZ	ERBMFMPR	ERBMFMPR	ERB851I	ERB3RTBR	ERBMFMPR	ERBMFLMV
ERB265I	ERBMFMFC	ERBMFMPR	ERBMFMPR	ERB852I	ERB3RTBR	ERBMFMPR	ERBMFLMV
ERB266I	ERBMFMFC	ERBMFMPR	ERBMFMPR	ERB853I	ERB3RDPS	ERBMFMPR	ERBMFLMV
ERB267I	ERBMFIZZ	ERBMFMPR	ERBMFMPR		ERB3GVSC		
ERB281I	ERBMFIQA	ERBMFMPR	ERBMFMID		ERB3GVSW		
ERB282I	ERBCNFGG	ERBMFMPR	ERBMFMID	ERB854I	ERB3RDPS	ERBMFMPR	ERBMFLMV
ERB289I	ERBMFQSV	ERBMFMPR	ERBMFLMV	ERB855I	ERB3RDPS	ERBMFMPR	ERBMFLMV
ERB290I	ERBMFQSV	ERBMFMPR	ERBMFLMV	ERB856I	ERB3RGTS	ERBMFMPR	ERBMFLMV
ERB291I	ERBMFQSV	ERBMFMPR	ERBMFLMV	ERB857I	ERB3RDSS	ERBMFMPR	ERBMFLMV
ERB301I	ERBMFINP	ERBMFMPR	ERBMFLMV	\$HASP000	HASPCOMM	HASPCOMM	HASPCOMM
ERB302I	ERBMFINP	ERBMFMPR	ERBMFLMV	\$HASP001	HASPCOMM	HASPCOMM	HASPCOMM
ERB304I	ERBMFINP	ERBMFMPR	ERBMFLMV	\$HASP002	HASPCOMM	HASPCOMM	HASPCOMM
ERB305I	ERBLISTO	ERBMFMPR	ERBMFLMV	\$HASP050	HASPCCKPT	HASPCCKPT	HASPCCKPT
ERB306D	ERBMFINP	ERBMFMPR	ERBMFLMV	\$HASP070	HASPTERM	HASPTERM	HASPTERM
ERB400I	ERBMFRGM	ERBMFMPR	ERBMFLMV	\$HASP071	HASPTERM	HASPTERM	HASPTERM
ERB401I	ERBMFSAR	ERBMFMPR	ERBMFLMV	\$HASP072	HASPTERM	HASPTERM	HASPTERM
ERB402I	ERBMFSAR	ERBMFMPR	ERBMFLMV	\$HASP073	HASPTERM	HASPTERM	HASPTERM
ERB403I	ERBMFBPC ERBMFDPC ERBMFP79 ERBMFALL	ERBMFMPR	ERBMFLMV	\$HASP074	HASPTERM	HASPTERM	HASPTERM
ERB404I	ERBMFDPC	ERBMFMPR	ERBMFLMV	\$HASP080	HASPTERM	HASPTERM	HASPTERM
ERB405I	ERBMFBPC ERBMFDPC ERBMFP79	ERBMFMPR	ERBMFLMV	\$HASP081	HASPTERM	HASPTERM	HASPTERM
ERB406I	ERBMFBPC ERBMFDPC	ERBMFMPR	ERBMFLMV	\$HASP083	HASPTERM	HASPTERM	HASPTERM
ERB407I	ERBMFP79 ERBMFBPC ERBMFDPC ERBMFP79	ERBMFMPR	ERBMFLMV	\$HASP084	HASPTERM	HASPTERM	HASPTERM
ERB408I	ERBMFBPC ERBMFDPC ERBMFP79	ERBMFMPR	ERBMFLMV	\$HASP085	HASPTERM	HASPTERM	HASPTERM
ERB409I	ERBMFBPC ERBMFP79	ERBMFMPR	ERBMFLMV	\$HASP086	HASPTERM	HASPTERM	HASPTERM
ERB410I	ERBMFP79	ERBMFMPR	ERBMFLMV	\$HASP087	HASPTERM	HASPTERM	HASPTERM
ERB802I	ERB3GVSI	ERBMFMPR	ERBMFLMV	\$HASP088	HASPTERM	HASPTERM	HASPTERM
ERB803I	ERB3GDSI	ERBMFMPR	ERBMFLMV	\$HASP089	HASPTERM	HASPTERM	HASPTERM
ERB806I	ERB3GDSI	ERBMFMPR	ERBMFLMV	\$HASP092	HASPSNA	HASPSNA	HASPSNA
ERB807I	ERB3GESV	ERBMFMPR	ERBMFLMV	\$HASP093	HASPCCKPT	HASPCCKPT	HASPCCKPT
ERB810I	ERB3GESV	ERBMFMPR	ERBMFLMV	\$HASP094	HASPNUC	HASPNUC	HASPNUC
ERB813I	ERB3GVSC	ERBMFMPR	ERBMFLMV	\$HASP095	HASPFSSM	HASPFSSM	HASPFSSM
ERB816I	ERB3GVSC	ERBMFMPR	ERBMFLMV	\$HASP096	HASPTERM	HASPTERM	HASPTERM
ERB818I	ERB3RDPS ERB3GVSC ERB3RDPC	ERBMFMPR	ERBMFLMV	\$HASP097	HASPNUC	HASPNUC	HASPNUC
				\$HASP098	HASPTERM	HASPTERM	HASPTERM
				\$HASP099	HASPNUC	HASPNUC	HASPNUC
				\$HASP100	HASPRDR	HASPRDR	HASPRDR
				\$HASP101	HASPRDR	HASPRDR	HASPRDR
					HASPCNVT	HASPCNVT	HASPCNVT
				\$HASP102	HASPRDR	HASPRDR	HASPRDR
				\$HASP103	HASPRDR	HASPRDR	HASPRDR
				\$HASP104	HASPRDR	HASPRDR	HASPRDR
				\$HASP110	HASPRDR	HASPRDR	HASPRDR
				\$HASP111	HASPRDR	HASPRDR	HASPRDR
				\$HASP112	HASPRDR	HASPRDR	HASPRDR
				\$HASP113	HASPRDR	HASPRDR	HASPRDR
				\$HASP114	HASPRDR	HASPRDR	HASPRDR
				\$HASP115	HASPRDR	HASPRDR	HASPRDR

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
\$HASP116	HASPRDR	HASPRDR	HASPRDR	\$HASP223	HASPSNA	HASPSNA	HASPSNA
\$HASP117	HASPRDR	HASPRDR	HASPRDR	\$HASP224	HASPSNA	HASPSNA	HASPSNA
\$HASP119	HASPRDR	HASPRDR	HASPRDR	\$HASP225	HASPSNA	HASPSNA	HASPSNA
\$HASP120	HASPRDR	HASPRDR	HASPRDR	\$HASP226	HASPSNA	HASPSNA	HASPSNA
\$HASP121	HASPRDR	HASPRDR	HASPRDR	\$HASP227	HASPBSC	HASPBSC	HASPBSC
\$HASP125	HASPRDR	HASPRDR	HASPRDR	\$HASP239	HASPTRAM	HASPRTAM	HASPRTAM
\$HASP127	HASPRDR	HASPRDR	HASPRDR	\$HASP240	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP128	HASPRDR	HASPRDR	HASPRDR	\$HASP241	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP150	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP242	HASPRTAM	HASPRTAM	HASPRTAM
	HASPFSSP	HASPFSSP	HASPFSSP	\$HASP243	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP151	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP244	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP152	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP245	HASPRTAM	HASPRTAM	HASPRTAM
	HASPFSSP	HASPFSSP	HASPFSSP	\$HASP246	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP153	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP247	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP154	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP248	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP155	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP249	HASPRTAM	HASPRTAM	HASPRTAM
\$HASP156	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP250	HASPMISC	HASPMISC	HASPMISC
\$HASP157	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP251	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP158	HASPPRPW	HASPPRPW	HASPPRPW	\$HASP252	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP160	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP253	HASPCCKPT	HASPCCKPT	HASPCCKPT
	HASPFSSP	HASPFSSP	HASPFSSP	\$HASP264	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP165	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP265	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP170	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP266	HASPCCKPT	HASPCCKPT	HASPCCKPT
	HASPFSSP	HASPFSSP	HASPFSSP	\$HASP267	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP175	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP268	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP179	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP269	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP180	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP301	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP181	HASPNUC	HASPNUC	HASPNUC	\$HASP302	HASPCNVT	HASPCNVT	HASPCNVT
\$HASP182	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP303	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP183	HASPPRPW	HASPPRPW	HASPPRPW	\$HASP305	HASPCNVT	HASPCNVT	HASPCNVT
\$HASP185	HASPFSSM	HASPFSSM	HASPFSSM	\$HASP306	HASPCNVT	HASPCNVT	HASPCNVT
	HASPPRPW	HASPPRPW	HASPPRPW	\$HASP307	HASPCNVT	HASPCNVT	HASPCNVT
\$HASP190	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP308	HASPXEQ	HASPXEQ	HASPXEQ
	HASPFSSM	HASPFSSM	HASPFSSM	\$HASP309	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP191	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP310	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP195	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP311	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP196	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP312	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP197	HASPPRPU	HASPPRPU	HASPPRPU	\$HASP314	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP200	HASPSNA	HASPSNA	HASPSNA	\$HASP315	HASPXEQ	HASPXEQ	HASPXEQ
	HASPBSC	HASPBSC	HASPBSC	\$HASP316	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP201	HASPBSC	HASPBSC	HASPBSC	\$HASP317	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP202	HASPBSC	HASPBSC	HASPBSC	\$HASP318	HASPXEQ	HASPXEQ	HASPXEQ
\$HASP203	HASPBSC	HASPBSC	HASPBSC	\$HASP350	HASPSSSM	HASPSSSM	HASPSSSM
	HASPSNA	HASPSNA	HASPSNA	\$HASP351	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP204	HASPSNA	HASPSNA	HASPSNA	\$HASP352	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP205	HASPSNA	HASPSNA	HASPSNA	\$HASP353	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP206	HASPSNA	HASPSNA	HASPSNA	\$HASP354	HASPAM	HASPAM	HASPAM
\$HASP207	HASPSNA	HASPSNA	HASPSNA	\$HASP355	HASPCCKPT	HASPCCKPT	HASPCCKPT
\$HASP208	HASPSNA	HASPSNA	HASPSNA	\$HASP357	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP209	HASPSNA	HASPSNA	HASPSNA	\$HASP358	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP210	HASPSNA	HASPSNA	HASPSNA	\$HASP359	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP211	HASPSNA	HASPSNA	HASPSNA	\$HASP360	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP212	HASPSNA	HASPSNA	HASPSNA	\$HASP361	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP221	HASPSNA	HASPSNA	HASPSNA	\$HASP362	HASPSSSM	HASPSSSM	HASPSSSM
\$HASP222	HASPSNA	HASPSNA	HASPSNA	\$HASP363	HASPSSSM	HASPSSSM	HASPSSSM

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
\$HASP364	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP439	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP370	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP441	HASPIRA	HASPIRA	HASPIRA
\$HASP371	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP442	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP373	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP443	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP374	HASPSSSM	HASPSSSM	HASPSSSM		HASPIRDA	HASPIRDA	HASPIRDA
\$HASP375	HASPAM	HASPAM	HASPAM	\$HASP444	HASPIRA	HASPIRA	HASPIRA
\$HASP376	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP445	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP380	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP446	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP381	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP447	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP395	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP448	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP396	HASPSSSM	HASPSSSM	HASPSSSM		HASPNUC	HASPNUC	HASPNUC
\$HASP397	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP449	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP398	HASPSSSM	HASPSSSM	HASPSSSM	\$HASP450	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP400	HASPWARM	HASPWARM	HASPWARM	\$HASP451	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP401	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP453	HASPSPOL	HASPSPOL	HASPSPOL
	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP455	HASPWARM	HASPWARM	HASPWARM
\$HASP402	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP460	HASPWARM	HASPWARM	HASPWARM
\$HASP403	HASPWARM	HASPWARM	HASPWARM	\$HASP461	HASPWARM	HASPWARM	HASPWARM
\$HASP404	HASPWARM	HASPWARM	HASPWARM	\$HASP462	HASPWARM	HASPWARM	HASPWARM
\$HASP405	HASPWARM	HASPWARM	HASPWARM	\$HASP463	HASPWARM	HASPWARM	HASPWARM
\$HASP406	HASPWARM	HASPWARM	HASPWARM	\$HASP464	HASPWARM	HASPWARM	HASPWARM
\$HASP407	HASPWARM	HASPWARM	HASPWARM	\$HASP465	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP408	HASPWARM	HASPWARM	HASPWARM	\$HASP466	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP409	HASPWARM	HASPWARM	HASPWARM	\$HASP467	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP410	HASPWARM	HASPWARM	HASPWARM	\$HASP468	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP411	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP469	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP412	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP470	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP413	HASPWARM	HASPWARM	HASPWARM	\$HASP471	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP414	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP472	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP415	HASPWARM	HASPWARM	HASPWARM	\$HASP473	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP416	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP474	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP417	HASPINIT	HASPINIT	HASPINIT	\$HASP475	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP418	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP476	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP419	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP477	HASPIRRE	HASPIRRE	HASPIRRE
\$HASP420	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP478	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP421	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP479	HASPIRDA	HASPIRDA	HASPIRDA
	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP480	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP422	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP481	HASPIRDA	HASPIRDA	HASPIRDA
	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP482	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP423	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP483	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP424	HASPSPOL	HASPSPOL	HASPSPOL	\$HASP484	HASPIRDA	HASPIRDA	HASPIRDA
	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP485	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP425	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP486	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP426	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP487	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP427	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP488	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP428	HASPIRA	HASPNUC	HASPNUC	\$HASP489	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP429	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP490	HASPIRA	HASPIRA	HASPIRA
\$HASP430	HASPIRMA	HASPIRMA	HASPIRMA	\$HASP491	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP431	HASPNWC	HASPNWC	HASPNWC	\$HASP492	HASPINIT	HASPINIT	HASPINIT
\$HASP432	HASPIRA	HASPIRA	HASPIRA	\$HASP493	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP434	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP494	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP435	HASPIRPL	HASPIRPL	HASPIRPL	\$HASP495	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP436	HASPIRDA	HASPIRDA	HASPIRDA	\$HASP500	HASPNET	HASPNET	HASPNET
\$HASP437	HASPIRPL	HASPIRPL	HASPIRPL	\$HASP501	HASPNET	HASPNET	HASPNET
\$HASP438	HASPMISC	HASPMISC	HASPMISC	\$HASP502	HASPNET	HASPNET	HASPNET

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
\$HASP503	HASPNET	HASPNET	HASPNET	\$HASP811	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP504	HASPNET	HASPNET	HASPNET	\$HASP850	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP505	HASPNET	HASPNET	HASPNET		HASPIRDA	HASPIRDA	HASPIRDA
\$HASP506	HASPNET	HASPNET	HASPNET	\$HASP851	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP507	HASPNET	HASPNET	HASPNET	\$HASP852	HASPSPOL	HASPSPOL	HASPSPOL
\$HASP520	HASPNET	HASPNET	HASPNET	\$HASP853	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP521	HASPNET	HASPNET	HASPNET	\$HASP854	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP522	HASPNET	HASPNET	HASPNET	\$HASP855	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP523	HASPNET	HASPNET	HASPNET	\$HASP856	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP524	HASPNET	HASPNET	HASPNET	\$HASP857	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP526	HASPNET	HASPNET	HASPNET	\$HASP858	HASPIRPL	HASPIRPL	HASPIRPL
\$HASP530	HASPNET	HASPNET	HASPNET	\$HASP859	HASPINIT	HASPINIT	HASPINIT
\$HASP531	HASPNET	HASPNET	HASPNET	\$HASP860	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP532	HASPNET	HASPNET	HASPNET	\$HASP861	HASPIRDA	HASPIRDA	HASPIRDA
\$HASP533	HASPNET	HASPNET	HASPNET	\$HASP862	HASPINIT	HASPINIT	HASPINIT
\$HASP534	HASPNET	HASPNET	HASPNET	\$HASP863	HASPINIT	HASPINIT	HASPINIT
\$HASP540	HASPNET	HASPNET	HASPNET	\$HASP864	HASPIRA	HASPIRA	HASPIRA
\$HASP543	HASPNET	HASPNET	HASPNET	\$HASP866	HASPIRMA	HASPIRMA	HASPIRMA
	HASPRDR	HASPRDR	HASPRDR	\$HASP867	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP545	HASPNET	HASPNET	HASPNET	\$HASP869	HASPIRPL	HASPIRPL	HASPIRPL
	HASPRDR	HASPRDR	HASPRDR	\$HASP871	HASPIRMA	HASPIRMA	HASPIRMA
\$HASP546	HASPNET	HASPNET	HASPNET	\$HASP872	HASPIRA	HASPIRA	HASPIRA
\$HASP547	HASPNET	HASPNET	HASPNET	\$HASP955	REMOTGEN	REMOTGEN	REMOTGEN
\$HASP548	HASPNET	HASPNET	HASPNET	\$HASP965	GENRMT	GENRMT	GENRMT
\$HASP549	HASPNET	HASPNET	HASPNET	\$HASP966	GENRMT	GENRMT	GENRMT
\$HASP580	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP967	GENRMT	GENRMT	GENRMT
\$HASP581	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP968	GENRMT	GENRMT	GENRMT
\$HASP582	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP985	LETRRIP	LETRRIP	LETRRIP
\$HASP583	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP986	LETRRIP	LETRRIP	LETRRIP
\$HASP584	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP990	SYS3CNVT	SYS3CNVT	SYS3CNVT
\$HASP585	HASPSTAM	HASPSTAM	HASPSTAM	\$HASP991	SYS3CNVT	SYS3CNVT	SYS3CNVT
\$HASP586	HASPSTAM	HASPSTAM	HASPSTAM	IAR001I	IARRZ	IARRZ	IARRZ
\$HASP6xx	HASPCOMM	HASPCOMM	HASPCOMM	IAR002A	IARMS	IARMS	IARMS
				IAR003W	IARMN	IARMN	IARMN
				IAR004I	IARMT	IARMT	IARMT
				IAR005E	IARUC	IARUC	IARUC
				IAR006A	IARMU	IARMU	IARMU
					IARMS	IARMS	IARMS
					IARMT	IARMT	IARMT
				ICH001E	ICHSF100	ICHSF100	ICHSMF00
				ICH002I	ICHSF100	ICHSF100	ICHSMF00
				ICH003I	ICHSF100	ICHSF100	ICHSMF00
				ICH004I	ICHSF100	ICHSF100	ICHSMF00
				ICH005I	ICHSF100	ICHSF100	ICHSMF00
				ICH006D	ICHSF100	ICHSF100	ICHSMF00
					ICHSEC00	ICHSEC00	ICHSMF00
				ICH007E	ICHSEC00	ICHSEC00	ICHSMF00
				ICP050D	ICPPCNTL	ICPPCNTL	ICPPCNTL
				ICP056D	ICPPCNTL	ICPPCNTL	ICPPCNTL
				ICP057D	ICPPCNTL	ICPPCNTL	ICPPCNTL
				ICT010I	ICTMKG00	ICTMKG02	ICTMKG03
				ICT011I	ICTMKG01	ICTMKG02	ICTMKG03
				ICT012I	ICTMKG00	ICTMKG02	ICTMKG03
				ICT020I	ICTMKM04	ICTMKM04	ICTMKM06
				ICT021I	ICTMKM04	ICTMKM04	ICTMKM06

Module HASPCOMM is the detecting, issuing, and containing module for all messages numbered \$HASP600 through \$HASP699, unless the message is listed here.

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
ICT022I	ICTMKM04	ICTMKM04	ICTMKM06	ICU013I	ICUMKG10	ICUMKG12	ICUMKG13
ICT023I	ICTMKM04	ICTMKM04	ICTMKM06	ICU014I	ICUMKG10	ICUMKG12	ICUMKG13
ICT024I	ICTMKM04	ICTMKM04	ICTMKM06	ICU020I	ICUMKM14	ICUMKM14	ICUMKM16
ICT1001	ICTMKG01	ICTMKG01	ICTMKG03		ICUMKM11	ICUMKM12	ICUMKM12
ICT1002	ICTMKG01	ICTMKG01	ICTMKG03	ICU021I	ICUMKM14	ICUMKM14	ICUMKM16
ICT1003	ICTMKG01	ICTMKG01	ICTMKG03	ICU022I	ICUMKM14	ICUMKM14	ICUMKM16
ICT1004	ICTMKG01	ICTMKG01	ICTMKG03	ICU024I	ICUMKM14	ICUMKM14	ICUMKM16
ICT1005	ICTMKG01	ICTMKG01	ICTMKG03		ICUMKM11	ICUMKM12	ICUMKM12
ICT1006	ICTMKG01	ICTMKG01	ICTMKG03	ICU025I	ICUMKM14	ICUMKM14	ICUMKM16
ICT1007	ICTMKG01	ICTMKG01	ICTMKG03	ICU030I	ICUMCS11	ICUMCS02	ICUMCS03
ICT1008	ICTMKG00	ICTMKG00	ICTMKG03			ICUMCS11	
ICT1009	ICTMKG01	ICTMKG01	ICTMKG03	ICU031I	ICUMCS11	ICUMCS02	ICUMCS03
ICT1010	ICTMKG01	ICTMKG01	ICTMKG03			ICUMCS11	
ICT1011	ICTMKG00	ICTMKG00	ICTMKG03	ICU033I	ICUMCS11	ICUMCS02	ICUMCS03
	ICTMKG01	ICTMKG01				ICUMCS11	
ICT1012	ICTMKG00	ICTMKG00	ICTMKG03	ICU034I	ICUMCS11	ICUMCS02	ICUMCS03
	ICTMKG01	ICTMKG01				ICUMCS11	
ICT1013	ICTMKG00	ICTMKG00	ICTMKG03	ICU041I	ICUMKM11	ICUMKM12	ICUMKM12
	ICTMKG01	ICTMKG01		ICU042I	ICUMKM11	ICUMKM12	ICUMKM12
ICT1014	ICTMKG01	ICTMKG01	ICTMKG03	ICU043I	ICUMKM11	ICUMKM12	ICUMKM12
ICT1015	ICTMKG00	ICTMKG00	ICTMKG03	ICU044I	ICUMKM11	ICUMKM12	ICUMKM12
	ICTMKG01	ICTMKG01		ICU045I	ICUMKM11	ICUMKM12	ICUMKM12
ICT1016	ICTMKG00	ICTMKG00	ICTMKG03	ICU047I	ICUMKM11	ICUMKM12	ICUMKM12
	ICTMKG01	ICTMKG01		ICU048I	ICUMKM11	ICUMKM12	ICUMKM12
ICT1017	ICTMKG00	ICTMKG00	ICTMKG03	ICU050I	ICUMKV01	ICUMKG10	ICUMKG12
ICT1018	ICTMKG00	ICTMKG00	ICTMKG03	ICU051I	ICUMKV01	ICUMKG10	ICUMKG12
	ICTMKG01	ICTMKG01		ICU052I	ICUMKV01	ICUMKG10	ICUMKG12
ICT1019	ICTMKG00	ICTMKG00	ICTMKG03	ICU053I	ICUMKV01	ICUMKG10	ICUMKG12
ICT1020	ICTMKG00	ICTMKG00	ICTMKG03	ICU054I	ICUMKV01	ICUMKM12	ICUMKM12
ICT1021	ICTMKG00	ICTMKG00	ICTMKG03	ICU055I	ICUMKV01	ICUMKM12	ICUMKM12
ICT1022	ICTMKG00	ICTMKG00	ICTMKG03			ICUMKG10	ICUMKG12
ICT1023	ICTMKG00	ICTMKG00	ICTMKG03	ICU061I	ICUMKM11	ICUMKM12	ICUMKM12
	ICTMKG01	ICTMKG01		ICU062I	ICUMKM11	ICUMKM11	ICUMKM12
ICT1024	ICTMKG01	ICTMKG01	ICTMKG03	ICU070I	ICUCDR04	ICUCDR05	ICUCDR05
ICT1025	ICTMKG01	ICTMKG01	ICTMKG03			ICUCDR04	ICUCDR06
ICT1026	ICTMKG00	ICTMKG00	ICTMKG03	ICU071I	ICUCDR04	ICUCDR05	ICUCDR05
	ICTMKG01	ICTMKG01				ICUCDR04	ICUCDR06
ICT1027	ICTMKG00	ICTMKG00	ICTMKG03	ICU072I	ICUCDR04	ICUCDR05	ICUCDR05
ICT1028	ICTMKG00	ICTMKG00	ICTMKG03			ICUCDR04	ICUCDR06
ICT1029	ICTMKG00	ICTMKG00	ICTMKG03	ICU073I	ICUCDR04	ICUCDR05	ICUCDR05
ICT1030	ICTMKG00	ICTMKG00	ICTMKG03			ICUCDR04	ICUCDR06
	ICTMKG01	ICTMKG01				ICUCDR05	ICUCDR05
ICT1031	ICTMKG00	ICTMKG00	ICTMKG03	ICU074I	ICUCDR04	ICUCDR04	ICUCDR06
ICT1032	ICTMKG00	ICTMKG00	ICTMKG03			ICUCDR04	ICUCDR05
	ICTMKG01	ICTMKG01		ICU077I	ICUCDR04	ICUCDR05	ICUCDR05
ICT1033	ICTMKG00	ICTMKG00	ICTMKG03	ICU078I	ICUCDR04	ICUCDR05	ICUCDR05
ICT1034	ICTMKG00	ICTMKG00	ICTMKG03	ICU080I	ICUCDR00	ICUCDR05	ICUCDR05
	ICTMKG01	ICTMKG01				ICUCDR00	ICUCDR06
ICT1035	ICTMKG00	ICTMKG00	ICTMKG03	ICU081I	ICUCDR00	ICUCDR05	ICUCDR05
	ICTMKG01	ICTMKG01				ICUCDR00	ICUCDR06
ICT1036	ICTMKG01	ICTMKG01	ICTMKG03	ICU082I	ICUCDR00	ICUCDR05	ICUCDR05
ICT1037	ICTMKG00	ICTMKG00	ICTMKG03			ICUCDR00	ICUCDR06
ICU010I	ICUMKG10	ICUMKG12	ICUMKG13	ICU083I	ICUCDR00	ICUCDR05	ICUCDR05
ICU011I	ICUMKG11	ICUMKG12	ICUMKG13			ICUCDR00	ICUCDR06
ICU012I	ICUMKG10	ICUMKG12	ICUMKG13	ICU084I	ICUCDR00	ICUCDR05	ICUCDR05
						ICUCDR00	ICUCDR06

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
ICU085I	ICUCDR00	ICUCDR05	ICUCDR05	ICU1048	ICUMKG10	ICUMKG10	ICUMKG13
		ICUCDR00	ICUCDR06	IDC0001I	IDCAL01	IDCAL01	IDCTSUV0
ICU1001	ICUMKG11	ICUMKG11	ICUMKG13		IDCBI01	IDCBI01	IDCTSUV0
ICU1002	ICUMKG11	ICUMKG11	ICUMKG13		IDCCC01	IDCCC01	IDCTSUV0
ICU1003	ICUMKG11	ICUMKG11	ICUMKG13		IDCDE01	IDCDE01	IDCTSUV0
ICU1004	ICUMKG11	ICUMKG11	ICUMKG13		IDCDL01	IDCDL01	IDCTSUV0
ICU1005	ICUMKG11	ICUMKG11	ICUMKG13		IDCLC01	IDCLC01	IDCTSUV0
ICU1006	ICUMKG11	ICUMKG11	ICUMKG13		IDCLR01	IDCLR01	IDCTSUV0
ICU1007	ICUMKG11	ICUMKG11	ICUMKG13		IDCMP01	IDCMP01	IDCTSUV0
ICU1008	ICUMKG10	ICUMKG10	ICUMKG13		IDCPM01	IDCPM01	IDCTSUV0
ICU1009	ICUMKG11	ICUMKG11	ICUMKG13		IDCPR01	IDCPR01	IDCTSUV0
ICU1010	ICUMKG11	ICUMKG11	ICUMKG13		IDCRC01	IDCRC01	IDCTSUV0
ICU1011	ICUMKG10	ICUMKG10	ICUMKG13		IDCRM01	IDCRM01	IDCTSUV0
	ICUMKG11	ICUMKG11			IDCRP01	IDCRP01	IDCTSUV0
ICU1012	ICUMKG10	ICUMKG10	ICUMKG13		IDCRS01	IDCRS01	IDCTSUV0
	ICUMKG11	ICUMKG11			IDCVY01	IDCVY01	IDCTSUV0
ICU1013	ICUMKG10	ICUMKG10	ICUMKG13		IDCXP01	IDCXP01	IDCTSUV0
	ICUMKG11	ICUMKG11		IDC0002I	IDCEX03	IDCEX03	IDCTSUV0
ICU1014	ICUMKG11	ICUMKG11	ICUMKG13	IDC0003I	all FSRs	all FSRs	IDCTSUV0
ICU1015	ICUMKG10	ICUMKG10	ICUMKG13	IDC0005I	IDCPR01	IDCPR01	IDCTSUV0
	ICUMKG11	ICUMKG11		IDC0006I	IDCRL01	IDCRL01	IDCTSCM0
ICU1017	ICUMKG10	ICUMKG10	ICUMKG13		IDCRP01	IDCRP01	IDCTSUV0
ICU1018	ICUMKG10	ICUMKG10	ICUMKG13	IDC0014I	IDCAL01	IDCAL01	IDCTSUV0
	ICUMKG11	ICUMKG11			IDCBI01	IDCBI01	IDCTSUV0
ICU1019	ICUMKG10	ICUMKG10	ICUMKG13		IDCCC01	IDCCC01	IDCTSUV0
ICU1020	ICUMKG10	ICUMKG10	ICUMKG13		IDCDE01	IDCDE01	IDCTSUV0
ICU1021	ICUMKG10	ICUMKG10	ICUMKG13		IDCDL01	IDCDL01	IDCTSUV0
ICU1023	ICUMKG10	ICUMKG10	ICUMKG13		IDCLC01	IDCLC01	IDCTSUV0
	ICUMKG11	ICUMKG11			IDCMP01	IDCMP01	IDCTSUV0
ICU1024	ICUMKG11	ICUMKG11	ICUMKG13		IDCRM01	IDCRM01	IDCTSUV0
ICU1025	ICUMKG11	ICUMKG11	ICUMKG13		IDCRS05	IDCRS05	IDCTSUV0
ICU1030	ICUMKG10	ICUMKG10	ICUMKG13		IDCVY01	IDCVY01	IDCTSUV0
	ICUMKG11	ICUMKG11			IDCXP01	IDCXP01	IDCTSUV0
ICU1031	ICUMKG10	ICUMKG10	ICUMKG13	IDC0063I	IDCAV01	IDCAV01	IDCTSCM0
ICU1032	ICUMKG10	ICUMKG10	ICUMKG13		IDCMV01	IDCMV01	IDCTSCM0
	ICUMKG11	ICUMKG11		IDC0064I	IDCAV01	IDCAV01	IDCTSCM0
ICU1033	ICUMKG10	ICUMKG10	ICUMKG13		IDCMV01	IDCMV01	IDCTSCM0
ICU1034	ICUMKG10	ICUMKG10	ICUMKG13		IDCSR01	IDCSR01	IDCTSCM0
	ICUMKG11	ICUMKG11		IDC0068I	IDCCO01	IDCCO01	IDCTSCM0
ICU1035	ICUMKG10	ICUMKG10	ICUMKG13		IDCMV01	IDCMV01	IDCTSCM0
	ICUMKG11	ICUMKG11		IDC0073I	IDCAV01	IDCAV01	IDCTSCM0
ICU1036	ICUMKG11	ICUMKG11	ICUMKG13		IDCMV01	IDCMV01	IDCTSCM0
ICU1038	ICUMKG10	ICUMKG10	ICUMKG13	IDC083E	IDCC001	IDC001	IDCTSCM0
	ICUMKG04	ICUMKG04			IDCEV01	IDCEV01	IDCTSCM0
ICU1039	ICUMKG11	ICUMKG11	ICUMKG13		IDCSR01	IDCSR01	IDCTSCM0
ICU1040	ICUMKG11	ICUMKG11	ICUMKG13	IDC0085I	IDCEV01	IDCEV01	IDCTSCM0
ICU1041	ICUMKG11	ICUMKG11	ICUMKG13		IDCCO01	IDCCO01	IDCTSCM0
ICU1042	ICUMKG11	ICUMKG11	ICUMKG13		IDCSR01	IDCSR01	IDCTSCM0
ICU1043	ICUMKG11	ICUMKG11	ICUMKG13	IDC0086I	IDCAV01	IDCAV01	IDCTSCM0
ICU1044	ICUMKG11	ICUMKG11	ICUMKG13		IDCMV01	IDCMV01	IDCTSCM0
ICU1045	ICUMKG10	ICUMKG10	ICUMKG13		IDCSR01	IDCSR01	IDCTSCM0
	ICUMKG11	ICUMKG11		IDC0088I	IDCCO01	IDCCO01	IDCTSCM0
ICU1046	ICUMKG10	ICUMKG10	ICUMKG13		IDCSV01	IDCSV01	IDCTSCM0
ICU1047	ICUMKG10	ICUMKG10	ICUMKG13	IDC0098I	IDCCO01	IDCCO01	IDCTSCM0
	ICUMKG11	ICUMKG11			IDCRV01	IDCRV01	IDCTSCM0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	IDCSV01	IDCSV01	IDCTSCM0		IDCXP01	IDCXP01	IDCTSDL0
IDC0102I	IDCLD01	IDCLD01	IDCTSCM0	IDC0555I	IDCDL01	IDCDL01	IDCTSDL0
	IDCSD01	IDCSD01	IDCTSCM0	IDC0571I	IDCRP01	IDCRP01	IDCTSPR0
IDC0104I	IDCLD01	IDCLD01	IDCTSCM0	IDC0594I	IDCXP01	IDCXP01	IDCTSXP0
	IDCSD01	IDCSD01	IDCTSCM0	IDC0603I	IDCMP01	IDCMP01	IDCTSMP0
IDC0105I	IDCLD01	IDCLD01	IDCTSCM0	IDC0604I	IDCMP01	IDCMP01	IDCTSMP0
	IDCSD01	IDCSD01	IDCTSCM0		IDCRM01	IDCRM01	IDCTSMP0
IDC0106I	IDCLD01	IDCLD01	IDCTSCM0	IDC0611I	IDCMP01	IDCMP01	IDCTSMP0
	IDCSD01	IDCSD01	IDCTSCM0	IDC0622I	IDCRM01	IDCRM01	IDCTSMP0
IDC0107I	IDCLD01	IDCLD01	IDCTSCM0	IDC0626I	IDCRM01	IDCRM01	IDCTSMP0
	IDCSD01	IDCSD01	IDCTSCM0	IDC0634I	IDCCC01	IDCCC01	IDCTSCC0
IDC0112I	IDCSD01	IDCSD01	IDCTSCM0	IDC0635I	IDCCC01	IDCCC01	IDCTSCC0
IDC0117I	IDCMV01	IDCMV01	IDCTSCM0	IDC0636I	IDCCC01	IDCCC01	IDCTSCC0
	IDCSR01	IDCSR01		IDC0637I	IDCCC01	IDCCC01	IDCTSCC0
IDC0204I	IDCRI03	IDCRI03	IDCTSRIO	IDC0639I	IDCCC01	IDCCC01	IDCTSCC0
IDC0206I	IDCRI01	IDCRI01	IDCTSRIO	IDC0652I	IDCBI01	IDCBI01	IDCTSBI0
IDC0222I	IDCRI01	IDCRI01	IDCTSRIO	IDC0665I	IDCLR01	IDCLR01	IDCTSLR1
IDC0233I	IDCRI01	IDCRI01	IDCTSRIO	IDC0669I	IDCRC01	IDCRC01	IDCTSRC0
IDC0234I	IDCRI01	IDCRI01	IDCTSRIO	IDC0670I	IDCRC01	IDCRC01	IDCTSRC0
IDC0339I	IDCIO01	IDCIO01	IDCTSIO0	IDC0672I	IDCRC01	IDCRC01	IDCTSRC0
IDC0342I	IDCIO01	IDCIO01	IDCTSIO0	IDC0674I	IDCRC01	IDCRC01	IDCTSRC0
IDC0361I	IDCSA07	IDCSA07	IDCTSSA7	IDC0676I	IDCRC01	IDCRC01	IDCTSRC0
IDC0362I	IDCSA07	IDCSA07	IDCTSSA7	IDC0680I	IDCCV01	IDCCV01	IDCTSCV0
IDC0363I	IDCSA07	IDCSA07	IDCTSSA7	IDC0686I	IDCCV01	IDCCV01	IDCTSCV0
IDC394I	IDCSA06	IDCSA06	IDCTSSA6	IDC0703I	IDCCO01	IDCCO01	IDCTSCO0
	IDCSA10	IDCSA10		IDC0704I	IDCCO01	IDCCO01	IDCTSCO0
IDC0396I	IDCSA07	IDCSA07	IDCTSSA7	IDC0705I	IDCCO01	IDCCO01	IDCTSCO0
IDC0397I	IDCSA07	IDCSA07	IDCTSSA7	IDC0711I	IDCRV01	IDCRV01	IDCTSRV0
IDC0398I	IDCSA07	IDCSA07	IDCTSSA7	IDC0722I	IDCAV01	IDCAV01	IDCTSAV0
IDC497I	IDCMC01	IDCMC01	IDCTSMC0	IDC0724I	IDCAV01	IDCAV01	IDCTSAV0
IDC498D	IDCRD07	IDCRD07	IDCTSRD0	IDC0725I	IDCAV01	IDCAV01	IDCTSAV0
IDC0508I	IDCDE01	IDCDE01	IDCTSDE0	IDC0731I	IDCSR01	IDCSR01	IDCTSSR0
	IDCMP01	IDCMP01	IDCTSDE0	IDC0733I	IDCSR01	IDCSR01	IDCTSSR0
	IDCRM01	IDCRM01	IDCTSDE0	IDC0737I	IDCCN01	IDCCN01	IDCTSCN0
IDC0509I	IDCDE01	IDCDE01	IDCTSDE0	IDC0743I	IDCCN01	IDCCN01	IDCTSCN0
	IDCMP01	IDCMP01	IDCTSDE0	IDC0746I	IDCCN01	IDCCN01	IDCTSCN0
	IDCRM01	IDCRM01	IDCTSDE0	IDC0747I	IDCCN01	IDCCN01	IDCTSCN0
IDC0510I	IDCDE01	IDCDE01	IDCTSDE0	IDC0748I	IDCCN01	IDCCN01	IDCTSCN0
IDC0511I	IDCDE01	IDCDE01	IDCTSDE0	IDC0749I	IDCCN01	IDCCN01	IDCTSCN0
IDC0512I	IDCDE01	IDCDE01	IDCTSDE0	IDC0751I	IDCSV01	IDCSV01	IDCTSSV0
IDC0520I	IDCDE01	IDCDE01	IDCTSDE0	IDC0760I	IDCRR01	IDCRR01	IDCTSRR0
	IDCMP01	IDCMP01	IDCTSDE0	IDC0763I	IDCRR01	IDCRR01	IDCTSRR0
	IDCRM01	IDCRM01	IDCTSDE0	IDC0780I	IDCEC01	IDCEC01	IDCTSEC0
IDC0526I	IDCAL01	IDCAL01	IDCTSAL0	IDC0781I	IDCEC01	IDCEC01	IDCTSEC0
IDC0531I	IDCAL01	IDCAL01	IDCTSAL0	IDC0790I	IDCRL01	IDCRL01	IDCT SRL0
IDC0532I	IDCAL01	IDCAL01	IDCTSAL0	IDC0791I	IDCRL01	IDCRL01	IDCT SRL0
IDC0534I	IDCAL01	IDCAL01	IDCTSAL0	IDC0810I	IDCSD01	IDCSD01	IDCTSSD0
IDC0535I	IDCAL01	IDCAL01	IDCTSAL0	IDC0811I	IDCSD01	IDCSD01	IDCTSSD0
IDC0548I	IDCDL01	IDCDL01	IDCTSDL0	IDC0812I	IDCSD01	IDCSD01	IDCTSSD0
IDC0549I	IDCDL01	IDCDL01	IDCTSDL0	IDC0813I	IDCSD01	IDCSD01	IDCTSSD0
IDC0550I	IDCDL01	IDCDL01	IDCTSDL0	IDC0814I	IDCSD01	IDCSD01	IDCTSSD0
	IDCMP01	IDCMP01	IDCTSDL0	IDC0815I	IDCSD01	IDCSD01	IDCTSSD0
	IDCRM01	IDCRM01	IDCTSDL0	IDC0816I	IDCSD01	IDCSD01	IDCTSSD0
	IDCXP01	IDCXP01	IDCTSDL0	IDC0817I	IDCSD01	IDCSD01	IDCTSSD0
IDC0551I	IDCDL01	IDCDL01	IDCTSDL0	IDC0832I	IDCLV01	IDCLV01	IDCTSLV0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	ICBVUT02	IDCLV01	IDCTSLV0	IDC1569I	IDCLC01	IDCLC01	IDCTSLC1
IDC0855I	IDCTU01	IDCTU01	IDCTSTU0	IDC1574I	IDCRP01	IDCRP01	IDCTSPR0
IDC0861I	IDCCK01	IDCCK01	IDCTSCK0	IDC1575I	IDCRP01	IDCRP01	IDCTSPR0
IDC0862I	IDCCK01	IDCCK01	IDCTSCK0	IDC1595I	IDCXP01	IDCXP01	IDCTSXP0
IDC0863I	IDCCK01	IDCCK01	IDCTSCK0	IDC1597I	IDCXP01	IDCXP01	IDCTSXP0
IDC0874I	IDCLR01	IDCLR01	IDCTSLR1	IDC01600I	IDCSS03	IDCSC01	IDCSS03
IDC0877I	IDCLR01	IDCLR01	IDCTSLR1	IDC01603I	IDCSS03	IDCSC01	IDCSS03
IDC0888I	IDCRC01	IDCRC01	IDCTSRC0	IDC01605I	IDCSC01	IDCSC01	IDCTSSC0
IDC0922I	IDCDB02	IDCDB02	IDCTSEX0	IDC1631I	IDCCC01	IDCCC01	IDCTSCC0
IDC0923I	IDCDB02	IDCDB02	IDCTSEX0	IDC1632I	IDCCC01	IDCCC01	IDCTSCC0
IDC0924I	IDCDB01	IDCDB01	IDCTSEX0	IDC1638I	IDCCC01	IDCCC01	IDCTSCC0
IDC0925I	IDCDB01	IDCDB01	IDCTSEX0	IDC1644I	IDCBI01	IDCBI01	IDCTSB10
IDC0970I	IDCVS01	IDCVS01	IDCTSVS0	IDC1645I	IDCBI01	IDCBI01	IDCTSB10
IDC0974I	IDCVS03	IDCVS03	IDCTSVS0	IDC1646I	IDCBI01	IDCBI01	IDCTSB10
IDC01002I	IDCRS01	IDCRS01	IDCTSR01	IDC1653I	IDCBI01	IDCBI01	IDCTSB10
IDC01011I	IDCRS01	IDCRS01	IDCTSR01	IDC1661I	IDCRC01	IDCRC01	IDCTSRC0
IDC01037I	IDCRS01	IDCRS01	IDCTSR01	IDC1662I	IDCRC01	IDCRC01	IDCTSRC0
IDC01049I	IDCRS01	IDCRS01	IDCTSR01	IDC1663I	IDCRC02	IDCRC02	IDCTSRC0
IDC01069I	IDCSA09	IDCSA09	IDCTSCM0	IDC1664I	IDCRC02	IDCRC02	IDCTSRC0
IDC01120I	IDCCH04	IDCCH04	IDCTSCH0	IDC1667I	IDCRC01	IDCRC01	IDCTSRC0
IDC01121I	IDCCH04	IDCCH04	IDCTSCH0	IDC1678I	IDCRC01	IDCRC01	IDCTSRC0
IDC01122I	IDCCH04	IDCCH04	IDCTSCH0	IDC1679I	IDCRC01	IDCRC01	IDCTSRC0
IDC01123I	IDCCH04	IDCCH04	IDCTSCH0	IDC1707I	IDCCO01	IDCCO01	IDCTSC00
IDC01124I	IDCCH04	IDCCH04	IDCTSCH0	IDC1742I	IDCCN01	IDCCN01	IDCTSCN0
IDC1140I	IDCXP01	IDCXP01	IDCTSMPO	IDC1784I	IDCEC01	IDCEC01	IDCTSEC0
IDC1142I	IDCXP0	IDCXP0	IDCTSMPO	IDC1840I	IDCTR01	IDCTR01	IDCTSTR0
IDC01146I	IDCAU03	IDCAU03	IDCTSAU0	IDC1841I	IDCTR01	IDCTR01	IDCTSTR0
IDC01190I	IDCNC01	IDCNC01	IDCTSNCO	IDC1860I	IDCCK01	IDCCK01	IDCTSCK0
IDC01215I	IDCRD02	IDCRD02	IDCTSRD0	IDC1864I	IDCCK01	IDCCK01	IDCTSCK0
	IDCRD06	IDCRD06	IDCTSRD0	IDC1865I	IDCCK01	IDCCK01	IDCTSCK0
IDC01236I	IDCRD04	IDCRD04	IDCTSRD0	IDC1866I	IDCCK01	IDCCK01	IDCTSCK0
IDC1252I	IDCRI04	IDCRI04	IDCTSR11	IDC1867I	IDCCK01	IDCCK01	IDCTSCK0
IDC01371I	IDCDA03	IDCDA03	IDCTSDA0	IDC1870I	IDCLR01	IDCLR01	IDCTSLR1
IDC01402I	IDCCC01	IDCCC01	IDCTSCC0		IDCLR02	IDCLR02	IDCTSLR1
IDC01407I	IDCCC01	IDCCC01	IDCTSCC0	IDC1871I	IDCLR01	IDCLR01	IDCTSLR1
IDC01408I	IDCCC01	IDCCC01	IDCTSCC0		IDCLR02	IDCLR02	IDCTSLR1
IDC01460I	IDCRP01	IDCRP01	IDCTSPRO	IDC1875I	IDCLR01	IDCLR01	IDCTSLR1
IDC01500I	IDCSS03	IDCBD01	IDCSS03	IDC1878I	IDCLR01	IDCLR01	IDCTSLR1
IDC1502I	IDCDE02	IDCDE02	IDCTSDE0	IDC1880I	IDCLR01	IDCLR01	IDCTSLR1
IDC1543I	IDCAL01	IDCAL02	IDCTSAL0	IDC1881I	IDCLR01	IDCLR01	IDCTSLR1
IDC1544I	IDCAL01	IDCAL02	IDCTSAL0	IDC1885I	IDCLR01	IDCLR01	IDCTSLR1
IDC01551I	IDCBD01	IDCBD01	IDCTSLA0	IDC1887I	IDCRC01	IDCRC01	IDCTSRC0
IDC01552I	IDCLA01	IDCLA01	IDCTSLA0	IDC1890I	IDCDL01	IDCDL01	IDCTSDL0
IDC01553I	IDCLA01	IDCLA01	IDCTSLA0	IDC1891I	IDCDL01	IDCDL01	IDCTSDL0
IDC01554I	IDCLA01	IDCLA01	IDCTSLA0	IDC1927I	IDCPM01	IDCPM01	IDCTSEX0
IDC01555I	IDCLA01	IDCLA01	IDCTSLA0	IDC1968I	IDCVS01	IDCVS01	IDCTSVS0
IDC01556I	IDCLA01	IDCLA01	IDCTSLA0	IDC1969I	IDCVS01	IDCVS01	IDCTSVS0
IDC01557I	IDCLA01	IDCLA01	IDCTSLA0	IDC2011I	IDCLM01	IDCLM01	IDCTSUV0
IDC1561I	IDCLC02	IDCLC02	IDCTSLC1	IDC2035I	IDCTP06	IDCTP06	IDCTSTP6
IDC1562I	IDCLC01	IDCLC01	IDCTSLC1	IDC2065I	IDCAV01	IDCAV01	IDCTSCM0
IDC1564I	IDCLC01	IDCLC01	IDCTSLC1		IDCMV01	IDCMV01	IDCTSCM0
IDC1565I	IDCLC01	IDCLC01	IDCTSLC1		IDCSR01	IDCSR01	IDCTSCM0
IDC1566I	IDCLC01	IDCLC01	IDCTSLC1	IDC2074I	IDCLD01	IDCLD01	IDCTSCM0
IDC1567I	IDCLC01	IDCLC01	IDCTSLC1	IDC2075I	IDCAV01	IDCAV01	IDCTSCM0
	IDCLC02	IDCLC02	IDCTSLC1		IDCCV01	IDCCV01	IDCTSCM0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module	
IDC2076I	IDCMV01	IDCMV01	IDCTSCM0	IDC2097I	IDCRV01	IDCRV01	IDCTSCM0	
	IDCCO01	IDCCO01	IDCTSCM0		IDCEV01	IDCEV01	IDCTSCM0	
	IDCRV01	IDCRV01	IDCTSCM0		IDCMG01	IDCMG01	IDCTSMC0	
	IDCSV01	IDCSV01	IDCTSCM0		IDCMV01	IDCMV01	IDCTSCM0	
IDC2078I	IDCCO01	IDCCO01	IDCTSCM0		IDCCN01	IDCCN01	IDCTSCM0	
	IDCLV01	IDCLV01	IDCTSCM0		IDC2100I	IDCAV01	IDCAV01	IDCTSCM0
IDCRR01	IDCRR01	IDCTSCM0	IDCLD01			IDCLD01	IDCTSCM0	
IDC2079I	IDCSV01	IDCSV01	IDCTSCM0			IDCSD01	IDCSD01	IDCTSCM0
	IDCAV01	IDCAV01	IDCTSCM0			IDCSR01	IDCSR01	IDCTSCM0
	IDCCV01	IDCCV01	IDCTSCM0			IDCRV01	IDCRV01	IDCTSCM0
	IDCLC01	IDCLD01	IDCTSCM0			IDCMG01	IDCMG01	IDCTSCM0
	IDCLV01	IDCLV01	IDCTSCM0			IDCMV01	IDCMV01	IDCTSCM0
	IDCMG01	IDCMG01	IDCTSCM0			IDCCN01	IDCCN01	IDCTSCM0
IDC2080I	IDCMV01	IDCMV01	IDCTSCM0			IDCEV01	IDCEV01	IDCTSCM0
	IDCSD01	IDCSD01	IDCTSCM0			IDCCO01	IDCCO01	IDCTSCM0
	IDCAV01	IDCAV01	IDCTSCM0		IDC2101I	IDCSA07	IDCSA07	IDCTSSA7
	IDCCN01	IDCCN01	IDCTSCM0	IDC2101I		IDCSA07	IDCSA07	IDCTSSA7
	IDCCO01	IDCCO01	IDCTSCM0	IDC2103I	IDCLD01	IDCLD01	IDCTSCM0	
	IDCLD01	IDCLD01	IDCTSCM0	IDC2108I	IDCSD01	IDCSD01	IDCTSCM0	
	IDCLV01	IDCLV01	IDCTSCM0		IDCLD01	IDCLD01	IDCTSCM0	
	IDCMG01	IDCMG01	IDCTSCM0	IDC2109I	IDCSD01	IDCSD01	IDCTSCM0	
	IDCMV01	IDCMV01	IDCTSCM0		IDCLD01	IDCLD01	IDCTSCM0	
	IDCRL01	IDCRL01	IDCTSCM0	IDC2110I	IDCSD01	IDCSD01	IDCTSCM0	
IDCRR01	IDCRR01	IDCTSCM0	IDCLD01		IDCLD01	IDCTSCM0		
IDCRV01	IDCRV01	IDCTSCM0	IDC2111I	IDCSD01	IDCSD01	IDCTSCM0		
IDCSD01	IDCSD01	IDCTSCM0		IDCLD01	IDCLD01	IDCTSCM0		
IDC2084I	IDCSR01	IDCSR01	IDCTSCM0	IDC2118I	IDCLV01	IDCLV01	IDCTSCM0	
	IDCSV01	IDCSV01	IDCTSCM0		IDC2119I	IDCLV01	IDCLV01	IDCTSCM0
	IDCCO01	IDCCO01	IDCTSCM0	IDC2160I	IDCRC01	IDCRC01	IDCTSRC0	
	IDCEV01	IDCEV01	IDCTSCM0	IDC2360I	IDCSA07	IDCSA07	IDCTSSA7	
	IDCSR01	IDCSR01	IDCTSCM0		IDC2364I	IDCSA07	IDCSA07	IDCTSSA7
	IDC2087I	IDCCO01	IDCCO01	IDCTSCM0	IDC2370I	IDCIO05	IDCIO05	IDCTSIO5
IDCSV01		IDCSV01	IDCTSCM0	IDC2371I	IDCIO05	IDCIO05	IDCTSIO5	
IDC2091I	IDCAV01	IDCAV01	IDCTSAV0	IDC2372I	IDCIO05	IDCIO05	IDCTSIO5	
	IDCAV01	IDCAV01	IDCTSCM0	IDC2373I	IDCIO05	IDCIO05	IDCTSIO5	
IDC2093I	IDCCV01	IDCCV01	IDCTSCM0		IDC2374I	IDCIO05	IDCIO05	IDCTSIO5
	IDCMV01	IDCMV01	IDCTSCM0	IDC2375I	IDCIO05	IDCIO05	IDCTSIO5	
IDC2095I	IDCMV01	IDCMV01	IDCTSCM0	IDC2376I	IDCIO05	IDCIO05	IDCTSIO5	
	IDCAV01	IDCAV01	IDCTSCM0	IDC2381I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCLD01	IDCLD01	IDCTSCM0	IDC2382I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCSD01	IDCSD01	IDCTSCM0		IDC2386I	IDCSA06	IDCSA06	IDCTSSA6
	IDCRV01	IDCRV01	IDCTSCM0	IDC2387I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCEV01	IDCEV01	IDCTSCM0	IDC2388I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCMG01	IDCMG01	IDCTSCM0	IDC2390I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCMV01	IDCMV01	IDCTSCM0	IDC2391I	IDCSA06	IDCSA06	IDCTSSA6	
	IDCSR01	IDCSR01	IDCTSCM0		IDC2399I	IDCSA07	IDCSA07	IDCTSSA7
	IDCSV01	IDCSV01	IDCTSCM0	IDC2400I	IDCLD01	all FSRs	IDCTSSS0	
IDCCN01	IDCCN01	IDCTSCM0	IDC2401I	IDCLD01	all FSRs	IDCTSSS0		
IDCCO01	IDCCO01	IDCTSCM0	IDC2402I	IDCLD01	all FSRs	IDCTSSS0		
IDC2096I	IDCAV01	IDCAV01	IDCTSCM0	IDC2403I	IDCLD01	all FSRs	IDCTSSS0	
	IDCCO01	IDCCO01	IDCTSCM0	IDC2404I	IDCLD01	all FSRs	IDCTSSS0	
	IDCLD01	IDCLD01	IDCTSCM0	IDC2405I	IDCLD01	all FSRs	IDCTSSS0	
	IDCSD01	IDCSD01	IDCTSCM0	IDC2406I	IDCLD01	all FSRs	IDCTSSS0	
	IDCSR01	IDCSR01	IDCTSCM0	IDC2407I	IDCLD01	all FSRs	IDCTSSS0	

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC2408I	IDCLD01	all FSRs	IDCTSSSO		ICRC02	IDCRC02	IDCTSRC0
IDC2409I	IDCLD01	all FSRs	IDCTSSSO	IDC2666I	IDCRC01	IDCRC01	IDCTSRC0
IDC2410I	IDCLD01	all FSRs	IDCTSSSO	IDC2668I	IDCRC01	IDCRC01	IDCTSRC0
IDC2411I	IDCLD01	all FSRs	IDCTSSSO	IDC2671I	IDCRC01	IDCRC01	IDCTSRC0
IDC2412I	IDCLD01	all FSRs	IDCTSSSO	IDC2673I	IDCRC01	IDCRC01	IDCTSRC0
IDC2413I	IDCLD01	all FSRs	IDCTSSSO	IDC2675I	IDCRC01	IDCRC01	IDCTSRC0
IDC2414I	IDCLD01	all FSRs	IDCTSSSO	IDC2677I	IDCRC01	IDCRC01	IDCTSRC0
IDC2415I	IDCLD01	all FSRs	IDCTSSSO	IDC2681I	IDCCV01	IDCCV01	IDCTSCV0
IDC2416I	IDCLD01	all FSRs	IDCTSSSO	IDC2684I	IDCCV01	IDCCV01	IDCTSCV0
IDC2417I	IDCLD01	all FSRs	IDCTSSSO	IDC2685I	IDCCV01	IDCCV01	IDCTSCV0
IDC2418I	IDCLD01	all FSRs	IDCTSSSO	IDC2687I	IDCCV01	IDCCV01	IDCTSCV0
IDC2419I	IDCLD01	all FSRs	IDCTSSSO	IDC2688I	IDCCV01	IDCCV01	IDCTSCV0
IDC2420I	IDCLD01	all FSRs	IDCTSSSO	IDC2689I	IDCCV01	IDCCV01	IDCTSCV0
IDC2421I	IDCLD01	all FSRs	IDCTSSSO	IDC2752I	IDCSV01	IDCSV01	IDCTSSV0
IDC2422I	IDCLD01	all FSRs	IDCTSSSO	IDC2753I	IDCSV01	IDCSV01	IDCTSSV0
IDC2423I	IDCLD01	all FSRs	IDCTSSSO	IDC2761I	IDCRR01	IDCRR01	IDCTSRRO
IDC2424I	IDCLD01	all FSRs	IDCTSSSO	IDC2762I	IDCRR01	IDCRR01	IDCTSRRO
IDC2425I	IDCLD01	all FSRs	IDCTSSSO	IDC2764I	IDCAV01	IDCAV01	IDCRR0
IDC2426I	IDCLD01	all FSRs	IDCTSSSO		IDCRR01	IDCRR01	IDCTSRRO
IDC2427I	IDCLD01	all FSRs	IDCTSSSO	IDC2765I	IDCRR01	IDCRR01	IDCTSRRO
IDC2428I	IDCLD01	all FSRs	IDCTSSSO	IDC2782I	IDCEC01	IDCEC01	IDCTSEC0
IDC2429I	IDCLD01	all FSRs	IDCTSSSO	IDC2800I	IDCMG01	IDCMG01	IDCTSMG0
IDC2430I	IDCLD01	all FSRs	IDCTSSSO	IDC2801I	IDCMG01	IDCMG01	IDCTSMG0
IDC2431I	IDCLD01	all FSRs	IDCTSSSO	IDC2821I	IDCLM01	IDCLM01	IDCTSLM0
IDC2432I	IDCLD01	all FSRs	IDCTSSSO	IDC2823I	IDCLM01	IDCLM01	IDCTSLM0
IDC2433I	IDCLD01	all FSRs	IDCTSSSO	IDC2831I	IDCLV01	IDCLV01	IDCTSLV0
IDC2434I	IDCLD01	all FSRs	IDCTSSSO	IDC2832I	IDCLV01	IDCLV01	IDCTSLV0
IDC2439I	IDCMC01	IDCMC01	IDCTSSSO	IDC2833I	IDCLV01	IDCLV01	IDCTSLV0
IDC2533I	IDCAL01	IDCAL01	IDCTSAL0	IDC2834I	IDCLV01	IDCLV01	IDCTSLV0
IDC2552I	IDCDL01	IDCDL01	IDCTSDL0	IDC2843I	IDCTR01	IDCTR01	IDCTSTR0
IDC2553I	IDCDL01	IDCDL01	IDCTSDL0	IDC2853I	IDCTU01	IDCTU01	IDCTSTU0
IDC2557I	IDCDL01	IDCDL01	IDCTSDL0	IDC2854I	IDCTU01	IDCTU01	IDCTSTU0
IDC2559I	IDCDL01	IDCDL01	IDCTSDL0	IDC2872I	IDCLR01	IDCLR01	IDCTSLR1
IDC2563I	IDCLC01	IDCLC01	IDCTSLC1	IDC2873I	IDCLR01	IDCLR01	IDCTSLR1
	IDCLO02	IDCLO02	IDCTSLC1	IDC2876I	IDCLR01	IDCLR01	IDCTSLR1
IDC2616I	IDCMP01	IDCMP01	IDCTSMP0	IDC2879I	IDCLR01	IDCLR01	IDCTSLR1
	IDCRM01	IDCRM01	IDCTSMP0	IDC2882I	IDCLR01	IDCLR01	IDCTSLR1
IDC2618I	IDCMP01	IDCMP01	IDCTSMP0	IDC2884I	IDCLR01	IDCLR01	IDCTSLR1
IDC2620I	IDCMP01	IDCMP01	IDCTSMP0	IDC2886I	IDCRC01	IDCRC01	IDCTSRC0
	IDCCC01	IDCCC01	IDCTSMP0	IDC2889I	IDCRC01	IDCRC01	IDCTSRC0
	IDCRM01	IDCRM01	IDCTSMP0	IDC2895I	IDCDL01	IDCDL01	IDCTSDL0
IDC2621I	IDCRM01	IDCRM01	IDCTSMP0	IDC2908I	IDCIO03	IDCIO03	IDCTSIO0
IDC2630I	IDCCC01	IDCCC01	IDCTSCC0		IDCSA08	IDCSA08	IDCTSIO0
	IDCCC02	IDCCC02	IDCTSCC0	IDC2909I	IDCSA08	IDCSA08	IDCTSSA0
IDC2640I	IDCBI01	IDCBI01	IDCTSBI0	IDC2910I	IDCSA08	IDCSA08	IDCTSSA0
IDC2642I	IDCBI01	IDCBI01	IDCTSBI0	IDC2912I	IDCSA08	IDCSA08	IDCTSSA0
IDC2647I	IDCBI01	IDCBI01	IDCTSBI0	IDC2913I	IDCSA08	IDCSA08	IDCTSSA0
IDC2648I	IDCBI01	IDCBI01	IDCTSBI0	IDC2914I	IDCSA08	IDCSA08	IDCTSSA0
IDC2649I	IDCBI01	IDCBI01	IDCTSBI0	IDC2915I	IDCSA08	IDCSA08	IDCTSSA0
IDC2650I	IDCBI01	IDCBI01	IDCTSBI0	IDC2916I	IDCSA08	IDCSA08	IDCTSSA0
IDC2651I	IDCBI01	IDCBI01	IDCTSBI0	IDC2917I	IDCSA08	IDCSA08	IDCTSSA0
IDC2654I	IDCBI01	IDCBI01	IDCTSBI0	IDC2918I	IDCSA08	IDCSA08	IDCTSSA0
IDC2655I	IDCBI01	IDCBI01	IDCTSBI0	IDC2919I	IDCSA08	IDCSA08	IDCTSSA0
IDC2656I	IDCBI01	IDCBI01	IDCTSBI0	IDC2930I	IDCSA08	IDCSA08	IDCTSSA0
IDC2660I	IDCRC01	IDCRC01	IDCTSRC0	IDC2950I	IDCTP01	IDCTP01	IDCTSTP1

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC29511	IDCTP01	IDCTP01	IDCTSTP1	IDC30071	IDCAL01	IDCAL01	IDCTSTP6
IDC29521	IDCTP01	IDCTP01	IDCTSTP1		IDCBI01	IDCBI01	IDCTSTP6
IDC29531	IDCTP01	IDCTP01	IDCTSTP1		IDCDE01	IDCDE01	IDCTSTP6
IDC29541	IDCTP05	IDCTP05	IDCTSTP1		IDCDE02	IDCDE02	IDCTSTP6
IDC29551	IDCTP01	IDCTP01	IDCTSTP1		IDCDL01	IDCDL01	IDCTSTP6
IDC29601	IDCVS01	IDCVS01	IDCTSVS0		IDCLC02	IDCLC02	IDCTSTP6
IDC29611	IDCVS01	IDCVS01	IDCTSVS0		IDCMP01	IDCMP01	IDCTSTP6
IDC29621	IDCVS01	IDCVS01	IDCTSVS0		IDCCN01	IDCCN01	IDCTSUV0
IDC29631	IDCVS01	IDCVS01	IDCTSVS0		IDCRC02	IDCRC02	IDCTSUV0
IDC29641	IDCVS01	IDCVS01	IDCTSVS0		IDCRM01	IDCRM01	IDCTSTP6
IDC29651	IDCVS01	IDCVS01	IDCTSVS0		IDCRS01	IDCRS01	IDCTSTP6
IDC29661	IDCVS01	IDCVS01	IDCTSVS0		IDCRS06	IDCRS06	IDCTSTP6
IDC29671	IDCVS01	IDCVS01	IDCTSVS0		IDCTR01	IDCTR01	IDCTRUUV0
IDC29711	IDCVS01	IDCVS01	IDCTSVS0		IDCXP01	IDCXP01	IDCTSTP6
IDC29721	IDCVS03	IDCVS03	IDCTSVS0	IDC30081	IDCSA02	IDCSA02	IDCTSUV0
IDC29731	IDCVS01	IDCVS01	IDCTSVS0	IDC30091	IDCAL01	IDCAL01	IDCTSTP6
IDC30031	IDCAL01	IDCAL01	IDCTSUV0		IDCBI01	IDCBI01	IDCTSTP6
	IDCBI01	IDCBI01	IDCTSUV0		IDCCC01	IDCCC01	IDCTSTP6
	IDCCC01	IDCCC01	IDCTSUV0		IDCCN01	IDCCN01	IDCTSUV0
	IDCDE01	IDCDE01	IDCTSUV0		IDCDE01	IDCDE01	IDCTSTP6
	IDCED02	IDCED02	IDCTSUV0		IDCDE02	IDCDE02	IDCTSTP6
	IDCLC01	IDCLC01	IDCTSUV0		IDCDL01	IDCDL01	IDCTSTP6
	IDCMP01	IDCMP01	IDCTSUV0		IDCLC02	IDCLC02	IDCTSTP6
	IDCPR01	IDCPR01	IDCTSUV0		IDCMP01	IDCMP01	IDCTSTP6
	IDCRC01	IDCRC01	IDCTSUV0		IDCRC02	IDCRC02	IDCTSUV0
	IDCRM01	IDCRM01	IDCTSUV0		IDCRM01	IDCRM01	IDCTSTP6
	IDCRP01	IDCRP01	IDCTSUV0		IDCRS01	IDCRS01	IDCTSTP6
	IDCRS05	IDCRS05	IDCTSUV0		IDCRS06	IDCRS06	IDCTSTP6
	IDCVY01	IDCVY01	IDCTSUV0		IDCSA02	IDCSA02	IDCTSTP6
	IDCXP01	IDCXP01	IDCTSUV0		IDCXP01	IDCXP01	IDCTSTP6
IDC30041	IDCAL01	IDCAL01	IDCTSUV0	IDC30101	IDCCN01	IDCCN01	IDCTSUV0
	IDCCC01	IDCCC01	IDCTSUV0		IDCLC01	IDCLC01	IDCTSUV0
	IDCCC02	IDCCC02	IDCTSUV0		IDCMP01	IDCMP01	IDCTSUV0
	IDCDE01	IDCDE01	IDCTSUV0		IDCSA02	IDCSA02	IDCTSUV0
	IDCDE02	IDCDE02	IDCTSUV0		IDCXP02	IDCXP02	IDCTSUV0
	IDCIO01	IDCIO01	IDCTSUV0	IDC30121	IDCTP06	IDCTP06	IDCTSTP6
	IDCIO02	IDCIO02	IDCTSUV0	IDC30131	IDCTP06	IDCTP06	IDCTSTP6
	IDCLC01	IDCLC01	IDCTSUV0	IDC30141	IDCTP06	IDCTP06	IDCTSTP6
	IDCLR01	IDCLR01	IDCTSUV0	IDC30161	IDCTP06	IDCTP06	IDCTSTP6
	IDCMP01	IDCMP01	IDCTSUV0	IDC30171	IDCTP06	IDCTP06	IDCTSTP6
	IDCPM01	IDCPM01	IDCTSUV0	IDC30181	IDCTP06	IDCTP06	IDCTSTP6
	IDCRC01	IDCRC01	IDCTSUV0	IDC30191	IDCTP06	IDCTP06	IDCTSTP6
	IDCRC02	IDCRC02	IDCTSUV0	IDC30201	IDCTP06	IDCTP06	IDCTSTP6
	IDCRI01	IDCRI01	IDCTSUV0	IDC30211	IDCTP06	IDCTP06	IDCTSTP6
	IDCRM01	IDCRM01	IDCTSUV0	IDC30221	IDCTP06	IDCTP06	IDCTSTP6
	IDCRP01	IDCRP01		IDC30231	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS01	IDCRS01	IDCTSUV0	IDC30241	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS03	IDCRS03	IDCTSUV0	IDC30251	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS04	IDCRS04	IDCTSUV0	IDC30261	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS05	IDCRS05	IDCTSUV0	IDC30271	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS06	IDCRS06	IDCTSUV0	IDC30281	IDCTP06	IDCTP06	IDCTSTP6
	IDCRS07	IDCRS07	IDCTSUV0	IDC30291	IDCTP06	IDCTP06	IDCTSTP6
	IDCXP01	IDCXP01	IDCTSUV0	IDC30301	IDCTP06	IDCTP06	IDCTSTP6
IDC30061	IDCPR01	IDCPR01	IDCTSUV0	IDC30311	IDCTP06	IDCTP06	IDCTSTP6
	IDCRP01	IDCRP01	IDCTSUV0	IDC30321	IDCTP06	IDCTP06	IDCTSTP6

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC3033I	IDCTP06	IDCTP06	IDCTSTP6	IDC3200I	IDCRI01	IDCRI01	IDCTSR10
IDC3062I	IDCAV01	IDCAV01	IDCTSCM0	IDC3201I	IDCRI01	IDCRI01	IDCTSR10
	IDCMV01	IDCMV01	IDCTSCM0	IDC3202I	IDCRI01	IDCRI01	IDCTSR10
	IDCSR01	IDCSR01	IDCTSCM0	IDC3203I	IDCRI01	IDCRI01	IDCTSR10
IDC3066I	IDCAV01	IDCAV01	IDCTSCM0	IDC3205I	IDCRI01	IDCRI01	IDCTSR10
	IDCCN01	IDCCN01	IDCTSCM0	IDC3207I	IDCRI01	IDCRI01	IDCTSR10
	IDCCO01	IDCCO01	IDCTSCM0	IDC3208I	IDCRI01	IDCRI01	IDCTSR10
	IDCRV01	IDCRV01	IDCTSCM0	IDC3209I	IDCRI01	IDCRI01	IDCTSR10
IDC3067I	IDCAV01	IDCAV01	IDCTSCM0	IDC3210I	IDCRI01	IDCRI01	IDCTSR10
	IDCCN01	IDCCN01	IDCTSCM0	IDC3211I	IDCRI01	IDCRI01	IDCTSR10
	IDCRV01	IDCRV01	IDCTSCM0	IDC3212I	IDCRI01	IDCRI01	IDCTSR10
IDC3070I	IDCAV01	IDCAV01	IDCTSCM0	IDC3213I	IDCRI01	IDCRI01	IDCTSR10
	IDCRV01	IDCRV01	IDCTSCM0	IDC3214I	IDCRI01	IDCRI01	IDCTSR10
IDC3071I	IDCCN01	IDCCN01	IDCTSCM0	IDC3216I	IDCRI01	IDCRI01	IDCTSR10
	IDCRV01	IDCRV01	IDCTSCM0	IDC3217I	IDCRI01	IDCRI01	IDCTSR10
IDC3072I	IDCAV01	IDCAV01	IDCTSCM0	IDC3218I	IDCRI01	IDCRI01	IDCTSR10
	IDCCV01	IDCCV01	IDCTSCM0	IDC3219I	IDCRI01	IDCRI01	IDCTSR10
IDC3074I	IDCAV01	IDCAV01	IDCTSCM0	IDC3220I	IDCRI01	IDCRI01	IDCTSR10
	IDCCN01	IDCCN01	IDCTSCM0	IDC3221I	IDCRI01	IDCRI01	IDCTSR10
	IDCCO01	IDCCO01	IDCTSCM0	IDC3223I	IDCRI01	IDCRI01	IDCTSR10
	IDCLD01	IDCLD01	IDCTSCM0	IDC3225I	IDCRI01	IDCRI01	IDCTSR10
	IDCMV01	IDCMV01	IDCTSCM0	IDC3226I	IDCRI01	IDCRI01	IDCTSR10
	IDCRV01	IDCRV01	IDCTSCM0	IDC3240I	IDCRI04	IDCRI04	IDCTSR11
	IDCSD01	IDCSD01	IDCTSCM0	IDC3241I	IDCRI04	IDCRI04	IDCTSR11
	IDCSR01	IDCSR01	IDCTSCM0	IDC3242I	IDCRI04	IDCRI04	IDCTSR11
	IDCSV01	IDCSV01	IDCTSCM0	IDC3243I	IDCRI04	IDCRI04	IDCTSR11
IDC3081I	IDCAV01	IDCAV01	IDCTSCM0	IDC3244I	IDCRI04	IDCRI04	IDCTSR11
	IDCRR01	IDCRR01	IDCTSCM0	IDC3246I	IDCRI04	IDCRI04	IDCTSR11
	IDCRV01	IDCRV01	IDCTSCM0	IDC3247I	IDCRI04	IDCRI04	IDCTSR11
IDC3082I	IDCCN01	IDCCN01	IDCTSCM0	IDC3248I	IDCRI04	IDCRI04	IDCTSR11
	IDCRV01	IDCRV01	IDCTSCM0	IDC3249I	IDCRI04	IDCRI04	IDCTSR11
IDC3089I	IDCAV01	IDCAV01	IDCTSCM0	IDC3250I	IDCRI04	IDCRI04	IDCTSR11
	IDCEV01	IDCEV01	IDCTSCM0	IDC3251I	IDCRI04	IDCRI04	IDCTSR11
IDC3090I	IDCAV01	IDCAV01	IDCTSCM0	IDC3253I	IDCRI04	IDCRI04	IDCTSR11
	IDCMV01	IDCMV01	IDCTSCM0	IDC3300I	IDCIO02	IDCIO02	IDCTSIO0
	IDCSR01	IDCSR01	IDCTSCM0		IDCIO05	IDCIO05	IDCTSIO5
IDC3092I	IDCAV01	IDCAV01	IDCTSCM0	IDC3301I	IDCIO02	IDCIO02	IDCTSIO0
	IDCMV01	IDCMV01	IDCTSCM0	IDC3302I	IDCIO01	IDCIO01	IDCTSIO0
	IDCRV01	IDCRV01	IDCTSCM0		IDCIO03	IDCIO03	IDCTSIO0
	IDCSR01	IDCSR01	IDCTSCM0		IDCRS06	IDCRS06	IDCTSIO0
IDC3099I	IDCAV01	IDCAV01	IDCTSCM0	IDC3303I	IDCIO02	IDCIO02	IDCTSIO0
	IDCCO01	IDCCO01	IDCTSCM0	IDC3304I	IDCIO02	IDCIO02	IDCTSIO0
	IDCCV01	IDCCV01	IDCTSCM0	IDC3305I	IDCIO02	IDCIO02	IDCTSIO0
	IDCEC01	IDCEC01	IDCTSCM0	IDC3306I	IDCIO02	IDCIO02	IDCTSIO0
	IDCEV01	IDCEV01	IDCTSCM0	IDC3307I	IDCIO02	IDCIO02	IDCTSIO0
	IDCLV01	IDCLV01	IDCTSCM0	IDC3308I	IDCIO01	IDCIO01	IDCTSIO0
	IDCMC01	IDCMC01	IDCTSCM0	IDC3309I	IDCIO01	IDCIO01	IDCTSIO0
	IDCRL01	IDCRL01	IDCTSCM0	IDC3310I	IDCIO03	IDCIO03	IDCTSIO0
IDC3113I	IDCLD01	IDCLD01	IDCTSCM0	IDC3311I	IDCIO03	IDCIO03	IDCTSIO0
IDC3114I	IDCAV01	IDCAV01	IDCTSCM0	IDC3312I	IDCIO02	IDCIO02	IDCTSIO0
	IDCMV01	IDCMV01	IDCTSCM0	IDC3313I	IDCIO01	IDCIO01	IDCTSIO0
IDC3179I	IDCAL01	IDCAL01	IDCTSDE0		IDCIO05	IDCIO05	IDCTSIO5
	IDCDE02	IDCDE02		IDC3314I	IDCIO01	IDCIO01	IDCTSIO0
IDC3190I	IDCAL01	IDCAL01	IDCTSAL0	IDC3315I	IDCIO02	IDCIO02	IDCTSIO0
IDC3191I	IDCAL01	IDCAL01	IDCTSAL0	IDC3316I	IDCIO02	IDCIO02	IDCTSIO0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC3317I	IDCIO01	IDCIO01	IDCTSIO0		IDCDE02	IDCDE02	IDCTSDE0
	IDCIO02	IDCIO02	IDCTSIO0	IDC3525I	IDCAL01	IDCAL01	IDCTSAL0
	IDCIO03	IDCIO03	IDCTSIO0	IDC3527I	IDCAL01	IDCAL01	IDCTSAL0
IDC3318I	IDCIO02	IDCIO02	IDCTSIO0	IDC3528I	IDCAL01	IDCAL01	IDCTSAL0
IDC3321I	IDCIO02	IDCIO02	IDCTSIO0	IDC3529I	IDCAL01	IDCAL01	IDCTSAL0
IDC3322I	IDCIO01	IDCIO01	IDCTSIO0	IDC3530I	IDCAL01	IDCAL01	IDCTSAL0
IDC3325I	IDCIO01	IDCIO01	IDCTSIO0	IDC3536I	IDCAL01	IDCAL01	IDCTSAL0
IDC3326I	IDCIO02	IDCIO02	IDCTSIO0	IDC3537I	IDCAL01	IDCAL01	IDCTSAL0
IDC3327I	IDCIO01	IDCIO01	IDCTSIO0	IDC3538I	IDCAL01	IDCAL01	IDCTSAL0
IDC3330I	IDCIO03	IDCIO03	IDCTSIO0	IDC3539I	IDCAL01	IDCAL01	IDCTSAL0
IDC3331I	IDCIO03	IDCIO03	IDCTSIO0	IDC3540I	IDCAL01	IDCAL01	IDCTSAL0
IDC3332I	IDCIO02	IDCIO02	IDCTSIO0	IDC3541I	IDCAL01	IDCAL01	IDCTSAL0
	IDCIO03	IDCIO03	IDCTSIO0	IDC3542I	IDCAL01	IDCAL01	IDCTSAL0
	IDCSA02	IDCSA02	IDCTSIO0	IDC3545I	IDCAL01	IDCAL01	IDCTSAL0
IDC3333I	IDCIO01	IDCIO01	IDCTSIO0	IDC3546I	IDCAL01	IDCAL01	IDCTSAL0
IDC3334I	IDCIO01	IDCIO01	IDCTSIO0	IDC3547I	IDCAL01	IDCAL01	IDCTSAL0
IDC3335I	IDCIO01	IDCIO01	IDCTSIO0	IDC3568I	IDCLC01	IDCLC01	IDCTSLC1
IDC3336I	IDCIO01	IDCIO01	IDCTSIO0	IDC3570I	IDCRP01	IDCRP01	IDCTSPR0
IDC3337I	IDCIO01	IDCIO01	IDCTSIO0	IDC3572I	IDCRP01	IDCRP01	IDCTSPR0
IDC3338I	IDCIO01	IDCIO01	IDCTSIO0	IDC3573I	IDCRP01	IDCRP01	IDCTSPR0
IDC3340I	IDCIO01	IDCIO01	IDCTSIO0	IDC3576I	IDCRP01	IDCRP01	IDCTSPR0
IDC3341I	IDCIO01	IDCIO01	IDCTSIO0	IDC3577I	IDCRP01	IDCRP01	IDCTSPR0
IDC3350I	IDCIO01	IDCIO01	IDCTSIO0	IDC3578I	IDCRP01	IDCRP01	IDCTSPR0
	IDCIO02	IDCIO02	IDCTSIO0	IDC3579I	IDCRP01	IDCRP01	IDCTSPR0
	IDCIO03	IDCIO03	IDCTSIO0	IDC3580I	IDCRP01	IDCRP01	IDCTSPR0
IDC3351I	IDCIO01	IDCIO01	IDCTSIO0	IDC3581I	IDCRP01	IDCRP01	IDCTSPR0
	IDCIO02	IDCIO02	IDCTSIO0	IDC3582I	IDCRP01	IDCRP01	IDCTSPR0
	IDCIO03	IDCIO03	IDCTSIO0	IDC3583I	IDCPR01	IDCPR01	IDCTSPR0
	IDCRS06	IDCRS06	IDCTSIO0		IDCRP01	IDCRP01	IDCTSPR0
IDC3380I	IDCSA06	IDCSA06	IDCTSSA6	IDC3584I	IDCRP01	IDCRP01	IDCTSPR0
IDC3383I	IDCSA06	IDCSA06	IDCTSSA6	IDC3585I	IDCRP01	IDCRP01	IDCTSPR0
IDC3392I	IDCSA06	IDCSA06	IDCTSSA6	IDC3586I	IDCRP01	IDCRP01	IDCTSPR0
IDC3435I	IDCMC01	IDCMC01	IDCTSSS0	IDC3587I	IDCRP01	IDCRP01	IDCTSPR0
IDC3436I	IDCMC01	IDCMC01	IDCTSSS0	IDC3588I	IDCRP01	IDCRP01	IDCTSPR0
IDC3437I	IDCMC01	IDCMC01	IDCTSSS0	IDC3589I	IDCRP01	IDCRP01	IDCTSPR0
IDC3438I	IDCMC01	IDCMC01	IDCTSSS0	IDC3592I	IDCXP01	IDCXP01	IDCTSXP0
IDC3500I	IDCDE03	IDCDE03	IDCTSDE0	IDC3593I	IDCRX01	IDCRC01	IDCTSXP0
IDC3501I	IDCDE02	IDCDE02	IDCTSDE0		IDCC01	IDCC01	IDCTSXP0
IDC3503I	IDCDE02	IDCDE02	IDCTSDE0		IDCRC02	IDCRC02	IDCTSXP0
IDC3504I	IDCDE02	IDCDE02	IDCTSDE0		IDCXP01	IDCXP01	IDCTSXP0
IDC3505I	IDCDE01	IDCDE01	IDCTSDE0	IDC3596I	IDCXP01	IDCXP01	IDCTSXP0
IDC3506I	IDCDE01	IDCDE01	IDCTSDE0	IDC3598I	IDCXP01	IDCXP01	IDCTSXP0
IDC3507I	IDCDE01	IDCDE01	IDCTSDE0	IDC3599I	IDCXP01	IDCXP01	IDCTSXP0
IDC3513I	IDCDE01	IDCDE01	IDCTSDE0	IDC3602I	IDXMP01	IDCMP01	IDCTSMP0
IDC3514I	IDCDE02	IDCDE02	IDCTSDE0		IDCRM01	IDCRM01	IDCTSMP0
	IDCMP01	IDCMP01	IDCTSDE0	IDC3605I	IDCMP01	IDCMP01	IDCTSMP0
IDC3515I	IDCDE02	IDCDE02	IDCTSDE0	IDC3606I	IDCMP01	IDCMP01	IDCTSMP0
IDC3516I	IDCDE01	IDCDE01	IDCTSDE0		IDCRM01	IDCRM01	IDCTSMP0
IDC3517I	IDCDE02	IDCDE02	IDCTSDE0	IDC3607I	IDCMP01	IDCMP01	IDCTSMP0
IDC3518I	IDCDE01	IDCDE01	IDCTSDE0	IDC3608I	IDCMP01	IDCMP01	IDCTSMP0
IDC3519I	IDCDE01	IDCDE01	IDCTSDE0	IDC3609I	IDCMP01	IDCMP01	IDCTSMP0
IDC3521I	IDCDE01	IDCDE01	IDCTSDE0		IDCRM01	IDCRM01	IDCTSMP0
IDC3522I	IDCDE01	IDCDE01	IDCTSDE0	IDC3610I	IDCMP01	IDCMP01	IDCTSMP0
IDC3523I	IDCDE02	IDCDE02	IDCTSDE0	IDC3612I	IDCMP01	IDCMP01	IDCTSMP0
IDC3524I	IDCDE01	IDCDE01	IDCTSDE0	IDC3613I	IDCMP01	IDCMP01	IDCTSMP0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC3614I	IDCRM01	IDCRM01	IDCTSMP0	IDC4227I	IDCRI01	IDCRI01	IDCTSRI0
IDC3615I	IDCMP01	IDCMP01	IDCTSMP0	IDC4228I	IDCRI01	IDCRI01	IDCTSRI0
IDC3617I	IDCMP01	IDCMP01	IDCTSMP0	IDC4229I	IDCRI01	IDCRI01	IDCTSRI0
IDC3619I	IDCRM01	IDCRM01	IDCTSMP0	IDC4230I	IDCRI01	IDCRI01	IDCTSRI0
IDC3624I	IDCRM01	IDCRM01	IDCTSMP0	IDC4232I	IDCRI01	IDCRI01	IDCTSRI0
IDC3625I	IDCMP01	IDCMP01	IDCTSMP0	IDC4237I	IDCRI01	IDCRI01	IDCTSRI0
IDC3628I	IDCRM01	IDCRM01	IDCTSMP0	IDC4999I	IDCSA01	IDCSA01	IDCTSA01
IDC3629I	IDCMP01	IDCMP01	IDCTSMP0	IDC11003I	IDCRS06	IDCRS06	IDCTSR06
	IDCRM01	IDCRM01	IDCTSMP0	IDC11015I	IDCRS06	IDCRS06	IDCTSR06
				IDC11022I	IDCRS02	IDCRS02	IDCTSR02
IDC3633I	IDCC01	IDCC01	IDCTSCC0	IDC11023I	IDCRS02	IDCRS02	IDCTSR02
IDC3641I	IDCBI01	IDCBI01	IDCTSBIO	IDC11029I	IDCRS03	IDCRS03	IDCTSR03
IDC3643I	IDCBI01	IDCBI01	IDCTSBIO	IDC11031I	IDCRS03	IDCRS03	IDCTSR03
IDC3682I	IDCCV01	IDCCV01	IDCTSCV0	IDC11033I	IDCRS03	IDCRS03	IDCTSR03
IDC3683I	IDCCV01	IDCCV01	IDCTSCV0	IDC11036I	IDCRS03	IDCRS03	IDCTSR03
IDC3691I	IDCMV01	IDCMV01	IDCTSMV0	IDC11040I	IDCRS03	IDCRS03	IDCTSR03
IDC3692I	IDCMV01	IDCMV01	IDCTSMV0	IDC11041I	IDCRS03	IDCRS03	IDCTSR03
IDC3700I	IDCC01	IDCC01	IDCTSCO0	IDC11042I	IDCRS03	IDCRS03	IDCTSR03
IDC3701I	IDCC01	IDCC01	IDCTSCO0	IDC11043I	IDCRS03	IDCRS03	IDCTSR03
IDC3702I	IDCC01	IDCC01	IDCTSCO0	IDC11044I	IDCRS03	IDCRS03	IDCTSR03
IDC3706I	IDCC01	IDCC01	IDCTSCO0	IDC11216I	ICRD04	ICRD04	IDCTSRD0
IDC3708I	IDCC01	IDCC01	IDCTSCO0	IDC11217I	ICRD04	ICRD04	IDCTSRD0
IDC3709I	IDCC01	IDCC01	IDCTSCO0	IDC11218I	ICRD04	ICRD04	IDCTSRD0
IDC3710I	IDCRV01	IDCRV01	IDCTSRV0	IDC11219I	ICRD04	ICRD04	IDCTSRD0
IDC3712I	IDCRV01	IDCRV01	IDCTSRV0	IDC11250I	IDCMC01	IDCMD01	IDCTSMC0
IDC3720I	IDCAV01	IDCAV01	IDCTSAV0	IDC11360I	IDCDA03	IDCDA03	IDCTSDA0
IDC3721I	IDCAV01	IDCAV01	IDCTSAV0	IDC11361I	IDCDA03	IDCDA03	IDCTSDA0
IDC3726I	IDCAV01	IDCAV01	IDCTSAV0	IDC11362I	IDCDA03	IDCDA03	IDCTSDA0
IDC3730I	IDCSR01	IDCSR01	IDCTSSR0	IDC11367I	IDCDA03	IDCDA03	IDCTSDA0
IDC3732I	IDCSR01	IDCSR01	IDCTSSR0	IDC11373I	IDCDA03	IDCDA03	IDCTSDA0
IDC3734I	IDCSR01	IDCSR01	IDCTSSR0	IDC11441I	IDCLC02	IDCLC02	IDCTSLC1
IDC3738I	IDCCN01	IDCCN01	IDCTSCN0	IDC11614I	IDCSS01	IDCLA01	IDCLA01
IDC3739I	IDCCN01	IDCCN01	IDCTSCN0	IDC11651I	IDCXP01	IDCXP01	IDCTSMPO
IDC3740I	IDCCN01	IDCCN01	IDCTSCN0	IDC11653I	IDCXP01	IDCXP01	IDCTSMPO
IDC3741I	IDCCN01	IDCCN01	IDCTSCN0	IDC11654I	IDCXP01	IDCXP01	IDCTSMPO
IDC3744I	IDCCN01	IDCCN01	IDCTSCN0	IDC11656I	IDCXP01	IDCXP01	IDCTSMPO
	IDCSR01	IDCSR01	IDCTSSR0	IDC21009I	IDCRS01	IDCRS01	IDCTSR01
IDC3745I	IDCCN01	IDCCN01	IDCTSCN0		IDCRS03	IDCRS03	IDCTSR03
	IDCSR01	IDCSR01	IDCTSSR0	IDC21020I	IDCRS06	IDCRS06	IDCTSR06
IDC3770I	IDCEV01	IDCEV01	IDCTSEV0	IDC21024I	IDCRS02	IDCRS02	IDCTSR02
IDC3802I	IDCGR01	IDCGR01	IDCTSMG0	IDC21025I	IDCRS03	IDCRS03	IDCTSR03
	IDCMG01	IDCMG01		IDC21026I	IDCRS02	IDCRS02	IDCTSR02
IDC3820I	IDCLM01	IDCLM01	IDCTSLM0	IDC21027I	IDCRS03	IDCRS03	IDCTSR03
IDC3822I	IDCAU01	IDCAU01	IDCTSAU0	IDC21030I	IDCRS03	IDCRS03	IDCTSR03
	IDCLM01	IDCLM01	IDCTSLM0	IDC21032I	IDCRS02	IDCRS02	IDCTSR02
IDC3842I	IDCTR01	IDCTR01	IDCTSTR0		IDCRS03	IDCRS03	IDCTSR03
IDC3844I	IDCTR01	IDCTR01	IDCTSTR0	IDC21034I	IDCRS03	IDCRS03	IDCTSR03
IDC3850I	IDCTU01	IDCTU01	IDCTSTU0	IDC21045I	IDCRS07	IDCRS07	IDCTSR07
IDC3851I	IDCTU01	IDCTU01	IDCTSTU0	IDC21046I	IDCRS07	IDCRS07	IDCTSR07
IDC3852I	IDCTU01	IDCTU01	IDCTSTU0	IDC21047I	IDCRS07	IDCRS07	IDCTSR07
IDC3860I	IDCMV01	IDCMV01	IDCTSMV0	IDC21100I	IDCDU01	IDCDU01	IDCTSDU0
IDC3883I	IDCLR01	IDCLR01	IDCTSLR1	IDC21101I	IDCDU01	IDCDU01	IDCTSDU0
IDC3900I	IDCSA02	IDCSA02	IDCTSRI1	IDC21102I	IDCDU01	IDCDU01	IDCTSDU0
IDC3901I	IDCSA02	IDCSA02	IDCTSRI1	IDC21103I	IDCDU01	IDCDU01	IDCTSDU0
IDC3902I	IDCSA02	IDCSA02	IDCTSRI1	IDC21104I	IDCDU01	IDCDU01	IDCTSDU0

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC21105I	IDCDU01	IDCDU01	IDCTSDU0	IDC31205I	IDCRD07	IDCRD07	IDCTSRD0
IDC21106I	IDCDU01	IDCDU01	IDCTSDU0	IDC31206I	IDCRD07	IDCRD07	IDCTSRD0
IDC21107I	IDCDU01	IDCDU01	IDCTSDU0	IDC31207I	IDCRD07	IDCRD07	IDCTSRD0
IDC21108I	IDCDU01	IDCDU01	IDCTSDU0	IDC31208I	IDCRD07	IDCRD07	IDCTSRD0
IDC21109I	IDCDU01	IDCDU01	IDCTSDU0	IDC31209I	IDCRD07	IDCRD07	IDCTSRD0
IDC21125I	IDCCH01	IDCCH01	IDCTSCH0	IDC31210I	IDCRD07	IDCRD07	IDCTSRD0
IDC21127I	IDCCH01	IDCCH01	IDCTSCH0	IDC31211I	IDCRD07	IDCRD07	IDCTSRD0
IDC21141I	IDCAU03	IDCAU03	IDCTSAU0	IDC31212I	IDCRD07	IDCRD07	IDCTSRD0
IDC21143I	IDCCA03	IDCCA03	IDCTSAU0	IDC31213I	IDCRD04	IDCRD04	IDCTSRD0
IDC21144I	IDCCA03	IDCCA03	IDCTSAU0	IDC31214I	IDCRD04	IDCRD04	IDCTSRD0
IDC21147I	IDCAU03	IDCAU03	IDCTSAU0	IDC31220I	IDCRD06	IDCRD06	IDCTSRD0
IDC21363I	IDCDA03	IDCDA03	IDCTSDA0	IDC31221I	IDCRD05	IDCRD05	IDCTSRD0
IDC21364I	IDCDA02	IDCDA02	IDCTSDA0	IDC31222I	IDCRD05	IDCRD05	IDCTSRD0
IDC21365I	IDCDA03	IDCDA03	IDCTSDA0	IDC31223I	IDCRD05	IDCRD05	IDCTSRD0
IDC21372I	IDCDA01	IDCDA01	IDCTSDA0	IDC31224I	IDCRD05	IDCRD05	IDCTSRD0
IDC21404I	IDCCC02	IDCCC02	IDCTSCC0	IDC31225I	IDCRD05	IDCRD05	IDCTSRD0
IDC21409I	IDCCC01	IDCCC01	IDCTSCC0	IDC31226I	IDCRD05	IDCRD05	IDCTSRD0
IDC21410I	IDCCC01	IDCCC01	IDCTSCC0	IDC31227I	IDCRD05	IDCRD05	IDCTSRD0
IDC21411I	IDCCC02	IDCCC02	IDCTSCC0	IDC31228I	IDCRD05	IDCRD05	IDCTSRD0
IDC21412I	IDCCC02	IDCCC02	IDCTSCC0	IDC31229I	IDCRD05	IDCRD05	IDCTSRD0
IDC21558I	IDCLA01	IDCLA01	IDCTSLA0	IDC31230I	IDCRD05	IDCRD05	IDCTSRD0
IDC31000I	IDCRS02	IDCRS02	IDCTSR0	IDC31231I	IDCRD05	IDCRD05	IDCTSRD0
IDC31001I	IDCRS01	IDCRS01	IDCTSR0	IDC31232I	IDCRD05	IDCRD05	IDCTSRD0
IDC31004I	IDCRS06	IDCRS06	IDCTSR0	IDC31233I	IDCRD07	IDCRD07	IDCTSRD0
IDC31005I	IDCRS02	IDCRS02	IDCTSR0	IDC31234I	IDCRD07	IDCRD07	IDCTSRD0
IDC31006I	IDCRS07	IDCRS07	IDCTSR0	IDC31235I	IDCRD07	IDCRD07	IDCTSRD0
IDC31007I	IDCRS07	IDCRS07	IDCTSR0	IDC31237I	IDCRD04	IDCRD04	IDCTSRD0
IDC31008I	IDCRS01	IDCRS01	IDCTSR0	IDC31238I	IDCRD03	IDCRD03	IDCTSRD0
IDC31010I	IDCRS01	IDCRS01	IDCTSR0	IDC31239I	IDCRD07	IDCRD07	IDCTSRD0
IDC31012I	IDCRS06	IDCRS06	IDCTSR0	IDC31240I	IDCRD07	IDCRD07	IDCTSRD0
IDC31013I	IDCRS01	IDCRS01	IDCTSR0	IDC31241I	IDCRD05	IDCRD05	IDCTSRD0
IDC31014I	IDCRS06	IDCRS06	IDCTSR0	IDC31242I	IDCRD05	IDCRD05	IDCTSRD0
IDC31016I	IDCRS01	IDCRS01	IDCTSR0	IDC31243I	IDCRD05	IDCRD05	IDCTSRD0
IDC31017I	IDCRS01	IDCRS01	IDCTSR0	IDC31244I	IDCRD04	IDCRD04	IDCTSRD0
IDC31018I	IDCRS01	IDCRS01	IDCTSR0	IDC31245I	IDCRD05	IDCRD05	IDCTSRD0
IDC31019I	IDCRS01	IDCRS01	IDCTSR0	IDC31246I	IDCRD07	IDCRD07	IDCTSRD0
IDC31035I	IDCRS01	IDCRS01	IDCTSR0	IDC31247I	IDCRD04	IDCRD04	IDCTSRD0
	IDCRS03	IDCRS03	IDCTSR0	IDC31251I	IDCRD04	IDCRD04	IDCTSRD0
IDC31038I	IDCDA01	IDCDA01	IDCTSDA0		IDCMC01	IDCMC01	IDCTSMC0
	IDCRS01	IDCRS01	IDCTSR0	IDC31265I	IDCCO01	IDCCO01	IDCTSCO0
IDC31126I	IDCCH01	IDCCH01	IDCTSCH0	IDC31366I	IDCDA01	IDCDA01	IDCTSDA0
IDC31140I	IDCAU01	IDCAU01	IDCTSAU0	IDC31368I	IDCDA01	IDCDA01	IDCTSDA0
IDC31142I	IDCAU03	IDCAU03	IDCTSAU0	IDC31369I	IDCDA01	IDCDA01	IDCTSDA0
IDC31143I	IDCAU03	IDCAU03	IDCTSAU0	IDC31370I	IDCDA01	IDCDA01	IDCTSDA0
IDC31145I	IDCAU03	IDCAU03	IDCTSAU0	IDC31400I	IDCCC01	IDCCC01	IDCTSCC0
IDC31148I	IDCAU03	IDCAU03	IDCTSAU0	IDC31401I	IDCCC01	IDCCC01	IDCTSCC0
IDC31160I	IDCST01	IDCST01	IDCTSCT0	IDC31403I	IDCCC01	IDCCC01	IDCTSCC0
IDC31170I	IDCST01	IDCST01	IDCTSST0	IDC31405I	IDCCC01	IDCCC01	IDCTSCC0
IDC31180I	IDCCP01	IDCCP01	IDCTSCP0	IDC31405I	IDCCC01	IDCCC01	IDCTSCC0
IDC31181I	IDCCP01	IDCCP01	IDCTSCP0	IDC31406I	IDCCC01	IDCCC01	IDCTSCC0
	IDCEC01	IDCEC01	IDCTSEC0	IDC31440I	IDCLC01	IDCLC01	IDCTSLC0
IDC31201I	IDCRD02	IDCRD02	IDCTSRD0	IDC31461I	IDCRP01	IDCRP01	IDCTSPR0
IDC31202I	IDCRD02	IDCRD02	IDCTSRD0	IDC31502I	IDCBD01	IDCBD01	IDCBD01
IDC31203I	IDCRD07	IDCRD07	IDCTSRD0		IDCSS04		IDCSS04
IDC31204I	IDCRD07	IDCRD07	IDCTSRD0	IDC31503I	IDCBD01	IDCBD01	IDCBD01

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IDC31504I	IDCSS03	IDCBD01	IDCSS03	IEA189I	IEAVN610	IEAVM200	IEAVM200
IDC31550I	IDCLA01	IDCLA01	IDCLA01	IEA190I	IEAVN613	IEAVM200	IEAVM200
IDC31562I	IDCSS01	IDCLA01	IDCTSSC0	IEA191I	IEAVN613	IEAVM200	IEAVM200
IDC31601I	IDCSS02	IDCBD01	IDCSS02	IEA192I	IEAVN613	IEAVM200	IEAVM200
		IDCLA01		IEA193I	IEAVN600	IEAVNPA1	IEAVNPA1
		IDCSC01			IEAVN613		
IDC31602I	IDCSS03	IDCBD01	IDCSS03	IEA194I	IEAVN613	IEAVM200	IEAVM200
		IDCLA01		IEA195I	IEAVN600	IEAVM200	IEAVM200
		IDCSC01			IEAVN601		
IDC31604I	IDCBD01	IDCBD01	IDCBD01		IEAVN602		
	IDCLA01	IDCLA01	IDCLA01		IEAVN611		
	IDCSC01	IDCSC01	IDCSC01		IEAVN612		
IDC31607I	IDCSS01	IDCLA01	IDCTSSC0	IEA196I	IEAVN600	IEAVM200	IEAVM200
IDC31655I	IDCMP01	IDCMP01	IDCTSMP0		IEAVN601		
IEA000I	ERPs	ERPs	ERPs		IEAVN602		
					IEAVN611		
IEA001I	IECIOSCN	IGE0025C	IGE0025C		IEAVN612		
IEA030I	IEAVTABD	IEAVTABD	IEAVTABD		IEAVN612		
IEA084W	IEAIPL03	IEAIPL35	IEAIPL03	IEA208I	IEAVNP03	IEAVNPM2	IEAVNP03
IEA086W	IEAIPL02	IEAIPL35	IEAIPL02		IEAVNPC5	IEAVNPM2	IEAVNPC5
	IEAIPL40		IEAIPL40		IEAVNP03	IEAVNPM2	IEAVNP03
	IEAIPL41		IEAIPL41	IEA211I	IEAVNPM3	IEAVNPM2	IEAVNPM3
IEA087W	IEAIPL41	IEAIPL35	IEAIPL41	IEA212A	IEAVNP02	IEAVNPM2	IEAVNP02
IEA088W	IEAIPL41	IEAIPL35	IEAIPL41	IEA216I	IEAVNP03	IEAVNPM2	IEAVNP03
IEA089W	IEAIPL02	IEAIPL35	IEAIPL02		IEAVNP14	IEAVNPM2	IEAVNP14
IEA090W	IEAIPL02	IEAIPL35	IEAIPL02	IEA230E	IEAVMQWR	IEAVMQWR	IEAVMQWR
	IEAIPL40		IEAIPL40	IEA231A	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA091I	IEAIPL41	IEAIPL35	IEAIPL41	IEA232I	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA092I	IEAIPL02	IEAIPL35	IEAIPL02	IEA240I	IEAVNP05	IEAVNPM2	IEAVNP05
IEA093I	IEAIPL02	IEAIPL35	IEAIPL02	IEA300I	IEAVNIPM	IEAVNPM2	IEAVNIPM
IEA096W	IEAIPL40	IEAIPL35	IEAIPL40		IEAVNP03	IEAVNPM2	IEAVNP03
					IEAVNP05	IEAVNPM2	IEAVNP05
IEA097W	IEAIPL40	IEAIPL35	IEAIPL40		IEAVNP13	IEAVNPM2	IEAVNP13
IEA098W	IEAIPL40	IEAIPL35	IEAIPL40		IEAVNP16	IEAVNPM2	IEAVNP16
IEA101A	IEAVNP01	IEAVNPM2	IEAVNIPM		IEAVNPM4	IEAVNPM2	IEAVNPM4
IEA107I	IEAVNP03	IEAVNPM2	IEAVNP03		IEAVNPM3	IEAVNPM2	IEAVNIPM
	IEAVNP05	IEAVNPM2	IEAVNP05		IEAVNPM4	IEAVNPM2	IEAVNIPM
IEA108I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA301I	IEAVNIPM	IEAVNPM2	IEAVNIPM
		IEAVNP05			IEAVNP03	IEAVNPM2	IEAVNP03
IEA109I	IEAVNP05	IEAVNPM2	IEAVNP05		IEAVNP05	IEAVNPM2	IEAVNP05
IEA116A	IEAVNP03	IEAVNPM2	IEAVNIPM		IEAVNP13	IEAVNPM2	IEAVNP13
IEA120A	IEAVNP02	IEAVNPM2	IEAVNP02		IEAVNP16	IEAVNPM2	IEAVNP16
IEA133E	IEAVETRM	IEAVETRM	IEAVETRM		IGFRINIT	IEAVNPM2	IGFRINIT
IEA134I	IEECB925	IEECB925	IEECB925		IEAVNPC5	IEAVNPM2	IEAVNPC5
IEA139E	IEAVXPCR	IEAVXPCR	IEAVXPCR		IEAVNPM4	IEAVNPM2	IEAVNPM4
IEA140W	IEAVNP08	IEAVNP08	IEAVNP08		IEAVNPM3	IEAVNPM2	IEAVNIPM
	IEAVNPB8	IEAVNPB8			IEAVNPM4	IEAVNPM2	IEAVNIPM
IEA152I	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA302I	IEAVNIPM	IEAVNPM2	IEAVNIPM
IEA153I	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA303W	IEAVNIPM	IEAVNPM2	IEAVNIPM
IEA154I	IEAVNPM2	IEAVNPM2	IEAVNPM2	IEA304W	IEAVNIPM	IEAVNPM2	IEAVNIPM
IEA162I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA305A	IEAVNPM2	IEAVNPM2	IEAVNPM2
IEA163E	ILRASRIM	ILRIMMSG	ILRIMMSG		IEAVNPM2	IEAVNPM2	IEAVNPM2
	IEAVNP13	IEAVNPM2	IEAVNP13	IEA306I	IEAVNPM3	IEAVNPM2	IEAVNIPM
IEA180I	IEAVC701	IEAVC701	IEAVC701		IEAVNPM4	IEAVNPM2	IEAVNIPM
IEA181I	IEAVC701	IEAVC701	IEAVC701	IEA307I	IEAVNPM3	IEAVNPM2	IEAVNP03
IEA187I	IEAVNPA1	IEAVNPA1	IEAVNPA1		IEAVNP02	IEAVNPM2	IEAVNP02
IEA188I	IEAVN610	IEAVM200	IEAVM200	IEA310A	IEAVNPM3	IEAVNPM2	IEAVNPM3

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	IEAVNP02	IEAVNPM2	IEAVNP02	IEA357I	IEAVNPC5	IEAVNPM2	IEAVNPC5
	IEAVNP03	IEAVNPM2	IEAVNP03			IEAVNPC5	
	ILRASRIM	IEAVNPM2	ILRIMMSG	IEA358I	IEAVNPC5	IEAVNPM2	IEAVNPC5
IEA311I	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA359E	IEAVMQWR	IEAVMQWR	IEAVMQWR
	IEAVNP02	IEAVNPM2	IEAVNP02	IEA360A	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA312I	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA361I	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA313I	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA362E	IEAVMQWR	IEAVMQWR	IEAVMQWR
	IEAVNP02	IEAVNPM2	IEAVNP02	IEA363I	IEAVNPS5	IEAVNP05	IEAVNP05
IEA314I	IEAVNPM3	IEAVNPM2	IEAVNPM3		IEAVNP05	IEAVNPM2	IEAVNP05
IEA315A	IEAVNPM3	IEAVNPM2	IEAVNPM3		IEAVNP07	IEAVNPM2	IEAVNP07
IEA316A	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA364E	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA317A	IEAVNPM3	IEAVNPM2	IEAVNPM3		IEAVM700	IEAVMQWR	IEAVMQWR
IEA318I	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA365E	IEAVN701	IEAVN701	IEAVN701
IEA319I	IEAVNPM3	IEAVNPM2	IEAVNPM3	IEA366W	IEAVN700	IGFPTCON	IEAVN700
IEA320A	IEAVNP03	IEAVNPM2	IEAVNP03	IEA367A	IEAVN701	IEESTPRS	IEAVN701
IEA321I	IEAVNP08	IEAVNP08	IEAVNP08	IEA404A	IEAVMQWR	IEAVMQWR	IEAVMQWR
				IEA405E	IEAVMQWR	IEAVMQWR	IEAVMQWR
IEA322A	IEAVNPA1	IEAVNPM2	IEAVMPA1	IEA406I	IEAVMQWR	IEAVMQWR	IEAVMQWR
	IEAVNP03	IEAVNPM2	IEAVNP03	IEA408I	IEAVNIPM	IEAVNIPM	IEAVNIPM
IEA323I	IEAVNP03	IEAVNPM2	IEAVNP03	IEA410E	IECVRSTI	IECVRSTI	IECVRSTI
IEA324I	IEAVNP03	IEAVNPM2	IEAVNP03		IECVIRST	IEAVTRET	IECVIRST
IEA325I	IEAVNP03	IEAVNPM2	IEAVNP03	IEA411I	IEAVTSLP	IEECB908	IEECB908
IEA326I	IEAVNP03	IEAVNPM2	IEAVNP03	IEA412I	IEAVTSLP	IEECB908	IEECB908
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA413I	IEAVTSLP	IEECB908	IEECB908
IEA327I	IEAVNP03	IEAVNPM2	IEAVNP03	IEA414I	IEAVTGLB	IEAVTGLB	IEAVTGLB
IEA328E	IEAVNP03	IEAVNPM2	IEAVNP03		IEAVTPVT	IEAVTPVT	IEAVTPVT
IEA328I	IEAVNP03	IEAVNPM2	IEAVNP03	IEA415I	IEAVTLCL	IEECB708	IEECB908
IEA329I	IEAVC700	IEAVC700	IEAVC700		IEAVTPVT	IEAVTPVT	IEAVTPVT
IEA330A	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA418I	IEAVNPF2	IEAVNPF2	IEAVNPF2
	IEAVNP03	IEAVNPM2	IEAVNP03	IEA419I	IEAVNPF2	IOSRMIHT	IEAVNPF2
IEA331I	IEAVNP03	IEAVNPM2	IEAVNP03		IOSRMIHT	IOSRMIHT	IOSRMIHT
IEA332A	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA422I	IEAVTJBN	IEECB908	IEECB908
	IEAVNP03	IEAVNPM2	IEAVNP03	IEA423I	IEECB915	IEECB915	IEECB915
IEA333A	IEAVNP03	IEAVNPM2	IEAVNP03	IEA424I	IEAVTGLB	IEECB908	IEECB908
IEA334A	IEAVNPM4	IEAVNPM2	IEAVNPM4	IEA427A	IECVDURP	IECVDURP	IECVDURP
IEA335I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA428I	IECVDURP	IECVDURP	IECVDURP
IEA337I	IEAVNPM3	NIPWTO	IEAVNPM3	IEA429I	IECVDURP	IECVDURP	IECVDURP
IEA340I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA442E	IECVDERP	IECLMSGD	IECLMSGD
IEA342E	ILRQSRIT	ILRIMMSG	ILRIMMSG	IEA442E	IGGSNS01	IECVDMSG	IECVDMSG
IEA343D	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA448I	IGGSNS01	IECVDMSG	IECVDMSG
IEA347A	IEAVNP11	IEAVNP11	IEAVNP11	IEA449A	IGGSNS01	IECVDMSG	IECVDMSG
IEA349I	IEAVNPM3	NIPWTO	IEAVNPM3	IEA451E	IGGSNS01	IECVDMSG	IECVDMSG
IEA350I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA452I	IGGSNS01	IECVDMSG	IECVDMSG
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA453I	IGGSNS01	IECVDMSG	IECVDMSG
IEA351I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA454E	IGGSNS01	IECVDMSG	IECVDMSG
IEA352I	IEAVNPA5	IEAVNPM2	IEAVNPA5	IEA455E	IGGSNS01	IECVDMSG	IECVDMSG
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA457I	IGGSNS01	IECVDMSG	IECVDMSG
	IEAVNP05	IEAVNP05	IEAVNP05	IEA458I	IGGSNS01	IECVDMSG	IECVDMSG
IEA353I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA459I	IGGSNS01	IECVDMSG	IECVDMSG
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA466I	IECVDER2	IECVDMSG	IECVDMSG
IEA354I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA467E	IECVDER2	IECVDMSG	IECVDMSG
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA468I	IECVDER2	IECVDMSG	IECVDMSG
IEA355A	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA469E	IECVDER2	IECVDMSG	IECVDMSG
IEA356I	IEAVNP05	IEAVNPM2	IEAVNP05	IEA470W	IEAVSPDM	IEAVSPDM	IEAVSPDM
	IEAVNPC5	IEAVNPM2	IEAVNPC5	IEA471E	IEAVSPDM	IEAVSPDM	IEAVSPDM

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEA473I	IGGSNS01	IECVDMSG	IECVDMSG	IEA805I	IEAVMFRM	IEAVMFRM	IEAVMFRM
IEA474I	IGGSNS01	IECVDMSG	IECVDMSG	IEA807I	IEAVLK00	IEAVLK00	IEAVLK00
IEA475E	IGGSNS01	IECVDMSG	IECVDMSG	IEA811E	ILRASRIM	ILRIMMSG	ILRIMMSG
IEA476E	IGGSNS01	IECVDMSG	IECVDMSG	IEA812E	ILRASRM1	ILRIMMSG	ILRIMMSG
IEA477I	IGGSNS01	IECVDMSG	IECVDMSG	IEA813E	ILRASRIM	ILRIMMSG	ILRIMMSG
IEA478I	IGGSNS01	IECVDMSG	IECVDMSG	IEA836I	ILROPS00	ILRIMMSG	ILRIMMSG
IEA479I	IGGSNS01	IECVDMSG	IECVDMSG	IEA837I	ILRASRIM	ILRIMMSG	ILRIMMSG
IEA480E	IGGSNS01	IECVDMSG	IECVDMSG		ILRASRM1	ILRIMMSG	ILRIMMSG
IEA481I	IGGSNS01	IECVDMSG	IECVDMSG	IEA838I	IEAVTSYS	IEAVTSYS	IEAVTSYS
IEA500A	IEAVEREX	IEAVEREX	IEAVEREX	IEA839I	ILRASRIM	ILRIMMSG	ILRASRIM
IEA501I	IEAVEREX	IEAVEREX	IEAVEREX	IEA840I	IEAVNP13	IEAVNP13	IEAVNP13
IEA502A	IEAVEREX	IEAVEREX	IEAVEREX	IEA841E	ILRASRIM	ILRIMMSG	ILRASRIM
IEA535I	ICBMSG05	ICBMSG05	ICBMSG05	IEA842E	ILRASRIM	ILRIMMSG	ILRASRIM
IEA536I	ICBMSG05	ICBMSG05	ICBMSG05	IEA843I	IEAVTABI	IEAVTABI	IEAVTABI
IEA537I	ICBMSG05	IEAVNPM2	ICBMSG05	IEA846I	IEAIPL00	IEAVNPM2	IEAVNIP0
IEA539I	IEAVNP19	IEAVNP19	IEAVNPM2		IEAVNIP0	IEAVNPM2	IEAVNIP0
IEA590I	IEAVVINT	IEAVVINT	IEAVVNIT	IEA848I	IEAVTABD	IEAVTABD	IEAVTABD
	IEAVX600	IEAVX600	IEAVX600	IEA849I	IEAVTABD	IEAVTABD	IEAVTABD
IEA598I	IEAVNP20	IEAVNPM2	IEAVNP20	IEA850I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA599I	IEAVNP20	IEAVNPM2	IEAVNP20	IEA851A	IEAVAP00	IEAVNPM2	IEAVAP00
IEA600I	IEAVNP20	IEAVNPM2	IEAVNP20	IEA851I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA601I	IEAVNP20	IEAVNPM2	IEAVNP20	IEA852I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA604A	IECVDVAV	IECVDVAV	IECVDVAV	IEA853A	IEAVAP00	IEAVNPM2	IEAVAP00
IEA605A	IECVDVAV	IECVDVAV	IECVDVAV	IEA854I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA606I	IECVDVAV	IECVDVAV	IECVDVAV	IEA855I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA607I	IEAVTSDR	IEAVTSDR	IEAVTSDR	IEA857W	IEAVTCR1	IGFPTERM	IEAVTCR1
IEA607E	IEAVTSDR	IEAVTSDR	IEAVTSDR	IEA858E	IEAVTACR	IGFPWMSG	IGFPWMSG
IEA703I	IEAVLK00	IEAVLK00	IEAVLK00	IEA859I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA705I	IGVRVSM	IEAVTPMT	IEAVTPMT	IEA860A	IEAVAP00	IEAVNPM2	IEAVAP00
	IGVVSM24			IEA861A	IEAVAP00	IEAVNPM2	IEAVAP00
	IGVVSM31			IEA862I	IEAVAR00	IEAVAR00	IEAVAR00
	IGVVSMRT			IEA863I	IEAVNP13	IEAVNPM2	IEAVNP13
	IGVVSMRF			IEA864I	IEAVNP13	IEAVNPM2	IEAVNP13
	IGVVSCEL			IEA865I	IEAVNP05	IEAVNPM2	IEAVNP05
IEA710A	IEAVNP05	IEAVNP05	IEAVNP05		IEAVNPC5	IEAVNPM2	IEAVNPC5
IEA711E	IEAVNP05	IEAVNP05	IEAVNP05	IEA866I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA712I	IEAVNP05	IEAVNP05	IEAVNP05	IEA867I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA713I	IEAVNP05	IEAVNP05	IEAVNP05	IEA868I	IEAVNP13	IEAVNPM2	IEAVNP13
IEA714I	IEAVNP05	IEAVNP05	IEAVNP05	IEA869I	IEAVNPB6	IEAVNPM2	IEAVNPB6
IEA736I	IEAVNP09	IEAVNPM2	IEAVNP09	IEA870I	IEAVNPB6	IEAVNPM2	IEAVNPB6
	IEAVNP09	IEAVNP09	IEAVNP09	IEA871I	IEAVNPB6	IEAVNPM2	IEAVNPB6
IEA737I	IEAVNP09	IEAVNPM2	IEAVNP09	IEA872I	IEAVNP10	IEAVNPM2	IEAVNP10
	IEAVNP09	IEAVNP09	IEAVNP09	IEA873I	IEAVNP10	IEAVNPM2	IEAVNP10
IEA738I	IEAVNP09	IEAVNPM2	IEAVNP09	IEA874I	IEAVNP10	IEAVNPM2	IEAVNP10
	IEAVNP09	IEAVNP09	IEAVNP09	IEA875I	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA740W	IEAVESVR	IEAVESVR	IEAVESVR	IEA876I	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA768I	IEAVTSAI	IEAVNP57	IEAVNP57	IEA877A	IEAVTSDD	IEAVTSDD	IEAVTSDD
	IEAVTSAS	IEAVTSDR	IEAVTSDR	IEA878I	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA774I	IEAVNPM2	IEAVNPM2	IEAVNPM2	IEA879A	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA792I	IEAVTMTC	IEAVTMTC	IEAVTMTC	IEA880I	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA797W	IEAVTRTV	IGFPEMER	IEAVTRTV	IEA881I	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA801I	IEAVENQ1	IEAVENQ1	IEAVENQ1	IEA882A	IEAVTSDD	IEAVTSDD	IEAVTSDD
IEA802W	IEAVTRTM	IGFPTERM	IEAVRS0	IEA883I	IEAVTSDI	IEAVTSDI	IEAVTSDI
IEA803I	IEAVENQ1	IEAVENQ1	IEAVENQ1		IEAVTDSV	IEAVTDSV	IEAVTDSV
IEA804E	IEAVMSF	IEAVMSF	IEAVMSF	IEA884I	IEAVTABI	IEAVNPM2	IEAVTABI

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEA885I	IEAVTABI	IEAVNPM2	IEAVTABI	IEA944I	ILRASRIM	ILRIMMSG	ILRIMMSG
IEA886A	IEAVRTOD	IEAVRTOD	IEAVRTOD	IEA945W	ILRASRIM	ILRIMMSG	ILRIMMSG
IEA888A	IEAVRTOD	IEAVRTOD	IEAVRTOD	IEA946W	IGVVSCEL	IGFPTERM	IGVVSCEL
IEA889A	IEAVRTOD	IEAVRTOD	IEAVRTOD	IEA947A	IEAVAP00	IEAVNPM2	IEAVAP00
IEA890I	IEAVEMCR	IEAVEMCR	IEAVEMCR	IEA948I	IEAVAP00	IEAVNPM2	IEAVAP00
	IEAVEMIN			IEA949A	IEAVAP00	IEAVNPM2	IEAVAP00
IEA891I	IEAVNP09	IEAVNPM2	IEAVNP09	IEA949I	IEAVAP00	IEAVNPM2	IEAVAP00
	IEAVNP09	IEAVNP09	IEAVNP09	IEA950I	IEAVNP17	IEAVNPM2	IEAVNP17
IEA892I	IEAVNP09	IEAVNPM2	IEAVNP09	IEA951I	IEAVNIP0	IEAVNPM2	IEAVNIP0
	IEAVNP09	IEAVNP09	IEAVNP09	IEA953I	IEAVNP00	IEAVNPM2	IEAVNP00
IEA893A	IEAVAP00	IEAVNPM2	IEAVAP00	IEA958I	IEAVNP16	IEAVNP16	IEAVNP16
IEA894I	IEAVAP00	IEAVNPM2	IEAVAP00	IEA959I	IEAVLK03	IEAVLK03	IEAVLK03
IEA895A	IEAVAP00	IEAVNPM2	IEAVAP00	IEA960I	IEAVENQ1	IEAVENQ1	IEAVENQ1
IEA897I	IEAVNPA6	IEAVNPM2	IEAVNPA6	IEA961I	IEAVENQ1	IEAVENQ1	IEAVENQ1
IEA898E	IEAVRTI1			IEA962A	IEAVMQRO	IEAVMQRO	IEAVMQRO
	IEAVRTOD	IEAVRTOD	IEAVRTOD	IEA963A	IEAVMQRO	IEAVMQRO	IEAVMQRO
IEA899I	IEE6503D	IEE6503D	IEE6503D	IEA964I	IEAVSWCH	IEAVSWCH	IEAVSWCH
IEA900I	IEAVNP10	IEAVNPM2	IEAVNP10		IGC0007B	IGC0007B	IGC0007B
IEA903A	IEE6603D	IEE6603D	IEE6603D	IEA966I	IEAVNP1F	IEAVNP1F	IEAVNP1F
IEA904I	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA973I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA905I	IEAVNPA1	IEAVNPM2	IEAVNPA1	IEA974I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA906I	IEAVNP08	IEAVNPM2	IEAVNP08	IEA975I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA907I	IEAVNP08	IEAVNP08	IEAVNP08	IEA976I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA908I	IEAVNP08	IEAVNP08	IEAVNP08	IEA977I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA909A	IEAVNP08	IEAVNP08	IEAVNP08	IEA978I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA911E	IEAVTSDC	IEAVTSDC	IEAVTSDC	IEA979I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA912I	IEAVTABD	IEAVTABD	IEAVTABD	IEA980I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA913I	IEAVNP08	IEAVNP08	IEAVNP08	IEA981I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA915E	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA982I	IEAVNP19	IEAVNPM2	IEAVNP19
IEA916E	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA984E	IEAVTSD0	IEAVTSDC	IEAVTSDC
	ILRASRM1			IEA985I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA918I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA986I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA919I	IECVCINT	IECVCINT	IECVCINT	IEA987I	IEAVAP00	IEAVNPM2	IEAVAP00
IEA920I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA988I	IEAVGFA	IEAVPREF	IEAVPREF
IEA921I	ILRASRIM	ILRIMMSG	ILRIMMSG		IEAVNP05	IEAVNPM2	IEAVNP05
IEA922D	ILRASRIM	ILRIMMSG	ILRIMMSG		IEAVNP05		
IEA923D	ILRASRIM	ILRIMMSG	ILRIMMSG		ILRASRIM	IEAVNPM2	ILRIMMSG
IEA924D	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA989I	IEAVTSL2	IEECB908	IEECB908
IEA925D	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA990I	IEAVNP1F	IEAVNP1F	IEAVNP1F
IEA926I	IEAVNP1F	IEAVNP1F	IEAVNP1F	IEA991I	IEAVNP1F	IEAVNP1F	IEAVNP1F
IEA927I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA992I	IEAVTSLP	IEECB908	IEECB908
IEA928I	ILRQSRIT	ILRIMMSG	ILRIMMSG	IEA993I	IEAVTABD	IEAVTABD	IEAVTABD
	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA994A	IEAVTSDH	IEAVTSDC	IEAVTSDC
IEA929I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA994E	IEAVTSDH	IEAVTSDC	IEAVTSDC
IEA930I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA995I	IEAVTABD	IEAVTSYM	IEAVTSYM
IEA935W	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA996I	IEAVTABD	IEAVTABD	IEAVTABD
IEA936I	ILRQSRIT	ILRIMMSG	ILRIMMSG		IEAVAD01	IEAVAD01	IEAVAD01
IEA937I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA997I	IEAVAD01	IEAVAD01	IEAVAD01
IEA938W	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA998I	IEAVTABD	IEAVTABD	IEAVTABD
IEA939D	ILRASRIM	ILRIMMSG	ILRIMMSG	IEA999W	IEAVEPC	IEAVEPC	IEAVEPC
IEA940I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEC001E	IGG0197B	IGG0197B	IGG0197B
IEA941D	ILRASRIM	ILRIMMSG	ILRIMMSG	IEC006I	IDAVBPJ2	IDAVBPJ2	IDAVBPJ2
IEA942I	ILRASRIM	ILRIMMSG	ILRIMMSG	IEC011I	IGG019GA	IGG019GA	IFG0550P
IEA943W	ILRASRIM	ILRIMMSG	ILRIMMSG		IGG019GB	IGG019GB	
	ILRQSRIT	ILRIMMSG	ILRIMMSG		IGG019IA	IGG019IA	

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	IGG019IB	IGG019B			IFG0554C		
	IGG019I1	IGG019I1		IEC033I	IFG0194C	IFG0199B	IFG0550P
	IGG019I2	IGG019I2		IEC036I	IGG019AB	IFG0199B	IFG0196M
IEC015I	IGC0005E	IFG0199B	IFG0550P		IGG019AD		
	IFG0551F				IGG019AE		
IEC020I	IFG0551B	IFG0551D	IFG0551B		IGG019BN		
	IFG0551D		IFG0551D		IGG019BO		
	IFG0554T		IFG0554T		IGG019FB		
	IGC0005E		IGC0005E		IGG019FD		
	IGG019JC		IFG0551D		IGG019FF		
	IGG019LI				IGG019CD		
IEC021I	IGG019AH	IGG019AH	IGG019AH		IGG019DV		
IEC022I	IGC0109H	IGC0209H	IGC0009H		IGG019C2		
	IFG0551P	IFG0199B	IFG0550P		IGG019TD		
	IFG0551R				IGG019TV		
	IFG0552B				IGG019T2		
	IFG0552R				IGG019FG		
	IFG0552T				IGG019AL		
IEC023I	IFG0553F	IFG0199B	IFG0550P		IGG019AJ		
	IFG0552R				IGG019BP		
IEC024I	IFG0553F	IFG0199B	IFG0550P		IGG019FJ		
	IFG0552X				IGG019DA		
	IGC0005E				IGG019DB		
	IGG019AV				IGG019DD		
IEC025I	IGC0003A	IFG0199B	IFG0550P		IGG0191M		
	IFG0553X			IEC037I	IGG019BS	IFG0199B	IFG0550P
IEC026I	IFG0551T	IFG0199B	IFG0550P		IGG019DC		
	IFG0552T			IEC041I	IGG0196R	IFG0199B	IGG0196M
	IFG0552X			IEC042I	IGG019LT	IGG019LT	IGG019LT
	IFG0553F				IGG019LU	IGG019LU	IGG019LU
	IFG0552V			IEC066I	IFG0555H	IFG0199B	IFG0550P
IEC027I	IFG0554F	IFG0199B	IFG0550P		IFG0554C		
	IFG0554C				IFG0553X	IFG0559B	IFG0559B
	IFG0554N				IFG0554J		
	IFG0554P				IFG0555H		
	IFG0554T			IEC067I	IFG0558X	IFG0558X	IFG0558X
	IFG0554Z			IEC068A	IGC0K05B	IGC0K05B	IGC0K05B
	IFG0194C			IEC089I	IFG0194F	IFG0194J	IFG0194J
	IFG0553Z			IEC090I	IGC0005E	IFG0194J	IFG0194J
	IFG0553P			IEC102I	IGG0197D	IGG0197D	IGGMSG01
	IFG0553X			IEC105I	IFG0196X	IFG0196X	IFG0196X
IEC028I	IFG0554A	IFG0199B	IFG0550P	IEC108I	IFG0194J	IFG0194J	IFG0194J
	IFG0551H				IGG0290F	IGG0290F	IGG0290F
IEC029I	IFG0193D	IFG0199B	IFG0550P	IEC113A	READPSWD	READPSWD	READPSWD
	IFG0552B			IEC115I	READPSWD	READPSWD	READPSWD
	IFG0553F			IEC116A	READPSWD	READPSWD	READPSWD
	IFG0554C			IEC117I	IFG0195U	IFG0195U	IFG0195U
	IGC0003A			IEC118I	IFG0195U	IFG0195U	IFG0195U
	IFG0554B			IEC119I	IGC0010E	IGC0010E	IGGMSG01
	IFG0553H			IEC120A	IGG0191T	IGG0191U	IGGMSG01
IEC030I	IFG0554A	IFG0199B	IFG0550P		IGG0191U		
	IFG0554T			IEC121D	IGG0197U	IGG0197U	IGGMSG01
	IFG0554P			IEC122D	IGG0191U	IGG0191U	IGGMSG01
IEC031I	IFG0554P	IFG0199B	IFG0550P	IEC123D	IGG0191T	IGG0191T	IGGMSG01
IEC032I	IFG0554P	IFG0199B	IFG0550P	IEC124I	IGG0197E	IGG0197E	IGGMSG01

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IEC125D	IGG0191U	IGG0191U	IGGMSG01		IFG0194A		
	IGG0197E	IGG0197E					
	IGG0197F	IGG0197F					
	IGG0197U	IGG0197U					
	IGG08101	IGG08101					
	IGG08103	IGG08103					
	IGG08104	IGG08104					
	IGG08105	IGG08105					
	IGG08113	IGG08113					
	IGG08114	IGG08114					
	IGG0191V	IGG0191V					
	IGG0197E	IGG0197E					
	IGG08103	IGG08103					
	IGG0197F	IGG0197F					
IGG08113	IGG08113						
IEC126I	IGG0191V	IGG0191V	IGGMSG01	IEC142I	IFG0194A	IFG0199B	IFG0190P
IEC127D	IGG0197E	IGG0197E	IGGMSG01	IEC143I	IFG0194A	IFG0199B	IFG0190P
	IGG08103	IGG08103			IFG0194C		
IEC128D	IGG0197F	IGG0197F	IGGMSG01		IFG0195G		
	IGG08113	IGG08113	IGGMSG01		IFG0195T		
IEC129D	IGG0191T	IGG0191T	IGGMSG01	IEC144I	IFG0194C	IFG0199B	IFG0190P
	IGG0191V	IGG0191V		IEC145I	IFG0194A	IFG0199B	IFG0190P
	IGG0197U	IGG0197U			IFG0194F		
IEC129I	IGG0191M	IGG0191M	IGG0196M				
IEC130I	IGC0001I	IGC0001I	IGC0001I		IFG0195D		
	IGC0002B	IGC0002B	IGC0002B		IFG0195K		
IEC131I	IGC0006D	IGC0006D	IGC0006D		IFG01960		
IEC132I	IGC0001I	IGC0001I	IGC0001I		IGC0002B		
	IGC0002B	IGC0002B	IGC0002B		IFG0193A		
IEC135A	IFG0194F	IFG0194J	IFG0194J		IFG0194C		
	IFG0195K			IEC146I	IFG0194A	IFG0199B	IFG0190P
IEC137I	IFG0196L	IFG0196L	IGC0006I	IEC147I	IFG0195B	IFG0199B	IFG0190P
	IGG0325H				IFG0195C		
IEC138I	IGG0193A	IFG0199B	IFG0550P		IFG0195K		
		IGG0193A	IGG0196M		IFG0195N		
IEC140I	IFG0195H	IFG0195H	IFG0196M		IFG0195H		
IEC141I	IFG0194F	IFG0199B	IFG0195H		IFG0196N		
	IGG0193A		IFG0190P		IFG0194A		
	IGG0191A				IFG0194F		
	IGG0191B				IFG01960		
	IGG0191C			IEC148I	IFG0196T	IFG0199B	IFG0190P
	IGG0199G				IFG0194A		
	IGG0196J				IFG0195H		
	IGG0191F			IEC149I	IFG0196Q	IFG0199B	IFG0190P
	IGG0191I				IFG0195H		
	IGG0191H			IEC150I	IFG0195U	IFG0199B	IFG0190P
	IGG0199K				IFG0196L		
	IGG0191D				IFG0194C		
	IGG0191O				IGC0002B		
	IGG01990				IFG0196X		
IGG0191K				IFG0196V			
IGG0191W				IFG0194J			
IGG01911				IFG0196N			
IGG0196B				IGC0005C	IFG0199B	IFG0190P	
IGG0196A				IFG0551F			
IGG01912				IFG0195B			
IGG01915				IFG0195C			
IGG01916				IEC151I	IFG0195B	IFG0199B	IFG0196M
IFG0196J				IEC152I	IGG0101U	IFG0199B	IFG0196M
					IGG0196R		
					IGG0191V		

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	IGG0197U			IEC203I	IGG02029	IGG02029	IFG0200P
	IGG0197F			IEC208I	IGG0203A	IGG0203A	IFG0200P
	IGG0191T			IEC210I	IFG0202A	IFG0199B	IFG0200P
	IGG0197E				IFG0202F		
IEC153I	IFG0194A	IFG0199B	IFG0196M	IEC211I	IFG0200V	IFG0199B	IFG0200P
IEC155I	IGC0006D	IFG0199B	IFG0196M		IFG0200Y		
IEC156I	IFG0194C	IFG0199B	IFG0196M		IFG0201R		
IEC157I	IGG01934	IFG0199B	IFG0196M	IEC212I	IFG0201R	IFG0199B	IFG0200P
IEC158I	IGG01934	IFG0199B	IFG0196M	IEC214I	IFG0202E	IFG0199B	IFG0200P
IEC159I	IGG01934	IFG0199B	IFG0196M	IEC215I	IFG0200Z	IFG0199B	IFG0200P
IEC162I	IGG0196Q	IGG0196Q	IGGMSG01		IFG0202A		
IEC163A	IGG08114	IGG08114	IGGMSG01		IFG0202F		
IEC164A	IGG08114	IGG08114	IGGMSG01	IEC216I	IFG0202E	IFG0199B	IFG0200P
IEC166I	IGG0191N	IFG0199B	IFG0196M	IEC217I	IGG0201B	IFG0199B	IFG0206M
	IFG0194J	IFG0199B	IFG0199B		IGG0201Z		
	IGG0193A			IEC218I	IFG0232S	IFG0199B	IFG0230P
	IGG0191N				IFG0132Z		
IEC167I	IGC0008A	IGG08116	IGGMSG01		IFG0232G		
IEC168I	IGG08110	IGG08116	IGGMSG01		IFG0551R		
	IGG08111	IGG08116	IGGMSG01		IFG0232M		
	IGG08112	IGG08116	IGGMSG01	IEC220I	IFG0232D	IFG0199B	IFG0230P
	IGG08113	IGG08116	IGGMSG01	IEC221I	IFG0232D	IFG0199B	IFG0230P
IEC169I	IGG08110	IGG08116	IGGMSG01	IEC222I	IFG0232G	IFG0199B	IFG0230P
	IGG08111	IGG08116	IGGMSG01		IFG0232M		
	IGG08112	IGG08116	IGGMSG01		IFG0232S		
	IGG08113	IGG08116	IGGMSG01	IEC223I	IGC00020	IGC00020	IFG0200P
IEC170I	IGG08111	IGG08116	IGGMSG01	IEC225I	IFG0232D	IFG0199B	IFG0230P
	IGG08112	IGG08116	IGGMSG01	IEC254D	IFG0196T	IFG0194J	IFG0194J
	IGG08113	IGG08116	IGGMSG01	IEC255D	IFG0193D	IFG0194J	IFG0194J
	IGG08115	IGG08116	IGGMSG01		IFG0195B		
IEC171I	IGG08113	IGG08116	IGGMSG01		IFG0195K		
IEC172I	IGG08113	IGG08116	IGGMSG01		IFG0196Q		
	IGG08114	IGG08116	IGGMSG01		IFG0196T		
IEC173I	IGC0008A	IGG08116	IGGMSG01		IGC0Q05B	IGC0Q05B	IGC0Q05B
IEC174I	IGG08110	IGG08116	IGGMSG01	IEC256A	IFG0193D	IFG0194J	IFG0194J
	IGG08112	IGG08116	IGGMSG01	IEC271I	IGX00030	IGX00030	IGX00030
	IGG08113	IGG08116	IGGMSG01	IEC290I	IGC00020	IFG0194J	IFG0194J
IEC175I	IGG08110	IGG08116	IGGMSG01		IGC0002C	IFG0194J	IFG0194J
	IGG08112	IGG08116	IGGMSG01	IEC291I	IGC00020	IFG0194J	IFG0194J
	IGG08113	IGG08116	IGGMSG01		IGC0002C	IFG0194J	IFG0194J
IEC176I	IGG08111	IGG08116	IGGMSG01	IEC301A	READPSWD	READPSWD	READPSWD
IEC177I	IGG08112	IGG08116	IGGMSG01	IEC347I	IGG0CLGB	IGG0CLGB	IGG0CLGB
IEC178I	IGG08110	IGG08116	IGGMSG01	IEC348I	IGG0CLGB	IGG0CLGB	IGG0CLGB
IEC179I	IGG08114	IGG08116	IGGMSG01	IEC349I	IGG0CLGA	IGG0CLGA	IGG0CLGA
IEC180I	IGG08114	IGG08116	IGGMSG01	IEC366I	IGG0CLCF	IGG0CLCF	IGG0CLCF
	IGG08115	IGG08116	IGGMSG01	IEC400A	IGC0K05B	IGC0K05B	IGC0K05B
IEC181I	IGG08117	IGG08116	IGGMSG01	IEC401A	IGC0K05B	IGC0K05B	IGC0K05B
IEC182I	IGG08111	IGG08116	IGGMSG01	IEC402A	IGC0K05B	IGC0K05B	IGC0K05B
IEC183I	IGG08116	IGG08116	IGGMSG01	IEC403A	IGC0M05B	IGC0M05B	IGC0M05B
IEC184I	IGG08111	IGG08116	IGGMSG01	IEC466I	IGC0M05B	IGC0M05B	IGC0M05B
	IGG08112	IGG08116	IGGMSG01	IEC501A	IFG0194A	IFG0194J	IFG0194J
	IGG08113	IGG08116	IGGMSG01		IFG0193E		
IEC185I	IGG08117	IGG08116	IGGMSG01		IFG0194F		
IEC190I	IGC0001I	IFG0194J	IFG0194J		IFG0194C		
IEC191I	IGC0001I	IFG0194J	IFG0194J		IFG0193D		

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEC501E	IFG0194A	IFG0194J	IFG0194J		ICVDMC04		
IEC502E	IFG0194A	IFG0194J	IFG0194J		ICVIXA04		
	IFG0194F				ICVIXA05		
	IFG0195N				ICVIXA06		
	IFG0195K				ICVIXA07		
	IFG0553F				ICVIXC02		
	IFG019RA				ICVIXD02		
	IGG0290F	IGG0290F	IGG0290F		ICVIXS01		
IEC507D	IFG0194C	IFG0194J	IFG0194J		ICVIXS02		
	IFG0196Q			IEC608I	IGG020P2	IGG0290D	IGG0290D
	IFG0552B				IGG0290A	IGG020P3	IGG020P3
	IFG0193D				IGG0299A	IGG0290D	IGG0290D
	IFG0193H				IGG0325E	IGG0325H	IGG0325H
IEC509A	IFG0194F	IFG0194J	IFG0194J		IGG032I3	IGG032I7	IGG032I7
IEC510D	IFG0194F	IFG0194J	IFG0194J		IGG032I4	IGG0553E	IGG0553E
IEC512I	IFG0193D	IFG0194J	IFG0194J		IGG032I5		
	IFG0194F				IGG0553C		
	IFG0196N			IEC609I	IGGVRF01	IGGVRF00	IGGVRF00
	IFG0194J				IGGVRF02		
	IFG019RA				IGGVRF03		
					IGGVRF04		
IEC513D	IFG0194A	IFG0194J	IFG0194J		IGGVRF05		
IEC534D	IFG0193D	IFG0194J	IFG0194J	IEC613A	IFG0199I	IFG0199I	IFG0199I
IEC537I	IFG0200Y	IFG0194J	IFG0194J	IEC666I	IGG0290F	IGG0290F	IGG0290F
	IFG0551H	IFG0194J	IFG0194J	IEC701D	IGC0003I	IGC0003I	IGC0003I
	IGG0002C	IFG0194J	IFG0194J				
IEC601D	IGG0290F	IGG0290F	IGG0290F	IEC702I	IGC0003I	IGC0003I	IGC0003I
IEC602I	IGG0325P	IGG0325T	IGG0325T	IEC703I	IGC0003I	IGC0003I	IGC0003I
	IGG0325Q	IGG032I8	IGG032I8	IEC704A	IFG0193E	IFG0194J	IFG0194J
	IGG0325R			IEC705I	IFG0194F	IFG0194J	IFG0194J
	IGG0325U				IFG0196T		
	IGG0325V				IFG0552F		
	IGG0325W			IEC900I	IFG0190P	IFG0190P	IFG0190P
	IGG0325Z				IFG0200P	IFG0200P	IFG0200P
IEC603I	All DADSM modules in	IGG020P3	IGG020P3		IFG0230P	IFG0230P	IFG0230P
		IGG0290D	IGG0290D		IFG0550P	IFG0550P	IFG0550P
	Allocate, Scratch, Partial Release, Extend,	IGG03001	IGG03001		IGG0196M	IGG0196M	IGG0196M
		IGG0325H	IGG0325H	IEC902I	IGCT005C	IGCT005C	IGCT005C
		IGG032I7	IGG032I7		IGCT105C	IGCT105C	IGCT105C
		IGG0553E	IGG0553E	IEC903I	IGCT005C	IGCT005C	IGCT005C
					IGCT105C	IGCT105C	IGCT105C
	Rename			IEC904I	IGCT005G	IGCT005G	IGCT005G
IEC604I	IGG020P3	IGG0325Z	IGG0325Z	IEC905I	IGCT005G	IGCT005G	IGCT005G
	IGG0290A			IEC906I	IGCT006H	IGCT006H	IGGMSG02
	IGG03001			IEC907I	IGCT006H	IGCT006H	IGGMSG02
	IGG0325A			IEC908I	IGCT0018	IGCT0018	IGCT0018
				IEC909I	IGCT0018	IGCT0018	IGCT0018
IEC605I	IGG0553A	IGGVRF00	IGGVRF00	IEC910I	IGCT0021	IGCT0021	IGCT0021
	IGG020P1			IEC911I	IGCT0021	IGCT0021	IGCT0021
	IGG0290A			IEC912I	IGCT002D	IGCT002D	IGCT002D
	IGG03001			IEC913I	IGCT002D	IGCT002D	IGCT002D
	IGG0325A						
				IEC914I	IGCT002E	IGCT002E	IGCT002E
	IGG032I8			IEC915I	IGCT002E	IGCT002E	IGCT002E
IEC606I	IGG0553A			IEC916I	IGCT0069	IGCT0069	IGCT0069
	ICVCM100	ICVCM501	ICVCM501	IEC917I	IGCT0069	IGCT0069	IGCT0069
	ICVCM103			IEC918I	IGCT1081	IGCT1081	IGCT1081
	ICVCM500						

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEC919I	IGCT010E	IGCT010E	IGCT010E	IEE129I	IEAVSWCH	IEAVSWCH	IEAVSWCH
IEC920I	IGCT010E	IGCT010E	IGCT010E	IEE130I	IEEC2740	IEEC2740	IEEC2740
IEC921I	IFG0559C	IFG0559C	IGGMSG01	IEE131D	IEEVCHPR	IEEVMESS	IEEMTEXT
IEC950I	IGG019CC	IGG019CC	IGG019CC	IEE132I	IEESB605	IEEVSMMSG	IEEVSMMSG
	IGG019CE	IGG019CE	IGG019CE	IEE133I	IEEVCHPR	IEEVMESS	IEEMTEXT
	IGG019CF	IGG019CF	IGG019CF	IEE134I	IEESB605	IEEVSMMSG	IEEVSMMSG
	IGG019FA	IGG019FA	IGG019FA	IEE135I	IEESB605	IEEVSMMSG	IEEVSMMSG
	IGG019FK	IGG019FK	IGG019FK	IEE136I	IEE3503D	IEE3503D	IEE3503D
	IGG019FQ	IGG019FQ	IGG019FQ	IEE141A	IEAVSWCH	IEAVSWCH	IEAVSWCH
IEC951I	IGG0197M	IGG0197M	IGG0197M	IEE142I	IEAVSWCH	IEAVSWCH	IEAVSWCH
IEC952I	IGG0197N	IGG0197N	IGG0197N	IEE143I	IEAVSWCH	IEAVSWCH	IEAVSWCH
IEC953I	IGG0197Q	IGG0197Q	IGG0197Q	IEE144I	IEE6903D	IEE8103D	IEE8103D
IEC954I	IGG019SI	IGG019SI	IGG019SI	IEE145I	IEE6903D	IEE0503D	IEE0503D
IEC999I	IFG0TC0A	IFG0TC0A	IFG0TC0A	IEE146I	IEE6903D	IEE0503D	IEE0503D
	IFG0RR0A	IFG0RR0A	IFG0RR0A	IEE147I	IEEMB804	IEEMB804	IEEMB804
IEE019I	IEE1603D	IEE0503D	IEE0503D	IEE148I	IEEVCPR	IEEVMESS	IEEMTEXT
IEE023I	IEE1603D	IEE0503D	IEE0503D		IEEVSTEL	IEEVMESS	IEEMTEXT
IEE025I	IEE3603D	IEE3603D	IEE3603D		IEEVSTGP	IEEVMESS	IEEMTEXT
IEE026I	IEE1603D	IEE0503D	IEE0503D		IEEVIOSR	IEEVMESS	IEEMTEXT
	IEE5703D	IEE0503D	IEE0503D		IEEVCHPR	IEEVMESS	IEEMTEXT
IEE032I	IEE1603D	IEE0503D	IEE0503D		IEEVCONF	IEEVMESS	IEEMTEXT
IEE033I	IEE1603D	IEE0503D	IEE0503D		IEEVRSCN	IEEVMESS	IEEMTEXT
IEE037I	IEEMB803	IEEMB807	IEEMB807	IEE150I	IEECVETA	IEECVETD	IEECVETD
	IEEMB806	IEEMB807	IEEMB807		IEE6903D	IEE5603D	IEE5603D
IEE041I	IEEMB803	IEEMB807	IEEMB807		IEECVET4	IEECVETD	IEECVETD
IEE042I	IEEMB807	IEEMB807	IEEMB807	IEE151I	IEECVET4	IEECVETE	IEECVETE
IEE043I	IEEMB803	IEEMB807	IEEMB807		IEECVET6	IEECVETE	IEECVETE
IEE050A	IEEMB825	IEEMB825	IEEMB826		IEECVFT8	IEECVETE	IEECVETE
IEE076I	IEEVCHPR	IEEVMESS	IEEMTEXT		IEE6703D	IEE5603D	IEE5603D
IEE077I	IEEVCHPR	IEEVMESS	IEEMTEXT		IEE6703D	IEE5903D	IEE5903D
IEE078I	IEE9403D	IEE0503D	IEE0503D	IEE152I	IEECVETP	IEECVETP	IEECVETP
IEE082I	IEEMPS03	IEEVDCCR	IEEMPS03		IEECVETU	IEECVFTU	IEECVETU
IEE083A	IEEVDCCMP	IEEVDCCMP	IEEVDCCMP	IEE153I	IEECVET4	IEECVETE	IEECVETE
IEE084I	IEE1403D	IEE0503D	IEE0503D	IEE154I	IEECVETE	IEECVETD	IEECVETD
	IEE3103D	IEE3103D	IEE3103D	IEE156I	IEECVETA	IEECVETD	IEECVETD
	IEE3603D	IEE3603D	IEE3603D		IEE6303D	IEE5603D	IEE5603D
IEE094D	IEECB866	IEECB866	IEECB866		IEE6303D	IEE5903D	IEE5903D
IEE097I	IEEMPDEV	IEEMPDEV	IEEMPDEV		IEE6403D	IEE5603D	IEE5603D
	IEEVSCAN	IEEVSCAN	IEEVSCAN		IEE6403D	IEE5903D	IEE5903D
IEE100E	IEEVCHPR	IEEVMESS	IEEMTEXT		IEE6703D	IEE5603D	IEE5603D
IEE102I	IEECB800	IEECB801	IEECB801		IEE6703D	IEE5903D	IEE5903D
IEE104I	IEECB800	IEECB801	IEECB800		IEE6803D	IEE5603D	IEE5603D
IEE105I	IEECB800	IEECB801	IEECB800		IEE6803D	IEE5903D	IEE5903D
IEE106I	IEE20110	IEE24110	IEE24110		IEE6903D	IEE5603D	IEE5603D
IEE110I	IEE2903D	IEE2903D	IEE2903D		IEE7503D	IEE5603D	IEE5603D
IEE111I	IEE2903D	IEE2903D	IEE2903D		IEE7503D	IEE5903D	IEE5903D
IEE112I	IEECB804	IEECB801	IEECB804		IEE7703D	IEE5603D	IEE5603D
IEE121I	IEESB605	IEEVSMMSG	IEEVSMMSG		IEE7803D	IEE5603D	IEE5603D
IEE122I	IEESB605	IEEVSMMSG	IEEVSMMSG		IEE7803D	IEE5903D	IEE5903D
IEE123A	IEEVDCCMP	IEEVDCCMP	IEEVDCCMP		IEE8A03D	IEE5603D	IEE5603D
IEE124I	IEESB605	IEEVSMMSG	IEEVSMMSG		IEE8B03D	IEE5603D	IEE5603D
IEE125A	IEEVDCCMP	IEEVDCCMP	IEEVDCCMP	IEE157I	IEECVET6	IEECVETD	IEECVETD
IEE126I	IEEVDCCMP	IEEVDCCMP	IEEVDCCMP		IEECVET8	IEECVETD	IEECVETD
IEE127I	IEEVDCCMP	IEEVDCCMP	IEEVDCCMP	IEE158I	IEECVET9	IEECVETD	IEECVETD
IEE128A	IEEVDCCR	IEEVDCCR	IEEVDCCR		IEECVFTB	IEECVETD	IEECVETD

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	IEE6703D	IEE5603D	IEE5603D	IEE227I	IEECB816	IEECB816	IEECB816
	IEE6703D	IEE5903D	IEE5903D	IEE228I	IEECB816	IEECB816	IEECB816
	IEE8C03D	IEE5603D	IEE5603D	IEE229I	IEECB816	IEECB816	IEECB816
		IEE5903D	IEE5903D	IEE230I	IEECB816	IEECB816	IEECB816
IEE159E	IEECVETJ	IEECVETP	IEECVETP	IEE232I	IEAVC701	IEAVC701	IEAVC701
		IEECVETR	IEECVETR		IEECVFTU	IEECVFTU	IEECVFTU
		IEECVETU	IEECVETU		IEE8C03D	IEE8C03D	IEE8C03D
	IEECVFTL	IEECVETP	IEECVETP	IEE233I	IEECVFTU	IEECVFTU	IEECVFTU
		IEECVETR	IEECVETR	IEE234I	IEECVFTU	IEECVFTU	IEECVFTU
		IEECVETU	IEECVETU	IEE235I	IEE40110	IEECB808	IEE40110
	IEECVFT2	IEECVETP	IEECVETP	IEE239I	IEEVCVPH	IEEVMESS	IEEMTEXT
		IEECVETR	IEECVETR	IEE240I	IEEVCVPH	IEEVMESS	IEEMTEXT
	IEECVETU	IEECVETU		IEE241I	IEEVCVSR	IEEVMESS	IEEMTEXT
IEE160I	IEECVET1	IEECVETD	IEECVETD		IEEVCLPF		
	IEECVET2	IEECVETD	IEECVETD		IEEVVFLF		
	IEECVET3	IEECVETD	IEECVETD		IEEVTOD		
	IEECVET9	IEECVETD	IEECVETD		IEEVCPR		
	IEECVFTL	IEECVETD	IEECVETD		IEEVCPR		
	IEECVFT2	IEECVETD	IEECVETD	IEE242I	IEEVCVSR	IEEVMESS	IEEMTEXT
IEE161I	IEECVETA	IEECVETD	IEECVETD	IEE243I	IEEVVFLF	IEEVMESS	IEEMTEXT
IEE162I	IEE10110	IEE10110	IEE10110	IEE244D	IEEVCPLF	IEEVMESS	IEEMTEXT
IEE163I	IEECVETA	IEECVETD	IEECVETD	IEE245D	IEEVCPLN	IEEVMESS	IEEMTEXT
	IEECVFTR	IEECVETD	IEECVETD	IEE249I	IEECB813	IEECB808	IEECB814
IEE164I	IEECVETF	IEECVETF	IEECVETE	IEE250I	IEEXEDNA	IEEXEDNA	IEEXEDNA
IEE166E	IEE7903D	IEE0503D	IEE0503D	IEE260I	IEEMB889	IEEMB889	IEEMB889
IEE167E	IEECVETR	IEECVETR	IEECVETR	IEE271I	IEECVFTB	IEECVFTD	IEECVFTD
IEE170E	IEECVETC	IEECVETE	IEECVETE		IEE8C03D	IEE5603D	IEE5603D
IEE171E	IEECVETC	IEECVETE	IEECVETE	IEE272I	IEECVFTB	IEECVFTD	IEECVFTD
IEE172I	IEEVCHPR	IEEVMESS	IEEMTEXT		IEE8C03D	IEE5603D	IEE5603D
IEE173I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE273I	IEE4403D	IEE0503D	IEE0503D
IEE174I	IEEMPDM	CMGSRV	IEEMPDM		IEE4703D		
IEE176I	IEEVVFLF	IEEVMESS	IEEMTEXT	IEE274I	IEE0403D	IEE0503D	IEE0503D
IEE177D	IEEVVFLF	IEEVMESS	IEEMTEXT		IEECB804		
IEE180I	IEEMB888	IEEMB888	IEEMB888		IEE40110		
IEE181I	IEEMB888	IEEMB888	IEEMB888	IEE275I	IEECB815	IEECB801	IEECB815
IEE182I	IEEMB888	IEEMB888	IEEMB888	IEE298I	IEE0403D	IEE0503D	IEE0503D
IEE183I	IEEMB888	IEEMB888	IEEMB888	IEE299I	IEE4203D	IEE4203D	IEE4203D
IEE188I	IEE8B03D	IEE5903D	IEE5603D		IEE5703D	IEE0503D	IEE0503D
	IEE8B03D	IEE5903D	IEE5903D	IEE300I	IEE4203D	IEE4203D	IEE4203D
IEE189I	IEECB807	IEECB801	IEECB807			IEAVNPM4	
IEE200I	IEECB931	IEECB931	IEECB931	IEE301I	IEE3703D	IEE0503D	IEE0503D
IEE201I	ILRPGDEL	ILRPGDEL	ILRPGDEL			IEAVNPM4	
IEE202I	ILRPGDEL	ILRPGDEL	ILRPGDEL	IEE302I	IEEVPTH	IEEVMESS	IEEMTEXT
IEE203I	ILRPREAD	ILRPGDEL	ILRPGDEL		IEE3103D	IEE3103D	IEE3103D
IEE204I	ILRPDVIO	ILRPGDEL	ILRPGDEL		IEE4603D	IEE4603D	IEE4603D
IEE205I	ILRPGDEL	ILRPGDEL	ILRPGDEL	IEE303I	IEEVPTH	IEEVMESS	IEEMTEXT
	ILRPDPAG				IEE3103D	IEE3103D	IEE3103D
	ILRPDSWP				IEE4603D	IEE4603D	IEE4603D
IEE220I	IEECB816	IEECB816	IEECB816	IEE304I	IEEMB810	IEE0503D	IEE0503D
IEE221I	IEECB816	IEECB816	IEECB816	IEE305I	IEEMB815	IEE2103D	IEE2103D
IEE222I	IEECB816	IEECB816	IEECB816		IEE0403D	IEE0503D	IEE0503D
IEE223I	IEECB816	IEECB816	IEECB816		IEE0603D	IEE0503D	IEE0503D
IEE224I	IEECB816	IEECB816	IEECB816		IEE0803D	IEE0503D	IEE0503D
IEE225I	IEECB816	IEECB816	IEECB816		IEE1403D	IEE0503D	IEE0503D
IEE226I	IEECB816	IEECB816	IEECB816		IEE3503D	IEE0503D	IEE0503D

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	IEE3703D	IEE0503D	IEE0503D		IEE1603D	IEE0503D	IEE0503D
	IEE4403D	IEE0503D	IEE0503D		IEE3203D	IEE0503D	IEE0503D
	IEE7103D	IEE0503D	IEE0503D		IEE3503D	IEE0503D	IEE0503D
	IEE7503D	IEE0503D	IEE0503D		IEE3703D	IEE0503D	IEE0503D
	IEECB806	IEE0503D	IEE0503D		IEE5503D	IEE0503D	IEE0503D
	IEECB923	IEE0503D	IEE0503D		IEE7103D	IEE0503D	IEE0503D
	IEECB925	IEE0503D	IEE0503D		IEE8603D	IEE0503D	IEE0503D
IEE306I	IEECB813	IEECB813 IEAVNPM4	IEE0503D		IEECB815		
	IEECB815			IEE312I	IEECB804	IEE0503D	IEE0503D
IEE307I	IEECB923	IEE0503D	IEE0503D		IEECB813	IEECB813	IEE0503D
	IEECB925	IEE0503D	IEE0503D		IEECB925	IEE0503D	IEE0503D
	IEEMPM	IEE0503D	IEE0503D		IEEMB815	IEE2103D	IEE0503D
	IEE7703D	IEE5603D	IEE5603D		IEEVMNT2	IEEVSMMSG	IEEVSMMSG
	IEECB813	IEECB813	IEE0503D		IEEMPM	IEE0503D	IEE0503D
	IEECB815				IEE0503D	IEE0503D	IEE0503D
	IEECB804				IEE0603D	IEE0503D	IEE0503D
IEE308I	IEECB804	IEE0503D	IEE0503D		IEE3103D	IEE0503D	IEE0503D
	IEE40110				IEE3203D	IEE0503D	IEE0503D
	IEECB866	IEE0503D	IEE0503D		IEE3603D	IEE3603D	IEE3603D
	IEECB907	IEE0503D	IEE0503D		IEE4203D	IEE0503D	IEE0503D
	IEEMB810	IEE0503D	IEE0503D		IEE4403D	IEE0503D	IEE0503D
	IEEMB811	IEE0503D	IEE0503D		IEE5703D	IEE0503D	IEE0503D
	IEEMB815	IEE0503D	IEE0503D		IEE7203D	IEE0503D	IEE0503D
	IEEVMN1	IEEVSMMSG	IEEVSMMSG		IEE40110		
	IEE0603D	IEE0503D	IEE0503D	IEE313I	IEECB904	IEECB903	IEECB904
	IEE0703D	IEE0503D	IEE0503D		IEE3103D	IEE3103D	IEE3103D
	IEE3203D	IEE0503D	IEE0503D		IEE3603D	IEE3603D	IEE3603D
	IEE3303D	IEE0503D	IEE0503D		IEE4203D	IEE4203D	IEE4203D
	IEE3603D	IEE3603D	IEE3603D		IEE8603D	IEE0503D	IEE0503D
	IEE3703D	IEE0503D	IEE0503D	IEE314I	IEEMB813	IEE0503D	IEE0503D
	IEECB806	IEE0503D	IEE0503D	IEE315I	IEECB813	IEECB813	IEE0503D
IEE309I	IEEMB810	IEE0503D	IEE0503D	IEE324I	IEE3703D	IEE0503D	IEE0503D
	IEEMB811	IEE0503D	IEE0503D	IEE328I	IEECB905	IEE503D	IEE0503D
	IEEMB815	IEE0503D	IEE0503D		IEE0803D	IEE0503D	IEE0503D
	IEECB925	IEE0503D	IEE0503D		IEE3603D	IEE3603D	IEE3603D
	IEEMPM	IEE0503D	IEE0503D		IEE4903D	IEE4903D	IEE4903D
	IEEVMNT1	IEEVSMMSG	IEEVSMMSG		IEE5603D	IEE0503D	IEE0503D
	IEE0603D	IEE0503D	IEE0503D		IEE7103D	IEE0503D	IEE0503D
	IEE1403D	IEE0503D	IEE0503D		IEE7203D	IEE0503D	IEE0503D
	IEE3203D	IEE0503D	IEE0503D	IEE329I	IEE3103D	IEE3103D	IEE3103D
	IEE3303D	IEE0503D	IEE0503D		IEE3603D	IEE3603D	IEE3603D
	IEE4403D	IEE0503D	IEE0503D		IEE4203D	IEE4203D	IEE4203D
	IEE4703D	IEE0503D	IEE0503D		IEE4603D	IEE4603D	IEE4603D
	IEE5703D	IEE0503D	IEE0503D	IEE331A	IEAVELK	IEEVEXSN	IEEVEXSN
	IEE7203D	IEE0503D	IEE0503D		IEAVERI	IEEVEXSN	IEEVEXSN
	IEE8603D	IEE0503D	IEE0503D		IEAVERP	IEEVEXSN	IEEVEXSN
	IEECB804				IEAVINV	IEEVEXSN	IEEVEXSN
IEE310I	IEECB923	IEE0503D	IEE0503D		IEAVRT11	IEEVEXSN	IEEVEXSN
IEE311I	IEEVMNT1	IEEVSMMSG	IEEVSMMSG		IEAVTNITC	IEEVEXSN	IEEVEXSN
	IEECB813	IEECB813	IEE0503D		IEEVLDWT	IEEVEXSN	IEEVEXSN
	IEE0603D	IEE0503D	IEE0503D	IEE334I	IEE40110	IEE90110	IEE90110
	IEE0703D	IEE0503D	IEE0503D	IEE335I	IEEVMNT1	IEEVSMMSG	IEEVSMMSG
	IEE0803D	IEE0503D	IEE0503D	IEE338I	IEE5703D	IEE0503D	IEE0503D
	IEE1403D	IEE0503D	IEE0503D	IEE339I	IEE4203D	IEE4203D	IEE4203D

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	IEE5703D	IEE0503D	IEE0503D	IEE362I	IEEMB829	IEEMB824	IEEMB826
IEE341I	IEECB866	IEE0503D	IEE0503D	IEE363I	IEEMB822	IEEMB822	IEEMB824
IEE340E	IEAVTSDR	IEAVTSDR	IEAVTSDR	IEE364I	IEEMB821	IEEMB824	IEEMB826
	IEECB926	IEECB926	IEECB926		IEEMB829	IEEMB824	IEEMB826
	IEEMB810	IEE0503D	IEE0503D		IEEMB829	IEEMB829	IEEMB828
	IEE0703D	IEE0503D	IEE0503D	IEE365I	IEEMB821	IEEMB821	IEEMB824
	IEE3703D	IEE0503D	IEE0503D		IEEMB822	IEEMB822	IEEMB824
IEE342I	IEECVETE	IEECVETE	IEECVFTE		IEEMB829	IEEMB822	IEEMB824
	IEE0703D	IEE0503D	IEE0503D	IEE366I	IEEMB829	IEEMB824	IEEMB826
	IEECB806	IEE0503D	IEE0503D	IEE375I	IEE7203D	IEE0503D	IEE0503D
IEE345I	IEECB866	IEE0503D	IEE0503D	IEE376I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEECB927	IEE0503D	IEE0503D	IEE378I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEEMPS03	IEEMPS03	IEEMPS03	IEE379I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEEVPTHR	IEEVMESS	IEEMTEXT	IEE382I	IEE1603D	IEE0503D	IEE0503D
	IEEVPTH	IEEVMESS	IEEMTEXT	IEE383I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEE0403D	IEE0503D	IEE0503D	IEE384I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEE3303D	IEE0503D	IEE0503D	IEE385I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEE3503D	IEE0503D	IEE0503D	IEE400I	IEAVMDOM	IEAVMDOM	IEAVMDOM
	IEE4203D	IEE4203D	IEE4203D	IEE450I	IEE23110	IEE23110	IEE23110
	IEE4303D	IEE0503D	IEE0503D	IEE459I	IGUDSP02	IGUDSP02	IGUDS001
	IEE4403D	IEE0503D	IEE0503D	IEE479W	IEEMB860	IEEMB860	IEEMB860
	IEE4703D	IEE0503D	IEE0503D		IEEVIPL	IEEVIPL	IEEVIPL
	IEE5703D	IEE0503D	IEE0503D		IEEVPWAIT	IEEVPWAIT	IEEVPWAIT
	IEE6303D	IEE5603D	IEE5603D	IEE480I	IEECB860	IEECB860	IEECB860
	IEE6303D	IEE5903D	IEE5903D		IEEMB816	IEEMB816	IEEMB816
	IEE7503D	IEE5603D	IEE5603D		IEEMB820	IEEMB820	IEEMB824
	IEE7503D	IEE5903D	IEE5903D		IEEMB820	IEEMB824	IEEMB826
	IEE7703D	IEE5603D	IEE5603D		IEEMB822	IEEMB822	IEEMB824
	IEE8B03D	IEE5603D	IEE5603D		IEEMB825	IEEMB825	IEEMB826
IEE349I	IEE4103D	IEE4103D	IEE4103D		IEE5103D	IEE5103D	IEE5103D
	IEE4903D	IEE4903D	IEE4903D	IEE481I	IEEMB816	IEEMB816	IEEMB816
IEE351I	IEECB916	IEEMB824	IEEMB826		IEEVPWAIT	IEEVPWAIT	IEEVPWAIT
	IEEMB820	IEEMB820	IEEMB824	IEE482E	IEEVPWAIT	IEEVPWAIT	IEEVPWAIT
	IEEMB820	IEEMB824	IEEMB826	IEE490I	IEEMPDM	IEEMPDM	IEEMPDM
	IEEMB821	IEEMB820	IEEMB824		IEEMPDM	IEEMPDM	IEEMPDM
	IEEMB822	IEEMB820	IEEMB824	IEE491I	IEEVPTHR	IEEVMESS	IEEMTEXT
	IEEMB825	IEEMB820	IEEMB824	IEE502I	IEECB927	IEEVMESS	IEEMTEXT
	IEEMB829	IEEMB820	IEEMB824	IEE503I	IEECB927	IEEVMESS	IEEMTEXT
	IEEMB829	IEEMB824	IEEMB826	IEE504I	IEEVCPR	IEEVMESS	IEEMTEXT
	IEEMB835	IEEMB824	IEEMB826	IEE505I	IEEVCPR	IEEVMESS	IEEMTEXT
IEE352A	IEEMB821	IEEMB821	IEEMB824	IEE506I	IEEVCPR	IEEVMESS	IEEMTEXT
IEE353A	IEEMB821	IEEMB821	IEEMB824	IEE507D	IEEVCHPR	IEEVMESS	IEEMTEXT
IEE354I	IEEMB821	IEEMB821	IEEMB824	IEE508E	IEEVCHPR	IEEVMESS	IEEMTEXT
IEE355I	IEEMB821	IEEMB821	IEEMB824	IEE510I	IEEVSTEL	IEEVMESS	IEEMTEXT
IEE356A	IEEMB821	IEEMB821	IEEMB824		IEEVSTGP	IEEVMESS	IEEMTEXT
IEE357A	IEEMB821	IEEMB821	IEEMB824		IEEVSTPE	IEEVMESS	IEEMTEXT
	IEEMB821	IEEMB824	IEEMB826	IEE512I	IEEVCHPR	IEEVMESS	IEEMTEXT
IEE358I	IEEMB829	IEEMB822	IEEMB824	IEE513I	IEEVPWAIT	IEEVPWAIT	IEEVPWAIT
IEE359I	IEEMB821	IEEMB821	IEEMB824		IEE5103D	IEE5103D	IEE5103D
IEE360I	IEEMB829	IEEMB824	IEEMB826	IEE518I	IEEVCPR	IEEVMESS	IEEMTEXT
	IEEMB829	IEEMB829	IEEMB828	IEE521I	IEEVRSCN	IEECB808	IEEVRSCN
IEE361I	IEEMB829	IEEMB824	IEEMB826		IEEDMSID	CMSSGRV	IEEMPDM
	IEEMB829	IEEMB829	IEEMB828	IEE522D	IEEVRSCN	IEECB808	IEEVRSCN
IEE362A	IEEMB829	IEEMB824	IEEMB826	IEE524I	IEEVSTEL	IEEVMESS	IEEMTEXT
	IEEMB829	IEEMB829	IEEMB828		IEEVSTGP	IEEVMESS	IEEMTEXT

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IEE525I	IEEVSTPE	IEEVMESS	IEEMTEXT	IEE704I	IEAVVRP1	IEAVVRP1	IEAVVRP1
IEE526I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE706I	IEECB811	IEECB811	IEECB811
IEE527I	IEEVSTEL	IEEVMESS	IEEMTEXT	IEE707I	IEE70110	IEE90110	IEE90110
IEE531I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE708I	IEE0403D	IEE0503D	IEE0503D
IEE532I	IEEMB803	IEEMB807	IEEMB807		IEECB866	IEE0503D	IEE0503D
IEE533I	IEE1603D	IDD1603D	IEE1603D		IEECB813	IEECB813	IEE0503D
IEE534I	IEEMB803	IEEMB807	IEEMB807		IEECB910	IEE0503D	IEE0503D
	IEEMB803	IEEMB807	IEEMB807		IEEDISPD	IEE0503D	IEE0503D
	IEECB804	IEE0503D	IEE0503D		IEEMB810	IEE0503D	IEE0503D
	IEECB925	IEE0503D	IEE0503D		IEEMB815	IEE2103D	IEE0503D
	IEECB806	IEE0503D	IEE0503D		IEEMB860	IEE0503D	IEE0503D
	IEECB866	IEE0503D	IEE0503D		IEE8603D	IEE0503D	IEE0503D
	IEECB916	IEEMB824	IEEMB826	IEE709I	IEECB815	IEE4903D	IEE4903D
	IEEDISPD	IEE0503D	IEE0503D		IEE4903D	IEE4903D	IEE4903D
	IEEMB815	IEE0503D	IEE0503D		IEAVG700	IEE0503D	IEE0503D
	IEE0603D	IEE0503D	IEE0503D		IEE4903D		
	IEE0803D	IEE0503D	IEE0503D	IEE710I	IEE4903D	IEE4903D	IEE4903D
	IEE8603D	IEE0503D	IEE0503D		IEAVG700	IEE0503D	IEE0503D
IEE535I	IEECB813	IEECB813	IEE0503D		IEE4903D		
IEE536I	IEEMB811	IEEMB814	IEEMB877	IEE711I	IEECB866	IEE0503D	IEE0503D
		IEEMB811	IEEMB811	IEE712I	IEEMB815	IEE0503D	IEE0503D
IEE537I	IEEMB811	IEEMB814	IEEMB877		IEECB905	IEE0503D	IEE0503D
IEE538I	IEEMB811	IEEMB814	IEEMB877		IEECB927	IEE0503D	IEE0503D
	IEEMB878	IEEMB814	IEEMB877		IEE8603D	IEE0503D	IEE0503D
IEE539I	IEEMB811	IEEMB814	IEEMB877		IEEMB819	IEE0503D	IEE0503D
	IEEMB878	IEEMB814	IEEMB877		IEECB805	IEE0503D	IEE0503D
IEE540I	IEEMB811	IEEMB814	IEEMB877	IEE713I	IEEVPTH	IEEVMESS	IEEMTEXT
	IEEMB878	IEEMB814	IEEMB877		IEEVPTH	IEEVMESS	IEEMTEXT
IEE541I	IEEVCHPR	IEEVMESS	IEEMTEXT		IEEVPTH	IEEVMESS	IEEVPTRH
IEE559I	IEEVCHPR	IEEVCHPR	IEEVCHPR	IEE714I	IEEVPTH	IEEVMESS	IEEMTEXT
	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE715I	IEEVPTH	IEE0503D	IEE0503D
	IEEVSTEE	IEEVMESS	IEEMTEXT		IEECB927	IEE0503D	IEE0503D
	IEEVSTEL	IEEVMESS	IEEMTEXT		IEE40110		
	IEEVIOSR	IEEVIOSR	IEEVIOSR	IEE717D	IEEVPTH	IEEVMESS	IEEMTEXT
	IEEVIOSR	IEEVMESS	IEEMTEXT		IEEVPTH	IEEVMESS	IEEMTEXT
IEE564I	IEEVMESS	IEEVMESS	IEEMTEXT		IEEVPTH	IEEVMESS	IEEMTEXT
IEE574I	IEEVSTEL	IEEVMESS	IEEMTEXT	IEE718D	IEEVCHPR	IEEVMESS	IEEMTEXT
IEE575A	IEEVSTGL	IEEVMESS	IEEMTEXT	IEE718I	IEEVCPR	IEEVMESS	IEEMTEXT
IEE576I	IEEVSTEL	IEEVMESS	IEEMTEXT		IEEVCPLF		
	IEEVSTGP	IEEVMESS	IEEMTEXT	IEE719I	IEEVCHPR	IEEVMESS	IEEMTEXT
	IEEVSTPE	IEEVMESS	IEEMTEXT	IEE720I	IEECVFTB	IEECVFTD	IEECVFTD
IEE577D	IEEVSTGP	IEEVMESS	IEEMTEXT		IEE8C03D	IEE5603D	IEE5603D
IEE578I	IEEVSTGP	IEEVMESS	IEEMTEXT	IEE721I	IEECVFTA	IEECVFTD	IEECVFTD
	IEEVSTEL	IEEVMESS	IEEMTEXT	IEE722I	IEECVFTA	IEECVFTD	IEECVFTD
IEE581I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE723I	IEECVFTA	IEECVFTD	IEECVFTD
IEE590I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE724I	IEE40110	IEE40110	IEE40110
IEE600I	IEAVVRP1	IEAVVRP1	IEAVVRP1	IEE725I	IEECB909	IEECB907	IEECB907
IEE602I	IEEVCONF	IEEVMESS	IEEMTEXT	IEE726D	IEECB909	IEECB908	IEECB908
IEE607I	IEAVTSDR	IEAVTSDR	IEAVTSDR	IEE727I	IEECB905	IEECB908	IEECB908
IEE608E	IEAVTSDR	IEAVTSDR	IEAVTSDR	IEE728D	IEECB909	IEECB908	IEECB908
IEE699I	IEAVVRP1	IEAVVRP1	IEAVVRP1	IEE729D	IEECB905	IEECB908	IEECB908
IEE700I	IEAVVRP1	IEAVVRP1	IEAVVRP1	IEE730I	IEFJSBLD	IEFJSIMW	IEFJSIMM
IEE701I	IEAVVRP1	IEAVVRP1	IEAVVRP1	IEE731I	IEECB905	IEECB908	IEECB908
IEE702I	IEAVVRP1	IEAVVRP1	IEAVVRP1		IEECB907	IEECB908	IEECB908
IEE703I	IEAVVRP1	IEAVVRP1	IEAVVRP1	IEE732D	IEECB905	IEECB908	IEECB908

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IEE733I	IEECB907	IEECB908	IEECB908	IEE794I	IEE3103D	IEE3103D	IEE3103D
	IEECB905	IEECB908	IEECB908		IEE4603D	IEE4603D	IEE4603D
	IEECB907	IEECB908	IEECB908	IEE796I	IEEDISPD	IEEDISPD	IEEDISPD
IEE734I	IEEMB813	IEEMB813	IEEMB813	IEE797I	IEE8603D	IEE8603D	IRARMMSG
IEE735I	IEECB907	IEECB907	IEECB907	IEE798I	IEE8603D	IEEP603D	IRARMMSG
IEE736D	IEECB909	IEECB908	IEECB908	IEE799D	IEE3603D	IEE3603D	IEE3603D
IEE737I	IEE8063D	IEE8063D	IRARMMSG	IEE800D	IEE3603D	IEE3603D	IEE3603D
IEE738D	IEECB909	IEECB908	IEECB908	IEE824E	IEAVSTAA	IEAVSTAA	IEAVSTAA
IEE739I	IEECB909	IEECB908	IEECB908	IEE824I	IEEPRWI2	IEEVSMMSG	IEEVSMMSG
IEE740I	IEECB905	IEECB908	IEECB908		IEESB665	IEEVSMMSG	IEEVSMMSG
IEE741I	IEECB905	IEECB908	IEECB908	IEE825I	IEESB605	IEEVSMMSG	IEEVSMMSG
IEE742I	IEAVTGLB	IEECB908	IEECB908	IEE826I	IEESB605	IEEVSMMSG	IEEVSMMSG
IEE743I	IEAVTGLB	IEECB908	IEECB908	IEE827I	IEESB605	IEEVSMMSG	IEEVSMMSG
IEE744I	IEE4903D	IEE4903D	IEE4903D	IEE828E	IEECB818	IEECB818	IEECB818
IEE748E	IEECB906	IEECB906	IEECB906	IEE830I	IEECB905	IEECB908	IEECB908
IEE751I	IEEMPS03	IEEMPS03	IEEMPS03		IEECB909		
IEE752I	IEEMPS03	IEEMPS03	IEEMPS03		IEECB928		
IEE753I	IEEMPS03	IEEMPS03	IEEMPS03	IEE836D	IEECB909	IEECB908	IEECB908
IEE754I	IEEVCHPR	IEEVMESS	IEEMTEXT		IEECB928	IEECB908	IEECB908
IEE755I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE837I	IEAVTSL2	IEEVDCCR	IEAVTSL2
	IEECB908	IEECB908	IEECB908	IEE838I	IEE3703D	IEE0503D	IEE0503D
	IEECB907	IEECB908	IEECB908		IEECB806	IEECB806	IEECB806
	IEECB909	IEECB908	IEECB908	IEE840I	IEECB806	IEECB806	IEECB806
IEE756I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE841I	IEE3703D	IEE0503D	IEE0503D
IEE757I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE842I	IEE3703D	IEE0503D	IEE0503D
IEE758I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE852I	IEECB910	IEECB910	IEECB911
IEE759I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE853I	IEECB910	IEECB910	IEECB911
IEE760I	IEEVCHPR	IEEVMESS	IEEMTEXT	IEE854I	IEECB910	IEECB910	IEECB911
	IEEVPTH	IEEVMESS	IEEMTEXT	IEE855I	IEECB923	IEECB923	IEECB923
	IEEMPS03	IEEMPS03	IEEMPS03		IEECB926		
IEE761I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE857I	IEECB912	IEECB912	IEECB911
IEE762I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE858I	IEEMB860	IEEMB860	IEEMB860
IEE769I	IEEMB806	IEEMB806	IEEMB806	IEE859I	IEFJSBLD	IEFJSIMW	IEFJSIMM
IEE770I	IEEMB807	IEEMB807	IEEMB807	IEE860I	IEECB806	IEECB806	IEECB806
IEE771I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE861I	IEECB923	IEECB923	IEECB923
IEE772I	IEEVCPR	IEEVMESS	IEEMTEXT	IEE862I	IEECB923	IEECB923	IEECB923
	IEEVCPLF			IEE908I	IEE3203D	IEE0503D	IEE0503D
IEE775I	IEEMB803	IEEMB807	IEEMB807	IEE919I	IEE6903D	IEE6903D	IEE6903D
IEE777I	IEE7103D	IEE0503D	IEE0503D	IEE920I	IEECB800	IEECB801	IEECB800
IEE779I	IEECB904	IEECB904	IEECB904	IEE921I	IEE7503D	IEE5603D	IEE5603D
	IEECB813	IEECB813	IEECB813		IEE7503D	IEE5903D	IEE5903D
	IEECB815	IEECB801	IEECB815		IEE7703D	IEE5603D	IEE5603D
IEE782I	ILROPS00	ILRPGEXP	ILRPGEXP		IEE7703D	IEE5903D	IEE5903D
IEE782I	ILRPGEXP	ILRPGEXP	ILRPGEXP		IEE8A03D	IEE5903D	IEE5603D
IEE783I	ILRPGEXP	ILRPGEXP	ILRPGEXP		IEE8B03D	IEE5603D	IEE5603D
IEE784I	ILRPGEX	ILRPGEXP	ILRPGEXP		IEE8B03D	IEE5903D	IEE5903D
IEE785I	ILRPGEXP	IEPRGEXP	ILRPGEXP	IEE922I	IEE6903D	IEE6903D	IEE6903D
IEE786I	ILRPGEXP	ILRPGEXP	ILRPGEXP	IEE923I	IEE8A03D	IEE8A03D	IEE8A03D
IEE787I	ILRPGEXP	ILRPGEXP	ILRPGEXP	IEE924I	IEE6803D	IEE5603D	IEE5603D
IEE788I	ILRPGEXP	ILRPGEXP	ILRPGEXP		IEE6803D	IEE5903D	IEE5903D
IEE789I	ILRPGEXP	ILRPGEXP	ILRPGEXP		IEE6903D	IEE5603D	IEE5603D
IEE791I	IEECB809	IEEMB814	IEEMB877		IEE6903D	IEE5903D	IEE5903D
IEE792I	IEE3603D	IEE0503D	IEE0503D	IEE925I	IEE6303D	IEE5603D	IEE5603D
IEE793I	IEE3103D	IEE0503D	IEE0503D		IEE6303D	IEE5903D	IEE5903D
	IEE4603D				IEE6703D	IEE5603D	IEE5603D

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
	IEE6703D	IEE5903D	IEE5903D	IEE941I	IEEMB821	IEEMB824	IEEMB826
	IEE6803D	IEE5603D	IEE5603D	IEE942I	IEEMB821	IEEMB824	IEEMB826
	IEE6803D	IEE5903D	IEE5903D	IEE943I	IEEMB821	IEEMB824	IEEMB826
	IEE7503D	IEE5603D	IEE5603D	IEE944I	IEEMB831	IEEMB824	IEEMB826
	IEE7503D	IEE5903D	IEE5903D	IEE945I	IEEMB831	IEEMB824	IEEMB826
IEE926I	IEE6303D	IEE5603D	IEE5603D	IEE946I	IEEMB831	IEEMB824	IEEMB826
	IEE6303D	IEE5903D	IEE5903D		IEEMB832	IEEMB824	IEEMB826
	IEE6703D	IEE5603D	IEE5603D	IEE947I	IEEMB832	IEEMB824	IEEMB826
	IEE6703D	IEE5903D	IEE5903D	IEE948E	IEEMB832	IEEMB824	IEEMB826
	IEE6803D	IEE5603D	IEE5603D	IEE948I	IEEMB832	IEEMB824	IEEMB826
	IEE7503D	IEE5603D	IEE5603D	IEE949I	IEECB916	IEEMB824	IEEMB826
	IEE7503D	IEE5903D	IEE5903D		IEEMB829	IEEMB824	IEEMB826
	IEE7703D	IEE5603D	IEE5603D	IEE950I	IEEMB822	IEEMB824	IEEMB826
	IEE7703D	IEE5903D	IEE5903D		IEEMB829	IEEMB824	IEEMB826
	IEE8A03D	IEE5903D	IEE5603D	IEE951I	IEEMB822	IEEMB824	IEEMB826
			IEE5903D	IEE952I	IEEMB821	IEEMB824	IEEMB826
	IEE8B03D	IEE5603D	IEE5603D	IEE953I	IEEMB822	IEEMB824	IEEMB826
	IEE8B03D	IEE5903D	IEE5903D	IEE954I	IEEMB822	IEEMB824	IEEMB826
IEE927I	IEE6703D	IEE5603D	IEE5603D		IEEMB835	IEEMB824	IEEMB826
	IEE6703D	IEE5903D	IEE5903D	IEE955I	IEEMB823	IEEMB824	IEEMB826
	IEE7503D	IEE5603D	IEE5603D	IEE956A	IEEMB823	IEEMB824	IEEMB826
	IEE7503D	IEE5903D	IEE5903D	IEE957I	IEEMB823	IEEMB824	IEEMB824
	IEE7703D	IEE5603D	IEE5603D	IEE958I	IEEMB821	IEEMB824	IEEMB826
	IEE7703D	IEE5903D	IEE5903D	IEE959I	IEEMB824	IEEMB824	IEEMB824
	IEE7803D	IEE5603D	IEE5603D	IEE960I	IEEMB822	IEEMB824	IEEMB826
	IEE7803D	IEE5903D	IEE5903D	IEE961I	IEEMB827	IEEMB824	IEEMB826
	IEE8B03D	IEE5603D	IEE5603D	IEE962E	IEEMB825	IEEMB824	IEEMB826
	IEE8B03D	IEE5903D	IEE5903D		IEEMB835	IEEMB824	IEEMB826
IEE928I	IEE6803D	IEE5603D	IEE5603D	IEE962I	IEEMB916	IEEMB824	IEEMB826
	IEE6803D	IEE5903D	IEE5903D	IEE963I	IEEMB825	IEEMB824	IEEMB826
	IEE6803D	IEE6803D	IEE6803D	IEE964I	IEEMB835	IEEMB824	IEEMB826
	IEE6903D	IEE6903D	IEE6903D	IEE965I	IEEMB835	IEEMB824	IEEMB826
IEE929I	IEE6903D	IEE6903D	IEE6903D	IEE966I	IEEMB822	IEEMB824	IEEMB826
IEE930I	IEE6403D	IEE6403D	IEE6403D	IEE967I	IEEMB833	IEEMB824	IEEMB826
IEE931I	IEECB804	IEE0503D	IEE0503D	IEE968I	IEEMB835	IEEMB824	IEEMB824
	IEE2903D	IEE0503D	IEE0503D		IEECB913		
	IEE6303D	IEE5603D	IEE5603D	IEE969I	IEECB913	IEEMB824	IEEMB824
	IEE6303D	IEE5903D	IEE5903D	IEE970I	IEECB913	IEEMB824	IEEMB824
	IEE6403D	IEE5603D	IEE5603D	IEE971I	IEECB913	IEEMB824	IEEMB824
	IEE6403D	IEE5903D	IEE5903D	IEE978E	IFASMF	IEEMB824	IEEMB826
	IEE6903D	IEE5603D	IEE5603D	IEE979W	IFASMF	IEEMB824	IEEMB826
	IEECB805	IEE0503D	IEE0503D	IEE980I	IEEMB835	IEEMB824	IEEMB826
	IEECB807	IEE0503D	IEE0503D	IEE982I	IEEMB830	IEEMB824	IEEMB826
	IEECB925	IEE0503D	IEE0503D	IEF006I	IEFXB609	IEFXB609	IEFXB603
	IEECB927	IEE0503D	IEE0503D	IEF007I	IEFXB609	IEFXB609	IEFXB603
	IEEVRSCN	IEE0503D	IEE0503D	IEF010I	IEFXB609	IEFXB609	IEFXB603
	IEE22110	IEE0503D	IEE0503D	IEF085I	IEFSD263	IEFSD263	IEFBB650
	IEECB800	IEE0503D	IEE0503D	IEF086I	IEFXB601	IEFXB601	IEFXB603
	IEEXEDNA	IEECB813	IEE0503D	IEF087I	IEFXB601	IEFXB601	IEFXB603
	IEE40110			IEF089I	IEFXB500	IEFXB500	IEFXB603
IEE932I	IEAVMWTO	IEAVMWTO	IEAVMWTO	IEF090E	IEFSD161	IEFSD161	IEFIB650
IEE934I	IEECVFT1	IEECVFT1	IEECVFT1	IEF091I	IEFSD161	IEFSD161	IEFIB650
IEE935I	IEECVFTV	IEECVFTV	IEECVFTV	IEF092I	IEFSD263	IEFSD263	IEFIB650
IEE936I	IEECVFTV	IEECVFTV	IEECVFTV	IEF096I	IEFCMAUT	HASPCNVT	IEFIB650
IEE940I	IEEMB821	IEEMB824	IEEMB826	IEF097I	IEFCMAUT	HASPCNVT	IEFIB650

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEF098I	IEFPPT	IEFPPT	IEFPPT		IEFAB434	IEFAB4FD	IEFBB4M3
IEF099I	IEFSD102	IEFSD102	IEFIB650		IEFAB492	IEFAB4FD	IEFBB4M3
IEF100I	IEFAB4E6	IEFAB4E6	IEFAB4E6		IGG032I1		
IEF125I	IEFBB401	IEFBB401	IEFBB4M1	IEF142I	IEFBB410	IEFAB4FD	IEFBB4M4
IEF126I	IEFBB401	IEFAB4FD	IEFBB4M4	IEF143I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF127I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFAB434	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3		IGG032I1		
	IGG032I1			IEF145I	IEFAB431	IEFAB4FD	IEFBB4M3
	IGG0325C				IEFAB434	IEFAB4FD	IEFBB4M3
	IGG0325I				IGG032I1		
IEF128I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF165I	IEFVHM	IEFVHM	IEFVHM
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF166I	IEFVHM	IEFVHM	IEFVHM
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAB4FD	IEFBB4M3
	IGG032I1			IEF167I	IEFRPREP	IEFRPREP	IEFXB603
IEF129I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF168I	IEFRPREP	IEFRPREP	IEFXB603
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF169I	IEFXB601	IEFXB601	IEFXB603
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF170I	IEEJB840	IEEJB840	IEEJB840
	IGG032I1			IEF172E	IEESD161	IEFSD161	IEFIB650
IEF130I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF173I	IEFSD101	IEFSD101	IEFIB650
	IEFAB434	IEFAB4FD	IEFBB4M3		IEFSD161	IEFSD161	IEFIB650
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF174I	IEFIB645	IEFIB645	IEFIB645
	IGG032I1			IEF180I	IEFBB401	IEFAB4FD	IEFBB4M2
IEF131I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF181I	IEFBB401	IEFAB4FD	IEFBB4M2
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF186I	IEFSD263	IEFSD263	IEFIB650
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF187I	IEFIB621	IEFIB621	IEFIB650
	IGG032I1			IEF188I	IEFSD101	IEFSD101	IEFIB650
IEF132I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFSD161	IEFSD162	IEFIB650
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF192I	IEFAB424	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF193I	IEFAB431	IEFAB4FD	IEFBB4M3
	IGG032I1				IEFAB434	IEFAB4FD	IEFBB4M3
IEF133I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAR4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF194I	IEFAR423	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF195I	IEFBB404	IEFAB4FD	IEFBB4M3
	IGG032I1			IEF196I	IEEJWTO	IEEJWTO	IEEJWTO
IEF134I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF197I	IEFAB4E4	IEFAB4E4	IEFAB4M5
	IEFAB434	IEFAB4FD	IEFBB4M3		IEFAB4DD	IEFAB4DD	IEFAB4M5
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF198I	IEFAB424	IEFAB4FD	IEFBB4M3
	IGG032I1			IEF201I	IEFBB410	IEFAB4FD	IEFBB4M4
IEF135I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF202I	IEFBB402	IEFBB401	IEFBB4M2
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF209I	IEFXB609	IEFXB609	IEFXB603
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF210I	IEFAB424	IEFAB4FD	IEFBB4M3
	IGG0325C				IEFAB464	IEFAB4FD	IEFBB4M3
	IGG0325I				IEFAB470	IEFAB4FD	IEFBB4M3
	IGG032I2			IEF211I	IEFAB459	IEFAB4FD	IEFBB4M3
IEF136I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF212I	IEFAB460	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF213I	IEFAB469	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF217I	IEFAB458	IEFAB4FD	IEFBB4M3
	IGG032I1			IEF218I	IEFAB458	IEFAB4FD	IEFBB4M3
IEF140I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF219I	IEFAB461	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF221I	IEFAB453	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF225D	IEFRPREP	IEFRPREP	IEFRPREP
	IGG0325B			IEF233A	IEFAB495	IEFAB495	IEFAB4M4
	IGG0325E			IEF233D	IEFAB495	IEFAB495	IEFAB4M4
IEF141I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF234E	IEFAB494	IEFAB494	IEFAB4M4

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEF235D	IEFAB421	IEFAB421	IEFAB4M5		IGG032I1		
IEF236I	IEFAB4EE	IEFAB4FD	IEFAB4M7	IEF263I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF237I	IEFAB4EE	IEFAB4FD	IEFAB4M7		IEFAB434	IEFAB4FD	IEFBB4M3
IEF238D	IEFAB488	IEFAB488	IEFAB4M9		IEFAB492	IEFAB4FD	IEFBB4M3
IEF240I	IEFAB4FC	IEFBB401	IEFBB4M2		IGG032I2		
IEF242I	IEFAB4EE	IEFAB4FD	IEFAB4M7	IEF264I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF244I	IEFAB487	IEFAB487	IEFAB4M9		IEFAB434	IEFAB4FD	IEFBB4M3
IEF245I	IEFBB404	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAB4FD	IEFBB4M3
IEF246I	IEFAB436	IEFAB4FD	IEFBB4M3	IEF266I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF247I	IEFAB48A	IEFAB48A	IEFAB4M9		IEFAB434	IEFAB4FD	IEFBB4M3
IEF251I	IEFBB401	IEFBB401	IEFBB4M1		IEFAB492	IEFAB4FD	IEFBB4M3
IEF253I	IEFAB431	IEFAB4FD	IEFBB4M3		IGG0325A		
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF267I	IEFAB431	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFAB434	IEFAB4FD	IEFBB4M3
	IGG032I1				IEFAB492	IEFAB4FD	IEFBB4M3
	IGG032I8				IGG0325B		
	IGG0325A				IGG0325I		
IEF254I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF272I	IEFBB410	IEFAB4FD	IEFBB4M4
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF273I	IEFAB431	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFAB434	IEFAB4FD	IEFBB4M3
	IGG032ID				IEFAB492	IEFAB4FD	IEFBB4M3
	IGG0325B				IGG0325A		
	IGG0325C				IGG0325Z		
	IGG0325D			IEF274I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF256I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFAB434	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3		IEFAB490	IEFAB4FD	IEFBB4M3
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAB4FD	IEFBB4M3
	IGG032I2			IEF275I	IEFAB431	IEFAB4FD	IEFBB4M3
	IGG0325C				IEFAB434	IEFAB4FD	IEFBB4M3
	IGG0325I				IEFAB490	IEFAB4FD	IEFBB4M3
IEF257I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFAB492	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF281I	IEFAB421	IEFAB421	IEFAB4M5
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF282I	IEFAB421	IEFAB421	IEFAB4M5
	IGG032I2			IEF283I	IEFAB4A2	IEFAB4FD	IEFAB4M6
	IGG032I7			IEF285I	IEFAB4A2	IEFAB4FD	IEFAB4M6
	IGG0325C			IEF286I	IEFAB461	IEFAB4FD	IEFBB4M3
	IGG0325D			IEF287I	IEFAB4A2	IEFAB4FD	IEFAB4M6
	IGG0325I			IEF288I	IEFAB4SF	IEFAB4SF	IEFAB4SF
	IGG0325K			IEF300I	IASXSD82	IASXSD82	IASXSD82
IEF258I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF318I	IEFAB423	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF338I	IEFAB4IE	IEFAB4IE	IEFAB4IM
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF339A	IEFAB4IE	IEFAB4IE	IEFAB4IM
	IGG0325A			IEF361I	IEFAB4F5	IEFAB4FD	IEFBB4M2
IEF260I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF362I	IEFAB4F4	IEFAB4FD	IEFBB4M2
	IEFAB434	IEFAB4ED	IEFBB4M3	IEF363I	IEFAB469	IEFAB4FD	IEFBB4M2
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF364I	IEFAB469	IEFAB4FD	IEFBB4M2
	IGG032I1			IEF365I	IEFAB457	IEFAB4FD	IEFBB4M3
	IGG032I5			IEF366I	IEFAB461	IEFAB4FD	IEFBB4M3
IEF261I	IEFAB431	IEFAB4FD	IEFBB4M3		IEFAB456	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF367I	IEFAB458	IEFAB4FD	IEFBB4M2
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF369D	IEFAB496	IEFAB496	IEFBB4M3
	IGG032I1			IEF371I	IEFAB425	IEFAB4FD	IEFBB4M3
IEF262I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF372I	IEFAB457	IEFAB4FD	IEFBB4M3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF373I	IEFTB722	IEFTB722	IEFTB720
	IEFAB492	IEFAB4FD	IEFBB4M3	IEF374I	IEFTB722	IEFTB722	IEFTB720

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEF375I	IEFTB722	IEFTB722	IEFTB720		IEFAB492	IEFAB4FD	IEFBB4M3
IEF376I	IEFTB722	IEFTB722	IEFTB720		IGG0325Z		
IEF402I	IEFIRECM	IEFIRECM	IEFIRECM	IEF479I	IEFAB431	IEFAB4FD	IEFBB4M3
IEF403I	IEFBB401	IEFBB401	IEFBB4M1		IEFAB434	IEFAB4FD	IEFBB4M3
IEF404I	IEFBB410	IEFBB410	IEFBB4M4		IEFAB492	IEFAB4FD	IEFBB4M3
IEF417I	IEFVHA	IEFVHR	IEFVHR		IGG032I8		
	IEFVFA	IEFVHR	IEFVHR	IEF480I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF430I	IEFVHH	IEFVHR	IEFVHR	IEF481I	IEFAB479	IEFAB4FD	IEFBB4M3
IEF433D	IEFAB488	IEFAB487	IEFAB4M9	IEF482I	IEFAB479	IEFAB4FD	IEFBB4M3
IEF434D	IEFAB487	IEFAB487	IEFAB4M9	IEF483I	IEFAB479	IEFAB4FD	IEFBB4M3
IEF450I	IEFBB410	IEFBB410	IEFBB4M4	IEF484I	IEFAB479	IEFAB4FD	IEFBB4M3
IEF451I	IEFBB410	IEFBB410	IEFBB4M4	IEF485I	IEFAB421	IEFAB4FD	IEFBB4M2
IEF452I	IEFBB401	IEFVHR	IEFVHR		IEFAB479	IEFAB4FD	IEFBB4M3
	IEFVHF	IEFVHR	IEFVHR	IEF488I	IEFAB487	IEFAB487	IEFAB4M9
	IEFVHN	IEFVHR	IEFVHR	IEF489I	IEFAB48A	IEFAB48A	IEFAB4M9
IEF453I	IEFBB410	IEFBB410	IEFBB4M4	IEF490I	IEFAB488	IEFAB488	IEFAB4M9
IEF455D	IEFAB495	IEFAB495	IEFAB4M4	IEF491I	IEFAB466	IEFAB4FD	IEFBB4M2
IEF456I	IEFAB4A0	IEFAB4FD	IEFBB4M2	IEF492I	IEFAB452	IEFAB4FD	IEFBB4M3
	IEFAB4F5	IEFAB4FD	IEFBB4M2	IEF493I	IEFAB452	IEFAB4FD	IEFBB4M3
	IEFAB421	IEFAB4FD	IEFBB4M2	IEF502I	IEFAB473	IEFAB473	IEFAB4M5
	IEFAB451	IEFAB4FD	IEFBB4M2	IEF503I	IEFAB473	IEFAB473	IEFAB4M5
	IEFAB493	IEFAB4FD	IEFBB4M2	IEF506I	IEFAB490	IEFAB4FD	IEFAB4M7
	IEFBB401	IEFAB4FD	IEFBB4M2	IEF510I	IEFAB473	IEFAB473	IEFAB4M5
	IEFBB410	IEFAB4FD	IEFBB4M2	IEF601I	IEFVFA	IEFVGM	IEFVGM1
IEF458D	IEFAB4DC	IEFAB4DC	IEFBB4M5		IEFVHA	IEFVGM	IEFVGM1
IEF464I	IEFAB425	IEFAB4FD	IEFBB4M3		IEFVHCB	IEFVGM	IEFVGM1
	IEFAB433			IEF602I	IEFVEA	IEFVGM	IEFVGM7I
	IEFAB441			IEF603I	IEFVHA	IEFVGM	IEFVGM1
	IEFAB479			IEF604I	IEFVDA	IEFVGM	IEFVGM7I
IEF465I	IEFAB427	IEFAB4FD	IEFBB4M2	IEF605I	IEFVHCB	IEFVGM	IEFVGM1
IEF466I	IEFAB492	IEFAB4FD	IEFBB4M3		IEFVHM	IEFVGM	IEFVGM1
IEF467I	IEFAB479	IEFAB4FD	IEFBB4M3		IEFVFA	IEFVGM	IEFVGM1
IEF468I	IEFBB410	IEFAB4FD	IEFBB4M5		IEFVJDTI	IEFVGM	IEFVGM1
IEF469I	IEFBB410	IEFAB4FD	IEFBB4M5	IEF606I	IEFVDA	IEFVGM	IEFVGM1
IEF470I	IEFBB410	IEEBB410	IEFBB4M4	IEF607I	IEFVHCB	IEFVGM	IEFVGM1
IEF471E	IEFBB410	IEFBB410	IEFBB4M4		IEFVHF	IEFVGM	IEFVGM1
IEF472I	IEFBB410	IEFAB4FD	IEFBB4M4	IEF609I	IEFVEA	IEFVGM	IEFVGM2
IEF473I	IEFAB436	IEFAB4FD	IEFBB4M2	IEF610I	IEFVHA	IEFVGM	IEFVGM2
	IEFAB478	IEFAB4FD	IEFBB4M2	IEF611I	IEFVHEB	IEFVGM	IEFVGM2
	IEFAB489	IEFAB4FD	IEFBB4M2		IEFVHH	IEFVGM	IEFVGM2
IEF474I	IEFBB404	IEFAB4FD	IEFBB4M3	IEF612I	IEFVFA	IEFVGM	IEFVGM72
IEF475I	IEFAB441	IEFAB4FD	IEFBB4M3	IEF613I	IEFVFA	IEFVGM	IEFVGM2
	IEFAB442	IEFAB4FD	IEFBB4M3	IEF614I	IEFVFA	IEFVGM	IEFVGM2
	IEFAB479	IEFAB4FD	IEFBB4M3	IEF615I	IEFVEA	IEFVGM	IEFVGM2
IEF476I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF616I	IEFVFA	IEFVGM	IEFVGM3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF617I	IEFVDA	IEFVGM	IEFVGM3
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFVHCB	IEFVGM	IEFVGM3
	IGG0325P			IEF618I	IEFVFA	IEFVGM	IEFVGM3
	IGG0325R				IEFVFB	IEFVGM	IEFVGM3
IEF477I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF619I	IEFVDA	IEFVGM	IEFVGM7I
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF620I	IEFVFA	IEFVGM	IEFVGM72
	IEFAB492	IEFAB4FD	IEFBB4M3		IEFVFB	IEFVGM	IEFVGM72
	IGG0325R			IEF621I	IEFVHC	IEFVGM	IEFVGM3
IEF478I	IEFAB431	IEFAB4FD	IEFBB4M3	IEF622I	IEFVFA	IEFVGM	IEFVGM3
	IEFAB434	IEFAB4FD	IEFBB4M3	IEF623I	IEFVGT	IEFVGM	IEFVGM3

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEF624I	IEFVDA	IEFVGM	IEFVGM4	IEF644I	IEFVGT	IEFVGM	IEFVGM6
	IEFVJDTI	IEFVGM	IEFVGM4		IEFVDA	IEFVGM	IEFVGM6
	IEFVFA	IEFVGM	IEFVGM4		IEFVJDTI	IEFVGM	IEFVGM6
	IEFVFB	IEFVGM	IEFVGM4		IEF645I	IEFVEA	IEFVGM
IEF625I	IEFVFA	IEFVGM	IEFVJDTI	IEFVGM		IEFVGM6	
IEF626I	IEFVFA	IEFVGM	IEFVGM4	IEF646I	IEFVDA	IEFVGM	IEFVGM6
IEF627I	IEFVFA	IEFVGM	IEFVGM4		IEFVEA	IEFVGM	IEFVGM6
IEFVDA	IEFVGM	IEFVGM4	IEFVFA		IEFVGM	IEFVGM6	
IEF628I	IEFVFA	IEFVGM	IEFVGM4	IEF647I	IEFVDA	IEFVGM	IEFVGM6
IEF629I	IEFVFA	IEFVGM	IEFVGM4		IEFVFB	IEFVGM	IEFVGM6
IEF630I	IEFVDA	IEFVGM	IEFVGM4	IEFVGT	IEFVGM	IEEVGM6	
	IEFVFA	IEFVGM	IEFVGM4	IEFVFA	IEFVGM	IEFVGM6	
	IEFVFB	IEFVGM	IEGVGM4	IEFVJA	IEFVGM	IEFVGM6	
	IEFVJDTI	IEFVGM	IEFVGM4	IEF648I	IEFVDA	IEFVGM	IEFVGM7
IEF631I	IEFVDA	IEFVGM	IEFVGM4		IEF649I	IEFVDA	IEFVGM7
IEF632I	IEFVDA	IEFVGM	IEFVGM5	IEF650I	IEFVFA	IEFVGM	IEFVGM7
	IEFVEA	IEFVGM	IEFVGM5	IEF651I	IEFVFA	IEFVGM	IEFVGM7
	IEFVFA	IEFVGM	IEFVGM5	IEF652I	IEFVFA	IEFVGM	IEFVGM7
	IEFVFB	IEFVGM	IEGVGM5	IEF653I	IEFVFB	IEFVGM	IEFVFB
	IEFVHCB	IEFVGM	IEFVGM5	IEF654I	IEFVDA	IEFVGM	IEFVGM7
	IEFVJA	IEFVGM	IEFVGM5	IEF655I	IEFVDA	IEFVGM	IEFVGM7
IEF633I	IEFVJA	IEFVGM	IEFVGM5	IEF656I	IEFVDA	IEFVGM71	
IEF634I	IEFVJA	IEFVGM	IEFVGM5	IEF657I	IEFVHA	IEFVGM72	
IEF635I	IEFVJA	IEFVGM	IEFVGM5	IEF658I	IEFVHCB	IEFVGM70	
IEF636I	IEFVDA	IEFVGM	IEFVGM5	IEF659I	IEFVHCB	IEFVGM70	
IEF637I	IEFVEA	IEFVGM	IEFVGM5	IEFVHEB	IEFVGM	IEFVGM70	
	IEFVJA	IEFVGM	IEFVGM5	IEF660I	IEFVHCB	IEFVGM70	
IEF638I	IEFVEA	IEFVGM	IEFVGM5	IEF661I	IEFVHH	IEFVGM70	
	IEFVGT	IEFVGM	IEFVGM5	IEF662I	IEFVINA	IEFVGM70	
	IEFVJDTI	IEFVGM	IEFVGM4	IEF663I	IEFVINA	IEFVGM70	
	IEF639I	IEFVGT	IEFVGM	IEFVGM5	IEF665I	IEFVINA	IEFVGM71
IEF640I	IEFVJA	IEFVGM	IEFVGM5	IEF666E	IEFENFFX	IEFENFFX	
	IEFVDA	IEFVGM	IEFVGM6	IEFENFNM	IEFENFNM	IEFENFNM	
	IEFVFA	IEFVGM	IEFVGM6	IEF668I	IEFVHCB	IEFVGM71	
	IEFVGK	IEFVGM	IEFVGM6	IEF669I	IEFVDA	IEFVGM71	
	IEFVGS	IEFVGM	IEFVGM6	IEF670I	IEFVEA	IEFVGM71	
	IEFVGT	IEFVGM	IEFVGM6	IEF671I	IEFVDA	IEFVGM71	
	IEFVJDTI	IEFVGM	IEFVGM6	IEF672I	IEFVDA	IEFVGM71	
	IEFN901	IEFVGM	IEFVGM6	IEF673I	IEFVEA	IEFVGM71	
	IEFVJA	IEFVGM	IEFVGM6	IEFVJA	IEFVGM	IEFVGM71	
	IEF641I	IEFVGK	IEFVGM	IEFVGM6	IEF674I	IEFVEA	IEFVGM1
IEF642I	IEFVJDTI	IEFVGM	IEFVGM6	IEF675I	IEFVJA	IEFVGM1	
	IEFVFA	IEFVGM	IEFVGM6	IEFVEA	IEFVGM	IEFVGM1	
IEF643I	IEFVDA	IEFVGM	IEFVGM6	IEF676I	IEFVINA	IEFVGM3	
	IEFVEA	IEFVGM	IEFVGM6	IEF677I	IEFVFA	IEFVHR	
	IEFVFB	IEFVGM	IEFVGM6	IEF678I	IEFVGM	IEFVGM3	
	IEFVGT	IEFVGM	IEFVGM6	IEFVHA	IEFVGM	IEFVGM3	
	IEFVHCB	IEFVGM	IEFVGM6	IEFVHE	IEFVGM	IEFVGM3	
	IEFVJA	IEFVGM	IEFVGM6	IEFVHCB	IEFVGM	IEFVGM3	
	IEFVJDTI	IEFVGM	IEFVGM6	IEF679I	IEFVHA	IEFVHR	
	IEFVFA	IEFVGM	IEFVGM6	IEFVHE	IEFVHR	IEFVHR	
	IEFVDA	IEFVGM	IEFVGM6	IEFVGM	IEFVHR	IEFVHR	
	IEFVGS	IEFVGM	IEFVGM6	IEF680I	IEFVGM	IEFVHR	
IEFVGT	IEFVGM	IEFVGM6	IEF681I	IEFVDA	IEFVGM70		
IEFVJDTI	IEFVGM	IEFVGM6	IEF682I	IEFVDA	IEFVGM71		

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IEF683I	IEFNB9CR IEFNB9IR	IEFNB9CR IEFNB9IR	IEFNB9CR IEFNB9IR	IEF748I	IEFVFA	IEFVGM	IEFVGM71
IEF684I	IEFVDA	IEFVGM	IEFVGM71	IEF749I	IEFVFA	IEFVGM	IEFVGM71
IEF685I	IEFVHH	IEFVHH	IEFVGM	IEF750I	IEFVFA	IEFVGM	IEFVGM71
IEF686I	IEFVHH	IEFVGM	IEFVGM71	IEF751I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF687I	IEFAB441	IEFAB4FD	IEFBB4M3	IEF752I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF689I	IEFSD162	IEFSD162	IEFIB650	IEF753I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF690I	IEFAB42I	IEFAB42I	IEFAB4ME	IEF754I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF691I	IEFAB459	IEFAB4FD	IEFBB4M3	IEF755I	IEFAB427	IEFAB4FD	IEFBB4M3
IEF700I	IEFAB486	IEFAB4FD	IEFBB4M2	IEF756I	IEFAB427	IEFAB4FD	IEFBB4M3
	IEFAB489	IEFAB4FD	IEFBB4M2	IEF757I	IEFVDA	IEFVGM	IEFVGM71
	IEFAB491	IEFAB4FD	IEFBB4M2	IEF758I	IEFJSIN2	IEFJSIMW	IEFJSIMM
IEF701I	IEFAB477	IEFAB4FD	IEFBB4M2	IEF759I	IEFJSBLD	IEFJSIMW	IEFJSIMM
	IEEAB490	IEFAB4FD	IEFBB4M2	IEF760I	IEFCB805	IEFJSIMW	IEFJSIMM
IEF702I	IEFAB485	IEFAB4FD	IEFBB4M3		IEFJSIN2	IEFJSIMW	IEFJSIMM
	IEFAB486	IEFAB4FD	IEFBB4M3	IEF771I	IEFAUINT	IEFAUINT	IEFSVMSG
IEF703I	IEFAB427 IGG0325A	IEFAB4FD	IEFBB4M3	IEF772I	IEFAB429	IEFAB429	IEFAB4M5
IEF704I	IEFAB469	IEFAB4FD	IEFBB4M3	IEF773I	IEFAB410	IEFAB410	IEFAB410
IEF710I	IEFAB495	IEFAB495	IEFAB4M4	IEF774A	IEFAB410	IEFAB410	IEFAB410
IEF711I	IEFAB494	IEFAB494	IEFAB4M4	IEF811I	IEFVJDTI	IEFVGM	IEFVGM72
IEF712I	IEFAB498	IEFAB49B	IEFAB4M4	IEF812I	IEFVJDTI	IEFVGM	IEFVGM72
IEF713I	IEFAB495	IEFAB4FD	IEFBB4M2		IEFVFA	IEFVGM	IEFVGM72
IEF714I	IEFAB495	IEFAB4FD	IEFBB4M2	IEF813I	IEFVFA	IEFVGM	IEFVGM72
IEF715I	IEFAB495	IEFAB4FD	IEFBB4M2		IEFVHCB	IEFVGM	IEFVGM72
IEF716I	IEFAB495 IEFAB49B	IEFAB4FD	IEFBB4M2	IEF814I	IEFVFA	IEFVGM	IEFVGM72
IEF717I	IEFAB495	IEFAB4FD	IEFBB4M2	IEF815I	IEFVJDTI	IEFVGM	IEFVGM72
IEF718I	IEFAB495	IEFAB4FD	IEFBB4M2	IEF816I	IEFJOBS	IEFJSIMW	IEFJSIMM
IEF719I	IEFAB434	IEFAB4FD	IEFBB4M3	IEF817I	IEFVJDTI	IEFVGM	IEFVGM72
		IEFAB492	IEFBB4M3	IEF818I	IEFSJINT	IEFJSIMW	IEFJSIMM
IEF720I	IEFAB434 IEFAB492	IEFAB4FD	IEFBB4M3	IEF819I	IEFVJDTI	IEFVGM	IEFVGM72
IEF721I	IEFAB490	IEFAB4FD	IEFBB4M3	IEF820I	IEFVJDTI	IEFVGM	IEFVGM72
IEF722I	IEFIB600	IEFIB600	IEFIB650		IEFVDA	IEFVGM	IEFVGM72
	IEFCMAUT	HASPCNVT	IEFIB650	IEF821I	IEFVHA	IEFVGM	IEFVGM72
IEF724I	IEFAB4A3	IEFBB410	IEFBB4M5	IEF822I	IEFVFA	IEFVGM	IEFVGM72
IEF725I	IEFAB457	IEFAB4FD	IEFBB4M3	IEF823I	IEFVJDTI	IEFVGM	IEFVGM72
IEF726I	IEFAB424	IEFAB4FD	IEFBB4M3	IEF824I	IEFVJDTI	IEFVGM	IEFVGM72
IEF731I	IEFPPT	IEFPPT	IEFPPT		IEFVJDTI	IEFVGM	IEFVGM72
IEF732I	IEFPPT	IEFPPT	IEFPPT	IEF825I	IEFVJDTI	IEFVGM	IEFVGM72
IEF734I	IEFRCSTP	IEFRCSTP	IEFXB603	IEF861I	IEFSD102	IEFSD102	IEFIB650
IEF735I	IEFJSIN2	IEFJSIMW	IEFJSIMM		IEFAB4DC	IEFAB4DC	IEFAB4M5
IEF736A	IEFJSIN2	IEFJSIMW	IEFJSIMW	IEF863I	IEFSD102	IEFSD102	IEFIB650
IEF737I	IEFJSIN2	IEFJSIMW	IEFJSIMM		IEFAB4DC	IEFAB4DC	IEFAB4M5
IEF738I	IEFRCSTP	IEFRCSTP	IEFXB603	IEF923I	IEFEB400	IEFEB400	IEFEB4M1
IEF740I	IEFAB434	IEFAB4FD	IEFBB4M3	IEF924I	IEFEB400	IEFEB400	IEFEB4M1
IEF741I	IEFAB434 IEFAB459	IEFAB4FD	IEFBB4M3	IEF925I	IEFEB400	IEFEB400	IEFEB4M1
IEF742I	IEFBB410	IEFBB410	IEFBB4M4	IEF926I	IEFEB400	IEFEB400	IEFEB4M1
IEF743I	IEFIRECM	IEFIRECM	IEFIRECM	IEF927I	IEFAB4IE	IEFAB4IE	IEFAB4IM
IEF744I	IEFVFA	IEFVGM	IEFVGM71		IEFAB410	IEFAB410	IEFAB410
IEF745I	IEFVFA	IEFVGM	IEFVGM90	IEF928I	IEFAB410	IEFAB410	IEFAB410
IEF746I	IEFVFA	IEFVGM	IEFVGM90	IFA010I	IEEMB833	IEEMB824	IEEMB826
IEF747I	IEFVFA	IEFVGM	IEFVGM90	IFA012I	IFASMFDP	IEEMB824	IEEMB826
				IFA012I	IFASMFDP	IEEMB824	IEEMB826
				IFA013I	IFASMFDP	IEEMB824	IEEMB826
				IFA014I	IFASMFDP	IEEMB824	IEEMB826
				IFA015I	IFASMFDP	IEEMB824	IEEMB826
				IFA016I	IFASMFDP	IEEMB824	IEEMB826
				IFA017I	IFASMFDP	IEEMB824	IEEMB826

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IFA018I	IFASMFDP	IEEMB824	IEEMB826	IFD124I	IFDOLT07	IFDOLT07	IFDMSG07
IFA019I	IFASMFDP	IEEMB824	IEEMB826	IFD125I	IFDOLT07	IFDOLT07	IFDMSG07
IFB010D	IFBSVC76	IFBSVC76	IFBSVC76	IFD127I	IFDOLT31	IFDOLT31	IFDMSG31
IFB020I	IFBSVC76	IFBSVC76	IFBSVC76		IFDOLT61	IFDOLT61	IFDMSG61
IFB030I	IFBSVC76	IFBSVC76	IFBSVC76	IFD129I	IFDOLT00	IFDOLT08	IFDMSG00
					IFDOLT08		IFDMSG08
IFB040I	IFBSVC76	IFBSVC76	IFBSVC76	IFD130I	IFDOLT07	IFDOLT07	IFDMSG07
IFB050I	IFBSVC76	IFBSVC76	IFBSVC76		IFDOLT03	IFDOLT03	IFDMSG03
IFB060E	IFBSVC76	IFBSVC76	IFBSVC76		IFDOLT00	IFDOLT00	IFDMSG00
IFB070I	IFBSVC76	IFBSVC76	IFBSVC76	IFD134I	IFDOLT00	IFDOLT00	IFDMSG00
IFC001I	IFCDIP00	IFCDIP00	IFCDIP00	IFD137I	IFDOLT07	IFDOLT07	IFDMSG07
					IFDOLT03	IFDOLT03	IFDMSG03
IFC002I	IFCDIP00	IFCDIP00	IFCDIP00		IFDOLT53	IFDOLT53	IFDMSG53
IFC003I	IFCDIP00	IFCDIP00	IFCDIP00		IFDOLT07	IFDOLT07	IFDMSG07
IFC004I	IFCDIP00	IFCDIP00	IFCDIP00	IFD138I	IFDOLT07	IFDOLT07	IFDMSG07
IFC005I	IFCDIP00	IFCDIP00	IFCDIP00	IFD139D	IFDOLT03	IFDOLT03	IFDMSG03
IFC006I	IFCDIP00	IFCDIP00	IFCDIP00		IFDOLT07	IFDOLT07	IFDMSG07
IFC007I	IFCDIP00	IFCDIP00	IFCDIP00	IFD140I	IFDOLT31	IFDOLT31	IFDMSG31
IFC008I	IFCDIP00	IFCDIP00	IFCDIP00		IFDOLTAJ	IFDOLTAJ	IFDMSGAJ
IFC009I	IFCDIP00	IFCDIP00	IFCDIP00	IFD144D	IFDOLT06	IFDOLT06	IFDOLT06
IFC155I	IFCDIP00	IFCDIP00	IFCDIP00	IFD145D	IFDOLT04	IFDOLT04	IFDMSG04
IFC156I	IFCDIP00	IFCDIP00	IFCDIP00		IFDOLT22	IFDOLT22	IFDMSG22
IFC157I	IFCDIP00	IFCDIP00	IFCDIP00	IFD146I	IFDOLT50	IFDOLT50	IFDMSG50
IFC158I	IFCDIP00	IFCDIP00	IFCDIP00	IFD147I	IFDMSG50	IFDOLT50	IFDMSG50
IFC159I	IFCDIP00	IFCDIP00	IFCDIP00	IFD148I	IFDOLT50	IFDOLT50	IFDMSG50
IFC160I	IFCDIP00	IFCDIP00	IFCDIP00	IFD149I	IFDOLT50	IFDOLT50	IFDMSG50
IFD100I	(the OLT	IFDOLT13	(the OLT	IFD154I	IFDOLT61	IFDOLT61	IFDMSG61
	in use)	IFDOLT37	in use)	IFD155I	IFDOLT32	IFDOLT32	IFDMSG32
IFD101D	(the OLT	IFDOLT13	(the OLT	IFD156I	IFDOLT22	IFDOLT22	IFDMSG22
	in use)	IFDOLT37	in use)	IFD157I	IFDOLT14	IFDOLT14	IFDOLT14
IFD102I	IFDOLT00	IFDOLT00	IFDMDG00				IFDMSG00
IFD103I	IFDOLT52	IFDOLT52	IFDMSG00	IFD158I	IFDOLT48	IFDOLT48	IFDMSG00
IFD104E	IFDOLT33	IFDOLT33	IFDMSG33	IFD160I	IFDOLT18	IFDOLT18	IFDMSG00
IFD105D	IFDOLT30	IFDOLT30	IFDMSG00	IFD161I	IFDOLT31	IFDOLT31	IFDMSG31
IFD106D	IFDOLT30	IFDOLT30	IFDMSG00		IFDOLT32	IFDOLT32	IFDMSG32
IFD107D	IFDOLT33	IFDOLT33	IFDMSG33		IFDOLT33	IFDOLT33	IFDMSG33
IFD108D	IFDOLT30	IFDOLT30	IFDMSG00		IFDOLT38	IFDOLT38	IFDMSG38
	IFDOLT31	IFDOLT31	IFDMSG31	IFD162I	IFDOLT22	IFDOLT22	IFDMSG22
IFD109D	IFDOLT03	IFDOLT03	IFDMSG03	IFD173I	IFDOLT55	IFDOLT55	IFDMSG00
	IFDOLT31	IFDOLT31	IFDMSG31	IFD174I	IFDOLT53	IFDOLT53	IFDMSG53
	IFDOLT61	IFDOLT61	IFDMSG61	IFD176I	IFDOLT33	IFDOLT33	IFDMSG33
IFD110I	IFDOLT61	IFDOLT61	IFDMSG61	IFD178I	IFDOLT55	IFDOLT55	IFDMSG00
IFD111I	IFDOLT31	IFDOLT31	IFDMSG31	IFD179I	IFDOLT31	IFDOLT31	IFDMSG31
	IFDOLT61	IFDOLT61	IFDMSG61	IFD180I	IFDOLT31	IFDOLT31	IFDMSG31
IFD112I	IFDOLT32	IFDOLT32	IFDMSG32	IFD200I	IFDOLT48	IFDOLT48	IFDMSG00
IFD113D	IFDOLT52	IFDOLT52	IFDMSG00	IFD201I	IFDOLT48	IFDOLT48	IFDMSG00
IFD114I	IFDOLT61	IFDOLT61	IFDMSG61	IFD202I	IFDOLT12	IFDOLT12	IFDMSG00
IFD115I	IFDOLT33	IFDOLT33	IFDMSG33	IFD203I	IFDOLT12	IFDOLT12	IFDMSG00
IFD117I	IFDOLT48	IFDOLT48	IFDMSG00	IFD205I	IFDOLT12	IFDOLT12	IFDMSG00
IFD118I	IFDOLT03	IFDOLT03	IFDMSG03	IFD210I	IFDOLT18	IFDOLT18	IFDMSG00
IFD119I	IFDOLT03	IFDOLT03	IFDMSG03	IFD212I	IFDOLT04	IFDOLT04	IFDMSG04
IFD120D	IFDOLT04	IFDOLT04	IFDMSG04	IFD227I	IFDOLT48	IFDOLT48	IFDMSG00
	IFDOLT22	IFDOLT22	IFDMSG22	IFD229I	IFDOLT48	IFDOLT48	IFDMSG00
IFD121I	IFDOLT37	IFDOLT37	IFDMSG37	IFD231I	IFDOLT48	IFDOLT48	IFDMSG00
	IFDOLT56	IFDOLT56	IFDMSG56	IFD243D	IFDOLTAJ	IFDOLTAJ	IFDMSGAJ
IFD122I	IFDOLT03	IFDOLT03	IFDMSG03	IFD244I	IFDOLTAJ	IFDOLTAJ	IFDMSGAJ
	IFDOLT07	IFDOLT07	IFDMSG07		IGC0905I	IGC0905I	

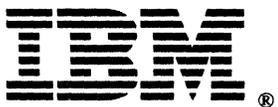
Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IFD248I	IFDOLT48	IFDOLT48	IFDMSG00		IFDOLT30	IFDOLT30	
IFD251I	IFDOLT31	IFDOLT31	IFDMSG31	IFD900I	IFDOLT98	IFDOLT98	IFDOLT98
IFD252I	IFDOLT31	IFDOLT31	IFDMSG31				IFDOLT99
IFD253I	IFDOLT28	IFDOLT28	IFDMSG00	IFD901I	IFDOLT12	IFDOLT12	IFDMSG00
IFD255I	IFDOLT39	IFDOLT18	IFDMSG00		IFDOLT98	IFDOLT98	IFDOLT98
		IFDOLT39			IFDOLT99	IFDOLT99	IFDOLT99
		IFDOLT55		IFD902I	IFDOLT98	IFDOLT98	IFDOLT98
IFD260I	IFDOLT30	IFDOLT30	IFDMSG00		IFDOLT99	IFDOLT99	IFDOLT99
IFD261I	IFDOLT62	IFDOLT62	IFDOLT62	IFD903I	IFDOLT99	IFDOLT99	IFDOLT99
IFD262I	IFDOLT62	IFDOLT62	IFDOLT62	IFD904I	IFDOLT99	IFDOLT99	IFDOLT99
IFD263D	IFDOLT62	IFDOLT62	IFDOLT62	IFD905I	IFDOLT98	IFDOLT98	IFDOLT98
IFD264D	IFDOLT62	IFDOLT62	IFDOLT62	IFD906I	IFDOLT99	IFDOLT99	IFDOLT99
IFD271I	IFDOLT81	IFDOLT81	IFDOLT81	IFD907I	IFDOLT99	IFDOLT99	IFDOLT99
IFD272I	IFDOLT81	IFDOLT81	IFDOLT81	IFD908I	IFDOLT99	IFDOLT99	IFDOLT99
IFD273I	IFDOLT81	IFDOLT81	IFDOLT81	IFD909I	IFDOLT99	IFDOLT99	IFDOLT99
IFD274D	IFDOLT81	IFDOLT81	IFDOLT81	IFD911I	IFDOLT12	IFDOLT12	IFDMSG00
IFD275I	IFDOLT81	IFDOLT81	IFDOLT81	IGF910W	IGFPMMAIN	IGFPWMSG	IGFPMMAIN
IFD276I	IFDOLT81	IFDOLT81	IFDOLT81	IGF912W	IGFPMMAIN	IGFPEMER	IGFPMMAIN
IFD310I	IFDOLT35	IFDOLT35	IFDOLT35	IGF931E	IGFPMSCA	IGFPWMSG	IGFPMMMSG
IFD313I	IFDOLT48	IFDOLT48	IFDMSG00	IGF953I	IGF2603D	IGFPWMSG	IGFPMMMSG
IFD327I	IFDOLT33	IFDOLT33	IFDMSG33	IGF955I	IGF2603D	IGFPWMSG	IGFPMMMSG
IFD373I	IFDOLT49	IFDOLT49	IFDOLT49	IGF957A	IGFPXMFA	IEEVDCCR	IGFPXMFA
IFD394D	IFDOLT49	IFDOLT49	IFDOLT49	IGF958I	IGF2603D	IGFPWMSG	IGFPMMMSG
IFD395I	IFDOLT49	IFDOLT49	IFDOLT49	IGF959I	IGF2603D	IGFPWMSG	IGFPMMMSG
IFD396D	IFDOLT49	IFDOLT49	IFDOLT49	IGF970E	IGFPMHCA	IGFPWMSG	IGFPWMSG
IFD397I	IFDOLT49	IFDOLT49	IFDOLT49	IGF971E	IGFPMHCA	IGFPWMSG	IGFPMMMSG
IFD398I	IFDOLT49	IFDOLT49	IFDOLT49	IGF972E	IGFPMHCA	IGFPWMSG	IGFPMMMSG
IFD399I	IFDOLTAJ	IFDOLTAJ	IFDMSGAJ	IKJ139I	IEEVSND2	IEEVSND4	IKJEES20
IFD400I	IFDOLT73	IFDOLT73	IFDMSG73		IEEVSND3		
IFD405I	IFDOLT73	IFDOLT73	IFDMSG73		IEEVSND8		
IFD406I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ140I	IEEVSND9	IEEVSND4	IKJEES20
IFD407I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ141I	IEEVSND9	IEEVSND4	IKJEES20
IFD408I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ142I	IEEVSND9	IEEVSND4	IKJEES20
	IFDOLT74	IFDOLT74	IFDMSG74	IKJ143I	IEEVSND	IEEVSND4	IKJEES20
IFD412I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ144I	IEEVSND2	IEEVSND4	IKJEES20
IFD413I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ413I	IEDAY1	IEDAY1	IEDAY2
IFD415I	IFDOLT73	IFDOLT73	IFDMSG73	IKJ572I	IEEVSND6	IEEVSND4	IKJEES20
IFD450I	IFDOLT48	IFDOLT18	IFDMSG00		IEEVSND7		
IFD467I	IFDOLT31	IFDOLT31	IFDOLT31	IKJ573I	IEEVSND	IEEVSND4	IKJEES20
IFD468I	IFDOLT67	IFDOLT67	IFDOLT67	IKJ574I	IEEVSND2	IEEVSND4	IKJEES20
IFD469D	IFDOLT67	IFDOLT67	IFDOLT67		IEEVSND8		
	IFDOLTAJ	IFDOLTAJ	IFDOLTAJ	IKJ576I	IEEVSND3	IEEVSND4	IKJEES20
IFD470I	IFDOLT67	IFDOLT67	IFDOLT67		IEEVSND8		
	IGC0505I	IGC0505I	IGC0505I	IKJ578I	IEEVSND8	IEEVSND4	IKJEES20
IFD472I	IGC0905I	IFDOLTAJ	IFDMSGAT	IKJ579I	IEEVSND1	IEEVSND4	IKJEES20
IFD473I	IFDOLT03	IFDOLT03	IFDMSG03		IEEVSND3		
IFD474I	IFDOLT03	IFDOLT03	IFDMSG03		IEEVSND4		
IFD475I	IFDOLT03	IFDOLT03	IFDMSG03		IEEVSND6		
IFD476I	IFDOLT53	IFDOLT53	IFDMSG53		IEEVSND7		
IFD477I	IFDOLT53	IFDOLT53	IFDMSG53	IKJ580I	IEEVSND1	IEEVSND4	IKJEES20
IFD501I	IFDOLT48	IFDOLT48	IFDMSG00		IEEVSND6		
IFD502I	IFDOLT48	IFDOLT48	IFDMSG00		IEEVSND7		
IFD503I	IFDOLT48	IFDOLT48	IFDMSG00	IKJ581I	IEEVSND	IEEVSND4	IKJEES20
IFD890I	IGC0505I	IGC0505I	IGC0505I	IKJ582I	IEEVSND1	IEEVSND4	IKJEES20
IFD899I	IGC0005I	IFDOLT00	IFDMSG00	IKJ583I	IEEVSND1	IEEVSND4	IKJEES20

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IKJ584I	IEEVSND IEEVSND1 IEEVSND7	IEEVSND4	IKJEES20	IKJ56412I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ585I	IEEVSND IEEVSND1 IEEVSND7	IEEVSND4	IKJEES20	IKJ56420I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ586I	IEEVSND IEEVSND1 IEEVSND7	IEEVSND4	IKJEES20	IKJ56421I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ587I	IEEVSND IEEVSND1 IEEVSND7	IEEVSND4	IKJEES20	IKJ56422I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ588I	IEEVSND IEEVSND1 IEEVSND7	IEEVSND4	IKJEES20	IKJ56423I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ600I	IKJEFLE IKJEFLL	IKJEFLGM	IKJEFLGN	IKJ56424I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ601I	IKJEFLGB IKJEFLS	IKJEFLGB	IKJEFLGB	IKJ56425I	IKJEFLE IKJEFLI	IKJEFLGM	IKJEFLGN
IKJ602I	IKJEFLE	IKJEFLGM	IKJEFLGN	IKJ56428I	IKJEFLEA	IKJEFLGM	IKJEFLGN
IKJ603I	IKJEFLEA IKJEFLGB IKJEFLI	IKJEFLGM	IKJEFLGN	IKJ56429I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ605I	IKJEFLEA	IKJEFLGM	IKJEFLGN	IKJ56450I	IKJEFLH	IKJEFLH	IKJEFLH
IKJ606I	IKJEFLE	IKJEFLGM	IKJEFLGN	IKJ56451I	IKJEFLI	IKJEFLGM	IKJEFLGN
IKJ608I	IKJEFLC IKJEFLE IKJEFLEA IKJEFLI IKJEFLI	IKJEFLGM	IKJEFLGN	IKJ56452I	IKJEFLGB IKJEFLA IKJEFLE	IKJEFLGM	IKJEFLGB IKJEFLA IKJEFLGN
IKJ609I	IKJEFLA	IKJEFLA	IKJEFLA	IKJ56453I	IKJEFLGB	IKJEFLGB	IKJEFLGB
IKJ701I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56454I	IKJEFLC	IKJEFLGM	IKJEFLGN
IKJ702I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56454I	IKJEFLA	IKJEFLA	IKJEFLA
IKJ703I	IKJPRM10	IKJPRM10	IKJPRMSG	IKJ56454I	IKJEFLC	IKJEFLGM	IKJEFLGN
IKJ704I	IKJPRM01	IKJPRM01	IKJPRMSG	IKJ56454I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ705I	IKJPRM01	IKJPRM01	IKJPRMSG	IKJ56455I	IKJEFLEA	IKJEFLGM	IKJEFLGN
IKJ706I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56456I	IKJEFLI	IKJEFLGM	IKJEFLGN
IKJ707I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56456I	IKJEFLE	IKJEFLGM	IKJEFLGN
IKJ708I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56457I	IKJEFLL	IKJEFLGM	IKJEFLGN
IKJ709I	IKJPRM02	IKJPRM02	IKJPRMSG	IKJ56470I	IKJEFLL	IKJEFLGM	IKJEFLGN
IKJ54050I	IEAVAR04 IEAVAR00 IEAVAR05	IEAVAR00 IEAVAR00 IEAVAR05	IEAVAR00 IEAVAR00 IEAVAR05	ILR001I	ILRTMI00	ILRTMI00	ILRTMI00
IKJ56400A	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR002I	ILRTMI00	ILRTMI00	ILRTMI00
IKJ56401I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR003A	ILRTMI01	ILRTMI01	ILRTMI01
IKJ56402I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR004I	ILRTMI00	ILRTMI00	ILRTMI00
IKJ56403I	IKJEFLE	IKJEFLGM	IKJEFLGN	ILR005I	ILRTMI01	ILRTMI01	ILRTMI01
IKJ56404I	IKJEFLE	IKJEFLGM	IKJEFLGN	ILR006I	ILRMSG00	ILRMSG00	ILRMSG00
IKJ56405I	IKJEFLE	IKJEFLGM	IKJEFLGN	ILR007I	ILRMSG00	ILRMSG00	ILRMSG00
IKJ56406I	IKJEFLGB	IKJEFLGB	IKJEFLGB	ILR008W	ILRDRV01	ILRMSG00	ILRMSG00
IKJ56407I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR009E	ILRCMP	ILRMSG00	ILRMSG00
IKJ56408I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR010I	ILRCMP01 ILRMSG00	ILRMSG00	ILRMSG00
IKJ56409I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR020I	ILRCMP01 ILRMSG00	ILRMSG00	ILRMSG00
IKJ56410I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR021I	ILRCMP	ILRMSG00	ILRMSG00
IKJ56411I	IKJEFLEA	IKJEFLGM	IKJEFLGN	ILR022A	ILRDRV01 ILRMSG00	ILRMSG00	ILRMSG00
				ILR025E	ILRTMI00	ILRTMI00	ILRTMI00
				ILR073W	ILRTMI01	ILRTMI01	ILRTMI01
				IOS000I	ILRTMI01	ILRTMI01	ILRTMI01
					ILRIODRV	ILRMSG00	ILRMSG00
					ILR025E	ILRMSG00	ILRMSG00
					ILR073W	ILRMSG00	ILRMSG00
					IOS000I	IGE0025C	IGE0025C

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
IOS001I	IOSVIRBN	IGE0025C	IGE0025C	IOS429I	IOSVURDT	IOSVMSLG	IOSVURDT
IOS002A	IOSVIRBN	IGE0025C	IGE0025C	IOS430I	IOSVURDT	IOSVMSLG	IOSVURDT
IOS003A	ERPs	IGE0025C	IGE0025C	IOS443I	IECVIOSI	IECVIOSI	IECVIOSI
IOS004I	IOSRCHPR	IOSRCHPR	IOSRCHPR	IOS444I	IECVDPHT	IECVDPHT	IECVDPHT
IOS019W	IOSRMCH	IOSRMCH	IOSRMCH	IOS450E	IOSRDNDV	IOSVMSLG	IOSRSNDV
IOS050I	IOSRSLH	IOSRSLH	IOSRSLH	IOS451I	IOSRDNDV	IOSVMSLG	IOSRSNDV
IOS062E	IOSRCHPR	IOSRCHPR	IOSRCHPR	IOS452I	IOSRDNDV	IOSVMSLG	IOSRSNDV
IOS070E	IOSRMIHP	IOSRMIHM	IOSRMIHM	IRA100E	IRARMSTM	IRARMSRV	IRARMMSG
IOS071E	IOSRMIHP	IOSRMIHM	IOSRMIHM	IRA101E	IRARMSTM	IRARMSRV	IRARMMSG
	IOSRMIHR	IOSRMIHM	IOSRMIHM	IRA102I	IRARMSTM	IRARMSRV	IRARMMSG
IOS071I	IOSRMIHP	IOSRMIHM	IOSRMIHM	IRA103I	IRARMSTM	IRARMSRV	IRARMMSG
	IOSRMIHR	IOSRMIHM	IOSRMIHM	IRA104I	IRARMSTM	IRARMSRV	IRARMMSG
IOS072E	IOSRMIHP	IOSRMIHT	IOSRMIHT	IRA200E	IRARMSTM	IRARMSRV	IRARMMSG
	IOSRMIHR	IOSRMIHT	IOSRMIHT	IRA201E	IRARMSTM	IRARMSRV	IRARMMSG
IOS074E	IOSRMIHT	IOSRMIHT	IOSRMIHT	IRA202I	IRARMSTM	IRARMSRV	IRARMMSG
IOS075E	IOSRMIHP	IOSRMIHM	IOSRMIHM	IRA203I	IRARMSTM	IRARMSRV	IRARMMSG
	IOSRMIHR	IOSRMIHM	IOSRMIHM	IRA300I	IRARMIPS	IEEMB812	IRARMIPS
IOS076E	IOSRMIHP	IOSRMIHM	IOSRMIHM		IRARMIPS	IEEMB812	IRARMIPM
	IOSRMIHR	IOSRMIHM	IOSRMIHM	IRA301I	IRARMIPS	IEEMB812	IRARMIPM
IOS077E	IOSRMIHP	IOSRMIHM	IOSRMIHM		IRARMIPS	IEEMB812	IRARMIPM
	IOSRMIHR	IOSRMIHM	IOSRMIHM	IRA302I	IRARMOPT	IEEMB812	IRARMIPM
IOS100I	IOSRCHDR	IOSRDBOX	IOSRCHDR	IRA303I	IRARMOPT	IEEMB812	IRARMIPM
IOS101I	IOSRCHDR	IOSRDBOX	IOSRCHDR	IRA304I	IRARMICS	IEEMB812	IRARMIPM
IOS102I	IOSRFDEV	IOSRDBOX	IOSRFDEV	IRA305I	IRARMICS	IEEMB812	IRARMIPM
IOS104I	IOSVURSV	IOSRDBOX	IOSVURDT	IRA400E	IRARMSTM	IRARMSRV	IRARMMSG
IOS105I	IECVDURP	IOSRDBOX	IOSVURDT	IRA401E	IRARMSTM	IRARMSRV	IRARMMSG
IOS106E	IOSRDBOX	IOSRDBOX	IOSRDBOX	IRA402I	IRARMSTM	IRARMSRV	IRARMMSG
IOS109E	IOSRHREC	IOSRHREC	IOSRHREC	IRA403E	IRARMSTM	IRARMSRV	IRARMMSG
IOS110A	IOSRHREC	IOSRHREC	IOSRHREC	IRA500E	IRARMCTL	IRARMSRV	IRARMMSG
IOS111A	IOSRHREC	IOSRHREC	IOSRHREC		IRARMEVT	IRARMSRV	IRARMMSG
IOS112A	IOSRHREC	IOSRHREC	IOSRHREC	IRA501I	IRARMEVT	IRARMSRV	IRARMMSG
IOS113W	IOSRCHPR	IOSRCHPR	IOSRCHPR	IRA600I	IRARMCHM	IRARMSRV	IRARMMSG
IOS115A	IECV PST	IEEVL DWT	IECV PST	IRA601I	IRARMCHM	IRARMSRV	IRARMMSG
	IOSV DAVV	IOSV DAVV	IOSV DAVV	IRA602I	IRARMCHM	IRARMSRV	IRARMMSG
IOS116A	IOSV RSTS	IEEVL DWT	IOSV RSTS	IRA700I	IRARMEVT	IRARMSRV	IRARMMSG
IOS120A	IEAVN P02	IEAVN P02	IEAVN P02	ISG001D	ISGN CBIM	ISGN CBIM	ISGN CBIM
IOS150I	IOSR SCH	IOSR SCH	IOSR SCH	ISG002D	ISGN RNLP	ISGN RNLP	ISGN RNLP
IOS151I	IOSR SCH	IOSR SCH	IOSR SCH	ISG003I	ISGN GRSP	ISGMSG00	ISGMSG00
IOS160I	IOSR SCH	IOSR SCH	IOSR SCH	ISG004I	ISGN GRSP	ISGMSG00	ISGMSG00
IOS161I	IOSRACRW	IOSRACRW	IOSRACRW	ISG005I	ISGN GRSP	ISGMSG00	ISGMSG00
IOS162A	IOSRACRW	IOSRACRW	IOSRACRW	ISG006I	ISGN GRSP	ISGMSG00	ISGMSG00
IOS162E	IOSRCHPR	IOSRCHPR	IOSRCHPR	ISG007I	ISGN GRSP	ISGMSG00	ISGMSG00
IOS163A	IOSRACRW	IOSRACRW	IOSRACRW	ISG008E	ISGJ PARM	ISGJ PARM	ISGJ PARM
IOS190I	IOSV DAVV	IOSV DAVV	IOSV DAVV	ISG009D	ISGN GRSP	ISGMSG00	ISGMSG00
IOS191I	IOSV DAVV	IOSV DAVV	IOSV DAVV		ISGN RNLP	ISGN RNLP	ISGN RNLP
IOS192A	IOSV DAVV	IOSV DAVV	IOSV DAVV	ISG010E	ISGN ASIM	ISGMSG00	ISGMSG00
IOS201E	IOSRCHPR	IOSRCHPR	IOSRCHPR		ISGN GRSP		
IOS202I	IOSRCHPR	IOSRCHPR	IOSRCHPR		ISGBTC		
IOS203I	IOSRCHPR	IOSRCHPR	IOSRCHPR	ISG011I	ISGCRST	ISGMSG00	ISGMSG00
IOS250I	IOSRCHDR	IOSRCHDR	IOSRCHDR		ISGCQSC		
IOS251I	IOSRCHDR	IOSRCHDR	IOSRCHDR		ISGCPRG		
IOS306I	IOSVN PTH	IEAVN P02	IOSVN PTH	ISG012I	ISGCRST	ISGMSG00	ISGMSG00
IOS310I	IOSVN PTH	IEAVN P02	IOSVN PTH		ISGCQSC		
IOS427A	IOSVURDT	IOSVMSLG	IOSVURDT	ISG013I	ISGCRST	ISGMSG00	ISGMSG00
IOS428I	IOSVURDT	IOSVMSLG	IOSVURDT		ISGCQSC		

Message ID	Detecting Module	Issuing Module	Containing Module	Message ID	Detecting Module	Issuing Module	Containing Module
ISG014I	ISGCPRG			ISG114I	ISGCRST	ISGMSG00	ISGMSG00
	ISGBTC			ISG115I	ISGCRST	ISGMSG00	ISGMSG00
	ISGCRST	ISGMSG00	ISGMSG00	ISG116E	ISGCRST	ISGMSG00	ISGMSG00
	ISGCQSC			ISG117D	ISGCRST	ISGMSG00	ISGMSG00
ISG015I	ISGCPRG			ISG118I	ISGCRST	ISGMSG00	ISGMSG00
	ISGCRST	ISGMSG00	ISGMSG00	ISG119I	ISGCRST	ISGMSG00	ISGMSG00
ISG016I	ISGCQSC			ISG120I	ISGCRST	ISGMSG00	ISGMSG00
	ISGCPRG			ISG121I	ISGCRST	ISGMSG00	ISGMSG00
ISG017D	ISGCPRG	ISGMSG00	ISGMSG00	ISG122I	ISGCRST	ISGMSG00	ISGMSG00
ISG018I	ISGGDEQP	ISGMSG00	ISGMSG00	ITV001I	Data-in-virtual component		
ISG020I	ISGCDSPI	ISGCDSPI	ISGCDSPI	ITV002I	Data-in-virtual component		
ISG021I	ISGBTC	ISGMSG00	ISGMSG00				
ISG022E	ISGJENF0						
	ISGBTC	ISGMSG00	ISGMSG00				
ISG023E	ISGBTC	ISGMSG00	ISGMSG00				
ISG024I	ISGBCI	ISGMSG00	ISGMSG00				
ISG025E	ISGBCI	ISGMSG00	ISGMSG00				
	ISGCMDI						
ISG031E	ISGGFRR0	ISGMSG00	ISGMSG00				
ISG032E	ISGGDEQP	ISGMSG00	ISGMSG00				
ISG033E	ISGGTRM1	ISGMSG00	ISGMSG00				
ISG034I	ISGGTRM1	ISGMSG00	ISGMSG00				
ISG035E	ISGGDEQP	ISGMSG00	ISGMSG00				
	ISGGTRM1	ISGMSG00	ISGMSG00				
ISG041I	ISGNCBIM	ISGNCBIM	ISGNCBIM				
ISG042I	ISGJPARM	ISGJPARM	ISGJPARM				
ISG043I	ISGBTC	ISGMSG00	ISGMSG00				
ISG044I	ISGBTC	ISGMSG00	ISGMSG00				
ISG045I	ISGBTC	ISGMSG00	ISGMSG00				
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ISG113I	ISGCRST	ISGMSG00	ISGMSG00				





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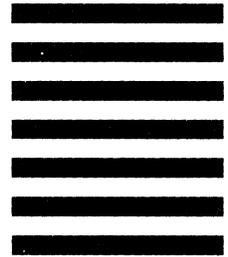


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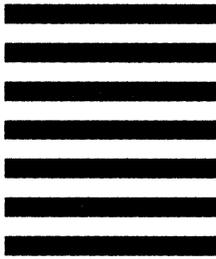


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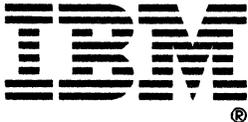


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