

80 IAM VERSION 9.0 MESSAGES AND CODES

80.01 IAM V9.0 MESSAGES AND CODES

This section describes the various printer, console, and TSO messages that may be displayed by INNOVATION's IAM product and the various ABEND codes with which it may terminate.

The general format of IAM messages and WTORs is as follows:

- **IAMnnn** Message on printed report.
- **IAMWnn** IAM WTO/R message.
- **IAMJnnl** AM Journal Exit WTO message.
- **IAMLnnnn** IAM/RLS and IAM/PLEX messages, displayed on the RLSLOGDD, and may also be a WTO message.

IAM Utility Return Codes

IAM utility programs pass a return code at the end of the step, unless they ABEND. A return code of zero indicates that IAM has performed all functions successfully. A return code of thirty-two (032) indicates that the testing period for a trial version of the product has expired. The production version of the product library does not contain an expiration date. Any other return code is accompanied by error messages, and indicates that some kind of error has occurred during the execution.

VSAM Return Codes

IAM's VSAM Interface (VIF) will pass return codes comparable to the return codes set by VSAM. The return codes are passed in the RPL for I/O requests or in the ACB for Open or Close requests. The return codes that IAM will issue are documented in [Section 80.21](#) and [Section 80.22](#).

ABEND Codes

When using IAM through the VSAM interface, IAM abides by general VSAM rules, which is to pass back error return codes and error codes rather than abending. The exception to that rule is a possible U0184 abend that can occur for diagnostic purposes for various errors when the user has added a //IAMDEBUG DD DUMMY card to a potentially failing job step. ***This DD statement should only be coded at the request of IAM support personnel to obtain additional documentation for a particular problem. This is because many normally occurring errors may result in a U0184 abend when the DD card is present.***

IAM abend codes range from U0100 to U0999. IAM ABENDS are preceded by an IAM error message. For the VIF interface, IAM avoids intentionally abending whenever possible, but will issue appropriate error codes.

80.02 IAM WTO MESSAGES**IAMW01 DD='ddname' I/O ERROR CODE=X'decb iobecb csw cccchhhrr'**

Reason: This message is provided by the IAM processor for Compatible format files, when a file access fails with an I/O error. The message contains the following diagnostic information:

DECB - displays the two error bytes of the BDAM DECB(+1). Possible codes are:

8000 - Block not found on track
 4000 - Block length was incorrect
 0800 - Media failure - Data or Equipment check
 0400 - Physical End of File marker
 0200 - Unidentified error
 0010 - Requested block not within file extents

IOBECB- displays the first four bytes of the IOB.

CSW - displays the channel status word.

cccchhhrr- displays the cylinder, head and record head number the error was detected on. The head and record number may not be accurate. IBM's message IEA000I/IOS000I, if present, contains the real track address.

Return Codes: A Return Code of 12, X'0C', and a reason code of X'04' for a read I/O error, or X'10' for an output I/O error, is stored in the RPL. The SYNAD exit will be invoked, if so specified by the program.

Action: If an IBM IEA000I/IOS000I message appears on the JCL LOG, a hardware error has occurred. The IBM message gives the sense information (ex: data check, equipment check). Examine the error information provided in the IBM message to determine the cause of the error. The format of this information is documented in the IBM data management SRL for the operating system in use. The file in question is unreadable in its present state and must be reestablished. This may be the result of a hardware error and if possible the new file should be allocated to a different physical location or volume.

For other I/O errors, those not accompanied by a hardware failure error message, determine the cause of the error. It is recommended that an IAMRECVR DIAGNOSE function be executed on the problem file, to see if there are any problems with the file integrity. Some common reasons for these types of I/O errors include:

- File has been improperly moved or restored to a device type different than it was originally loaded on. Frequently, this will fail with block not found I/O error, with a DECB error code of x'8000'.
- Multivolume file has been improperly moved, or improperly cataloged. Frequently, this will result in an I/O error of block not within extent, DECB error code of x'0010'.
- Storage overlay of IAM I/O control blocks. When this type of error occurs, most jobs and application programs do successfully process the IAM file, as does IAMRECVR. The failure is typically limited to one or a few jobs. A SYSUDUMP will be needed to determine the cause of this type of error.

The utility IAMRECVR may be used to recover a file that is no longer usable due to I/O or logical error conditions. This utility can be used to off load records from those portions of the file that have not been physically damaged. The user program should make a decision on the action to take when this occurs, for example to continue processing without this file or to terminate processing until this file is made available. The appropriate action will depend entirely on the application and the user program's evaluation of the diagnostic information that is returned. If further assistance is needed, contact Innovation Data Processing.

IAMW02 REPLY RETRY WAIT OR CANCEL FOR ENQ WAIT ON 'dsname'

Reason: The IAM file is not available to this job because some other job is currently accessing the file. This WTOR will only be issued when the IAM Global Option VSAMTWO=YES is specified, and is only applicable to Compatible Format files. A load process is always protected against concurrent access (read or update) or from another load. The Share Options specified when the file was defined determine which types of access can concurrently share the file.

Action: The operator reply determines the course of action IAM will take. The following responses are allowed:

RETRY: IAM retries the ENQUEUE for the data set. If the file is still unavailable, the message will be re-issued.

WAIT: IAM waits for the data set to become available. Caution: The job could time out.

CANCEL: IAM fails the OPEN request with a return code indicating the file is not currently available for processing. The ACBERFLG field will be set to x'A8'.

IAMW03 DD='ddname' FILE FULL DUE TO INSUFFICIENT CORE

Reason: This message is displayed by IAM when it finds an insert has failed because of insufficient storage to expand the overflow index. The record that was to be added was not placed in the file. Space may still be available at other locations within the file. Consequently, subsequent inserts may or may not fail depending on where in the file they are placed. Additionally, changes in the storage available within a region may allow a subsequent GETMAIN to succeed.

This message is displayed a maximum of 10 times per execution.

Return Codes: A return code of eight (8) and a reason code of 28 (x'1C') is stored in the feedback field of the RPL. This error code indicates a VSAM file full logical error. The logical error exit, LERAD, will be invoked, if so specified in the program.

Action: This message indicates that there is an insufficient above the line storage region available for IAM to expand the overflow index size. Reorganizing the file may help to reduce the storage required. For Compatible format files, the definition of the file's OVERFLOW parameters as well as the OCOREO% and OCOREX% parameters should be reviewed. Increasing the OCOREO% value to acquire a larger overflow index area when the file is Opened may correct the problem. The job step region size or, for CICS users, the MVS IEFUSI exit, may also need adjustment so more storage will be available for use by this particular task.

IAMW04 DD='ddname' OPEN ERROR - DATASET NOT AVAILABLE[, IN USE BY JOB jobn]

Reason: IAM was unable to open the specified file because it was already opened by another job. For Enhanced Format files, if IAM is able to determine which JOB or user has the file, it will be identified in the message.

Return Codes: A reason code of 168(x'A8') is stored in the ACB error flags field (ACBERFLG) and the OPEN is failed with a return code of 8.

Action: Rerun the job when the indicated job has terminated or closed the IAM file that was in use.

IAMW05 DD='ddname' OPEN ERROR - MORE THAN 2 OPENS FOR UPDATE IN TASK

Reason: This message is displayed by IAM, for Compatible format files only, when it finds a task has issued multiple Opens for update against the same dataset.

Return Codes: A reason code of x'F8' is stored in the ACB error flags and the OPEN is failed with a return code of 8.

Action: Convert the file to an Enhanced Format file, which supports multiple ACB's within the same address space. Or, change the program to insure that the same file is never opened for update more than once within the processing task without first closing it.

IAMW06 DD='ddname' OPEN ERROR - DD STATEMENT MISSING

Reason: This message is displayed when a task has issued an OPEN, but the 'ddname' the OPEN was issued against did not exist, or some other error in open processing has occurred. This message may be preceded by another message if it was due to an error encountered in open processing.

Return Codes: Reason code of x'80' is stored in the ACB error field and the open request is failed with a return code of 8.

Action: Check for other messages that may indicate the cause of the problem. Also, check to see if the missing DD statement is not the result of a misspelling. If not, add the DD statement to the JCL.

IAMW07 DD='ddname' I/O ERROR CODE=X'decb iobecb csw cccchhhrr'

Reason: This message is displayed for Compatible Format file when a file OPEN fails with an I/O error. The format is the same as the IAMW01 message, please refer to that message for an explanation of the error codes.

Note: This message may also occur when an attempt is made to OPEN a non-IAM or non-VSAM data set as VSAM.

Return Codes: The ACB error flag is set to a value of x'B8', and the open is failed with a return code of 8.

Action: Refer to message IAMW01 for potential causes and corrective action.

IAMW08 DD='ddname' OPEN ERROR - INSUFFICIENT STORAGE IN REGION

Reason: This message is displayed by IAM when a file OPEN fails because storage is not available for data buffers, the index or control information. Typically this message is issued due to insufficient storage above the 16 megabyte line (31-bit addressable storage), although it can also be issued for shortage of storage below the 16 megabyte line. Below the line storage may have become depleted due to insufficient region specified for above the line storage.

Return Codes: Reason code of x'88' is stored in the ACB error flags, and the open is failed with a return code of 8.

Action: This message can occur for any number of reasons, and be corrected in various ways depending on the base cause of the problem. Frequently the problem is that the number of records in Independent or Extended Overflow result has significantly increased, causing a high demand for virtual storage for the index to the Overflow area. That problem can most easily be resolved by reorganizing the file. Please refer to the [Section 10.51](#) on Storage Tuning for complete information on IAM's storage usage, and how that usage can be controlled.

IAMW09 DD='ddname' OPEN ERROR - FILE ALLOCATED BUT NOT LOADED

Reason: This message is displayed by IAM when a task has issued an OPEN against an IAM file but the dataset (referenced by 'ddname') for input or update processing, but the file had never been loaded as an IAM file, or an attempted load failed.

Return Codes: Reason code of x'A0' is stored in the ACB error flags, and the open request is failed with a return code of 8.

Action: The file must be successfully loaded with data before it can be used for input or update processing.

IAMW10 DD='ddname ' OPEN ERROR - NOT AN IAM/VSAM FILE OR CREATE FAILED

Reason: This message is displayed by IAM when a task has issued a VSAM OPEN for the dataset (referenced by 'ddname') but the file did not contain a valid IAM file descriptor block. The dataset may be the result of a load that failed, may have a misspelled data set name, or perhaps the file was damaged.

Return Codes: Reason code of x'BC' is stored in the ACB error flags, and the Open is failed with a return code of 8.

Action: First, determine if the file being opened is supposed to be an IAM or a VSAM file. If it is supposed to be an IAM file, review the output from the job which created the file for errors.

IAMW11 DD='ddname' DYNCORE DISABLED DUE TO INSUFFICIENT STORAGE

Reason: This message is displayed by IAM when a user requested storage for IAM's Dynamic Table option and the virtual storage is not available. Processing continues as if the request for Dynamic Tabling had not been requested.

Return Codes: No error codes or return codes are set.

Action: The user should increase the region size or decrease the value requested for DYNCORE.

IAMW12 DD='ddname' DATA COMPRESS ERROR xxxxxxxx xxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx

Reason: During a file access of a data compressed IAM file, IAM decompression failed. The first four bytes are the internal RDW, the remaining data is the key.

Return Codes: A logical error code of x'2C' is set in the RPL. If present and active, the program's logical error exit (LERAD) is invoked, otherwise the request is failed with a return code of 8. If the user has placed a //IAMDEBUG DD DUMMY DD card in the JCL, then the task is abended with an abend code of U0185.

Action: Run an IAMRECVR DIAGNOSE function to validate that the file is still valid. If the DIAGNOSE did not find any errors, then the cause is most likely a storage overlay. If the application did not produce a dump, rerun the job with a //IAMDEBUG DD DUMMY DD card to get a dump. If errors were found by DIAGNOSE, then a file recovery is necessary, either with IAMRECVR or other procedures that have been established. Contact Innovation for assistance.

IAMW13 DD='ddname' FILE FULL, REORGANIZATION REQUIRED

Reason: IAM was unable to add a record into a file, or unable to accept a larger size updated record. For Compatible format files, the Independent Overflow area has been filled. For Enhanced format files, IAM was not able to obtain additional DASD space to expand the size of the file. A message indicating some type of X37 abend may precede this message.

Return Codes: A reason code of 28(x'1C') is stored in the RPL error flags field (RPLERRCD) and the PUT is failed with a return code of 8. This VSAM logical error code signifies a file full error condition. If the application has provided a logical error exit (LERAD), the exit will be invoked.

Action: Reorganize the file. It may be necessary to increase the space allocation for the file, and / or to move the file to a different volume(s). For Enhanced Format files, it may be possible to free up some DASD space that is allocated to other data sets, and retry the request without doing a file reorganization.

IAMW16 DD='ddname' OPEN ERROR - IAM DOES NOT CURRENTLY SUPPORT LSR

Reason: For Compatible Format files only, this message is displayed by IAM when a task has issued an open for a data set with the Local Shared Resources processing option (MACRF=LSR) specified in the ACB, and a UPAD exit active in the exit list (EXLIST) specified for the ACB. Typically, this will occur for a Compatible Format file opened by CICS, without indicating that the file is not to be in any LSR pool in the CICS FCT. The OPEN fails.

Return Codes: Reason code of x'E4' is stored in the ACB error flag field and the open is failed with a return code of 8.

Action: Either convert the file to an IAM Enhanced Format file, which will support the LSR application, or if the error occurred under CICS, change the CICS FCT table to specify LSRPOOL=NONE.

IAMW17 DD='ddname' ADD FAILED - MORE THAN 1 ACB CONCURRENTLY UPDATING FILE.

Reason: IAM does not support concurrent file update. This message will be displayed when IAM detects an inconsistency between an Overflow block, and the index entries for that block in virtual storage. Generally such inconsistencies should only occur if another job had updated the data set since it was last OPENed by the failing application. IAM expects proper procedures to be used to prevent concurrent update as it will eventually result in damage to the file. This message is displayed a maximum of 10 times per execution.

Return Codes: A return code of eight (8) and a reason code of x'1C' (file full) is stored in the feedback field of the RPL. The logical error exit (LERAD) will be invoked, if so specified in the program.

Action: In a multi-processor environment IAM files must be protected, by a global enqueue facility or manual scheduling, from concurrent update by tasks running on different processors. Within a single processor multiple tasks will be prevented from concurrently opening a file for update by the proper use of SHAREOPTIONS. IAM defaults to a cross region SHAREOPTION 1, multiple read access users or one update user. The use of SHAREOPTIONS 3 and 4 disable IAM's enqueue protection for a file as does the IAMOVRID parameter UPDATENQ=NONE. Use these facilities with great care. Within a single task for Compatible Format files, use of multiple ACB's against an IAM file will defeat IAM's enqueue protection for that file. To preserve the integrity of your IAM files any application program that accesses an IAM Compatible Format file with multiple ACB's must be changed to ensure only one ACB is used to access the file for update, or convert the file to the IAM Enhanced File format. (For further assistance contact INNOVATION).

IAMW18 DD='ddname' USER NOT AUTHORIZED FOR UPDATE

Reason: For Enhanced Format files, IAM issued a RACROUTE to verify that the user had authority to access the data set for the desired mode, and received a return code indicating that the user is not authorized for the requested function.

Return Codes: A reason code of x'98' is stored in the ACB error flags field, and the open request is failed with a return code of 8.

Action: Correct the error and rerun the job. Error could be caused by an incorrect data set name on the DD card, or this is a legitimate error.

IAMW20 DD='ddname' OPEN ERROR -- error description

Reason: The file load process has detected an invalid, unsupported, or inconsistent parameter for the indicated file attribute. The particular attribute that is invalid is indicated in the error description text. The possibilities are:

- LRECL Specification - Must be at least as long as key offset (RKP) plus the key length, and no larger than 32,755.

- Key Length Specification - Must be greater than 1, and less than 250.
- Blocking Factor Specification - Must be between 1 and 15.
- Blocksize Specification - Must exceed the maximum record length by at least five bytes, and be at least 300 bytes.
- RKP Specification - Must be less than 4092 bytes.
- Independent Overflow Specification - For compatible format files, cannot be a value that will cause the Overflow area to exceed 64,000 blocks.
- Integrated Overflow Specification - Must be between 0 and 99.
- Prime Extension Specification - For Compatible Format files, cannot exceed 32,767.
- Delete Processing Request - Should not occur with the IAM / VSAM Interface.
- Data Control Area (DCA) Validation - Should not occur with the IAM / VSAM Interface.
- Block size Calculation - The IAM internal block size calculation resulted in a value that cannot be used on the device that contains the IAM file.
- IAM File cannot be a DFSMS Striped dataset. – IAM files cannot have multiple stripes, and Compatible format files cannot be SMS Extended format.
- DSNTYPE Invalid for Compatible – Compatible format IAM files cannot use Large Format datasets.
- DSNTYPE=LARGE Requires ZOS 1.7 – Large Format datasets require a minimum operating system level of z/OS 1.7.
- ACBSTRNO > 1 – The program specified a string number greater than one on a file load, which is not allowed for problem state programs. A reason code of 160 (x'A0') is stored in the ACB error flags field.
- Not licensed for RRDS support – May occur during an attempted load an RRDS file when the version of the IAM product being used has not been licensed for the optional RRDS feature.
- RRDS Initialization Failed – Should be accompanied by additional error message, such as an IAMW36. Please refer to other message(s) for additional details.

Return Codes: Unless otherwise noted above, a reason code of 192(X'C0') is stored in the ACB error flags field (ACBERFLG) and the open is failed with a return code of 8.

Action: Correct the invalid specification, and rerun. This error may occur when using VIF if the IAM file was allocated through some means other than an IDCAMS DEFINE and the user failed to correctly provide file specifications through a CREATE Override Control Statement. Additionally, conflicts between the file itself and the user program's internal file definition must be resolved.

IAMW21 DD='ddname' LOAD ERROR -- EXCEEDED 255 EXTENTS

Reason: During the loading of a multivolume file, the file required more than 255 extents, which is more than the number of extents allowable.

Return Codes: If failure occurred on a WRITE or PUT request, the RPL is failed with a Logical Error code of x'1C', file full logical error, and the request will receive a return

code of 8. If the error occurred during CLOSE, then the CLOSE will fail with a return code of 4, and the ACB error flags set to x'90'. The file is left marked in an unloaded state.

Action: Delete and redefine the data set, increasing the primary and / or secondary space allocation values so that the file will fit within 255 extents.

IAMW22 DD='ddname' FILE REORGANIZATION RECOMMENDED -

Reason: A file reorganization is being recommended for one of the following reasons, as indicated in the message:

1. OVERFLOW INDEX EXCEEDS 16 MEG
2. OVERFLOW EXCEEDS 1000 CYLINDERS
3. EXCEEDED 13 EXTENTS ON SINGLE VOLUME
4. EXCEEDED REQUESTED OVERFLOW RECORDS

Return Codes: None.

Action: For reasons 1 and 2, performance on the indicated file may be adversely affected due to the size of the overflow area. In particular, it may take several minutes to open the file, and sequential processing may be detrimentally affected. It is therefore recommended that the file be reorganized at the earliest convenient time to prevent further performance deterioration. The file can be quickly reorganized with FDRREORG®, or if that product is not available, then use IDCAMS REPRO.

For reason 3, because IAM files have a non-VSAM file structure, they are limited to 16 extents per volume. The file indicated currently has 14 or more extents, so future growth will be restricted. To prevent an out of space condition, action should be taken at the earliest possible time. If there is sufficient space for the file to expand on the volume that it currently resides, either use COMPAKTOR to merge extents, or reorganize the file doing a DELETE and DEFINE of the data set, specifying a larger space allocation. The current space allocation values can be determined by performing a Listcat All on the data set. If the current volume has insufficient space, and you are unable to free up sufficient space, then the data set should be moved to a different volume, where more DASD space is available.

For reason 4, the file was defined with an Overflow override, and the file has reached or exceeded that number of records in extended overflow. Presumably, the override was provided to indicate when the file should be reorganized. IAM will continue to add records to extended overflow, provided that IAM is able to obtain sufficient DASD space to do so.

IAMW23 DD='ddname' OPEN ERROR -- FILE WAS RELOADED SINCE READ ONLY ACB OPENED

Reason: An attempt was made to open a file with a second ACB (and possibly second DD card) within the same address space for UPDATE processing. The file had previously only been eligible for read only processing. On the open for update, it was determined that the file created time stamp is different from when the file had originally been opened by the READ only ACB. This would indicate that the file has been reloaded, and the index structure cannot be updated.

Return Codes: A reason code of 240(x'F0') is stored in the ACB error flags field (ACBERFLG) and the open request fails with a return code of 8.

Action: Close all other ACB's open to that data set, and then reopen.

IAMW24 DD='ddname' OPEN ERROR – AN ABEND OCCURRED DURING OPEN

Reason: While IAM was opening a file an ABEND occurred. The ABEND is identified by a preceding IAMW73 error message, which contains the PSW and registers. Open processing for this file is terminated.

Return Codes: The OPEN fails with a return code of 8 and a reason code of 188(X'BC') in the ACBERFLG field of the ACB being opened.

Action: Contact Innovation Data Processing. Please have all of the available error messages available, along with any dumps to diagnose the problem.

IAMW25 DD='ddname' OPEN ERROR – INVALID COMPRESSION DICTIONARY

Reason: IAM was attempting to open a dataset with an internal customized hardware compression dictionary. IAM encountered an invalid or corrupted block that should have had a portion of the hardware compression dictionary.

Return Codes: The OPEN fails with a return code of 8 and a reason code of 188(X'BC') in the ACBERFLG of the ACB being opened.

Action: Attempt a dataset recovery, by either using IAMRECVR, or restoring the dataset from a backup. Before overwriting the corrupted dataset, back it up to tape and notify Innovation of the error.

IAMW26 DD='ddname' EXTEND CVAF READ (or WRITE) FAILED R15=xx STATUS=ddd

Reason: While IAM was expanding the size of a DFSMS Extended Format IAM dataset, the attempt to update the LSTAR in the VTOC failed. Refer to DFSMSdfp Diagnosis Reference for information on the return code and status value.

Return Codes: If an IAMDEBUG DD DUMMY dd card is in the affected job step, then the job step will abend with a U0184, otherwise IAM will continue processing the dataset.

Action: Contact Innovation with the error codes. If problem is repeatable, add in an IAMDEBUG DD DUMMY and a SYSABEND dd card to the job to get a dump at the time the error is detected.

IAMW27 DD='ddname' OPEN ERROR: error description

Reason: While attempting to open an SMS Extended Format or a Sequential Large Format IAM dataset, IAM encountered the error as described in the text of the message. This message will be followed by an IAMW06 message.

Return Codes: Reason code of x'80' is stored in the ACB error field and the open request is failed with a return code of 8.

Action: If unable to correct the indicate problem, rerun the job with an //IAMDEBUG DD DUMMY card and an //SYSABEND DD SYSOUT=* card in the failing job step to produce a dump, and contact Innovation for assistance.

IAMW28 DD='ddname' INELIGIBLE FOR BACKUPCOMPRESSED, OPTION IGNORED'
VERIFY FAILED, CONTINUING DUE TO NOVERIFY OVERRIDE
IARV64 RC=xxxxxxx REAS=xxxxxxx OPEN CONTINUES
UNABLE TO OBTAIN 64 BIT STORAGE, CACHE64 IGNORED

Reason: This is a warning message indicating that a problem occurred during open processing.

Action: IAM continues file open processing without use of the indicated function.

IAMW30 DD='ddname' OPEN ERROR -- FILE IN USE BY JOB jobname

Reason: While attempting to load an IAM file, it was determined that the IAM file is currently in use by some other job or an attempt was made to simultaneously load multiple IAM files to the same data set. IAM attempts to determine the name of the job using the data set, and will display the first job found that has the data set open in this message. If the owning job is not found, then *UNKNOWN is displayed.

Return Codes: A reason code of 192(x'C0') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: An IAM load must be executed without any other job accessing the file at the same time. Wait until the file is closed by the other users, then rerun the file load.

IAMW32 DD=ddname OPEN ERROR – JOURNALING INITIALIZATION FAILED

Reason: An error has occurred while attempting to open an IAM file that requested the use of the IAM Journaling exit. IAM was unable to complete initialization for journal processing. This message will be preceded by IAMJxx messages indicating the reason for the failure.

Return Codes: A reason code of 188 (x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: Review the accompanying IAMJxx messages for the corrective action that is required.

IAMW33 DD=ddname EMPTY ALTERNATE INDEX, DSN=alternate index name

Reason: This error message occurs when an alternate index is being opened as an object of a PATH, or as part of an upgrade set, and OPEN determined that the specified alternate index had not been loaded. Valid loading of an alternate index is generally accomplished via an IDCAMS BLDINDEX function.

Return Codes: If the alternate index is the object of a PATH that is being opened, the open will fail with a return code of 8, and an error code of 196 (x'C4') in the ACBERFLG field. If the alternate index is being opened as part of an upgrade set, then the open receives a warning return code of 4, and an error code of 100 (x'64') in the ACBERFLG field.

Action: Load the identified alternate index data sets with an IDCAMS BLDINDEX, or other program with a comparable function. If the alternate index is no longer needed, make sure that it has been properly deleted.

IAMW34 DD=ddname IAM RLS NOT ACTIVE RLSID=rlsid

**RLS MISMATCH, REQUIRED RLSID=rlsid
IAM RLS OPEN ABENDED**

Reason: This error message may occur when attempting to open a file to the IAMRLS address space, and it was either not active, or it abended while processing this open request. If it was not active, or if the job had previously connected to a different IAMRLS address space then the four character identifier of the IAM RLS address space that was required is included in the message.

Return Codes: The open will fail with a return code of 8. If the IAMRLS address space is not active, the ACBERFLG field will be set to 182(x'B6'). If the IAMRLS address space abended, then the ACBERFLG field will be set to 167(x'A7').

Action: If IAMRLS is not active, then start it. If it abended, review the log and any dump(s) that may have been taken. Contact Innovation if assistance is required.

**IAMW36 DD=ddname TCBTOKEN JSTCB FAILED, RC=xx
DSPSERVE CREATE FAILED, RC=xx REAS=xxxxxxxx
ALESERV ADD FAILED, RC=xx
EXCEEDED MAXIMUM OF 16 DATA SPACES
RRN BITMAP OVERFLOWED WORK FILE DATASPACE**

Reason: One of the above errors occurred while loading an IAM RRDS data set. The requestor will be failed with an error code indicating insufficient virtual storage.

Return Codes: For a PUT or WRITE I/O request, it will fail with a return code of 8, and a logical error code of 40(x'28'). If the error occurred during OPEN processing, the OPEN will be failed with a return code of 8 and an error code in ACBERFLG of 192(x'C0').

Action: Contact Innovation technical support for assistance.

IAMW37 DD=ddname I/O ERROR ECB=xx CSW=xxxx SENSE=xxxx [op RBN=block]

Reason: This message is displayed when an I/O error has occurred processing an Enhanced Format IAM file, or during a load of an IAM file. This message may also be accompanied by an IEA000I/IOS000I error message. The message contains the following information:

ECB - displays high order byte of ECB as posted. Possible values include:

- 41 - I/O terminated with error. CSW and / or Sense bytes are useful.
- 42 - Block is not within DASD extents for data set.
- 47 - DFSMS Extended Format block-id mismatch
- 4E - Attempted write of a block of all hex zeros.

CSW - contains the UNIT/CHANNEL status bytes from the CSW. Possible values include:

- 0C00 - Normal Status
- 0E40 - Unit Check and/or Wrong length record
- 0D40 - End of file

SENSE - contains the first two sense bytes from the IAM internal IOB. Possible values include:

- 8000 - Command reject, the device or control unit did not recognize the command
- 4000 - Device requires operator Intervention
- 1000 - Equipment check
- 0800 - Data check
- 0040 - Invalid Track Format
- 0020 - End of cylinder
- 0008 - Block not found

For file loads, the job step will be abended with a U0233 abend code.

For file access, additional information includes:

- op = RD error occurred on input operation or
- op = WR error occurred on output operation
- RBN= the relative block number being read or written

Action: If an IBM IEA000I/IOS000I message appears on the JCL LOG, a hardware error has occurred. The IBM message gives the sense information (ex: data check, equipment check). Examine the error information provided in the IBM message to determine the cause of the error. The format of this information is documented in the IBM data management SRL for the operating system in use. The file in question is unreadable in its present state and must be reestablished. This may be the result of a hardware error and if possible the new file should be allocated to a different physical location or volume.

For other I/O errors, those not accompanied by a hardware failure error message, determine the cause of the error. It is recommended that an IAMRECVR DIAGNOSE function be executed on the problem file, to see if there are any problems with the file integrity. Some common reasons for these types of I/O errors include:

- File has been improperly moved or restored to a device type different than it was originally loaded on. Frequently, this will fail with block not found I/O error, with a SENSE error code of x'0008'.
- Multivolume file has been improperly moved, or improperly cataloged. Frequently, this will result in an I/O error of block not within extent, ECB error code of x'42'.
- Storage overlay of IAM I/O control blocks. When this type of error occurs, most jobs and application programs do successfully process the IAM file, as does

IAMRECVR. The failure is typically limited to one or a few jobs. A SYSUDUMP will be needed to determine the cause of this type of error.

The utility IAMRECVR may be used to recover a file that is no longer usable due to I/O or logical error conditions. This utility can be used to off load records from those portions of the file that have not been physically damaged. The user program should make a decision on the action to take when this occurs, for example to continue processing without this file or to terminate processing until this file is made available. The appropriate action will depend entirely on the application and the user program's evaluation of the diagnostic information that is returned. If further assistance is needed, contact Innovation Data Processing.

IAMW38 DD='ddname' DSPSERV CREATE FAILED, RC=xx REAS=nnnnnnnn

Reason: IAM attempted to create a data space for holding the index structure during the file load, however the request was rejected by MVS for the indicated return code and reason code. This is an informational message only, IAM will attempt to continue processing, and utilize a dynamically allocated temporary work file on DASD. For information on the return code and reason code, review in the IBM MVS/ESA Authorize Assembler Services Reference Manual, under the DSPSERV macro.

Return Codes: No error codes are set for this situation.

Action: Contact INNOVATION for assistance to resolve the problem if unable to do so after reviewing the return code and reason code provided. One of the common reasons for this error message is that the installation exit has either disallowed the use of data spaces, or limited the size. If the size is limited, reduce the IAM Global Option value for DATASPACE, or set it to 0 to prevent the use of data spaces.

IAMW39 DD='ddname' ##### RECORDS ACCEPTED PRIOR TO ABEND

Reason: IAM has determined that the task loading the specified file has abended, or hit some other type of error condition, after loading the indicated number of records. This information may be useful for determining how much to adjust the space parameters if some type of Sx37 abend has occurred. The number of records that were actually written to the file may be slightly less than indicated due to buffering. *Please note that the IAM file MUST BE RELOADED SUCCESSFULLY before attempting to otherwise access the file.*

Action: Correct the error condition as indicated by the abend, and rerun the job. Depending on the cause of the abend, the file may have to be deleted and redefined, for example if a larger space requirement is necessary.

IAMW40 CARD IMAGE --*cc.....cc*

Reason: The input control statement(s) read from the 'IAMOVRID' DD statement is displayed when the control statement(s) contains an error or if requested by the user via the 'LOG=YES' operand.

Action: If any error condition was raised, another message will indicate the reason for the error. Otherwise, no action is necessary.

IAMW41 CONTROL STATEMENT OPEN FAILED -- DDNAME='ddname'

Reason: The DDNAME listed was required as control statement input to the override processor, IAMOVRID. An OPEN was attempted, but failed. Processing of the override service is terminated. Normal processing continues.

Action: Review the execution job log messages for more detail on cause of the failure. Correct the 'ddname' statement and, if necessary, rerun the job.

IAMW42 INVALID CONTINUATION CARD

Reason: User coded a delimiting comma following the last keyword on a control statement input to the override processor, IAMOVRID, and neglected to provide the next logical record. Processing of the override service is terminated. Normal processing continues.

Action: Correct the control statement. The job will continue to run, but may fail or perform unsatisfactorily if the Override data is critical.

IAMW43 I/O ERROR READING CONTROL STATEMENTS -- DDNAME='ddname'

Reason: An I/O error occurred reading the data set referenced by 'ddname'. IAMOVRID is terminated, but normal processing continues.

Action: Examine any system message(s) to determine the cause of the error. The format of system messages is documented in the IBM MESSAGE SRL for the operating system in use. The job will continue to run, but may fail if the Override data is critical.

IAMW44 CONTROL STATEMENT BYPASSED -- 'error description'

Reason: An error was encountered by the override processor, IAMOVRID, during the processing of user supplied Override Control statements. The error description will be from the following list:

- DDNAME NOT SPECIFIED -- The DDNAME operand was missing or misspelled. DDNAME is required to relate the override to a specific IAM file.
- MAXIMUM GLOBAL OVERRIDES EXCEEDED -- The in storage table which holds the Overrides is full. A maximum of 200 control statements may be specified.
- INSUFFICIENT STORAGE -- There was insufficient virtual storage for the IAM override processor to acquire for saving the internal format of the overrides.

Action: Correct the Override statements as follows:

- Add a corrected DDNAME operand to the control statement and, if necessary, rerun the job.
- Reduce the number of global overrides to 200 control statements or less. If more Override statements are required, contact INNOVATION technical support for a modification to IAMOVRID to expand the in-storage table.
- Increase the amount of region, particularly for above the line storage. The override processor needs 48K of storage for the override table. Additional storage will also be required for processing the data set being opened, so just an

increase of 48K will most likely not be sufficient.

IAMW46 'ddname' OPEN FAILURE -- IAMNINFO PROCESSING TERMINATED

Reason: The output report 'ddname' statement could not be opened by IAMNINFO. This DDNAME is usually 'IAMINFO', but may have been overridden by the user. Processing continues without interruption with the IAMINFO report bypassed.

Action: Correct the allocation of DDNAME 'ddname' so the next execution of the job will produce the IAMINFO report.

IAMW47 I/O ERROR MONITORING DSN - 'dsname' - IAM MONITOR TERMINATED

Reason: An IAM monitor facility processor encountered an I/O error while writing monitor/trace data. Monitoring has been discontinued. Normal IAM processing continues.

Action: If a Monitor report is needed, correct the cause of the I/O error and rerun the job.

IAMW48 IAMNINFO PARAMETER LIST ABSENT OR IN ERROR -- PROCESSING TERMINATED

Reason: The parameter list required by the dynamic file status display processor, IAMNINFO, was missing, was overlaid or is in error. This maybe an internal error. Processing continues without the IAMINFO reported printed.

Action: If you are unable to determine the reason for the message, call INNOVATION for further assistance.

IAMW50 IAM VTOC ACCESS FAILED COMP=xxxx CODE=xxxx CLUSTER=clustername

Reason: During an IDCAMS DEFINE or RECATALOG of an IAM file, an attempt to access or update a VTOC failed. The completion code and return codes from CVAF are displayed in the message.

Action: Refer to the IBM manual 'Common VTOC Access Facility Diagnosis Reference' for the meaning of the codes. Correct the problem and re-submit. If unable to correct the problem, contact INNOVATION for assistance.

IAMW51 IAMOVRID CONTROL STATEMENT ERROR, CLUSTER=dsname

Reason: During an IDCAMS DEFINE of an IAM file, the IAM Override processor detected an error or invalid IAM override card.

Return Codes: The DEFINE is failed with a return code of 140 and a reason code of 36. These codes will appear on the IDC3009I message produced by IDCAMS. The DEFINE is failed on an override error to prevent IAM from defining a file with incorrect attributes.

Action: Correct the error on the IAM Overrides, and rerun the dataset. Review [Section 30](#) for proper IAM Override parameters.

IAMW52 IAM SHOWCAT INTERCEPT FAILED

Reason: The IAM SHOWCAT intercept function within VIF failed.

Return Codes: The calling program will be abended with a U0283 abend code. This error would indicate that something has destroyed the IAM VSAM interface table in virtual storage.

Action: Obtain a SYSABEND dump and call INNOVATION for assistance.

**IAMW53 RECAT FAILED,DATASET NOT CATALOGED CLUSTER=clustername
DATASET NOT ON VOLUME: volserCLUSTER=clustername
OBTAIN FAILED, VOLUME: volserCLUSTER=clustername
DATASET FAILED IAM VALIDATIONCLUSTER=clustername**

Reason: An error as indicated by the reason in the message occurred during an IDCAMS DEFINE RECATALOG of an IAM dataset.

Return Codes: The RECATALOG request will be failed with return codes from the failing service.

Action: Make the corrections to the RECATALOG to correct the identified error, and rerun. If unable to determine why the request failed, contact INNOVATION for assistance.

IAMW54 PROBABLE IAM FILE HAS NOT BEEN DEFINED, DSN=dsname

Reason: The processing program issued a SHOWCAT catalog request for a non-VSAM file that is cataloged, but does not have the IAM information (as established by DEFINE or file load) was not returned. This message is for diagnostic purposes, and will only be issued when an IAMDEBUG DD DUMMY DD card is in the job step of the program issuing the SHOWCAT macro.

Return Code: The SHOWCAT is given a return code of 32 (x'20'), indicating that the file cannot be accessed through IAM or VSAM.

Action: This is an unexpected error situation, and should be reported to Innovation Data Processing. Please have a LISTCAT ALL output from IDCAMS available when calling.

IAMW55 IAM NOT LICENSED FOR AIX OR RRDS SUPPORT CLUSTER=dsname

Reason: An IDCAMS DEFINE was attempted for an alternate index, a path, or a numbered (RRDS) type of data set. While IAM does support those types of data sets, the version of IAM being used has not been licensed for those optional features.

Return Codes: The DEFINE request is failed with a return code of 22 and a reason code of 12. These codes will appear in an IDC3009I message.

Action: If you have purchased an IAM license for those features, make sure that you are running with the version of IAM that has been licensed. If you believe that the version you are running should have the optional features license, contact Innovation technical support. If you would like to purchase a license for these features, contact Innovation.

IAMW56 IAM DEFINE OF NON-SUPPORTED FILE TYPE CLUSTER=dsname

Reason: An IDCAMS DEFINE was issued with an indication that the file should be an IAM file, but the file type cannot be converted to IAM. Examples are VSAM RRDS (Relative Record data sets) and VSAM Linear data sets.

Return Codes: The DEFINE is failed with a return code of 22, and a reason code of 8. These codes will appear in an IDC3009I message.

Action: Correct the IDCAMS DEFINE to either change the file type to one supported by IAM, or remove the indication that the file is to be an IAM file.

IAMW57 IAM ALLOCATION FAILED COMP=xxxx CODE=xxxx CLUSTER=clustername

Reason: An error occurred during an IDCAMS DEFINE of an IAM file. The codes displayed correspond to the return code and reason codes of the IDC3009I message from IDCAMS, and there will also be a IDC3009I message on SYSPRINT with the same codes. There may also be additional IDC or IAMW messages.

Return Codes: The DEFINE request is failed with the return code and reason code given in this message. Some of the more common return codes include:

- 8,38 - Data set already cataloged
- 16,0 - SMS failed allocation request, refer to IGD messages
- 22,8 - IAM does not support type of VSAM file requested.
- 42,0 - MVS DADSM failed allocation request
- 56,6 - User not RACF authorized to define the file
- 58,0 - Obtain of VTOC entry failed
- 58,4 - Specified DASD volume(s) not online
- 68,20 - No space on selected volume
- 140,36 – Invalid IAM Override card
- 140,120 – SMS Compressed Data Set cannot be used for IAM
- 176,0 - No space in VTOC
- 184,4 - Data set is allocated to another job or user
- 192,0 - Exceeded maximum allowable IAM record size

Action: Refer to [Section 80.20](#) Catalog Return Codes or IDCAMS error message IDC3009I for meaning of the codes. Correct the problem, and resubmit. It may be necessary to issue an IDCAMS DELETE command before attempting to resubmit the DEFINE.

IAMW58 LISTC INTERCEPT FAILED COMP=xxxx CODE=xxxx CLUSTER=UNKNOWN

Reason: A catalog Locate or LISTC request intercepted by IAM failed and received the specified the completion and return codes.

Return Codes: The request is failed with the indicated return code and reason code.

Action: Refer to VSAM errors message IDC3009I for meaning of the codes. Correct the problem and resubmit.

IAMW59 LOCATE FOR AN IAM FILE FAILED CODE=(cc)xxx [DSN=.....]

Reason: Locate for an IAM file failed for one of the following reasons:

1. CODE=S1xxx The IAM SHOWCAT intercept issued a locate which failed with return code xxxx on the specified data set. This form of the message will only appear when there is an IAMDEBUG DD DUMMY coded in the failing job step.
2. CODE=S2xxx The IAM SHOWCAT intercept issued a locate which failed with return code xxxx. The locate was issued by CI number, so the data set name is unknown.

Return Code: The SHOWCAT is given a return code of 32 (x'20'), indicating that the file cannot be accessed through IAM or VSAM.

Action: Make sure that the data set is still properly cataloged. If not, an IDCAMS DEFINE RECATALOG must be done. If further assistance is required, contact INNOVATION.

IAMW60 IAM DYNALLOC FAILED 'description'

Reason: During the processing of an IDCAMS DEFINE for an IAM file, IAM's attempted use of Dynamic Allocation failed for the specified reason. This message presents a brief English description of the error code returned by Dynamic Allocation, which is supplied in the IAMW61 error message. Both messages are printed on the system log. There will also be an IDC3009I message on SYSPRINT, with an appropriate error code.

Return Code: The DEFINE request is failed, with a return code and reason code that matches the problem description.

Action: Correct the error situation, as described with the matching text below, and rerun the DEFINE.

Text: DATA SET NAME IN USE BY ANOTHER JOB/USER

Reason:The dataset name has been enqueued on by another job/user.

Action: Through whatever software facilities available, determine which job and/or users are enqueued on the data set, and rerun the DEFINE upon the completion of the other job/user.

Text: VOLUME NOT MOUNTED ON SPECIFIED UNIT

Reason:The specified volume was either not mounted, or was mounted but not on the unit specified by the UNIT= keyword on the IAM override control statement for this file. For non-specific volume requests, (i.e., with VOL(ANYVOL) coded), there were no volumes mounted as storage for the unit name specified on the IAM Override Control statement, or SYSDA.

Action: Mount the required volume, or change the volume and/or unit specification.

Text: SPECIFIED UNIT NAME IS UNDEFINED

Reason:The unit name specified on the IAM Override Control statement for this file

does not exist on the system that the define was attempted.

Action: Correct the unit name specification, or run on the proper operating system.

Text: REQUIRED CATALOG NOT MOUNTED

Reason:The catalog required for the definition of the IAM data set is on a volume that is not currently mounted.

Action: Insure that the volume containing the user catalog is mounted, and rerun the DEFINE.

Text: DATA SET ALREADY EXISTS

Reason:The data set being Defined already exists in the catalog, and may or may not be on the volume it is cataloged to.

Action: Make sure that the cluster name is correct and if not correct it. If it is correct, delete the data set from the catalog (and volume if applicable) and rerun the DEFINE.

Text: DUPLICATE DATA SET NAME ON VOLUME

Reason:The data set already exists on the specified volume, and is not cataloged.

Action: Delete the data set from the volume, and rerun the DEFINE.

Text: NO SPACE IN VTOC

Reason:There was no space in the VTOC (Volume Table of Contents) or the VTOC Index for the new data set on the specified or selected volume.

Action: Either correct the error by increasing the size of the VTOC or VTOC Index on the volume (this can be done by use of COMPAKTOR), delete unwanted data sets from the volume, or select a different volume.

Text: VTOC I/O ERROR OR CVAF ERROR

Reason:An I/O error occurred on the VTOC during file allocation.

Action: Review SYSLOG for other messages indicating a more precise cause of error. Correct the problem and rerun DEFINE.

Text: REQUESTED SPACE NOT AVAILABLE ON VOLUME

Reason:The volume specified or selected did not have sufficient space to satisfy the request.

Action: Ensure that the space requested is actually needed, and adjust if possible. (NOTE: IAM files generally require less space than VSAM files.) Otherwise, select a different volume, remove unneeded data sets from the volume, or run COMPAKTOR to consolidate free space.

Text: USER NOT AUTHORIZED TO ALLOCATE DATA SET

Reason:The job lacks RACF authorization to DEFINE the data set.

Action: Contact the Security Administrator for assistance.

Text: INSTALLATION EXIT REJECTED ALLOCATION REQUEST

Reason:A dynamic allocation exit routine in the system did not allow the allocation request to be processed.

Action: Correct the DEFINE to the installation requirements.

Text: REQUIRED CATALOG NOT AVAILABLE

Reason:The user catalog required may have been Deleted or disconnected from the system master catalog, or may have been damaged and is being recovered.

Action: Correct the error with the user catalog, and rerun the DEFINE command.

Text: DUPLICATE DATA SET NAME IN CATALOG

Reason:The data set name already exists in the catalog, and may or may not exist on disk.

Action: Make sure the cluster name is correctly specified. If it is delete the current entry from catalog (and disk if applicable).

Text: NO SPACE IN CATALOG

Reason:Insufficient space in the catalog to contain the record for the new data set.

Action: Enlarge the catalog, and rerun the DEFINE.

Text: SMS FAILED REQUEST. REFER TO PRIOR MESSAGE(S)

Reason:The allocation request was failed by SMS. There should be preceding messages from SMS indicating the reason for the error.

Action:Correct the problem indicated by the SMS error messages, and try request again.

IAMW61 IAM DYNALLOC FAILED COMP=nnnn CODE=nnnn CLUSTER=clustername

Reason: The dynamic allocation requested by IAM to perform the DEFINE operation failed with the printed error codes. This message may be accompanied by an IAMW60 message.

Return Code: The DEFINE request is failed, with a return code and reason code that matches the problem description.

Action: Refer to message IAMW60, if printed, and/or the IDC3009I error message on SYSPRINT. The error codes from Dynamic Allocation are documented in the MVS/XA and MVS/ESA System Macro and Facilities manual, the MVS Job Management SPL, and under the ISPF tutorial. Correct the error condition as indicated by the error codes, and rerun the DEFINE.

IAMW62 IAM OPEN FAILED FOR DDNAME=ddname CLUSTER=clustername

Reason: During DEFINE processing of an IAM file, IAM attempted to OPEN the defined file, however the OPEN failed. Additional IBM messages may appear on the system log.

Return Codes: The DEFINE request is failed with a return code of 62, reason code of 0.

Action: Determine the cause of the OPEN failure, correct the error, and rerun the job. For a new DEFINE (as opposed to RECATALOG), DELETE and redefine the data set.

Note: At this point, the data set has been allocated and cataloged, but is not yet usable by IAM.

IAMW63 IAM I/O ERROR: 'synad message'

Reason: During the processing of a DEFINE command for an IAM file, an I/O error occurred when reading or writing the IAM control information.

Return Codes: The DEFINE request is failed with a return code of 62, reason code of 0. If an IAMDEBUG DD DUMMY is specified, then the program will abend with a U0310.

Action: Using the standard SYNAD message and other messages that may appear on SYSLOG, determine the cause of I/O error and correct it. If this was not a RECATALOG operation, DELETE and DEFINE the IAM data set again.

Note: At this point, the data set has been allocated and cataloged, but is not yet usable by IAM. For RECATALOG operations, the file is either not a previously DEFINED or loaded IAM file, or there is an error with the data set requiring recovery. The recovery can be done by restoring the data set from a good copy or possibly by using program 'IAMRECVR'. Use of the recovery program may result in data loss.

IAMW64 UNEXPECTED END OF FILE READING AN IAM FILE FOR RECATALOG REQUEST -- NOT VALID IAM DATA SET

Reason: During the processing of a DEFINE RECATALOG command for an IAM file, an end of file occurred while attempting to read the file characteristics.

Return Codes: The DEFINE request is failed with a return code of 86, reason code of 4.

Action: The data set is empty. The recatalog request was not performed. Either the file was never an IAM file, in which case no corrective action is required, or the data set has been clobbered. To recover the data set, it can be restored from a good backup, or a recovery attempted with program 'IAMRECVR'. Recover the file, then retry the recatalog processing.

Note: This message will not be issued by IAM Version 8.0, but is retained in the manual for documentation purposes.

**IAMW65 IAM SCRATCH FAILED COMP=nnnn CODE=nnnn VOLSER=vvvvvv
IAM UNCATLG FAILED COMP=nnnn CODE=nnnn CLUSTER=clustername**

Reason: After an error attempting to catalog or initialize an IAM file being defined, an attempt to delete or uncatlog the data set failed. The codes are returned from SCRATCH or UNCATLG request, which are documented in the SYSTEM DATA ADMINISTRATION manual.

Return Codes: The return code for the DEFINE is based on the original condition that caused the error.

Action: The data set is still on the specified volume. Refer to an immediately preceding IAMWnn message for the data set name. The data set must be manually scratched from the indicated volume and uncatlogged prior to attempting to redefine the data set.

IAMW66 IAM REALLOC FAILED CODE=nnnn INFO=nnnn CLUSTER=clustername

Reason: After successfully defining an IAM file, IAM had determined that the job step had DD cards which were allocated to the file, but were allocated to the wrong volume. The attempt to reallocate the file with dynamic allocation failed, with the indicated error codes.

Return Codes: The DEFINE completes with a return code of 0.

Action: The IAM file has been successfully defined, but attempts to REPRO into the IAM file within the same step may fail. A subsequent REPRO into the IAM file can be done.

IAMW67 IAM SMS ALLOC FAILED RC=X'xx' REAS=X'xxxxxxxx' CLUSTER=clustername

Reason: The define of an IAM file failed using DADSM allocation with the specified return code and reason code. Refer to the DADSM Create (ALLOCATE) Function Return Codes section of the *IBM MVS/ESA DADSM/CVAF Diagnostic Aids* for a description of the error codes.

Return Codes: The DEFINE request is failed with a return code of 62, reason code of 0.

Action: Take the appropriate corrective action based on the error codes indicated, and retry the define request.

IAMW68 IAM UNIT NAME SEARCH FAILED, RC=xx CLUSTER=clustername

Reason: During the define of a multivolume nonspecific allocation, an IAM call to the MVS Unit Name look up service failed as indicated in the message. The return code, if provided, is documented in the *IBM MVS System Modifications Manual*.

Return Codes: The DEFINE request fails with a return code of 72, reason 4.

Action: If the condition indicated by the return code cannot be corrected, contact INNOVATION for support. As a circumvention, try a different UNIT override, or switch to specific volume allocation.

IAMW69 IAM xx ELIGIBLE VOLUMES, nn VOLUMES REQUIRED CLUSTER=clustername

Reason: During the define of a multivolume nonspecific allocation, IAM found the indicated number of storage volumes in the specified UNIT name pool, however, more volumes than available were needed to satisfy the allocation request.

Return Codes: The DEFINE request fails with a return code of 72, reason 4.

Action: Change the UNIT override to indicate a UNIT name that has sufficient storage volumes, or reduce the number of volumes requested.

IAMW70 DD='ddname' PUT ERROR -- WORK FILE DATASPACE OVERFLOW

Reason: The size of the data space used to hold the index structure during a file load was insufficient for the file indicated by the ddname.

Return Codes: A reason code of 244(x'F4') is stored in the RPL error flags field (RPLERRCD) and the request fails with a return code of 8. The logical error exit, LERAD, if specified will be invoked. If the error is detected during close, the program is abended with a U0246 abend.

Action: Increase the size of the data space by using the IAM CREATE override, specifying the DATASPACE keyword. As an alternative, specify a DATASPACE=0, which will force the use of a temporary work file.

IAMW71 TRACE DEACTIVATED - text indicating reason

Reason: The IAM trace facility for Enhanced Format files has detected an error during activation. The possible reasons include

- The DDNAME IAMATR31 is not available
- There is insufficient storage available to obtain the trace work area.

Action: If the IAMATR31 DD was not specified, add it to the job. If storage was not available for the trace work area, specify a larger REGION size, or a REORG of the IAM file may be required.

IAMW72 IAMASY ESPIE RECOVERY ENTERED FOR ABEND S0Cx

Reason: A program check occurred under the IAM IRB while performing asynchronous processing for an I/O request with RPL OPTCD=ASY. Included in the displayed information are the PSW and registers at time of the error.

Return Codes: The specific request causing the error, if it is identified, will receive a return code of 8 with an RPL error code of 240(X'F0') stored in the RPLERRCD. IAM will internally issue an ENDREQ for that RPL to clean up any resources it may have held.

Action: IAM will attempt to continue processing for the affected file. Contact Innovation Technical Support with the full text of the message for assistance, and save any dumps that may have occurred to aid in diagnosis.

Note: This message will not occur in IAM Version 8.0. It is presented here for documentation compatibility with prior versions.

IAMW73 IAM module name ESTAE ENTERED FOR ABEND Sxxx

Reason: Aabend occurred while opening or processing an IAM file. If the error occurred during open processing, IAM will attempt to free the resources acquired during the open process. Depending on the circumstance, the PSW and registers at time of the error may also be displayed.

Return Codes: The job may abend with a U0184, or the Open, Close, or I/O request will fail. An open request will fail with a return code of 8, and the ACB that has caused the error will have a reason code of 188(X'BC') set in the ACBERFLG field. If IAM was using a Data Space for this file, it will be included in the dump. An I/O request will fail with a logical error, return code of 8, with an error code of x'B8'.

Action: Contact Innovation Technical Support with the full text of the message for assistance, and save any dumps that may have occurred to aid in diagnosis. For CICS, IAM will terminate open processing for this ACB, and will attempt to free all resources used by the failing OPEN request.

IAMW74 UCBLLOOK MACRO FAILED R15=xxxx R0=xxxx CLUSTER=clustername

Reason: During IAM file definition, an attempt to find the UCB on which the data set resides, or will reside, using the IBM UCBLLOOK service has failed. IAM will continue, if possible, with the define request by utilizing a different UCB lookup technique.

Action: Contact Innovation Technical support with the full text of the message for assistance.

IAMW78 DD='ddname' OPEN ERROR - AN ABEND CONDITION OCCURRED

Reason: While IAM was opening a file to be loaded, some type of system Abend occurred. There should be additional messages indicating the exact abend condition. Open processing for this file is terminated.

Return Codes: The OPEN fails with a return code of 8 and a reason code of 192(X'C0') in the ACBERFLG field of the ACB being opened.

Action: Correct the abend condition, and then reload the file. The most typical abend condition is an X37 abend, in which case delete and redefine the data set with more DASD space.

IAMW79 DD='ddname' OPEN ERROR - text indicating reason

Reason: IAM was unable to open the specified file due to damaged control or index information on the file.

Return Codes: A reason code of 188(X'BC') is stored in the ACB error flags field (ACBERFLG) and the OPEN is failed with a return code of 8. If an IAMDEBUG DD DUMMY is in the job step, then the job will be abended with a U0184.

Action: *DO NOT ATTEMPT TO REORGANIZE THE DATA SET WITH IDCAMS OR OTHER SOFTWARE!!!* Use the IAMRECVR to recreate the file. For diagnosis, please do the following:

1. Rerun job with an //IAMDEBUG DD DUMMY card added and a //SYSUDUMP or //SYSABEND. If you have the ABENDAID, please insure that the standard IBM dump will be taken.
2. Save the damaged file, or back it up using FDR/ABR, or DFDSS.
3. Contact Innovation for assistance.

IAMW80 MODULE 'modname' INSTALLED AT 'address' - VER nn

Reason: The message is issued in response to a VIF status request when the module 'modname' is in place and is ready to provide IAM services to programs using ACB's to access VSAM files. The 'address' given is the virtual storage location of the named IAM VIF module. The version level number is also given for the module.

Action: None, information message only.

IAMW81 THE IAM SYSTEM MODULES ARE 'status'

Reason: This message is provided by IAMSTART when the IAM VIF modules are installed, or in response to VIF action commands when the IAM system level VSAM interface is already in place. The 'status' of the modules may be:

- ACTIVE
- REACTIVATED
- ALREADY INSTALLED

This message includes the version and release level of the VIF modules installed.

Action: None, information message only.

IAMW82 THE IAM SYSTEM MODULES ARE 'status'

Reason: This message is provided by IAMSTART in response to VIF action commands when the IAM system level VSAM interface is already in place. The status of the modules maybe:

- NOT ACTIVE (the IAM system level VSAM interface is not in place),
- INACTIVE (the IAM system level VSAM interface is in place but is not active).

Action: None, information message only.

**IAMW84 IAMSTART ESTAE RECOVERY ENTERED FOR ABEND Sxxx Uxxxx AT OFFSET
xxxx**

Reason: This message is provided by IAMSTART when VIF ABENDS. An attempt is made to provide diagnostic information.

Action: If the problem persists call INNOVATION for assistance.

IAMW85 'ADDRESS' 'HEX core print'----- 'EBCDIC core print'

Reason: This message is provided by IAMSTART when the VIF modules are first installed and is also the response to a VIF STATUS request when VIF is in place and is ready to provide IAM services to programs using ACB's. The 'ADDRESS' given is the virtual storage location of the VIF Vector Table Entry. The remainder of the line is the entry in hex and display format.

Action: None, information message only.

IAMW86 IDPSTART FAILURE - REASON='number' 'reason'

Reason: The activation of the IAM VSAM Interface failed for one of the following reasons:

- 01 OPERATING SYSTEM NOT MVS OR SP 1.2 OR HIGHER
- 02 INVALID INPUT PARAMETERS
- 03 UNABLE TO OBTAIN AUTHORIZATION
- 04 'vector table name' VECTOR TABLE IS INVALID
- 05 SYSLIB DD MISSING OR OPEN ERROR
- 06 'modname' NOT FOUND IN SYSLIB
- 07 'modname' MODULE LOAD ERROR
- 08 ERROR MODIFYING THE SVC TABLE
- 09 'modname' NOT FOUND

- 10 'modname' NOT FOUND IN THE LINKLIST
- 11 'modname' UNABLE TO DE-INSTALL
- 12 'modname' CDE OR LPDE ABOVE 16M ERROR
- 13 'modname' MODULE ABOVE 16M ERROR
- 14 GETMAIN ERROR
- 15 'modname' HAS SMP INSTALLED IDP MODULE
- 16 UNABLE TO OBTAIN DISPATCHER LOCK
- 17 FREEMAIN ERROR
- 18 UNABLE TO OBTAIN LOCAL LOCK
- 19 'modname' CDE NOT FOUND
- 20 ENQUEUE/DEQUEUE ERROR ON IAM RESOURCE
- 21 ENQUEUE/DEQUEUE ERROR ON SYSZSVC
- 22 INVALID VECTOR TABLE STATUS
- 23 INVALID VECTOR TABLE CDE ADDRESS
- 24 RC=xxxx FROM SVCUPDTE
- 27 'modname' and IAMVECTB ARE OUT OF SYNCH
- 28 VECTOR TABLE CANNOT BE STOPPED
- 31 HIGHER VERSION OF VIF ALREADY STARTED

Action: If the problem persists call INNOVATION for assistance.

IAMW89 IAM - TRIAL VERSION FROM INNOVATION DATA PROCESSING EXPIRES IN 'nnn' DAYS (PLEASE CONTACT INNOVATION)

Reason: This is a trial version of the IAM system. The number of days the trial will remain active is displayed.

Note: This message will never appear if you are a licensed user of IAM. If you are a licensed IAM user, then it is possible that you have in your job a bad STEPLIB pointing to the old trial library. The library that contains the production copy will appear in the heading with a P following the version identification. For example, IAM V9.0/01P.

Action: When there are 10 or fewer days before the trial is due to expire this message will become nondeletable. To prevent the trial from expiring call INNOVATION for an extension PARM= value and use the JCL shown below to extend your trial's expiration date. The JCL to extend the trial is as follows:

```
//EXTEND EXEC PGM=IAMEXTND,PARM=xxxx
//STEPLIB DD DISP=SHR,DSN=your.user.lib
//SYSLIB DD DISP=SHR,DSN=your.user.lib
//@BINDNOT DD DUMMY
//SYSDIAG DD SYSOUT=*
```

IAMW90 IOSCAPU MACRO FAILED COMP=xxxx CODE=yyyy

Reason: IAM attempted to capture a UCB to initialize the IAM file being defined. The capture of the UCB failed, as indicated in the error message.

Action: IAM terminates processing for the file being defined. The file will need to be deleted and redefined before it can be processed. The error codes are available in the MVS Authorized Assembler Services Reference manual. If assistance is needed with diagnosing the problem, contact Innovation Data Processing. Attempting to define the file on a different volume(s) may circumvent the problem. A dump can be obtained by including an IAMDEBUG DD DUMMY statement in the JCL, which will result in a U0310 abend.

IAMW99 INTERNAL LOGIC ERROR -- JOB TERMINATED

Reason: IAMOVRID has encountered an illogical condition.

Action: Obtain a SYSUDUMP or SYSABEND dump, and call INNOVATION for assistance.

80.03 IAM SYSTEM SYSPRINT MESSAGES

The following general messages are issued by various IAM utility programs. These messages are typically written to SYSPRINT by the originating utility program. These are messages from the IAMRECVR, IAMSIMVS, IAMSFMVVS, IAMSFMF, and IAMZAPOP utility programs provided with the IAM product.

IAM099 NEAR RELATIVE DATA LOCATION nnnn 'error description'

Reason: The common parsing routine encountered an error in parsing the user specified control statements. The approximate location of the error was position nnnn, counting the first position as 000.

Action: Correct the error and resubmit job.

IAM100 IAM FILE ANALYSIS - DSN= data set name

Reason: This report is produced from a LISTCAT request on the IAMPRINT DD output, and also on SYSPRINT when IAMRECVR is run against an IAM file. The report contains descriptive information and statistics about the IAM file. For a complete description of the output report following this message, please refer to the LISTCAT Report description in [Section 10.71](#) in the IAM manual.

Action: None, this is an informational message only.

IAM213 'file type' RECOVERY FILE CREATED DDNAME='ddname'

Reason: IAMRECVR has completed the output of a file to the DDNAME 'ddname'. The 'file type' is as follows:
IAM - An IAM file created by the RECOVER operation.
DUPLICATE - A key/log file containing duplicate records found in the IAM file that is being recovered by IAMRECVR.

Action: Refer to the documentation of IAMRECVR for the uses of the different output files it creates.

IAM260 LISTC PROCESSING FAILED FOR DSN='dsname'

Reason: An error occurred during IAM processing of an IDCAMS LISTC command for a possible IAM file. This message will be preceded by one or more error messages describing the error in more detail.

Action: Review other messages for source of error, and correct as necessary. IDCAMS LISTC processing will continue normally, however no information will appear in the IAMPRINT file for the named file.

IAM262 DATA SET IS NOT AN IAM FILE

Reason: During an IDCAMS LISTC IAM attempted to process a data set as an IAM file, however it was determined that the data set was not an IAM file. The data set name is displayed in the IAM260 message.

Action: None, information message only.

IAM266 LOAD OF MODULE 'modulename' FAILED

Reason: During an IDCAMS LISTC command, IAM encountered an error loading the named support module. There should also be an accompanying message in SYSLOG indicating the cause of the problem (i.e. S106, S306, or S806 error). The data set name is presented in the accompanying IAM260 message.

Action: Find the IBM error message, and take corrective action. Possibilities are insufficient virtual storage to load the module, or IAM is not in the system LINKLIST and no STEPLIB has been provided.

IAM269 IAM CPL PROCESSING FAILED

Reason: IAM was attempting to process a CATALOG parameter list to determine data set name and volume information, however the CPL did not contain the expected information. There will be no information listed about the IAM file.

Action: Contact INNOVATION for assistance.

IAM303 CARD IMAGE -- * control statement image *

Reason: A display of the SYSIN data set input control statements.

Action: None. Information message only.

IAM316 RECOVERY CAN BE FORCED BY SPECIFYING VALUES FOR THE FOLLOWING -

Reason: An attempt was made to recover an IAM file that has damaged control records. The unreadable control records requires the user to specify key data normally extracted from the file.

Action: The next line(s) displayed will detail the fields required. Use this information to continue the recovery.

IAM318 * WARNING* DATASET-'dsn' DEFINED FIXED CONTAINS VARIABLE LEN RECORDS

Reason: The DEFINE for this cluster shows the average and maximum record lengths to be equal. IAMSIMVS detected one or more records that were not equal to the average record length Defined for this cluster.

Action: IAMSIMVS continues processing as if the file contained fixed length records. Blocking, overflow and other values established for a file however vary depending upon whether record lengths are fixed or variable. To obtain a more accurate estimate of IAM's space savings for this file, include the 'VARIABLE' keyword with the 'SELECT' option.

Note: To properly identify this file as containing variable length records the DEFINE for this file should be changed so the average RECORDSIZE value is less than the maximum. During processing, if the Defined average RECORDSIZE value is not changed, IAM will return a record length error for this file.

IAM319 PREMATURE END OF FILE -- AFTER BLOCK nnnnnnnn

Reason: IAMRECVR detected a premature end of file at block nnnnnnn. Data blocks may have been lost.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM320 MAXIMUM BLOCKS LOST DUE TO END OF FILE -- nnnnnnnn

Reason: An end of file error erases the remainder of the track. The reported number of blocks could have existed on the track but were not yet read when the end of file was encountered.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM321 INVALID VARIABLE LENGTH FIELD -- BLOCK nnnnnnnn

Reason: IAMRECVR detected an invalid RDW length field for a given record (i.e.: RDW exceeds maximum LRECL). The block number is printed and the remainder of block is bypassed.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM322 DROPPED DUE TO I/O ERROR -- BLOCK nnnnnnnn

Reason: IAMRECVR has dropped block nnnnnnn. The first 24 bytes of the block at the location of the errors is printed in hexadecimal. Processing continues.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM323 SEQUENCE CHECK -- BLOCK nnnnnnnn

Reason: An out of sequence record was encountered. The IAM block number is printed along with 24 bytes of the key in hexadecimal. Processing continues.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM324 UNABLE TO CALCULATE LOST BLOCKS - ASSUMING nn MISSING

Reason: An end of file erases the remainder of the track. Any blocks that were on the track at the time the EOF record was created have been destroyed.

Action: Review the contents of the recovered file. A section of the file being recovered may not have been readable.

IAM325 FILE NOT COMPRESSABLE - DATA LEN PAST KEY < 11 BYTES - DSN=

Reason: IAMSIMVS determined that the records contained within the file were not eligible for IAM record compression. IAM only compresses the data in a record located

past the end of the key and only if the length of that data is more than 10 bytes. (i.e. $\text{MAXLRECL} - (\text{RKP} + \text{KEYLEN}) > 10$).

Action: No action is required. IAMSIMVS will continue the simulation for the file as if it were not converted to an IAM file in compressed format.

IAM325 ERROR DECOMPRESSING RECORD – BLOCK nnnn

Reason: IAMRECVR was unable to decompress a compressed record from an IAM data set.

Action: Most probable cause is that a corrupted buffer was written out to the data set. If possible, recover the file through other means. If that is not possible then continue IAMRECVR will recover all the records that it is able to read, but will drop the rest of the records. Backup the data set as described in the User's Guide section of the IAM Manual, and contact Innovation for support.

IAM326 IAMCRTSM ERROR -- 'error description' -- DSN=dsn

Reason: IAMCRTSM was invoked to simulate the conversion of a VSAM file and encountered a logical error. The error description will be in the format: INVALID BLOCKSIZE/BLOCKING FACTOR CODE=nnn. The CODE=nnn translates directly into an IAM create abend code (see IAM user abend, error, and completion codes later in this section).

Action: If the message was issued for invalid blocking, ensure that the blocksize specified is both larger than the record length and compatible with the device. If the CODE= message is issued, refer to the actions for the associated IAM create abend code.

IAM340 'recovery operation' - DSN= 'dsname'

Reason: Describes the user specified IAM file 'recovery operation' and the name of the IAM file being processed.

Action: None, information message only.

IAM341 CONTROL BREAKS IN OVERFLOW BLOCKS -- = nnnn nnnn

Reason: Issued by the DIAGNOSE and RECOVER operations of the IAM file recovery program IAMRECVR, indicating that records within the overflow blocks of the file being processed are out of sequence.

Action: When issued during RECOVER, it indicates that the RECOVER output is out of sequence and must be sorted, either by IAMRECVR or externally prior to an IAM create. When issued during DIAGNOSE, no additional processing is necessary.

IAM342 IAM FILE CONTAINS NO DETECTABLE ERRORS

Reason: Issued by the DIAGNOSE and RECOVER operations of the IAM file recovery program IAMRECVR, indicating that the IAM file is not damaged and is acceptable for IAM processing.

Action: None, information message only.

IAM343 SEQUENCE ERRORS IN DATA BLOCKS -- = nnnnnnnn

Reason: Issued by the DIAGNOSE and RECOVER operations of the IAM file recovery program IAMRECVR, indicating physical damage to the IAM file.

Action: The file must be created again from a suitable backup or recovered and reconstructed. Prior to create, sort the data set output from the RECOVER operation.

IAM344 NUMBER OF DROPPED BLOCKS -- = nnnnnnnn

Reason: Issued by the DIAGNOSE and RECOVER operations of the IAM file recovery program IAMRECVR, indicating physical damage to the IAM file. IAMRECVR encountered I/O errors during the processing of the IAM file and nnnnnnnn blocks were dropped from the file.

Action: The file must be created again from a suitable backup or recovered and reconstructed. Prior to create, sort the data set output from the RECOVER operation.

IAM345 NUMBER OF DUPLICATE RECORDS -- = nnnnnnnn

Reason: Issued by the DIAGNOSE and RECOVER operations of the IAM file recovery program IAMRECVR, indicating that duplicate keys were found in the IAM file. During a RECOVER operation, duplicate records can be ignored, printed, logged for subsequent application to the file, or applied directly if an IAM file is being created as the output of the recovery program.

Action: See the documentation for the RECOVER program, DUPLICATES operand. The file must be created again from a suitable backup or recovered and reconstructed. Prior to create, sort the data set output from the RECOVER operation.

IAM346 SPANNED RECORDS EXTRACTED --- = nnnnnnnn

Reason: Issued by the IAMRECVR RECOVER command when spanned records have been recovered and placed in the dataset identified by the SPANOUT DD statement.

Action: To recover the spanned records, run the IAMRECVR APPLY SPANNED command, which will read the SPANOUT dataset, and insert the records back into the IAM data set. See [Section 45.03](#) for additional information.

IAM360 STEP - ssssssss DDNAME - 'ddname' DATA SET MONITORED - 'dsname'

Reason: Identifies the IAM job step name, the DDNAME and, optionally, the data set name of the IAM file being processed by the information service routines of the IAM monitor facility.

Action: None, information message only.

IAM361 INFO REQUESTED BY PROGRAM 'program' PERFORMING 'description' PROCESSING

Reason: Identifies the IAM processing program that requested the printing of the information block, the type of processing being performed, and the time the information block was printed by the information service routines of the IAM INFO report.

Action: None, information message only.

IAM362 DATA CHARACTERISTICS

Reason: Heading line which always precedes the IAM data characteristics when listed by the IAMINFO report.

Action: None, information message only, for further detail on these fields see [Section 10.72: IAM362](#) .

IAM363 IAM FILE CHARACTERISTICS

Reason: Heading line which always precedes the IAM file characteristics when listed by the IAMINFO report.

Action: None, information message only, for further detail on these fields see [Section 10.72:IAM363](#).

IAM364 IAM OVERFLOW CHARACTERISTICS

Reason: Heading line which always precedes the IAM overflow characteristics when listed by the IAMINFO report.

Action: None, information message only, for IAM Compatible format files only.

IAM365 IAM EXECUTION STATISTICS

Reason: Heading line which always precedes the IAM execution statistics when listed by the IAMINFO report.

Action: None, information message only, for further detail on these fields see [Section 10.72: 365](#).

IAM366 IAM COMMAND EXECUTED SUMMARY

Reason: Heading line which always precedes the IAM command summary when listed by the IAMINFO report.

Action: None, information message only, for further detail on these fields see [Section 10.72: IAM366](#).

IAM367 THERE WAS INSUFFICIENT STORAGE AVAILABLE TO ACQUIRE ADDITIONAL BUFFERS

Reason: IAM's Real Time Tuning tried to acquire additional data buffers but there was insufficient virtual storage available.

Action: Increase the REGION value on the JOB statement or the EXEC statement so the next execution of the job will have storage available to acquire additional buffers.

IAM368 SPECIFYING A BUFNO VALUE GREATER THAN nn MAY IMPROVE PERFORMANCE

Reason: IAM's Real Time Tuning buffer management found that, for this mix of data and file processing commands, if additional buffers had been available they would have been acquired. Additional buffers were not acquired because it would have exceeded the maximum buffers allowed for this job.

Action: If you wish to increase the maximum buffers for this job, specify the MAXBUFNO=nn parameter on the IAM Override Control statement (Section 11) for this IAM file.

Note: If the number of I/O's (EXCPs) for this file is relatively small, there is no real need to increase the maximum number of buffers.

IAM371 INCREASING THE NUMBER OF PRIME EXTENSION BLOCKS MAY IMPROVE PERFORMANCE

Reason: An attempt to insert a record into prime extension failed because the prime extension was full. The record was inserted into independent overflow instead.

Action: Define the IAM file with a larger prime extension.

IAM372 IAM EXTENDED AREA CHARACTERISTICS

Reason: This heading line always precedes the description of the IAM Extended Area (Enhanced format files only). See [Section 10.72: IAM372](#).

IAM373 REORGANIZATION OF THIS FILE IS RECOMMENDED

Reason: During Open and/or Close processing, IAM noticed that the size of the extended overflow area was such that it could cause a performance degradation. As a preventative measure, it is recommended, but not required, that the file be reorganized to move records out of the overflow area. This IAMINFO message should be accompanied with an IAMW22 message, which will indicate the reason that a reorganization is being recommended.

Action: No action is required, but a file reorganization is recommended to be scheduled in the near future.

IAM400 'processing function' - 'programe' - VER v.r. - INNOVATION DATA PROCESSING - DATE: 'yyddd' PAGE: 'nn'

Reason: Generalized page header for the named 'processing functions' which are provided by the 'program' named in the printed title.

Action: None, information message only.

IAM401 PARM DATA - * parm-field-data *

Reason: Displays the program control information specified in the "PARM=" field of the EXEC statement. This data will not be displayed if program is invoked under TSO.

Action: None, information only.

IAM402 INVALID CONTINUATION

Reason: User coded a delimiting comma following the last keyword on a control statement and did not provide the next logical record.

Action: Correct and resubmit job.

IAM403 REQUIRED OPERAND(S) NOT SPECIFIED - cc...cc

Reason: The operand cc...cc is required for the execution of the command. It must be specified; no defaults are available.

Action: Correct and resubmit job.

IAM404 WORKING STORAGE AREA SIZE OF nn BYTES EXCEEDED - SUBCOMMAND IGNORED

Reason: The maximum number of working storage bytes available to the subcommands has been exceeded.

Action: The number of bytes available for subcommand working storage is derived from the 'MAXCORE' operand, which has a lower limit of 1000 bytes and an upper limit of 120000 bytes. If the upper limit has been reached, call INNOVATION for technical support. If the upper limit has not been reached, resubmit the job specifying a value for 'MAXCORE' greater than the number displayed.

IAM405 MAXIMUM CONTINUATION COUNT OF nnnn EXCEEDED - COMMAND FLUSHED

Reason: The user control statement used too many continuations.

Action: Reduce the number of continuations to the value nnnn. Resubmit the job.

IAM407 CONTROL STATEMENT ERROR - 'action taken'

Reason: An error was encountered during the processing of user supplied control statements. Always preceded by one or more messages which define and delimit the error(s). The 'action taken' is one of the following:

1. JOB TERMINATED - Processing will stop after the first error has been encountered.
1. SKIPPING FOR COMMAND - Processing will continue for all command statements within the SYSIN data set.
1. RE-ENTER COMMAND OREND - Message when the SYSIN data set is assigned to a TSO terminal. Re-enter command in error or 'END' to complete the processing.

Action: Correct and resubmit job.

IAM408 NO CONTROL STATEMENTS WERE FOUND JOB TERMINATED

Reason: SYSIN data set is empty or contained only comment statements ('*' in column 1).

IAM410 DSNAME='dsname' -- 'error description' -- PROCESSING BYPASSED

Reason: The 'data set name' printed encountered the 'error' described and subsequent processing was bypassed. The error description can be one of the following:

- NOT RECOGNIZABLE IAM FILE
- TRKCALC FUNCTION FAILED
- NOT KSDS VSAM
- FILE HAS ALTERNATE INDEX
- NAMEDS DATA NOT RETURNED
- UNABLE TO LOCATE DATA/INDEX
- KEYLEN GREATER THAN 250 BYTES
- RKP GREATER THAN 4096
- FILE WAS NEVER LOADED
- IS NOT VSAM OR IAM

Action: Check the data set name for correctness. If the wrong data set name was specified, specify the correct data set name and resubmit the job. If the message indicates the data set is not an IAM file it is because the IAM control record was not present. Use program IAMRECVR specifying the IAM file characteristics on the 'RECOVER' subcommand to facilitate data recovery.

IAM413 DSN/DSG INDEX ERROR - 'error description'

Reason: When using the index level option to select data sets or data set groups the user either:

1. Specified too many index levels. (The maximum is 22).
2. Failed to provide significant data. (The leading periods were followed by a comma or blank).

Action: Correct and resubmit.

IAM418 COMMAND PROCESSING DETECTED ERROR -- 'action taken'

Reason: An error was encountered during the processing of the subcommand specified on a user supplied control statement. Always preceded by one or more messages that define and delimit the error(s). The action taken is one of the following:

RE-ENTER COMMAND OR END - message for user when the SYSIN data set is assigned to a TSO terminal. Re-enter command in error or 'END' to complete the processing.

SKIPPING FOR COMMAND - processing will continue for all command statements found within the SYSIN data set.

REVERTING TO SYSIN - the error occurred when reading from an alternate command input source. Processing will continue for commands in the SYSIN data set.

Action: Correct and resubmit job.

IAM421 LOCATE ERROR -- 'error description' - DSN='dsname'

Reason: A LOCATE SVC was issued requesting identification of the component named by DSN='dsname'. The LOCATE either failed or returned a component:cluster name type code that is not currently supported.

If the 'error description' is in the form: RETURN CODE rc - REASON IGGOCLAA - 'reason number' The LOCATE failed. Error codes are documented in the IBM System Messages Manual; under message number IDC3009I.

If the 'error description' is in the form: ENTYPE -- C(X'xx') The program encountered a type of component entry that it does not presently support.

If the 'error description' is in the form: NAMEDS -- C(X'xx') The program encountered a type of cluster entry that it does not presently support.

If the 'error description' is in any other form, an error exists in the catalog.

Note: This message only appears if DFEFERRPRT=YES had been setup earlier with IAMZAPOP or specified on the control statement. This is only a warning message. The program does not associate the component shown by DSN='dsname' with a cluster name, processing continues.

Action: Do one of the following:

For the RETURN CODE type of error, look up the codes under message IDC3009I. The most likely cause is a STEPCAT or JOBCAT DD statement was not supplied for a user catalog that has entries in it for components on the volume(s) being processed, and those entries are not ALIAS'ed.

For any other type of errors, contact INNOVATION technical support for assistance.

IAM465 UNABLE TO OPEN (DDNAME=DSN='name' - 'reason'

Reason: The 'ddname' named in the message failed to OPEN for the 'reason' shown in the text. The recognized reasons are:

ABEND exit taken.

VOL='volser'

denied by OPEN exit.

DD='ddname' statement missing/ misspelled or incorrectly specified.

RC=nn ERROR CODE=nnn

Action: If the named 'ddname' is required for the requested operation correct the error and resubmit the job, otherwise the message may be ignored.

IAM471 DDNAME='ddname' I/O ERROR -- SYNAD='message'

Reason: A permanent I/O error was detected on the data set referenced by the DDNAME 'ddname'.

Action: Examine the SYNADAF message to determine the cause of the error. The format of this message is documented in IBM SRL publications. Call INNOVATION for additional assistance.

IAM476 DDNAME='ddname' REFERENCES A DEVICE TYPE OTHER THAN DISK

Reason: The DDNAME 'ddname' listed can only be allocated to a disk device.

Action: Check the unit specification in the JCL for errors, correct and resubmit.

IAM484 INTERNAL LOGIC ERROR -- JOB TERMINATED

Reason: The program has encountered an illogical condition.

Action: Call INNOVATION for additional assistance AFTER obtaining a storage dump.

IAM485 SORT FAILURE HAS OCCURRED RC='nn' - 'action description'

Reason: Your installation's sort product has set a return code other than zero. The return code problem description can be found in the sort manual supplied with the sort program product. In many cases the sort program will provide an error message on DDNAME SYSOUT and or on the system console.

Action: If you cannot correct the problem from this information, call INNOVATION for additional assistance.

IAM491 'function' FUNCTION STARTED TIME=hh.mm.ss

Reason: Identifies type of function and time the function started.

Action: None, information message only.

IAM492 'function' FUNCTION ENDED -- hh.mm.ss CONDITION CODE - nnnn

Reason: Identifies type of function and time the function ended. The return code is printed if it is non-zero.

Action: Review the completion code. If the completion code is greater than zero, check the output for the preceding messages that describe the reason for a non-zero completion.

IAM493 'function' - BYPASSED -- PRIOR FUNCTION TERMINATED WITH KEYWORD OR COMMAND DETECTED ERROR

Reason: A previous command upon which this function may be dependent encountered serious errors.

IAM495 NO RECORDS MATCHED SELECTION CRITERIA

Reason: The selection criteria specified did not cause any records to be selected for processing. If program IAMSMFVS, this message will also appear if the required SMF record types are not being collected.

Action: Make sure the selection criteria is correct.

If IAMSMFVS: Make sure you are collecting SMF records types 4 or 30 subtype 4 and type 64. If you are running against an SMF history tape, make sure that the required record types are being copied to the history tapes.

If IAMSMF: Make sure you are collecting SMF records types 4 or 30 subtype 4 and type 14,15, 64. If you are running against an SMF history tape, make sure that the required record types are being copied to the history tapes.

IAM496 MODULE 'modname' -- NOT USABLE WITH RELEASE v.r. PROGRAMS -- EXECUTION TERMINATED

Reason: Module 'modname' is a release/version that is incompatible with the load module being executed.

Action: Check for a STEPLIB/JOBLIB DD statement pointing to a library other than the correct library for the product level you expect to use. If present, correct the library name and resubmit the job. If there is no STEPLIB/JOBLIB present, the module 'modname' is being obtained from a LINKLIST library. Add a STEPLIB or JOBLIB DD statement specifying the correct load module library and resubmit the job.

IAM497 cc..cc ABNORMALLY TERMINATED DUE TO KEYWORD/COMMAND DETECTED ERRORS

Reason: The common parsing routine encountered errors in parsing the user specified control statements. In addition, the user has set the option KWDC=ABEND via program IAMZAPOP. Always preceded by one or more error description messages.

Action: Previous message(s) describe the error(s); see those messages for further details.

IAM498 cc...cc PROCESSING COMPLETED WITH ERRORS

Reason: The named program completed the requested processing but encountered abnormalities in the process.

Action: Check the output for preceding messages that may describe the errors in detail.

IAM499 cc...cc PROCESSING COMPLETED

Reason: The named program has completed processing as requested.

Action: Check the output for messages that describe the results.

IAM516 CAMLST REGISTERS R0=nnnnnnnn R1=nnnnnnnn R15=nnnnnnnn

Reason: A CAMLST request failed. The type of CAMLST function (shown in the immediately preceding message) and the registers make diagnosing the problem relatively simple. The return code(s) from catalog management is(are) documented in the IBM SRL SYSTEM PROGRAMMING LIBRARY: DATA MANAGEMENT (for MVS) or CATALOG ADMINISTRATION GUIDE (for MVS/XA) or DATA MANAGEMENT FOR SYSTEM PROGRAMMERS (for non-MVS).

Action: Check the return code(s) and take corrective action if the error is apparent or call INNOVATION for additional assistance.

IAM530 MODULE 'modname' NOT FOUND - 'ddname' - 'dsname'

Reason: A BLDL was issued for the module 'modname' in the dataset 'dsname' referenced by 'ddname' and the module was not found. The module is required to support a requested processing function.

Action: Verify that the library dataset name 'dsname' specified on the 'ddname' statement was correct. If incorrect, correct it and resubmit the job. If the dataset name is correct, check the IAM product install listing to see that all steps executed successfully. If required, rerun the installation steps missed. If necessary contact INNOVATION for additional assistance.

IAM531 MODULE 'modname' CONTAINS NO TEXT RECORDS - 'ddname' - 'dsname'

Reason: When an attempt was made to read the module 'modname' in the dataset 'dsname' referenced by 'ddname' and no text records were found. The module is required to support a requested processing function.

Action: Verify that the library dataset name 'dsname' specified on the 'ddname' statement was the correct one. If incorrect, change and resubmit the job. If the dataset name is correct, check the IAM product install listing to see that all steps executed successfully. If required, rerun the installation steps missed. If necessary contact INNOVATION for additional assistance.

IAM532 MODULE 'modname' I/O ERROR READING - 'ddname' - 'dsname'

Reason: When an attempt was made to read the module 'modname' in the dataset 'dsname' referenced by 'ddname' an I/O error was encountered. The module is required to support a requested processing function.

Action: Check the SYNAD error message(s) and MINI DUMP produced to see if the cause of the error is an obvious one. If so, correct and resubmit the job. If necessary contact INNOVATION for additional assistance.

IAM533 MODULE 'modname' I/O ERROR WRITING - 'ddname' - 'dsname'

Reason: When an attempt was made to write the module 'modname' in the dataset 'dsname' referenced by 'ddname' an I/O error was encountered.

Action: This is a serious error which may result in the load module library referenced by 'dsname' being unusable. If necessary, restore or recreate the library. Check the SYNAD error message(s) and MINI DUMP produced to see if the cause of the error is

an obvious one. If so, correct and resubmit the job. If necessary contact INNOVATION for additional assistance.

IAM534 'ddname' OPEN FAILURE -- AVAILABLE COMMANDS: HELP, END

Reason: The required 'ddname' statement could not be OPENed. Commands which access modules in the 'ddname' dataset cannot be executed.

Action: If the 'ddname' dataset is required for the operation being attempted, correct and resubmit the job. Otherwise, none, information only.

IAM535 MODULE 'modname' READ UNSUCCESSFUL -- 'command' BYPASSED

Reason: The user requested function 'command' be performed against module 'modname' but the module was not successfully read. This message will be preceded by message IAM530, IAM531, or IAM532 detailing the reason the read failed.

Action: See message IAM530, IAM531, or IAM532, as required.

IAM538 MODULE 'modname' -- WRONG VER/LEVEL 'ddname' - 'dsname'

Reason: Module 'modname' is a release/version that is incompatible with the load module being executed.

Action: Verify that the 'ddname' DD statement is pointing to the correct library for the product level you expect to use. If incorrect, change and resubmit the job. If the data set name is correct, check the IAM product install listing to see that all steps were executed successfully. If required, rerun the installation steps missed. If necessary, contact INNOVATION for additional assistance.

IAM539 MODULE 'modname' 'function' - 'ddname' - 'dsname'

Reason: The module 'modname' from the dataset 'dsname' referenced by 'ddname' has had function 'function' performed as requested by the user.

Action: None, information only.

IAM540 ccccccc CONTAINS INVALID CHARACTERS -- ZAP REJECTED

Reason: The value specified for the operand 'ccccccc' contained one or more characters that were not A-Z, 0-9, \$#@.

Action: Remove the invalid character(s) and resubmit the job.

IAM541 THE FOLLOWING OPTIONS HAVE BEEN CHANGED IN -- 'dsname'

Reason: The AUDIT function has found changed options in the options table. The changed options will be listed.

Action: N/A

IAM542 ccccccc CONTAINS INVALID INDEX STRUCTURE -- ZAP REJECTED

Reason: The value specified for the operand ccccccc contains two (2) or more consecutive periods (..) in violation of operating system dataset naming conventions.

Action: Correct the error(s) and resubmit the job.

IAM543 ccccccc DOES NOT CONTAIN CHARACTER STRING ccccccc -- ZAP REJECTED

Reason: The value specified for the operand ccccccc does not contain the character string ccccccc as the required start of an index level.

Action: Correct the error(s) and resubmit the job.

IAM544 ccccccc REJECTED -- EXCEEDS MODIFIABLE PORTION OF IAMOPT

Reason: The length of the value specified for the operand ccccccc taken in conjunction with the offset operand exceeds the modifiable portion of the IAMOPT table.

Action: Correct the error(s) and resubmit the job.

IAM545 VERIFY FAILED -- CHAR/HEX PRINT FORCED

Reason: The VERIFY of existing contents failed. A character/hexadecimal print of the module IAMOPT is produced. Always preceded by message IAM544.

Action: See message IAM544.

IAM546 AUDIT REQUEST COMPLETE ALL DEFAULTS SET IN -- 'dsname'

Reason: The AUDIT function has found no changed options in the options table.

Action: N/A

IAM547 AUDIT REQUEST COMPLETE FOR -- 'dsname'

Reason: The AUDIT function has completed. Changes were found and listed.

Action: N/A

IAM550 ERRORS ENCOUNTERED DURING EXECUTION -- REWRITE CANCELED

Reason: One or more modules from the SYSLIB data set were scheduled for rewrite at termination or by the execution of a REWRITE command. However, previous commands failed to complete successfully. The errors encountered have been documented by preceding error messages.

Action: Correct the error conditions documented by the preceding error messages and resubmit the job.

IAM561 NON-NUMERIC DATA VALUE SPECIFIED FOR THE [FROMDATE | TODATE] KEYWORD

Reason: An invalid character string was specified for the indicated keyword.

Action: Correct the error condition. For information on valid values, refer to the IAMSMFVS Section 40.03 of the manual.

IAM562 INVALID VALUE SPECIFIED FOR [FROMDATE | TODATE]

Reason: An invalid numeric string was specified for the indicated keyword.

Action: Correct the error condition. For information on valid values, refer to the IAMSMFVS Section 40.03 of the manual.

IAM569 WARNING - ccccccc NOT CATALOGED - DSN='dsname'

Reason: The dataset 'dsname' indicated is the new default for the file type indicated by ccccccc. A CAMLST LOCATE was issued to verify that the dataset is cataloged as required for IAM to dynamically allocate. The data set name was not found by LOCATE. Message IAM516 detailing the CAMLST return code(s) is always printed following this message.

Action: See message IAM516. This is only a warning message. The data set name listed has become the new name of the indicated default.

IAM574 'request' - DDNAME='ddname' - 'action'

Reason: Failed I/O 'request' resulting in the named 'action':

- ** DD NOT OPEN - EXTRACT REQUEST DENIED
- GET FAILED - EOF FORCED
- CLOSE FAILED - JOB TERMINATED
- OPEN FAILED - COPY REQUEST DENIED
- OPEN FAILED - EXTRACT REQUEST DENIED
- OPEN FAILED - REPORT REQUEST DENIED
- ** OPEN FAILED - REQUEST DENIED
- OPEN FAILED - TO DDNAME COPY DENIED
- RJFCB FAILED - REQUEST DENIED

The 'ddname' shown in the message is required as either INPUT TO or OUTPUT FROM a processing program. An unexpected failing request for an I/O related service against that DDNAME has forced the program to take the remedial action shown in the message text.

Action: Correct the reason for the error and resubmit the job.

IAM600 MAXSTACK VALUE OF nnnnnn EXCEEDED - SMF RCD PROCESSING TERMINATED

Reason: The SMF record processing subcommand being executed utilizes an in storage stack specified by the operand MAXSTACK. This storage stack is full. The specified size is insufficient to allow all of the selected SMF records to be processed. IASMF terminates without producing a report.

Action: Re-execute the program and specify the operand MAXSTACK= with a value greater than the value nnnnnn printed in this message.

IAM601 SMF RECORDS -- READ.nnnnnnnn USED.nnnnnnnn DROPPED.nnnnnnnn

Reason: Documents the SMF records processed as follows:

READ - number of SMF records read from the input data set. May not reflect the total number of records in the data set if an IAM600 message was issued.

USED - number of SMF records selected from the input data set by the criteria specified by the user.

DROPPED- number of SMF records dropped from the input data set because of length checking, or other user specified criteria.

Action: None, information only.

IAM602 FOLLOWING SMF RECORD DROPPED - LENGTH CHECK

Reason: User specified the CHECKLENGTH operand, causing all SMF records selected to be checked against a table of minimum lengths. This record failed the length check. The first 32 bytes of the record are printed in hexadecimal.

Action: Use the keyword RECSIZE=nn on the report control statement to specify an appropriate size.

IAM603 VSAM ERROR -- (DDNAME=DSN='name' 'error description' -- R15=xxxxxxx - CODE=xxxxxxx

Reason: An error occurred during the processing of a VSAM data set. The error description will be one of the following:

- CLOSE failed -- close of VSAM data set.
- GENCB failed -- generation of a control block.
- GET failed -- get next record.
- OPEN failed -- OPEN of VSAM data set.

Action: Check the values of R15 and CODE against the return codes listed in the 'VSAM REFERENCE FOR MVS/370 DFP', 'VSAM ADMINISTRATION: MACRO INSTRUCTION REFERENCE FOR MVS/XA', or 'OS/VS VIRTUAL STORAGE ACCESS METHOD PROGRAMMER'S GUIDE', to determine the cause of the error. If possible, correct and re-execute the job. Call INNOVATION for additional assistance.

IAM619 MODULE 'modname' TOO LARGE TO PROCESS -- 'ddname' - 'dsname'

Reason: IAMZAPOP attempted to read the module 'modname' in the dataset 'dsname' referenced by the statement 'ddname'. The module was required to support a processing functions but, due to the size of the module (or previously read modules), not enough buffer storage was available to complete the read.

Action: Run IAMZAPOP specifying 'ZAP BUFSIZE=nnnn', where nnnn is the size of the buffer in bytes. Specify a value between 122,880 and 3,145,728. After the buffer size has been changed, rerun the job that failed.

IAM620 MAXJOB VALUE OF nnnnn EXCEEDED - ADDITIONAL JOB NAMES BYPASSED

Reason: The maximum number of unique job names tabled by IAMSMFVS has been exceeded. SMF records that match the specified selection criteria but with job names other than those already tabled will be bypassed and not reported.

Action: Specify a MAXJOB value greater than nnnnn but less than or equal to 32,000 and, if required, rerun the job.

IAM621 MAXDSN VALUE OF nnnn EXCEEDED - ADDITIONAL DATA SET NAMES BYPASSED

Reason: The maximum number of unique dataset names tabled by has been exceeded. Records that match the specified selection criteria but with dataset names other than those already tabled will be bypassed and not reported or will be shown in a second report if present.

Action: Specify a MAXDSN value greater than nnnnn but less than or equal to 32,000 and, if required, rerun the job.

IAM622 MAXDSN VALUE OF nnnnn EXCEEDED - ADDITIONAL VSAM CLUSTER RELATIONSHIPS BYPASSED

Reason: IAMSMFVS issues a LOCATE for each ICF/VSAM DATA and/or INDEX component and adds the resulting cluster name to the tabled data set names. Those DATA and/or INDEX components that remain unrelated (I.E.: have not had the cluster name appended) when the value of MAXDSN is exceeded will be printed as unique data sets.

Action: ICF/VSAM clusters can take up to three (3) entries in the dataset name table that is generated from the MAXDSN operand. If you only plan to extract information on ICF/VSAM clusters and you expect to have approximately 1000 clusters listed, specify a MAXDSN no less than 3000. If the error reoccurs, specify a MAXDSN value greater than nnnnn but less than or equal to 32,000 and, if required, rerun the job.

IAM634 SEQUENCE CHECKS FORCE SORTING OF DATA BEFORE IAM CREATION

Reason: The file recovery program found the records it was processing were not in ascending sequential order. An IAM file creation expects the IAM file to be loaded in order. The set of keys the recovery program is processing cannot be used as is to load an IAM file. The Independent Overflow records in an IAM file may not be in collating sequence. Recovery of a file with Independent Overflow could result in this message.

- Type - IOS Request - One of the following, depending on the type of I/O requested: GET, PUT, POINT, ERASE, CHECK or ENDREQ.
- Time - Time the trace record was generated.
- RPL/RBN - The address of the RPL used to request the I/O.
- PLH - The address of the active PLH for this I/O.
- OPTCD - The values of RPLOPTCD1 and RPLOPTCD2 at the time of the request.
- RC/RINFO - blank
- RECLEN - The requested record length (if applicable).
- Key - The records RBA or key (if applicable).

Notes: When trace is activated on a PATH, the trace output is modified to include a suffix to the message number. When the trace entry is for a path, the suffix is "P", for the alternate index the suffix is "X", and for the base cluster, the suffix is "B"

IAM711 IOE 08.33.39.2200 PUT 00023A10 00040298 0000 01FE 0005A000

Reason: This is the I/O End trace detail line. The contents of each field are as follows:

- Type - IOE Request - One of the following, depending on the type of I/O requested: GET, PUT, POINT, ERASE, CHECK or ENDREQ.
- Time - Time the trace record was generated.
- RPL/RBN - The address of the RPL used for this request.
- PLH - The address of the active PLH for this I/O.
- OPTCD - N/A
- RC/RINFO - The return code from the I/O.
- RECLEN - The record length (if applicable).
- Key - The records RBA or key (if applicable)

Notes: When trace is activated on a PATH, the trace output is modified to include a suffix to the message number. When the trace entry is for a path, the suffix is "P", for the alternate index the suffix is "X", and for the base cluster, the suffix is "B"

IAM712 BFR 08.33.39.2300 WRITE 00000026 00040298 1008 0005A1FE

Reason: This is the Buffer Manager trace detail line. The contents of each field are as follows:

- Type - BFR Request - One of the following, depending on the type of processing required: READ, WRITE, RELEASE, FLUSH.
- Time - Time the trace record was generated.
- RPL/RBN - The Relative Block Number (RBN) of the requested data block.
- PLH - The address of the active PLH for this I/O.
- OPTCD - PLH option bytes 1/2.

- RC/RINFO - 'OV' if record was from/to Independent Overflow.
- RECLLEN - N/A.
- Key - The records RBA or key (if applicable).

IAM713 EXCP 08.33.39.2400 READ 00000024 00040298 0001

Reason: This is the EXCP trace detail line. The contents of each field are as follows:

- TYPE - EXCP Request - One of the following, depending on the type of processing required:
- PRFMT - Preformat additional blocks
- WREOF - Write EOF
- WRADD - Write new block
- READ - Read single or multiple blocks
- WRITE - Write single or multiple blocks
- Time - Time the trace record was generated.
- RPL/RBN - Relative Block Number (RBN) of first block processed.
- PLH - The address of the active PLH for this I/O.
- OPTCD - Number of blocks to process.
- RC/RINFO - N/A.
- RECLLEN - N/A.
- Key - N/A.

IAM714 XTND 08.34.02.0100 EXTEND 00000028 00000000 0102 0000 20980001

Reason: This is the XTND trace detail line. The contents of each field are as follows:

- TYPE - XTND Request - One of the following, depending on the type of EXTEND processing required:
- EXPAND - Expand into allocated but unused area.
- EXTEND - Obtain new extent.
- EXP/EXT - Expand and obtain new extent.
- Time - Time the trace record was generated.
- RPL/RBN - RBN of first new block after EXTEND.
- PLH - Number of new index blocks after EXTEND.
- OPTCD - Volume number and extent number of new extent.
- RC/RINFO - Return code from EXTEND processing.
- RECLLEN - N/A.
- Key - EXTEND processing internal flags.

IAM715 hh.mm.ss.nnnn PUT xxxxxxxx ooooooooo rrrrrrrr llllllll kkkkkkkkkkkkkkkkkkkkk

Reason: This is the file load detail trace line. The contents of each field are as follows:

- **hh.mm.ss.nnnn** – Time the request was issued.
- **PUT** – VSAM I/O request type. Normally for file load, this will only be a PUT. Other types of I/O requests (i.e., GET) are invalid during a file load, although if such a request is attempted it will be included on the trace.
- **xxxxxxxx** – The address of the Request Parameter List (RPL), in hexadecimal.
- **oooooooo** – The 4 bytes, in hexadecimal, of the RPL OPTCD field.
- **rrrrrrrr** – The return code and logical error code, in hexadecimal, from the RPLFDBWD field.
- **llllllll** – The length of the record being written to the file, from the RPLRLEN field.
- **kkkkkk...** - The key of the record being written. For ESDS files, this will be the RBA of the record generated by IAM. The key will be displayed in either hexadecimal, or in character, depending on the name of the TRACE DD statement. The key will be continued on subsequent lines, if necessary.

IAM716 +kkkkkkkk

Reason: This is the continuation of the key of the record being processed, from the preceding IAM715 message.

80.04 IAM JOURNAL EXIT WTO MESSAGES**IAMJ01 IAMDD ddname: INITQ BROKEN, JOURNAL PROCESSING TERMINATED.**

Reason: An error occurred during the IAM Journal Exit initialization processing. This error can occur when multiple concurrent I/O requests are active and are requiring service from the IAM Journal Exit while it is attempting to allocate and open the log data set.

Action: I/O requests will continue to be serviced to the IAM data set, however journaling is no longer being done by IAM for the indicated IAM data set. Contact Innovation for assistance.

IAMJ02 IAMDD ddname: ALLOCATION OF LOG FILE FAILED, JOURNAL PROCESSING TERMINATED.

Reason: The dynamic allocation of the log file for the specified IAM data set has failed.

Action: I/O requests will continue to be serviced for the indicated IAM data set, however journaling is not being done. If you are having difficulty determining why the LOG data set is not able to be allocated, contact Innovation for assistance.

IAMJ03 IAMDD ddname: GETMAIN1 FAILED, JOURNAL PROCESSING TERMINATED.

Reason: There is insufficient below the 16 megabyte line storage available in the region for IAM to acquire the storage required to handle the requested journaling. The amount of storage being requested that resulted in this failure is generally less than 2K. The OPEN of the indicated IAM data set will be failed.

Return Codes: A reason code of 188(x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: Generally increasing the REGION parameter for the job step should correct this problem. If it does not, then contact Innovation for assistance. This problem can be circumvented by turning journaling off for this file, through the use of the IAM overrides. (i.e., JRNAD=NONE).

IAMJ04 IAMDD ddname: OPEN OF LOG FILE FAILED, JOURNAL PROCESSING TERMINATED.

Reason: The OPEN of the log file has failed. There should be some IBM messages indicating the cause of the failure.

Action: I/O requests will continue to be serviced for the indicated IAM data set, however journaling is not being done. Correct the error condition based on the information available.

IAMJ05 IAMDD ddname: BUFFER GETMAIN FAILED, JOURNAL PROCESSING TERMINATED.

Reason: There is insufficient storage available to obtain the necessary I/O buffers for the IAM journal processing. For systems that are at a high enough level of DFSMS, the

buffers are requested above the 16 megabyte line, otherwise the storage is requested from below the 16 megabyte line.

Action: I/O requests will continue to be serviced for the indicated IAM data set, however journaling is not being done. The journal exit requests storage for five (5) buffers, so multiply the block size of the data set by 5 to determine storage requirements, and adjust your region parameter as necessary.

IAMJ06 IAMDD ddname: SYNAD MESSAGE GOES HERE.....

Reason: An I/O error has occurred on the IAM Log dataset. Review the I/O error cause from the message displayed.

Action: I/O requests will continue to be serviced for the indicated IAM data set, however journaling is not being done. Correct the problem causing the I/O error.

IAMJ08 IAMDD ddname: LOCATE FAILED FOR THE LOG FILE, JOURNAL PROCESSING TERMINATED.

Reason: In an attempt to prevent allocation and open errors, the IAM Journal exit program will verify that the required log file is in the catalog. If it is not found in the catalog, then the OPEN request for the IAM data set will also fail.

Return Codes: A reason code of 188(x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: **Action:** The OPEN request for the IAM file is failed. Either correct the error condition, or disable IAM journaling for this file and job step through the ACCESS override keyword JRNAD=NONE.

IAMJ09 IAMDD ddname: OBTAIN FAILED FOR THE LOG FILE, JOURNAL PROCESSING TERMINATED.

Reason: The IAM journal exit will attempt to make sure that the required log data set is allocated on the volume indicated by the catalog prior to attempting an allocation and open of this critical file. If the required log data set is not found, then the OPEN for the IAM data set will be failed.

Return Codes: A reason code of 188(x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: Make sure that the required log data set is properly allocated and cataloged. Specifying the IAM ACCESS override JRNAD=NONE can be used to turn off journaling until the cause of the error is found.

IAMJ10 IAMDD ddname: DCB ATTRIBUTES OF LOG FILE ARE INCOMPATIBLE, JOURNAL PROCESSING TERMINATED.

Reason: The IAM journal exit will make sure that the attributes (RECFM, LRECL, and BLKSIZE) are appropriate as needed by the file being logged. If they do not meet the required criteria, the OPEN of the IAM data set will fail.

Return Codes: A reason code of 188(x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: Review the documentation on the IAM journaling exit to make sure that the DCB attributes selected for the LOG data set are appropriate, and change them as necessary. It is best to let IAM determine the DCB attributes, by just allocating the DASD space required for the LOG data set without specifying any DCB attributes.

IAMJ11 **IAMDD ddname: SAVEAREA GETMAIN FAILED, JOURNAL PROCESSING TERMINATED.**

Reason: There is insufficient virtual storage available for the IAM Journal Exit. The OPEN of the IAM data set will be failed. The amount of storage being requested is generally less than 1K, and it can reside in either above or below the 16 megabyte line.

Return Codes: A reason code of 188(x'BC') is stored in the ACB error flags field (ACBERFLG) and the open request is failed with a return code of 8.

Action: Increase the REGION parameter of the job step that is failing with this error.

80.05 IAM/RLS and IAM/PLEX Messages

The following informational and error messages may occur during IAM/RLS or IAM/PLEX processing. They will generally appear on the RLSLOGDD, and some critical error message will appear on the consoles and system logs. For most of the information provided on the messages, the use of IAMRLS or IAM/RLS generally can also occur for IAM/PLEX address spaces. Several of the messages are for diagnostic purposes that will contain information useful only to Innovation technical support personnel.

IAML0001 LOGGING OF MESSAGES DISABLED

Reason: IAMRLS was unable to obtain storage for the message table used by IAMLOGGER and has disabled logging of messages to RLSLOGDD.

Action: Increase the **REGION** size of the **IAMRLS** address space.

IAML0002 GLOBAL NAME TOKEN AREA RETRIEVED

Reason: IAMRLS was able to retrieve and reuse the Global Token area left from a previous iteration of the IAMRLS address space.

Action: None

IAML0003 UNABLE TO START VIF

Reason: IAMRLS received a non-zero return code from IAMSTART while attempting to start VIF.

Action: Check for other messages issued by IAMSTART to the SYSLOG which will provide further information as to the reason VIF could not start.

IAML0004 GETMAIN OR LOCK OBTAIN FAILURE

Reason: IAMRLS could not obtain the local lock needed for a CSA getmain, or there was not enough CSA available to satisfy the CSA getmain request.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0005 GLOBAL NAME TOKEN AREA CREATE FAILED

Reason: IAMRLS was unable to create a Global Token area.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0006 DATASPACE BUILD FAILED

Reason: IAMRLS was unable to create a data space.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0007 SYSEVENT FAILED

Reason: The SYSEVENT macro issued to make the IAMRLS address space non-swappable failed.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0008 LOAD OF SERVICE MODULE FAILED

Reason: IAMRLS was unable to load one of its service modules.

Action: Make sure you have an IAM load library that has all of the modules distributed on the IAM distribution tape included in either the LINKLIST or a JOBLIB/STEPLIB.

IAML0009 LOCAL NAME TOKEN AREA CREATE FAILED

Reason: IAMRLS was unable to create the Local Name Token area.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0010 GETMAIN OF CELL POOL STORAGE FAILED

Reason: IAMRLS was unable to acquire storage for the cell pools set up during initialization.

Action: Raise the region size for the IAMRLS address space.

IAML0011 TASK WORK AREA GETMAIN FAILED

Reason: The getmain for the TASK work area storage failed.

Action: Raise the region size for the IAMRLS address space.

IAML0012 ATTACH PROCESSOR FAILED, CANNOT CONTINUE

Reason: IAMRLS was unable to attach one of its subtasks.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0013 GLOBAL NAME TOKEN AREA DELETED

Reason: IAMRLS deleted the Global Token Area during shutdown.

Action: None.

IAML0014 OPEN/CLOSE TASK ATTACHED

Reason: IAMRLS attached the OPEN/CLOSE subtask.

Action: None.

IAML0015 LOGGING TASK ATTACHED

Reason: IAMRLS attached the LOGGING subtask.

Action: None.

IAML0016 WORKLOAD MANAGER ATTACHED

Reason: IAMRLS attached the WORLOAD MANAGER subtask.

Action: None.

IAML0017 JOURNAL TASK ATTACHED

Reason: IAMRLS attached the JOURNAL subtask.

Action: None.

IAML0018 TRACE TASK ATTACHED

Reason: IAMRLS attached the TRACE subtask.

Action: None.

IAML0019 IAMRLS ESTAE ENTERED FOR ABEND Sxxx

Reason: The ESTAE for module IAMRLS was entered for an abend condition.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0020 PRELOAD OF PROCESSING MODULE FAILED

Reason: IAMRLS was unable to preload some of the processing modules.

Action: Check the IAM load library to make sure it contains all of the modules distributed with the IAM product.

IAML0021 ADDRESS SPACE ALREADY ACTIVE

Reason: IAMRLS detected an address space running under the same name.

Action: None.

IAML0022 IAMBREST SUBTASK ATTACHED

Reason: IAMRLS attached the DYNAMIC BACKOUT subtask.

Action: None.

IAML0023 IAMBWJRN SUBTASK ATTACHED

Reason: IAMRLS attached the Journal Buffer Flush subtask.

Action: None.

IAML0024 IAMBIJNL SUBTASK ATTACHED

Reason: IAMRLS attached the Batch Remote Journal subtask.

Action: None.

IAML0025 BASE NAME TOKEN AREA CREATE FAILED

Reason: IAMRLS was unable to create a Global Token area to be used as an anchor for the Multiple IAMRLS address space support.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0026 IAMRLS ACTIVE WITH RLSID= nnnn

Reason: IAMRLS address space is active, with the indicated RLSID.

Action: None.

IAML0027 RLSID OF TEST IS INVALID, CANNOT CONTINUE

Reason: Specification of an RLSID value of TEST is not permitted on the start up of IAM/RLS or IAM/PLEX. An RLSID of TEST is automatically assigned when an IAM/RLS address space is started with a PARM=TEST on the start command or on the EXEC card in the proc.

Action: Change the value of the RLSID parameter in the startup parameters for the IAM/RLS or IAM/PLEX proc to something other than TEST. If you desire to start a TEST IAM/RLS address space with an RLSID of TEST, then start it with PARM=TEST.

IAML0028 IAMRLS ACTIVE WITH RLSID=rlsid IS A REMOTE RLS ONLY

Reason: Indicates that the IAM/PLEX address space was started with the REMOTERLS parameter. This IAM/PLEX address space can only handle file I/O operations, it cannot be directly connected to users of the IAM/PLEX facilities. This is used when multiple IAM/PLEX address spaces in the same RLSGROUP are active on the same LPAR.

Action: None, informational only message.

IAML0029 BRLOK INITIALIZATION FAILED, CANNOT CONTINUE

Reason: Indicates that the IAM Record Lock Manager initialization has failed. There should be additional messages indicating the exact cause of this failure.

Action: Review the other messages and correct the error condition, then restart the IAM/RLS or IAM/PLEX address space. For assistance, contact Innovation technical support.

IAML0035 CHANGEDSNT REQUEST SENT TO REMOTE RLSID=rlsid

Reason: A CHANGEDSNT operator command issue to an IAM/PLEX address space on one LPAR is propagated to other IAM/PLEX address spaces running on other LPARs that belong to the same RLSGROUP.

Action: Informational only message.

IAML0036 CHANGEDSNT REQUEST REJECTED FOR RLSID=rlsid

Reason: In response to a CHANGEDSNT operator command, this IAM/PLEX address space attempted to send the request to the IAM/PLEX address space with the indicated RLSID. XCF rejected the send request with a non-zero return code.

Action: If the IAM/PLEX address space indicated by the RLSID is either not active or having some type of problem then take appropriate action to correct that error condition. If the IAM/PLEX address space indicated appears to be functioning normally, contact Innovation technical support.

IAML0037 REMOTE CHANGEDSNT REQUEST PROCESSED

Reason: The IAM/PLEX address space issuing this message has received and processed a CHANGEDSNT command that was sent from another IAM/PLEX address space.

Action: None, informational only.

IAML0047 GLOBAL TOKEN AREA NOT FOUND FOR THE RLSID PROVIDED

Reason: The IAMRLSX program was executed to delete the Global Token Area from CSA storage, but the Global Token area for the specified IAM RLS address space did not exist.

Action: None.

IAML0048 RLSID MUST BE PROVIDED TO DELETE THE GLOBAL TOKEN AREA

Reason: The IAMRLSX program was executed to delete the Global Token Area from CSA storage, but the user did not provide the RLSID of the Global Token Area to be deleted.

Action: Add the required RLSID parameter and rerun.

IAML0049 ADDRESS SPACE STILL ACTIVE, ISSUE STOP, QUIESCE, OR QUIESCE FORCE TO DEACTIVATE.

Reason: The IAMRLSX program was executed to delete the Global Token Area from CSA storage, but a flag was set in the token area indicating that IAMRLS was still active.

Action: This program should not be run until the IAMRLS address space has been deactivated. Quiesce IAMRLS and run this program again.

IAML0050 GLOBAL NAME TOKEN AREA DELETED

Reason: IAMRLSX successfully deleted the Global Token Area from CSA storage.

Action: None

IAML0051 - IAML0075 IAMOPCOM MESSAGES

IAML0051 IAMOPCOM WAITING

Reason: IAMOPCOM, the operator communications task for IAMRLS, is waiting for work.

Action: None

IAML0052 IAMOPCOM SHUTTING DOWN

Reason: IAMOPCOM has ended operator communications and is shutting down.

Action: None

IAML0053 IAMOPCOM MODIFY RECEIVED

Reason: IAMOPCOM has received a modify command.

Action: None

IAML0054 IAMOPCOM RECEIVED INVALID COMMAND

Reason: IAMOPCOM has received an invalid command.

Action: Check the spelling and syntax of the command entered.

IAML0055 IAMOPCOM RECEIVED INVALID MODIFY

Reason: IAMOPCOM has received an invalid modify command.

Action: Check the spelling and syntax of the modify command entered.

IAML0056 TRACE COMMAND COULD NOT BE PROCESSED

Reason: IAMOPCOM was unable to load the trace processing program.

Action: Check the contents of the IAM load library to ensure all of the distributed modules are present.

IAML0057 JSWITCH COMMAND COULD NOT BE PROCESSED

Reason: The JSWITCH command was entered to switch the journal datasets but IAMRLS is using the SYSTEM LOGGER for the journal so the switch could not be processed.

Action: None

IAML0058 IAMOPCOM LOAD OF IAMBSTAE FAILED, ESTAE NOT ACTIVE

Reason: IAMOPCOM was unable to load the IAMBSTAE module.

Action: Check the contents of the IAM load library to ensure all of the distributed modules are present.

IAML0059 IAMOPCOM ESTAE ACTIVATION FAILED

Reason: IAMOPCOM was unable to activate it's estae routine.

Action: Contact Innovation for help in diagnosing the cause of this problem.

IAML0060 IAMOPCOM COMMAND INVALID, MISMATCHED QUOTES

Reason: On an APPLY or RESTORE command, the dataset name entered contains mismatched quotes.

Action: Re-enter the command correctly.

IAML0061 IAMOPCOM COMMAND INVALID, MISMATCHED PARENTHESIS

Reason: On an APPLY or RESTORE command, the dataset name entered contains mismatched parenthesis.

Action: Re-enter the command correctly.

IAML0062 MESSAGES COMMAND INVALID

Reason: An invalid MESSAGES command was entered.

Action: Check the syntax of the command and re-enter it correctly.

IAML0063 DISPLAY COMMAND INVALID

Reason: An invalid DISPLAY command was entered.

Action: Check the syntax of the command and re-enter it correctly.

IAML0064 SELECT TABLE DATASET LIST

Reason: This is the header message for the list of SELECT TABLE datasets displayed as a result of the DISPLAY,SELECTTB command.

Action: None

**IAML0065 DSN: dsname or
NO MATCHING DATASETS FOUND**

Reason: This message is written once for every dataset in the Select Table that matches the selection criteria or once if no datasets are found.

Action: None

IAML0066 EXCLUDE TABLE DATASET LIST

Reason: This is the header message for the list of EXCLUDE TABLE datasets displayed as a result of the DISPLAY,EXCLUDETB command.

Action: None

- IAML0067** **DSN: dsname or
NO MATCHING DATASETS FOUND**
- Reason:** This message is written once for every dataset in the Exclude Table that matches the selection criteria or once if no datasets are found.
- Action:** None
- IAML0068** **NO SELECT TABLE DATASET LIST PRESENT**
- Reason:** A DISPLAY,SELECTTB command was entered and no Select Table exists.
- Action:** None
- IAML0069** **NO EXCLUDE TABLE DATASET LIST PRESENT**
- Reason:** A DISPLAY,EXCLUDETB command was entered and no Exclude Table exists.
- Action:** None
- IAML0070** **RELEASELOCKS COMMAND INVALID**
- Reason:** An invalid RELEASELOCKS command was entered.
- Action:** Check the syntax of the command and re-enter it correctly.
- IAML0071** **CLOSEFILE COMMAND INVALID**
- Reason:** An invalid CLOSEFILE command was entered.
- Action:** Check the syntax of the command and re-enter it correctly.
- IAML0072** **GETMAIN FAILED ON CLOSEFILE COMMAND**
- Reason:** The GETMAIN for an OCQ needed for the CLOSEFILE command failed, the close is not done.
- Action:** Check the region size of the IAMRLS address space.
- IAML0073** **CLOSE COMMAND FAILED, O/C TASK NOT ACTIVE.**
- Reason:** The OPEN CLOSE TASK was not active and the close command could not be processed.
- Action:** The QUIESCE,FORCE command may have been entered, if so all files will have been closed. If not then call Innovation for further assistance in diagnosing this problem.
- IAML0074** **RETAINED LOCKS PRESENT, QUIESCE IGNORED**
- Reason:** IAMRLS will not shut down while there are record locks that have been retained due to transaction or job step abend that have not yet been recovered.

Action: Make sure all recovery action has been processed. If you decide not to have the recovery performed, you can either issue the release retained locks commands, or do the QUIESCE with the FORCE operand.

IAML0075 ECHO OF WHATEVER OPERATOR COMMAND IS ENTERED

Reason: This message is issued in confirmation that the IAM/RLS or IAM/PLEX address space has received the indicated operator command.

Action: None required, informational only message.

IAML0076 EXTRA I/O TASK ATTACHED

Reason: An extra I/O subtask was attached to handle an increase in workload.

Action: None

IAML0077 I/O TASK ATTACHED

Reason: This message is issued once for every I/O subtask attached during initialization, till the MINITASK is reached.

Action: None

IAML0086 RLSLOGDD ALLOCATION FAILED, LOGGING DISABLED

Reason: The RLSLOGDD DD statement was not present in the JCL used to start the IAMRLS address space and IAMRLS was not able to dynamically allocate it. Logging is disabled.

Action: If you want logging active, stop IAMRLS and add the RLSLOGDD DD and restart IAMRLS.

IAML0087 RLSLOGDD DEALLOCATED BY LOGSWITCH COMMAND

Reason: The RLSLOGDD has been deallocated due to the issuance of the LOGSWITCH command.

Action: None

IAML0088 RLSLOGDD REALLOCATED BY LOGSWITCH COMMAND

Reason: The RLSLOGDD has been reallocated due to the issuance of the LOGSWITCH command.

Action: None

IAML0089 RLSLOGDD SWITCH COMPLETED

Reason: The switch of the RLSLOGDD to a new sysout dataset has been completed.

Action: None

IAML0090 RLSLOGDD DEALLOCATION FAILED, LOGSWITCH TERMINATED

Reason: The RLSLOGDD could not be deallocated, the LOGSWITCH command has been terminated.

Action: The JOURNAL subtask should have printed out the DYNAMIC ALLOCATION messages indicating the reason for the failure.

IAML0091 IAMBDSNT PROCESSING COMPLETED

Reason: The processing of the SELECT and EXCLUDE lists is complete.

Action: None

IAML0092 RLSLOGDD ALLOCATION FAILED, LOGGING DISABLED

Reason: The RLSLOGDD could not be reallocated, logging to the RLSLOGDD is disabled.

Action: Examine the log for messages indicating the reason for the allocation failure. Call Innovation if you cannot correct the error situation.

IAML0093 RLSLOGDD LOGSWITCH COMPLETE

Reason: The LOGSWITCH command has completed successfully.

Action: None

IAML0094 RLSLOGDD ALLOCATED TO SYSOUT BY IAMLOGGER

Reason: The RLSLOGDD has been dynamically allocated during IAMRLS initialization due to the lack of the RLSLOGDD DD statement in the RLS proc.

Action: None

IAML0095 RLSLOGDD DYNALLOC ERROR, RC= ,RSN=

Reason: The dynamic allocation error codes describing the reason for the dynamic allocation failure.

Action: Take corrective action if possible otherwise call Innovation if you cannot correct the situation.

IAML0096 RLSLOGDD ALLOCATED VIA JCL, CANNOT SWITCH

Reason: The LOGSWITCH command cannot switch the RLSLOGDD if it was allocated via a DD statement in the RLS PROC.

Action: None

IAML0100 TRACE DWA GETMAIN FAILURE - TRACE REQUEST FAILED

Reason: The trace processor was unable to obtain storage for its work area.

Action: Check the region size of the IAMRLS address space and increase if needed.

IAML0101 TRACE SUBTASK NOT ACTIVE - TRACE REQUEST FAILED

Reason: The TRACE subtask is not active, tracing cannot be activated.

Action: Check the RLSLOGDD and JESLOG to determine why the TRACE subtask was not started. Call Innovation for help in diagnosing this problem.

IAML0102 TRACE REQUEST COMPLETED SUCCESSFULLY

Reason: A TRACE request has completed successfully.

Action: None

IAML0103 TRACE REQUEST FAILED

Reason: A TRACE request has failed.

Action: Call Innovation for help in diagnosing the problem.

IAML0104 INVALID TRACE KEYWORD - TRACE REQUEST FAILED

Reason: An invalid keyword was entered on a TRACE request.

Action: Check the syntax of the command entered and re-enter it correctly.

IAML0105 TRACE ID REQUIRED. ENTER ID= OR CANCEL

Reason: A trace ID is required on a TRACE request.

Action: Enter a trace ID or CANCEL in response to the WTOR.

IAML0106 TRACE JOB AND/OR DSN REQUIRED. ENTER JOB=, DSN= OR CANCEL

Reason: A jobname and/or a dataset name is required for a TRACE request.

Action: Enter a JOB=jobname or DSN=dsname or CANCEL in response to the WTOR.

IAML0108 TRACE TYPE REQUIRED. ENTER TR= OR CANCEL

Reason: The type of TRACE records to record is required on a TRACE request.

Action: Enter one or more of the record types in response to the WTOR, for example: TR=(IOS,IOE,BFR,EXCP,XTND,PC)

IAML0109 TRACE REQUEST MUST BE START, STOP, LIST OR CANCEL

Reason: One of the above keywords must be present in the TRACE request.

Action: Re-enter the TRACE request specifying either START, STOP, LIST, or CANCEL.

- IAML0110 TRACE_ID=xxxxxxx**
- Reason:** Output from a TRACE request showing the TRACE ID.
- Action:** None
- IAML0111 TYPE=IOS,IOE,BFR,EXCP,XTND,PC**
- Reason:** Output from a TRACE request showing the TRACE TYPES.
- Action:** None
- IAML0112 DSN=dsname**
- Reason:** Output from a TRACE request showing the DSNAME being traced.
- Action:** None
- IAML0113 JOBNAME=jobname**
- Reason:** Output from a TRACE request showing the JOBNAME being traced.
- Action:** None
- IAML0114 STEPNAME=stepname**
- Reason:** Output from a TRACE request showing the STEPNAME.
- Action:** None
- IAML0115 OUTDD=ddname**
- Reason:** Output from a TRACE request showing the OUTPUT DD.
- Action:** None
- IAML0116 TRACE_ID ALREADY ACTIVE. TRACE REQUEST FAILED**
- Reason:** A TRACE request with the same TRACE ID was already active, the current request is terminated.
- Action:** If this is a new request use a different TRACE ID, if you want to change the old request, STOP it first then restart it with the new options.
- IAML0117 SPECIFIED TRACE_ID NOT FOUND. TRACE NOT DEACTIVATED**
- Reason:** A TRACE,STOP command was issued but an active TRACE with the ID requested was not active.
- Action:** None
- IAML0118 NO ACTIVE TRACE REQUESTS FOUND**
- Reason:** No active trace requests were found to list on the TRACE,LIST command.

Action: None

IAML0119 TRE GETMAIN FAILURE. TRACE REQUEST FAILED

Reason: A GETMAIN for a trace element failed causing the trace request to be failed.

Action: Check the region size of the IAMRLS address space, contact Innovation for assistance in diagnosing this problem.

IAML0120 TRACE OUTPUT OPEN FAILURE. TRACE REQUEST FAILED

Reason: The TRACE processor could not open the requested trace output file.

Action: Make sure the file is allocated and has sufficient space.

IAML0121 TRACE OUTPUT DCB GETMAIN FAILURE. TRACE REQUEST FAILED

Reason: The GETMAIN for the trace output DCB failed. The TRACE request is failed.

Action: Check the region size of the IAMRLS address space, contact Innovation for assistance in diagnosing this problem.

IAML0122 OUTPUT DD FOR TRACE_ID xxxxxxxx IS ddname

Reason: Output from a TRACE request showing the OUTPUT DD.

Action: None

IAML0123 IAM ADDRESS SPACE TRACE REQUEST:

Reason: Output header line for a trace request.

Action: None

IAML0124 TRACE_ID xxxxxxxx DEACTIVATED

Reason: The trace id in the message has been deactivated.

Action: None

IAML0125 TRACE_ID xxxxxxxx QUEUED

Reason: A trace request has been queued and will become active when the requested selection criteria have been met.

Action: None

IAML0126 TRACE_ID xxxxxxxx ALREADY ACTIVE

Reason: An active trace request is already active with the trace id requested on a new trace request.

Action: If this is indeed a new request, choose a new trace id.

IAML0127 INVALID TRACE KEYWORD IN PARMLIB - TRACE REQUEST FAILED

Reason: An invalid trace keyword was detected, the trace request fails.

Action: Correct the trace keyword in error.

IAML0128 INVALID DSN SPECIFIED - TRACE REQUEST FAILED

Reason: An invalid dataset name was specified on a trace request, the trace request is failed.

Action: Re-enter the trace request with a valid dataset name.

IAML0129 DATASET ALLOCATION FAILED

Reason: Allocation of the output dataset for a trace request failed.

Action: Make sure the output dataset exists and is available for use.

IAML0130 LOG OF USER TRACE REQUEST

Reason: Log entry of the trace request as entered by the user.

Action: None

IAML0150 dsname OPENED DD=ddname J=jobname S=stepname I=jobid

Reason: DSNNAME X.Y.Z DDNAME DDDDDDDD under JOBNAME JJJJJJ and STEPNAME SSSSSS using PROGRAM PPPPPPP was successfully opened by IAMRLS.

Action: None

IAML0151 dsname OPEN FAILED DD=ddname J=jobname S=stepname I=jobid

Reason: The indicated dataset was not successfully opened by IAMRLS.

Action: None

IAML0152 dsname DYNALOC FAILED RC=nnnn DD=ddname J=jobname S=stepname I=jobid

Reason: The indicated dataset could not be dynamically allocated by IAMRLS.

Action: None

IAML0153 dsname CLOSED DD=ddname J=jobname S=stepname I=jobid

Reason: The indicated dataset was successfully closed by IAMRLS.

Action: None

- IAML0154 dsname CLOSE FAILED DD=ddname J=jobname S=stepname I=jobid**
- Reason:** DSNAME X.Y.Z DDNAME DDDDDDDD under JOBNAME JJJJJJ and STEPNAME SSSSSS using PROGRAM PPPPPPP was not successfully closed by IAMRLS.
- Action:** None
- IAML0155 dsname DYNDEAL FAILED RC=nnnnnnnn DD=ddname J=jobname**
- Reason:** IAMRLS attempted to de-allocate the indicated dataset, but encountered a failure.
- Action:** Determine cause of the problem from the return codes. Contact Innovation technical support if further assistance is needed.
- IAML0156 dsname CLOSE COMMANDS ISSUED DUE TO IAMRLS REQUEST**
- Reason:** In response to an operator command the indicated dataset has been closed.
- Action:** None
- IAML0157 dsname OPEN REQUESTED BY RLSID=rlsid CPUID=xxxxxxx**
- Reason:** The indicated dataset has been opened for processing by the indicated IAMPLEX region.
- Action:** None.
- IAML0158 dsname CLOSE REQUESTED BY RLSID=rlsid CPUID=xxxxxxx**
- Reason:** The indicated dataset has been closed due to a request from the indicated IAMPLEX region.
- Action:** None
- IAML0167 IAMBROC-IAMBSTAE LOAD FAILED - ESTAE NOT ACTIVE**
- Reason:** The remote open/close task that is responsible for sending those requests to a remote IAM/PLEX instance encountered a non-zero return code when attempting to load the IAMBSTAE load module. The task will continue to operate however will not have ESATE protection for recovery should the task experience an abend condition.
- Action:** Notify Innovation technical support for assistance.
- IAML0168 IAMBROC-ESTAE ACTIVATION FAILED**
- Reason:** The remote open/close task that is responsible for sending those requests to a remote IAM/PLEX instance encountered a non-zero return code when attempting to activate an ESTAE environment. The task will continue to operate however will not have ESATE protection for recovery should the task experience an abend condition.
- Action:** Notify Innovation technical support for assistance.

IAML0169 IAMBROC-SCHEDULE FAILED RC=xxxxxxx J=jobname S=stepname I=jobid

Reason: The request to schedule an SRB in the address space identified by the indicated job step failed with the indicated return code, displayed as hex digits. This SRB was intended to resume processing within that job step on completion of the open or close request being handled by IAM/PLEX.

Action: If the indicated job step is no longer active, then no action is necessary. If the indicated job step is active, obtain a dump of this IAM/PLEX address space and the batch job indicated then notify Innovation technical support for assistance. The job will most likely have to be cancelled and restarted.

IAML0173 RLSID=rlsid IS NO LONGER CONNECTED TO GROUP=rlsgroup

Reason: The IAM/PLEX instance identified by the indicated RLSID is no longer connected to the indicated RLSGROUP. Message is issued during termination processing of the indicated IAM/PLEX instance.

Action: None.

IAML0174 REMOTE NAME TOKEN AREA DELETED FOR RLSID=NNNN

Reason: The IAM/PLEX instance identified by the indicated RLSID has deleted its name token area. Message is issued during termination processing of the indicated IAM/PLEX instance.

Action: None.

IAML0175 RLS SYSPLEX GROUP INFORMATION FOR RLSID=CCCC

Reason: This message appears in response to a DISPLAY,GROUP command issued on an IAM/PLEX instance identified by the indicated RLSID. It will be followed by subsequent IAML0176 messages.

Action: None.

IAML0176 RLSID=rlsid,CPUID=ccccccc,STATUS=[ACTIVE|CREATED|QUIESCED|FAILED|NOT-DEF]

Reason: This message appears in response to a DISPLAY,GROUP command issued on an IAM/PLEX instance identified by the indicated RLSID on the preceding IAML0175 message. This message displays the known IAM/PLEX instances by RLSID and CPUID that are associated with the same RLSGROUP indicated by the IAML0175 message, along with the current status.

Action: None.

IAML0177 REMOTE OPEN REQUESTED RLSID=rlsid CPUID=ccccccc

Reason: An IAM/PLEX address space received a request to open an IAM file that is being processed by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance, and will send the open request to the indicated TARGET IAM/PLEX instance.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0178 REMOTE OPEN COMPLETED RLSID=rlsid CPUID= cccccc RC=xxxxxxx

Reason: An IAM/PLEX address space received a request to open an IAM file that is being processed by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance having received a response from the TARGET RLSID with the associated return code has completed the open processing.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0179 REMOTE CLOSE REQUESTED RLSID=rlsid CPUID= cccccc

Reason: An IAM/PLEX address space received a request to close an IAM file that has opened by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance, and will send the close request to the indicated TARGET IAM/PLEX instance.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0180 REMOTE CLOSE COMPLETED RLSID=rlsid CPUID=ccccc RC=xxxxxxx

Reason: An IAM/PLEX address space received a request to close an IAM file that has been opened by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance having received a response from the TARGET RLSID with the associated return code has completed the close processing.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0181 REMOTE TERMINATE REQUESTED RLSID=rlsid CPUID=ccccc

Reason: An IAM/PLEX address space received a request for job step termination of a job step that had one or more IAM files handled by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance and has sent the job step termination request to the TARGET RLSID.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0182 REMOTE TERMINATE COMPLETEX RLSID=rlsid CPUID=ccccc RC=xxxxxxx

Reason: An IAM/PLEX address space received a request for job step termination of a job step that had one or more IAM files handled by the remote RLS instance identified by the RLSID on the message. This IAM/PLEX instance issuing this message is acting as a ROUTER in this circumstance having received a response from the TARGET RLSID has completed termination processing.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0183 IAMBROC RESPONSE RECEIVED FROM TARGET RLSID=rlsid CPUID=cccccccc

Reason: An IAM/PLEX remote open/close task has received a response from a prior request to a target address space.

Action: None, informational message. This message is only displayed when the MESSAGES=ALL parameter has been specified.

IAML0184 IAMBROC XCF FAILURE DURING cccc REQUEST/RESPONSE, TARGET RLSID=rlsid

Reason: An error was encountered either sending or receiving a message from XCF. There should be a message preceding this message with more details.

Action: Search for preceding message for details on the failure, and take the associated action.

IAML0185 IAMBROC function IXCMMSGO FAILURE RC=xx REAS=xxxxxxx TARGET=rlsid CPUID=cupid

Reason: The transmission of the indicated request type that was destined for the indicated target IAM/PLEX address space failed with the indicated return and reason code.

Action: Check the return code and reason code to determine the cause of the error. If it is an environmental factor, correct the problem. Take a dump of the IAM/PLEX address space that issued the message with the IAMPLEX operator command of DUMP. Then contact Innovation technical support for assistance if needed.

IAML0186 IAMBROC TERM RLSID=rlsid NOT CURRENTLY ACTIVE

Reason: A router IAM/PLEX instance received a job step termination request which needed to be sent to the indicated TARGET IAM/PLEX instance, however the Target IAM/PLEX address space was not active.

Action: No action is necessary if the indicated IAM/PLEX region is not active. If it is active, enter a DISPLAY,GROUP command and dump the IAM/PLEX address space, then contact Innovation technical support with t requested information.

IAML0187 IAMRLS ROUTER ENTRY NOT FOUND AFTER function RLSID=rlsid...

Reason: The Target IAM/PLEX did not find the indicated Router IAM/PLEX instance. Because of that, it was unable to return a response back to the originating system.

Action: If the Target system is still running and the job did not abend, the job will need to be cancelled.

IAML0188 IAMBOC function XCF RESPONSE SENT TO ROUTER

Reason: The Target IAM/PLEX instance has responded to the Router IAM/PLEX upon completion of the indicated function.

Action: None, informational only message.

**IAML0189 IAMBOC EXTERNAL function status RLSID=rlsid CPUID=cupid MSGID=msgid
JOB=jobname**

Reason: This message is displayed by the TARGET IAM/PLEX address space indicating the processing of an open or close request from an external ROUTER IAM/PLEX instance.

Action: None, this is an informational message that is only displayed when the MESSAGES=ALL parameter is set.

IAML0190 dsname OPEN-type DD=ddname J=jobname S=stepname I=job#####

Reason: Message issued by IAM/PLEX ROUTER on completion of an open request on a TARGET system. The "type" will be either "I" for input only, or "U" for update. The rest of the information provided is based on the job that had requested the open.

Action: None, informational only message followed by an IAML0191 message.

IAML0191 dsname OPENED ON RLSID=rlsid CPUID=xxxxxxx

Reason: Message issued by IAM/PLEX ROUTER on completion of an open request on a TARGET system. This message will follow the IAML0190 message, and provide information on the TARGET IAM/PLEX instance that actually did the open.

Action: None, informational only message followed by an IAML0191 message.

IAML0192 dsname CLOSED DD=ddname J=jobname S=stepname I=job#####

Reason: Message issued by IAM/PLEX ROUTER on completion of a close request on a TARGET system. The rest of the information provided is based on the job that had requested the open.

Action: None, informational only message followed by an IAML0191 message.

IAML0193 Dsname CLOSED ON RLSID=rlsid CPUID=xxxxxxx

Reason: Message issued by IAM/PLEX ROUTER on completion of a close request on a TARGET system. This message will follow the IAML0192 message, and provide information on the TARGET IAM/PLEX instance that actually did the close.

Action: None, informational only message followed by an IAML0191 message.

IAML0200 INSUFFICIENT STORAGE FOR ADDITIONAL RECORD LOCKS

Reason: IAMBRLOK was unable to obtain more storage for lock tables. The I/O that requested the record lock is failed.

Action: Make sure IAMRLS has sufficient storage in the area being used for the record locks.

IAML0201 INSUFFICIENT STORAGE FOR ADDITIONAL OWNER ELEMENTS

Reason: IAMBRLOK was unable to obtain more storage for owner elements. The I/O that requested the record lock is failed.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0202 INSUFFICIENT STORAGE FOR DEADLOCK DETECTION

Reason: IAMBRLOK was unable to obtain more storage for deadlock detection tables. Processing continues, however a dead lock situation is possible.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0203 RECORD LEVEL LOCKING ALREADY INITIALIZED

Reason: A call has been made to IAMBRLOK to perform initialization and IAMBRLOK has detected that initialization has already been done.

Action: Call Innovation for help in diagnosing this problem.

IAML0204 INSUFFICIENT STORAGE FOR LOCK HASH TABLE

Reason: IAMBRLOK was unable to obtain more storage for a lock hash table.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0205 INSUFFICIENT STORAGE FOR RECORD LOCKS

Reason: IAMBRLOK was unable to obtain storage for record locks during initialization. The startup of IAM/PLEX instance will be failed.

Action: Either increase storage via REGION or if locks are to be in 64-bit storage increase the MEMLIMIT parameter for more storage. Alternatively, reduce the value for MAXLCKS. Then restart the failing IAM/PLEX instance.

IAML0206 INSUFFICIENT STORAGE FOR LOCK OWNER TABLE

Reason: IAMBRLOK was unable to obtain more storage for lock owner tables. The IAM/PLEX or IAM/RLS startup has failed.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0207 INSUFFICIENT STORAGE FOR LOCK OWNER POOL

Reason: IAMBRLOK was unable to obtain storage for a lock owner pool. The IAM/PLEX or IAM/RLS startup has failed.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0208 INSUFFICIENT STORAGE FOR DEADLOCK DETECTION

Reason: IAMBRLOK was unable to obtain storage for deadlock detection tables. The IAM/PLEX or IAM/RLS startup has failed.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

IAML0209 INSUFFICIENT STORAGE FOR LOCK WORK AREA

Reason: IAMBRLOK was unable to obtain storage for a lock work area. If this occurs during initialization of the IAM/RLS or IAM/PLEX instance, the startup will be failed. If this occurs during regular processing, the request being process will be failed.

Action: Make sure IAMRLS has sufficient region size in the startup jcl.

**IAML0210 DEADLOCK CONDITION DETECTED, I/O REQUEST FAILED FOR J=jobname
S=stepname DD=ddname**

Reason: A deadlock condition was detected for DD=ddname J=JOBNAME S=STEPNAME. The I/O request is failed.

Action: Wait for the other user of the resource to end and resubmit the job.

**IAML0211 LOCKS HAVE BEEN RETAINED FOR JOB ASID=xxxx J=jobname S=stepname
I=jobid**

Reason: In response to a DISPLAY,RETAINEDLOCKS, this message indicates for what job steps record locks were retained due to an abend.

Action: None, informational message only.

IAML0212 RL DSN=dsname ASID=xxxx J=jobid S=stepname I=jobid

Reason: In response to a DISPLAY,RETAINEDLOCKS,DSN. This message indicates the dataset name, and associated jobstep for which record locks have been retained. A group of these messages is preceded by message IAML0211.

Action: None, informational message only.

IAML0213 NO LOCKS RETAINED

Reason: In response to a DISPLAY,RETAINEDLOCKS command, this message indicates that there are no retained locks.

Action: None, informational message only.

IAML0214 RETAINED LOCKS FOUND, SEE RLSLOGDD

Reason: In response to a DISPLAY,RETAINEDLOCKS command. The list of retained locks is displayed in the RLSLOGDD.

Action: None, informational message only.

IAML0215 Dsname LOCKED ASID=xxxx J=jobname S=stepname I=jobid

Reason: In response to a DISPLAY,CONTENTION command, indicates that the specified job has record locks held for the identified dataset.

Action: None, informational message only.

**IAML0216 MAXLOCK CONDITION DETECTED, I/O REQUEST FAILED FOR DD=12345678
J=12345678 S=12345678**

Reason: The batch job indicated in the message attempted to exceed concurrently holding more record locks than specified by the IAM/RLS or IAM/PLEX startup parameter value for MAXLOCKS. This results in failing this and any subsequent I/O requests that require record locks unless locks are released. The reason for this action is to prevent IAM/RLS or IAM/PLEX address space failures due to storage shortages that can be caused by holding an excessive number of record locks at one time.

Action: This batch job step needs to be revised to either (1) use the AUTOSYNCPPOINT function, (2) incorporate calls to the IAM batch Syncpoint routine to release locks, or (3) set some of the files being processed to a non-recoverable state by turning off before image journaling.

IAML0217 NO RECORD LOCK CONTENTION FOUND

Reason: In response to a DISPLAY,CONTENTION command, indicates that no record lock contention was detected, meaning that no I/O requests are waiting for record lock.

Action: None, informational message only.

IAML0218 RECORD LOCK CONTENTION FOUND, SEE RLSLOGDD

Reason: In response to a DISPLAY,CONTENTION command, indicates that record lock contention exists. This means that some I/O requests are waiting for a record lock. Additional details on what is waiting can be found in messages in the RLSLOGDD.

Action: Review the RLSLOGDD for more information on the lock contention.

IAML0219 LOCK CONTENTION FOUND FOR FOLLOWING KEY:

Reason: In response to a DISPLAY,CONTENTION command, indicates the specified records that are experiencing contention.

Action: None, informational message only.

**IAML0220 UNABLE TO OBTAIN 64-BIT STORAGE FOR LOCKS RC= xx REASON=xxxxxxx
REQUESTED x,xxx,xxx MEGABYTES OF 64-BIT STORAGE**

Reason: During initialization of an IAM/PLEX or IAM/RLS address space, IAM was not able to obtain the required amount of 64-bit virtual storage to use for the record locking structures. The IAM/PLEX or IAM/RLS address space will terminate due to this problem.

Action: Make sure to provide an adequate MEMLIMIT value on the EXEC card of the PROC or in the system SMFPRMxx so that IAM can obtain the necessary storage. Alternatively the amount of storage requested can be reduced by lowering the MAXLOCKS parameter however that may result in subsequent failures if the number of concurrently held record locks requires more storage and is unable to obtain it at that time.

IAML0222 BRLOK SYNCPOINT

Reason: A SYNCPOINT request was issued by the indicated job or CICS transaction.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0223 IAMBRLOK ENTERED FOR CICS SYNCPOINT/TX END

Reason: A SYNCPOINT request was issued by a CICS transaction.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0224 IAMBRLOK FOUND MATCHING CICS TX OID

Reason: Indicates that IAMBRLOK found an entry for the CICS transaction that had issued a SYNCPOINT and will perform the syncpoint processing.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0225 IAMBRLOK ENTERED FOR JOB STEP TERMINATION

Reason: IAMBRLOK was entered to perform cleanup of locks for a job step termination.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0226 IAMBRLOK JOB STEP END RELEASING LOCKS

Reason: IAMBRLOK has released record locks during a job step end.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0227 IAMBRLOK JOB ABENDED, RETAINING LOCKS

Reason: IAMBRLOK has retained record locks after a job abend.

Action: Insure that a backout recovery is performed for this file, then release the locks if not already done so by IAMRLS.

IAML0228 IAMBRLOK BATCH SYNCPOINT RELEASING LOCKS

Reason: IAMBRLOK has been called from the batch syncpoint exit to release locks following a syncpoint exit call from the batch program.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0229 IAMBRLOK ENTERED FOR BATCH SYNCPOINT

Reason: IAM RLS lock manager has been called to release locks from a job issuing batch syncpoints.

Action: None, this message is informational only and will only be displayed when the MESSAGES=ALL parameter has been set.

IAML0230 JOBSTEP NORMAL TERMINATION ASID=xxxx J=jobname S=stepname I=jobid

Reason: The indicated job step, which had IAM files opened to IAM RLS, has completed without an abend.

Action: None, informational message only.

IAML0230 JOBSTEP ABEND TERMINATION ASID=xxxx J=jobname S=stepname I=jobid

Reason: The indicated job step has abnormally terminated. If the job was accessing recoverable datasets, then any record locks that were held will be retained until a recovery is performed.

Action: None, informational message only.

IAML0230 ADDRSPACE ABEND TERMINATION ASID=xxxx J=jobname S=stepname I=jobid

Reason: IAMBTERM has detected an address space termination of a job that was processing IAM datasets under IAM RLS. This message will only appear if an address space fails without having gone through the step termination.

Action: None, informational message only.

IAML0232 RECORD LOCKS RETAINED ASID=xxxx J=jobname S=stepname I=jobid

Reason: Record locks held by the specified job were retained due to an abend or because of address space failure.

Action: Make sure that a file recovery is performed, which will release the retained locks.

**IAML0233 QUEUED DYNAMIC BACKOUT REQUEST ASID=xxxx J=jobname S=stepname
I=jobid**

Reason: IAM RLS posted the dynamic job backout task to perform a backout on the indicated job step due to an abend or address space failure.

Action: Verify from subsequent messages that the backout was performed and that it released the retained locks.

**IAML0234 TERMINATION PROCESSING COMPLETED ASID=xxxx J=jobname S=stepname
I=jobid**

Reason: IAM RLS step termination processing has completed for the indicated job step. This means that any record locks held by the job step were either released, or retained as needed.

Action: None, this is an informational message only.

IAML0240 RELEASE RETAINED LOCKS REQUESTED ASID=xxxx J=jobname S=stepname I=jobid

Reason: A RELEASELOCKS command has been issued for the indicated job. Any information not provided on the command will be printed as asterisks.

Action: None, informational message only.

IAML0241 FOUND FOLLOWING MATCHING JOB ASID=xxxx J=jobname S=stepname I=jobid

Reason: In response to a RELEASELOCKS command, IAM RLS has found the indicated job with record locks.

Action: None, informational message only.

IAML0242 RETAINED LOCKS RELEASED FOR ASID=xxxx J=jobname S=stepname I=jobid

Reason: IAM RLS released the retained record locks held for the indicated job step.

Action: None, informational message only.

IAML0243 REQUESTED JOB NOT FOUND ASID=xxxx J=jobname S=stepname I=jobid

Reason: The job specified on a RELEASELOCKS command could not be found.

Action: Issue either a DISPLAY,RETAINEDLOCKS or DISPLAY,CONTENTION to get a list of job(s) which currently have locks, and supply more job identification on the RELEASELOCKS command.

IAML0244 NONE RELEASED, MORE THAN 1 MATCH ASID=xxxx J=jobname S=stepname I=jobid

Reason: In response to a RELEASELOCKS command, IAM RLS found more than one matching job. No record locks were released

Action: Reissue the RELEASELOCKS command with more specific job identification, as can be found on the preceding IAML0241 messages.

IAML0245 LOCK RELEASE REQUEST FAILED

Reason: IAM was unable to release any locks. The job may not have had any retained locks.

Action: None.

IAML0246 TERMINATING JOB OID NOT FOUND ASID=xxxx J=jobname S=stepname I=jobid

Reason: A job termination request was given to the IAM/RLS or IAM/PLEX address however IAM had no record of the job.

Action: None.

IAML0247 IXCMMSGO FAILED, RC=xx REAS=xxxxxxx RLS=r/sid J=jobname S=stepname I=jobid

Reason: A TARGET IAM/PLEX instance processed termination for a job, however the attempt to respond to the ROUTER IAM/PLEX instance failed with the indicated return and reason codes.

Action: If unable to correct the problem from the provided information, contact Innovation technical support for assistance.

IAML0250 IAMBREST INITIALIZATION FAILURE. BATCH BACKOUT NOT AVAILABLE

Reason: The automatic batch backout was either unable to obtain storage or encountered an invalid environment during initialization and is unable to process.

Action: Contact Innovation technical support for assistance.

IAML0251 BACKOUT REQUESTED ASID=xxxx J=xxxxxxx S=xxxxxxx I=xxxxxxx

Reason: The automated job backout process has started processing a backout for the failed job that is indicated in the message.

Action: None.

IAML0252 BACKOUT COMPLETE ASID=xxxx J=xxxxxxx S=xxxxxxx I=xxxxxxx

Reason: The automated job backout has completed processing for the indicated failed job.

Action: None.

IAML0253 Name_of_dataset_allocated_for BACKOUT DD=xxxxxxx J=xxxxxxx I=xxxxxxx

Reason: Indicates the name(s) of the IAM datasets allocated to updated by the backout process.

Action: None.

IAML0254 J=xxxxxxx S=xxxxxxx I=xxxxxxx (JOURNAL I/O TRACE MSG)

IAML0255 IAMBREST DATASPACE INIT FAILURE. BACKOUT WITHOUT DATASPACE

Reason: IAMBREST requested Data Space storage, however that request failed. IAMBREST continues processing without the use of Data Space storage.

Action: Notify Innovation technical support of problem.

IAML0256 IAMBREST REQUIRED JOURNAL DATASET ALLOCATION FAILURE. BACKOUT NOT PERFORMED

Reason: IAMBREST could not allocated a required journal dataset.

Action: Make sure all journal datasets are properly cataloged and available. If so, then contact Innovation technical support for assistance.

IAML0257 BACKOUT FAILED ASID=xxxx J=jobname S=stepname I=jobid

Reason: The dynamic job backout processing has failed.

Action: Contact Innovation technical support. Attempt to perform backout manually with the IAMJREST utility.

IAML0275 IAMRLS STORAGE SHORTAGE OBTAINING IOQ OR OCQ CELL

Reason: IAM/PLEX or IAM/RLS was unable to obtain additional storage for the control block used to manage an I/O or open/close request.

Action: Attempt to take a dump of the IAM/PLEX or IAM/RLS address space with the F iamplex,DUMP operator command, then notify Innovation technical support for assistance.

IAML0276 I/O REQUEST SENT TO TARGET=rtsid CPUID=cupid MSGID=xxxxxxxx

Reason: The IAM/PLEX instance acting as a router has sent an I/O request to the target IAM/PLEX.

Action: None, informational only. Message will only appear when the MESSAGES=ALL parameter has been specified.

IAML0277 I/O RESPONSE RECEIVED FROM TARGET=xxxx CPUID=xxxxxxxxx MSGID=xxxxxxxx

Reason: The IAM/PLEX router has received a response for an I/O request from the target IAM/PLEX.

Action: None, informational only. Message will only appear when the MESSAGES=ALL parameter has been specified.

IAML0278 I/O ERROR RESPONSE FROM TARGET=rtsid CPUID=cupid MSGID=xxxxxxxx

Reason: The IAM/PLEX router has received a response for an I/O request from the target IAM/PLEX that indicates an error was encountered with IAM/PLEX processing.

Action: Obtain a dump of the IAM/PLEX target and router address spaces, and notify Innovation technical support.

IAML0279 I/O ERROR - TARGET TERMINATED - TARGET=rtsid CPUID=cupid

Reason: A router IAM/PLEX address space had been posted by recovery for an I/O request sent to the indicated target.

Action: If the indicated target IAM/PLEX instance is operational, notify Innovation technical support.

IAML0280 I/O EXPECTED RESPONSE - TARGET=rIsid CPUID=cupid

Reason: A router IAM/PLEX address space received an invalid response from the target IAM/PLEX address space for the I/O request.

Action: Take a dump of both the router and target IAM/PLEX address spaces as soon as possible, and contact Innovation technical support for assistance.

IAML0281 IAMBIO REQ xxxxX xxxx/xxxxxxxx MSGID=xxxxxxxx LEN=xxxxxxxx

Reason: The target IAM/PLEX address space has received the indicated I/O request from the router IAM/PLEX address space and is beginning processing of that request.

Action: None, informational only message that is only issued when the MESSAGES=ALL parameter is set.

IAML0282 IAMBIO RESP xxxxX xxxx/xxxxxxxx MSGID=xxxxxxxx FDBK=xxxxxxxx

Reason: The target IAM/PLEX address space has completed processing the indicated I/O request and is sending the response back to the router.

Action: None, informational only message that is only issued when the MESSAGES=ALL parameter is set.

IAML0283 IAMBPC07 IOQ=xxxxxxxx OBTAINED FOR REMOTE I/O OCQ=xxxxxxxx

Reason: The router IAM/PLEX has received an I/O request destined for another IAM/PLEX address space, and has obtained the internal control block necessary for the request.

Action: None, informational only message that is only issued when the MESSAGES=ALL parameter is set.

IAML0284 IAMBPC07 IOQ=xxxxxxxx REQUEUED AFTER REMOTE I/O OCQ=xxxxxxxx'

Reason: The router IAM/PLEX has received a response from the target IAM/PLEX address space for an I/O request and is releasing the internal control block necessary for the request.

Action: None, informational only message that is only issued when the MESSAGES=ALL parameter is set.

IAML0285 IAMBPC02 SYNCPOINT REQUEST IOQ=xxxxxxxx

Reason: The router IAM/PLEX has received a syncpoint request.

Action: None, informational only message that is only issued when the MESSAGES=ALL parameter is set.

IAML0502 GETMAIN1 FAILED, JOURNAL PROCESSING TERMINATED

Reason: A getmain for the journal work area failed during journal processing initialization, journal processing is terminated.

Action: If journal processing is desired, make sure the IAMRLS address space has a big enough region size to satisfy its storage needs and restart the address space.

IAML0504 BUFFER GETMAIN FAILED, JOURNAL PROCESSING TERMINATED

Reason: A getmain for the journal output buffers failed during journal processing initialization, journal processing is terminated.

Action: If journal processing is desired, make sure the IAMRLS address space has a big enough region size to satisfy its storage needs and restart the address space.

IAML0506 SYNAD MESSAGE

Reason: The synad exit was entered during I/O to a journal file.

Action: Call Innovation for help in diagnosing this problem.

IAML0507 LOCATE FAILED FOR JOURNAL DSN dsname

Reason: A locate failed for the specified journal dataset during the initialization process for journaling.

Action: Make sure the dataset names provided in the startup parameters are correct and that the datasets are properly cataloged.

IAML0508 OBTAIN FAILED FOR JOURNAL DSN dsname

Reason: An obtain failed for the specified journal dataset during the initialization process for journaling.

Action: Make sure the dataset names provided in the startup parameters are correct and that the dataset(s) exist on the volumes to which they are cataloged.

IAML0510 IAMBJRNL CLOSED DSN - DDD.DDD.DDD**IAML0511 IAMBJRNL USING DSN - dsname**

Reason: The journal processor has selected the specified dataset for journal use.

Action: None, informational message only.

IAML0512 JOURNALING HAS BEEN DISABLED

Reason: Journaling has been disabled for IAMRLS processing either due to an initialization error or because no journal datasets have been provided and SYSLOGGER has not been selected.

Action: If journaling is desired, fix the initialization error or specify journal datasets or SYSLOGGER in the IAMRLS startup parameters.

IAML0513 CONNECT FAILED TO LOGSTREAM: logstreamid

Reason: IAMBJRNL was unable to connect to the specified journal logstream.

Action: Make sure the system coupling facility policies have been defined correctly and the SYSTEM LOGGER is available on your CPU.

IAML0514 INIT OF JOURNAL FILES FAILED

Reason: IAMBJRNL was unable to complete initialization of the journal files.

Action: Make sure the dataset names provided in the IAMRLS parmlib member for journal datasets is correct, and that they exist on dasd and have available space.

IAML0515 IAMBJRNL THE NEXT JOURNAL FILE IS NOT EMPTY, JOURNAL FILE SWITCH HAS FAILED.

Reason: A JSWITCH command was entered to force a journal switch or a journal dataset has filled causing an automatic switch, but the next journal dataset is not empty.

Action: This will be followed by message IAML0534 requesting you ready the next journal dataset and respond "U" or reply "Q" to terminate the IAMRLS address space.

IAML0516 IAMBJRNL DSN - dsname DEALLOCATED

Reason: A journal dataset was deallocated.

Action: The data in the indicated journal should be copied to another dataset on tape or dasd, and the indicated journal dataset should then be emptied.

IAML0517 IAMBJRNL DEALLOCATION FAILED FOR DSN- dsname

Reason: The deallocation of a journal dataset failed.

Action: Call Innovation for help in diagnosing this problem.

IAML0518 IAMBJRNL DSN - dsname ALLOCATED

Reason: A Journal dataset has been allocated for use.

Action: None, informational message only.

IAML0519 IAMBJRNL ALLOCATION FAILED FOR DSN- dsname

Reason: The allocation of a journal dataset has failed.

Action: IAMRLS should switch to the next journal dataset if possible. Call Innovation for help in diagnosing this problem.

IAML0520 IAMBJRNL CONNECTED TO LOGSTREAM: logstream

Reason: The name of the System Logger Logstream that IAMRLS connected to for journal processing is displayed.

Action: None, informational message only.

IAML0525 IAMDD ddname: SHUTDOWN IN PROGRESS OR JOURNAL PROCESSING TERMINATED

Reason: The journal exit tried to journal a request for IAMDD ddname and was unsuccessful due to IAMRLS shutting down or the IAMRLS journal processing was terminated.

Action: Check the RLSLOGDD and JESLOG for other messages indicating why journal processing has been terminated or why IAMRLS is shutting down. Call Innovation for help in diagnosing this problem.

IAML0526 IAMDD ddname: GETMAIN1 FAILED, JOURNAL PROCESSING TERMINATED

Reason: The journal exit, IAMJRNRL, could not obtain storage for a journal work area for IAMDD ddname.

Action: Journaling for this dd is terminated. Make sure that the IAMRLS address space has enough region size specified at startup time.

IAML0527 IAMDD ddname: SAVEAREA GETMAIN FAILED, JOURNAL PROCESSING TERMINATED

Reason: The journal exit, IAMJRNRL, could not obtain storage for a save area to schedule a journal request to the journal subtask.

Action: Journaling for this dd is terminated. Make sure that the IAMRLS address space has enough region size specified at startup time.

IAML0528 IAMDD ddname: IXGWRITE FAILED, RC= nn ,RSNCD= nnnnn

Reason: The journal exit has received a failing return code from the System Logger during a write operation.

Action: Call Innovation for help in diagnosing this problem.

IAML0529 IAMDD ddname: JOURNAL UPDATE FAILED

Reason: The journal subtasks work area could not be found to schedule a journal request for IAMDD ddname.

Action: The journal request is not scheduled and the journal entry is lost. Contact Innovation for help in diagnosing this error.

IAML0530 IAMDD ddname: JOURNAL PROCESSING TERMINATED, JOURNAL ENTRIES LOST.

Reason: There is a problem with the journal buffer queue and a journal entry has not been able to be written.

Action: Check the RLSLOGDD and JESLOG for other messages indicating the source of the journaling problem. Call Innovation for help in diagnosing this error.

- IAML0531** **IAMDD ddname: IXGWITES FAILING, JOURNAL PROCESSING TERMINATED**
- Reason:** The journal exit is receiving failing return codes from the System Logger. Journal processing is terminated.
- Action:** Call Innovation for help in diagnosing this problem.
- IAML0533** **IAMBJRNL INITIALIZATION OF JOURNAL FILES FAILED, IAMRLS WILL QUIESCE.**
- Reason:** The journal subtask was unable to initialize any of the journal datasets provided in the IAMRLS parmlib.
- Action:** Make sure the dataset names provided in the IAMRLS parmlib are correct, that the datasets exist on dasd and have available space.
- IAML0534** **READY DSN dsname, THEN REPLY 'U', OR REPLY 'Q' TO TERMINATE IAMRLS**
- Reason:** The next journal dataset was not empty during a switch operation.
- Action:** Empty dataset dsname, then reply 'U' to continue journal processing, or reply 'Q' to terminate the IAMRLS address space.
- IAML0535** **ONLY 1 JOURNAL DATASET WAS PROVIDED, REPLY 'U' TO REUSE THE SAME DATASET, OR REPLY 'Q' TO TERMINATE IAMRLS.**
- Reason:** The single journal dataset has been filled. IAMRLS needs operator response to start reusing the dataset in order to preserve the data. All I/O requests that need to be journaled will be delayed until a response is provided.
- Action:** Copy off the data from the journal dataset, then reply U to continue processing. Consider adding additional journal datasets to the IAMRLS region so that delays such as this can be eliminated.
- IAML0536** **OFFLOAD PROCESSING FOR LOGSTREAM nnnnnnnn.nnnnnn COMPLETED, RC=xxxx,RSN=xxxx**
- Reason:** The requested offload process for the logstream journal has completed with the indicated return and reason codes.
- Action:** None if the return code is 0. If the return code is other than 0, determine the cause of the problem. Contact Innovation technical support if assistance is needed.
- IAML0551** **IAMSYNC STORAGE OBTAIN FAILED, NO SYNCPOINT RECORD WRITTEN**
- Reason:** IAMSYNC was unable to obtain storage for a work area and will not be able to write the syncpoint record for the batch program that called it.
- Action:** Make sure the batch job has sufficient region size to satisfy the storage request.

IAML0552 IAMSUNC ATTEMPT TO LOAD IAMASPT FAILED, NO SYNCPOINT RECORD WRITTEN

Reason: IAMSUNC was unable to load module IAMASPT to perform syncpoint processing.

Action: Check the LINKLIST/JOBLIB/STEPLIB and make sure that the batch job has access to the IAM load library where module IAMASPT is located.

IAML0561 IAMASPT UNABLE TO LOAD IEANTRT, NO SYNCPOINT RECORD WRITTEN

Reason: IAMASPT was unable to load the IBM module IEANTRT to perform name token services. Without this module IAMASPT cannot write a syncpoint record.

Action: Make sure that IBM's common services library, SYS1.CSSLIB, is in the LINKLIST or that programs have access to it.

IAML0562 IAMASPT RECEIVED RETURN CODE nnn FROM TOKEN SERVICES, NO SYNCPOINT RECORD WRITTEN

Reason: IAMASPT was unable to retrieve the Global Token Area for the IAMRLS address space and cannot perform SYNCPOINT services.

Action: Check to see that IAMRLS is active, if not start it and restart the job. If it is active, call Innovation for help in diagnosing this problem.

IAML0563 IAMASPT RECEIVED RETURN CODE nnn FROM ALESERV EXTRACT, NO SYNCPOINT RECORD WRITTEN

Reason: The IAM batch syncpoint process encountered an error when invoking the IBM ALESERV service.

Action: Contact Innovation for assistance.

IAML0564 IAMASPT HAS TRIED TO EXCEED THE LIMIT OF 103 FILES, NO SYNCPOINT RECORD WRITTEN

Reason: The IAM batch syncpoint process has a limit of 103 IAM files.

Action: Either reduce the number of files that the program is using, or contact Innovation for assistance.

IAML0565 IAMASPT FOUND IAM RLS MARKED AS INACTIVE IN THE GLOBAL TOKEN Area, NO SYNCPOINT RECORD WRITTEN

Reason: IAMRLS has been marked as inactive and no syncpoint services are available.

Action: Determine why the IAMRLS address space is inactive and if possible, restart IAM RLS then restart the batch job.

- IAML0566** **IAMASPT FOUND IAM RLS MARKED AS QUIESCE FORCE IN THE GLOBAL TOKEN, NO SYNCPOINT RECORD WRITTEN**
- Reason:** A QUIESCE, FORCE condition exists in the IAMRLS address space and it is longer accepting requests.
- Action:** Determine why the IAMRLS address space has been quiesced.
- IAML0567** **IAMASPT RECEIVED ETURN CODE nnn FROM THE RLS JOURNAL CALL, NO SYNCPOINT RECORD WRITTEN**
- Reason:** The syncpoint writer in RLS encountered an error.
- Action:** Check this job log and the RLS job log for other error messages and contact Innovation for assistance.
- IAML0571** **IAMBSYNC UNABLE TO OBTAIN STORAGE; NO SYNCPOINT WRITTEN**
- Reason:** IAMBSYNC was unable to obtain storage for a work area, the syncpoint record could not be written.
- Action:** Make sure the job has a large enough region size when started to accommodate all of the storage required.
- IAML0572** **IAMBSYNC FOUND JOURNAL-IN-TROUBLE FLAG ON IN THE IWA, NO SYNCPOINT WRITTEN**
- Reason:** The journal subtask has set a bit in the IWA indicating that initialization failed or that journaling is not active. The syncpoint record cannot be written.
- Action:** Browse the RLSLOGDD and JESLOG for additional messages to determine why the journal subtask is not active.
- IAML0573** **IAMBSYNC FOUND AN ADDRESS OF ZERO IN THE GLOBAL TOKEN FOR THE JOURNAL'S TWA, NO SYNCPOINT WRITTEN**
- Reason:** There was no task work area for the journal subtask in the Global Token Area. The subtask has either failed or was not activated.
- Action:** Browse the RLSLOGDD and JESLOG for additional messages to determine why the journal subtask has failed or is not active.
- IAML0574** **IAMBSYNC FOUND JOURNAL FULL BIT ON AFTER WAITING FOR THE JOURNAL WRITE, NO SYNCPOINT WRITTEN**
- Reason:** There is a problem with the journal output buffers, the syncpoint record cannot be written.
- Action:** Call Innovation for help in diagnosing this problem.

- IAML0575** **IAMBSYNC IXGWRITE FAILED; RC=nn, RSNCN=nnnn, NO SYNCPOINT RECORD WRITTEN**
- Reason:** IAMBSYNC attempted to write a syncpoint record to the System Logger, and the write failed with the indicated return and reason codes.
- Action:** Browse the RLSLOGDD and JESLOG for additional messages that might indicate why the System Logger Connection is not working. Call Innovation for help in diagnosing this problem.
- IAML0576** **IAMBSYNC'S CALL TO RELEASE THE LOCKS HELD BY THIS JOB FAILED**
- Reason:** A call to release the record locks held by this job has failed.
- Action:** Call Innovation for help in diagnosing this problem.
- IAML0577** **IAMBSYNC FOUND AN INVALID OCQ IN THE PARAMETER LIST, OCQ BYPASSED**
- Reason:** The batch syncpoint process encountered an invalid pointer to an expected open dataset. Processing will continue with the next open dataset for this job, if any.
- Action:** Contact Innovation technical support.
- IAML0578** **IAMBSYNC IXCMMSGO MESSAGE NOT ACCEPTED SYNCPOINT NOT COMPLETED**
- Reason:** The attempt by a router IAM/PLEX to send an request to a target IAM/PLEX for syncpoint processing has failed.
- Action:** Contact Innovation technical support.
- IAML0579** **IAMBSYNC IXCMMSGO RESPONSE MESSAGE NOT ACCEPTED SYNCPOINT NOT COMPLETED**
- Reason:** The target IAM/PLEX address space failed notifying the router IAM/PLEX that it had completed syncpoint processing.
- Action:** Contact Innovation technical support.
- IAML0580** **IAMBSYNC'S CALL TO FIND THE OID FOR THIS JOB FAILED**
- Reason:** Syncpoint processing attempted to find the control information for the job that issued the syncpoint, but was unable to do so.
- Action:** Contact Innovation technical support.
- IAML0581** **IAMBIJNL UNABLE TO OBTAIN STORAGE, NO BATCH JOURNAL PROCESSING WILL TAKE PLACE**
- Reason:** The batch journal task was unable to obtain storage and no batch journal processing can happen.
- Action:** Restart IAM RLS with more storage.

- IAML0582** **IAMBIJNL FOUND JOURNAL-IN-TROUBLE FLAG ON IN THE TWA; NO JOURNAL RECORD WRITTEN**
- Reason:** The batch journal task was found an unexpected flag value and cannot proceed.
- Action:** Dump the IAM RLS address space and contact Innovation.
- IAML0583** **IAMBIJNL FOUND A ZERO ADDRESS IN THE GLOBAL TOKEN FOR THE JOURNAL'S TWA, NO JOURNAL WRITTEN**
- Reason:** The batch journal task cannot process without a valid address for the journal task's work area.
- Action:** Dump the IAM RLS address space and contact Innovation.
- IAML0584** **IAMBIJNL FOUND JOURNAL FULL BIT ON AFTER WAITING FOR JOURNAL WRITE, NO JOURNAL RECORD WRITTEN**
- Reason:** The batch journal task has encountered a journal full condition after waiting for the journal task.
- Action:** Dump the IAM RLS address space and contact Innovation.
- IAML0585** **IAMBIJNL IXGWRITE FAILED; RC=., RSNCD=....., NO JOURNAL RECORD WRITTEN**
- Reason:** The batch journal task has received a non-zero return code from the system log write.
- Action:** Dump the IAM RLS address space and contact Innovation.
- IAML1000** **IAMRLS/CICS Initialization complete. IAM RLS Support active vn.n/mIP (xxxxxxx)**
- Reason:** Informational message indicating that IAM CICS exits have successfully completed initialization and shows the Version release modification level of the IAM code.
- Action:** None
- IAML1001** **IAMRLS/CICS is connected to IAM RLS with RLSID = <id>**
- Reason:** Informational message showing that the IAM CICS exits have successfully connected to the IAM/RLS (or IAM/PLEX) region which has an RLSID of <id>.
- Action:** None

IAML1003 IAMXCINI - IAM PLT Stage <i> initialization has <status> or IAM vn.n/mIP.

where: <i> = [II or III] CICS Initialization phase

where: <status> = { begun | ended }

Reason: Informational message showing that the IAM CICS program IAMXCINI has been invoked by CICS initialization during the specified Phase.

Action: None

IAML1004 IAMXCINI - IAM TRUE exit program IAMBCICS has been ENABLED.

Reason: Informational message showing that the IAM CICS program IAMXCINI has successfully installed the IAM TRUE (task related user exit) program and enabled it for the current CICS execution.

Action: None

IAML1005 IAMXCINI - IAM GLUE exit program IAMXFCBO has been ENABLED at EXIT(XFCBOUT).

Reason: Informational message showing that the IAM CICS program IAMXCINI has successfully installed the IAM GLUE (global user exit) program at the specified CICS exit point and has enabled it for the current CICS execution.

Action: None

IAML1006 IAMXCINI - IAM GLUE exit program IAMXFCBO has been STARTED at EXIT(XFCBOUT).

Reason: Informational message showing that the IAM CICS program IAMXCINI has successfully started the IAM GLUE (global user exit) program at the specified CICS exit point which causes CICS to invoke the exit whenever the specified exit point gets driven.

Action: None

IAML1007 IAMXCINI - IAM TRUE exit program IAMBCICS has been STARTED.

Reason: Informational message showing that the IAM CICS program IAMXCINI has successfully started the IAM TRUE (Task related User exit) program. The IAM exit is fully active when this message occurs.

Action: None

IAML1008 IAMXCINI - IAM GWA-global work area is at: x('xxxxxxx')

Reason: Informational message showing the address of the IAM Global Work Area (GWA) that gets allocated when the IAM Task related User exit) program is initially "ENABLED". This area is utilized to communicate with an associated IAM/RLS (or IAM/PLEX) address space.

Action: None

IAML1009 IAMXCINI - IAM Initialization ENQUEUE was issued.

Reason: Informational message showing the IAM initialization has issued a z/OS Enqueue within the CICS address space to control and serialize IAM actions within the CICS region.

Action: None

IAML1011 IAMXCINI - IAM program: <pgmnam> was loaded at x('xxxxxxx').

Reason: Informational message showing the address within the CICS region that an IAM program has been loaded by CICS program load services.

Action: None

IAML1012 IAMXCINI - IAM program: <pgmnam> was not loaded.

Reason: Informational message showing that the specified IAM program was not loaded within the CICS address space. This is a normal message as the program may be a feature of IAM not utilized, such as the IAM GLUE IAMXFCAB which is part of the IAMRLS Record Lock Timeout function.

Action: None

IAML1013 IAMXCINI - IAM PLT program is being invoked more than one time during PLT Stage <i>.

where: <i> = [II or III]

Reason: Informational message showing that the specified IAM PLT program was invoked by CICS more than once during the specified CICS initialization Phase.

Action: Check your PLTPI statements for any duplicate IAM program entities within each section of the PLT (there should be an entry in the PLT for IAMX CINI both before and after the DELIM entry).

IAML1014 IAMXCINI - IAM requires a PLTPI Stage II entry for IAMXCINI with CICS TS 3.1 and above in PLTPI.

Reason: Diagnostic message showing that IAM requires both a CICS PLT Phase II and Phase III entry at CICS TS v3.1 and above in order for IAM to fully initialize and function with an associates IAMRLS region.

Action: Check your PLTPI statements making sure there are two entities within each section of the PLT (there should be an entry in the PLT for IAMXCINI both before and after the DELIM entry).

IAML1015 IAMXCINI - IAMXFCBO not ENABLED during PLT Stage II;Resp='xxxxxxx' Resp2='xxxxxxx' EIBRCODE='xxxxxxx'

Reason: Diagnostic message showing that IAM was unable to ENABLE the IAM GLUE exit program IAMXFCBO during PLT Stage II. Without the exit IAMXFCBO enabled, backout and syncpoint calls to an associates IAMRLS region will be fully functional, causing a data integrity exposure.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. Correct the indicated underlying cause and restart CICS

IAML1021 IAMXCINI - ILLOGICAL ERROR on INQUIRE PROGRAM(<pgmnam>); Resp='xxxxxxx' Resp2='xxxxxxx' EIBRCODE='xxxxxxx'

Reason: Diagnostic message showing that IAM was unable to execute the INQUIRE PROGRAM function for the specified program.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. Correct the indicated underlying cause and restart CICS

IAML1022 IAMXCINI - NOTAUTH ERROR on INQUIRE PROGRAM(<pgmnam>); Resp='xxxxxxx' Resp2='xxxxxxx' EIBRCODE='xxxxxxx'

Reason: Diagnostic message showing that IAM was unable to execute the INQUIRE PROGRAM function for the specified program.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. Correct the indicated underlying cause and restart CICS

IAML1023 IAMXCINI - PGMIDERR ERROR on INQUIRE PROGRAM(<pgmnam>); Resp='xxxxxxx' Resp2='xxxxxxx' EIBRCODE='xxxxxxx'

Reason: Diagnostic message showing that IAM got a PGMIDERR when it did an INQUIRE PROGRAM function for the specified program.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. Correct the indicated underlying cause and restart CICS

**IAML1030 IAMXCINI - INVEXITREQ ERROR on EXTRACT EXIT PROGRAM(<pgmnam>)
Resp='xxxxxxx' Resp2='xxxxxxx' EIBRCODE='xxxxxxx'**

Reason: Diagnostic message showing that IAM got an INVEXITREQ when an EXTRACT EXIT PROGRAM functioned to obtain the address of the IAM GWA associated with the IAM GLUE Exit program.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. IAM uses the GWA to communicate with an associated IAMRLS (or IAM/PLEX) region for sharing IAM files. Without this IAM will not be able to fully function. Determine and correct the indicated underlying cause and restart CICS

IAML1033 IAMXCINI - IAM EXIT PROGRAM(<pgmnam>) is already ENABLED.

Reason: Diagnostic message showing that IAM found there to already be an existing program <program> defined to the CICS region as an exit program.

Action: Review the CICS CSD / RDO definitions for a pre-existing definition matching the specified program <pgmname>. All of IAM's CICS programs begin with the prefix IAM and should be treated as a reserved program name. Rename, remove or delete the other non-IAM created definitions corresponding to the specified program <pgmname> and restart CICS

IAML1034 IAMXCINI - IAM EXIT POINT(<pgmnam>) is invalid.

Reason: Diagnostic message showing that IAM got a UNKNOWN error response code when it did an INQUIRE PROGRAM function for the specified program.

Action: Check load libraries for valid load module <prgname> as it may not be an marked as an executable load module. Refresh the load module <pgmname> from the IAM distribution library.

IAML1035 IAMXCINI - IAM EXIT PROGRAM(<pgmnam>) is not defined to CICS.

Reason: Diagnostic message showing that IAM got a undefined error response code when it did an INQUIRE PROGRAM function for the specified program.

Action: Check CICS traces or prior messages to determine why the IAM exit program <pgmname> did not get defined.

IAML1036 IAMXCINI - IAMBCICS exit global work area length exceeds maximum.

Reason: Diagnostic message showing that IAM got a length error response code when it attempted to define the IAM Global User Exit (GLUE) program.

Action: Check in the CICS logs and message output for any possible storage violations or overlays. Dump the CICS region and retain the generated dump, contact IAM support at Innovation for further assistance and directions.

**IAML1039 IAMXCINI - UNKNOWN ERROR on INQUIRE PROGRAM(<pgmnam>
Resp='xxxxxxx' Resp2='xxxxxxx').**

Reason: Diagnostic message showing that IAM got a UNKNOWN error response code when it did an INQUIRE PROGRAM function for the specified program.

Action: Check in the CICS SPI Programming Reference, for the explanation of the CICS response (RESP=xxxxxxx), the CICS Response2 (RESP2=xxxxxxx) and the EIBRCODE values. Correct the indicated underlying cause and restart CICS

IAML1040 IAMXCINI - IAM abnormal condition occurred. Reply GO or CANCEL.

Reason: Diagnostic message showing that IAM ran into a situation during initialization and determined it could not continue further with initialization.

Action: Reply "GO" to continue with CICS initialization without IAM being fully functional within the CICS region or reply with "CANCEL" to cause a full CICS region dump to be generated. Retain the generated dump, contact IAM support at Innovation for further assistance and directions.

IAML1041 IAMXCINI - An EXEC CICS PERFORM DUMP has been issued.

Reason: Diagnostic message showing that IAM ran into a situation that was illogical and determined a dump was necessary.

Action: Review the installation of IAM, reinstalling if necessary within the CICS environment if a discrepancy is uncovered. Retain the generated dump, contact IAM support at Innovation for further assistance and directions.

IAML2000 IXCJOIN RC=NNNNNNNN,RSN=NNNNNNNN,GROUP=CCCCCCCC

Reason: Results of IXCJOIN from IAMRLS during startup.

Return Codes: RC=00000004 and RSN=00000004 indicates first member to join the RLSGROUP. RC=00000000 and RSN=00000000 indicates members have already joined the group.

Action: If any other return or reason codes issued, call Innovation for assistance. Otherwise no action needed.

IAML2001 IAMRLS GETMAIN FOR XCF AREA STORAGE FAILED.

Reason: There was insufficient storage available to obtain the work area needed for XCF processing.

Action: Will be followed by message IAML2021 IAMRLS SYSPLEX INITIALIZATION FAILED, IAMRLS WILL TERMINATE. Check your REGION parameters for the a IAMRLS address space.

IAML2002 IAMRLS IXCJOIN FAILED.

Reason: The IXCJOIN issued by IAMRLS failed, IAMRLS is unable to complete SYSPLEX initialization.

Action: Will be followed by message IAML2021 IAMRLS SYSPLEX INITIALIZATION FAILED, IAMRLS WILL TERMINATE. Call Innovation for assistance.

IAML2003 IAMRLS GETMAIN OF LOCAL XCF WORKAREA FAILED.

Reason: There was insufficient storage available to obtain the local work area needed for XCF processing.

Action: Will be followed by message IAML2021 IAMRLS SYSPLEX INITIALIZATION FAILED, IAMRLS WILL TERMINATE. Check your REGION parameters for the a IAMRLS address space.

IAML2004 IAMRLS MAXIMUM MEMBERS IN THIS RLSGROUP HAVE BEEN EXCEEDED, NO MORE ROOM FOR MEMBER ENTRIES.

Reason: The limit of 40 members in an RLSGROUP has been exceeded.

Action: You cannot start another IAMRLS region with this RLSGROUP until one active member of the group is quiesced and leaves the group.

IAML2005 IAMXCFS1 HAS BEEN POSTED FOR RLSID=CCCC

Reason: The XCF Group User Exit has been notified of an event like a member joining or leaving a group, and has posted the IAMXCFS1 subtask to process the event and update the status of the group.

Action: None

IAML2006 IAMXCFS1 GETMAIN FAILED

Reason: There was insufficient storage available to obtain the work area needed for the IAMXCFS1 subtask.

Action: Quiesce the IAMRLS region and check your Region parameters for the IAMRLS address space. The subtask will not be available to process XCF status updates until you recycle with sufficient REGION for the work area to be obtained.

IAML2007 IAMXCFS1 HAS BEEN ATTACHED

Reason: The IAMXCFS1 subtask has been attached during IAMRLS startup.

Action: None.

IAML2008 IXCQUERY RC=NNNNNNNN,RSN=NNNNNNN

Reason: The IAMXCFS1 subtask has issued an IXCQUERY to obtain the status information for an RLSGROUP.

Return Codes: The return and reason codes should always be zero. If an RC=00000004 RSN=00000004 is returned, it indicates the number of member entries returned exceeded the length of a work area. The subtask will getmain a new larger area and reissue the IXCQUERY.

Action: For any return or reason codes other than mentioned above, call Innovation for assistance.

IAML2009 IAMXCFS1 HAS BEEN POSTED WHILE INIT IN PROGRESS

Reason: The IAMXCFS1 subtask was posted to do work during its initialization.

Action: None, the subtask will be posted again after initialization completes.

IAML2010 IAMXCFS1 NEEDS MORE STORAGE FOR MEMBER ENTRIES

Reason: The limit of 40 members in an RLSGROUP has been exceeded.

Action: You cannot start another IAMRLS region with this RLSGROUP until one active member of the group is quiesced and leaves the group.

IAML2011 IAMXCFS1 GETMAIN FAILED FOR LARGER ANSWER AREA, ALL MEMBERS CANNOT BE PROCESSED.

Reason: The IAMXCFS1 subtask was unable to acquire enough storage to process all of the members in the RLSGROUP.

Action: Call Innovation for assistance. You may not have enough REGION available for this IAMRLS address space.

IAML2012 IAMRLS SYSPLEX INITIALIZATION FAILED, IAMRLS WILL TERMINATE.

Reason: IAMRLS was unable to complete initialization of the SYSPLEX environment.

Action: This message will be preceded by another message indicating the reason why initialization failed.

IAML2013 PARMLIB CONTAINS ERRORS, CANNOT CONTINUE

Reason: The parmlib processor returned an error condition during startup.

Action: Check the IAMRLS system log and RLSLOGDD for messages indicating which parms were in error.

IAML2014 OPTION TABLE TYPE INCORRECT, IAMRLS WILL TERMINATE

Reason: There is a mismatch between the global option table and the level of module IAMRLS.

Action: Contact Innovation for assistance.

IAML2015 LEVEL MISMATCH BETWEEN IAMPLEX AND IAMRLS, IAMPLEX WILL TERMINATE

Reason: There is a mismatch between the level of the IAMPLEX module and the level of module IAMRLS.

Action: Contact Innovation for assistance.

- IAML2016** **IAMPLEX MODULE MUST BE USED IF A RLSGROUP IS PROVIDED, IAMRLS WILL TERMINATE**
- Reason:** The procedure that was used to start this IAMRLS region has provided and RLSGROUP in its startup parms but is executing PGM=IAMRLS.
- Action:** To use IAM SYSPLEX services with an RLSGROUP, PGM=IAMPLEX must be used.
- IAML2017** **RLSGROUP MUST BE PROVIDED WHEN EXECUTING IAMPLEX, IAMPLEX WILL TERMINATE**
- Reason:** The procedure that was used to start this IAMRLS region has used PGM=IAMPLEX indicating it will use SYSPELX services, but has not provided an RLSGROUP.
- Action:** When requesting SYSPLEX services by coding the PGM=IAMPLEX in the startup procedure, and RLSGROUP must be provided in the startup parmlib.
- IAML2018** **IAMPLEX CANNOT BE USED, NOT LICENSED FOR IAMPLEX SUPPORT. IAMPLEX WILL TERMINATE**
- Reason:** The procedure that was used to start this IAMRLS region has used PGM=IAMPLEX indicating it will use SYSPLEX services, but this site is not licensed for IAMPLEX.
- Action:** Change the procedure to use PGM=IAMRLS, or contact Innovation for assistance.
- IAML2019** **DATASET NAME TABLE ALREADY IN STORAGE, TABLE PROCESSING BYPASSED**
- Reason:** Another IAMRLS region has already processed the dataset name table and this IAMRLS region will use the one already in storage.
- Action:** None. If a change is required for the dataset name table then you can use the F IAMRLSnn,CHANGEDSNT command.
- IAML2300** **IXCMGSI FAILED, RC=xx REAS=xxxxxxx MSGID=xxxxxxx R=rlsid T=rlsid**
- Reason:** IAM/PLEX attempted to retrieve the XCF message data being sent, but encountered the indicated error. The routing (R=) and the target (T=) rlsids are provided.
- Action:** Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.
- IAML2302** **INSUFFICIENT STORAGE FOR ANOTHER OCQ POOL**
- Reason:** The target IAM/PLEX address space was unable to obtain the necessary storage to process an OPEN or a job step termination request. The target IAM/PLEX will attempt to send a message back to the router IAM/PLEX to notify it of the problem.
- Action:** Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2303 MSG IGNORED, INVALID MSG TYPE OF ###

Reason: An IAM/PLEX address space received an invalid message from XCF. The message will be ignored.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2304 TARGET OCQ VALIDATION FAILED, OCQ @ xxxxxxxx

Reason: The target IAM/PLEX address space encountered a validation error on a close request. The file may have already been closed. The target IAM/PLEX will attempt to send a message back to the router IAM/PLEX to notify it of the problem.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

**IAML2305 ROUTER OCQ VALIDATION FAILED, OCQ @ xxxxxxxx BAD OCQ ADDRESS
TOKEN MISMATCH
OCQ TOKEN MISMATCH
MESSAGE ID MISMATCH**

Reason: The router IAM/PLEX address space encountered a failure in validating a response to a close or job termination request.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

**IAML2306 REQ FOR MSG STORAGE FAILED, RC=xx LENGTH = n MSGID=xxxxxxx R=rlsid
T=rlsid**

Reason: The IAM/PLEX message processing exit was unable to obtain storage to process a message from XCF.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2307 REQUIRED MSG DATA NOT SENT, MSGID=xxxxxxx R=rlsid T=rlsid

Reason: The IAM/PLEX message processing exit received an invalid message.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2308 UNEXPECTED XPL TYPE / LENGTH, MSGID=xxxxxxx R=xxxx T=xxxx

Reason: An IAM/PLEX address space received an invalid message from XCF. The message will be ignored.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2312 INSUFFICIENT STORAGE FOR ANOTHER IOQ POOL

Reason: The target IAM/PLEX address space was unable to obtain the necessary storage to process an I/O or a syncpoint request. The target IAM/PLEX will attempt to send a message back to the router IAM/PLEX to notify it of the problem which will result in a failing return code for the request.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2314 TARGET IOQ ALREADY IN USE, IOQ @ xxxxxxxx MSGID=xxxxxxx

Reason: The target IAM/PLEX address space received an I/O request for an IOQ (RPL) that was already busy processing an I/O request. The router will be notified of the error and result in a failing return code on the originator of the I/O request.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2315 OPEN MSGID:xxxxxxx DOES NOT MATCH OCQ MSGID: xxxxxxxx OCQ @ xxxxxxxx HAS INVALID OCQ ADDRESS: xxxxxxxx

Reason: The router received a response for an active open request however the response has incorrect or conflicting information.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2316 OPEN RESPONSE RECEIVED FOR OCQ @ xxxxxxxx FOR JOB jobname INDICATORS INVALID

Reason: The router received a response for an active open request however the response has incorrect or conflicting information.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2317 I/O MSGID: xxxxxxxx DOES NOT MATCH IOQ MSGID: xxxxxxxx IOQ @ xxxxxxxx IOQ @ xxxxxxxx INDICATORS INVALID HAS INVALID IOQ ADDRESS: xxxxxxxx SRB SCHEDULE FAILED, RC= xxxxxxxx

Reason: The router received a response for an active open request however the response has incorrect or conflicting information. If the error is an SRB Schedule failed then the response data was good however IAM/PLEX did not successfully notify the originator's address space of the I/O completion.

Action: If the failure is an SRB Schedule failure and the originating job is no longer active, then no action is necessary. Otherwise take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2318 **BMON MSGID: xxxxxxxx DOES NOT MATCH IOQ MSGID: xxxxxxxx IOQ @
xxxxxxx**

HAS INVALID ICQ ADDRESS: xxxxxxxx

Reason: The router received a response for an active syncpoint request however the response has incorrect or conflicting information.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2319 **BSYN MSGID: xxxxxxxx DOES NOT MATCH IOQ MSGID: xxxxxxxx IOQ @
xxxxxxx**

HAS INVALID IOQ ADDRESS: xxxxxxxx

Reason: The router received a response for an active syncpoint request however the response has incorrect or conflicting information.

Action: Take a dump of the IAM/PLEX address space that the error message occurred on, and contact Innovation technical support.

IAML2321 **MSGU PROCESSING OPEN REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx**

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a request to OPEN an IAM file, and is proceeding with validating and scheduling the request.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2322 **MSGU COMPLETED OPEN REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx**

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a request to OPEN an IAM file. The request has been validated and scheduled for processing by the Open/Close task.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2323 **MSGU PROCESSING CLOSE REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx**

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a request to CLOSE an IAM file, and is proceeding with validating and scheduling the request.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2324 **MSGU COMPLETED CLOSE REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx**

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a request to CLOSE an IAM file. The request has been validated and scheduled for processing by the Open/Close task.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2325 MSGU PROCESSING BMON REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a BMON request and is proceeding with validating and scheduling the request.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2326 MSGU COMPLETED BMON REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a BMON request. The request has been validated and scheduled for processing.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2327 MSGU PROCESSING BSYN REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a BSYN (syncpoint) request and is proceeding with validating and scheduling the request.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML2328 MSGU COMPLETED BSYN REQUEST FOR MSGID=xxxxxxx R=xxxx T=xxxx

Reason: Message on a TARGET IAM/PLEX address space indicating it has received a BSYN (syncpoint) request. The request has been validated and scheduled for processing.

Action: None, and informational only message that will only be issued when the MESSAGES=ALL parameter is specified.

IAML9000 IAMZAPR MAINTENANCE APPLIED

Reason: The pfts supplied as input to the APPLY command have been successfully applied to the virtual storage copies of the IAMRLS processing modules.

Action: None

IAML9001 IAMZAPR MAINTENANCE RESTORED

Reason: The ptf supplied as input to the RESTORE command have been successfully removed from the virtual copies of the IAMRLS processing modules.

Action: None

IAML9002 IAMZAPR MAINTENANCE NOT APPLIED

Reason: The ptf supplied as input to the APPLY command have not been successfully applied to the virtual storage copies of the IAMRLS processing modules.

Action: Browse the output from SYSPRINT the DD and RLSLOGDD for additional information as to why the ptf was not applied.

IAML9003 IAMZAPR MAINTENANCE NOT RESTORED

Reason: The ptf supplied as input to the RESTORE command have not been successfully removed from the virtual storage copies of the IAMRLS processing modules.

Action: Browse the output SYSPRINT DD and RLSLOGDD for additional information as to why the ptf was not removed

IAML9004 IAMZAPR ALLOCATION FAILED FOR DSN - dsname

Reason: The allocation of the dataset specified on either the apply or restore command has failed.

Action: Check the syntax of the command entered and make sure the dataset name is correct and is available. Re-enter the command with the correct dataset name.

IAML9005 IAMZAPR OPEN FAILED FOR DSN - dsname

Reason: The open of the dataset specified on either the apply or restore command has failed.

Action: Check the syntax of the command entered and make sure the dataset name is correct and is available. Re-enter the command with the correct dataset name.

IAML9006 IAMZAPR OPEN OF SYSPRINT DD FAILED

Reason: IAMZAPR was unable to open the SYSPRINT DD during APPLY or RESTORE command processing.

Action: Make sure the IAMRLS JCL used to start the IAM RLS address space has a SYSPRINT DD included. If it does, browse the RLSLOGDD, JESLOG, or SYSMSGs for additional messages documenting the reason for the open failure.

IAML9007 IAMZAPR OPEN OF SYSLIB DD FAILED

Reason: IAMZAPR was unable to open the SYSLIB DD during APPLY or RESTORE command processing.

Action: Make sure the IAMRLS JCL used to start the IAM RLS address space has a SYSLIB DD included. If it does, browse the RLSLOGDD, JESLOG, or SYSMSGs for additional messages documenting the reason for the open failure.

IAML9008 IAMZAPR VIFKEY MISMATCH BETWEEN IAMZAPR AND IAMVECTB FROM SYSLIB

Reason: There is a module level mismatch between the execution load library and the SYSLIB load library included in the startup JCL for IAMRLS.

Action: Make sure the SYSLIB DD points to the current IAM load library and is the same as the IAM load library in use from the LINKLIST/JOBLIB/STEPLIB.

- IAML9009** **IAMZAPR VECTOR TABLE FOR CURRENT LEVEL NOT FOUND, VIF NOT ACTIVE**
- Reason:** IAMZAPR was unable to locate the IAM VECTOR TABLE for the current level of the VSAM INTERFACE that matches the level of the IAMZAPR module.
- Action:** Browse the RLSLOGDD and the SYSTEM LOG to determine why VIF was not started, or if it was stopped.
- IAML9010** **IAMZAPR PROCESSING PTF nnnnnnnnn**
- Reason:** The PTF being processed by either the APPLY or RESTORE command is documented here.
- Action:** None, informational message only.
- IAML9011** **THE ABOVE STATEMENT IS MISSING AN OPERAND. REASON=9**
- Reason:** IAMZAPR has encountered a missing operand in the PTF control statements.
- Action:** Correct the error with the PTF in the input library supplied to either the APPLY or RESTORE command and re-enter the command.
- IAML9012** **THE ABOVE STATEMENT CONTAINS AN ODD NUMBER OF DIGITS. REASON=15**
- Reason:** The PTF input contains an odd number of digits in one of the offsets or data portions of the zap.
- Action:** Correct the error with the PTF in the input library supplied to either the APPLY or RESTORE command and re-enter the command.
- IAML9013** **THE ABOVE STATEMENT CONTAINS AN INVALID HEXADECIMAL DIGIT. REASON=16**
- Reason:** The PTF input contains an invalid hexadecimal digit in one of the offsets or data portions of the zap.
- Action:** Correct the error with the PTF in the input library supplied to either the APPLY or RESTORE command and re-enter the command.
- IAML9014** **MODULE IAMVECTB NOT FOUND. REASON=19**
- Reason:** The IAMVECTB module could not be found in LPA. The operation is failed.
- Action:** Browse the SYSLOG to see why VIF is not longer active.
- IAML9015** **THE ABOVE MODULE IS NOT ACTIVE. REASON=7**
- Reason:** The module that was named on the PTF NAME statement was found in storage, but is marked as inactive.
- Action:** VIF must have been stopped, in order to apply the PTF's to the virtual storage copy of the module you will have to restart VIF.

IAML9016 THE ABOVE MODULE WAS NOT FOUND. REASON=8

Reason: The module that was named on the PTF NAME statement was either not in the table of modules that can be zapped, or could not be loaded or found in storage.

Action: Call Innovation for help in diagnosing this problem.

IAML9017 NAME CARD MISSING. REASON=13

Reason: The PTF supplied as input to the APPLY or RESTORE command is missing a NAME statement.

Action: Check your input against the PTF that was sent to you and if both are missing the NAME statement, call Innovation for a corrected PTF.

IAML9018 THE ABOVE STATEMENT OFFSET IS INVALID. REASON=11

Reason: The offset in the PTF provided is invalid.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

IAML9019 THE MODULE WAS FOUND IN PLPA OR IN READ ONLY NUCLEUS WHICH IS NOT VALID. REASON=11

Reason: The module named on the NAME statement in the PTF supplied as input to either the APPLY or RESTORE command was found in PLPA or the read only nucleus.

Action: None of the IAM modules should be in PLPA or the read only nucleus. If you have put IAM modules in PLPA then you cannot use the online zap command to apply maintenance against them, you must use superzap and IPL with a CLPA.

IAML9020 THE ABOVE STATEMENT OFFSET IS NOT WITHIN THE MODULE. REASON=12

Reason: The offset in the PTF provided is invalid.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

IAML9021 MODULE EP ADDRESS = xxxxxxxx

Reason: The entry point of the module about to be zapped is documented here.

Action: None

IAML9022 VERIFY FAILED DATA = xxxxxxxx

Reason: The PTF failed to verify with the data printed in this message.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

IAML9023 OLD DATA TO REPLACE= xxxxxxxx

Reason: The data being replaced in the module by the PTF is documented here.

Action: None

IAML9024 BASE CARD IS NOT SUPPORTED FOR LPA. REASON=14

Reason: There is a BASE card included with the PTF, which is not allowed for the intercept modules located in LPA.

Action: This PTF must be applied using superzap, and a recycle of IAMRLS and VIF scheduled to pick up the maintenance.

IAML9025 SETSSI DOES NOT CONTAIN 8 HEXADECIMAL DIGITS. REASON=24

Reason: There is an invalid number of digits in a SETSSI keyword in the PTF.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

IAML9026 CHECKSUM IS xxxxxxxx

Reason: The checksum data in the PTF is documented here.

Action: None, informational message only.

IAML9027 THE CURRENT CHECKSUM VALUE IS.....xxxxxxxxxx

Reason: The actual checksum of the zap statements is documented here.

Action: None

IAML9029 IAMZAPR WILL APPLY ZAPS TO LPA NOW

Reason: The checksum and verify data is correct, the zap will be applied to the virtual storage copy of the module.

Action: None

IAML9031 CHECKSUM IS CORRECT

Reason: The checksum data supplied in the PTF is correct.

Action: None

IAML9032 CHECKSUM IS WRONG - PLEASE CORRECT THE ZAP. REASON=1

Reason: The checksum data provided in the PTF is incorrect.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

IAML9033 IF YOU DO NOT FIND THE ERROR, PLEASE CALL INNOVATION TECH SUPPORT (KEEP THE OUTPUT LISTING).

Reason: This comes out after the IAML9033 message to remind you call Innovation if you cannot find the error.

Action: Call Innovation if you cannot find the error.

IAML9034 THE FOLLOWING PAGES CONTAIN THE PARTIAL CHECKSUM OF EVERY STATEMENT (FOR INNOVATION USE ONLY)

Reason: Documentation of the error in applying the PTF.

Action: Save for Innovation Tech Support.

IAML9035 THE ABOVE STATEMENT IS INVALID. REASON=10

Reason: The PTF statement printed above this message is incorrect.

Action: Check your input against the PTF that was sent to you and if both are the same, call Innovation for a corrected PTF.

80.10 IAM ABEND CODES

As a general rule, the IAM access method avoids intentionally abending, but rather passes return codes and error codes back to the calling program. Most of the abend codes listed below are for the various utility programs available with IAM, including IAMRECVR, IAMZAPO, IAMSMFVS, and IAMSMF.

The abend codes issued by the old IAM Native and ISAM interfaces have been removed from the manual. They are documented in the ICL library that was loaded as part of the product installation. Refer to member OLDABEND.

Abend Code Description:

- | | |
|--------------|--|
| U0102 | The UPAD exit routine returned to IAM with the contents of R1 being either x'00', or not pointing to the parameter area that was passed from IAM to the UPAD exit. |
| U0184 | An error condition occurred during IAM processing, and the user had supplied a //IAMDEBUG DD DUMMY DD statement. For various errors, IAM will check if an IAMDEBUG DD has been supplied, and rather than returning an error code and non-zero return code, IAM will issue an abend. The primary purpose of this capability is to add in problem diagnosis. |
| U0185 | IAM-RLS was unable to obtain the requested record lock, and the RLS LOCK parameter indicated that it should abend the job. R15 has the associated logical error code. See Section 80.21 for the meaning of the code in R15. |
| U0402 | An IAM utility program encountered a failure attempting to open the required SYSPRINT DD statement. Most likely the DD statement is either missing, or incorrectly spelled. |
| U0502 | An IAM utility program encountered an error processing the required control card input. The required SYSIN DD statement is missing or incorrectly spelled, or no control cards were supplied. There should be an error message provided on the SYSPRINT listing indicating the cause of the problem. |
| U0600 | An IAM utility program encountered an error processing an input or output file. Refer to SYSPRINT for messages detailing the error encountered. |
| U0658 | An IAM utility program encountered a module that did not match the level of the utility program being executed. This may indicate an incorrect STEPLIB, or a problem with the product installation. |
| U0659 | An IAM utility program encountered an unexpected logical error during processing. There should be messages on SYSPRINT further explaining the cause of the problem. |
| U0660 | An IAM utility program encountered an internal save area stack overflow. Contact Innovation for assistance. |
| U0777 | IAMSTART encountered an error with the SETLOCK service. Contact Innovation for assistance. |
| U0900 | The IAM utility IAMEXTND, encountered a correctable user error. Refer to the SYSPRINT output for messages detailing the cause of the error. Contact Innovation. |

Abend Code Description:

- U0901** The IAM utility IAMEXTND encountered a serious error. Refer to the SYSPRINT listing for messages indicating the reason for the failure. Contact Innovation.
- U0902** The IAM utility IAMEXTND encountered a serious processing error. Refer to the SYSPRING listing for error messages. Contact Innovation.

80.20 CATALOG RETURN CODES

The following is a list of return codes and reason codes that IAM will set for a file DEFINE. When a file is defined under IDCAMS, these codes appear in the IDC3009I message. IDCAMS may print out other messages that relate to the failure code. Whenever possible, IAM uses codes that will have the same or similar meaning for VSAM files, however that is not always possible. There will be an IAM error message, with the IAMW prefix that should identify the error in more detail. Also, for most allocations, there will also be error messages generated by the failed dynamic allocation request, which IAM will print out. Due to the way IDCAMS displays messages, the error messages printed by IAM will actually appear before the card images for the actual DEFINE. Then, IDCAMS will print out its own error messages based upon the codes that IAM set.

Return Code	Reason Code	Error description:
8	6	Invalid type specified on a DELETE request.
8	38	Duplicate data set name found in the catalog, or on the volume(s) to which the data set is being defined.
16	0	SMS has failed the allocation request. Refer to the associated SMS error messages for additional information on the exact cause of the error.
22	8	The user attempted to define a cluster of a type not supported by IAM. IAM does not support LINEAR type of VSAM Clusters.
22	12	The user attempted to define an IAM AIX, PATH, or RRDS type of data set. The version of IAM being used is not licensed for the type of file that the user is attempting to define.
42	nnnn	MVS/ESA DADSM allocation of the data set failed. The reason code is the return code from DADSM.
44	12	The work area provided by the caller of a request for information from the catalog for an IAM file was not large enough to contain all of the requested information.
54	nnnn	MVS/XA DADSM allocation of the data set failed. The reason code is the return code from DADSM.
56	6	User is not authorized to define the data set, according to the security system.
58	nnnn	On a DEFINE RECATALOG request, the attempt to OBTAIN the VTOC information for the specified data set failed. The reason code is the return code from the OBTAIN service.
58	4	A CVAF service request issued by IAM during the define of an IAM file failed. CVAF indicated that the volume on which the data set was defined was not mounted. There should be a corresponding IAMW50 error message.
58	8	A CVAF service request issued by IAM during the define process of an IAM file failed. CVAF indicated that the DSCB for the IAM file was not found on the volume to which the IAM file was defined. There should be a corresponding IAMW50 error message.
58	12	A CVAF service request issued by IAM during the define process of an IAM file failed. The CVAF return code and reason code are on the associated IAMW50 error message.
Return Code	Reason Code	Error description:
60	4	A catalog information request was issued (locate SVC) which appeared to be for an IAM file, however either an error occurred during IAM processing, or the file is not an IAM file. Normally, this return code will only be set if an //IAMDEBUG DD DUMMY statement is included in the JCL.

- 62 0 The initialization of the IAM file being defined failed. There should be IAMWxx messages indicating the cause of the error.
- 62 84 IAM found an error within the block of the file containing the alternate index and path information.
- 62 88 There was insufficient space to add additional alternate index or path information. Using a larger block size for the base cluster may correct the problem.
- 68 20 The define request failed because there was insufficient space on the specified volume(s) to contain the data set.
- 72 4 During a define of an IAM file, IAM was not able to find one or more of the requested volumes online.
- 80 2 Attempted to define an AIX for an RRDS type of dataset. As per VSAM restrictions, AIX's cannot be used for RRDS type of datasets.
- 80 4 During a define of an alternate index or path, the related data set or path entry data set was not found. Make sure that the related data set name or path entry data set name is specified correctly.
- 80 10 A define of an alternate index or path was missing the related or path entry name.
- 80 12 During a define of an alternate index or path, the related data set or path entry specified was invalid for the type of data set being defined. Make sure that the related data set is an IAM data set of the appropriate type (base for an alternate index define, and base or alternate index for a path define.)
- 86 4 During a define recatalog of an IAM dataset, IAM encountered a failure attempting to determine the attributes of the file. The file most likely is not an IAM file.
- 86 6 During a define recatalog of an IAM dataset, IAM could not find the data set on the specified volume.
- 96 4 Maximum record size for dataset exceed IAM's maximum record size.
- 96 8 The base cluster record size is not large enough to contain the specified alternate key, or the calculated minimum alternate index record size exceeds the record size defined for the alternate index.
- 132 xx During the define of an IAM file, the internal parameter list usually generated by IDCAMS was missing data. The reason code indicates the particular field that was not provided. This most likely is not a user error, but rather an error on the part of the software issuing the define.
- 132 2 No VOLUME FVT was found in the parameter list.
- 132 4 No AMDSB FVT was found in the parameter list.
- 132 8 No Average LRECL FVT was found in the parameter list.
- 132 10 No Space FVT was found in the parameter list.
- 132 26 No SPACE was found the FPL .
- 132 34 No attribute FPL was found (RGATTR FPL) on the define of an IAM Path or alternate index.

Return Code Reason Code Error description:

- 132 48 No AMDSB in the FPL.
- 136 2 No VOLUME information length.
- 136 6 No CLUSTER FVT found.
- 136 18 No Average LRECL found in the FPL

- 140 36 The IAMOVRID override statements contained an error, either in syntax or an unknown keyword was specified.
- 140 72 Duplicate volume found in volume list.
- 168 2 IAM's internal device characteristics table does not contain an entry for the type of device on which the user is attempting to define an IAM file. If the device is a valid DASD device, contact Innovation for support.
- 176 0 The define of an IAM file failed because there was insufficient room in the VTOC on the specified volume(s) to contain an entry for the new file. The data set will have to be allocated on a different volume, or some data sets will need to be deleted from the target volume. Another option is to enlarge the size of the VTOC.
- 184 4 The define of an IAM file failed because the dataset was in use by another job.
- 192 0 During the file define, IAM determined that the maximum record length being requested is longer than IAM supports for files without the SPANNED attribute. IAM can support records up to 32,760 bytes long if they are not spanned.
- 240 4 IAM was unable to determine the device characteristics for the volume requested on the file define request.
- 240 36 On the file define, the required DD statement for the volume(s) on which the data set is to be defined was not found, or was not provided. This return code should normally not be seen by an end user.

80.21 IAM I/O REQUEST ERROR CODES

IAM adheres to the VSAM application programming interface guidelines. When a request fails, IAM sets a non-zero return code in register 15, and provides a reason code within the RPL. Abends are avoided as much as possible. The appropriate exit routine, EODAD, LERAD, or SYNAD will be given control if so specified by the application program. It is the responsibility of the application program to verify the results of each I/O request, and take the action it deems appropriate in response to any error circumstance. As a result of a failing request, IAM will set the return code and error code to match the VSAM codes as much as is possible.

The table below indicates the return code, which is returned in register 15, and the error code, which is returned in the RPL field RPLERRCD. (The return code is also in the RPL, in field RPLRTNCD.) The error code is returned to an application program through the use of the SHOWCB macro, by requesting the FDBK field of an RPL.

Return Code	Error Code (Decimal)	Error Code (Hex)	Description of Error Condition:
0			Request completed successfully.
0	8	X'08'	Indicates a duplicate alternate key. For GET requests, this means that there are additional base records with the same alternate key. For PUT requests, indicates a duplicate entry for the alternate key was created.
4	0	X'00'	Indicates that the RPL was already active with another request.
08			Logical Error Occurred (See Error Code for Reason)
08	4	X'04'	Logical End of File, there are no records with any higher key value than that of the last record returned. For a POINT, or START BROWSE, the key specified is higher than the highest key on the file.
08	8	X'08'	Duplicate Record. A PUT to add a record was issued, however there was already a record on the file with that same key.
08	12	X'0C'	Out of sequence. On a PUT during file load, the key of the record is lower than the previous record. Records must be loaded in ascending key sequence. On a PUT in sequential mode (OPTCD=SEQ), the key of the record being added is lower than the key of the last record processed (either retrieved or added) by this RPL. On a Skip Sequential request (POINT or GET), the key requested is lower than the key of the record previously retrieved.
08	16	X'10'	No record was found in the file with the specified key.

Return Code	Error Code (Decimal)	Error Code (Hex)	Description of Error Condition:
08	20	X'14'	Record is under Exclusive Control: The same record has been requested for UPDATE by another RPL. The RPL message area, if provided, has the address of the RPL that holds the requested record for update. From IAM-RLS: The records is locked by another RPL for the same logical unit of work (batch job, TSO user, or CICS transaction).
08	21	X'15'	IAM-RLS detected that by waiting for this record lock, this request would have caused in a deadlock.
08	22	X'16'	IAM-RLS: Request timed out waiting for a record lock.
08	24	X'18'	IAM-RLS: Request was waiting for a record lock that was retained by another job due to an abend.
08	28	X'1C'	For Compatible format files, the Independent Overflow area is filled, the file needs to be reorganized. For Enhanced format files, there either is insufficient DASD space to expand the file, or the file has used up the maximum number of extents it is permitted.
08	32	X'20'	ESDS: RBA supplied does not specify the address of the beginning of a record. No record at the specified relative byte address.
08	40	X'28'	IAM was not able to obtain virtual storage to complete the request. This will normally only occur on a GET request, with OPTCD=LOC, where IAM could not obtain storage for an area to contain the requested record.
08	44	X'2C'	The area provided by the application program was not large enough to contain the requested record. The record size is in the RPL field RPLRLEN.
08	64	X'40'	For Enhanced Format files: IAM was unable to obtain virtual storage for an additional string (place holder). For Compatible Format files, an insufficient number was specified for STRNO, and IAM ran out of place holders.
08	68	X'44'	An UPDATE request was issued, i.e. PUT or ERASE, however the file was opened for INPUT processing only.
08	72	X'48'	Keyed access attempted on an ESDS type of file.
08	80	X'50'	Erase attempted on an ESDS type of file.
08	84	X'54'	PUT with locate mode (OPTCD=LOC) is not permitted.
08	88	X'58'	RPL is not positioned for the specified sequential request. A POINT is required, or a random get with positioning: OPTCD=(DIR,NSP).
08	92	X'5C'	A PUT or ERASE request was issued without a preceding GET for update.
08	96	X'60'	On an update PUT request, the key in the record does not match the key of the record read for update.
08	100	X'64'	ESDS file type: on an update PUT request, the user attempted to change the record length.

Return Code	Error Code (Decimal)	Error Code (Hex)	Description of Error Condition:
08	104	X'68'	Invalid RPL options specified. (OPTCD) KSDS: Relative Byte Address or Control Interval processing is not supported by IAM. (OPTCD=ADR or OPTCD=CNV) or a get previous request is issued in skip sequential mode (RPL OPTCD=(SKP,BWD)).
08	108	X'6C'	The record length either is less than the minimum record length, which is (key length + key offset), or exceeds the maximum defined record length. For compatible format IAM files with the FIXED length record attribute, the record length was not equal to the defined length.
08	112	X'70'	The key length in the RPL is greater than the defined length of the key. (RPL OPTCD=GEN type requests only.)
08	116	X'74'	The request type (i.e., a GET, POINT, or ERASE) is not valid during a file load.
08	144	X'90'	An invalid pointer was found in an alternate index. While the requested key was found in the alternate index, the associated base record was not found.
08	156	X'9C'	An internal IAM error was encountered while processing the request. IAM found a record with a length of zero, or reached the end of data within a block unexpectedly. This error could be due to a corrupted buffer in storage. Run an IAMRECVR DIAGNOSE to verify that the file is ok.
08	184	X'B8'	I/O request for IAM-RLS either failed or abended.
08	185	X'B9'	I/O request for IAM-RLS was rejected because either IAM-RLS was no longer active, or was being quiesced.
08	189	X'BD'	I/O request for IAM-RLS was rejected because the file had been closed under IAM-RLS by operator request.
08	192	X'C0'	The program issued a request specifying an invalid relative record number. This can primarily occur if a relative record number of 0.
08	200	X'C8'	A control interval request (OPTCD=CNV) is not permitted when reading an ESDS through an alternate index.
08	208	X'D0'	A CHECK or an ENDREQ request was issued, however there was another task waiting on the RPL ECB.
08	225	X'E1'	Internal IAM error: The buffer pointer in the PLH is 0.
08	241	X'F1'	A invalid type of request was made, the contents of R0 contains a VSAM request type that IAM does not recognize or support.
08	242	X'F2'	The ECB address passed in the RPL is invalid.
08	244	X'F4'	During a file load, the Data Space used to temporarily hold the index was filled. Rerun job with the DATASPACE override, providing a larger value.
0C			Physical I/O error occurred. Message IAMW37, or IAMW01 should be examined to determine the nature of the error.
0C	4	X'04'	An error occurred attempting to READ a data block from DASD.
0C	16	X'10'	An error occurred when IAM was attempting to WRITE a data block to DASD.

80.22 IAM OPEN AND CLOSE ERROR CODES

In keeping with the VSAM application programming interface, most errors that occur during Open or Close will not cause an abend. Rather, a non-zero return code is passed in register 15, and an error code is set in the ACBERFLG field of the ACB. The error code can also be retrieved by the SHOWCB macro, requested for the failing ACB. Request FIELDS=ERROR in the SHOWCB macro to obtain the error code. Most of the IAM Open or Close failures will result in an IAMWxx error message being generated. Refer to the message for additional information.

Return Code	Error Code (Decimal)	Error Code (Hex)	Description of Error Condition:
04			The CLOSE for the IAM file failed. See reason codes below. This could also be returned on OPEN to indicate that there was a warning message issued for one or more files being opened. The ACBERFLG should be checked for each ACB being opened.
04	4	X'04'	A CLOSE was requested for an ACB that was already closed.
04	100	X'64'	This is a warning that on an open for a PATH or base cluster with an alternate index(es) in an upgrade set, one or more of the alternate index data sets were found to be empty.
04	136	X'88'	Insufficient storage in region to close the file. Most likely, there is insufficient below the line storage to obtain work area(s) for the file close. Perhaps by closing other files first, if possible, will correct this circumstance. It may be necessary to raise the value of the REGION parameter for this job step.
04	144	X'90'	The CLOSE for an IAM file being loaded or reorganized failed, due to insufficient DASD space to write out the file's index. Delete and redefine the file with more DASD space.
08			Open Error Occurred. The file is not opened, see reason codes below for further information.
08	128	X'80'	DD Statement for the specified data set is not in the JCL. This also will be issued when one of the macros issued by IAM to OPEN the data set fails, such as OPEN, DEVTYPE, or TRKCALC.
08	136	X'88'	Insufficient storage in region to open the file. Most likely, there is insufficient extended private storage, however there could also be insufficient below the line storage. Check message IEF374I to determine how much storage was used. Most likely increasing the REGION parameter will solve the problem.
08	152	X'98'	RACF, or other system security software, indicated that the user was not allowed the type of access to the file that was being requested by the ACB on the OPEN macro.
08	160	X'A0'	The application attempted to open an IAM file for input processing, however either the file had never been loaded, or an attempted file load or reorganization failed. Or, the application attempted to open an unloaded file with a STRNO value not equal to 1.

Return Code	Error Code (Decimal)	Error Code (Hex)	Description of Error Condition:
08	167	X'A7'	IAM-RLS has encountered an abend attempting to open or close this dataset.
08	168	X'A8'	The specified file was already being processed by another job or user, and could not be opened for the processing that the application requested. Check for an IAMW04 or IAMW30, which will, when possible, include the name of the job that had the file opened. Rerun the failing job after the identified job terminates.
08	182	X'B6'	The Open was failed because the IAM-RLS was not active.
08	184	X'B8'	An I/O error occurred while trying to open the indicated file. This error code should be accompanied by either an IAMW37 or an IAMW07 error message, indicating the nature of the I/O error.
08	188	X'BC'	Open processing encountered a problem while attempting to Open the file. If the file was being loaded, an invalid or unsupported record length was specified for the file. This error may also be due a problem with the extended data areas of the file. There should be an IAMWxx message indicating the reason for the error.
08	192	X'C0'	Open processing failed for a file load, due to an invalid file attribute being specified. This should be accompanied by an IAMW20 error message, indicating the improperly specified attribute.
08	196	X'C4'	Open processing failed on a PATH because the alternate index object of that PATH was empty.
08	209	X'D1'	The open for this file failed under IAM-RLS. Review the IAM-RLS log for additional information.
08	232	X'E8'	An attempt was made to Open a loaded IAM file for reloading with ACB MACRF=RST, however the file was defined with the NOREUSE attribute, and the IAM Global Option was set to ENABLE=NOREUSE. The file must be deleted and redefined to be reloaded.
08	240	X'F0'	The file was already open by another ACB (or DD) in this address space, and the current attempt to OPEN the file failed because the time stamp for file load was different than the time stamp in the previously opened ACB. Close all open ACB for this data set in this address space, and then they can be reopened.
08	241	X'F1'	The IAM VSAM Interface was not able to find a proper version of the IAM processing module required to OPEN this file.
08	242	X'F2'	The file was being opened for OUTPUT with an expired trial version of IAM.
08	248	X'F8'	Internal IAM error, the Open request failed.
08	254	X'FE'	The IAM VSAM Interface either was unable to successfully LOAD the required IAM processing module, or a version was loaded that does not match the version of the IAM VSAM Interface (VIF) that is active.

80.23 COBOL FILE STATUS CODES WITH IAM

While the above error codes are available to COBOL programs, more frequently these programs use the COBOL File Status Codes for interpreting error situations. Below are the more frequently encountered File Status Codes which can occur while processing an IAM file.

<u>File Status</u>	<u>Reason for File Status Code</u>
00	Successful completion of request.
02	Successful completion of request. There are additional base records with the same alternate key.
04	Successful completion of request, however the record size does not match the fixed length of the record as defined within the COBOL program.
10	End of file.
14	Relative Record Number given exceeds maximum for this file.
21	On sequential WRITES, the key is lower than the previously written key. Or, on REWRITE of an existing record, the application program changed the key of the record.
22	A WRITE of a new record was attempted for a key that matches a record currently in the file.
23	The requested record (key) was not found in the file.
24	Additional DASD space was required for this request, but it could not be obtained. For Compatible format files, this indicates that the Independent Overflow area has been filled. For Enhanced format files, either there was insufficient DASD space to expand the file, or the file had reached the maximum extents allowed, which is 16 extents per DASD volume. Generally, this error requires that the file be reorganized, possibly requiring a DELETE and DEFINE to allocate more DASD space. For Enhanced Format files, if the cause is insufficient DASD space, if some existing data sets can be deleted from the DASD volume, it might be possible to subsequently retry the request.
34	The file is full. See description for file status code 24 above.
35	Improper OPEN of an empty (unloaded) file, such as open for input only.
37	Invalid mode for OPEN
39	This file status generally implies a mismatch between the defined IAM file attributes and the record layout in the COBOL program. For example, possible causes are the key length or offset from the file definition do not match the COBOL record layout. Also, the defined maximum record length for the file is shorter than the maximum possible length for variable length records. COBOL requires that the defined record length be at least as long as the maximum theoretical record size, from the layout. Refer to the IAM PSEUDOLRECL feature for circumventing this restriction.
41	An OPEN was requested for a file that had already been opened.
42	A CLOSE was issued for a file that was already closed.
43	A file update request (i.e., REWRITE or DELETE) was issued without a prior READ for UPDATE.
44	An incorrect record length was specified on the WRITE. Either the length was shorter than the minimum, which is key length plus key offset, or the record was longer than the defined maximum record size for the file.

<u>File Status</u>	<u>Reason for File Status Code</u>
46	A READ failed because the application had not successfully established a position in the file, or a READ was attempted after the end of file had been reached.
47	A READ request was issued for a file that was not opened for input or I/O.
48	A WRITE request was issued for a file not opened for output or I/O (update).
49	A DELETE or REWRITE request was issued for a file that was not opened for I/O (update).
92	Logic error. The file attributes from the COBOL program, such as key length, relative key position, or record length do not match the IAM file being accessed. (Note that the defined record length for the file must be at least as large as the largest possible record length.)
93	Insufficient virtual storage to process the request. Most likely, the REGION parameter has to be increased for the job. Check the IAM output, IAMPRINT, from a Listcat of the file to determine how much storage will be required to open this file. This can also occur if there is record lock contention or exclusive control errors.
94	Not positioned for a sequential READ request.
95	Invalid or incomplete file information.
96	The DD statement is missing for this file.