

### **Complete List User and System Abend Codes in IMS Database**

0002

Explanation:

When the IMS control region abnormally terminates, it forces this abend for active dependent regions. This abend can also occur after normal shutdown of the control region if a new dependent region attempts to start.

System action:

The dependent regions are abnormally terminated.

System Operator Response: Follow IMS restart procedures.

Problem determination:

None.

0005

Explanation:

IMS restart was unable to close (terminate) the input online log data set (OLDS). Refer to messages DFS0738I and DFS0738X for further explanation.

System action:

IMS terminates abnormally.

Programmer response:

Use the Log Recovery utility to close (terminate) the log.

Problem determination:

1, 5, 8, 11, 35, 40

Save a copy of the OLDSs and WADSs data sets.

006

Explanation:

The License Manager did not find a certificate for either the DB or the TM feature. See message DFS2930I to determine which (or both features) do not have a certificate.

System action:

The region that issued the abend terminates.

Programmer response:

Add the necessary certificates to LM or change the LM mode so that it grants requests even when certificates do not exist.

Module:

DFSXSTM0

0008

Explanation:

The amount of storage specified for the region is insufficient to build TABLE zzzzzzzz. This prevents IMS from acquiring the information needed for initialization. Message DFS0610W, issued before this abend, identifies the TABLE name and provides additional information.

System action:

IMS terminates abnormally.

Programmer response:

Increase the size of the region.

Master Terminal Operator Response: Increase the size of the region, and retry IMS.

Problem determination:

1, 3, 6, 8

0011

Explanation:

An attempt was made to enter the system console DDM entry point to handle a WRITE interrupt. This entry point does not exist.

System action:

IMS terminates abnormally.

**Programmer response:**

Make certain that CSECT DFSICIO0 has not been user-modified, nor any other user modification branches to CSECT DFSDNSC0.

**Problem determination:**

1, 2, 3, 4, 5, 11, 12, 35

0012

**Explanation:**

The data set cannot be processed because the block size is invalid. This prevents IMS from acquiring information required for initialization. Message DFS0605W, issued before this abend, identifies DDNAME xxxxxxxx and provides additional information.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Refer to message DFS0605W. Be sure the DDNAME xxxxxxxx data set has a block size that is a multiple of 80.

**Problem determination:**

1, 3, 6, 8

0013

**Start of change**

**Explanation:**

The IMS terminated terminates for one of these reasons:

IMS could not open the system log for IMS batch. Reg 15 = 1

The output SLDS (IEFRDER/2) are allocated to an extended format data set. Reg 15 = 2

The macro ISITMGD returned a non-zero return code. Reg 15 = 3

**End of change**

**System action:**

IMS terminates abnormally.

**Programmer response:**

The response to this problem depends on the value of register 1 as follows:

If Reg 15 = 1, make sure you have included the DD statement for the IEFRDER and specified it correctly. Then resubmit the job.

If Reg 15 = 2, reallocate the output SLDS (IEFRDER/2) to a non-SMS striped data set.

If Reg 15 = 3, check the ISITMGD return code in register 15. For details on ISITMGD return codes, see z/OS DFSMS Macro Instructions for Data Sets (SC26-7408).

0014

**Explanation:**

The IMS system logger passed an invalid log call. Register 15 contains a return code. For details on the return code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

IMS terminates abnormally.

**Master Terminal Operator Response:** Save the log data set. Contact your IMS system programmer to restart.

**Programmer response:**

The user can emergency restart IMS. The save area trace shows who called the logger with the invalid request.

Problem determination:  
1, 4, 5, 35

0015

Explanation:

The data set does not contain the required member. This prevents IMS from acquiring information required for initialization. Message DFS0579W, DFS0596W, DFS3652X, or DFS3659X identifies the name of the member not found and provides additional information. If message DFS3652X was issued, neither DFSDSCTy (where y is specified by the DSCT=EXEC parameter) nor DFSDSCMy (where y is the nucleus suffix specified by the SUF=EXEC parameter) was found in IMS.PROCLIB, or did not contain at least one valid logon descriptor and one valid user descriptor.

System action:  
IMS terminates abnormally.

Programmer response:

Start of changeRefer to messages DFS0579W, DFS0596W, DFS0671W, DFS3652X, and DFS3659X. End of change

Problem determination:  
1, 3, 6, 8

0016

Explanation:

The IMS system abnormally terminates for one of these reasons:

The request for storage (in subpool 0 of the IMS control region extended private area) for a hash table for the VTAM® control blocks failed.

The VTAM control blocks (DFSCLVyx) could not be initialized. (y is a value from 0 to 9 or A to F; x is the IMS nucleus suffix).

The VTAM control blocks modules could not be loaded.

The request for storage (in subpool 0 of IMS control region extended private area) for a hash table for the CNT/LNB/RCNT, SPQB, or CCB control blocks was unsuccessful.

The request for storage (in subpool 0 of IMS control region extended private area) for a bit map for CCB control blocks was unsuccessful.

The LQB/RCNT control blocks modules (DFSCLCms, DFSCLSmS, DFSCLRmS, DFSCLIDs, where m is a value from 0 to 9 or A to F; s is the IMS nucleus suffix) could not be initialized.

The LQB/RCNT control blocks modules (DFSCLCms, DFSCLSmS, DFSCLRmS, DFSCLIDs, where m is a value from 0 to 9 or A to F; s is the IMS nucleus suffix) could not be loaded.

The request for storage (in subpool 0 of the IMS control region extended private area) for a work area or for system logon and user descriptors for creation of temporary structures was unsuccessful.

The request for storage (in subpool 0 of the IMS control region extended private area) for hash tables for logon and user descriptors was unsuccessful.

The request for storage (in subpool 214 of the IMS control region extended private area) for the VTAM control blocks failed.

Message DFS1990I, DFS1991I, DFS1992I, DFS1993I, DFS1996I, DFS1998I, or DFS1999I was issued previously to describe the error.

System action:  
IMS terminates abnormally.

Programmer response:

See message DFS1990I, DFS1991I, DFS1992I, DFS1993I, DFS1996I, DFS1998I, or DFS1999I to determine the appropriate action.

Problem determination:  
4, 6, 8, 10

0017

Explanation:

During writing or deallocating a log buffer, the physical logger found the buffers out of sequence.

System action:

IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem determination:

1, 4, 5, 35

0019

Explanation:

The component number in the CNT is greater than the maximum allowed. Register 10 contains the address of the CNT in error.

System action:

IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

0020

Explanation:

The IMS system or the specified external subsystem task was terminated by the use of the MODIFY command.

System action:

All of IMS or the specified external subsystem task will terminate. If an external subsystem was specified, only that task will terminate, while the remainder of IMS continues processing.

Programmer response:

You should determine the cause of modifying IMS and take corrective action.

System Operator Response:

Restart IMS if an external subsystem task terminated. You can restart it by issuing the /START SUBSYS command.

0021

Explanation:

The physical log master ITASK or the set-up ITASK was posted with an invalid request element.

System action:

IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem determination:

1, 4, 15, 35

0022

Explanation:

On SESSIONC completion, the session control code in the RPL is invalid (not STSN, SDT, or CLEAR).

System action:

IMS terminates abnormally.

Programmer response:  
None required.

Problem determination:

11, 35. At the time of the abend, register 6 contains the address of the buffer that contains the RPL in error.

0023

Explanation:

The DL/I subordinate address space option was selected. The ACBLIB data sets specified in the DL/I subordinate address space procedure were not the same as the specification in the IMS procedure. Message DFS0404W precedes this abend and provides further information.

System action:

The DL/I subordinate address space terminates abnormally with a U0023, causing the control region to terminate with a U150.

Programmer response:

The ACBLIB data sets specified in the DL/I subordinate address space start-up procedure must be the same as specified in the control region JCL and the concatenation order must be identical. This applies to both the active and inactive ACBLIBs. Correct the specification of the ACBLIB DDNAMES IMSACBA and IMSACBB. If it is necessary to analyze the storage dump, the MVS™ Scheduler Work Area blocks must be included. Specify SDATA=SWA on the z/OS CHNGDUMP command to include these blocks.

0024

Explanation:

Either a DL/I subordinate address space region or a DBRC region attempted to connect to the IMS control region. The job name passed on the connection request did not match the DLINM= (for the DL/I subordinate address space region) or the DBRCNM= (for the DBRC region) specification. These values are obtained from the IMSCTRL system definition macro or from the control region JCL. The defaults for these keywords are "DLISAS" and "DBRC", respectively.

System action:

The region that attempted the connection terminates abnormally with U0024.

Programmer response:

Start a procedure with the correct name, or restart the control region, overriding the expected name.

0025

Explanation:

Either a DL/I subordinate address space region or a DBRC region attempted to connect to the IMS control region. The control region already has an active connection to that region type. This error is caused, for example, by starting the DL/I subordinate address space region twice.

System action:

The region that attempted the connection terminates abnormally with U0025.

Programmer response:

None.

0026

Explanation:

IMS was unable to successfully issue the (E)STAE macro. This is an IMS system error.

System action:

IMS terminates abnormally.

**Programmer response:**

This is an IMS internal error. For information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**

4, 35.

Register 15 contains the return code from (E)STAE.

0027

**Explanation:**

While processing a DFSDUMP request, the IMS memory dump service routine received a system or IMS abnormal termination request. This abend is issued after the memory dump process is complete to force normal IMS recovery and termination. The reason code field in the first line of message DFS629I contains the original abend code.

**System action:**

The error is passed to the normal IMS recovery routines, the current DFSDUMP request is forced to TERM=YES, and a software LOGREC entry is requested for the original termination request.

**Programmer response:**

To analyze the original abend referred to by abend U0027, use both the LOGREC entry for the original abend and the memory dump in progress when the original abend was deferred.

0028

**Explanation:**

The IMS control region terminated because the ABDUMP keyword was included in the /CHECKPOINT command.

This abend is a result of a /CHE FREEZE, PURGE, or DUMPQ ABDUMP command.

**System action:**

IMS issues the abend, produces a memory dump, and terminates normally.

**Programmer response:**

Determine the reason why the operator specified the DUMP option to the /CHECKPOINT command.

**Problem determination:**

None.

0029

**Explanation:**

This is a standard abend issued by DL/I subordinate address space initialization. Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for details on the various conditions which cause this abend to be issued.

**Reason Code**

**Description**

81

An error return code was returned from DFSBCB GET indicating that SAVEAREA could not be got during initialization.

Module: DFSXDT10

82

An error return code was returned from DFSCDSP indicating that dispatcher work area could not be created.

Module: DFSXDT10

83

During initialization, an error return code was returned from IMODULE LOAD indicating that the tracking module cannot be loaded.

Module: DFSXDT10

84

During initialization, an error return code was returned from DFSCWU indicating that the tracking ITASK could not be created.

Module: DFSXDT10

85

During initialization, an error return code was returned from IMODULE GETMAIN indicating that storage could not be obtained in subpool 0 for the DFSXDT10 work area.

Module: DFSXDT10

86

During initialization, an error return code was returned from IMODULE GETMAIN indication that storage could not be obtained in subpool 0 for the termination ITASKs.

Module: DFSXDT10

87

During initialization, an error return code was returned from DFSBCB GET indicating that storage could not be obtained for the save area needed by the termination ITASKs.

Module: DFSXDT10

88

During initialization, an error return code was returned from DFSCIR indicating that termination ITASKs could not be created.

Module: DFSXDT10

System action:

The DL/I subordinate address space region terminates with abend U0029, causing the control region to abend with a U150.

Programmer response:

Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

0031

Explanation:

While trying to locate a block in error on one log data set, CSECT DFSFLTP0 returned a nonzero return code in register 15.

System action:

Module DFSULG20 terminates abnormally with a memory dump.

Programmer response:

Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis and check the return code in register 15.

0032

Explanation:

A log sequence error was detected by the Log Recovery utility.

System action:

The Log Recovery utility issues abend 0032.

**Programmer response:**

Make sure that the order of the log data sets in the JCL is correct. If the order is correct, correct the log data set using the DUP and the REP modes of the Log Recovery utility. Then rerun the job.

0034

**Explanation:**

Start of changeModule DFSSCBT0 or DFSBCB30 was entered to get or release the VTCB, VLQB, or CBTS latch. In the case of a get-latch request, the common latch manager module DFSCLM00 returned with a nonzero return code. In the case of a release-latch request, the common latch manager module DFSCLM10 returned with a nonzero return code. End of change

**System action:**

IMS terminates abnormally with abend U0034.

**Programmer response:**

Abend U0034 is identical to abend U0780 issued by the common latch manager (DFSCLM00 and DFSCLM10). See ABENDU780 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for the explanation of the abend subcode found in register 15.

0035

**Explanation:**

A phase 1 sync point call failed in a Database Control (DBCTL) subsystem.

**System action:**

DBCTL terminates the unit of recovery, backing out any database changes.

**Programmer response:**

See the SNAP memory dump produced by the Database Resource Adapter (DRA). This memory dump contains the DRA Architected Parameter List (PAPL) and other diagnostic information.

**Problem determination:**

38

0036

**Explanation:**

An unexpected posting of a VTAM RPL resulting from either a VTAM, IMS logic error, or both occurred.

**System action:**

IMS terminates abnormally.

**Master Terminal Operator Response:** Save the pertinent information for the IBM® Support Center, and restart IMS.

**Problem determination:**

4, 5, 6, 11, 14, 35

0041

**Explanation:**

A signon request to DBRC failed. The DBRC return codes define the error. Refer to DBRC Request Return Codes to determine the cause of the failure.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Ensure that the online subsystem name IMSID or batch job name was correctly specified in the start-

up procedure, and that the proper RECON data set was allocated to the IMS subsystem. If you are restarting the IMS alternate subsystem, issue the DBRC command CHANGE.SUBSYS SSID(name) NOBACKUP. This command resets the flags that indicate the alternate subsystem has signed on.

0042

Explanation:

Backout was required for this startup and the DBRC signon request indicated that an entry did not exist for this subsystem. It is necessary to establish the same environment during an emergency restart.

System action:

IMS terminates abnormally.

Programmer response:

Ensure that the subsystem name IMSID or DBRC= has been properly specified in the startup procedure and that the proper RECON data set has been allocated to the IMS subsystem.

Problem determination:

1, 4, 10

0043

Explanation:

A signon request for "recovery end" was issued to DBRC, and the request failed. This request is issued after the initial checkpoint at the end of emergency restart and notifies DBRC of emergency restart completion. This allows DBRC to remove any pending information held from the previous execution of IMS. The DBRC return codes specify the error. Refer to DBRC Request Return Codes to determine the cause of the failure.

System action:

IMS terminates abnormally.

Programmer response:

Determine the cause of the error and correct the problem.

Problem determination:

1, 4, 10, 35

0044

Explanation:

A normal or emergency restart was specified, and DBRC was not active. The DBRC name or subsystem name was not the same as that found on the X4001' checkpoint record.

If you are using HALDB partitioning, this abend indicates that DBRC is not active when it is required. Message DFS0415W, with a reason code of X74', precedes the abend.

Programmer response:

Ensure that DBRC is present for this execution and that DBRC=N was not specified. The same environment used in the previous execution, namely utilization of DBRC, must be used in this environment for emergency restart and database backout. Validate the input tapes for this execution or the correctness of the checkpoint value specified in the restart command.

System action:

IMS terminates abnormally.

Problem determination:

1, 4, 10

0045

Explanation:

The previous execution of IMS had used IRLM, but the IRLM was not present for this execution. For emergency restart, it is required that the same IRLM be present for this execution if it was present during the previous execution.

System action:

IMS terminates abnormally.

Programmer response:

Ensure that IRLM=N was not specified or that the same environment used by the previous execution of IMS exists for this execution.

Problem determination:

1, 4, 10

0046

Explanation:

One of the DB PCBs contained in the PSB, which appears in the third positional operand of the PARM field on the EXEC control statement, had an incompatible PROCESSING INTENT with the ACCESS parameter defined in the DATABASE macro statement for IMS system definition. The PROCESSING INTENT is derived from the PROCOPT operand specifications in the PSBGEN.

System action:

Error message DFS046A is issued. The batch region terminates abnormally. Dependent regions continue processing with limited access to the database.

Programmer response:

One of the following responses can be taken:

Contact the master terminal operator to change the database ACCESS parameter to the level compatible with your PROCESSING INTENT  
change the PROCOPT operand specifications to the level compatible with the ACCESS parameter defined in the DATABASE statement for the IMS system definition.

Rerun ACBGEN, and then rerun the job.

Problem determination:

6, 10, 19

0047

Explanation:

One of the DB PCBs in the named PSB, appearing in the third positional operand of the PARM field on the EXEC control statement, had referenced the database and failed to obtain the database authorization through DBRC, or failed to obtain a larger work storage area in which to build the database authorization request list during the PSB scheduling.

System action:

Error message DFS047A or DFS049I is issued and the database is stopped. The batch region terminates abnormally. Dependent regions continue processing, but access to the database is prohibited.

Programmer response:

See error message DFS047A or DFS049I in IMS Version 9: Messages and Codes, Volume 2 for the reason for the failure and the response to the failure. For message DFS047A, one of the following responses should be taken: 1) Contact the master terminal operator to close the database in other IMS subsystems that had held the database authorization by entering a /DBR command; or 2) wait until another IMS subsystem that had held the database authorization has terminated, and rerun the job.

Problem determination:  
11, 19

0048

Explanation:

An error occurred during initialization of Database Recovery Control (DBRC). The return code is in register 15. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminated abnormally.

Programmer response:

Take appropriate action according to the error code described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:  
1, 2, 3, 4, 8, 12

0050

Explanation:

An IMS services request required for external trace initialization received an unexpected nonzero return code.

Register 2 identifies the IMS services request that failed.

Code (Hex)

Meaning

01

DFSBCB for QSAV request failed.

02

DFSCDSP request failed.

03

DFSCWU request failed.

04

IMODULE request failed.

Register 14 is the address where the error is detected.

Register 15 contains the return code from the failing service.

System action:

The external trace TCB terminates abnormally. Only OLDS external tracing is permitted until IMS is restarted.

0056

Explanation:

An error occurred in a Database Control (DBCTL) subsystem while Fast Path was trying to access buffers for a Coordinator Controller (CCTL) request. This error can occur during a CCTL identify, terminate, thread schedule, or thread sync point request.

System action:

If the failure occurs during a schedule or sync point request, the IMS control region terminates abnormally with U0056. Sync point errors occur after the phase 2 termination or commit.

If the failure occurs during an identify request, the identify request fails with pseudoabend U0056, but IMS and the CCTL are unaffected. A snap memory dump is created.

If the failure occurs during a terminate request, the terminate request fails with pseudoabend U0056, but IMS and the CCTL are unaffected. A snap memory dump is created. The CCTL is no longer identified to IMS, but its FP buffers are not released.

**Programmer response:**

See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis to determine which type of request failed.

If schedule or sync point failed, an internal error occurred.

If identify failed, IMS probably does not have enough FP buffers to satisfy the number of buffers requested. See CCTLNBA in the DRA startup table to determine how many buffers you requested.

If terminate failed, an internal system error or a storage shortage problem probably occurred.

**Problem determination:**

1, 4, 38

0069

**Explanation:**

A recursive IRC entry was detected by program DBFIRC10 or DFSDCPY0, or Fast Path (FP) was unavailable, and a call to Fast Path was found by DBFIRC10. The error subcode is in register 15.

Code

Meaning

4

Recursive entry to inter-region communication (IRC) occurred.

8

Fast Path was unavailable, and a Fast Path call was detected.

**System action:**

The dependent region is terminated abnormally. Other dependent regions and the IMS control region continue running.

**Programmer response:**

Reason code 4 is a user error. Ensure that a user STAE is not issuing an IMS call or an MVS STAE retry, and then issuing a call. Other reason codes should be treated as IMS system errors.

Reason code 8 should have been preceded by message DFS2768W, and an error occurred at IMS startup time. Examine the console log for errors during IMS start for the original error, such as message DFS2713I or message DFS2718I. Any application making calls to Fast Path will be terminated with this abend until IMS is restarted.

**Problem determination:**

1, 5, 6, 11, 35

0070

**Explanation:**

An IMODULE failure occurred.

Register 15 contains a return code from the IMODULE function. For a description of the IMODULE return codes, see IMS System Services Return Codes.

Register 15 (bytes 0 and 1) might contain a second return code from the DFSBCB GET function. For an explanation of the DFSBCB return code, see IMS System Services Return Codes.

ABENDU0070 is a standard abend that is issued by the Fast Path emergency restart module, DBFNRST0. The PSW (program status word) at entry-to-abend points to the instruction where the abend was issued. See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

If you are using HALDB partitioning, this abend indicates either:

Allocation of storage for control block DFSPCA fails.

Loading of partition support modules fails. If this module is DFSDT150, message DFS0415W with reason code X45' precedes this abend. If it is a module other than DFSDT150, no message precedes this abend.

System action:

IMS terminates abnormally.

Programmer response:

Take appropriate action according to the error code indicated above.

Problem determination:

1, 4, 11, 35

0071

Explanation:

During system initialization or subsequent execution, an error occurred in a lower-level module, which might cause one of several messages to be issued before this abend. Refer to the messages issued before this abend from either the DBRC region or the control region.

A common cause of this abend is a failure to close the OLDS logs before doing an /ERE COLDSYS start.

For further explanation, refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

System Operator Response: Emergency restart IMS to resume processing.

Problem determination:

1, 4, 15, 35

0072

Explanation:

There was a nonzero return code from a DEVTYPE or TRKCALC macro issued for a log data set. The ddname might have been IEFRDER or IEFRDER2 for IMS batch, or DFSOLPnn, DFSOLSnn, or DFSWADSn for IMS online.

System action:

IMS terminates abnormally.

Programmer response:

Make sure there is a valid DD statement defining the log data sets. Make sure DASD devices are specified for the online log data sets, OLDS, and for the write-ahead data sets, WADS. Make sure the same DASD device type is specified for all WADS.

Problem determination:

None.

0073

Explanation:

An insufficient number of valid log data sets exists at online initialization or restart time. IMS online requires at least 3 online log data sets (OLDS) and 1 write-ahead log data set (WADS).

If DBRC is not active, the required IEFRDER DD statement was missing.

If DBRC is active, either the IEFRDER DD statement was missing or was specified as DD DUMMY OR DSN=NULLFILE (null data set). Register 15 contains a reason code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Programmer response:  
Rerun the job with sufficient valid DD statements for the required log data sets.

Problem determination:  
None.

0074

Explanation:  
A nonzero return code for the RDJFCB macro was issued for the system log or the monitor log.

System action:  
IMS terminates abnormally.

z/OS System Operator Response: Contact your IMS system programmer.

Problem determination:  
4, 35

0075

Explanation:  
Initialization of the IMS log detected an invalid log device characteristic. On a tape device, the IMS batch system log must have a standard label or a standard user label. The IMS OLDS must be on direct-access devices. Both the primary and secondary OLDS in a dual pair must be on the same device type. All the Write-Ahead Log Data sets must be on the same direct-access device type.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the DD statements for the log data sets, and rerun the job.

Problem determination:  
None.

0076

Explanation:  
This abend is issued for coupling facility services by either control address space or DL/I subordinate address space initialization. Register 3 contains the abend reason code. Register 15 contains the return code from the system service that found the error (for example, IMODULE). See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for details on the conditions that cause this abend to be issued.

System action:  
IMS terminates abnormally.

Programmer response:  
See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:  
1, 4, 35

0077

Explanation:

A DELETE failure occurred during initialization.

System action:

IMS terminates abnormally.

Problem determination:

4, 35

0078

Explanation:

This abend results if the control block modules (load module DFSBLK00, PI control block module DFSFXC00, or OTMA control block modules DFSYINI0 and DFSYIMI0) could not be loaded during control region initialization. The last character of the module name is the suffix of the IMS system, determined by the SUF parameter of the startup procedure. For additional information, see the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis manual.

If this abend is preceded by one or more occurrences of message DFS1921I, check the syntax of the DFSPBxxx member. For information about specifying PROCLIB members, see the IMS Version 9: Installation Volume 2: System Definition and Tailoring manual.

System action:

IMS terminates abnormally.

Problem determination:

35

0079

Explanation:

This abend occurs if the IMS nucleus, load module DFSVNUCs or DFSCNUCs (s=suffix of the IMS system), could not be loaded during control region initialization. Register 15 contains the return code from IMODULE LOAD. For a description of these return codes, see IMS System Services Return Codes.

System action:

IMS terminates abnormally.

Problem determination:

35

0080

Explanation:

An error occurred during execution of OSAM OPEN/CLOSE/EOV processing. This abend will also occur when module DFSA0S10 has received a request to schedule EOV processing for a DASD data set, but has found that EOV processing is already in progress for that data set.

System action:

IMS terminates abnormally.

z/OS System Operator Response: Restart IMS and call your IMS system programmer for assistance.

Problem determination:

2, 3, 4. Obtain a memory dump showing both the module and the work area. If necessary, change the dump parameters or use a SYSABEND statement to obtain the above information.

0081

Explanation:

The IMS IMSAUTH SVC BLDSSCT function was unable to build the subsystem control table (SSCT). Register 14 contains the address of the program invoking the abend. Register 15 contains the IMSAUTH BLDSSCT return code. For a description of these return codes, see IMS System Services Return Codes.

System action:

IMS initialization terminates abnormally.

Programmer response:

If the caller is not authorized, make sure that the JOB or STEP libraries are authorized and DFSPCC30 is link-edited with the re-enterable (RENT) attribute.

Problem determination:

1, 4, 8, 35

0083

Explanation:

This abend occurs when ABEND is appended to message DFS1920I. The execution parameter was set with a bad value. This type of error is unrecoverable for the following IMS control region execution parameters:

TRN

SGN

RCF

ISIS

System action:

IMS terminates abnormally.

Programmer response:

Correct the parameter and error and rerun IMS.

0084

Explanation:

A batch message processing (BMP) program tried to access an undefined data set.

0085

Explanation:

The Message Format data set (ddname FORMATA or FORMATB) directory block that was read online conflicts with the directory block that was read at IMS initialization.

System action:

IMS terminates abnormally.

Programmer response:

Make sure that the Message Format data set will not be updated while IMS is active. Determine whether the format library is shared between processing units. Verify that active format library is a PDS file. PDS-E is not supported for Message Format data sets in IMS.

Master Terminal Operator Response: Emergency restart IMS to resume processing.

Problem determination:

8,11

0088

Explanation:

Initialization for the Local Storage Option failed.

System action:

IMS terminates abnormally.

System Operator Response:

Probably an IMS internal error. Contact your system programmer for help. Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 8, 12, 35

0090

Explanation:

An IMS internal post failed. A CLB, which was waiting for a format block, could not be posted.

Register 8 contains the CLB address. Register 10 contains the FRE address where FRE+0 has the format block name.

System action:

IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS to resume processing.

Problem determination:

1, 11, 35

0092

Explanation:

An IMODULE GETMAIN request for storage in the private or extended private area of the IMS control region was not successful.

System action:

The IMS control region terminates abnormally.

Programmer response:

For a description of IMODULE GETMAIN return codes, see IMODULE Return Codes. For storage allocation errors, increase the size allocated to the private or extended private area and restart IMS.

0095

Explanation:

An error occurred while initializing the Logon, User, and MSC descriptors. This error is unrecoverable. See message DFS3658, which was issued before the abend, for the reason for the failure.

System action:

IMS terminates abnormally with a memory dump.

System programmer response:

See the response for message DFS3658.

Problem determination:

See the problem determination for message DFS3658.

0097

Explanation:

The VSAM DLVRP macro request to delete the VSAM local resource pools failed.

System action:

IMS terminates abnormally.

Programmer response:

The VSAM return code is in register 15. For an explanation of the return codes from the VSAM DLVRP macro, see DFSMS/MVS Macro Instructions for Data Sets.

Problem determination:

4, 35

0098

Explanation:

IMS issues this abend when it cannot find the user edit routine name in the user edit routine address table.

System action:

IMS terminates abnormally with a memory dump.

System programmer response:

Ensure that the terminal descriptors describe the same user edit routines that were in effect before the restart.

Problem determination:

1, 4, 35

Start of change

0099

Explanation:

Abend 0099 is a standard abend issued by IMS during termination when a NAME TOKEN SERVICES RETRIEVE (IEANTRT) request fails.

Analysis: This abend can happen during normal or abnormal termination of IMS. Register 15 at the time of the abend indicates normal (R15=1) or abnormal (R15=2) termination processing that was underway when the IEANTRT request failed. R9 contains the return code from IEANTRT.

System action:

IMS terminates abnormally.

Programmer response:

Use the R9 value to determine the cause of the IEANTRT failure as documented in z/OS MVS Programming: Authorized Assembler Services Reference Vol 1 (SA22-7609 - SA22-7612). Then restart IMS using ERE or Cold Start.

Module:

DFSDYA00

End of change

0101

Explanation:

An error occurred during Java dependent region processing. For module and register information, see the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The dependent region is terminated abnormally unless the abend is issued by DFSPCJM0 with a reason code of 3 or 4.

**Programmer response:**

For all instances of this abend, examine the dependent region job output for the cause of the failure by searching on the character string DFSJVM00::

**Module:**

DFSRCJB0, DFSRCJM0, DFSPCJB0, DFSPCJM0

0102

**Explanation:**

An error was detected in doing the positioning for an extended restart.

For additional information, see message DFS1000I in IMS Version 9: Messages and Codes, Volume 2 and ABENDU0102 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The program terminates abnormally.

**System Operator Response:**

Determine the cause of the error, correct the problem, and rerun the job.

0103

**Explanation:**

The length field for one of the user areas pointed to by the parameter list for the CHKP call is either zero or negative.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Check the length fields for the user areas that you have specified in the parameter list for the CHKP call. If one is found to be invalid, change it and rerun the job. See ABENDU0103 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**

2, 3, 11

0106

**Explanation:**

IMODULE LOAD for the Environment Controller (DFSECP10 or DFSECP20) failed with a nonzero return code. This is a standard abend issued by module DFSPCC20. Register 15 contains the return code. For a description of the IMODULE LOAD return codes, see IMODULE Return Codes.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Correct the error and restart IMS.

**Problem determination:**

4

0107

**Explanation:**

Start of changeResource access security initialization encountered a problem. The hexadecimal error subcode in register 15 indicates why the initialization failed. For a description of these subcodes, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. End of change

System action:

The application program terminates abnormally.

Programmer response:

Correct the error and restart IMS.

0108

Explanation:

A timer request failure occurred during an LU 6.2 shutdown. The LU 6.2 shutdown is not completed and is unable to proceed. DFSTIMER has returned with a bad return code.

System action:

The shutdown is terminated abnormally.

Programmer response:

Contact the IBM Support Center.

Problem determination:

1, 5, 6, 8, 10, 27, 34, 36

0110

Explanation:

A Coordinator Control (CCTL) subsystem issued an INIT call to connect to a Database Control (DBCTL) subsystem. The connection routines sent a request to the IMS control region to load the DBCTL modules, but the load request failed.

System action:

IMS terminated the connection process and issued message DFS697I.

System programmer response:

See message DFS697I.

Problem determination:

6, 8, 10, 38

0111

Explanation:

A Coordinator Control (CCTL) subsystem issued an INIT call to connect to a Database Control (DBCTL) subsystem. DBCTL built a subsystem status index entry (SIDX) for this CCTL and tried to enqueue it to the SIDX chain, but the enqueue request failed.

System action:

IMS terminated the connection process.

System programmer response:

Bring down the IMS control region with a memory dump and perform an emergency restart.

Problem determination:

1, 4, 6, 11, 15, 35, 38

0112

Explanation:

A Coordinator Control (CCTL) subsystem requested termination (purge) of a Database Control (DBCTL) subsystem thread.

System action:

IMS purged the thread and the thread TCB.

0113

Explanation:

An IMS abend was detected while DL/I or DC was processing a call in a dependent region. The diagnostic area for the region causing this abend contains the program status word (PSW), general-purpose registers, and a copy of the IMS-related blocks with eye-catchers at entry to the abend.

Note:

If offline memory dump formatting is chosen, the dump will be taken during the dependent region abend processing and will show the dependent region abend code. The control region will then be terminated with abend U0113, but no additional dump will be taken unless the SDUMP was not successful. Analyzing dependent region SDUMPs is the same as analyzing other IMS SDUMPs.

System action:

The IMS control region terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS to bring up the control region.

Problem determination:

1, 4, 6, 14, 35. Do not submit an APAR if the abend was the result of MVS CANCEL, SMF JOB STEP TIMING, /STOP REGION CANCEL, or other user-initiated terminates abnormally.

0114

Explanation:

Abend U0114 is a standard abend issued by module DFSSCHR0. An IMODULE GETMAIN request failed to obtain the DFSSCHR work area.

System action:

The dependent region is terminated.

Programmer response:

Increase the region size and resubmit the job.

0119

Explanation:

An LU 6.2 session failure occurred on an LU 6.2 synchronous conversation or a SEND failure occurred on an OTMA SEND-THEN-COMMIT transaction for the following reasons:

Start of change

The User Destination Exit abended the transaction instead of sending the output message asynchronously.

A User Destination Exit was not provided. This abend code is used to terminate the transaction. The program and transaction are not stopped.

The TPIPE on which the reply is to be sent is stopped.

OTMA is stopped.

The OTMA client has left the XCF group.

The OTMA output message size was greater than 32K.

End of change

System action:

If the abend is issued for an LU 6.2 session failure, the shutdown continues normally. For an OTMA error, both the incoming SEND-THEN-COMMIT message to IMS, and the REPLY message to the client are lost.

**Programmer response:**  
Determine the cause of the session or SEND failure.

**Problem determination:**  
1, 5, 6, 8, 10, 27, 34, 36

0120

**Explanation:**

Start of change An error was detected by module DFSXNCL0 while loading the IMS nucleus. The error is one of the following:

When DFSXNCL0 loads the IMS nucleus, it performs a validity check on the IMS product number stored within the nucleus. The nucleus product number must match the product number stored within DFSXNCL0. This check is to ensure that the IMS nucleus was built using the same IMS release macros as the IMS that is executing. If the nucleus product number does not match, then DFSXNCL0 issues an ABENDU0120. Register 15 at abend will be zero for this case. You must ensure that the IMS system definition is done with the IMS macro libraries for the IMS release that you are executing. When IMS Fast Path is installed, DFSXNCL0 performs address resolution on the SCD extensions. If an SCD extension cannot be located (if the LOCESCD service fails), then DFSXNCL0 issues an ABENDU0120. Register 15 at abend will be non-zero, and will point to the address of label XNCLABND within module DFSXNCL0.

End of change

**System action:**

The IMS control region terminates abnormally.

**Problem determination:**  
4, 35

0121

**Explanation:**

When the IMS control blocks module (DFSBLK00) was loaded, the SCD (CSECT DFSISCD) was not the entry point, as required. The probable cause is user modification of the linkage editor control statements.

**System action:**

IMS terminates abnormally.

**Programmer response:**  
Rebind DFSBLK0x with the correct entry point.

0123

**Explanation:**

A deadlock condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at least one LU 6.2 conversation when the deadlock condition was detected. This abend is similar to abend U0777, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

**System action:**

The modified standard DL/I program terminates abnormally, and the input message is discarded.

**Programmer response:**  
Reenter the transaction.

0124

**Explanation:**

A U2478 condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at

least one LU 6.2 conversation when the number of PI waiters exceeded 63. This abend is similar to abend U2478, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System action:

The modified standard DL/I program terminates abnormally and the input message is discarded.

Programmer response:

Reenter the transaction.

0125

Explanation:

A LOCK REJECT condition that cannot be retried was detected while an IMS database call for a modified standard DL/I program was being processed. The modified standard DL/I program had allocated at least one LU 6.2 conversation when the lock reject occurred. This abend is similar to abend U3303, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System action:

The modified standard DL/I program terminates abnormally and the input message is discarded.

Programmer response:

Reenter the transaction.

0126

Explanation:

A U2479 condition that cannot be retried was detected for a modified standard DL/I program. The modified standard DL/I program had allocated at least one LU 6.2 conversation when IMS detected that insufficient storage exists for a Buffer Queue Element (BQEL). This abend is similar to abend U2479, but cannot be retried; the input message is discarded. CPI communications driven programs cannot be retried.

System action:

The modified standard DL/I program terminates abnormally, and the input message is discarded.

Programmer response:

Reenter the transaction.

0127

Explanation:

An SAA communications driven program terminated with IMS resources in a noncommitted state. This condition occurs when the CPI communications driven program fails to issue CPI-RR COMMIT(SRRCMIT) or BACKOUT(SRRBACK) calls before terminating. IMS attempted to perform an implicit commit but the commit failed. CPI communications driven programs cannot be retried.

System action:

The program terminates abnormally.

Programmer response:

Ensure the resources are recovered.

0128

Explanation:

An APPC/MVS ASSOCIATE call failed. An ASSOCIATE call informs APPC/MVS where the LU 6.2 conversation is processed.

System action:

The program terminates abnormally. The input message is requeued for scheduling, and the conversation is changed to asynchronous.

Programmer response:

Reenter the transaction.

0129

Explanation:

A RACF® or equivalent call to create a copy of an ACEE failed. A RACF call establishes the security environment for the dependent region.

System action:

The program terminates abnormally. The input message is discarded from the system if RACF or equivalent indicates an actual security violation. If the input message has been discarded, the DFS554A message will indicate that neither the transaction nor the program was stopped. If the input message is put back on the message queue (for example, RACF or equivalent is not active), the DFS554A message will indicate that both the transaction and program were stopped.

Programmer response:

Ensure RACF or equivalent is available and start the transaction.

0130

Explanation:

An MPP region attempted to connect to a DBCTL region. The attempt is invalid because DBCTL does not allow a connection from MPP regions.

System action:

The MPP receives pseudoabend U130.

Programmer response:

Do not start an MPP that attempts to connect to an IMSID that is associated with an active DBCTL region.

0131

Explanation:

In the identify function of DFSASK00, a nonzero return code was returned from an IMODULE GETMAIN request for SP230 storage for DFSSRB.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0132

Explanation:

Nonzero condition code following a store clock, STCK, instruction during IDENTIFY. Originating module is DFSASK00.

System action:

The dependent region is terminated.

Programmer response:

Refer to System 370 Principles of Operation for the store clock, STCK, failure return code.

Problem determination:  
4, 35

0134

Explanation:  
Dependent region issued an IDENTIFY request when the control region shutdown was in progress.

System action:  
The dependent region is terminated.

Problem determination:  
4, 35

0135

Explanation:  
Invalid request code passed to DFSASK00.

System action:  
The dependent region is terminated.

Problem determination:  
4, 35

0136

Explanation:  
A second IDENTIFY request was issued from the same dependent region.

System action:  
The dependent region is terminated. For a Database Control (DBCTL) subsystem, the Coordinator Control (CCTL) subsystem connection process is terminated.

Problem determination:  
4, 35

0137

Explanation:  
A Coordinator Control (CCTL) subsystem issued a second IDENTIFY while the cleanup for the previous connection was still in progress. The same ASCB address or the same CCTL ID detected the error. To determine which one detected the error, examine the SSPSCODE field of the SSOB. This field will contain either 'NAME' or 'ASCB'.

System action:  
The connection process is terminated.

System programmer response:  
Wait until the cleanup completes for the previous connection before attempting another connection. You can use the /DIS CCTL command to check the CCTL status. Refer to IMS Version 9: Command Reference for information about using the command.

Problem determination:  
1, 5, 8, 38

0138

Explanation:  
A Coordinator Control (CCTL) subsystem issued an INIT request. The Database Resource Adapter (DRA) loads a module that is called to notify the DRA about DBCTL events such as DBCTL abending,

DBCTL terminating normally (/CHE FREEZE), or /STOP REGION commands for DRA threads. DBCTL was unable to locate the DRA notification module.

System action:

The CCTL INIT request is rejected.

Programmer response:

Verify that the library defined in the DRA startup table includes all of the DRA modules.

0139

Explanation:

An error return code was received from the SYSEVENT SVC.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0140

Explanation:

The IDENTIFY token is not valid. This abend is also issued if a dependent region is not found in the PST ID table while making a DL/I call.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0141

Explanation:

The signon token was not valid.

System action:

The dependent region is terminated.

Problem determination:

4, 35

Start of change

0142

Explanation:

The work unit blocks (LCRE, OSWA, DPST, GMQW, XPST, D1WA, EPST, or D2WA) assigned to the dependent region could not be created. This abend can also occur when the MAXPST limit is reached.

Analysis: ABENDU0142 is a standard abend issued by DFSRRA00. The signon failed for lack of resources or internal error.

Possible Causes:

ECSA storage was not available for one of the work unit blocks (LCRE, OSWA, DPST, GMQW, XPST, D1WA, EPST, or D2WA).

MAXPST is reached.

Internal IMS error with BCB IPAGE control block get or release. Module SIGNSAVE+X58' may contain the control block name (first 3 bytes) plus BCB return code in low-order byte.

System programmer response:

If IMS can still function with acceptable throughput, no action is required.

If MAXPST has been reached as shown through IMS commands DISPLAY ACTIVE, or DISPLAY CCTL, consider increasing MAXPST value, if system resources can be tuned for the increase.

MAXPST indicated internally by SCDPSTCT being equal to SCDPSTMX. This change requires an IMS recycle with FORMAT RS option recommended at restart.

If IMS throughput is not acceptable, and CSA is full, CSA utilization must be understood and resolved. This may require system monitor display information analysis or dump analysis.

If IMS throughput is not acceptable, the threads can be reset by a recycle of IMS with FORMAT RS option specified at restart. This clears most internal errors related to control block overlays. Take a dump of the IMS control region before recycling IMS and report the problem to the IMS Support Center.

Problem determination:

4, 35

End of change

0143

Explanation:

Insufficient virtual storage was available for dependent region initialization.

System action:

The dependent region is terminated.

Programmer response:

Increase the region (partition) size and resubmit the job.

0144

Explanation:

A dependent region IDENTIFY request failed, probably because the storage request for the IDENTIFY table failed. No IDENTIFY table is available.

Programmer response:

Increase the region (partition) size and resubmit the job.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0145

Explanation:

The caller of DFSASK00 is not a valid caller. During the processing of a call, either the identify token passed on the call did not match that in the IDT, or the caller was not in the same address space as the identifier.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0147

Explanation:

A SIGN-OFF request was received while one or more threads were still active. SIGN-OFF issued a TERMINATE THREAD.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0148

Explanation:

Abend U0148 is a standard abend issued by module DFSASK00. A nonzero return code was returned in response to an IMODULE GETMAIN or a QSAV request during dependent region termination (SIGN-OFF processing).

System action:

The IMS dependent region terminates abnormally.

Problem determination:

4, 35

0149

Explanation:

An ISWITCH to the control region failed. This is a pseudoabend established by DFSASK00.

System action:

The dependent region is terminated.

System Operator Response:

If a /STOP REGION ABDUMP command was not entered for the abended region contact the IMS system programmer.

Programmer response:

For more details, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

4, 35.

0150

Explanation:

When either the DBRC region, the DL/I subordinate address space region, or the IMS control region abnormally terminates, the other regions are terminated with abend U150.

System action:

IMS, DBRC, and DL/I subordinate address space terminate abnormally.

Programmer response:

Provide a memory dump of the DBRC, DL/I subordinate address space, and IMS control regions.

0151

Explanation:

The //DFSCTL data set has invalid data set attributes. Message DFS1071I is issued along with this abend.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Correct the data set attributes based on information in message DFS1071I.

0152

**Explanation:**

The Sequential Buffering (SB) COMPARE option detected that the buffer content that the SB buffer handler wanted to return to the OSAM buffer handler did not match the content of the block as stored on DASD. Message DFS1070I is issued along with this abend.

**System action:**

The application program terminates abnormally.

**Programmer response:**

See message DFS1070I for the appropriate response.

0153

**Explanation:**

IMS was unable to acquire storage for an area, or load an IMS system module. IMS issues message DFS1075A, DFS1076A, or DFS2347A before this abend to indicate the cause of the problem.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Correct the error based on information in message DFS1075A, DFS1076A, or DFS2347A.

0154

**Explanation:**

An unexpected interface error occurred between the OSAM access method and the Sequential Buffering (SB) buffer handler. A SNAP memory dump is written to the IMS log or to a user-designated data set.

**System action:**

The application program terminates abnormally.

**Programmer response:**

See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for detailed diagnostic information.

0155

**Explanation:**

The Sequential Buffering (SB) test program (DFSSBHD0) detected an error during execution.

Before terminating abnormally, the SB test program issues a message describing the problem, and places a reason code in the low-order byte of register 15. Each reason code corresponds to a message.

**Code (Hex)**

**Message Number**

00

DFS1080A

01

DFS1081A

02

DFS1082A  
03  
DFS1083A  
04  
DFS1084A  
05  
DFS1085A  
06  
DFS1086A  
07  
DFS1087A  
08  
DFS1088A  
09  
DFS1089A  
0A  
DFS1090A  
0C  
DFS1092A  
0D  
DFS1093A  
0F  
DFS1095A  
13  
DFS1099A  
14  
DFS2343A  
System action:  
IMS terminates abnormally.

Programmer response:  
See the message that corresponds to the reason code for the appropriate response.

0156

Explanation:

An application program made a DL/I call. The caller was in supervisor state.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0157

Explanation:

An application program made a DL/I call. The caller was in a different key than the key in the TCB.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0158

Explanation:

The GSAM initialization module, DFSZDI20, encountered a problem executing the type 13 RDJFCB macro to obtain DD statement information for GSAM data sets. For register content information, see ABENDU0158 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. See

MVS/XA/Extended Architecture System- Data Administration Manual for a description of the type 13 RDJFCB macro.

System action:

The IMS batch or BMP region terminates abnormally.

Programmer response:

Additional virtual storage is needed to execute the RDJFCB macro. Ensure that the size of the region is adequate.

0160

Explanation:

An application that was not executing in an IMS dependent region issued a DL/I call, an SRRCMIT call, or an SRRBACK call. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application is terminated.

0166

Explanation:

Start of changeIMS security options specified RACF to be used for signon verification and command or transaction authorization or for RAS authorization, but IMS RACF security initialization either failed or is not present in the system. End of change

System action:

IMS terminates abnormally.

System Operator Response:

Activate RACF security for this IMS system.

Programmer response:

Start of changeA code in register 15 at the time of ABEND identifies the cause of the failure in RACF initialization. If an error occurred on the RACF RAclist call, register 5 will contain a value to indicate which class failed (4 - CIMS, 5 - TIMS, 6 - IIMS, and 7 - LIMS). See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for the possible reason codes for the failure in RACF initialization. End of change

0168

Explanation:

One of the following errors occurred:

The checkpointed blocks do not match the loaded blocks. This condition occurs if the user's IMS control block structure has been changed since the specified checkpoint was taken.

A checkpointed CNT could not be found on a restart. This condition is the result of an IMS code failure.

System action:

IMS terminates abnormally.

Programmer response:

If the error is because checkpointed blocks do not match the loaded blocks, re-IPL IMS and either enter a checkpoint that reflects the current block structure, or cold start the system.

If the error is because a checkpointed CNT could not be found on a restart, contact the IBM Support Center.

Problem determination:  
4, 5, 10, 35, 36

0171

Explanation:

This abend results if FORCE security is in effect. Loading of one or more of the security tables was requested but could not be loaded correctly. A return code in the DFS171A message indicates which security tables could not be loaded.

System action:  
IMS terminates abnormally.

Using Terminal Operator Response: Contact your IMS system programmer for assistance.

Problem determination:  
1, 4, 8, and the output from the Security Maintenance utility.

0172

Explanation:

There is insufficient space in the work area pool (WKAP) to satisfy restart workspace requirements.

System action:  
IMS terminates abnormally.

Programmer response:  
Increase the size of the IMS work area pool (WKAP), and perform another restart.

0175

Explanation:

Unrecoverable errors have been encountered while processing the input log during restart. Refer to messages DFS0739I and DFS0739X, which might be received before this abend.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 5, 8, 11, 35

Save a copy of the OLDSs and WADSs.

List the DBRC RECON data set.

0176

Explanation:

While processing the input log during restart within an Extended Recovery Facility (XRF) complex, the IMS alternate system encountered errors from which recovery was impossible. Fast Database Recovery also issues this abend when it encounters errors. Refer to messages DFS0739I and DFS0739X, which might be received before this abend.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 5, 8, 11, 35

Save a copy of the OLDSs and WADSs.

List the DBRC RECON data set.

0181

Explanation:

Duplicate data space tokens found. A new data space was acquired that has the same data space token as an existing data space.

System action:

The IMS control region abnormally terminates.

System programmer response:

This should not occur and represents a z/OS error if it does.

Module:

DBFVIDS0

0182

Explanation:

A must-not-occur condition was detected in one of the Fast Path I/O modules. Register 15 contains the diagnostic code: bytes 0-2 contain the module ID and byte 3 contains the subcode.

Module ID FOR (DBFFFORI0):

01

A process running at SYNCPOINT added a buffer on the output thread for which the write-must-complete state was not set. This condition should not occur.

02

Data Space unpin buffer after I/O failed

03

Data space I/O in process count does not match the number of VSO buffers being written

Module ID MFL (DBFMFL10):

01

The user's field search argument (FSA) for hexadecimal data field exceeds IMS I/O work area.

02

The user's field search argument (FSA) for decimal data field exceeds IMS I/O work area.

03

Start of changeThe user's field search argument (FSA) for data type is different than the hexadecimal or decimal and exceeds the IMS I/O work area.End of change

Module ID MIO (DBFMIOS0):

02

A process running at SYNCPOINT added a buffer on the output thread for which the write-must-complete state was not set. This condition should not occur.

Module ID NCB (DBFNCBS0), the subcodes are:

01

The resource ID for the pre-allocated SDEP CI equals the current CI RBA or HWM CI RBA.

Module ID SRB (DBFMSRB0); the subcodes are:

01

DMAC does not support VSO

02

Data Space Control Block Structure is invalid

03

Area contained in Data Space Control Block structure is invalid

04

RBA requested is too large (GE SDEP portion of area)  
Module ID MAI (DBFUMAI0):

01

The resource ID for the pre-allocated SDEP CI equals the current CI RBA or HWM CI RBA.  
Module ID VOC (DBFVOCI0); the subcodes are:

01

DSML (Data Space Map List) not passed by caller

02

Dummy DMHRs for write staging area not exist in DSML

03

No I/O, data space unpin failed

04

No DSML has completed I/O

05

After I/O completed, data space unpin failed

07

Address of L56X block in DSML DSSEL56X is zero

Module ID VSO (DBFVSOW0); the subcodes are:

01

The DMAC pointed to in the DMHR did not specify VSO

02

The DMAC and DSME pointers did cross check

03

The RBA in the DMHR was beyond the scope of the DSME

04

The block passed to DBFVSOW0 was not a DMHR

05

The return code from BCB was nonzero

System action:

The IMS control or dependent region abnormally terminates.

System Programmer Response: Call IBM Software Support.

Module:

DBFMSRB0, DBFVOCI0, DBFVSOW0, DBFMIOS0, DBFFORI0, DBFUMAI0, DBFNCBS0

0184

Explanation:

IMS could not allocate a structure for long busy toleration in the coupling facility at startup.

System action:

IMS terminates abnormally.

Programmer response:

See message DFS1552A. Correct the problem and restart IMS. If the MADS I/O timing function is not required, delete the MADSIOT specification from the DFSVSMxx PROCLIB member and restart IMS.

0195

Explanation:

A must-not-occur condition was detected in one of Fast Path modules. Reg13 is the address of a save area that contains registers at the time of abend if the module that detects the error saves the registers before issuing the abend. Reg15 contains the subcodes:

X01'

DBFARD30 detects that the number of areas in parameter list for authorized areas returned from

DBRC is greater than 200.

X02'

DBFHSRT0 detects that there is no EMHB for output message ISRT and there is no INIT STATUS GROUP A or INIT STATUS GROUP B set.

System action:

The IMS dependent region or the IMS control region abnormally terminates, depending on the abend subcode.

System programmer response:

Call IBM Software Support.

Module:

DBFARD30, DBFHSRT0

0200

Explanation:

A GET type function was issued using the AIB interface that was expecting data to be returned in the I/O area. However, the length of the I/O area was too small to receive the data.

System action:

The application program terminates abnormally.

Programmer response:

Increase the size of the I/O area to allow the data to be returned to the application.

0201

Explanation:

One of the following situations may have occurred:

Start of changeAt least one HALDB input statement that was read and validated contained syntax errors. Message DFS3777A with an RC=04 or 08 is issued. An RC=04 could also indicate that there were no syntax errors but more than 20 statements were supplied.End of change

Single partition processing in an IFP, JMP, or MPP region is not allowed. Message DFS3776A is issued.

DFSHALDB failed to open or its attributes are not valid. The LRECL might not be equal to 80 or the RECFM is not fixed block format. The corresponding message is DFS3775A.

There is not enough storage to continue processing. Message DFS3774A is issued and indicates a GETMAIN failure for the control block that appears in the message.

System action:

The job terminates abnormally in module DFSHSPI0 with one of the following reason codes:

Code

Message Number

04

DF3777A RC=4

08

DF3777A RC=08

12

DF3776A IFP/JMP/MPP

16

DF3775A RECFM

20

DF3775A LRECL

24

DF3667A open failure of DFSHALDB

28

DF3774A insufficient storage

Programmer response:

Take one of the following actions:

For syntax errors, review the report in SYSHALDB. Correct the HALDB input statements and resubmit the job. If no syntax errors exist, limit the input to 10 statements and resubmit the job.

For HALDB input statements that are supplied to DFSHALDB in an IFP, JMP, or MPP region, delete DFSHALDB or remove the input statements and resubmit the job.

Investigate the attributes of the data set associated with DFSHALDB.

Increase the size value of the REGION parameter.

Problem determination:

1, 17h

Module:

DFSHSPIO

0202

Explanation:

For any of the statements whose syntax was successfully validated, the PCB number does not correspond to any DBPCB within the PSB or the partition name is not valid. The partition name could be either misspelled or it could be a valid name that cannot be found in the database referenced by the DBPCB number that was supplied. This abend is preceded by messages DFS3379E and DFS3779A.

System action:

Pseudoabend 0202 is issued from module DFSHSPP0

Programmer response:

Correct the invalid PCB number or partition name and resubmit the job.

Problem determination:

1, 17b, 17h

Module:

DFSHDPP0

0203

Explanation:

While running the File Select and Formatting Print utility, DFSERA10, the parameter list constructed from the OPTION statements was found to have been modified. (Refer to the IMS Version 9: Utilities Reference: System for the format of the OPTION control statement.) An error might have occurred in the user exit routine (OPTION control statement, operand EXITR=), which caused the routine to address and modify storage outside the program's legitimate address space.

System action:

The program terminates abnormally.

Programmer response:

Correct any indicated errors, and rerun the job.

Problem determination:

3, 4, 35

0204

Explanation:

An attempt to open a data set defined by the TRCPUNCH DD statement failed.

**System action:**  
The job terminates abnormally.

**Programmer response:**  
Ensure that TRCPUNCH DD statement exists and is correct in the DFSERA10 input stream.

0206

**Explanation:**  
The IMS.PSBLIB or IMS.DBDLIB libraries could not be opened.

**System action:**  
The IMS batch region terminates abnormally.

**Programmer response:**  
Check the batch processing region JCL for the correct IMS ddnames. Correct the JCL in the DFSERA10 input stream, and resubmit the job.

**Problem determination:**  
2, 3

0209

**Explanation:**  
A region type of ULU or UDR was specified, but the DBD name specified was a logical DBD or the access method was invalid.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Correct the JCL, and resubmit the job.

0210

**Start of change**  
**Explanation:**

A CCTL subsystem issued an UNSCHEDULE call or a TERMINATE THREAD call to the DBCTL subsystem. DBCTL detected the unit of recovery with outstanding updates, or an ODBA thread issued a DPSB call with no prior commit or rollback, or issued a deallocate PSB (DPSB) call without the PREP (prepare) subfunction followed by a commit or rollback.

**End of change**

**System action:**  
IMS terminates the thread abnormally and issues a DFS554 message. The updates are backed out if the DBCTL thread is in flight. The updates are held if the DBCTL thread is in doubt.

**System programmer response:**  
See message DFS0554A and IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for additional information to correct the problem.

**Problem determination:**  
1, 3, 5, 33, 36

0214

**Explanation:**  
The parameter field specified a region type of ULU, UDR, DBB, or DLI. The program name supplied is not authorized to use this region type.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the JCL, and resubmit the job.

0215

Explanation:  
The IMS disk logical logger has encountered an internal error. Register 15 contains a return code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

System Operator Response:  
Emergency restart IMS to resume processing.

Problem determination:  
1, 3, 4, 5, 6, and 25

0216

Explanation:  
The Log Recovery utility (DFSULTR0) detected a bad return code from DBRC, and DBRC=YES was requested.

System action:  
The Log Recovery utility terminates abnormally.

Programmer response:  
Correct the DBRC problem or code DBRC=N on the EXEC statement to ignore DBRC.

System Operator Response:  
Contact your IMS system programmer.

Problem determination:  
1, 2, 3, 4, 8, and 25

0219

Explanation:  
The command processor detected an error that was unrecoverable or detected an invalid interface with a command action module.

System action:  
IMS terminates abnormally.

System Operator Response:  
Note the activity on the terminal that caused the message, and contact your IMS system programmer for assistance.

Problem determination:  
1, 4, 5, 6, 35

0220

Explanation:  
IMS initialization of an LGEN system definition did not find a control block. See IMS message DFS3563I for the control block that was not found.

DFSIIRS0 is the module that issues the error message and the abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Make sure the correct set of control blocks is being used from LGEN system definition.

Problem determination:  
1, 4, 10, 13, 35

0225

Explanation:

The Database Image Copy 2 utility (DFSUDMT0) issues this abend when it determines that invalid information was received from DFSMSdss. Register 15 contains a reason code that further identifies the problem. The utility also issues message DFS3144A, which identifies the database data set for which the problem occurred. The reason code for the abend is:

| Code | Meaning   |
|------|---|
| 4    | The output volume serial number from DFSMSdss is zeros. |

System action:

The Database Image Copy 2 utility (DFSUDMT0) continues processing for other database data sets if DFSMSdss is able to recover from the abend. The return code for the utility will be 8 or higher.

Programmer response:  
Check ADRnnn messages issued by DFSMS to aid in diagnosis. See z/OS MVS System Messages, Volume 1 for a description of ADR messages. If you cannot determine the solution, contact the IBM Support Center. Have the abend documentation available.

0230

Explanation:

This abend is issued by module DFSRLP00 for these reasons:

An /ERE BLDQ command was issued and the log used for restart reached EOF before the end of checkpoint record (4099) was read.

During restart an attempt to get storage for a work area from the MAIN (WKAP) storage pool failed.

System action:

Abnormal termination of IMS.

Programmer response:  
Specify an earlier checkpoint at which to restart IMS, or determine the cause of the error and rerun this execution.

Problem determination:  
1, 4, 5, 35

0231

Explanation:

IMS was not able to resynchronize with the CQS subsystem. The abend subcode in register 15 provides the reason for the failure.

Subcode  
Description  
01  
The operator replied ABORT to message DFS3909.  
02

IMS received a return code other than 0 and 4 from CQS. This return code is provided in register 14 in the memory dump.

03

An attempt was made to warm or emergency start IMS with CQS, but CQS was not active in the prior IMS execution. A change in the usage of CQS can only be made during a cold start.

04

An attempt was made to warm or emergency start IMS without CQS, but CQS was active in the prior IMS execution. A change in the usage of CQS can only be made during a cold start.

05

An attempt was made to warm or emergency start IMS with a different CQS than was active in the prior IMS execution. A change of this type can only be made during a cold start.

06

An attempt was made to warm or emergency start IMS with a different CQS MSGQNAME than was used in the prior IMS execution. A change of this type can only be made during a cold start.

07

An attempt was made to warm or emergency start IMS with a different CQS EMHQNAME than was used in the prior IMS execution. A change of this type can only be made during a cold start.

Start of change08End of change

Start of changeStart of changeAn EMHQ structure was used in the previous IMS execution and no EMHQ structure is used in the current execution, or no EMHQ structure was used in the previous IMS execution and an EMHQ structure is used in the current execution. A change of this type can only be made during a cold start.End of changeEnd of change

Module:

DFSRLP00

0233

Explanation:

IMS was not able to resume with the current resource structure usage. The abend subcode provides the reason for the failure:

Subcode

Meaning

01

An attempt was made to warm or emergency restart IMS with a resource structure, but the resource structure was not in use by the DC component of IMS in the prior IMS run. This change can only be made during a cold start of the DC component of IMS.

02

An attempt was made to warm or emergency restart IMS without a resource structure, but the resource structure was in use by the DC component of IMS in the prior IMS run. This change can only be made during a cold start of the DC component of IMS.

System action:

IMS terminates abnormally.

Programmer response:

Start of changeDetermine whether or not IMS should be using a resource structure, then determine whether the resource structure has been defined correctly to the Resource Manager. If IMS must change its use of the resource structure, cold start the Transaction Manager component of IMS.End of change

Module:

DFSRLP00

0240

Start of change

Explanation:

A message processing application program exceeded the allowable execution time. This time includes the processing time used by the memory dump process if any. You set the processing time at IMS system definition. In the case of a BMP, this abend indicates that the value specified in "CPUTIME=" has been exceeded.

End of change

System action:

A storage dump is taken and the dependent region program controller is reattached. In the case of a BMP step, the step is terminated.

Programmer response:

Refer to the TRANSACT macro in IMS Version 9: Installation Volume 2: System Definition and Tailoring.

Problem determination:

5, 14

Save the log data sets being used and the assembly listings of any user-modified IMS modules.

0242

Explanation:

The DIRCA parameter (for BMPs) or PCB parameter (for MPPs) specifies a size that is too small to accommodate the PSB to be scheduled. This abend can also result from a Database Control (DBCTL) internal error in building the DIRCA for a Coordinator Control (CCTL) thread.

System action:

The IMS dependent region terminates abnormally, and the program in progress stops.

Master Terminal Operator Response: Issue a /START command for the program, and contact your IMS system programmer for assistance.

Programmer response:

See the IMS Version 9: Installation Volume 2: System Definition and Tailoring for information about default DIRCA size and how it is calculated. Increase the DIRCA size specifications.

Problem determination:

1, 2, 3, 4, 5, 6, 8, 9, 17b.

0243

Explanation:

An APPC transaction has been timed out by IMS. The time-out value is specified in the APPCIOT=(,XX) parameter.

System action:

No memory dump is taken and the dependent region controller is reattached.

0249

Explanation:

An invalid status code (not STATUSGA or status blank) is returned to the DL/I test program, DFSDDLTO, during its internal end-of-job status calls in a batch environment. The absence of VSAM buffers in the DFSVSAMP DD card results in a STATUSGE on the status call and causes ABENDU0249 to be issued from DFSDDLTO, if the ABU249 option is coded.

System action:

The application program is abnormally terminated.

Programmer response:

In the memory dump, locate PSTRTCDE to determine the cause of the error.

Problem determination:

17a, 17b, 35

0250

Explanation:

The DL/I test program, DFSDDLT0, issued a conditional GETMAIN macro for an area to be used for the segment I/O area. If running online, the size requested was 32732 bytes. If running in batch, the size was the maximum I/O length determined when the blocks were built for the PSB. The requested storage was not available.

System action:

The IMS dependent or batch region terminates abnormally.

Programmer response:

Provide a larger region size for the step and rerun the job.

Problem determination:

None.

0251

Explanation:

The DL/I test program, DFSDDLT0, is unable to open one of the data sets used by this program. Unless it is the data set used by the PRINTDD statement, a message on the PRINTDD data set indicates the ddname of the data set that could not be opened.

System action:

The IMS dependent or batch region terminates abnormally.

Programmer response:

Provide a DD statement for the data set and execute the job again.

Problem determination:

2, 3, 4, 20

0252

Explanation:

The DL/I test program (DFSDDLT0) might issue this abend for the following reasons:

An abend was requested by specifying ABEND in columns 1 through 5 on an input control card. An unknown return code was received after the STAT call was issued to gather statistics before termination.

An unknown return code was received following a message ISRT call to the IMS message queue. No PRINTDD statement was present in the JCL for the job.

System action:

The IMS batch or dependent region terminates abnormally with abend U0252.

Programmer response:

If you requested the abend, the abnormal termination is expected. If the abend occurred on a STAT call, the first database PCB contains the return code. If it occurred on an ISRT call to the message queue, the I/O PCB contains the return code. Determine the cause of the return code, correct the error, and rerun the job.

0253

Explanation:

The name of the database PCB specified, starting at column 16 of the last status statement read by the DL/I test program, matches none of the database PCB names in the PSB.

System action:

The IMS dependent or batch region terminates abnormally.

**Programmer response:**

Ensure that the PCB name in the status control statement is correct by comparing the database PCB names in the PSB specified on the EXEC statement. Correct the error, and resubmit the job.

**Start of change** Possible cause: An online/BMP transaction might have attempted to process a generated PSB (GPSB); this cause the 0253. Check whether the PSB specified is a GPSB. **End of change**

**Problem determination:**

2, 3, 4, 18, 19

0254

**Explanation:**

The DL/I test program, DFSDDLTO, received an AI status code, indicating that one of the data sets used by DL/I could not be opened. A message on the output data set indicates the ddname of the data set that could not be opened.

**System action:**

The IMS dependent or batch region terminates abnormally.

**Programmer response:**

See "Status Code Explanations" in DL/I Status Codes for possible causes of an AI status code.

**Problem determination:**

2, 3, 4, 18, 19, 20

0255

**Explanation:**

In the DL/I test program (DFSDDLTO), the specified limit of unequal compares was reached.

**System action:**

The IMS dependent or batch region terminates abnormally.

**Programmer response:**

None.

**Problem determination:**

None.

0256

**Explanation:**

The communication restart processor for conversations detected an error while processing X11' log records during emergency restart. This problem is probably caused by modifications to the IMS system.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Determine what modifications might be causing this problem.

**Master Terminal Operator Response:** Run the Database Backout utility for each PSB that was scheduled when the original problem occurred; then cold start IMS.

0257

**Explanation:**

An error occurred while scanning for a VTAM terminal control block when processing a X11' or X12'

log record during an emergency restart. This problem is probably caused by modifications to the IMS system.

System action:  
IMS terminates abnormally.

Programmer response:  
Determine what modifications might have caused this problem.

Master Terminal Operator Response: Run the Database Backout utility for each PSB that was scheduled when the original problem occurred; then cold start IMS.

Problem determination:  
4, 5, 12, 14

0260

Explanation:  
Abend U0260 was issued for one of the following reasons:

The number of parameters in the application program call to IMS exceeded the allowable limit of 18 or is equal to 0.

The checkpoint call was used and one of the following applies:  
Too few parameters were specified.

The number of user-specified areas exceeds the number specified on the XRST call.  
The user area parameters are not paired (a length and address for each area to be dumped).  
The application program overlaid the DL/I function code so that the first character was not alphanumeric. This causes the field to be treated as a count field.

System action:  
The online dependent or stand-alone batch region terminates abnormally. Other IMS regions are not affected.

Programmer response:  
If the problem is an incorrect number of parameters, correct the DL/I call from the application program to conform to the format and content described in IMS Version 9: Application Programming: Database Manager.

When using the symbolic checkpoint call, be sure that the number of user-specified areas does not exceed the number specified on the XRST call.

If the application program overlaid the DL/I function code, correct the application program.

0261

Explanation:  
One of the parameters passed in a DL/I call from the application program to IMS is invalid. It either exceeds object machine size, does not meet alignment requirements, or violates storage protection boundaries.

Some possible causes for failure are:

The call requires an AIB. No AIB was provided.  
The parameter count in the DL/I call is invalid.  
An invalid PCB is detected by IMS. For example:  
A PL/I program does not match a PSB.  
The CMPAT parameter might be specified incorrectly. If the application program is designed to use the IOPCB, CMPAT=YES should be specified in the PSGEN statement for the program to run in the DL/I batch region.  
Incorrect DCB information about the GSAM input data set DD statement.

**System action:**

The online dependent or stand-alone batch region terminates abnormally.

**Programmer response:**

Correct the DL/I call list to conform to the format and content described in IMS Version 9: Application Programming: Database Manager.

Correct the application program DL/I call statements.

Rebind the application program with the ENTRY control statement.

**Problem determination:**

4, 17d

**0262**

**Explanation:**

A batch message processing (BMP) program issued a DL/I call after receiving an XD status code. The XD status code was set because the program issued a DL/I checkpoint or SYNC call while the IMS system was undergoing a checkpoint freeze shutdown.

**System action:**

The BMP region is terminated abnormally.

**Programmer response:**

This is an application program error. Status code XD was returned on the DL/I checkpoint call to warn the application program not to issue another DL/I call. Correct the application program, and resubmit the job.

**z/OS System Operator Response:** First, contact your IMS system programmer for assistance. At IMS system restart, you can restart the batch message processing program from the DL/I checkpoint.

**0263**

**Explanation:**

An invalid call was made to a Database Control (DBCTL) subsystem for a Coordinator Control (CCTL) subsystem thread. If this abend occurred when issuing a call against the IOPCB, then this is a user error; otherwise, this is an IMS internal error.

**System action:**

The CCTL thread is terminated.

**Programmer response:**

SNAP or SDUMP the CCTL thread.

**Problem determination:**

38

**0265**

**Explanation:**

This abend appears when one of the following conditions occurs:

An interface error occurs in the SPOOL/API processing routines.

A sync point PCB addressing error occurs in the SPOOL/API processing routines.

**System action:**

The IMS application region terminates abnormally.

**Problem determination:**

1, 3, 4, 5, 8, 11, 27

0271

Explanation:

An I/O error was detected while purging buffers during a checkpoint operation.

System action:

GSAM terminates abnormally.

Problem determination:

4, 35

0272

Explanation:

After receiving an AF status code identifying an invalidly formatted BSAM variable-length record, an application program issued a call to a GSAM data set without reinitializing GSAM.

System action:

GSAM terminates abnormally.

Programmer response:

See message DFS0768I for details.

0273

Explanation:

An error was detected while repositioning a GSAM data set during an XRST call, or there is a GSAM DCB discrepancy (BLKSIZE/LRECL) between the original execution and the attempted restart execution.

System action:

GSAM abnormally terminated because position in the affected data set was unpredictable.

Programmer response:

Print the GSAM control block DSECTS (member name IGLI in SDFSMAC) for use in analyzing the GSAM control blocks. Determine and correct the reason for the error, and rerun the failing job.

0274

Explanation:

An unexpected interface error occurred between module DFSSBIO0 and its caller.

System action:

IMS terminates abnormally.

Programmer response:

See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for detailed diagnostic information.

0275

Explanation:

IMS was not able to acquire an area needed to create a SNAP memory dump of the Sequential Buffering (SB) control blocks and areas. Message DFS2350I is issued along with this abend.

System action:

The application program terminates abnormally.

Programmer response:

Correct the error based on information in message DFS2350I.

0300

Explanation:

While running under control of the Utility Control Facility, a message was produced for which the user requested an abend to occur.

System action:

The Utility Control Facility terminates, and a storage memory dump is produced on the SYSUDUMP or SYSABEND data set.

Programmer response:

Verify that the objective of the memory dump has been achieved. This memory dump is a diagnostic aid.

0302

Explanation:

During the execution of the Database Data Set Recovery utility, DFSURDB0, an unrecoverable error occurred.

System action:

IMS terminates abnormally with a memory dump.

Programmer response:

None.

Problem determination:

3, 4, 35

0303

Explanation:

The parameter list constructed from the OPTION statements has been modified (see the IMS Version 9: Installation Volume 2: System Definition and Tailoring for information about specifying the IMS buffer pools). An error might have occurred in the user exit routine, which caused the routine to address and modify storage outside its legitimate address space.

System action:

The program terminates abnormally.

Programmer response:

Correct any indicated errors, and rerun the job.

Problem determination:

3, 4, 35

0305

Explanation:

Reading a VBS sequential data set, an incomplete spanned record was detected. Either a continuation segment was encountered without being preceded by a starting segment, or an end-of-file condition or a new segment was encountered after a starting segment without an ending segment.

System action:

IMS terminates abnormally.

Programmer response:

Correct the problem, and rerun the job.

Problem determination:

1, 2, 3, 4

0306

Explanation:

The length of the new Change Accumulation output record exceeds output buffer size.

System action:

Change Accumulation terminates abnormally with a memory dump.

Programmer response:

Correct any errors in the input to Change Accumulation, and rerun the job.

Problem determination:

3, 35, and copies of input Log and Change Accumulation data sets.

0307

Explanation:

Batch backout was not run with the same GSG name used when the log records were created.

System action:

Batch backout abnormally terminates.

System programmer response:

Rerun batch backout with the correct GSG name.

Module:

DFSBCKI0

0310

Explanation:

The partial database reorganization step terminates abnormally because of the condition indicated in the previously issued error message.

System action:

The step is abnormally terminated.

Programmer response:

See output of PDBR step for the error message that describes this problem.

Problem determination:

4, 35

0311

Explanation:

Surveyor detected an error.

System action:

The step is abnormally terminated.

Programmer response:

See output of Surveyor for the error message that describes this problem.

Problem determination:

None.

0315

Explanation:

IMS received a nonzero return code from an IMSAUTH SVC function. Register 15 contains the IMSAUTH return code. For a description of these return codes, see IMSAUTH Return Codes.

**System action:**  
IMS terminates abnormally with a memory dump.

**Programmer response:**  
Take appropriate action according to the codes in register 15.

**Problem determination:**  
4, 11, 35

0316

**Explanation:**

An unexpected or unrecoverable error was detected during coupling facility services initialization or subsequent execution. Register 15 contains the abend reason code. See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for details on what causes this abend to be issued.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**  
1, 4, 35

0317

**Explanation:**

A coupling facility failure was detected on the XRF alternate subsystem. The failure could be one of the following:

Connection failure  
Structure rebuild failure  
**System action:**  
IMS terminates abnormally.

**Programmer response:**  
See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. If the failure was a connection failure, restart the alternate subsystem after its connection to the coupling facility is reestablished.

**Problem determination:**  
1, 4, 35

0318

**Explanation:**

Module DFSDVBI0 determined that the coupling facility services function cannot be initialized. To use this function, MVS release level 510 or higher is required. If a VSAM structure is to be used, DFSMS release level 120 or higher is required. Register 15 contains the abend reason code. See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for details on what caused this abend to be issued.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Start of change Verify the z/OS release level, the DFSMS release level, or both. See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. End of change

0319

Explanation:

Module DFSDVBI0 determined that coupling facility services initialization failed in a batch environment. Message DFS3381E is issued; the DATA part of the message identifies the reason for failure.

System action:

IMS terminates abnormally. One or more messages are issued identifying the reason for failure.

Programmer response:

See message DFS3381E.

Problem determination:

1, 4

0322

Explanation:

An unexpected or unrecoverable error occurred in OSAM sequential buffering during execution for coupling facility services.

System action:

IMS terminates abnormally.

Programmer response:

See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 4, 35

0347

Explanation:

A severe error condition was detected during HD Reorganization Unload, and a SYSUDUMP or SYSABEND DD statement was provided. This was caused by either an internal system error or a missing DD statement or data set.

All HD Reorganization Unload and Reload operations now include PHDAM and PHIDAM databases.

System action:

System terminates abnormally.

Programmer response:

Check all preceding messages for clues to what caused the memory dump. Correct any errors found, and rerun the job.

Problem determination:

1, 2, 3, 4, 17d, 20, 35

0355

Explanation:

A severe error condition was detected during HD Reorganization Reload, and a SYSUDUMP or SYSABEND DD statement was provided. This is possibly an internal system error.

All HD Reorganization Unload and Reload operations now include PHDAM and PHIDAM databases.

System action:

IMS terminates abnormally.

**Programmer response:**

Check all preceding messages for clues to what caused the memory dump. Correct any errors found, and rerun the job.

**Problem determination:**

1, 2, 3, 4, 17d, 20, 35

0359

**Explanation:**

The abend option was selected for the HISAM Reorganization Unload or Reload utility and a severe error occurred.

**System action:**

The utility terminates abnormally.

**Programmer response:**

Check all preceding messages for clues to what caused the memory dump. Correct any errors found, and rerun the job.

**Problem determination:**

1, 2, 3, 4, 17d, 20, 35

0360

**Explanation:**

User error.

**Reason Code**

**Description**

01

Transport Manager is not executing in protect key seven (supervisor state). Probable user error: specify KEY(7) in the parameter field of the transport manager EXEC statement.

Module: ELXINIT0

02

A send filter exit routine failure has been detected. Recovery is attempted. If successful, filtering is suspended for the conversation.

Module: ELXUISE0

0361

**Explanation:**

Logic error in Transport Manager.

**Reason Code**

**Description**

01

Internal logic error: code in user address space does not match code in transport manager address space.

Module: ELXUTM00

02

Internal logic error: invalid vector value in transport manager exit scheduler.

Module: ELXUSX10

03

Internal logic error: invalid vector value in transport manager service routines.

Module: ELXUS000

04

Internal logic error: invalid vector value in transport manager VTAM allocation 1 routine.  
Module: ELXUVA10

05

Internal logic error: send queue "Should Not Occur" condition in transport manager send support.  
Module: ELXUVS10

06

Internal logic error: unsupported what-received status or data length. Recovery is attempted after an SDUMP; the conversation is deallocated. Register 3 at entry to abend points to the RPL.  
Module: ELXUVXR0

07

Internal logic error: unsupported RPL6REQ/RPL6QUAL values in a completed RPL. Recovery is attempted after an SDUMP. Register 3 at entry to abend points to the RPL. Any conversation associated with the RPL is likely to be inoperative.

Module: ELXUVXR0

08

RESMGR DELETE produced an error return code (saved in register 2). An SDUMP is created and recovery continues processing.  
Module: ELXUIFO0

09

Internal logic error: an invalid AFR function was received.  
Module: ELXUSX20

10

Internal logic error: an invalid status exit routine reason code.  
Module: ELXTITX0

0362

Explanation:  
Termination of transport manager has been requested by the operator.

Reason Code

Description

01

The ABDUMP command was invoked to take the system memory dump. The transport manager is abnormally terminated.

Module: ELXCABN0

0363

Explanation:  
An unrecoverable error was detected by database tracking logic. Reason codes further identify the type of unrecoverable error:

Reason Code

Description

01

During initialization, an error return code was returned by the MVS DSPSERV/ALESERV macro while attempting to create a data space. The return code from R15 has been saved in R2, the reason code from R0 has been saved in R4.

Module: DFSDT100, DFSDT320

03

During initialization, an error return code was returned from IMODULE GETMAIN for loc=(any,any)

private area storage in the DLT region, for the tracking hash table. The return code from R15 has been saved in R2.

Module: DFSDT150

04

During initialization, an error return code was returned from DFSDSM indicating that the tracking data space does not have storage for basic system areas. The return code from R15 has been saved in R2.

Module: DFSDT100, DFSDT320

07

During initialization, an error return code was returned from IMODULE LOAD indicating that a required module could not be loaded. The return code from R15 has been saved in R2.

Module: DFSSDT20

09

During initialization, an error return code was returned from DFSCWU indicating that milestone PST ITASKs could not be created. The return code from R15 has been saved in R2.

Module: DFSSDT20

10

An error return code was returned from DFSBCB GET indicating that AWE could not be created during initialization, milestone/quiesce processing, database status change processing, or abrupt-end-tracking processing. The return code from R15 has been saved in R2.

Module: DFSDT100, DFSDT160, DFSDT180, DFSDT330

11

During initialization, an error return code was returned from MVS TCBTOKEN request. The return code from R15 has been saved in R2.

Module: DFSDT100

12

During initialization, an error return code was returned from MVS SETLOCK request. The return code from R15 has been saved in R2.

Module: DFSDT100

13

During initialization or SAS AWE queue processing, an error return code was returned from DFSBCB GET indicating that storage could not be obtained for a control block or work area. The return code from R15 has been saved in R2.

Module: DFSDT150, DFSDT300

14

During tracking redo processing, an error return code was returned from IMODULE GETMAIN for loc=(any,any) private area storage in the DLT region, indicating that storage could not be obtained for control blocks needed. The return code from R15 has been saved in R2.

Module: DFSDT400

15

An error return code was returned from IMODULE GETSTOR, indicating that storage could not be obtained by the tracking CTL AWE processor for an AWE. The return code from R15 has been saved in R2.

Module: DFSDT240

16

During initialization, an error return code was returned from IMODULE GETMAIN indicating that storage could not be obtained in subpool 231 for the DL/I database tracking trace table. The return

code from R15 has been saved in R2.  
Module: DFSDT100

19

During initialization, an error return code was returned from IMODULE GETMAIN for LOC=(any,any) private area storage, indicating that storage could not be obtained for control blocks needed. The return code from R15 has been saved in R2.

Module: DFSSDT20

System action:  
IMS terminates abnormally with a memory dump.

System programmer response:  
Take appropriate action based on the return code in register 2.

0364

Explanation:

A logic error was detected during database tracking. Reason codes further identify the type of logic error:

Reason Code

Description

01

An invalid AWE request code was detected by database tracking CTL AWE processor or SAS AWE queue server.

Module: DFSDT240, DFSDT300

02

An invalid function code was detected by milestone/quiesce processing or database status change processing.

Module: DFSDT160, DFSDT180, DFSDT250

03

An invalid type of database redo record was encountered during tracking redo-queue processing.  
Module: DFSDT240

System action:  
IMS terminates abnormally with a memory dump.

System programmer response:

Contact IBM.

0365

Explanation:

A logic error was detected during isolate log send (ILS) processing. Reason codes further identify the type of logic error:

Reason Code

Description

01

An incorrect function code was detected by ILS.

Module: DFSIL010, DFSIL210, DFSIL240, DFSIL330, DFSIL340, DFSIL500, DFSIL510

02

An ILS internal logic error was detected.

Module: DFSIL300, DFSIL320

03

ILS issued a DBRC macro call and received an invalid return code. See either message DFS4072A or DFS4095I for more information about the error.

Module: DFSIL300, DFSIL310

05

An invalid status exit reason code was detected.

Module: DFSIL320, DFSIL400

System action:

IMS terminates abnormally with a memory dump.

System programmer response:

Contact IBM.

0367

Explanation:

An IMS system error was encountered during DL/I call processing for a GU (message), ISRT (message) or SETO call. IMS writes a '67D0' log record indicating the cause of the error. This abend is set by DFSDLA30 and issued by DFSECP10/DFSECP20.

System action:

The application program terminates abnormally.

Programmer response:

Check the '67D0' log record to determine the cause of the error and contact IBM Software Support.

Problem determination:

1, 3, 5, 6, 36

0368

Explanation:

A CQS request failed during DL/I call processing for a GU (message) or an ISRT (message). IMS writes a type X67D0' log record indicating the cause of the error. This abend is set by DFSDLA30 and issued by DFSECP10/DFSECP20.

System action:

The application program terminates abnormally. The input message is discarded if abend 0368 occurs on an ISRT call; the input message is not discarded if this abend occurs on a GU. The transaction is not stopped and the PSB is not stopped.

Programmer response:

Check the X67D0' log record to determine the cause of the error. Contact the IBM Support Center.

Problem determination:

1, 3, 5, 6, 36

Start of change

0369

Explanation:

Start of changeThe buffer handler module, DFSDVBH0, has detected an internal error. The caller provided the buffer handler with an RBA whose low-order bit contains either '0' or '1' referring either to data sets A-J or to data sets M-V of a HALDB, respectively. The value is inconsistent with DMBORFL2.End of change

Analysis: Registers R4 and R5 at time of abend will indicate what the internal error might be. Both registers will have either a '0' or '1' where '0' means that I/O is for one of the A-J data sets and '1' means that I/O is for one of the M-V data sets.

Start of change Both registers must have the same values for processing to continue. On the other hand, if both registers have different values, processing immediately returns to the caller with `PSTSUBCD=X08'` and `PSTRTCDE=X10'` set. The value in register R4 is the odd bit of `PSTBYTNM` and the value in register R5 is the flag bit in `DMBORFL2`. End of change

System action:  
The task pseudoabends with U0369.

System programmer response:  
Contact IBM Software Support.

Module:  
DFSDVBH0

End of change  
0370

Explanation:  
Start of change A CQS request failed due to a structure-full condition on a PURG call or during non-phase 2 sync point processing. A QMGR update APPC/OTMA prefix request failure can also cause this abend. End of change

This abend is set by `DFSFXC40` and issued by `DFSECP10`, `DFSECP20`, `DFSPCC20`, and `DFSCPY00`.

System action:  
The application program ends abnormally. The transaction and PSB are stopped. The input message is not discarded.

Programmer response:  
Correct the structure-full condition. Contact IBM Software Support.

Problem determination:  
1, 3, 5, 6, 36

0371  
Explanation:

During Phase 1 of sync point processing, a `DFSQMGR` Insert Prefix call was issued to append an `IMSID` to the queue name of a program-to-program switch message. The `DFSQMGR` call received an `RC=08`, which indicates an internal QMGR error.

System action:  
The application program ends abnormally. The transaction and PSB are stopped. The input message is discarded.

Module:  
DFSFXC40

Problem determination:  
1, 3, 5, 6, 36

0378  
Explanation:

IMS was unable to parse the DFSRSRxx member for one of the reasons below. The subcodes can be found in R15 at abend.

Reason Code

Description

01

One or more parameter errors were found while processing member.

02

Unable to obtain necessary working storage required while processing. An IMODULE GETMAIN failed; the return code is displayed in the DFS2929A message which precedes this abend. For more information, see IMODULE Return Codes.

03

The TSO/E IKJPARS service used for parsing returned a nonzero return code indicating an error. The return code is displayed in the DFS2929A message which precedes this abend. See the TSO Extensions Version 2 Programming Services manual TSO writes an error message to the data set indicated by the SYSTSPRT DD statement in the IMS job.

Analysis: The DFSRSRxx member contains parameters for an RSR system. This member is selected by specifying the two-character suffix on the RSRMBR= exec parameter in the IMS procedure; the default is 00. While processing this member, IMS detected an error. This abend is preceded by one or more DFS2929A messages, which indicate the reason for the abend.

System action:

IMS terminates abnormally.

System programmer response:

The following actions correspond to the reason codes listed in the explanation.

Correct the error in the DFSRSRxx member and restart IMS. This return code indicates the member was parsed correctly, but the values were not in the allowable range.

Increase the IMS region size and restart IMS. If this problem recurs report the problem to IBM.

Analyze the TSO error messages and correct the syntax of the DFSRSRxx member, then restart the IMS system.

Module:

DFSRPP00

0379

Explanation:

A transport manager instance (TMI) name was not specified for an IMS batch or utility job for which a global service group (GSG) name and logging were specified. A license certificate could not be found for either the DLT or RLT features.

Analysis: Specifying a GSG name for a batch or utility job that creates a log makes the job RSR-capable. However, a TMI name must also be specified for RSR processing. The abend is issued because a TMI name was not specified. Message DFS2924I precedes the abend.

System action:

IMS terminates abnormally.

System programmer response:

Correct the IMS system definition to specify the TMI name or supply the name using the TMI= execution parameter.

If you're running on a z/OS® operating system that is running a zSeries® processor, add the necessary license certificates for RLT, DLT, or both.

Module:

DFSXBAT0, DFSXDCC0

0380

Explanation:

A logic error was detected during log router processing. Reason codes further identify the type of logic error:

Reason Code

Description

01

An invalid AWE function code was detected by a log router ITASK.

Module: DFSLRART, DFSLRRDS, DFSLRID, DFSLRSAR, DFSLRDCR, DFSLRDZ, DFSLRLT, DFSLRMRG, DFSLRETI, DFSLRASC, DFSLRMIL, DFSLRARC, DFSLRLTR, DFSLRTRM, DFSLRCAS, DFSLRMST, DFSLRARP, DFSLROPR, DFSLRDDE, DFSLROIC, DFSLRRDC, DFSLRDSS, DFSLRR0

02

An invalid parameter was detected while allocating a conversation with an active subsystem or isolated log sender by the Transport Manager Subsystem (TMS). Message DFS4018I accompanies the abend code. Register 14 contains the reason code from the TMS allocate conversation request.

Module: DFSLRCS0, DFSLRICN

03

An invalid parameter error code was returned by the transport manager subsystem (TMS) as a result of an allocate conversation request. Message DFS4018I accompanies the abend code. Register 14 contains the reason code from the TMS allocate request.

Module: DFSLRCS0, DFSLRICN

04

The tracking subsystem processed an invalid tracking subsystem log record (49xx) during tracking subsystem restart. Register 14 contains the address of the log record.

Module: DFSLRARR

05

The tracking subsystem detected a missing gap descriptor block while attempting to obtain missing active subsystem log data from an Isolated Log Sender at the active site.

Module: DFSLRICM, DFSLRID

06

The tracking subsystem detected an error while attempting to communicate with an active subsystem or the Isolated Log Sender (ILS) at the active site. Register 14 contains the reason code from the send request.

Module: DFSLRASC, DFSLRID, DFSLRSCM

07

An invalid parameter was detected while deallocating a conversation with an active subsystem or isolated log sender by the Transport Manager Subsystem (TMS). Register 14 contains the reason code from the TMS deallocate conversation request.

Module: DFSLRASC, DFSLRCAS, DFSLRCS0, DFSLRICN, DFSLRSTX

08

The tracking subsystem detected invalid log sequence numbers when attempting to close a tracking log with DBRC. The first log sequence number of the tracking log is greater than the last log sequence number. Register 14 has the address of a parameter area containing the invalid log sequence numbers.

Module: DFSLRDDE, DFSLRRDD, DFSLRRDY, DFSLRSFT

09

The tracking subsystem attempted to write a log buffer with no data. Register 14 contains the address

of the empty buffer.

Module: DFSLRWRT

0A

The tracking subsystem received active subsystem log data out of order.

Module: DFSLRREX

0B

The tracking subsystem received an invalid package descriptor record from an active subsystem.

Module: DFSLRREX

0C

The tracking subsystem Transport Manager Subsystem (TMS) status exit routine received an invalid function request. Register 14 contains the invalid function code.

Module: DFSLRSTX

0D

The tracking subsystem detected that an active subsystem provided log buffer with no data.

Module: DFSLRIRX, DFSLRREX

0E

The tracking subsystem is unable to find the milestone position block containing the log position required for recovery of tracked databases or AREAs.

Module: DFSLREDT

0F

An AWE was received by a tracking subsystem ITASK that could not be processed before tracking subsystem initialization.

Module: DFSLRDSS

10

The tracking subsystem detected an invalid request code from the isolated log sender (ILS) at the active site. Register 14 contains the invalid request code.

Module: DFSLRIRX

11

The tracking subsystem detected an invalid buffer header in which the buffer header does not contain the last log sequence number contained in the buffer. Register 14 contains the address of the buffer header.

Module: DFSLRRR0

12

An OPEN macro was issued for a tracking log with a block size larger than the buffer size available to read it. Message DFS4012I with return code XFFFF' precedes this abend. That message identifies the tracking log data set with the invalid block size. The buffer size is the maximum of the BLOCK keyword values of the SLDSDEF, ARCHDEF and RLDSDEF parameters of IMS.PROCLIB member DFSRSRxx. See message DFS4012I for more information.

Module: DFSLRDOP

13

The tracking subsystem detected a sharing subsystem using an active subsystem log record and has no record of it.

Module: DFSLRMRG

End of change

14

The tracking subsystem is merging active subsystem log records and is unable to find a control block

representing an active subsystem participating in the merge.  
Module: DFSLRMRG

15

The tracking subsystem is presented with a second sharing log record representing an active subsystem participating in the merge.  
Module: DFSLRMRG

16

The tracking subsystem detected invalid feedback after routing data to the tracking subsystem trackers while merging log records from multiple active subsystems.  
Module: DFSLRMRG

18

The tracking subsystem detected an invalid condition while attempting to read a tracking log. Register 14 contains the address of the invalid AWE.  
Module: DFSLROPR, DFSLRRR0

1A

The tracking subsystem detected an invalid log record from an active subsystem.  
Module: DFSLRIRX, DFSLRREX

1B

The tracking subsystem detected an invalid STCK value in a log record from an active subsystem.  
Module: DFSLRBIR, DFSLRRBF, DFSLRSDS, DFSLRWRT

1C

The tracking subsystem is unable to read a set of log records required to complete restart.  
Module: DFSLRRRS

1D

The tracking subsystem has determined that the position being set for routing a log is not valid. This error could result from an internal logic error or an improper cold start of the tracking subsystem.  
Module: DFSLRRR0, DFSLRRRS

1E

(Reason code 1E is not used)

21

The tracking subsystem received data from the isolated log sender without a "begin data set" notification.  
Module: DFSLRID

22

The tracking subsystem is told to stop receiving data from the isolated log sender, but cannot find the required control blocks.  
Module: DFSLRID

23

The tracking subsystem detected a buffer in the available buffer pool that was not marked as available.  
Module: DFSLRASC, DFSLRBIT, DFSLRGLB, DFSLRID, DFSLRIRX, DFSLRLTR, DFSLRMRG, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRDC, DFSLRRDF, DFSLRRDS, DFSLRRDW, DFSLRREX, DFSLRRRD, DFSLRRRS, DFSLRRR0, DFSLRRT0, DFSLRSAR, DFSLRSBR, DFSLRSIN, DFSLRTRS, DFSLRWRT

24

The tracking subsystem detected a buffer in the available buffer pool that belongs to the automatic archive buffer pool.

Module: DFSLRASC, DFSLRBIT, DFSLRGLB, DFSLRID, DFSLRIRX, DFSLRLTR, DFSLRMRG, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRDC, DFSLRRDF, DFSLRRDS, DFSLRRDW, DFSLRREX, DFSLRRRD, DFSLRRRS, DFSLRR0, DFSLRRT0, DFSLRSAR, DFSLRSBR, DFSLRSIN, DFSLRTRS, DFSLRWRT

25

The tracking subsystem was either unable to obtain information about missing log data from DBRC, or obtained invalid information about missing log data from DBRC.

Module: DFSLRRRS

26

The tracking subsystem detected an invalid buffer when processing the buffer to write to a tracking log.

Module: DFSLRARP DFSLRWRT

27

The tracking subsystem needs to close a data set that resides on a mountable device type, but is unable to find the TCB which opened the data set.

Module: DFSLRDSS

28

The tracking subsystem detected an internal error while attempting to obtain a tracking subsystem latch. Register 14 contains the return code from the obtain latch request.

Module: DFSLRARA, DFSLRARL, DFSLRARR, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRLTS, DFSLRMST, DFSLRRDD, DFSLRRDS, DFSLRRDY, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSWB, DFSLRWRT

29

The tracking subsystem detected an internal error while attempting to release a tracking subsystem latch. Register 14 contains the return code from the release latch request.

Module: DFSLRARA, DFSLRARL, DFSLRARR, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRLTS, DFSLRMST, DFSLRRDD, DFSLRRDS, DFSLRRDY, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSWB, DFSLRWRT

2A

The tracking subsystem found no logs to start a database or AREA as a result of a /START command, but was notified by DBRC that the database or AREA requires recovery.

Module: DFSLRORH DFSLRORM DFSLRORN

2B

The tracking subsystem determined that the start point for a database or AREA was invalid when processing a /START DATABASE, UPDATE DB START(ACCESS), /START AREA or UPDATE AREA START(ACCESS) command.

Module: DFSLRORM DFSLRORN

End of change

2C

The tracking subsystem found the initial log record for an active subsystem was not in the concurrent image copy (CIC) as a result of processing a /START DATABASE, UPDATE DB START(ACCESS), /START AREA or UPDATE AREA START(ACCESS) command.

Module: DFSLROPR

End of change

2D

The tracking subsystem determined that DBRC did not supply the start-point information required for online forward recovery (OFR) processing.

Module: DFSLROIC, DFSLRORH, DFSLRORM

2E

The tracking system detected an I/O error while accessing a tracking log data set. The error occurred during either the BSAM READ macro or BSAM WRITE macro (not the BSAM CHECK macro). The abend originates in DFSLRRDU if the error occurred during BSAM READ; it originates in DFSLRSWB if the error occurred during BSAM WRITE. Refer to the accompanying access method services message to determine the appropriate action to take.

Module: DFSLRRDU, DFSLRSWB

2F

During OFR, the log router detected a log data set descriptor in the list returned by DBRC that represented a log data set that contained data that occurred before the current OFR position.

Module: DFSLRORM

0381

Explanation:

An unrecoverable resource shortage was detected by log router processing logic. Reason codes further identify the type of unrecoverable error:

Reason Code

Description

01

The tracking subsystem was unable to obtain an AWE. Register 14 contains the reason code from DFSBCB.

Module: DFSLRARA, DFSLRARC, DFSLRARI, DFSLRARP, DFSLRARR, DFSLRART, DFSLRAR1, DFSLRASC, DFSLRAST, DFSLRAS1, DFSLRBIR, DFSLRBIT, DFSLRCAS, DFSLRCS0, DFSLRDAL, DFSLRDBT, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRDTM, DFSLREDT, DFSLRICM, DFSLRICN, DFSLRIDS, DFSLRIILT, DFSLRIN1, DFSLRIRX, DFSLRLTC, DFSLRLTR, DFSLRMIL, DFSLRMRG, DFSLRMST, DFSLROCR, DFSLROIC, DFSLROPR, DFSLRORM, DFSLRORN, DFSLRRBF, DFSLRRDA, DFSLRRDB, DFSLRRDC, DFSLRRDD, DFSLRRDF, DFSLRRDH, DFSLRRDK, DFSLRRDN, DFSLRRDR, DFSLRRDS, DFSLRRDT, DFSLRRDU, DFSLRRDW, DFSLRRDX, DFSLRRDY, DFSLRRDZ, DFSLRREX, DFSLRRRS, DFSLRRR0, DFSLRSAR, DFSLRSBR, DFSLRSDS, DFSLRSFG, DFSLRSFT, DFSLRSIN, DFSLRSTX, DFSLRTK0, DFSLRWRT

02

The tracking subsystem was unable to obtain BRLSB storage in CSA for communication with DBRC. Register 14 contains the reason code from the storage request.

Module: DFSLRAST, DFSLRDAL, DFSLRDBT, DFSLRDCR, DFSLRDSS, DFSLRIN0, DFSLRORS, DFSLRRDB, DFSLRRDC, DFSLRRDN, DFSLRRDZ, DFSLRRRS

03

The tracking subsystem was unable to obtain storage for a log buffer(s). Register 14 contains the reason code from the storage request.

Module: DFSLRDCR, DFSLRDSS, DFSLRRCR

04

The tracking subsystem was unable to create an ITASK. Register 14 contains the reason code.

Module: DFSLRASC, DFSLRDAL, DFSLRDCR, DFSLRDSS, DFSLROIC

05

The tracking subsystem was unable to obtain extended CSA storage. Register 14 contains the reason code from the storage request.

Module: DFSLRARS, DFSLRDBT, DFSLRDSS, DFSLRDT, DFSLRMIL, DFSLRMST, DFSLRRCR, DFSLRRDB, DFSLRRDC, DFSLRRDH, DFSLRRDN, DFSLRRDS, DFSLRRDX, DFSLRRDZ, DFSLRRRD, DFSLRRST, DFSLRSIN

06

The tracking subsystem was unable to obtain storage from BCB to represent missing log data.

Register 14 contains the reason code from the storage request.

Module: DFSLRASC, DFSLRAS1, DFSLRDE, DFSLRICM, DFSLRID, DFSLRIGP, DFSLRRDH, DFSLRRDX, DFSLRSAR, DFSLRSDS

07

The tracking subsystem was unable to obtain storage using IMODULE. Register 14 contains the reason code.

Module: DFSLRARA, DFSLRARC, DFSLRARI, DFSLRARL, DFSLRARR, DFSLRAR1, DFSLRASC, DFSLRAS1, DFSLRCAS, DFSLRCS0, DFSLRDAL, DFSLRDCR, DFSLRDDE, DFSLRDIS, DFSLRDSS, DFSLRDTM, DFSLREDT, DFSLRGSL, DFSLRICM, DFSLRICN, DFSLRID, DFSLRILT, DFSLRINO, DFSLRINS, DFSLRIRX, DFSLRLTS, DFSLRMIL, DFSLRMRG, DFSLRMST, DFSLROIC, DFSLRORH, DFSLRORM, DFSLRORN, DFSLRORS, DFSLRRDA, DFSLRRDB, DFSLRRDC, DFSLRRDD, DFSLRRDH, DFSLRRDN, DFSLRRDR, DFSLRRDS, DFSLRRDY, DFSLRRRS, DFSLRRR0, DFSLRRST, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSIN, DFSLRSTX, DFSLRTRM, DFSLRSWB, DFSLRTRM

End of change

08

The tracking subsystem was unable to create a conversation manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

09

The tracking subsystem was unable to load a load module with IMODULE. Register 14 contains the reason code from the imodule func=load request.

Module: DFSLRINO

0A

The tracking subsystem was unable to obtain a save area set for use by the tracking subsystem transport manager exits. Register 14 contains the reason code from BCB."

Module: DFSLRINO

0B

The tracking subsystem was unable to create a tracking log data set manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

0C

The tracking subsystem was unable to create a milestone manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

0D

The tracking subsystem was unable to create an isolated log transport manager ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

0E

The tracking subsystem was unable to create an automatic archive ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

0F

The tracking subsystem was unable to create a tracking log read controller ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRINO

10

The tracking subsystem was unable to attach subordinate TCBs. Register 14 contains the reason code from the dfsattach request.

Module: DFSLRDAL, DFSLRDCR, DFSLRDSS, DFSLRIN0

11

The tracking subsystem was unable to obtain a service group list from DBRC during initialization.

Register 14 contains the reason code from DBRC.

Module: DFSLRIN1

12

The Remote Site Recovery tracking subsystem detected an unexpected return code from a deallocate conversation request for a conversation with the isolated log sender at the active site. Register 14 contains the return code from the deallocate conversation attempt.

Module: DFSLRLT

13

An INITECB failure occurred while attempting to read tracking log data in a Remote Site Recovery tracking subsystem. Register 14 contains the reason code from the INITECB request.

Module: DFSLRBIR, DFSLRRDT

14

The tracking subsystem detected an unexpected return code from DBRC on an allocate database/AREA attempt. Register 14 contains the reason code from the DBRC request.

Module: DFSLRDBT

15

The tracking subsystem detected an unexpected return code from DBRC on a deallocate database/AREA attempt. Register 14 contains the reason code from the DBRC request.

Module: DFSLRDBT

16

The Remote Site Recovery tracking subsystem detected an error during the log truncation phase of unplanned takeover processing. An unexpected return code from DBRC when the truncation request is made. Register 14 contains the reason code from the DBRC request.

Module: DFSLRLTS

17

The tracking subsystem detected an unexpected return code from DBRC on a replace tracking logs for truncation attempt for log truncation during unplanned takeover. Register 14 contains the reason code from the DBRC request.

Module: DFSLRLTR

18

The tracking subsystem was unable to obtain BCB storage. Register 14 contains the reason code from the BCB request.

Module: DFSLRDCR, DFSLRICM, DFSLRICN, DFSLRLT, DFSLRINS, DFSLRIN0, DFSLRMIL, DFSLROIC, DFSLRORS, DFSLRRST

19

The tracking subsystem was unable to create an online forward recovery ITASK. Register 14 contains the reason code from the create work unit request.

Module: DFSLRIN0

1B

An error was detected when the RSR tracking IMS tried to create a position data set during RSR tracking IMS shutdown. Register 14 contains one of the following

An error was detected when the RSR tracking IMS tried to create the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

2

Another data set was detected with the same name as the position data set. Delete the position data set identified in the accompanying messages before shutting down the tracking IMS.

3

An error was detected when the RSR tracking IMS tried to open the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

4

An error was detected when the RSR tracking IMS tried to write to the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

5

An error was detected when the RSR tracking IMS tried to close and deallocate the position data set. See accompanying messages and resolve the problem identified in the messages before restarting the tracking IMS.

6

A read error was detected while processing the secondary position data set during a cold start of the RSR tracking IMS. The read error occurred after an error was detected while processing the primary position data set. The RSR tracking IMS is unable to set the routing position and cannot continue with cold start processing. Resolve the cause of the errors and start the RSR tracking IMS.

Module: DFSLRDCR, DFSLRDOP, DFSLRDSS, DFSLRTRM

1C

The tracking subsystem was unable to log a tracking subsystem log record. Register 14 contains the reason code from the ILOG attempt.

Module: DFSLRARL, DFSLRARR, DFSLRASC, DFSLRAST, DFSLRAS1, DFSLRCAS, DFSLRDCR, DFSLRDDE, DFSLRDSS, DFSLRDTM, DFSLRLTR, DFSLRLTS, DFSLRMIL, DFSLRMST, DFSLROIC, DFSLRRCR, DFSLRRDD, DFSLRRDH, DFSLRRDY, DFSLRSAR, DFSLRSDS, DFSLRSFT, DFSLRSWB, DFSLRTK0, DFSLRTRM, DFSLRWRT

1D

The tracking subsystem failed to create the required output tracking log for log truncation during unplanned takeover processing.

Module: DFSLRLTS

1E

The tracking subsystem was unable to obtain at least 1 log buffer for use by log truncation during unplanned takeover processing.

Module: DFSLRLTS

1F

The tracking subsystem was unable to create a log reader for use by log truncation during unplanned takeover processing. Register 14 contains the return code from the create read request.

Module: DFSLRLTS

Module: DFSLRIN0

20

The tracking subsystem was unable to create an end tracking ITASK. Register 14 contains the reason

code from the create work unit request.  
Module: DFSLRIN0

21

The tracking subsystem detected an error while processing the position data set. Register 14 contains one of the following the reason codes:

The tracking subsystem was unable to create a position data set.  
A data set with the same name as the position data set was found when the tracking subsystem attempted to create it.  
An error was detected while attempting to open the position data set.  
An error was detected while attempting to write to the position data set.  
An error was detected while attempting to close the position data set.  
Module: DFSLRDCR, DFSLRTRM

22

The tracking subsystem experienced an unexpected return code from DBRC on a query tracking logs request. Register 14 contains the return code from DBRC.

Module: DFSLRIGP, DFSLRINI, DFSLRRRS

23

The tracking subsystem experienced an unexpected return code on a call to DBRC. Register 14 contains the return code from DBRC.

Module: DFSLRAST, DFSLRDDE, DFSLRDSS, DFSLRILT, DFSLRINI, DFSLRRDB, DFSLRRDD, DFSLRRDH, DFSLRRDN, DFSLRRDX, DFSLRRDY, DFSLRRRS, DFSLRSAR, DFSLRSDS, DFSLRTK0, DFSLRTRM

24

The tracking subsystem detected an invalid control block. Register 14 contains the address of the control block.

Module: DFSLRART

25

The tracking subsystem requires archive SLDS to be defined before allowing unplanned takeover processing to continue. This abend is preceded by message DFS4030A. See the message description for further details.

Module: DFSLRLTS, DFSLRTRM

27

The log router is unable to create the position data set ITASK. Register 14 contains the create work unit return code.

Module: DFSLRIN0

Start of change28End of change

The set owner call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

Start of change29End of change

The set owner call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

Start of change2AEnd of change

The reset cursor call to DBRC for a HALDB Online Reorganization at the tracking site failed.

Module: DFSLRDBT

0384

Explanation:

A service invoked by the Recovery Data Manager returned an unexpected result. Reason codes further identify the type of error:

Reason Code

Description

002

Obtain variable length storage error

The Recovery Data Manager is unable to obtain storage required for recovery. Register 14 contains the return code from the obtain storage service.

Modules: FRDRPPI00, FDRPPR00, FDRPPS00, FDRRVAM0, FDRRVGF0, FDRRVIA0, FDRRVLM0, FDRRVPR0, FDRRVQD0, FDRRVS00

003

Load error

The Recovery Data Manager is unable to load modules required for recovery. Register 14 contains the return code from the load service.

Modules: FDRPPI00, FDRPPR00, FDRPPS00, FDRRVMI0, FDRRVS10

004

Obtain fixed-length storage

The Recovery Data Manager is unable to obtain fixed-length storage. Register 14 contains the return code from the load service.

Modules: FDRRVAC0, FDRRVAM0, FDRRVIA0, FDRRVIC0, FDRRVIR0, FDRRVM00, FDRRVPR0, FDRRVQD0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWI0, FDRRVWR0, FDRRVWT0

005

Create thread error

If the module is FDRRVIC0, the Recovery Data Manager is unable to create an image copy restore dispatchable thread. If the module is FDRRVIR0, the Recovery Data Manager is unable to gain access to image copy restore dispatchable thread blocks. Register 14 contains the return code from the thread service.

Modules: FDRRVIC0, FDRRVIR0

007

Enqueue AWE error

The Recovery Data Manager is unable to enqueue an asynchronous work element to a dispatchable thread. Register 14 contains the return code from the enqueue service.

Modules: FDRRVAC0, FDRRVAM0, FDRRVIA0, FDRRVIC0, FDRRVIR0, FDRRVM00, FDRRVPR0, FDRRVQD0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWI0, FDRRVWR0, FDRRVWT0

008

Attach TCB error

The Recovery Data Manager image copy restore controller is unable to attach a TCB for an image copy restore instance. Register 14 contains the return code from the attach TCB service.

Modules: FDRRVIC0

009

Message error

The Recovery Data Manager is unable to issue a message. Register 14 contains the return code from the message service.

Modules: FDRRVAM0, FDRRVDA0, FDRRVDD0, FDRRVID0, FDRRVII0, FDRRVIR0, FDRRVIS0, FDRRVRB0, FDRRVRC0, FDRRVRD0, FDRRVWC0, FDRRVWR0

00A

Buffer error

The Recovery Data Manager is unable to obtain a data buffer. Register 14 contains the return code from the obtain buffer service.

Modules: FDRRVMI0, FDRRVPR0

00B

Set storage length

The Recovery Data Manager is unable to set values for obtaining fixed storage. Register 14 contains the return code from the set storage service.

Modules: FDRRVMI0

00C

Post error

The Recovery Data Manager is unable to post a dispatchable thread. Register 14 contains the return code from the post service.

Modules: FDRRVAM0

00F

Write to IMS pipe error

The Recovery Data Manager detected an error sending data to the Database Recovery Manager using an IMS pipe service. Register 14 contains the return code from the wait service.

Modules: FDRRVWR0

011

Release storage error

The Recovery Data Manager is unable to release storage. Register 14 contains the return code from the wait service.

Modules: FDRRVPR0

012

Terminate thread

The Recovery Data Manager is unable to terminate a thread. Register 14 contains the return code from the wait service.

Modules: FDRRVIR0

013

Create IMS pipe error

The Recovery Data Manager is unable to create an IMS pipe for inter-address space communication. Register 14 contains the return code from the wait service.

Modules: FDRRVPR0

014

Address space parameter error

The Recovery Data Manager experienced an error using the ASEXT macro to access and interpret parameters passed by the Database Recovery Manager as part of creating the Recovery Data Manager address space. Register 14 contains the return code from the create address space service.

Modules: FDRRVMI0

015

IMS pipe create error in DSPSERV

The IMS pipe create service detected an error from the DSPSERV macro. Register 14 contains the return code from the DSPSERV macro.

Modules: FDRPPIB0

016

IMS pipe create error in ALESERV

The IMS pipe create service detected an error from the ALESERV macro. Register 14 contains the return code from the ALESERV macro.

Modules: FDRPPIB0

017

Establish ESTAE error in ESTAEX

The IMS pipe service detected an error while using the ESTAEX macro.

Modules: FDRPPIB0, FDRPPRB0, FDRPPSB0

0385

Explanation:

The Recovery Data Manager detected a logic error. Reason codes further identify the type of error:

Reason Code

Description

001

Invalid AWE function code

A Recovery Data Manager thread attempted to process an unknown AWE function request. Register 14 contains the AWE function code.

Modules: FDRRVAM0, FDRRVIR0, FDRRVLM0, FDRRVM00, FDRRVQD0, FDRRVRC0, FDRRVRD0, FDRRVSP1

002

Data set allocation parameter error

The Recovery Data Manager detected a data set allocation parameter error. Register 14 contains the address in the FDRRVRA control block.

Modules: FDRRVDA0

003

Control function error

The Recovery Data Manager control pipe routine detected an unknown function request from the Database Recovery Manager.

Modules: FDRRVPR0

005

Invalid recovery buffer

The Recovery Data Manager detected an invalid recovery buffer on the unused recovery buffer chain.

Modules: FDRRVGF0, FDRRVIC0, FDRRVLM0, FDRRVQD0, FDRRVRB0

006

Invalid storage size

The Recovery Data Manager detected an unusable storage size for an obtain storage request.

Modules: FDRPPIB0, FDERRVDA0

009

SSID error

The Recovery Data Manager detected an invalid number of subsystem identifiers in the SSID list. Register 14 contains the address of the AWE containing the invalid number of SSIDs.

Modules: FDERRVQD0

00A

Invalid record detected

The Recovery Data Manager detected an invalid record.

Modules: FDERRVPR0, FDERRVRB0

00B

Invalid data buffer detected

The Recovery Data Manager detected a buffer with invalid data.

Modules: FDERRVIA0, FDERRVQD0

00D

Image copy restore function error

The Recovery Data Manager image copy restore process detected an invalid function request

Modules: FDERRVID0

015

Invalid ECB address

The Recovery Data Manager is unable to get the task ECB address.

Modules: FDERRVLM0

016

Log data merge setup or parameter error

The Recovery Data Manager detected one of the following errors when passed a buffer to merge:

A new merge request has not been received (no position block exists).

An invalid buffer pointer (0) was detected.

An invalid (0) merge token was passed.

Modules: FDERRVLM0

017

Invalid end of data detected

The Recovery Data Manager detected an end of data notification with at least one SSID still in an active state.

Modules: FDERRVLM0

018

Invalid merge identifier

The Recovery Data Manager was passed an invalid merge ID when a buffer was passed to it for processing.

Modules: FDERRVLM

019

Invalid merge buffer

The Recovery Data Manager detected a buffer with one of the following errors:

The subsystem index is greater than the total number of subsystems.

A request for processing (on behalf of an SSID) was processed before notification was received that it should be part of merge processing.

The buffer being processed has a Log Sequence Number that is smaller than the previous buffer with the same PRILOG time.

Data was received for an SSID whose log data already ended.

Modules: FDRRVLM0

020

Invalid end of merge

The Recovery Data Manager is passed an invalid merge ID for an end of merge for SSID call.

Modules: FDRRVLM0

0388

Explanation:

Start of changeThis abend indicates an RSR initialization failure. DFSIINB0 detected an IMS internal error during IMS Transaction Manager initialization of an RSR-capable system. Further initialization cannot continue. Register 15 contains the following abend subcodes:

Subcode

Explanation

X04'

USERVAR was not specified in the DFSHSBxx member of IMS.PROCLIB or as an execution parameter override.

X08'

The value specified on the MTOID parameter in the DFSRSRxx member of IMS.PROCLIB was not recognized. Valid values are 1, 2, or 3.

X0C'

Username3 was not specified in the APPLID parameter of the COMM macro, and the APPLID3 parameter was blank. Either username3 or APPLID3 must be specified for the RSR tracker.

End of change

System action:

IMS terminates abnormally

Programmer response:

Correct the appropriate system parameter.

0390

Explanation:

This abend is a standard abend issued by module DFSXLUM0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, IMODULE LOAD, or IPOST was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

Problem determination:

4, 33

0391

Explanation:

This abend is a standard abend issued by module DFSXRM00 during IMS initialization. A nonzero

return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 33

0392

Explanation:  
This abend is a standard abend issued by module DFSXTMC0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, IMODULE LOAD, or IPOST was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 33

0393

Explanation:  
This abend is a standard abend issued by module DFSXALM0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 33

0394

Explanation:  
This abend is a standard abend issued by module DFSXALC0 during IMS initialization. A nonzero return code was returned after DFSBCB GET was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 33

0396

Explanation:  
This abend is a standard abend issued by module DFSXXCF0 during IMS initialization. A nonzero return code was returned after DFSBCB GET, IMODULE GETMAIN, DFSCIR, or IPOST was issued. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 33

0402

Explanation:

An unauthorized program attempted to use the IMS SVC interface, an invalid call was passed to the SVC interface by IMS, or the IMS control region has terminated.

An abend U0402 might occur after an abend in a message region or a batch message region if the control region has terminated.

This user abend might also occur when an invalid PCB address is passed on a DL/I call. It can be interpreted as a Fast Path PCB when Fast Path is not in the system.

System action:

If IMS attempted to use the SVC, IMS terminates abnormally. If a user program attempted to use the SVC, the user program terminates abnormally.

Programmer response:

If a user attempted to use the SVC, contact the IMS system programmer for assistance.

Problem determination:  
1, 4, 11, or 35

0403

Explanation:

This abend is issued by module DFSAOS70 during batch processing. The OSAM batch interface to the I/O driver encountered an invalid parameter or control block associated with the I/O call. Register 14 in the abend SVRB registers will contain the address of the location that encountered the error.

System action:

IMS is abnormally terminated.

Programmer response:

Contact the IMS system programmer for assistance.

Problem determination:  
1, 4, 11

0404

Explanation:

This abend is issued by DFSQSPC0 user exit when a request to callable services for working storage fails. Module DFSQSPC0 is the Queue Control Facility (QCF) version of the Queue Space Notification Exit. Register 14 contains the callable services error code (CSPLRTRN) and register 15 contains the callable services return code.

System action:

IMS terminates abnormally.

Programmer response:

Contact the system programmer to analyze the return codes.

Module:  
DFSQSPC0

Problem determination:  
1, 4

0405

Explanation:

The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. The user-defined response in QCF was to abend the application to stop the application from further IMS queue usage.

System action:

The application terminates abnormally.

Programmer response:

Analyze the application to determine why it is using excessive queue space, and make the necessary corrections.

Module:

DFSQSPC0

0406

Explanation:

The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While in this wait state, the dependent region was invalidly posted to by a source other than QCF or a /PSTOP or /STOP command. Register 4 contains the post code.

System action:

The dependent region terminates.

System programmer response:

This abend occurred due to an internal error. Contact the IBM Support Center for assistance.

Module:

DFSQSPC0

0407

Explanation:

Module DFSILTA0 was unable to get enough storage to build queue entries.

System action:

DFSILTA0 terminates abnormally.

Programmer response:

Rerun the job in a larger region or code the ST parameter on the EXEC statement to process for a shorter time.

Problem determination:

None.

0408

Explanation:

The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While the dependent region was in a wait state, a /STOP or /PSTOP command was entered against the region. See message DFS0528I for additional information.

**System action:**  
The application terminates abnormally.

**Programmer response:**  
Analyze the application to determine why it is using excessive queue space, and make necessary corrections.

**Module:**  
DFSQSPC0

**0409**

**Explanation:**  
The dependent region was placed in a wait state by DFSQSPC0, the Queue Control Facility (QCF) version of the Queue Space Notification Exit. The wait state occurred based on IMS queue usage, which exceeded the user or default limits. While the dependent region was in this wait state, an invalid QCF action was received.

**System action:**  
The application terminates abnormally.

**System programmer response:**  
This abend occurred due to an internal error in QCF or IMS. Contact the IBM Support Center for assistance.

**0411**

**Explanation:**  
Open failed for a data set noted in Message DFS0411I.

**System action:**  
The log transaction analysis program (DFSILTA0) terminates abnormally.

**Programmer response:**  
See Message DFS0411I to identify the data set.

**Problem determination:**  
Check the JCL for the ddname in Message DFS0411I. Correct the JCL, and resubmit the job.

**0413**

**Explanation:**  
The limit of the internal table of 255 application programs running at once has been exceeded. This is an IMS system error.

**System action:**  
The log transaction analysis program, DFSILTA0, terminates abnormally.

**Programmer response:**  
Ensure that the log data set used as input to program DFSILTA0 contains valid IMS log records.

**Problem determination:**  
Save the storage dump of the abend and input log data sets. 1, 2, 3, 4, 8, 25, 35

**0415**

**Explanation:**  
This abend accompanies the DFS0408I or DFS0409I message, indicating an invalid parameter on the EXEC statement.

**System action:**

The log transaction analysis program, DFSILTA0, terminates abnormally.

**Programmer response:**

Check the associated message to identify the invalid parameter.

**Problem determination:**

Correct the JCL, and resubmit the job.

**0427**

**Explanation:**

A logical error occurred while processing a VSAM database. Refer to Message DFS0427I for a detailed description. If DUMP=YES is specified on the DL/I buffer options statement, the IMS control region will abend when the error is encountered.

**System action:**

The application program terminates abnormally.

**Programmer response:**

None.

**Problem determination:**

4, 35

**0428**

**Explanation:**

A batch message processing (BMP) step or a Fast Path (IFP) region could not be initiated because the PSB named in the third positional operand of the PARM field on the EXEC control statement was not defined at system definition time.

**System action:**

The BMP or IFP region is terminated abnormally.

**Programmer response:**

Get a list of PSBs defined at IMS system definition and find the correct name of the one desired. Correct the PSB name in the third positional operand of the PARM field on the EXEC statement, and resubmit the BMP for execution.

**Problem determination:**

2, 3, 10

**0430**

**Explanation:**

Module DFSDVBI0 determined that the DL/I database buffering services function cannot be initialized. Message DFS0430I is issued and the reason code in the message defines the reason for the failure.

**System action:**

IMS terminates abnormally. One or more messages are issued to indicate the reason for the failure.

**Programmer response:**

See message DFS0430I.

**Problem determination:**

1, 2, 3, 18, 19

**0432**

**Explanation:**

A batch message processing (BMP) program step could not be scheduled. The requested PSB was defined as a teleprocessing program, but the BMP step is message-driven, and the parallel option was specified.

System action:

The BMP region is terminated abnormally.

Programmer response:

Get a list of program names generated at IMS system definition and find the correct name of the program to be executed. Then, correct the program names in the PARM field of the EXEC statement, and resubmit the BMP for execution.

Problem determination:

None.

0436

Explanation:

A batch message processing (BMP) program step could not be scheduled because the input symbolic queue named in the fourth positional operand of the PARM field on the EXEC control statement was not defined to system definition.

System action:

The BMP region is terminated abnormally.

Programmer response:

Get a list of input symbolic names defined at IMS system definition, and correct the name. Then, correct the input symbolic queue named in the EXEC statement, and resubmit the BMP for execution.

For Database Control (DBCTL) subsystems, message-driven BMPs are not allowed and you should not specify an input symbolic queue name.

Problem determination:

None.

Start of change0437End of change

Explanation:

If SMU is active, then the Application Group Name or resources specified are not valid for this dependent region. If RAS security is used instead of SMU, then there are IMS resources (transaction, PSBs, and LTERMs) that are not valid for this dependent region.

System action:

The dependent region is terminated.

Programmer response:

None.

Problem determination:

1, 4, 6, 35

0438

Explanation:

The ODBA User request to schedule the PSB named on the APSB call failed SAF RACROUTE processing.

System action:

The APSB request is unsuccessful. Message DFS2855A is issued if the SAF RACROUTE AUTH call was not successful.

Programmer response:  
None.

Problem determination:  
1, 2, 4, 6, 11, 35, 36

0440

Explanation:

A batch message processing (BMP) program step could not be initiated because the input symbolic queue named in the fourth positional operand of the PARM field on the EXEC control statement was not a transaction code.

System action:  
The BMP region is terminated abnormally.

Programmer response:

Get a list of transaction codes defined at IMS system definition, and select a valid code. Then, change the input symbolic queue name on the EXEC statement to a transaction code, and resubmit the BMP for execution.

Problem determination:  
None.

0442

Explanation:

Before writing a VSAM control interval, the Record Definition Field (RDF) and the Control Interval Definition Field (CIDF) were checked and found invalid or inconsistent with the record format required by IMS.

System action:  
The application program terminates abnormally.

Programmer response:

Refer to message DFS0442A.

0444

Explanation:

A batch message processing (BMP) program step could not be scheduled because the output symbolic queue named in the fifth positional operand of the PARM field on the EXEC statement was not defined to system definition.

System action:  
The BMP region is terminated abnormally.

Programmer response:

Get a list of logical terminal names and transaction codes defined at IMS system definition, and select the right one. Then, correct the output symbolic queue name on the EXEC statement, and resubmit the BMP for execution. You cannot specify a remote LTERM (CNT) on the OUT parameter.

If the subsystem is Database Control (DBCTL), message-driven BMPs are not allowed and you should not specify an output symbolic queue name.

Problem determination:  
None.

0448

Explanation:

A batch message processing (BMP) program step could not be initiated because the input transaction code named in the third positional operand of the PARM field on the EXEC control statement specified a remote SMB.

System action:

The BMP region is terminated abnormally.

Programmer response:

Check the transaction codes defined at IMS system definition. Then, select a transaction code that is not a remote SMB and resubmit the BMP for execution.

0451

Explanation:

A physical input or output error occurred on a database data set. Message DFS0451I or DFS0451A was issued.

When the PSB for the program that terminated abnormally was generated, the IOEROPN parameter was specified on the PSBGEN macro statement. Either IOEROPN=451 was specified and the step is terminating after an I/O error, or IOEROPN=(n,WTOR) was specified and the operator responded ABEND to the DFS0451A message.

Note:

If n=451, IMS terminates with abend U0451, even if the operator responds CONT to the DFS0451A message.

System action:

The application program terminates abnormally with pseudoabend U0451, and IMS continues processing. If DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0451.

Programmer response:

See message DFS0451I or DFS0451A.

Problem determination:

1, 2, 3, 5, 8, 11, 17a, 17d, 17g, 20, 35

0452

Explanation:

A batch message processing (BMP) program step could not be initiated because the transaction named in the fourth positional operand of the PARM field on the EXEC control statement has been stopped or locked by a command or by a prior program failure.

System action:

The BMP region is terminated abnormally.

Programmer response:

Start the transaction again and resubmit the job.

Problem determination:

None.

0453

Explanation:

A BMP program step cannot be initiated because the transaction code specified in the fourth positional operand of the PARM field on the EXEC statement is an LU 6.2-driven dynamically built transaction or an IMS conversational transaction.

**System action:**

The BMP region is terminated abnormally.

**Programmer response:**

Ensure that the transaction code specified in the fourth positional operand of the PARM field on the EXEC control statement is not a LU 6.2-driven dynamically built transaction or an IMS conversational transaction.

0454

**Explanation:**

One of the following occurred:

An attempt was made to schedule a dependent region after a /CHE FREEZE or /CHE DUMPQ command was issued.

A BMP or MPP was started after a shutdown checkpoint had already quiesced and stopped all other active regions.

A BMP or IFP scheduling detected an IRLM that is not available and scheduling cannot continue.

A BMP or IFP scheduling that was prestarted on the alternate IMS in an XRF environment has been terminated by a /STOP BACKUP command. Scheduling did not complete.

Start of changeBMP or IFP scheduling that was prestarted on the alternate IMS in an XRF environment has been terminated by a /STOP BACKUP command issued on the alternate IMS or /CHE FREEZE command issued on the active IMS and PSDEPAB=YES in the DFSHSBxx member. Scheduling did not complete. End of change

**System action:**

The dependent region is terminated abnormally.

**Programmer response:**

Resubmit the job when IMS is started or restarted.

Start of change

0455

**Explanation:**

ABENDU0455 is issued by DFSSBMP0, which detected a Java application scheduling into a BMP region.

**System action:**

The Java application must be executed in a Java region.

**Programmer response:**

This pseudoabend is issued to stop scheduling because a Java application cannot schedule in a BMP region. Schedule the Java application in a Java region.

Module:

DFSSBMP0

End of change

0456

**Explanation:**

A DL/I batch region, a batch message processing (BMP) program step, or a Fast Path (IFP) region could not be initiated because the PSB named in the third positional operand of the PARM field on the EXEC control statement has been stopped or locked by a command or by a prior program failure.

This abend can also occur when:

A batch region, BMP, or IFP attempts to reference a PSB that is in NOTINIT status. Some possible causes for NOTINIT status are:

The PSB was not in the ACBLIB during initialization.

The PSB references a DBD that is not defined to IMS.

BLDL failed for the PSB

The PSB referenced was defined as DOPT and was found in the first concatenation of ACBLIB.

A Fast Path PCB referenced a DBD that was not found in the system.

A main storage database (MSDB) referenced by a Fast Path PCB could not be loaded during IMS initialization because member DBFMSDBX was not found in PROCLIB or that MSDB was not specified in member DBFMSDBX.

A DEDB randomizing module referenced by a Fast Path PCB could not be loaded during IMS initialization.

A PSB could not be scheduled because the DMB pool is too small, and the PSB requires a DMB that is exclusively allocated to another PSB.

The PROCOPT specified is incompatible with the calls being issued.

System action:

The batch region or BMP or IFP region is terminated abnormally. The missing PSB was noted in message DFS830I, which was issued during initialization. DFS563I might also be issued during initialization.

Programmer response:

Analyze why the PSB is locked or stopped. After the problem that caused the failure has been corrected and the PSB has been unlocked, resubmit the job.

To unlock the PSB for a BMP program or an IFP non-message-driven or a DEDB utility program, issue a /START PROGRAM command, with the PSB name, before resubmitting the job.

0457

Start of change

Explanation:

A batch message processing (BMP) region, a Fast Path (IFP) region, CICS thread, or an ODBA thread was started for a PSB already scheduled.

End of change

Start of change

System action:

The BMP region, IFP region, CICS thread, or ODBA thread was terminated abnormally.

End of change

Programmer response:

Determine the reason for the duplicated PSB specification. If this is not a duplication of a current job, resubmit the job when the current job is complete, or correct the PSB with a parallel scheduling option at IMS system definition.

Problem determination:

None.

0458

Explanation:

A batch message processing (BMP) program step or a Fast Path (IFP) region was not initiated because one of the Fast Path databases used by the PSB named in the third positional operand of the PARM field on the EXEC control statement was stopped or locked by a prior program failure.

If a Fast Path online utility is initiated, the database named in the second positional operand of the PARM field on the EXEC control statement has been stopped or has not been defined as a DEDB in the DBDGEN.

System action:

The BMP or IFP region is terminated abnormally.

**Programmer response:**

Determine the reason for the Fast Path database being stopped. After the problem that caused the database to be stopped has been corrected, resubmit the job.

**Problem determination:**

None.

0462

**Explanation:**

An application program was scheduled in a message region and terminated without successfully issuing a GET UNIQUE for an input message. The application program did successfully process at least one other call.

**System action:**

The application program is abnormally terminated, and the PSB and the SMB are stopped.

**Programmer response:**

Determine the problem in the user message processing program, correct it, and resubmit the job.

0474

**Explanation:**

An application program has been terminated through the use of the /STOP REGION ABDUMP or /STOP REGION CANCEL command.

**System action:**

The region is abnormally terminated in response to a user request.

**Programmer response:**

None.

**Problem determination:**

None.

0475

**Explanation:**

A Java application program attempted to run as an IMS batch job. IMS batch does not support Java application programs.

**System action:**

The batch program terminates abnormally.

0476

**Explanation:**

A DL/I call does not include a valid PCB address. The PCB address in the DL/I call (second parameter or third, if count is the first parameter) is not one of the PCB addresses passed to the application program at its entry point.

Some possible causes for this failure are:

An address for an AIB was provided but the first eight bytes of the block do not equal 'DFSAIB'.

The PSB language specified is not the same as that of the application program.

The call requires a PCB address, but the function is the last entry in the call list.

The address of the PCB in the call is not one of the PCB addresses passed to the application at its entry point.

An online program issued an UNLD call. The UNLD call is an internal DL/I call and should never be issued by an application program.

This abend can be the result of an improperly assembled or generated application program.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Correct the parameter list and resubmit the job.

Change the PSB language specified to that of the application program.

Correct the application program DL/I call statements.

**Problem determination:**

4, 17d

0477

**Explanation:**

Because the primary area to build FLD blocks was not large enough, an IGETBUF macro was issued to obtain an 8192-byte area for FLD blocks. The area was not available. In batch processing, a GETMAIN obtains the space. In online processing, the space is obtained from the database working pool.

**System action:**

The application program is terminated abnormally.

**Programmer response:**

For batch processing, provide a larger address space. For online processing, provide a larger database working pool.

**Problem determination:**

13, 17a, 17b

0478

**Explanation:**

A DL/I call exceeded the maximum allowable number of qualification statements which make up the segment search arguments on a single DL/I database call. The maximum number of qualification statements for a single DL/I call is 1024.

**System action:**

The application program terminates abnormally.

**Programmer response:**

You must modify the program so that it does not exceed the limit of 1024 qualification statements on a single DL/I call.

**Problem determination:**

11, 17a 17b.

0479

**Explanation:**

A nonzero return code was returned from a STAT call to the buffer handler to get buffer pool statistics.

**System action:**

The application program is terminated abnormally.

**Programmer response:**

This is probably an IMS internal error.

**Problem determination:**

17a, 17b, 35

0481

Explanation:

IMS was unable to build a recoverable in-doubt structure (RIS) to identify and save information about data in the in-doubt state. The system tries to build a RIS whenever a thread terminates abnormally while owning in-doubt data. A subcode in register 15 further defines the problem. For the meaning of the subcode, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region terminates abnormally.

Problem determination:

1, 4, 5, 35

0482

Explanation:

A Coordinator Control (CCTL) subsystem issued an INIT call to connect to IMS DB/DC, but the IMS DB/DC system was not specified with the DL/I SAS option required for Database Control (DBCTL) subsystem support.

System action:

IMS terminated the CCTL connection process.

System programmer response:

If you want DBCTL support, specify the DL/I SAS option for your IMS DB/DC system.

Problem determination:

1, 5, 8, 25, 38

0484

Explanation:

IMS started but was unable to complete the resynchronization process between a Coordinator Control (CCTL) subsystem and IMS. This process is initiated either when a connection between IMS and a CCTL occurs, or in response to an operator command. A subcode in register 15 further defines the problem. For the meaning of the subcode, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region terminates abnormally.

Problem determination:

1, 4, 5, 36

0485

Explanation:

In DFSDASD0, a request for storage for an AWE failed.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0499

Explanation:

The maximum insert call count was exceeded and the application received an 'A7' status code. The application then attempted to issue another insert and was terminated abnormally with a U0499.

**System action:**

The application program is abnormally terminated, and the PSB is stopped.

**Programmer response:**

Check the application program and make sure it recognizes an 'A7' status code, or increase the maximum insert count specified in the TRANSACT macro at system definition.

**Problem determination:**

Application memory dump and IMS system definition listing.

0500

**Explanation:**

IMS was unable to find the DEB pointed to by the 7770-3 DCB by following the TCB DEB chain. This was probably caused by an IMS or host system error.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Contact your IBM Support Center for assistance.

**Problem determination:**

1, 6, 10, 11, 35

0501

**Explanation:**

The device-dependent module for the 3270 remote or 3275 dial terminal detected an undetermined problem.

**System action:**

An abend instruction has been issued to produce a memory dump.

**Programmer response:**

Determine the cause of the failure. If the problem was caused by an IMS failure, contact the IBM Support Center for assistance. If the problem was caused by user modifications or hardware, correct the problem, and retry the failing operation.

**Problem determination:**

4, 6, 7

0502

**Explanation:**

The IMS graphics attention handler routine in DFSDN070 has attempted to post a 2260 local CLB, but the DECB was being used by the control region even though the idle flag (CLB2IDLE) was on. This is an IMS system error.

**System action:**

IMS terminates abnormally. The z/OS system continues with the next job, if any.

**System Operator Response:**

IMS can be restarted using the emergency restart procedures or with a cold start.

**Problem determination:**

4, 35

0503

**Explanation:**

The routine that marks PTERMs inoperable has detected the CTB for the PTERM is not on the same line as the communications task. Register 9 points to the CLB for the line and register 7 points to the CTB for the failing PTERM.

System action:  
IMS terminates abnormally.

System Operator Response: Restart IMS. If the error persists, the DD statement for the failing line should be removed in order to continue processing until the failure is corrected.

Problem determination:  
5, 11, 35

0504

Explanation:

The IMS switch line connect/disconnect processor module (DFSICLA0) has detected an error in a call to the queue manager while attempting to delete messages belonging to an inquiry logical terminal on a switched line. This is an IMS system error.

System action:  
The IMS control region is abnormally terminated.

Problem determination:  
4 and 35. The return code from DFSQMGR0 is in register 2.

0505

Explanation:

IMS attempted to acquire storage for a new 7770-3 DEB in subpool 230, key 5. Virtual storage was not available to satisfy the request.

System action:  
IMS terminates abnormally.

System Operator Response: Increase the region size the next time the IMS control region is started.

Problem determination:  
1, 4, 8, 11

0506

Explanation:

One of two types of error occurred:

If register 6 is zero

All log data sets were read in the backward direction to EOF, but a stopping point for the backout of one of the recovery tokens was not found. A stopping point was found during the forward read of the log data sets. Three possible reasons for the error are:

The log data sets are on unlabeled tapes, and the operator did not mount the same tapes during the backward and forward read.

The input log is a multi-volume DASD data set.

If register 6 is not zero

A data space management error occurred. Register 6 contains the address in module DFSBACK0 where the error was detected. Register 15 contains the return code from the data space management module, DFSRVSP0. The return codes from module DFSRVSP0 are:

12

Unable to obtain RVDL block

16

Unable to obtain data space

20

Unable to extend data space

24

Bad data space reference (bad token)

28

Bad length for retrieve

32

Unable to get ALET

System action:

IMS terminates abnormally.

Programmer response:

If register 6 is zero

If the log data sets are on unlabeled tapes, make sure the operator mounted the same tapes for the forward and backward reads.

If a model DSCB name was specified for a multi-volume tape data set, run the Database Recovery utility for each modified database, but exclude the Batch Backout output log. Remove the reference to the model DSCB name from the DD statement for the input log, and rerun Batch Backout.

If register 6 is not zero

Call the IBM Support Center.

0507

Explanation:

You selected the abend option for the Batch Backout utility.

System action:

After processing is complete, the utility terminates abnormally with a memory dump.

0509

Explanation:

The message generator module (DFSCLMO0) found an invalid SYSID while building a response message for an IMS command.

System action:

IMS terminates abnormally.

Programmer response:

The problem probably originated in the IMS system code.

Problem determination:

4, 35

0511

Explanation:

A conversational processing error occurred. Either an invalid buffer request has been specified or a request to free a conversation was made when no conversation was active. This is probably an IMS system error.

System action:

IMS terminates abnormally.

Programmer response:

None.

Problem determination:

1, 4, 6, 25, 26, 35

0513

Explanation:

Start of changeAn overlay of one of the Transaction Manager (TM) buffer pools (CIOP, HIOP, or

SPAP) might have occurred. In Fast Path, a storage overlay of the Fast Path segment compression work area (SEG1 or SEG2) might have occurred. The error might be caused by one of the user's TM exits or edit routines, an access method (such as BTAM or VTAM), or an error in IMS code. The reason code in register 15 provides additional information in diagnosing the cause of this failure. For the meaning of the codes, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. End of change

**System action:**

IMS terminates abnormally or, in the case of a potential overlay of a Fast Path work area, the dependent region is terminated abnormally.

**Problem determination:**

4, 35

0516

**Explanation:**

More than one input and one output logical terminal are in conversation on the same physical terminal.

**System action:**

The IMS control region terminates abnormally.

**Programmer response:**

Ensure that only one input and one output logical terminal on the same physical terminal are concurrently in a conversation. One of them represents the logical input terminal, and the other represents the logical output terminal.

**Problem determination:**

1, 4, 25, 26, 35

0517

**Explanation:**

An invalid format descriptor was encountered as a result of attempting to convert to an unpacked format from the SPA.

**System action:**

The region in which the error occurred terminates abnormally.

**Problem determination:**

1, 4, 6, 25, 26, 35

0519

**Explanation:**

The message router, DFSICLR0, was called with an invalid enqueue request. Register 8 provides a reason code. For a description of the reason code and additional information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The multiple systems VS control region terminates abnormally.

**Problem determination:**

1, 4, 5, 6, 10, 12, 35

0525

**Explanation:**

One of the following problems occurred:

The hardware clock is inoperable.

IMS initialization detected that the GMT offset value is outside the valid range, and the operator replied A (for abort) to message DFS0477A.

At the time of abend, register 15 contains the reason code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally, or issues message DFS0478A until the problem is corrected.

Programmer response:

Contact the IBM Support Center for hardware or software support, or follow the instructions in the operator response in message DFS0477A or DFS0478A.

0545

Explanation:

During log type 2702 record processing on the alternate, an inconsistent state between the active and the alternate's data set extent information existed at the completion of the pseudo-extend.

System action:

The IMS alternate system terminates abnormally.

Master Terminal Operator Response: Restart the IMS alternate system.

0551

Explanation:

GSAM PCBs were present, but the dependent region was not a BMP.

System action:

The dependent region terminates abnormally.

Programmer response:

The application was incorrectly defined. Identify it as a BMP.

0552

Explanation:

A conversational MPP terminated abnormally in a multiple systems environment. The SPA cannot be sent to the input terminal system where the conversation is controlled, because no MSNAME exists for the input SYSID. The input SYSID is used for responses.

System action:

The IMS control region terminates abnormally.

Programmer response:

Provide MSNAME in the abending system for input SYSID.

Problem determination:

1, 4, 5, 6, 10, 12, 35

0553

Explanation:

Module DFSCMM20 posted the link between two main storage-to-main storage IMS systems with a write completion code, but an input/output operation was already in progress. This is an invalid situation, as input/output activity is handled synchronously on the link.

System action:

IMS terminates abnormally.

Problem determination:  
1, 4, 25, 35

0554

Explanation:

The post handler module (DFSCMM20) received a read attention indicator on the main storage-to-main storage link. This is an invalid request.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 4, 25, 35

0555

Explanation:

Module DFSCMM20 posted the main storage-to-main storage link with a post code other than a write or read attention while IMS was preparing to do an input/output operation on that link.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 4, 25, 35

0556

Explanation:

Module DFSCMM20 posted the main storage-to-main storage link with an error post code because of a previous input/output operation.

System action:  
IMS terminates abnormally.

Programmer response:

Bring up IMS again, and continue to run the job. If the problem persists, contact the IBM Support Center for assistance.

Problem determination:  
1, 4, 25, 35

0557

Explanation:

During restart processing, module DFSCMR00 validates a multiple systems environment. An address for the logical link blocks does exist, but an address for the logical control blocks does not exist in the system contents directory.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 4, 6, 35

0560

Explanation:

In attempting to acquire a buffer, the message generator received an invalid return code from the queue manager. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**  
IMS terminates with a memory dump.

**Programmer response:**  
Examine register 15 in the memory dump to isolate the queue manager's return code. The return code will identify the problem.

**Problem determination:**  
1, 4, 5, 6, 35

0561

**Explanation:**  
The link number assigned to the link control block at system initialization must be at least 1, but was 0.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Investigate any application program that might obtain access to the IMS control region to ensure proper addressability throughout the module.

**Problem determination:**  
1, 4, 5, 6, 35

0562

**Explanation:**  
This is a main storage-to-main storage buffer incompatibility. An IMS main storage-to-main storage system has transmitted more data than its counterpart's input buffer can hold. Buffer lengths should be identical.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Ensure that main storage-to-main storage input/output buffers have the same length.

0563

**Explanation:**  
During system restart, all the link control blocks are reconnected to the logical link blocks, as they were before the system came down. All link numbers are set relative to 1, but one of the link control block numbers is 0.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Ensure that the link number is correct during restart.

**Problem determination:**  
4, 35

0564

**Explanation:**  
A device-dependent module called the communication analyzer (DFSICIO0) to obtain an extra input/output work buffer. An extra buffer already exists.

System action:  
IMS terminates abnormally.

Problem determination:  
1, 4, 5, 6, 35

0566

Explanation:

An internal logic error was detected while processing an internal and remote command. A message queue buffer might have been destroyed.

System action:  
IMS terminates abnormally.

Programmer response:  
None required.

Problem determination:  
35

0567

Explanation:

The communication analyzer detected an I/O error condition in sending the IMS Ready message to the system console.

System action:  
IMS terminates abnormally.

Programmer response:  
None.

Problem determination:  
23, 35

0568

Explanation:

The communication initialization module (DFSCINB0) received a nonzero return code from the queue manager in an attempt to acquire a buffer from the queue manager to transmit the IMS Ready message. Code is in register 15.

Code

Meaning

00

Buffer required

04

Incorrect length specified; no buffer acquired

System action:

IMS terminates abnormally.

Programmer response:  
None.

Problem determination:  
23, 35

0572

Explanation:

The length of an inner segment of a multisegment pre-edit message is a negative value. This is invalid.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 35

0573

Explanation:

The length of an inner segment of a multisegment message is larger than the total length of the message. One of the length fields is incorrect.

System action:  
IMS terminates abnormally.

Problem determination:  
4, 35

0574

Explanation:

The Fast DB Recovery region encountered an error. A message describing the error precedes this abend code.

System action:  
The Fast DB Recovery region terminates abnormally.

System Operator Response:  
See the operator response of the message issued before this abend.

0577

Explanation:

This abend occurred because input processing was selected for a VTAM terminal, but VTAM support was not generated for DFSICIO0.

System action:  
IMS terminates abnormally.

System programmer response:

Verify "DFSVTAM COPY" for the global &DFSVTAM=N; If VTAM support is required, add the COMM macro to the IMS system definition.

0578

Explanation:

This abend occurred because the CTT device type (CTTDEVIC) was either in binary zeros or the value was less than the system console (X33'). CTTDEVIC is picked up and examined for each defined terminal during Transaction Manager initialization (control TCB). IMS terminal device types begin with number 1. End of change

Both of the above conditions are obvious errors and are probably caused by one of the following conditions:

The stage 2 assembly of DFSCLL0x had an error.

The link edit of DFSCLL0x had an error.

Note: The x value in the module name indicates the nucleus suffix.

**System action:**  
IMS terminates initialization processing.

**System Operator Response:**  
Ensure that the stage 2 assembly of DFSCLL0x produced acceptable output and that the subsequent link edit occurred without errors. Notify the appropriate system programmer to correct the IMS problem.

**Problem determination:**  
1, 4, 6, 35

0579

**Explanation:**  
Start of changeThe control region initialization was unable to successfully open any line groups. DFSIINB0 has detected an internal IMS error during IMS Transaction Manager initialization. Further initialization cannot continue.End of change

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Ensure the correct IMS control blocks were linked into the IMS nucleus.

**Problem determination:**  
1, 4, 6, 35

0580

**Explanation:**  
Either DFSIINB0 detected an IMS internal error during IMS Transaction Manager initialization, or DFSDINB0 detected an IMS internal error during initialization of a Database Control (DBCTL) subsystem. Initialization cannot continue.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
None.

**Problem determination:**  
1, 4, 6, 35

0581

**Explanation:**  
DFSIINB0 or DFSIINV0 detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue. For more information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Be sure the correct IMS control blocks were linked into the IMS nucleus. If the blocks were linked correctly, contact the IBM Support Center for help in determining the problem.

**Problem determination:**  
1, 4, 6, 35

0582

Explanation:

DFSIINB0 detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue. The DFSBCB operation was unable to obtain storage for a VTAM Receive Any buffer.

System action:

IMS terminates abnormally.

Programmer response:

Check the following:

The number of VTAM Receive Any buffers specified in the RECA keyword of the EXEC parameter  
The number and size of the VTAM Receive Any buffers in the RECANY parameter of the IMS system definition COMM macro.

Problem determination:

1, 4, 6, 10, 35

0583

Explanation:

System definition was performed without VTAM; however, the SCD control block indicates that VTAM control blocks exist.

System action:

IMS terminates abnormally.

Programmer response:

Ensure the correct SCD was linked into the IMS nucleus.

Problem determination:

1, 4, 6, 35

0584

Explanation:

An error situation was detected by the Automated Operator Interface Message Generator. Register 5 contains the address in the module where the error was detected. Register 2 contains a code indicating the reason for the ABEND. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region is abnormally terminated.

System Console Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 35

0585

Explanation:

An error occurred during initialization of the XRF-capable IMS system. The subcode in register 15 indicates the specific problem. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The control region is terminated abnormally.

**Programmer response:**

If register 15 = 1, correct the HSBID parameter value in the EXEC statement of the control region execution procedure. If register 15 = 2, contact your IBM Support Center for assistance.

**Problem determination:**

1, 2, 3, 4, 6, 35

0586

**Explanation:**

One of the following errors occurred during initialization of an XRF-capable IMS system:

The system detected an invalid value on the HSBID parameter on the EXEC statement of the control region. Only HSBID=1, HSBID=2, or HSBID=null is allowed. HSBID=null deactivates the XRF capability.

The DFSHSBxx member of the procedure library could not be opened.

**System action:**

The control region is terminated abnormally.

**Programmer response:**

For the first error, correct the HSBID parameter; for the second error, correct the HSBMBR parameter. Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis to determine which of the errors occurred.

**Problem determination:**

1, 2, 3, 4, 6, 35

0587

**Explanation:**

The Fast Path emergency restart routine (DBFERST0) received a nonzero return code from the DEDB forward recovery routine (DBFERS10).

**System action:**

The control region is terminated abnormally.

**Programmer response:**

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**

1, 4, 6, 35

0588

**Explanation:**

An attempt to load and link to user-written, dependent-region, pre-initialization routines failed.

**System action:**

The dependent region is terminated abnormally.

**Programmer response:**

This abend is preceded by message DFS3848 or DFS3849. In either case, a BLDL macro instruction detected the problem. BLDL searches the link library and the job or step library. Either the modules listed in the error message was not found in any of these libraries or an I/O error occurred while searching one of these libraries.

**Problem determination:**

1, 2, 3, 6, 11, 35

0589

Explanation:

An internal system error occurred. Either a request to I/O toleration services for an extended error queue element (EEQE) control block failed, or a request to get or release an asynchronous work element (AWE) failed.

System action:

The control region is terminated abnormally.

Programmer response:

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 15, 35

0591

Explanation:

An error occurred while attempting to enqueue or dequeue a Fast Path resource. This is an internal IMS error.

System action:

The control region terminates abnormally.

Programmer response:

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 35

0592

Explanation:

IMS was unable to get a data entry database (DEDB) area lock. This is an internal IMS error.

System action:

The control region terminates abnormally.

Programmer response:

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 35

0593

Explanation:

A database block failure occurred during restart.

System action:

IMS terminates abnormally.

Programmer response:

A code in register 15 at the time of abend identifies the cause of the failure. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Take appropriate action according to the error code indicated above. CSA fragmentation might cause codes 3 and 4. In this case, re-IPL and rerun the job.

0594

Explanation:

An internal system error occurred. A request to Storage Management Services for an RPST control block failed. The requester can issue an abend.

System action:

The control region terminates abnormally.

Programmer response:

For the return codes and their meanings see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 15, 35

0595

Explanation:

A GETMAIN request for main storage from subpool 231 failed.

System action:

The control region on the alternate system terminates abnormally.

Programmer response:

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 35

0596

Explanation:

An internal system error occurred. This abend is issued by all IMS buffer tracking modules in an XRF complex or in a Fast Database Recovery region.

System action:

The control region on the alternate system terminates abnormally.

Programmer response:

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 2, 3, 4, 6, 15, 35

0597

Explanation:

An internal system error occurred. This abend is issued by all IMS lock tracking modules in an XRF complex.

System action:

The control region on the alternate system terminates abnormally.

**Programmer response:**

For the return codes and their meanings, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**

1, 2, 3, 4, 6, 15, 35

0598

**Explanation:**

An inconsistency in the system data sets was found during the synchronization phase of an XRF complex or during emergency restart of an alternate system. Register 3 contains a character string indicating which system data set caused this problem. The possible data sets in error are: the RDSSs, the MODSTATs, the QBLKs, the LGMSG-Qs, the SHMSG-Qs, and the MSDBs. For more information, refer to message DFS3889A and to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The control region terminates abnormally.

**Programmer response:**

Correct the control region JCL. See IMS Version 9: Installation Volume 1: Installation Verification for data set name and volume requirements for an XRF-capable IMS system.

**Problem determination:**

1, 2, 3, 4, 6, 35

0599

**Explanation:**

A page-fix or page-free error occurred during checkpoint of an XRF-capable IMS active system or in the synchronization phase of an XRF complex. The IMSAUTH PGFIX/PGFREE function passed a return code in register 15. For a description of these return codes, see IMS System Services Return Codes.

**System action:**

The control region terminates abnormally.

**Problem determination:**

1, 2, 3, 4, 6, 35

0600

**Explanation:**

An error occurred in a DIAGNOSE-0 instruction while running an XRF-capable IMS system under VM.

**System action:**

The control region terminates abnormally.

**Programmer response:**

If the attempt to rerun your XRF-capable IMS system fails, contact your IBM Support Center for assistance.

**Problem determination:**

1, 2, 3, 4, 6, 35

0601

**Explanation:**

A failure occurred during a request for getting or freeing storage in the address space private area or CSA using IMODULE services.

System action:  
IMS terminates abnormally.

Programmer response:  
Increasing the region size or the size of CSA might be necessary. Register 15 contains the IMODULE return code. For an explanation of IMODULE return codes, refer to IMS System Services Return Codes.

Problem determination:  
1, 2, 3, 4, 6, 35

0602

Explanation:  
A logic error occurred in the I/O toleration function of IMS. This abend is preceded by message DFS0612I, which contains the register 14 and register 15 return codes explaining the unexpected condition.

System action:  
The control region terminates abnormally.

Programmer response:  
See message DFS0612I for an explanation of the return codes.

Problem determination:  
1, 2, 3, 4, 6, 35

0603

Explanation:  
An error occurred when the alternate IMS system in the XRF complex loaded main storage databases (MSDBs) from the system log data set. A return code in register 15 indicates the reason for this error. See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for a detailed description of the return codes.

System action:  
The control region terminates abnormally.

Programmer response:  
Correct any errors; then rerun the alternate system.

Problem determination:  
1, 2, 3, 4, 6, 35

0604

Explanation:  
The /SWITCH SYSTEM FORCE (ACTIVE) or /SWITCH SYSTEM ACTIVE command was entered from either the active or the alternate system in an XRF complex to request a takeover by the alternate system. Abend code U0604 is expected for the active system in response to this command.

System action:  
The active system's control region terminates.

Programmer response:  
None required.

Problem determination:  
None.

0605

Explanation:

An unexpected condition occurred while attempting to release the scheduling serialization latch or the ACBLIB read serialization latch. The abend occurred because the latch is not owned, or the routine trying to release the latch is not the owner of the latch. This is an IMS system error. ABENDU0605 is issued by module DFSBML00 or DFSDBLR0. The program status word (PSW) at entry-to-abend will isolate the failure to the specific module.

System action:

IMS terminates abnormally.

Problem determination:

4

0608

Explanation:

While the /TRACE SET ON TRAP 2 command was enabled, IMS detected an overwrite of the MFS blocks, or the MOD and DOF failed block verification.

System action:

Recompile the Format or Test Format libraries.

Problem determination:

If an overwrite occurred, register 14 contains the location in the module where the overwrite was detected. If the MOD or DOF failed block verification, register 15 contains a debugging code. Refer to the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

0611

Explanation:

An invalid DOFFTYPE was found in DOFFLAG1 by one of the MFS output build modules (DFSCFE80 or DFSCFE90). This might be because the DOF:

Was not built properly

Was overlaid in storage

Was modified improperly

System action:

IMS terminates abnormally.

Programmer response:

None.

Problem determination:

11, 16, 35. Register 11 contains the address of the message output descriptor (MOD) name in use when the error occurred.

0616

Explanation:

A permanent I/O error occurred on the last remaining IMS log data set. If dual logging is in effect for IMS batch, this will occur when both of the log data sets are damaged. For IMS online, this will occur when the last remaining OLDS has a permanent I/O error or does not have enough space to complete a checkpoint freeze.

System action:

IMS terminates abnormally.

Programmer response:

Allocate new log data sets to replace the ones which have encountered I/O errors. It might be

necessary to use the Log Recovery Utility to create log data sets free from write or close errors. When sufficient log data sets are available, emergency restart IMS to resume processing.

0622

Explanation:

IMS attempted to initialize a non-control region with a protect key in the range 0-7. The CTL and CTX online control regions in z/OS are the only regions that can run under keys 0-7. For details, refer to the Procedures discussion in IMS Version 9: Installation Volume 2: System Definition and Tailoring.

System action:

IMS terminates the region that issued this abend.

Programmer response:

Correct the JCL and resubmit the job. Check with the z/OS system programmer to make sure that program DFSRRC00 is not specified to run under keys 0-7.

Problem determination:

1, 2, 3, 4, 8, 35

0623

Explanation:

IMS attempted to initialize an online control region in z/OS with a protect key in the range of 8-15; a key in the range of 0-7 is required.

System action:

IMS terminates the region that issued this abend.

Programmer response:

Correct the JCL and resubmit the job. Check with the z/OS system programmer to make sure that DFSMVRC0 is specified to run under keys 0-7, and that all JOBLIB data sets are APF-authorized.

Problem determination:

1, 2, 3, 4, 8, 35

0624

Explanation:

IMS received a nonzero return code from a DFSBCB request for AWE storage. The low-order 16 bits in register 15 contain the DFSBCB return code; the high-order 16 bits in register 15 might contain qualifying information. For an explanation of the DFSBCB return codes, see DFSBCB Return Codes.

System action:

IMS terminates abnormally with a memory dump.

Programmer response:

Take appropriate action based on the codes in register 15.

Problem determination:

4, 11, 35

0630

Explanation:

The initialization module DFSXCB00 issues this abend for any error that is encountered during processing. Register 14 contains the address in the module where the failure was detected. Register 15 contains a 4-byte return code consisting of a 1 to 3 character EBCDIC failure indicator followed by a hexadecimal return code. For an explanation of the values in register 15, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Determine the cause of failure as indicated by register 15, correct the problem, and resubmit the job.

For the meanings of the IMODULE and DFSBCB return codes, see IMS System Services Return Codes.

If the abend occurred because of insufficient storage, increase private or CSA storage allocations as follows:

To increase the size of private storage, increase the region size in the JCL.

To increase the size of CSA, re-IPL z/OS, specifying a larger CSA allocation.

**System Operator Response:**  
Notify the system programmer.

**Problem determination:**  
1, 4, 5, 6, 7, 11, 35

0631

**Explanation:**

A call was made to the IMS CREATE ITASK Processor using a DFSCIR macro to initialize an ECB. DFSCIR returned with a nonzero return code in register 15, indicating that the request could not be processed. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**  
IMS terminates initialization processing with this abend.

**Problem determination:**  
1, 4, 6, 10, 11, 35

Start of change

0632

**Explanation:**

The EXEC statement PARM field contains too many positional parameters.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Correct the JCL and resubmit the job.

**Problem determination:**  
1,2,3,4

End of change

0633

**Explanation:**

The startup procedure for an IMS DL/I DBB region specified DBRC=C, but the MBR parameter did not specify DFSBBO00. DBRC=C is valid only for IMS Batch Backout.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Correct either the DBRC parameter or the MBR parameter.

**Problem determination:**  
1, 2, 3, 4, 8

Start of change

0634

**Explanation:**

A positional parameter in the PARM field of the EXEC statement has one or more leading blanks.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Correct the JCL and resubmit the job.

**Problem determination:**  
1, 2, 3, 4, 35

End of change

0638

**Explanation:**

A comma was found within the extent of a fixed-length parameter.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Correct the JCL, and resubmit the job.

**Problem determination:**  
1, 2, 3, 4

0640

**Explanation:**

A required parameter was omitted for the kind of execution specified by the first 3 characters of the EXEC statement PARM field.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Correct the JCL, and resubmit the job.

**Problem determination:**  
1, 2, 3, 4

0641

**Explanation:**

The Database Recovery utility DFSURDB0 was executed in an invalid region type. The batch region type specified in the first subparameter of the //EXEC PARM field must be UDR.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Correct the JCL and resubmit the job.

0642

**Explanation:**  
A parameter value, such as the program name in a DL/I execution, exceeds the maximum allowable length.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Correct the JCL and resubmit the job, or reissue the START command specifying parameters with the correct length.

**Problem determination:**

1, 2, 3, 4

0643

**Explanation:**  
A non-numeric value was specified for a numeric parameter.

**System action:**  
The region that issued this abend is terminated.

**System Programmer Response:** Correct the EXEC statement parameter in the JCL, and resubmit the job.

**Problem determination:**

1, 2, 3, 4, 8

0644

**Explanation:**  
This is an internal IMS error. The internal destination list is invalid.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Check for user modifications to module DFSRRA00.

**Problem determination:**  
1, 2, 3, 4, 35. Also, get an assembly listing of DFSRRA00 as used on-site.

0646

**Explanation:**  
The SPIE option in the PARM field is invalid.

**System action:**  
The region that issued this abend is terminated.

**Programmer response:**  
Correct the JCL, and resubmit the job.

**Problem determination:**

1, 2, 3, 4

0648

Explanation:

The validity check option in the PARM field is invalid.

System action:

The region that issued this abend is terminated.

Programmer response:

Correct the JCL, and resubmit the job.

Problem determination:

1, 2, 3, 4

0652

Explanation:

The PARM field was omitted. All IMS EXECUTE statements must contain a PARM field. See IMS Version 9: Utilities Reference: Database and Transaction Manager for PARM field formats.

System action:

The region that issued this abend is terminated.

Programmer response:

Correct the JCL, and resubmit the job.

Problem determination:

1, 2, 3, 4

0654

Explanation:

For control region types, the first two parameters of the EXEC statement are required. They must both be exactly 3 characters in length. If this is not true, then this abend occurs.

For other region types, the first parameter in the PARM field of the EXEC statement is required. It must be exactly 3 characters in length. If this is not true, then this abend occurs.

See IMS Version 9: Installation Volume 2: System Definition and Tailoring for a description of parameters used in the PARM field of the EXEC statement for all region types.

System action:

The region that issued this abend terminates.

Programmer response:

Correct the JCL, and resubmit the job.

Problem determination:

1, 2, 3, 4

0657

Explanation:

A GSAM initialization error occurred. During region initialization, the GSAM routines encountered an error condition such as:

Invalid PCB processing options

Invalid DBD or PCB

A system error

Start of changeAn inconsistency between the PSB definition in the ACBLIB and PSBLIBEnd of change

System action:  
IMS terminates abnormally.

Programmer response:  
See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

Problem determination:  
11, 35

0658

Explanation:  
The program name parameter was omitted from the PARM field.

System action:  
The region that issued this abend is terminated.

Programmer response:  
Correct the JCL, and resubmit the job.

Problem determination:  
1, 2, 3, 4

0662

Explanation:  
The first positional parameter in the PARM field is invalid.

System action:  
The region that issued this abend is terminated.

Programmer response:  
Correct the JCL, and resubmit the job.

Problem determination:  
1, 2, 3, 4

0684

Explanation:  
IMS type 2 SVC initialization failed. Some possible reasons for the failure are:

An attempt was made to start a second copy of the IMS control region with the same IMSID as one already running. This can also occur if IMS SVC termination failed in a previous run of IMS with the same IMSID.

SDFSRESL is not authorized or the IMS SVC module is being loaded from an unauthorized library.  
The region size is too small.

Message DFS686W, which is issued along with this abend, provides additional diagnostic information.

System action:  
The region that issued the ABEND is terminated.

Programmer response:  
Do one of the following:

Correct the duplicated IMSID and rerun the job. If the IMS SVC termination failed in a previous run with the same IMSID, either re-IPL the operating system, or run with a different IMSID.

Make sure SDFSRESL is authorized, or include the DFSRESLB DD statement that points to an authorized library containing the IMS SVC modules.

Increase the region size.  
For additional information, refer to message DFS686W.

Problem determination:  
1, 2, 11

0688

Explanation:  
The operator entered "CANCEL" or "C" in response to message DFS690A.

System action:  
The region that issued this abend is terminated.

0689

Explanation:  
The DBRC region or DL/I subordinate address space region terminates abnormally with this code when the control region is not active during its initialization. Message DFS689I is issued before the abnormal termination. It is likely that the control region is in the process of abending or the control region does not exist.

System action:  
The region that issued this abend is terminated.

Programmer response:  
Analyze the control region dump to determine the cause of the abnormal termination and resubmit the job.

Problem determination:  
1, 2, 4, 6, 35

0701

Explanation:  
IMS attempted to enqueue using either an invalid queue control block or queue element.

System action:  
The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:  
1, 4, 5, 6, 35

0702

Explanation:  
IMS attempted to dequeue using either an invalid queue control block or queue element.

System action:  
The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:  
1, 4, 5, 6, 35

0704

Explanation:

An ICREATE call was issued to obtain a buffer. The buffer could not be allocated because a buffer already exists with the same name

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 35

0705

Explanation:

An IDESTROY call was issued to free a buffer, but a buffer with the name specified could not be found.

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 35

0707

Explanation:

IMS attempted to get a buffer (IGETBUF) from a nonexistent pool. Register 2 at abend contains the erroneous pool name.

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 35

0708

Explanation:

IMS attempted to free a buffer (IFREEBUF) to a nonexistent pool name. Register 2 at abend contains the erroneous pool name.

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 35

0709

Start of change

Explanation:

IMS attempted to obtain an EPCB buffer but the length specified was greater than the EPCB pool size.

End of change

System action:

The IMS control region is abnormally terminated.

Start of change

System Operator Response:

Locate the error message DFS0673E from the master console for information to correct the problem.

End of change

Problem determination:

1, 4, 5, 6, 35

0710

Explanation:

The save area chain pointed to by register 13 was followed to locate the first save area. This save area did not contain a pointer to the save area prefix (SAP). Either the save area chain has been destroyed, or the SAP pointer in the first save area has been overlaid.

System action:

IMS terminates abnormally with a memory dump. If the abend occurs under the ESS TCB, the ESS TCB terminates with a dump and allows the control region to keep running.

Programmer response:

This is an internal IMS error.

Problem determination:

4, 11, 35

0711

Explanation:

An error occurred using RRS/MVS. For a detailed description of this abend, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

If this abend occurs during restart processing, IMS terminates abnormally. If it occurs during dependent region processing, the dependent region terminates abnormally.

System programmer response:

If this is an internal error, such as an RRS/MVS service failure, first make sure that RRS/MVS was active on your system. Then contact the IBM Support Center for assistance.

0712

Explanation:

The IMS transaction enqueue or dequeue service encountered a system error.

System action:

The IMS control region is abnormally terminated.

System programmer response:

A return code in register 15 identifies the cause of the error. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 25, 35

0713

Explanation:

The IMS MPP scheduler or the IMS transaction enqueue service encountered a system error.

System action:

The IMS control region terminates abnormally.

System programmer response:

A return code in register 15 identifies the cause of the error. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

z/OS System Operator Response: Perform an emergency restart; this should correct the situation.

Problem determination:

1, 4, 6, 11, 15, 35

0714

Explanation:

A system error occurred when the IMS BMP region scheduler or the IMS APSB/DPSB call processor attempted to enqueue or dequeue a region on a scheduler subqueue.

System action:

The IMS control region terminates abnormally.

System programmer response:

Register 15 contains a reason code identifying the cause of the error. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

z/OS System Operator Response: Perform an emergency restart; this should correct the situation.

Problem determination:

1, 4, 6, 11, 15, 35

Start of change

0715

Explanation:

This abend indicates that RRS directed IMS to back out instead of commit during application termination. During application termination, IMS issues an implicit commit on behalf of the application in case the application terminated without issuing an explicit commit (by issuing a GU call before terminating). If RRS directs IMS to back out instead of commit, the ABENDU0715 indicator can be seen in message DFS555I. The backout can occur for any reason RRS deems necessary.

ABENDU0715 is just an indicator for the DFS555I message. There is no actual abend, pseudo or otherwise. There is no corresponding DFS554A message because there is no actual abend.

ABENDU0715 is issued solely to send message DFS555I so the inputting device does not hang.

System action:

IMS performs backout processing of the application as directed by RRS.

Programmer response:

None.

End of change

0716

Explanation:

User ABENDU0716 is a general abend issued by module DFSIINQ0 when an error is encountered during initialization of the queue manager buffer pool.

Register 8 contains the following abend subcodes:

|               |  |
|---------------|--|
| Subcode (Hex) |  |
| Meaning       |  |
| 04            | IMODULE GETMAIN failed while allocating private storage for the queue buffer address list, DFSPQBFA.<br>Register 3 contains the requested storage length.<br>Register 15 contains the IMODULE return code.<br>For an explanation of IMODULE return codes, refer to IMS System Services Return Codes.   |
| 08            | The number of buffers required for the QBUF pool can be specified on the EXEC parameters or during system definition. If the number specified is greater than 3, the size of the QBUF pool is calculated by using the number of required buffers multiplied by the buffer size. If the number of buffers specified is 3 or less, the QBUF pool is allocated using an internal default size. If the default size is not large enough to hold at least one queue manager buffer, this abend is issued. |
| 0C            | After the QBUF pool was allocated, a test was made to ensure the pool was large enough to hold at least one queue manager buffer. During this validation, the QBUF pool size was found to be insufficient. Register 5 contains the computed length of a queue manager buffer.  |
| 10            | During processing of the user-provided DD cards, the DCB ddname was found containing all blanks.<br>Register 3 contains the address of the DCB being processed.  |
| 14            | During processing of the user-provided DD cards, the primary DCB ddname contains eight characters. The primary ddname must be less than eight characters. Register 3 contains the address of the DCB being processed.  |
| 18            | IMODULE GETMAIN failed while allocating private storage for the optional DCB DD cards. Register 15 contains the IMODULE return code. For explanations of IMODULE return codes, see IMS System Services Return Codes.   |
| 1C            | DFSCBTS FUNC=ALTER failed while setting the block size and number for the QMBA block.<br>Register 15 contains the DFSCBTS return code.<br>Programmer response:<br>Take the following actions:  |
| Subcode (Hex) |  |
| Action        |  |
| 04            | If the IMODULE failure was caused by a storage allocation failure, increase the region size parameter in the JCL and rerun the job.  |
| 08            | This is an internal logic error. Refer to the problem determination.   |
| 0C            | This is an internal logic error. Refer to the problem determination.   |
| 10            | This is an internal logic error. Refer to the problem determination.   |
| 14            | This is an internal logic error. Refer to the problem determination.   |
| 18            | If the IMODULE failure was due to a storage allocation failure, increase the region size parameter in the JCL and rerun the job.   |
| 1C            | This is an internal logic error. Refer to the problem determination.<br>System action:<br>IMS terminates abnormally.   |

Problem determination:

1, 4, 11, 34

0717

Explanation:

User abend 0717 is issued by modules DFSIINS0 and DFSDOBI0. When this abend is issued by module DFSIINS0, it is a general abend indicating that an error was found during processing. During IMS initialization, DFSIINS0 was called to perform storage pool initialization. Register 8 contains the abend subcodes in the "Subcode and Meaning" list below.

Module DFSDOBI0, the OSAM buffer pool initialization module, issues an IMODULE GETMAIN call to get storage for the buffer pools. If a nonzero return code is returned from DFSDOBI0, abend 0717 is issued. The return code from the IMODULE GETMAIN request is in register 15.

Subcode (Hex)

Meaning

04

A DFSBCB GET request was made to get QSAV storage in order to have enough save areas for modules called by DFSIINS0. A nonzero return code was received from DFSBCB. Register 15 contains the DFSBCB return code.

08

An IMODULE GETMAIN request was made to get storage for DFSZIB00, which is the primary allocation of ZIB and FAQE blocks. A nonzero return code was received from IMODULE.

Register 2 contains the address of the IMODULE parameter list.

Register 3 contains the requested storage length.

Register 15 contains the IMODULE return code.

For a description of these codes in register 15, see IMS System Services Return Codes.

0C

An IMODULE GETMAIN request was made to get extended CSA storage for a storage pool header block, PHDRxxxx, where xxxx is the storage pool name. A nonzero return code was received from IMODULE.

Register 2 contains the address of the IMODULE parameter list.

Register 3 contains the requested storage length.

Register 4 contains the address of the storage pool header CDE name.

Register 15 contains the IMODULE return code.

For a description of these codes in register 15, see IMS System Services Return Codes.

10

An IMODULE GETMAIN request was made to get storage for a storage pool, DFSPxxxx, where xxxx is the storage pool name. A nonzero return code was received from IMODULE.

Register 2 contains the address of the IMODULE parameter list.

Register 3 contains the requested storage length.

Register 4 contains the address of the storage pool CDE name.

Register 15 contains the IMODULE return code.

For a description of these codes in register 15, see IMS System Services Return Codes.

14

All storage pools manipulated by the storage pool managers using the IGETBUF/IFREEBUF or DFSPPOOL macros must have a unique four-character storage pool name. The pool name is used to find the storage pool header in the storage manager hash table. DFSIINS0 was attempting to add a new storage pool header address to the hash table, but the pool name was a duplicate.

Register 4 contains the storage pool name.

Register 9 contains the address of the storage pool header.

System action:

IMS terminates abnormally.

Programmer response:

To recover from a failure in the DFS modules, take the following actions:

DFSIINS0

See IMS System Services Return Codes for explanations of IMODULE and DFSBCB return codes.

**DFSMODU0**

Specify a larger CSA, a larger region size, or both; then rerun the job.

**DFSIMN0**

Correct any error in the pool size specification on the PARM field on the JCL EXEC statement; then rerun the job.

**DFSDOBIO**

Either:

Specify a larger CSA size, region size, or both.

Decrease the number of subpools defined, decrease the size of the buffer pool, or both. Then rerun the job.

Problem determination:

1, 4, 11, 34

**0718**

Explanation:

An error occurred during IMS initialization. A required load module could not be loaded. For more information about this abend, see the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis manual.

System action:

IMS terminates abnormally.

Programmer response:

If this abend was issued by either DFSPLPP0 or DFSPLDR0, the modules for which the I/O error occurred are listed in message DFS677I, DFS678I, or DFS679I. Refer to the appropriate message for the information necessary to correct the problem.

**0719**

Explanation:

The control region initialization was unable to successfully open any line groups. DFSIINB0 has detected an internal IMS error during IMS Transaction Manager initialization. Initialization cannot continue.

For a switched device, the terminal type identification exceeds the valid range.

System action:

IMS terminates abnormally.

Programmer response:

Ensure the correct control blocks were linked into the IMS nucleus.

Problem determination:

1, 4, 6, 34

**0720**

Explanation:

IMS initialization was unable to page fix storage. Register 14 contains the location that issued the abend. Register 15 contains the return code from the IMSAUTH SVC PGFIX function. For a description of the IMSAUTH PGFIX return codes, see IMSAUTH Return Codes.

IMS also issues this abend for other reasons. For a description of the subcodes associated with these reasons, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

Problem determination:

1, 4, 6, 34

0721

Explanation:

An IFREEBUF call was issued to free a buffer address that does not exist.

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 34

0722

Explanation:

An improper post of an ECB waited on by DFSISMN0 has been detected.

System action:

The IMS control region is abnormally terminated.

Master Terminal Operator Response: Perform an emergency restart.

Problem determination:

1, 4, 5, 6, 34

0723

Explanation:

IMS was unable to locate the subsystem control table (SSCT) during OSAM initialization.

System action:

IMS terminates abnormally.

System Programmer Response: Make sure that the resource cleanup module (DFSMRLCO) has been installed correctly as described in IMS Version 9: Installation Volume 1: Installation Verification. If you are running multiple levels of IMS on the same operating system, then make sure that DFSMRCLO is from the highest level IMS system that you are running.

Problem determination:

1, 4, 6

0725

Explanation:

IMS encountered insufficient storage while trying to obtain additional ZIBs and FAQEs, or an error was encountered in the execution of DFSMODU0. The return code is in register 15

System action:

The IMS control region terminates abnormally.

Programmer Response: Re-IPL z/OS, specifying a larger CSA allocation; rerun the job.

Problem determination:

1, 4, 5, 6, 34

0728

Explanation:

While attempting to make the IMS batch region nonswappable, the IMSAUTH SVC encountered a problem. The return code is set in register 15. For a description of the IMSAUTH NOSWAP return codes, see IMSAUTH Return Codes.

System action:

The IMS batch region terminates abnormally.

z/OS System Operator Response: Contact the IMS system programmer.

Problem determination:

1, 4, 8, 34

0729

Explanation:

Start of changeABENDU0729 is issued from both DFSSPM40 and DFSSPM50. During a DFSPOOL GET request, module DFSSPM40 is called to allocate a buffer from an existing storage pool. During a DFSPOOL REL request, module DFSSPM50 is called to release a buffer. If DFSSPM40 is the issuer of the abend, then R0, R1, and R15 used by this logic (just before the abend) are saved in the save area set following DFSSPM40. If an unrecoverable internal error is detected by either module, a U0729 abend is issued. Register 15 contains the abend subcode.

Subcode (Hex)

Meaning

04

When obtaining a buffer, the caller's task was put in a wait state. When the task was posted, the storage manager determined that the post code was invalid.

08

The buffer allocated does not reside in the block, and a bit map error occurred.

When processing a GET request, the storage manager finds a block with a free buffer and allocates that buffer by updating the bit map in the block header. Before returning the address of the buffer to the caller, the storage manager verifies that the buffer resides in the block. If the buffer does not reside in the block, the storage manager issues this abend. An overlay of storage could cause this error.

0C

The first word of the buffer prefix contains zeros. Either an overlay occurred or a bad address was passed to the Storage Manager.

10

When releasing a buffer, either the buffer address passed by the caller or the block address obtained from the buffer prefix is invalid. Either an overlay has occurred or a bad address was passed to the storage manager.

14

A buffer is not being released to the correct pool. An overlay might have occurred.

18

The buffer being released is not currently allocated. An overlay might have occurred.

1C

The address of the buffer being released is not on a buffer boundary within the block.

End of change

System action:

IMS terminates abnormally.

Problem determination:

1, 4, 6, 11, 34

0730

Explanation:

During IMS initialization, module DFSXSPM0 was called to perform storage pool manager initialization. User ABENDU0730 is a general abend issued by module DFSXSPM0 when an error is found during processing. For explanations of IMODULE return codes, refer to IMS System Services Return Codes. Register 8 contains the following abend subcodes:

| Subcode (Hex)        | Meaning  |
|----------------------|--|
| 04                   | An IMODULE GETMAIN request was made to get extended CSA storage for the storage pool manager hash table, SPMHSHTB. A nonzero return code was received from IMODULE. Register 2 contains the address of the IMODULE parameter list. Register 3 contains the requested storage length. Register 15 contains the IMODULE return code.   |
| 08                   | An IMODULE GETMAIN request was made to get extended CSA storage for the storage pool manager bit map lookup table, SPMBMTAB. A nonzero return code was received from IMODULE. Register 2 contains the address of the IMODULE parameter list. Register 3 contains the requested storage length. Register 15 contains the IMODULE return code.   |
| 0C                   | An IMODULE LOAD request was made to load the storage pool definitions, DFSSPM10, into extended CSA. A nonzero return code was received from IMODULE. Register 2 contains the address of the IMODULE parameter list. Register 15 contains the IMODULE return code.  |
| 10                   | An IMODULE LOAD request was made to load the composite module DFSSPM00, which contains the storage pool manager routines. A nonzero return code was received from IMODULE. Register 2 contains the address of the IMODULE parameter list. Register 15 contains the IMODULE return code.  |
| 14                   | An IMS.PROCLIB member was specified using the SPM=suffix on the control region JCL, but the member was not found.  |
| 18                   | An internal error occurred while processing IMS.PROCLIB FPL= statements. DFSXSPM0 found more valid pool names than it's defined temporary pool areas. Only fixed type pools contain buffer definitions which are overridden by the PROCLIB statements. All fixed pool definitions reside in DFSSPM10. The amount of storage reserved for temporary definitions in DFSXSPM0 must be enough to allow all fixed pools to be processed.<br>System action:<br>IMS terminates abnormally.  |
| 0731                 | Problem determination:<br>1, 4, 11, 34<br><br>Explanation:<br>The storage pool manager was called for a DFSPOOL ALLOC function to allocate one or more of the storage pools defined in module DFSSPM10. During the storage pool allocation process, one or more errors were found. The storage manager returned with a nonzero return code causing the caller to terminate processing. For explanations of DFSPOOL and IMODULE GETMAIN return codes, refer to IMS System Services Return Codes.<br><br>System action:<br>IMS terminates abnormally.            |
| Programmer response: | Register 2 contains the DFSPOOL parameter list address, which points to one or more pool allocation entries. Each entry is mapped by the POOLALLOC DSECT generated by DFSPOOL GENLISTD. The last entry in the list is the word, XFFFFFFF'.<br><br>Each entry at byte 2 contains a 2-byte return code which indicates whether or not the specified pool in the entry was allocated. The high byte of the return code, if it is nonzero, is the return code from the IMODULE GETMAIN service. The low byte of the return code is from the DFSPOOL ALLOC service. |

Register 15 contains the largest DFSPOOL return code found during processing for all entries.

0732

Explanation:

The storage pool manager was called for a DFSPOOL GET function to obtain a buffer from a previously allocated storage pool. An error was found during the buffer allocation process. A nonzero return code from the storage manager caused the caller to terminate processing. Register 15 contains the DFSPOOL GET return code. For explanations of the DFSPOOL return codes, refer to IMS System Services Return Codes.

System action:

IMS terminates abnormally.

Programmer response:

If the return code indicates that there was a problem with the upper limit, make sure the upper limit that the user specified was not in error. If the return code is greater than X28', the problem is an internal IMS error.

Problem determination:

1, 4, 11, 34

0735

Explanation:

This abend is a general abend issued by modules DFSICIO0 or DFSASLT0 when an unrecoverable internal error is detected during processing (that is, when the CLB ITASK is running but the running flag is not on).

System action:

IMS terminates abnormally.

Problem determination:

1, 4, 5, 6, 11, 36

0736

Explanation:

There is insufficient storage to obtain the restart work area during IMS initialization.

System action:

The IMS control region is terminated.

Programmer response:

Increase the region size for the IMS control region, and restart IMS.

Problem determination:

8

0737

Explanation:

An internal IMS error occurred while attempting to start a database.

System action:

IMS terminates abnormally.

Programmer response:

One of the following codes in register 15, at the time of the abend, identifies the cause of the failure:

Code (Dec)

Meaning

1

A GETMAIN for working storage failed. The size requested is in register 8 at abend time.

2

The control region has knowledge of a backout required for the database being started, but DBRC does not know the necessary backout.

3

An attempt to obtain an internal RRE block failed.

4

The database being started required a backout. However, this database was one of several databases originally changed under a particular recovery scope. After performing the backout, the blocks for the other databases could not be located for updating system information.

Take appropriate action according to the indicated return code.

0738

Explanation:

When the IMS control region completed a service for a message region, the return to the message region failed because the region was canceled by z/OS.

System action:

The PST is freed for reuse. (The message region has already terminated as a result of MVS CANCEL.)

Problem determination:

1

0739

Explanation:

There is insufficient storage in an IMS message region to obtain the dependent region inter-region communication area.

System action:

The message region is terminated.

Programmer response:

Increase the size of the message region, and resubmit the job.

Problem determination:

8

0740

Explanation:

The partner product user exit returned a nonzero return code to module DFSRDY00. The return code is in R15.

System action:

IMS terminates abnormally.

Programmer response:

Correct the problem encountered by the partner product user exit, DFSPPUE0.

0741

Explanation:

Multiple Systems Coupling was unable to complete initialization.

System action:

IMS terminates abnormally.

**Programmer response:**

Register 14 minus 4 is the address of the instruction that determined the error. Ensure that the modules to be loaded are in SDFSRESL. Ensure that z/OS includes sufficient CSA at IPL time.

**Problem determination:**

1, 4, 35

0742

**Explanation:**

An error was detected in the maintenance of the DL/I task identification, which governs the reuse of freed space in a database during IMS online execution. One of four conditions was encountered:

During checkpoint, a new date was detected, but a valid DL/I task identification could not be generated. The cause could be an error in the time SVC, or the date set in the processor. The condition can also occur in an IMS system that has run continuously in excess of 658 days; the portion of the task identification containing the date information has overflowed.

An error in the range of active identifications was detected. For example, the low identification was higher than the next-available identification.

The identification of a dependent region, not within the range of known active identifications, was detected.

While doing backouts required during XRF takeover or during the recovery phase of Fast Database Recovery, the identification of a dependent region, not within the range of known active identifications, was detected.

**System action:**

For conditions 1, 2, and 4, the IMS control region terminates abnormally. For condition 3, the application in the dependent region terminates abnormally.

**System Operator Response:**

For conditions 1, 2, and 4, perform an emergency restart. For condition 3, issue a /START command to start the program and transaction affected, and, if the region was a BMP, restart the region.

**Programmer response:**

Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

0743

**Explanation:**

The active region counter in the SCD is negative.

Abend U0743 is a standard abend issued by DFSSABN0. This module is invoked when an application program or a dependent region terminates abnormally, to perform necessary PST cleanup functions.

**System action:**

IMS terminates abnormally.

0744

**Explanation:**

This is an internal system error. Module DFSSMIC0 was called invalidly. The call function in the RCSCHD field of the relocated RCPARMS image in the PST must be INIT or LOAD.

**System action:**

The IMS control region terminates abnormally.

**Master Terminal Operator Response:** Perform an emergency restart.

**Problem determination:**

1, 4, 5, 6, 25, 35

0745

Explanation:

The IMS scheduler discovered an invalid function (not CREATE THREAD) in the SSOB during scheduling of a batch message processing (BMP) region.

System action:

The program terminates abnormally.

Problem determination:

1, 5, 11, 12

0746

Explanation:

Module DFSDLA00 detected a failure on a CLOSE call during batch termination or checkpoint.

System action:

The application terminates abnormally.

Programmer response:

Start of changeCheck the system error messages, the IMS error messages issued, or both for the CLOSE failure. End of change

0747

Explanation:

A second CREATE-THREAD was issued for the same TCB without issuing a TERM-THREAD.

System action:

The dependent region is terminated.

Problem determination:

4, 35

0748

Explanation:

The IMODULE macro encountered an error while trying to perform an IMODULE LOAD request for module DFSCST00.

System action:

IMS terminates abnormally.

Programmer response:

The IMODULE LOAD macro returned a nonzero return code in register 15. For an explanation of the return code, see the IMODULE LOAD return codes in IMODULE Return Codes.

Problem determination:

1, 4, 12, 35

0749

Explanation:

When a user abend code 0 has been issued by an application program, this abend will appear. Additional information can be obtained from your system console log. If terminate thread processing is done by the end-of-task or end-of-storage instead of the IMS STAE processing, ABENDU0749 can occur.

System action:

IMS uses abend U0749 as the completion code for IMS messages and log records.

**Programmer response:**

If abend U0749 completion is desired, use abend code 0. If abend U0749 is not desired, do not use abend code 0.

**Problem determination:**

1, 5, 6, 11

0756

**Explanation:**

In an XRF environment, an OPEN failure was detected for a local message queue data set, or DFSQDOC0 failed to load.

IMS also issues this abend if the size of the local message queue is too small. This occurs when the number of records in any of the local message queue data sets is less than the number of records specified in the SHUTDWN parameter in the MSGQUEUE macro defined during system definition.

**System action:**

IMS terminates abnormally.

**Programmer response:**

This is probably a user error. Check LRECL and BLOCKSIZE definitions for the local message queue data sets: IMS.LGMSG, IMS.SHMSG, and IMS.QBLKSL.

**Problem determination:**

4, 35

0757

**Explanation:**

An error condition was detected in the IMS system message Queue Manager component. It was probably caused by a logic error in one of the Queue Manager's callers, by a logic error within one of the Queue Manager routines, or by an operations error relating to an emergency restart situation. The following operational errors can lead to this abend:

Warm starting after changing the defined system

Attempting an emergency restart with the wrong, or a missing, log data set

Using an improperly terminated log data set for an emergency restart

**System action:**

The system terminates abnormally.

**Start of change**

**Programmer response:**

First eliminate the possibility that an operational error could have caused the abend. If this is not the cause of the problem, then use the subcode value in register 15 at the time of the abend and refer to the failure analysis structure table for this abend (ABENDU0757) in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for a complete description of the problem.

**End of change**

**Problem determination:**

1, 2, 3, 4, 6, 8, 11, 35. Save the log data sets from the last DUMPQ/BUILDQ or from the last cold start.

0758

**Explanation:**

A message queue data set has overflowed before the system could be shut down with an internal checkpoint dump queue.

**System action:**

IMS terminates abnormally.

**Programmer response:**

The space allocation for one of the queue data sets listed below must be increased and the system emergency restarted with a build queue. The number of shutdown records can be increased by performing an IMS system definition. The contents of register 14 at abend point to the DCB of the full queue data set.

IMS.QBLKS

IMS.SHMSG

IMS.LGMSG

Often this error is related to a loop in an application program that creates a large amount of message data. If this is the case, the output from the looping application can be identified by examining the log data set. For additional information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Problem determination:**

None.

0759

**Explanation:**

Unrecoverable error in queue manager attempting to read or write message queue data sets.

**System action:**

IMS terminates abnormally.

**Master Terminal Operator Response:** Attempt to restart IMS with the BUILDQ and FORMAT options.

**Programmer response:**

Refer to ABEND0759 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

**Problem determination:**

See ABEND0759 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

0760

**Explanation:**

One of two error conditions was detected:

A message queue data set requires formatting.

The number of records reserved for a message queue data set for IMS shutdown is greater than the number of records in the data set.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Format one of the data sets listed below by restarting IMS using the FORMAT keyword parameter.

Message DFS986A, issued just before abend U0760, contains the name of the data set requiring formatting. Register 7, at the end of the abend, contains the DCB address.

Increase the space allocation for one of the system data sets listed below. Emergency restart the system with a build queue (/ERESTART BUILDQ FORMAT), remembering to FORMAT those data sets that were reallocated. You can alter the number of shutdown records by performing an IMS system definition. Message DFS986A, issued just before abend U0760, contains the name of the data set causing the error. Register 7, at the time of abend, contains the address of the DCB in error. The system data sets are as follows:

IMS.QBLKS

IMS.SHMSG

IMS.LGMSG

IMS.SPA

This error is caused by starting IMS with an unformatted system data set (above) or by reallocating one of these system data sets with a quantity that is too small.

0762

Explanation:

A critical system error was detected during IMS cross-memory processing.

System action:

IMS terminates abnormally.

Master Terminal Operator Response Emergency restart IMS.

Problem determination:

1, 3, 4, 6, 33, 34

0763

Explanation:

The IMS system message queue manager was waiting to be posted by a queue manager for another IMS subtask, but the DECB was posted by another part of the IMS system. This is an IMS system error.

System action:

IMS terminates abnormally.

Problem determination:

1, 2, 4, 6, 9, 35

0764

Explanation:

OSAM posted I/O ECB with an abnormal I/O ending code which does not equal (X7F'). There are two cases causing the abend 764. They are described as follows:

If R15 = 0, it indicates that OSAM is unable to convert an RNB to a full disk address in the form MBBCCCHHR during a WRTQUED redrive processing.

If R15 = XFFFFFFF', it indicates that the user specified 'DUMPIO=YES' in DFSVSMxx to ask abend 764 for any abnormal I/O ending.

System action:

IMS terminates abnormally.

Programmer response:

This is an internal IMS error.

System Operator Response: Contact the IMS system programmer.

Problem determination:

1, 2, 4, 35

0765

Explanation:

The OSAM access method attempted to translate a virtual address to a real address. The translation failed. As all pages were page fixed before attempting translation, this is an internal IMS error. In an z/OS environment, the failure could have been caused by a bad return code from the page fix routine. The DECBSTAT field in the DECB contains an error status code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

Problem determination:  
1, 2, 4, 35

0766

Explanation:  
A critical system problem was detected during IMS ITASK dispatching.

System action:  
IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem determination:  
1, 4, 5, 6, 35

0767

Explanation:  
A critical systems problem was detected while the IMS dispatcher was processing an IWAIT or ISERWAIT call.

System action:  
IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem determination:  
1, 4, 5, 6, 35

0768

Explanation:  
A system problem was detected while the IMS dispatcher was processing an ISWITCH call.

System action:  
IMS terminates abnormally.

Master Terminal Operator Response: Emergency restart IMS.

Problem determination:  
1, 4, 5, 6, 35

0769

Explanation:  
A critical system problem was detected in a dispatching subroutine.

System action:  
IMS terminates abnormally.

Master Terminal Operator Response: Do an emergency restart.

Problem determination:  
1, 4, 5, 6, 35

0770

Explanation:  
A systems error was detected while a dependent region was attempting to initialize an ITASK.

**System action:**

The dependent region terminates abnormally.

**Master Terminal Operator Response:** Shut down the control region with a memory dump. Restart the control region, and then restart the dependent region.

**Problem determination:**

1, 5, 6 (save the control and dependent region dumps), and 35

**0773**

**Explanation:**

The application received a read or open error from the buffer handler during an ISRT or DLET call that required single call backout to remove updates made during the call. Single call backout failed for one of these reasons:

No disk log was specified in batch for dynamic backout.

Positions in other PCBs in the PSB were adjusted.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Correct the cause of the read error or single call backout failure.

**Problem determination:**

1, 17

**0774**

**Explanation:**

A PST that was waiting for a lock for a resource from module DFSPIEX0 or DFSPIXA0, was posted out of a wait state with a post code that was not X60' or X6F'. A X60' post code is used when the PST is posted as the result of a deadlock. A X6F' post code initiates the PST when it has been granted the lock for which it has been waiting.

Register 10 in the abend memory dump contains the address of the PST. The first word of the PST is the DECB that contains the invalid post code.

**System action:**

IMS terminates abnormally.

**Programmer response:**

If the memory dump is from an IMS control region, scan the Dispatcher trace to find the X06' entry that indicates the post. This entry contains the address where the post was initiated.

If the memory dump is from a CICS® region, scan the CICS trace for an entry for the post.

**0775**

Start of change

**Explanation:**

This abend is issued when IMS cannot acquire any more ENQ/DEQ blocks or the amount of storage that was specified by the PIMAX parameter has been exhausted. It can be either a standard abend or a pseudoabend.

**Case1**

A standard abend is issued.

**Case2**

A pseudoabend is issued.

See message DFS2450I in this manual for additional information. If message DFS2450I was not

issued, the amount of storage specified in the PIMAX parameter may have been exhausted. Increase the size of the PIMAX parameter in member DFSPBIMS in a DB/DC environment, or in member DFSPBDBC in a DBCTL environment. For batch data sharing, refer to CICS/ESA Messages and Codes.

End of change

System action:

For Case1, the IMS control region terminates abnormally. For Case2, the application program terminates abnormally.

Programmer response:

For Case1, contact the IBM Support Center for assistance. For Case2, correct the cause by increasing the maximum storage available for the ENQ or by decreasing the requirements for ENQs.

Master Terminal Operator Response: For Case1, none. For Case2, decrease the system load by stopping the regions; then start the indicated SMBs and PSBs. If a BMP is not taking checkpoints and has used all available ENQ space, cancel the BMP.

Problem determination:

For Case1, 1, 2, 4, 6, 13.

0776

Explanation:

A failure occurred in dynamic backout while processing a ROLB call. This can happen if the current online OLDS does not contain the checkpoint required by a ROLB call. The OLDS might have wrapped if its allocation is too small compared to the huge volume of processing.

System action:

The IMS dependent region that encounters the ROLB call failure terminates abnormally.

Programmer response:

Refer to message DFS981I, which accompanies this abend, to determine the reason for the failure. Run Batch Backout on the databases named in the message.

Problem determination:

Refer to message DFS981I to determine the reason for the failure.

0777

Explanation:

The application program terminated abnormally because a potential resource was in the deadlock condition.

Start of changeThis abend is used to terminate an MPP and cause it to be rescheduled. This only occurs when the PPUR=Y option is specified in the DFSVSMxx member and a HALDB partition fails authorization due to a database command being in progress. When this happens, no TYPE67FF log record is sent to the log.

End of change

System action:

The application program terminates abnormally. If it was running in an MPP or IFP region it will automatically be rescheduled.

System Programmer Response: If a BMP failed, rerun the job.

System Operator Response:

None.

Problem determination:  
None.

0778

Explanation:

A ROLL call was issued by a user application program, or a failure during the Database Backout utility in another region resulted in all regions being terminated as a result of an internally issued ROLL call.

System action:

The application program terminates abnormally without a storage dump.

Master Terminal Operator Response: A message processing program (MPP) is automatically rescheduled.

Problem determination:  
None.

0779

Explanation:

The application program attempted to issue more \*Q command codes between sync points than specified in the MAXQ parameter of the PSBGEN statement in the PSB.

System action:

The control region continues normally; however, the message region terminates abnormally.

Programmer response:

If the application program was in error (for example, looping), correct it. If the PSB contains too low a value for MAXQ, correct the PSB and regenerate the ACB.

Problem determination:

4, 19. The number of Q commands issued since the last sync point is accumulated in the PSB.

0780

Explanation:

The IMS latching routine detected a critical system error.

Programmer response:

Determine the cause of the problem by referring to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

Problem determination:

4, 5, 6, 35

0783

Explanation:

DFSDPDM0 attempted to delete and release the space for a PSB that is not on its master PDIR's chain.

System action:

The system abnormally terminates.

Programmer response:

None.

Problem determination:  
4 and 5, or 25

0790

Explanation:  
The IMS USE Manager routine detected a critical system error.

System action:  
IMS terminates abnormally.

Programmer response:

Determine the cause of the USE manager by referring to the memory dump analysis in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

0791

Explanation:  
The ODBA sync point TCB initialization or processing detected a critical system error. For additional information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

System Operator Response:  
Emergency restart IMS to resume processing.

Problem determination:  
1,3,4,5,11

0793

Explanation:  
Module DFSISTS0 was unable to open either the LOGIN or LOGOUT DD statements.

System action:  
Module DFSISTS0 terminates abnormally.

Programmer response:  
None.

Problem determination:  
1, 2, 3, 8. Check the JCL for each ddname. Correct the JCL, and resubmit the job.

0794

Explanation:  
Module DFSISTS0 attempted to link to the SORT program and encountered a nonzero return code. A zero return code is required.

System action:  
Module DFSISTS0 terminates abnormally.

Problem determination:  
1, 2, 3, 4, 8, 25, 35

0795

Explanation:  
An invalid record type was encountered in the output phase of the SORT program. Register 7 points to the invalid record. This is probably a SORT program problem.

System action:  
Module DFSISTS0 terminates abnormally.

Problem determination:  
1, 2, 3, 4, 8, 25, 35

0796

Explanation:  
While processing a REPL call, the replace module found that the root segment was not locked by Retrieve.

System action:  
The application program terminates abnormally.

Problem determination:  
17a through 17d, 17f, 17g, 35

0797

Explanation:  
Delete/Replace received an unexpected segment from the buffer handler.

System action:  
The application program terminates abnormally.

Problem determination:  
17a through 17d, 17f, 17g, 35

0799

Explanation:  
Delete/replace called the user-written segment edit/compression routine to expand or compress a segment. Upon return, delete/replace found the new "LL" for the segment exceeded the maximum allowable "LL".

In Fast Path, upon return from the exit routine, the key is altered (subcode 1), or the length is incorrect (subcode 2).

System action:  
The application program terminates abnormally.

Programmer response:  
Correct the segment edit/compression routine, and rerun the job.

Problem determination:  
17a through 17g, 35

0800

Explanation:  
A user-written segment edit/compression routine has expanded a variable-length compressed segment to a size greater than maximum segment length.

During processing of the VLEXP routine in module DFSDLR00, a PCB with PROCOPT=GO, GON, or GOT (GOx) detected an invalid length in the LL field of a compressed segment. The length value in the LL field exceeded the maximum segment length by more than 10 bytes or was equal-to-or-less than 2 bytes. An update transaction might have changed the segment data before it expanded for the PROCOPT=GOx PCB.

**System action:**

The batch or message processing region is abnormally terminated. The control region continues normally.

**Programmer response:**

Correct the segment edit/compression routine. Refer to the DL/I User Exit Routine topic of IMS Version 9: Customization Guide for more information about the segment edit/compression routine.

If a PCB detected an invalid length in the LL field, rerun the PROCOPT=GOx transaction. If the abend is reissued, check the LL field of the segment in the database.

**Problem determination:**

4, 17c

0801

**Explanation:**

There are three reasons for this abend.

The "PSBIOAWK" work area is too small to hold the concatenated keys or segments to be returned. This might be a user error if the user defined an area too small in the PSBGEN (PSBGEN statement, IOASIZE= parameter) or if a path call was specified in such a way that the combined length of the concatenated segments to be returned to the application would be greater than 65535 bytes. This could be an IMS error if the IOASIZE parameter is omitted in the PSBGEN, in which case the size of the "PSBIOAWK" would be determined by the block builder.

A nonzero return code from storage manager in response to a GET BUFF call from DFSDLR00 to the "DBWP" pool. A nonzero return code from storage manager typically indicates that there is not enough room in the "DBWP" pool to satisfy the request.

The length field in a variable length segment is either less than two or greater than the defined maximum length.

**System action:**

The application program is terminated abnormally.

**Programmer response:**

Ensure that the value defined for the "IOASIZE=" parameter complies with the specifications for that parameter in IMS Version 9: Utilities Reference: System. If the call at the time of the ABEND was a path call, ensure that the combined length of all concatenated segments to be returned does not exceed 65535 bytes. If this size has been exceeded, the user might want to issue a series of path calls, rather than a single call, so that the 65535 byte limitation is not exceeded during any one call. If the abend is the result of an incorrect length field in a variable length segment, correct the invalid length.

**Problem determination:**

17a, 17b

0802

**Explanation:**

Replace tried to obtain space from space management to replace a variable-length segment which caused the data to be separated from the prefix and no space was available.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Reorganize the database.

**Problem determination:**

17a through 17g, 35

0803

Explanation:

Delete/replace was unable to find a logically related segment (typically a logical parent or a physically paired logical child); or a logical parent's counter is negative if decremented for deletion of a logical child; or a logical child could not be found on a logical twin chain.

If you were unable to find a physically paired logical child, one of two conditions exists:

The paired segment does not exist.

The paired segment intersection data is not equal to the original intersection data.

If it is this last condition, it is caused by the user's load program failing to load both copies with equal intersection data.

System action:

The application program terminates abnormally.

Programmer response:

Ensure that the reorganization/load program was performed correctly. See the "Partial Database Reorganization Utility" section of IMS Version 9: Utilities Reference: Database and Transaction Manager.

Problem determination:

17a through 17g, 35.

At the time of the abend, if register 11 points to CSECT DFSDLDS0, delete or replace was unable to find the logical parent or the paired logical child. However, if register 11 points to CSECT DFSDLDO0, register 15 will contain a value to identify the problem. If register 15 is negative, the logical parent counter was zero before the delete call. If register 15 is equal to zero, the logical parent does not point to the logical child to be deleted.

0804

Explanation:

A DL/I action module made a request for working storage. Because of insufficient space available in the database working pool, the request could not be satisfied. The database working pool should be at least as large as the number of active dependent regions times 2K.

System action:

The application program is stopped and the current message is re-enqueued on the message queue.

Programmer response:

If the 0804 abend occurs in an online system, the database working pool (DBWP) should be increased in size. This size can be specified as a parameter on the EXEC statement. If the abend occurs in a batch region, the region size should be increased.

System Operator Response:

The application program can be restarted and the transaction will be scheduled again.

Problem determination:

4, 5, 6

0805

Explanation:

During Reload processing for a partition of a High Availability Large Database (HALDB) it was determined that either the prefix was not valid for a HALDB partition or the prefix length was not valid for a HALDB partition. Locate the correct offset of field PSTFUNCH by assembling the IPST DSECT as referenced by the DFSADSCT module. PSTFUNCH will contain one of the following error codes:

RER1

Invalid partition prefix

RER2

Invalid partition prefix length

System action:

The application program terminates abnormally.

User response:

Specify the correct partition database that was unloaded and rerun the reload job.

Problem determination:

1, 2, 3, 17a, 35, 36

0806

Explanation:

Delete/replace got an invalid return from the buffer handler on a byte locate call, or an error occurred attempting to mark buffer altered. This is an IMS system error.

System action:

The application program terminates abnormally.

Problem determination:

17a through 17g and 35.

0807

Explanation:

Delete/replace cannot obtain a position in the physical structure (physical path to root required). This is probably a system error.

System action:

The application program terminates abnormally.

Programmer response:

None.

Problem determination:

17a through 17g, and 35. If register 11 points to CSECT DFSDLDS0, delete/replace was unable to follow the logical blocks (SDB and level tables) from the segment to be deleted or replaced up to the root segment. This is typically caused by retrieve not posting position where delete expected it. If register 11 points to CSECT DFSDLDD00, the segment to be removed is not pointed to by the physical chain (PCF, PCL, PTF, PTB, or RAP).

0808

Explanation:

Delete/replace cannot resolve database blocks description of logical relationships or could not calculate the address of the PSDB for the segment code just retrieved.

System action:

The application program terminates abnormally.

Problem determination:

17a through 17g and 35

0810

Explanation:

User program attempted to load a database and was not sensitive to all data set groups within the database.

**System action:**

The application program terminates abnormally.

**Programmer response:**

Perform PSB generation again, and make certain that the program is sensitive to at least one segment in each data set group.

**Problem determination:**

2, 3, 9, 18, 19

0811

**Explanation:**

Delete/Replace was attempting to change a pointer in a segment's prefix. It found that the old value of the pointer was not as expected. Prior pointer maintenance was erroneous.

**System action:**

The application program terminates abnormally.

**Problem determination:**

17a through 17g and 35

0814

**Explanation:**

An unrecoverable error was detected during data capture processing when changed data logging or changed data exits were defined for the database. The type of error depends upon which module generated the abend:

DFSCPY40

The abend was issued because an error was detected while preparing to call MVS/ESA data compression services, or the return code from MVS/ESA data compression services indicated an error condition.

DFSECP10/DPSECP20

The pseudoabend occurred because DFSDCAP0 detected an error during data capture for a full-function database.

DFSPCC30

A DSPSERV or ALESERV request received an invalid return code in register 15 at the time of the abend. For return code 8, the data space creation was not allowed because the IEFUSI exit routine prevents creating key 8 data spaces.

DFSDCAP0

An error occurred during data capture for a full-function database in a batch region (DLI/DBB).

**System action:**

The application program terminates abnormally.

**Problem determination:**

Check the JCL for the batch region. For detailed information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

0816

**Explanation:**

Index synchronization error. The contents of a secondary index do not correspond to the contents of the target database. This could be the result of the target and secondary DBDs being rebuilt without rebuilding the PSBs referencing them.

**System action:**

The program terminates abnormally.

**Programmer response:**

Ensure that the index is recovered to the same level as the target database; inspect the index

segment to ascertain whether its contents are valid. It can be found at the address contained in PSBXIOWK. The PSB is found by following the pointers at PSTPSB to the PDIR and PDIRADDR to the PSB. Reload the database and all secondary indexes. An effort should be made to trace the source of the synchronization error to a specific database call.

Problem determination:  
4, 5, 11, 17b, 17c, 17g, 35

0819

Explanation:  
This is an internal IMS system error. One of the following occurs:

A CLOSE failure occurs during phase 1 of sync point, and sync point processing is terminated. Any participant votes NO in phase 1 of sync point.  
A module called the synchronization point processor (DFSFXC30) and requested an undefined function.  
In a Database Control (DBCTL) environment, a Coordinator Control (CCTL) subsystem thread requested a sync point COMMIT before doing a sync point PREPARE.  
For the encoded function codes located in the PST, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS abnormally terminates.

z/OS System Operator Response: Inform the master terminal operator of the IMS control region abend.

Master Terminal Operator Response: Execute an emergency restart.

Problem determination:  
4, 5, 11, 35

0820

Explanation:  
An error has been detected in either module DFSDLA30 or DFSFXC40. The following are possible errors:

DFSDLA30:  
An invalid return code was received from the queue manager. This is an IMS system error.  
A failure occurred while trying to locate the call destination.  
DFSFXC40  
An invalid function code was passed into DFSFXC40. This is an IMS system error.  
A nonzero return code was received from the message router DFSICLRO. This is an IMS system error.  
The I/O PCB destination output represents an SMB and the dependent region is message driven.  
This is an IMS system error.  
System action:  
IMS terminates abnormally.

Problem determination:  
4, 5, 11, 34

0821

Explanation:  
An error has occurred during initialization of the program and database control blocks while executing a DBB type IMS region.

Start of changeTo determine which ACB library to read, IMS batch selects the OLCSTAT or MODSTAT data sets to read the online change status as follows:

From the OLCSTAT data set allocated via JCL if one exists.

From the OLCSTAT data set defined in the MDA member if one exists.

From the MODSTAT data set allocated through JCL if no OLCSTAT DD statement coded in JCL and no OLCSTAT MDA member defined.

The default is to use the ACBLIB from the IMSACB DD statement when there is no OLCSTAT and no MODSTAT DD statement coded in the JCL.

An error can occur either because the data set name is incorrect, or the data set cannot be accessed. End of change

If you have an OLCSTAT MDA member defined, this definition expresses an intent to use Global Online Change. OLCSTAT is selected over the MODSTAT DD statement if it is coded in the JCL. An error might occur either because the data set name is incorrect or the data set cannot be accessed.

System action:

The IMS region terminates abnormally. One or more messages will have been written to the system console. If the batch initialization module (DFSBIND0) detects the error then one or more of the following messages will appear: DFS2855I, DFS823I, DFS824I, DFS826I, DFS830I, DFS838I, DFS3467I.

If the error is detected by the block mover module DFSDBLM0, or by any module called by block mover, any of the messages put out by those modules in a batch DBB region might appear. These include DFS561I, DFS564I, and DFS592I.

Programmer response:

See the message listed above to determine the cause of failure and problem determination steps.

If the problem is with an OLCSTAT MDA member definition, correct the OLCSTAT error.

0822

Explanation:

A single message queue segment will not fit into the PSB index work area. This is an IMS system error.

System action:

IMS terminates abnormally.

Problem determination:

4 or 11 and 35

0824

Explanation:

IMS received an invalid return code from the user's program routing exit. Register 15 contains the invalid return code. For valid return code values, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

0825

Explanation:

An unexpected return code from the buffer handler occurred.

System action:

The batch or message processing region terminates abnormally. The control region continues.

Programmer response:

Review the PST fields. Pertinent PST fields and contents are:

Name  
Description  
PSTFNCTN  
Requested function  
PSTRTCDE

Return code

If the return code is 'X04', the following fields contain relevant information:

Name  
Description  
PSTBYTNM  
Incorrect relative byte address  
PSTDBPCB

Address of the PCB

DBPCBJCB

Address of the JCB

If an I/O error is indicated, take the action required to recover the database. Any other error is probably a DL/I error.

Problem determination:

4, 5, 11, 17b, 17c, 17g, 35. Re-create the problem in a batch environment and snap control blocks and buffer pool on two calls before this abend.

0826

Explanation:

A situation was encountered by index maintenance that prohibits further processing of the database. Message DFS0840I identifies the index and gives a status code. Probable causes are:

Read error indicated by buffer handler. The status code is 'NO'.

Unable to open the index database. The status code is 'NI'.

I/O error indicated when inserting to an index DB. The status code is 'NO'.

Open error on work file data set during DB load with secondary indexes. The status code is 'NI'.

Index Maintenance is unable to handle the return code it received from the buffer handler. The status code is blanks.

System action:

The application program terminates abnormally.

Programmer response:

If an open error is indicated, check JCL parameters or missing DD statements. For an I/O error, investigate the need to recover the affected data set.

Problem determination:

35

0827

Explanation:

An error occurred during LATCH, UNLATCH, or IMODULE LOAD processing related to use of the Index exit routine. The probable causes are:

Exit routine not found in Job or Step libraries under the name indicated in the DBDGEN.

Read error encountered on reading exit routine from library.

Latch ECB posted incorrectly while serializing the Index exit routine.

System action:

IMS terminates abnormally.

Programmer response:

Analyze the possible library errors that might have caused the problem. Latch problems can only exist in the online environment. If not a hardware or a user error, proceed with the problem determination.

Problem determination:  
3, 8, 11, 17b, 18, 35

Module:  
DFSURGU0

0828

Explanation:  
Index Maintenance attempted to insert a new index entry, with index specified as unique, and encountered a duplicate index entry.

System action:  
At the time the error was encountered, the segment being inserted was already added to the database and the other indexes might already have been updated. If you are executing in a batch system with disk logging and if the execution parameter BKO=Y (dynamic backout) was not specified, it is necessary to run the Database Backout utility. Otherwise the system runs dynamic backout.

Programmer response:  
If duplicate secondary index entries occur, the index should be specified as non-unique, and an overflow entry-sequenced data set should be provided.

Problem determination:  
1, 11, 35

0829

Explanation:  
When a VSAM ERASE call was issued, an invalid return code was returned from the VSAM buffer handler.

System action:  
IMS terminates abnormally.

Programmer response:  
None.

Problem determination:  
11, 17, 35

0830

Explanation:  
This is a pseudoabend issued when an application program issues a message GU call and the DC call handler (DFSDL30) detects the message has invalid fields such as MSC SYSIDS, IMSID, or SOURCE name.

This error can occur:

Start of change

While the message was inflight in a remote IMS in an MSC network (and on the queue in a shared-queue environment), the resources where these fields were set from are changed.

When one or more systems in a shared-queues environment are defined with MSC links, while others are defined without MSC links. In an IMSplex, if one IMS system is MSC capable, then all IMS systems in the IMSplex must be MSC capable. To enable an IMS system for MSC, define an MSC link for the IMS system during system definition. This MSC link definition does not need to be functional.

Due to an IMS internal error.

End of change

System action:

A pseudoabend U0830 is issued and message DFS554A is sent to the master terminal.

The transaction and program are stopped.

The message is placed back on the ready queue (unlocked).

A 6701-LA3E record is written to the IMS log.

System Operator Response:

If this is a shared queues IMS, first verify the message was not processed successfully by another IMS in the shared queue group. If the message is still on the queue, it may be removed by issuing a /DEQUEUE TRANSACTION trancode PURGE1. Trancode is the TRANCODE name in message DFS554A. You can also issue a /START command to restart the transaction and program again, if the error is corrected, to let the application program schedule again and GU the message.

If this is a shared queues IMSplex that is multiple systems coupling (MSC) capable, and the message was entered on an IMS that was taken down, and the error is due to an invalid MSC SYSID, the error may be corrected by starting all the IMSs in the shared queues group. This will cause the SYSIDs to be exchanged between the IMSs in the SQG and make all the SYSIDs valid.

Programmer response:

This could be a procedural or IMS internal error. To determine which and a possible resolution, the type 6701-LA3E records (and X67D0' records if produced) will need to be printed with the File Select and Formatting Print utility (DFSERA10), and analyzed. See ABENDU0830 in the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for a diagram and for specific information about this ABEND as well as the File Select and Formatting Print utility (DFSERA10).

Problem determination:

5, 6, 17h

The following information applies to 17h:

Print the log records type x'6701'ID=LA3E.

Use the Log File Select utility DFSERA10.

Use the following control cards:

```
OPTION PRINT O=5,V=6701,L=2,C=M,T=X,E=DFSERA30
OPTION PRINT O=9,V=LA3E,L=4,C=E,T=C,E=DFSERA30
OPTION PRINT O=5,V=67D0,L=2,C=E,T=X,E=DFSERA30
```

Start of change

0831

Explanation:

IMS has detected a logic error during processing block serialization for full function databases. IMS terminated abnormally because DFSBLSER has determined that a task has requested to release block serialization on a block which it was not the owner of the serialization lock.

System action:

IMS terminates abnormally with ABENDU0831.

System programmer response:

If the ABEND occurs during IMS-dependent region activity then the IMS can be emergency restarted.

If the ABEND occurs during batch backout then the databases must be recovered using forward recovery.

Problem determination:

1, 2, 3, 4, 5, 6, 8, 14, 15, 25, 40

Module:

DFSMMUD0, DFSRDBC0

End of change

0832

Explanation:

While requesting or freeing space in an HDAM, HIDAM, PHDAM, or PHIDAM database, an incorrect free space element (FSE) was found or created in the block whose prefix address is in PSTBUFFA. The current call might not have been completed.

System action:

The application program terminates abnormally.

Programmer response:

To identify which database is in error, obtain the data management block number from PSTDBNM and the DDIR from the SCD; use the data management block number to find the DDIR number that applies. Reorganize the database to correct FSEs, or do the following:

Set the FSE anchor point in the block to zero. This will prevent any more use of the FSEs in that block.

Take a memory dump of the database using the Database Image Copy Utility. This is necessary because backout of activity in this block, which preceded setting the FSE to zero, should not be attempted. Backout will not replace segments correctly if the space expected is not there, and results will be unpredictable.

Problem determination:

17a, 17b, 17g, 35, and save the log tapes for reference to activity on the incorrect data block.

0833

Explanation:

An invalid SYSID was encountered. Register 15 contains the invalid SYSID. This error is probably either a logic error or a destroyed data area.

System action:

IMS terminates abnormally.

Problem determination:

35

0834

Explanation:

While searching for space, Space Management received three consecutive read error returns from the Buffer Handler. An I/O error message was issued by the Buffer Handler before this abend.

System action:

The application program terminates abnormally.

Programmer response:

Refer to the I/O error message issued before the termination of the transaction.

0835

Explanation:

An error was detected in an FDB for a field within an index source segment. The field represented by the FDB was specified in the SUBSEQ or DDATA operand of an XDFLD statement and the FDB indicates that it is a system-related field, but the field name does not begin with /CK or /SX.

System action:

IMS terminates abnormally.

Programmer response:

This is probably an IMS internal error.

Problem determination:

4, 35

Module:  
DFSURGU0

0840

Explanation:

A user written Segment Edit/Compression routine detected a processing error while attempting compression or expansion services.

System action:  
The application abnormally ends.

Programmer response:

Ensure the edit/compression routine has been built and linked properly. Examine the problem-related data described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

4, 17a, 17b, 18, 19, and the source and link listings of the edit/compression routine.

Module:  
DFSURGU0

0842

Explanation:

An error occurred while extending an OSAM data set in a data sharing environment.

System action:

Message DFS0842I was issued before the abend indicating the DBDNAME, DDNAME, and DSNAME of the data set that encountered the extend error. The application program terminates abnormally with pseudoabend U0842, and IMS continues processing. However, if DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0842, and the control region terminates abnormally.

Programmer response:

Ensure that all database data sets can be shared from all subsystems that share the data set.

Problem determination:

1, 2, 4, 17

0843

Explanation:

The block number passed to DL/I from the user's randomizing routine, when multiplied by the block size, yields a value that exceeds the maximum addressable data address. The data address must be addressable by 32 bits in VSAM or 31 bits in OSAM.

System action:

The processing task is terminated abnormally.

Programmer response:

Examine the value returned from the randomizing routine in DMBDACP. If the block number portion multiplied by the CI size is greater than the corresponding maximum value allowable, change the randomizing routine or reduce the size of the root addressable area.

Problem determination:

11, 25, 35

0844

Explanation:

No space is available in the database, or the data set was defined as DD DSNAME=NULLFILE or DD DUMMY.

System action:

For Fast Path data sets, message DFS2767I or DFS2765W is issued before the abend, indicating that the DDNAME data set is out of space.

For non-Fast Path data sets, message DFS0844I is issued before the abend, indicating the DBDNAME and DDNAME of the data set encountering the out-of-space condition. The application program terminates abnormally with pseudoabend U0844, and IMS continues processing. However, if DUMP=YES was specified on the DL/I buffer options statement, the application terminates with standard abend U0844, and the control region terminates abnormally.

Programmer response:

For Fast Path data sets, the size of the data set must be increased. Space might be made available by executing the DEDB Direct Reorganization utility.

For non-Fast Path data sets, the database might be invalid. Run the Database Backout utility or re-create the database, allocating more space. If a LIST VTOC job is run, it might provide misleading information. While offline (using the /DBR command), you must copy the database to a larger space allocation. Then make the database available to the online region using the /START command.

Problem determination:

4, 12

0845

Explanation:

An unexpected condition occurred in DFSDBH00 or DFSDVSM0. This is an IMS system error.

System action:

IMS terminates abnormally.

Problem determination:

17a, 35. For a pseudoabend, register 14 is saved in the PST in the field named PSTDATA. The content of register 14 is the address in the buffer handler where the abnormal termination was issued.

0846

Explanation:

Module DFSDBH00 was posted with an unexpected post code. This is probably an IMS system error.

System action:

IMS terminates abnormally.

Problem determination:

4, 35

0847

Explanation:

An unexpected condition occurred in the OSAM buffer handler. This is an IMS system error. Register 14 contains the address in DFSDBH00 where the abnormal condition was detected.

System action:

IMS terminates abnormally.

Problem determination:

4

0848

Explanation:

All the buffer prefixes in the OSAM buffer subpool have been locked because of write errors.

System action:

The application program terminates abnormally.

Problem determination:

27, 35

0849

Explanation:

Module DFSDLR00 detected a failure and attempted to issue a pseudoabend for a DB PCB that had PROCOPT=GOx. The original abend was changed to user abend 0849. The register contents for the original abend code were saved in the last level save area in the PST. This save area starts at label PSTSAVL. The original abend code can be found in the two lower bytes of REG0, which is saved at PSTSAVL+X14'. The abend code is in hex and must be converted to decimal. After determining the original abend code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information about this abend.

System action:

The application program terminates abnormally.

Problem determination:

17a, 17b

0850

Explanation:

DFSDLR00 received an invalid return code from a call to the buffer handler. Pertinent PST fields are described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application program terminates abnormally.

Programmer response:

Analyze the DBDs you use. Ensure that the DBD you used to create the database and the DBD you used to update the database were the same.

Problem determination:

17a through 17e

0851

Explanation:

For a HISAM or INDEX database, the first segment code in the logical record was not segment code 1. Start of changeThis abend can occur if the database is being processed using a DBD from a DBDLIB or ACBLIB that is different from the DBD under which the database was most recently loaded. End of change For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application program terminates abnormally.

Problem determination:

17a through 17e

0852

Explanation:

In response to a PSTBYLCT call to the buffer handler for either a HISAM, HIDAM, HDAM, PHDAM, or PHIDAM database, the segment code returned was not a valid segment code for the database. Start of change This abend can occur if the database is being processed using a DBD from a DBDLIB or ACBLIB that is different from the DBD under which the database was most recently loaded. End of change For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Programmer response:**

Analyze the database. If there is an invalid pointer, recover the database.

**System action:**

The application program terminates abnormally.

**Problem determination:**

17a through 17e, 35

**0853**

**Explanation:**

For a HIDAM, HDAM, PHDAM, or PHIDAM database, in attempting to locate a root segment, the segment returned either did not have a segment code of 1, or (for HIDAM or PHIDAM) had a different key value than the key value in the index pointer segment. Start of change This abend can occur if the database is being processed using a DBD from a DBDLIB or ACBLIB that is different from the DBD under which the database was most recently loaded. End of change For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The application program terminates abnormally.

**Problem determination:**

17a through 17e

**0854**

**Explanation:**

For an HSAM database, a segment code was encountered which was not a valid segment code for the data management block. For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**

The application program terminates abnormally.

**Problem determination:**

17a through 17e

**0855**

**Explanation:**

The lock request handler detected an error while processing a lock request. PSTLRPRM contains the request parameters set by the DFSLR macro.

**System action:**

The application program terminates abnormally.

**Problem determination:**

17a, 17b, 17e, 17f, 35

**0857**

**Explanation:**

The insert position was determined for HIDAM, HDAM, PHDAM, or PHIDAM. Then, in attempting to verify the position, the segment to which the inserted segment would point could not be found starting from its parent. The database would appear to have invalid pointers. Start of change This abend can occur if the database is being processed using a DBD from a DBDLIB or ACBLIB that is different from the DBD under which the database was most recently loaded. End of change For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application program terminates abnormally.

Problem determination:

17a, 17b, 17c, 17g

0858

Explanation:

The pair of a physically paired segment could not be located. For a description of relevant PST fields and register contents, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application program is terminated abnormally.

Problem determination:

17a, 17b, 17c, 17g

0859

Explanation:

IMS found a logical child on a GET call and the logical parent could not be found. Check the problem-related data described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The application program terminates abnormally.

Problem determination:

17a through 17e

0860

Explanation:

A return error from a call to the database handler occurred.

System action:

The application program terminates abnormally.

Programmer response:

Check problem-related data in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Probable causes are:

Bad insert position in SDBs from retrieve (DFSDLR00).

Database had bad pointers. Error in DFSDDLE0.

There was insufficient space in the data set to initially load the data set.

Problem determination:

4, 17a, 17b, 17g, 18, 19, 35

0861

Explanation:

When doing a dependent segment insert in HISAM, or replacing a variable-length segment in HISAM whose length has changed, an invalid segment code was encountered by DFSDDLE0 (LOAD/INSERT) in determining length of segments to the right of the insert point.

System action:

The application program terminates abnormally.

Programmer response:

Probable causes are:

DBD redone, changing length of segments without reloading database.

Bad insert position in SDBs from retrieve (DFSDLR00) or replace (DFSDLD00).

To check the problem-related data, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

4, 17a, 17b, 17g, 18, 19, 35

0862

Explanation:

On insert of logical child/logical parent concatenated segment with logical parent insert rule virtual, format of the user I/O area was correct, but, when attempting to replace logical parent, the key in the logical parent did not match the corresponding portion of the concatenated key of the logical parent in the logical child. Module DFSDLR00 positioned for the logical parent using the concatenated key of the logical parent in the logical child. This position was placed in the SDBPOSC field of the SDB for the logical parent. When subsequent replace of the logical parent was attempted, this position was not consistent with the concatenated key of the logical parent.

System action:

The application program terminates abnormally.

Programmer response:

Check the problem-related data described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

4, 17a, 17b, 17g, 18, 19, 35

0863

Explanation:

An error in the user's edit/compression routine resulted in one of the following:

The segment length is greater than the defined maximum; or if the segment is fixed length, the length is greater than the defined length +10.

The key was changed without key compression being specified.

System action:

The application program terminates abnormally.

Programmer response:

Ensure that the edit/compression routine is executing properly. Examine the problem-related data described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis. Obtain the information listed under Problem Determination for analysis.

Problem determination:

4, 17a, 17b, 18, 19, and a source listing of the edit/compression routine.

0864

Explanation:

An unexpected return was received from the program isolation ENQ/DEQ routine, or from an invalid post to IWAIT. This is an IMS system error.

System action:

The application program terminates abnormally.

Problem determination:

17a, 17b, 35

0865

Explanation:

When inserting a replacing segment in a HISAM database, a work area was required to hold one LRECL. Space was not available using the ICREATE macro.

System action:

The application program terminates abnormally.

Programmer response:

Increase the storage available to the program.

Problem determination:

17a, 17b

0867

Explanation:

When inserting a logical child, an attempt is made to locate and update a logical parent through the logical child's secondary list. No secondary list entry was found for the just inserted logical child, indicating an incomplete ACBGEN.

System action:

The application program terminates abnormally.

Programmer response:

Start of changeAt entry to this abend, register 11 or register 5 points to the logical child's SDB for which no valid secondary list entry was found. Correct DBD in error or rerun ACBGEN, or both; and then re-execute the program. End of change

Problem determination:

4, 9, 17d

0868

Explanation:

When inserting a HIDAM or PHIDAM root with a twin backward pointer in update mode, the twin forward pointer was found to be zero. With a twin backward pointer specified at the root level, there should never be a twin forward pointer of zero. This indicates an invalid database or the loss of the all FFs key in the index record.

System action:

The application program terminates abnormally.

Programmer response:

Analyze the database to see if the twin forward and twin backward chains are valid and if the all FFs key is missing in the record. In either case, the database must be recovered.

Problem determination:  
17a through 17g, 35

0869

Explanation:

The DL/I buffer handler router was asked to perform an undefined function. This is an IMS system error.

System action:  
IMS terminates abnormally.

z/OS System Operator Response: Submit all output to your IMS system programmer. Follow the IMS restart procedures.

Problem determination:  
4, 11, 12, 35

0870

Explanation:

Retrieve detected a bad twin chain when positioning for the insert of a HIDAM or PHIDAM root that has PTR=TB. For a description of relevant PST fields and register contents, refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
The application program terminates abnormally.

Problem determination:  
17a through 17d, 35

0880

Explanation:

An unexpected condition occurred during processing of a HALDB. The error might have been detected during processing for one of these events:

Creation of an extended pointer set  
Creation of an indirect list entry  
Correction of an extended pointer set  
Selection of a HALDB partition  
Update of an indirect list entry  
Validation of an extended pointer set

For more detailed information about the reason codes for the abend, see the IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis manual.

System action:  
The application program terminates abnormally.

Problem determination:  
17a through 17d, 35

0881

Explanation:

An unexpected condition occurred in module DFSFXC50 during processing of a HALDB PINT (partition initialization) call or UNLD call.

System action:  
The application program terminates abnormally.

Problem determination:  
17a through 17d, 35

0882

Explanation:

A failure occurred while running the Index/ILDS Rebuild utility (DFSPREC0). The reason code identifies the type of error and action to be taken:

Reason Code

Meaning

04

The call to the Partition Selection and Initialization routine failed due to a severe error.

08

The call to open the prime data set failed.

0C

The call to open the index data set failed.

10

The call from the buffer handler to locate the first block of the prime data set failed.

14

The call to close the prime data set failed.

18

The call to close the index data set failed.

20

The call to insert an indirect list entry failed.

24

An invalid status code was returned on a GN DL/I call.

28

The call from the buffer handler to locate the next block in the database failed.

2C

While scanning a database block, the end of the PSDBs was reached before the PSDB was found for the level of the segment being processed.

System action:

The job terminates abnormally.

Programmer response:

Save the memory dump and registers provided and call the IBM Support Center for assistance.

Problem determination:

1, 3, 6, 8, 17a through 17d, 35, 40

0885

Explanation:

Pseudoabend issued by DFSDL00 when a required user exit (DFSDBUX1) could not be loaded or DATXEXIT=YES was specified in the DBDGEN but the user exit set SRCHFLAG to XFF'.

System action:

IMS stops the database and the transaction is pseudoabended.

Programmer response:

The programmer must ensure that the exit is link-edited into an APF authorized library before restarting IMS and rerunning the transaction. If the second option above applies, either remove the DATXEXIT=YES from the DBDGEN or change the user exit so that it does not set SRCHFLAG to XFF'.

0888

Explanation:

The active format library does not have any members and the IMS system has MFS supported

terminals. As a minimum, the active format library should contain the default format blocks generated by the IMS system definition.

System action:

IMS terminates abnormally with an abend code of U0888.

Programmer response:

Correct the format library specification on the FORMATA DD statement to a valid data set.

0889

Explanation:

A DEVTYPE macro was issued with an invalid area address.

System action:

IMS terminates abnormally.

z/OS System Operator Response: Notify your IMS system programmer.

Problem determination:

2, 3, 4, 35

0890

Explanation:

A DEVTYPE macro was issued for the ddname of the active format data set, FORMATA or FORMATB, and a not-found condition occurred.

System action:

IMS terminates abnormally.

z/OS System Operator Response: Rerun the job, making sure that there is a valid DD statement for the active format data set with ddname FORMATA or ddname FORMATB. The active format library ddname is identified in the message text of DFS3410I.

Problem determination:

2, 4

0891

Explanation:

The active format data set could not be opened.

System action:

IMS terminates abnormally.

System Operator Response:

Contact your IMS system programmer for assistance.

0892

Explanation:

Insufficient storage available in the message format block pool (MFBP) to complete the initialization of the pool.

System action:

IMS terminates abnormally.

System Operator Response:

Rerun the job after defining a larger format pool with the FBP parameter on the EXEC statement in the IMS procedure.

Programmer response:

See IMS Version 9: Administration Guide: System for the factors to be considered when defining pool size.

Problem determination:

4

0893

Explanation:

An I/O error occurred and issued a POINT or FIND macro for the active format library (IMS.FORMATA or IMS.FORMATB) during initialization of the message format block pool.

System action:

IMS terminates abnormally.

Programmer response:

There is probably an error in the PDS directory for the format data set. Ensure that the MFS Utility executed properly, and rerun the job.

Problem determination:

2, 3, 4, 11, 16

0894

Explanation:

An I/O error occurred issuing a READ macro for the active format data set during initialization of the message format block pool, or an invalid directory block was read.

System action:

IMS terminates abnormally.

Programmer response:

There is probably an error in the PDS directory for the format data set. The active format data set must not be updated while IMS is active. Ensure that the MFS utility executed properly, and rerun the job.

Problem determination:

2, 3, 4, 11, 16

0895

Explanation:

Insufficient storage was available in the IMS extended private area to build the PDS directory indexes used to read MFS control blocks from the active MFS format library.

System action:

Rerun the job when more space is available in the IMS extended private area.

0896

Explanation:

The DD DUMMY parameter is not supported for the active format data set. The ddname is FORMATA or FORMATB. Refer to message DFS3410I, which will identify which of the ddnames is the active format data set.

System action:

IMS terminates abnormally.

z/OS System Operator Response: Rerun the job with the DD statement corrected to specify a valid data set name.

Problem determination:

2

0897

Explanation:

Insufficient storage was available in the IMS private area to allocate the staging buffers used to read MFS control blocks from the active MFS format library.

System action:

Rerun the job when more space is available in the IMS private area.

0898

Explanation:

Insufficient storage was available in the IMS extended private area to build the MFS Dynamic Directory used to read MFS control blocks from the active MFS format library.

System action:

Rerun the job when more space is available in the IMS extended private area.

0899

Explanation:

Insufficient storage was available in the IMS private area to allocate the MFS buffer pool control area.

System action:

Rerun the job when more space is available in the IMS private area.

0900

Explanation:

Insufficient storage was available in the IMS private area to allocate storage for a dummy ECB required in order to read the MFS format library in 31-bit mode.

System action:

Rerun the job when more space is available in the IMS private area.

0901

Explanation:

An error exists in the Security Maintenance utility parameter field.

System action:

IMS terminates abnormally.

Programmer response:

See IMS Version 9: Utilities Reference: System for the required format. Correct the error and resubmit the job.

0902

Explanation:

JOBLIB does not contain the DFSISDBx or DFSISDCx module specified by the parameter field.

System action:

DFSIMP00 (Security Maintenance utility) terminates abnormally.

System Operator Response:

Correct the JCL, and rerun the job.

Problem determination:

4

0903

Explanation:

DD statements required by the Security Maintenance Utility program are missing.

System action:

DFSIMP00 (Security Maintenance Utility) terminates abnormally.

Programmer response:

Register 2 points to the ddname of the statement required. Correct the JCL, and resubmit the job.

Problem determination:

4

0904

Explanation:

During the processing of PDS directory entries by an MFS utility program, an invalid entry with a format block size greater than 32K was found. The MFS format build modules limit the size of the format block to 32K. The directory entry has been corrupted.

System action:

IMS terminates abnormally.

Programmer response:

At entry-to-abend, register 2 points to the directory entry. Register 8 contains the format block size. Delete the invalid entry; then re-execute the program.

0905

Explanation:

The block builder was unable to obtain sufficient storage to build the required control blocks.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the PSB being processed. Increase the region or partition size, and re-execute the program. See message DFS905I.

Problem determination:

4, 9, 17d, 35

0906

Explanation:

A SENSEG statement had an invalid processing option specified.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the SENSEG name, and register 7 points to the PSB name. Correct the PSB, and re-execute the program. See message DFS906I.

Problem determination:

4, 9, 17d, 35

0907

Explanation:

A PSB had a PCB which referenced a logical DBD and had a PROCOPT of L or LS.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the PSB name, and register 5 points to the PCB name.  
Correct the PSB, and re-execute the program.

Problem determination:  
4, 9, 17d, 35

0908

Explanation:  
The PSB is not a valid PSB.

Note:  
If no accompanying DFS0908I message is received, then this abend is not issued by IMS, but by a different product.  
System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the PSB name. Create the PSB, using IMS PSBGEN, and re-execute the program.

Problem determination:  
4, 17d, 35

0909

Explanation:  
The DBD name is not a valid DBD. Message DFS0909I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the DBD. Create the DBD, using IMS DBDGEN, and re-execute the program.

Problem determination:  
4, 17d, 35

0910

Explanation:  
An internal programming error has occurred while processing the PSB. Message DFS0910I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the PSB name which caused the error. Remove the offending PSB from the processing list, and re-execute the program.

Problem determination:  
4, 17d, 35

0911

Explanation:

The processing option intent list length was calculated incorrectly for the named PSB. Message DFS0911I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the PSB name. This is an internal program logic error. Remove the offending PSB, and re-execute the program.

Problem determination:

4, 17d, 35

0912

Explanation:

The named PSB referenced the named SEGM in the named DBD. The named SEGM does not exist in the named DBD. Message DFS0912I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 5 points to the PSB name, register 6 points to the segment name, and register 7 points to the DBD name. Correct the PSB or DBD, and re-execute the program.

Problem determination:

4, 17d, 35

0913

Explanation:

The named DBD contains an invalid or unknown access method. Message DFS0913I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name being initially loaded, reloaded, or scanned. Correct the DBD, and re-execute the program.

Problem determination:

4, 17d, 35

0914

Explanation:

The PSB contained a SENSEG statement for which there was no corresponding SEGM in the DBD.

System action:

The application program terminates abnormally and the program is stopped.

System Programmer Response: Replace the DBD with a new DBD copy using one of the following, and rerun the ACBGEN utility program.

BUILD PSB=ALL

BUILD DBD=dbdname

BUILD PSB=psbname, DBD=dbdname

Problem determination:

11, 17a, 17b, 17d, 35

0915

Explanation:

The named INDEX DBD has a sequence field length specified that is not equal to the indexed field length. The correct length is indicated. Message DFS0915I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name, and register 5 points to the required length. Correct the DBD in error, and re-execute the program.

Problem determination:

4, 17d, 35

0916

Explanation:

The named DBD requires that a sequence field be specified for the root segment. A sequence field was not specified, or the field was specified as non-unique. Message DFS0916I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name. Correct the DBD, and resubmit the program.

Problem determination:

4, 17d, 35

0917

Explanation:

The first DBD referenced the named SEGM in the second DBD. The SEGM does not exist in the second DBD. Message DFS0917I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 5 points to the referencing DBD, register 6 points to the referenced segment, and register 7 points to the referenced DBD. Correct one or both of the DBDs, and re-execute the program.

Problem determination:

4, 17d, 35

0918

Explanation:

The named PSB contained a SENSEG statement for the named segment. The SENSEG statement referenced a logical child segment as the first part of a segment concatenation. The second part of the concatenation, the logical or physical parent of the logical child, did not have a valid physical parent. Message DFS0918I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Start of changeAt entry to this abend, register 5 points to the PSB name, and register 6 points to the SENSEG name. Correct the PSB in error or the DBDs in error, or both; and then re-execute the program. End of change

Problem determination:  
4, 17d, 35

0919

Explanation:  
The named PCB in the named PSB contains a KEYLEN parameter which is too small to hold the longest fully concatenated key. The correct length is indicated. Message DFS0919I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 5 points to the PCB name, register 6 points to the PSB name, and register 7 points to the required length. Correct the PSB, and re-execute the program.

Problem determination:  
4, 17d, 35

0920

Explanation:  
The named PSB contains at least one reference to the named DBD with a PROCOPT of L and at least one additional reference to the same DBD with a PROCOPT of something other than L. The reference might be direct, such as in a PCB statement, or the reference might be indirect, such as in a DBD that references another DBD using logical or index relationships. Message DFS0920I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Start of changeAt entry to this abend, register 5 points to the DBD name and register 6 points to the PSB name. Correct the PSB or one or more of the DBDs, or both, and then re-execute the program. End of change

Problem determination:  
4, 17d, 35

0921

Explanation:  
The named PSB was loaded. Upon examination it was discovered the PSB was not a valid PSB. Message DFS0921I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Start of changeAt entry to this abend, register 6 points to the PSB name. Check the JCL or the control statements, or both, correct the errors, and then re-execute the program. End of change

Problem determination:  
4, 17d, 35

0922

Explanation:

The named DBD was loaded. Upon examination it was discovered the DBD was not a valid DBD. Message DFS0922I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:

Start of changeAt entry to this abend, register 6 points to the DBD name. Check the JCL or the control statements, or both, correct the errors, and then re-execute the program. End of change

Problem determination:  
4, 17d, 35

0923

Explanation:

The indicated logical child segment in the indicated DBD had a BYTES specification shorter than its logical parents fully concatenated key. The minimum acceptable length is indicated. Message DFS0923I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the segment name, register 7 points to the DBD name, and register 5 points to the minimum length. Correct the DBD, and re-execute the program.

Problem determination:  
4, 17d, 35

0924

Explanation:

The root segment in the named INDEX DBD had a data length that was too small to hold the required index data. The minimum acceptable length is indicated. Message DFS0924I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name, and register 5 points to the minimum length. Correct the DBD in error, and re-execute the program.

Problem determination:  
4, 17d, 35

0925

Explanation:

A named logical child segment had a sequence field defined which fell within the logical parent's concatenated key area in the logical child and the key was specified as VIRTUAL. The key must be specified as PHYSICAL if it is to be used as part of the physical twin sequence field. Message DFS0925I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the segment name, and register 7 points to the DBD name. Correct the DBD in error, and re-execute the program.

Problem determination:  
4, 17d, 35

0926

Explanation:  
The indicated PCB in the indicated PSB had an alternative processing sequence specified. The specified secondary index is not valid for the specified SENSEG. Message DFS0926I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Start of changeAt entry to this abend, register 6 points to the SENSEG name, register 7 points to the PCB name, and register 8 points to the PSB name. Correct the PSB or the DBDs, or both, and then re-execute the job. End of change

Problem determination:  
4, 17d, 35

0927

Explanation:  
The named INDEX DBD specified an indexed field in the INDEXED DBD which did not exist. Message DFS0927I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the INDEX DBD name, and register 7 points to the INDEXED DBD name. Correct the DBD in error, and re-execute the program.

Problem determination:  
4, 17d, 35

0928

Explanation:  
The named INDEX DBD indexes a valid field, but the field is not a sequence field. Message DFS0928I is issued before this abend.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the INDEX DBD name. Correct the DBD in error, and re-execute the program.

Problem determination:  
4, 17d, 35

0929

Explanation:

A BLDL was issued for the named member. The member was not found in the DBD or PSB library. Message DFS0929I is issued before this abend. Refer to IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for the codes and their meanings.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the member name. Correct the error in the appropriate library, and re-execute the program.

Problem determination:

4, 17d, 35

0930

Explanation:

The named DBD contained an LCHILD statement which referenced the named SEGM in a PAIR= operand. The named SEGM could not be found or the named SEGM was a virtual segment and the source segment contained a PTR=PAIRED operand. Message DFS0930I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name, and register 5 points to the segment name. Correct the DBD, and re-execute the program.

Problem determination:

4, 17d, 35

0931

Explanation:

The named INDEXED DBD had an index relationship with the named INDEX DBD. Either the INDEX DBD did not have a similar relationship to the INDEXED DBD, or another DBD referenced in the named PSB also had an index relationship with the INDEX DBD. Message DFS0931I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

Start of changeAt entry to this abend, register 6 points to the PSB name, register 7 points to the INDEX DBD name, and register 5 points to the INDEXED DBD name. Correct the appropriate PSB or DBDs, or both, and then re-execute the program. End of change

Problem determination:

4, 17d, 35

0932

Explanation:

The named INDEX DBD does not have a sequence field defined for the index segment. Message DFS0932I is issued before this abend.

System action:

IMS terminates abnormally.

**Programmer response:**

At entry to this abend, register 6 points to the DBD name. Correct the DBD, and re-execute the program.

**Problem determination:**

4, 17d, 35

0933

**Explanation:**

The indicated PSB contained an invalid INDICES operand. The indicated value of the INDICES operand was not a valid index name for the associated SENSEG statement. Message DFS0933I is issued before this abend.

**System action:**

IMS terminates abnormally.

**Programmer response:**

At entry to this abend, register 6 points to the PSB name, and register 7 points to the INDICES=value. Correct the PSB or DBDs in error, and re-execute the job.

**Problem determination:**

4, 17d, 35

0934

**Explanation:**

The named PSB referenced the named logical child SEGM in the named DBD. The logical child requires the logical parent's concatenated key to be stored physically but VIRTUAL was specified, or the LP segment could not be located in the specified DBD. Message DFS0934I is issued before this abend.

**System action:**

IMS terminates abnormally.

**Programmer response:**

At entry to this abend, register 5 points to the PSB name, register 6 points to the segment name, and register 7 points to the DBD name. Correct the appropriate DBD, and re-execute the program.

**Problem determination:**

4, 17d, 35

0935

**Explanation:**

The named PSB referenced the named DBD through a SENSEG statement. However, a logical structure or relationship within this segment definition is invalid. Message DFS0935I is issued before this abend.

**System action:**

IMS terminates abnormally.

**Programmer response:**

At entry to this abend, register 7 points to the PSB name, register 6 points to the segment name, and register 5 points to the DBD name. Correct the named DBD or the logical DBD referenced by the PSB, and re-execute the program.

**Problem determination:**

4, 17d, 35

0936

Explanation:

The named SEGM was referenced in the named PSB with a PROCOPT of L or LS. The SEGM is a virtual segment and as such cannot be loaded. Message DFS0936I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 5 points to the name of the invalid segment, and register 6 points to the PSB name. Correct the PSB, and re-execute the program.

Problem determination:

4, 17d, 35

0937

Explanation:

The named DBD specified the named segment as a virtual segment. The SOURCE parameter in the SEGM statement contained more than one operand. The probable cause is a missing pair of parentheses on the SOURCE operand. Message DFS0937I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the segment name, and register 5 points to the DBD name. Correct DBD source segments, and re-execute DBDGEN.

Problem determination:

4, 17d, 35

0938

Explanation:

The named database PCB within the named PSB had no SENSEG statements defined at PSBGEN time. The PSBGEN was invalid. Message DFS0945I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 5 points to the PSB name, and register 6 points to the PCB name. Correct PSB source statements, and re-execute PSBGEN.

Problem determination:

4, 17d, 35

0939

Explanation:

The indicated INDEX DBD contained an INDEX= operand which specified a field name with a /CK as the first 3 characters. Message DFS0946I is issued before this abend.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name in error. Correct the DBD, and re-execute the job.

Problem determination:  
4, 17d, 35

0941

Explanation:

The indicated segment in the indicated DBD was a physically paired logical child and of variable length. The opposite pair was fixed length. Physically paired segments must have the same length attributes.

System action:  
IMS terminates abnormally.

Programmer response:

At entry to abend, register 6 points to the segment name, and register 7 points to the DBD name. Correct the DBD in error, and re-execute the job.

Problem determination:  
4, 17d, 35

0942

Explanation:

The indicated INDEX DBD contained an LCHILD statement that contained the same database name for the indexed database as the name for this index database.

System action:  
IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the DBD name. Correct the DBD, and re-execute the job.

Problem determination:  
4, 17d, 35

0943

Explanation:

An invalid logical relationship exists:

A logical child references the named segment in the indicated database, and the named logical parent does not have an LCHILD statement.

A logical parent references a logical child segment in the named database, and the logical child does not have a reference for the logical parent.

A logical DBD does not contain a reference to the named segment in the SOURCE= operand that references its corresponding logical child or logical parent.

System action:  
IMS terminates abnormally.

Programmer response:

At entry to this abend, register 7 points to the DBD name, and register 8 points to the referenced segment name. Correct the DBD, and rerun the job.

Problem determination:  
4, 17d, 35

0944

Explanation:

Message ID not found in the message text module (DFSUMGTO).

System action:  
IMS terminates abnormally.

Programmer response:  
Ensure invalid modifications were not made to the message text module (DFSUMGT0).

Problem determination:  
1, 2, 3, 4, 8, 9, 12, 13, 35

0945

Explanation:  
Incorrect number of parameters passed to the message formatter, module DFSUMSG0, through the UERR macro.

System action:  
IMS terminates abnormally.

Programmer response:  
Ensure that invalid program modifications were not made to the message text module (DFSUMGT0).

Problem determination:  
1, 2, 3, 4, 9, 12, 13, 35

0947

Explanation:  
An invalid secondary list code has been found in a data management block. This is an IMS system error.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 8 points to the invalid code, register 5 points to the DDIR entry being processed, and register 7 points to the PSB being processed.

Problem determination:  
1, 2, 3, 4, 9, 35

0948

Explanation:  
The SYSPRINT data set had a permanent I/O error.

System action:  
IMS terminates abnormally.

Programmer response:  
Check LOGREC to determine the unit causing the error and the reason for the error, and resubmit the job.

Problem determination:  
1, 2, 3, 4, 9, 23, 35

0949

Explanation:  
The SYSPRINT data set could not be opened.

**System action:**  
IMS terminates abnormally.

**Programmer response:**  
Ensure that the JCL contains a valid DD statement for SYSPRINT, and resubmit the job.

**Problem determination:**  
1, 2, 3, 4, 9, 23, 35

0950

**Explanation:**

The work data set generator (DFSDSEH0) was attempting to read a control data set. The data set was either not opened successfully or, if opened, contained either no data or erroneous data.

**System action:**  
The program terminates abnormally.

**Programmer response:**  
The control data set must be specified by a DD statement named DFSURCDS. The control data set must have been generated by the Database Prereorganization utility (DFSURPR0). Refer to IMS Version 9: Utilities Reference: Database and Transaction Manager.

**Problem determination:**  
1, 2, 3, 4, 17d, 18 and 19, and a printout of the DFSURCDS data set.

0951

**Explanation:**

The work data set generator utility (DFSDSEH0) was performing a dynamic limit-check as described in IMS Version 9: Utilities Reference: Database and Transaction Manager, and the limit-check failed. (See also the discussion of the Database Prefix Resolution utility in that section.)

**System action:**  
The Database Prereorganization utility (DFSURPR0) will have provided diagnostic messages during its execution that indicate the segments for which the limit-check failure occurred.

**Programmer response:**  
Refer to the above-referenced topic of IMS Version 9: Utilities Reference: Database and Transaction Manager for the appropriate action to take.

0952

**Explanation:**

The work data set generator program (DFSDSEH0) was attempting to open a work data set. It was not opened successfully. The work data set must be specified by a DD statement named DFSURWF1.

**System action:**  
The program terminates abnormally.

**Programmer response:**  
Refer to IMS Version 9: Utilities Reference: Database and Transaction Manager regarding this DD statement. This DD statement must be present during initial database load, database reload, and database scan whenever the affected database contains segments involved in logical relationships.

**Problem determination:**  
4, 8

0953

Explanation:

The work data set generator (DFSDSEH0) was attempting to locate DL/I control blocks for segments involved in a logical relationship. They could not be found.

System action:

The program terminates abnormally.

Programmer response:

Verify that valid DBDs are available for the databases being initially loaded, reloaded, or scanned.

Problem determination:

1, 2, 3, 4, 17d, and 20, a printout of the DFSURWF1 data set, and a printout of the DFSURCDS.

0955

Explanation:

This abend code is issued by modules DFSURGP0, DFSURGS0, and DFSURG10 when an abend control statement is supplied in the SYSIN input stream.

System action:

The abend is issued at the end of program execution.

Master Terminal Operator Response: Determine why the abend statement was supplied to the input, and take appropriate action.

Problem determination:

Start of change1, 2, 3, 4, 17d, and 20, a printout of DFSWRF1, or a printout of DFSURWF3, or both. End of change

0956

Explanation:

Logical parent concatenated key length is defined as zero bytes long.

System action:

IMS terminates abnormally.

Programmer response:

This could be caused by field definition specifying NAME=XX rather than NAME=(XX,SEQ,U). Correct the field definition, and resubmit the job.

Problem determination:

1, 2, 3, 4, 17d, 35

0957

Explanation:

The referenced segment is physically paired. Either the two intersection data lengths are not equal (for fixed-length segments); or the maximum intersection data lengths for the two paired segments are not equal. Refer to DFS0951I for more information.

System action:

IMS terminates abnormally.

Programmer response:

At entry to this abend, register 6 points to the referenced segment name. Register 2 and register 4 contain the two calculated data lengths. Correct the DBD, and re-execute the job.

Problem determination:  
4, 17d, 35

0958

Explanation:

A PSB cannot reference a primary index DBD. nnnnnnn is the referenced DBD name. Refer to message DFS0958I for more information.

System action:  
IMS terminates abnormally.

Programmer response:

Change the PSB so that the primary index will not be processed, and resubmit the job.

Problem determination:  
3, 4, 17d, 35

0959

Explanation:

An error exists in the logical child SEGM statement in the database referenced by message DFS0953I. It is not permissible to specify a direct pointer to a database with HISAM organization. PTR=LP is an incorrect specification; only PTR= should be specified.

System action:  
If running under DL/I, IMS terminates abnormally.

Programmer response:

Correct the logical child SEGM statement to remove the LP specification. Specify instead only PTR=, and reassemble the DBD. Rerun the job.

0960

Explanation:

An error exists in the LCHILD statement in the database referenced in message DFS0954I. You have specified either PTR=SNGL or PTR=DBLE; both specifications are incorrect. It is not permissible to specify a direct pointer to a database with HISAM organization.

System action:  
If running under DL/I, IMS terminates abnormally.

Programmer response:

Correct the LCHILD statement, reassemble the DBD, and rerun the job.

0961

Explanation:

An error exists in the XDFLD statement in a DBD that points to the Shared Index (see message DFS0955I). You have specified more than one XDFLD constant of the same value. Each XDFLD statement for a Shared Index must have a unique CONST= specification.

System action:  
If running under DL/I, IMS terminates abnormally.

Programmer response:

Correct the XDFLD statements in error, reassemble the DBDs, and rerun the job.

0962

Explanation:

The SENSEG statements within the named PSB were not specified in hierachic sequence (top to bottom, left to right). Refer to message DFS956I for more information.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the order of the SENSEG statements, and re-execute the job.

0963

Explanation:  
Backout was unable to open the checkpoint control data set (SYSIN), or the DEVTYPE macro failed.

System action:  
The program terminates abnormally.

Programmer response:  
Start of changeCorrect the SYSIN DD statement or the data set, or both, and rerun backout.End of change

Problem determination:  
2, 4

0965

Explanation:  
There is an inconsistency in the DL/I control blocks involving a segment in a database being reorganized or initially loaded. Control blocks for a logically related database are incomplete or in error. This might be an IMS system error, or an improperly defined logical relationship.

System action:  
The IMS utility prereorganization module (DFSURPR0) terminates abnormally.

Programmer response:  
Verify that the DBDs for all logically related databases are accurate and available.

Problem determination:  
2, 8, 11, 18, 35

0966

Explanation:  
The PCB contains a PROCOPT of H but the DBD is not a DEDB. The PROCOPT H is only valid for a DEDB. Message DFS0964I is issued before this abend and contains the name of the PCB.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the PCB name and register 7 points to the PSB name. Correct the PSB, and run the program again.

Problem determination:  
4, 17d, 35

0967

Explanation:  
The PSB contains more than one explicit reference to a PHIDAM DBD with a PROCOPT of L or LS. Message DFS1008I is issued before this abend and contains the name of the PSB.

System action:  
IMS terminates abnormally.

Programmer response:  
At entry to this abend, register 6 points to the PSB name and register 5 points to the DBD name.  
Correct the PSB and run the program again.

Programmer response:  
4, 17d, 35

0969

Explanation:  
Reading a change accumulation data set, a detail record was encountered before a header record, or a record with an invalid record type code was encountered.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the problem, and rerun the job.

Problem determination:  
1, 2, 3, 4

0970

Explanation:  
One of the several possible error conditions occurred while restart processing was attempting to determine the checkpoint to be used in the restart. Register 10 at entry to abend contains a return code that pinpoints the error. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:  
IMS terminates abnormally.

Programmer response:  
Be sure that all proper log data sets are allocated to the control region. Also, be sure that enough storage is allocated to the control region. This abend is probably an IMS system error. For more detailed information about the failure, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:  
4, 5, 17b, 35

0971

Explanation:  
One of several possible error conditions occurred while restart was in progress. Register 15 at entry to abend contains one of the following codes:

Code (Hex)

Meaning

01

An attempt to open the system data sets failed. A message indicating which data set failed to open is also provided.

02

Restart was unable to obtain storage for its backout table, DFSRPSTB. Ensure that the control region was allocated enough storage and rerun.

03

An internal error occurred in attempting to dequeue an LCRE.

04

An internal error occurred in attempting to release an LCRE.

05

An internal error occurred in attempting to dequeue an RRE.

06

An internal error occurred in attempting to release an RRE.

System action:

IMS terminates abnormally.

Programmer response:

For codes 01-02 the problem can probably be resolved by examining the JCL and issued messages.

For codes 03-06 an internal examination of the problem will be required.

Problem determination:

4, 5, 17b, 35

0979

Explanation:

The database change logger, DFSRDBL0, encountered an error condition or a process failure and cannot complete its request processing. Register 15 contains a hexadecimal reason code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates with a memory dump.

Programmer response:

This is an IMS internal logic error.

Problem determination:

1, 4, 11, 35

0982

Explanation:

Emergency restart was unable to read the backout queue for the referenced program and database.

System action:

IMS terminates abnormally.

Programmer response:

If this error occurred because the backout records have been archived and are no longer in the OLDS, use the Database Backout utility with the SLDS as input to perform the backout.

Problem determination:

1, 2, 3, 4, 5

0985

Explanation:

Emergency restart was unable to perform a backout. Register 15 at entry to abend contains a return code, which is described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

IMS terminates abnormally.

Problem determination:

4, 5, 17b, 35

0986

Explanation:

A segment in a logical database has specified as its source a segment in another logical database. Refer to message DFS2425I immediately preceding this abend.

0987

Explanation:

An LCHILD statement in an index DBD has specified an incorrect segment name for the indexed segment. Refer to message DFS2426I immediately preceding this abend.

0988

Explanation:

An LCHILD statement in an indexed DBD refers to a nonexistent segment in the index DBD. Refer to message DFS2427I immediately preceding this abend.

0989

Explanation:

In resolving index relationships, module DFSDLBL0 found that an index DBD was referenced by multiple LCHILD statements for indexed segments. See accompanying message DFS2428I for the name of the index DBD.

System action:

IMS terminates abnormally.

Programmer response:

Revise the references in the indexed DBDs so that each indexed segment has its own unique index.

0990

Explanation:

Module DFSDLBL0 detected an error in the order that sibling segments were referenced in a logical DBD or PSB. The sibling segment dependents of a parent with PTR=HIER or in a HISAM DBD cannot be referenced in a different order from that established in the physical DBD. Refer to message DFS2429I immediately preceding this abend.

System action:

IMS terminates abnormally.

Programmer response:

Recode the logical DBD or PSB, and re-execute the procedure.

0991

Explanation:

The logical child destination parent concatenation is invalid. Message DFS2430I always accompanies this abend.

System action:

IMS terminates with a memory dump.

Programmer response:

Follow the steps indicated by DFS2430I.

0992

Explanation:

A DBD was referenced in an LCHILD statement as an index DBD invalidly. The referenced DBD was not designated as ACCESS=INDEX. Further information is given in the DFS2431I message which precedes the abend.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the DBDs and rerun the job.

0993

Explanation:  
An invalid field name was referenced in a SENFLD statement. See message DFS2432I for additional information.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the PSB, and rerun the job.

0994

Explanation:  
Field mapping specified in PSBGEN causes destructive overlap. See message DFS2433I for additional information.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the PSB, and rerun the job.

0995

Explanation:  
PCB of segment to be inserted does not specify sensitivity to sequence field. See message DFS2434I for additional information.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the PSB, and rerun the job.

0996

Explanation:  
Field level sensitivity has been specified for a logical child with PROCOPT=I or L. See message DFS2435I for additional information.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the PSB, and rerun the job.

0997

Explanation:  
The required PSB control block cannot be built because the logical relationships involved cause internal processing limits to be exceeded. Message DFS2436I was issued, indicating the PSB and PCB for which this occurred.

**System action:**  
IMS terminates abnormally after issuing message DFS2436I.

**Programmer response:**  
Start of changeModify the PSB or the DBDs, or both, to reduce the number of SENSEG statements in the PCB that reference LOGICAL CHILD/ LOGICAL PARENT concatenations. re-execute PSBGEN, then re-execute the job. End of change

0998

**Explanation:**  
A field defined for a virtual logical child did not fit in the virtual logical child. The field must begin and end within the logical child.

**System action:**  
Message DFS2437I is issued, and IMS terminates abnormally.

**Programmer response:**  
Correct the DBD, and rerun the job. The FIELD statement immediately after the definition of the logical child is wrong. Either the field did not start within the logical child, or the field was too long to fit within the logical child.

1001

**Explanation:**  
The batch DL/I or DBB region could not be initialized because one of the databases used by the PSB, named in the third positional operand of the PARM field on the EXEC job control statement is an MSDB or DEDB. A subcode is set in Register 15. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**System action:**  
The batch region is terminated abnormally.

**Programmer response:**  
Correct the PSB, re-execute the PSBGEN, and rerun the job. If all PCBs in the PSB have access to an MSDB or DEDB, a Fast Path (IFP) region procedure should be used.

If batch backout is being attempted in a batch DL/1 region, rerun the job with a DBB region procedure.

**Problem determination:**  
17a, d

1003

**Explanation:**  
A Fast Path (IFP) region could not be initialized because the set timer (STIMER) option in the tenth positional operand of the PARM field on the EXEC job control statement was incorrectly specified.

**System action:**  
The dependent region is terminated abnormally.

**Programmer response:**  
Correct the STIMER operand on the EXEC job control statement and rerun the job.

**Problem determination:**  
8, 11

1004

**Explanation:**  
The Fast Path (IFP) region could not be initialized because the abnormal termination limit count

(TLIM) option in the seventh positional operand of the PARM field on the EXEC job control statement was incorrectly specified.

System action:

The dependent region is terminated abnormally.

Programmer response:

Correct the TLIM operand on the EXEC job control statement, and rerun the job.

1005

Explanation:

A batch message processing (BMP) step or a Fast Path (IFP) region was not scheduled for one of the following reasons:

The dependent region was a BMP, but the PSB was defined as a Fast Path application.

The dependent region was an IFP, but the PSB was not defined as a Fast Path application.

The dependent region was an IFP, but the PSB was defined as a message-driven application and the subsystem type was DBCTL.

The dependent region was an IFP and the PSB was defined as a Fast Path application, but the application was neither message-driven nor a Fast Path utility.

System action:

The dependent region is abnormally terminated.

Programmer response:

Determine the cause of the problem, and make the appropriate correction.

Problem determination:

8, 10, 11

1006

Explanation:

The number of buffers requested for page fixing exceeds the total number of buffers currently available. This abend can be issued for any region that has been defined to access Fast Path databases.

System action:

The dependent region is terminated abnormally.

Programmer response:

After checking the NBA and OBA operands specified on the EXEC job control statement, either

Decrease the operand values and rerun the job, or

Wait for another region to terminate, and rerun the job.

Problem determination:

8, 10, 11

1007

Explanation:

During a Fast Path (IFP) initialization, program DBFCPY00 detected that the scheduled Fast-Path PSB contained one or more GSAM PCBs.

System action:

The dependent region is terminated abnormally.

Programmer response:

The PSB in error needs to be corrected. Either redefine the PSB as a non-Fast Path application, or remove the GSAM PCBs from the PSB.

Problem determination:  
4, 9, 18, 19

1008

Explanation:

During an MPP, BMP, or IFP-dependent region termination, program DBFATRM0 detected an error.

An IFP message-driven application program returned normally but without a QC status code posted in the I/O PCB; or without releasing the Fast Path buffers.

An application program returned normally without releasing the buffers.

System action:

IMS continues processing.

Programmer response:

Correct the application program. For a message-driven application program, return control to the IMS program controller only after a 'QC' status code is posted in the I/O PCB; else after issuing a "SYNC" or a "ROLB" call to release the buffers.

Problem determination:

17a

1009

Explanation:

Either IFP was specified for the region type and Fast Path was not generated for this IMS system or a critical condition that should not occur was detected in modules that process IFP region initialization and termination. A subcode is set in register 15. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region or the dependent region terminates abnormally.

Problem determination:

1, 4, 5, 35

1010

Explanation:

This is a system error. The segment pointer in an ECNT entry has already been used for another segment.

System action:

The IMS control region is terminated abnormally.

Problem determination:

None.

1011

Explanation:

IMS Fast Path initialization failed. For an explanation, refer to any error message that was issued before this abend occurred. The most likely cause is insufficient storage in CSA. For additional information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region is terminated abnormally.

Programmer response:

Determine the cause of failure as indicated by error messages and dump analysis. If the abend occurred because of insufficient storage, increase CSA storage allocations.

Problem determination:

3

1012

Explanation:

IMS Fast Path MSDB load determination process failed. For an explanation, refer to any error message issued before this abend occurred.

If MSDBABND=Y is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued when no MSDBs can be loaded due to errors in the MSDBINIT data set.

If MSDBABND=C is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued when an error occurs during the writing of the MSDBs to the MSDBCPN data set in the initial checkpoint after IMS start up.

If MSDBABND=I is the first card in the DBFMSDBx member of IMS.PROCLIB, this abend is issued when an error occurs during the initial load of the MSDBs from the MSDBINIT data set as described in option 'Y' above, or there are no segments in the MSDBINIT data set for one or more defined MSDBs.

If MSDBABND=A is the first card of the DBFMSDBx member of IMS.PROCLIB, this abend is issued as described in options 'C' and 'I' above.

If MSDBABND=B is the first statement of the DBFMSDBx member of IMS.PROCLIB, this abend is issued as described in options 'Y' and 'C' above.

System action:

The IMS control region is terminated abnormally.

Problem determination:

3

1013

Explanation:

During dependent region create thread (scheduling call), program DBFCPY00 detected that a PCB referenced more segments than were included in the associated DEDB's DBD.

System action:

The dependent region is terminated abnormally.

Programmer response:

There is an inconsistency between the PSB and the DBD. The DBD has been changed on DBDLIB. When ACBGEN was run, the DBD was not rebuilt because BUILD PSB was specified, but BUILD DBD was not.

1014

Explanation:

Module DBFXSL30 attempted to deactivate the dependent region using the SUSPEND macro. Register 4 contains the return code. For the meaning of the code, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The Fast Path dependent region terminates abnormally.

Problem determination:

The contents of register 4, together with a storage dump, should be enough to locate the final cause of the abend.

1015

Explanation:

The IMSAUTH SVC encountered a problem while trying to page fix or page free storage. Register 2 contains FIX or FREE. Register 15 contains the IMSAUTH PGFIX/PGFREE return code. For a description of these codes, see IMODULE Return Codes.

System action:

The IMS control region is terminated abnormally.

Problem determination:

4, 35

1016

Explanation:

The ECNT names in the MSDB checkpoint and in the IMS system do not match because of a control block change.

System action:

The IMS control region is terminated abnormally.

Programmer response:

Restart IMS with the appropriate system.

1017

Explanation:

Module DBFDBDL0 attempted to convert a virtual to a real address and encountered an error. Register 15 contains a return code, which is described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

35

1018

Explanation:

An error occurred in sequential dependent (SDEP) processing during a resynchronization commit request.

System action:

The IMS control region terminates abnormally.

Programmer response:

For additional information, see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

1, 4, 5, 6, 15, 36

1019

Explanation:

An invalid call was made to the Fast Path Queue Manager. This abend is caused by an internal program logic or interface error.

System action:

IMS terminates abnormally.

Programmer response:

Correct the call interface or contact your IBM Support Center for assistance.

Problem determination:  
4, 5, 11, 24

1020

Explanation:

The Fast Path asynchronous task has terminated abnormally, and this abend is issued to stop the rest of the IMS system.

System action:  
IMS terminates abnormally.

Programmer response:  
Correct the problem, and rerun the job.

System Operator Response: Contact the IMS system programmer.

1021

Explanation:

Invalid data was returned from a DEDB randomizing module. One of the following occurred:

Register 0 is not a valid anchor point offset within the DEDB.  
Register 1 is not a valid DMAC address.  
The return code in register 15 is not 0 or 4.

System action:  
The Fast Path dependent region terminates abnormally.

Programmer response:  
Correct the error in the randomizing module.

1022

Explanation:

Start of changeA LOCESCD macro failed to locate the Fast Path SCD extension identified by ESCD or an IMODULE LOAD for a Fast Path module failed. End of change

System action:  
IMS terminates the region abnormally.

Programmer response:  
Start of changeProbable linkage editor errors in the system definition process or the SCD indicate that the Fast Path is installed erroneously. An IMODULE LOAD failure is probably due to insufficient storage available. End of change

Problem determination:  
35

1023

Explanation:

The Fast Path message input edit routine detected that the exit routine had accepted, and moved into the EMHB buffer, an input message that was larger than the maximum length defined in the TERMINAL macro in the IMS system definition.

System action:  
IMS terminates abnormally.

System Programmer Response: Change the user input edit routine (defined by the FPCTRL macro) to compare the EMHBMXLN field to the input message length and set a return code of X1C' if the message length is greater than the EMHBMXLN field. Do not move the message to the EMHB buffer.

Problem determination:  
4, 10, 12, 35

1024

Explanation:

The Fast Path application program issued a GU call to the I/O PCB after receiving a QC status code on the previous GU call.

System action:  
IMS terminates the message-driven application program abnormally.

Programmer response:

Return to the program controller after a QC status code has been issued instead of issuing another GU call to the I/O PCB.

1025

Explanation:

Module DBFIRC10 detected an invalid return code after the DL/I call was processed by the Fast Path call analyzer.

System action:  
IMS terminates the Fast Path application program abnormally.

Programmer response:

Proceed with the Problem Determination.

Problem determination:  
1, 4, 5, 35

1026

Explanation:

An IMS Fast Path module has detected a condition that should not occur and has issued the DBFDEBUG macro to describe the condition.

System action:  
The Fast Path dependent region terminates abnormally.

Problem determination:

See the messages identified as DFS2712I issued before the abend for the name of the module, the register contents, and (depending on the module) a numeric subcode in a register. Also, see abend U1026 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for detailed diagnostic information.

1027

Explanation:

This is an internal IMS error. An error has occurred while attempting to enqueue or dequeue a Fast Path resource.

System action:  
The dependent region terminates abnormally. If the error occurs while holding critical resources, the control region will abend with abend U0113.

Programmer response:

For the codes and their meanings see IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:  
4, 8, 12, 35

1028

Explanation:

During execution of the High Speed Reorganization utility, a severe error was detected in the area being reorganized. An SDUMP is taken, with the title of the memory dump corresponding to the subcode nn below. Register 3 contains the failure subcode in the symptom dump; register 11 in the save area at entry to the routine UHREDUMP contains the address of the utility work area.

Start of change

Subcode (hex) Module Meaning

XA' DBFUHAC7 RAP RBA NOT FOUND IN BUFFERS

XB' DBFUHRE0 RAP CI INVALID TYPE

XC' DBFUHAC7 KEYS ARE NOT ASCENDING

XE' DBFUHCS7 INVALID PCL POINTER

XF' DBFUHCS7 INVALID PCF POINTER

X11' DBFUHRD7 INVALID SSPT POINTERS

X12' DBFUHAC7 SEGMENT CODE DOES NOT MATCH SDBF

X13' DBFUHAC7 SEGMENT LENGTH NOT WITHIN LIMITS

End of change

Module:

DBFUHRE0

1029

Explanation:

Module DBFXWU30 attempted to reactivate a dependent region that was not deactivated.

System action:

The Fast Path dependent region terminates abnormally.

Master Terminal Operator Response: Enter a /CHECKPOINT ABDUMP command to get a control region dump.

Problem determination:

Register 1, saved at entry to the module, points to the EPST in error. A control region and a dependent region dump are needed.

1030

Explanation:

Module DBFXTCU0 attempted to reactivate a dependent region that was not deactivated.

System action:

The Fast Path dependent region terminates abnormally.

Master Terminal Operator Response: Enter a /CHECKPOINT ABDUMP command to get a control region dump.

Problem determination:

Register 1, saved at entry to the module, points to the EPST in error. A control region and a dependent region dump are needed.

1031

Explanation:

The IMSAUTH SVC encountered a problem while trying to page fix or page free storage. Register 2 contains FIX or FREE. Register 15 contains the IMSAUTH PGFIX/PGFREE return code. For a description of these codes, see IMODULE Return Codes.

**System action:**

The IMS control region is terminated abnormally.

**Problem determination:**

4, 35

1032

**Explanation:**

Module DBFDBDP0 attempted to convert the virtual into the real address, and an error occurred. Register 15 contains a return code, which is described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

**Programmer response:**

None.

**Problem determination:**

4, 35

1033

**Explanation:**

The application program required more Fast Path database buffers than were specified by the NBA and OBA parameters in the dependent region JCL parameters.

**System action:**

IMS terminates the message-driven application program.

**Programmer response:**

Start of changeIncrease the NBA parameters or the OBA parameters, or both, and then restart the message-driven dependent region.End of change

1034

**Explanation:**

An ISWITCH from the dependent region to the control region (or from the control region to the dependent region) failed.

**System action:**

The task is terminated abnormally.

**Programmer response:**

This error condition should not occur. Contact your IBM Support Center for assistance.

1035

**Explanation:**

A search of the DEDB area name list (DBFAREA) for a specified ddname resulted in a 'not found' condition.

**System action:**

The task terminates abnormally.

**Programmer response:**

This error condition should not occur.

**Problem determination:**

4, 35

1036

**Explanation:**

The error message number, contained in register 8, is not included in the error message table used by the abending module, DBFMER00.

System action:

Task terminates abnormally.

Programmer response:

Because this error condition should not occur, save this memory dump.

Problem determination:

1, 2, 3, 4, 11, 35

1038

Explanation:

During an emergency restart, a VSAM GENCB macro was executed and a nonzero return code was returned from VSAM.

System action:

IMS is abnormally terminated.

Programmer response:

Register 15 contains the return code and register 2 contains the reason code from VSAM. For an explanation of the VSAM return and reason codes, see DFSMS/MVS Macro Instructions for Data Sets.

Problem determination:

4, 35

1039

Explanation:

The abend option for FP DEDB online utility was selected.

System action:

After processing is complete, the utility ends abnormally with a memory dump.

Programmer response:

None.

Problem determination:

None.

Start of change

1040

Explanation:

The system could not obtain an IMS Fast Path related control block using the storage manager service DFSBCB macro.

System action:

For SYNC POINT LOG processing, PSEUDO ABEND code 1040 is stored in PSTABTRM, and error message DFS3022W is issued. Processing continues.

In other cases, the IMS control region terminates.

Programmer response:

Determine the cause of failure as indicated by error messages and dump analysis. If the abend occurred because of insufficient storage, increase CSA storage allocations and emergency restart IMS to resume processing.

End of change  
1041

Explanation:

The high-level programming interface, HLPI, found a condition caused by a programming error, or DL/I returned a status code to HLPI indicating a programming error.

System action:

IMS terminates abnormally with a memory dump, and message DFS1041 is issued.

Programmer response:

For an explanation of the status codes, see IMS Version 9: Application Programming: EXEC DLI Commands for CICS and IMS. Correct the application program.

Problem determination:

4, 11, 19 and obtain a listing of macro DFSHLPDS.

1046

Explanation:

An IMS Fast Path SDEP utility has detected a condition that should not occur and has issued the DBFDEBUG macro to describe the condition.

System action:

The Fast Path SDEP utility terminates abnormally.

Problem determination:

See message DFS2712I, issued before the abend, for the name of the module, the register contents, and (depending on the module) a numeric subcode in a register. Also, see ABENDU1026 in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for detailed diagnostic information.

1050

Explanation:

During online change, the scan routine failed after attempting to retrieve the next control block.

System action:

The control region terminates abnormally.

Programmer response:

The Security Maintenance utility matrices might be inconsistent with the current number of resources in the IMS system.

Problem determination:

4, 39

1051

Explanation:

During online change, an unexpected condition occurred processing Fast Path DEDB changes.

System action:

The control region terminates abnormally.

Programmer response:

Contact the IBM Support Center.

Problem determination:

4, 36

1060

Explanation:

The DFSCTL data set contains an error. Accompanying error messages DFS0491A and DFS0492I describe the error.

System action:

The region is terminated.

Programmer response:

Correct the error based on the information in the messages.

1061

Explanation:

The GETMAIN routine was unable to obtain storage for HSSP control blocks.

System action:

The region is terminated.

Programmer response:

Increase the size of the REGION parameters; then resubmit the job. If this abend persists, wait until CSA usage diminishes before resubmitting the job.

1062

Explanation:

The high-speed sequential-processing (HSSP) image copy failed.

System action:

The region is terminated.

Programmer response:

Start of changeCorrect the problem based on the information in message DFS0531I or DFS0532I, or both. End of change

1063

Explanation:

Area private buffers were on the NBA/OBA buffer chain, or NBA/OBA buffers were on the area private buffer chain. This is an internal IMS system error.

System action:

The region is terminated.

Programmer response:

Contact the IBM Support Center for help in determining the problem.

1064

Explanation:

When HSSP finishes processing an area, it releases the private buffer pool after all private buffers are returned. HSSP was unable to release the private buffer pool because some private buffers had not been returned. This is an internal IMS system error. Register 15 contains a subcode described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

System action:

The IMS control region is terminated.

Programmer response:

Contact the IBM Support Center for help in determining the problem.

1065

Explanation:

An application made a call with a PCB that is defined with PROCOPT H and PROCOPT GO. This combination of processing options is invalid.

System action:

The dependent region is terminated.

Programmer response:

Correct the invalid combination of processing options, or use another PCB.

1070

Explanation:

The IMODULE GETMAIN request for storage for a private buffer pool in subpool 231 of the IMS control region, or the request to page fix such storage, was unsuccessful.

System action:

IMS terminates abnormally.

Programmer response:

Consult your z/OS system programmer, and increase the CSA or ECSA size.

Master Terminal Operator Response: After increasing CSA or ECSA storage size, restart IMS.

Module:

DBFPVTS0

1500

Explanation:

Recovery was attempted for a database. There was an incompatibility between the task I/O table and the scheduler work areas. A ddname was allocated that could not be located in the task I/O table.

System action:

The IMS control region terminates.

Programmer response:

None.

Problem determination:

4, 35

1501

Explanation:

Database recovery was attempted for an unsupported DASD device.

System action:

The IMS control region terminates.

Programmer response:

Ensure that JCL defining the database is correct, and that no user modifications have been made to IMS to attempt to support devices not supported by IMS.

Problem determination:

4, 8, 35

Start of change

1780

**Explanation:**

An application call to latch enters a wait while the latch is requested. When the latch is executed, an ITASK posts the application and a check is made to be certain the post code expected by the application matches the post code delivered by the ITASK. When they do not match, the unexpected result causes an ABEND.

**System action:**

The dependant region is terminated.

**Programmer response:**

None.

**Problem determination:**

4, 35

End of change

2476

**Explanation:**

DBRC terminates abnormally when I/O to the RECON data set has been prevented. This abend allows CICS emergency restart (takeover) to proceed.

**System action:**

IMS terminates abnormally.

2478

**Explanation:**

The maximum number of waiting PSTs has been exceeded during program isolation processing.

**System action:**

The application program abnormally terminates, and a message processing program (MPP) is automatically rescheduled.

**Master Terminal Operator Response:** If the application program was a batch message processing program (BMP), it must be rescheduled at its last sync point.

**Problem determination:**

None.

2479

**Explanation:**

The application program had insufficient storage available for a buffer queue element (BQEL).

**System action:**

The application program abnormally terminates, and a message processing program (MPP) is automatically rescheduled.

**Master Terminal Operator Response:** If the application program was a batch message processing program (BMP), it must be rescheduled at its last sync point.

**Programmer response:**

Start of changelf the problem occurs in batch, increase the region size and rerun the job. If the problem occurs repeatedly in an online environment, specify a larger CSA size or region size, or both, for the IMS control region and restart IMS. End of change

**Problem determination:**

None.

2480

Explanation:

An internal error in the IMS Database Recovery Control was detected. Message DSP0300I was issued with an error code indicating the nature of the error. Refer to message DSP0300I for a description of the individual error codes.

System action:

IMS terminates abnormally.

Programmer response:

Review the error code from message DSP0300I, and if possible correct the problem and rerun the job. Otherwise contact IBM for problem determination assistance.

Problem determination:

2, 3, 4, 8, 35, and your listings of the RECON data sets.

2481

Explanation:

The BLDL macro encountered an error while locating the module required to access the Database Recovery Control.

System action:

Message DFS2481I will precede this abend. Processing terminates abnormally.

Programmer response:

Register 15 contains the return code from the BLDL macro and register 3 contains the BLDL reason code. If the Database Recovery Control has been installed, determine the cause of the locate error, and be aware that the database log or utility information might need to be entered into the RECON data set because it was not accessible.

Problem determination:

1, 2, 3, 4, 8, 12, 35

2482

Explanation:

The DBRC router (DSPCRTR0) has been invoked to perform a function for IMS while a previously invoked functional request is in progress. DBRC cannot perform multiple concurrent functional requests.

System action:

IMS terminates abnormally.

Programmer response:

Keep all diagnostic information and contact the IBM Support Center for problem determination assistance.

Problem determination:

2, 3, 4, 8, 11, 35

2483

Explanation:

The DBRC loader (DSPLOADR) has been invoked to resolve a call to a DBRC module. The index of the called module in the DBRC router storage shows an undefined module, so the module invocation is invalid.

System action:

IMS terminates abnormally.

Programmer response:

Keep all diagnostic information and contact IBM Software Support for problem determination assistance.

Problem determination:

2, 3, 4, 8, 11, 35

2484

Explanation:

An IMS Fast Path related control block could not be obtained by using the DFSBCB macro. Register 2 contains the identification of the failing control block.

System action:

The IMS control region terminates.

Programmer response:

Provide more CSA space and emergency restart IMS to resume processing.

Module:

DBFICLIO

2485

Explanation:

A DMAc exclusive latch hold using the DBFLATCH macro failed because it already exists.

System action:

The IMS control region terminates.

Programmer response:

Because this error condition should not occur, save this memory dump.

Problem determination:

11, 35

2488

Explanation:

A logic error occurred in either IMS or DBRC when DBRC was called to set/reset the DEDB area data set available flag. The code specified in register 15 gives the reason for the abend.

Code (Hex)

Meaning

0C

The return code set by DBRC indicated that the area was not registered in the RECON data set.

Because the area data set status call is only issued if the area is registered to DBRC, an internal error occurred.

10

The return code set by DBRC indicated that the area data set was not registered in the RECON data set. Because the area data set status call is only issued when the area data set is registered to DBRC, an internal error occurred in either IMS or DBRC.

2C

The return code set by DBRC indicates that an internal DBRC error occurred during the processing of the area data set status call. Refer to the message issued by DBRC before this abend for further explanation. Since the message from DBRC varies according to the situation DBRC encounters, check any DBRC messages issued before this abend.

30

The return code set by DBRC indicated that a required parameter was not passed to DBRC.

System action:

IMS terminates abnormally.

**Programmer response:**

Correct the problem associated with DBRC, and re-execute the job. Refer to the return codes in DBRC Request Return Codes to determine the cause of the failure.

**Problem determination:**

1, 4, 6, 35

2489

**Explanation:**

An asynchronous work element (AWE) enqueue command, issued to the Fast Path common service ITASK routine to stop the DEDB area, failed because of an internal error.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Refer to the message explaining the reason for stopping the area issued before this abend. Run the Database Recovery utility, DFSURDB0, to recover the area and then rerun the job. If you are unable to determine the problem, proceed with the problem determination to determine the cause of the failure.

**Problem determination:**

1, 4, 6, 35

2610

**Explanation:**

This abend is issued by the IMS batch dispatcher (DFSKBDP0) when errors occur in initialization and SCP waits. Register 15 contains the reason code.

**System action:**

DFSKBDP0 terminates abnormally with a memory dump.

**Programmer response:**

See IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis for more information.

2763

**Explanation:**

The checkpoint selected by module DBFNRST0 to restart the MSDB was not found on the IMS log.

**System action:**

IMS terminates abnormally.

**Programmer response:**

Look at the IMS console sheet and identify:

The earlier of the latest 2 MSDB checkpoints on MSDBCP1 and MSDBCP2, and  
A system checkpoint that matches or is before that MSDB checkpoint.

Specify the system checkpoint for the restart.

**Problem determination:**

35

2800

**Explanation:**

IMS initialization encountered an error during global online change related initialization. The abend subcode provides the reason for the failure.

0001

The OLCSTAT data set allocate or deallocate failed. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.

0002

The OLCSTAT data set open, read, write, or close failed. Message DFS2843E, which is issued before this abend, displays associated return codes and information related to the failure.

0003

The OLCSTAT data set access request failed because of an internal error.

Start of change0007End of change

Start of changeThe OLCSTAT data set contents are invalid. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.End of change

0008

The operator replied CANCEL to message DFS2845A to cancel IMS initialization after a resource definition inconsistency was detected.

0009

The OLCSTAT data set name defined by this IMS is inconsistent with the OLCSTAT data set name defined by other IMSs in the IMSplex. All of the IMSs in the IMSplex must define the same OLCSTAT data set name.

0010

The OLCSTAT data set is locked because global online change is in progress. IMS is not permitted to initialize while global online change is in progress. A successful INITIATE OLC or TERMINATE OLC command will unlock the OLCSTAT data set.

System action:

IMS initialization terminates abnormally with this abend code.

Programmer response:

For the OLCSTAT data set abend subcodes (0001, 0002, and 0007), correct the OLCSTAT data set error and retry IMS initialization. For abend subcode 0003, save the IMS memory dump and contact your IBM support center. For abend subcode 0009, define the correct OLCSTAT data set name to this IMS and retry IMS initialization. For abend subcode 0010, the OLCSTAT data set is locked because global online change is in progress. Wait until an INITIATE OLC PHASE (COMMIT) command or TERMINATE OLC command completes successfully and unlocks the OLCSTAT data set before restarting IMS. In the case where all of the IMSs abended during global online change, no IMS is up to process an INITIATE OLC command or a TERMINATE OLC command. In this case, you must run the Global Online Change Utility (DFSUOLCO) with the unlock function to unlock the OLCSTAT data set, before attempting to restart IMS.

Module:

DFSIIOC0, DFSCSL40

2801

Explanation:

IMS restart encountered an error related to global online change. The abend subcode provides the reason for the failure.

0001

The OLCSTAT data set allocate or deallocate failed. Message DFS2848E, which is issued before this abend, displays associated return codes and information related to the failure.

0002

The OLCSTAT data set open, read, write, or close failed. Message DFS2843E, which is issued before this abend, displays associated return codes and information related to the failure.

0003

The OLCSTAT data set access request failed because of an internal error.

0007

The OLCSTAT data set contents are invalid. Message DFS2844E, which is issued before this abend, displays associated return codes and information related to the failure.

0010

Global online change is in progress. Global online change was initiated since this IMS initialized.

0011

Start of changeThe modify ID of this IMS at the end of restart is not in sync with the modify ID in the OLCSTAT data set.

For a tracking IMS, such as an XRF alternate that is taking over, a DBCTL warm standby that is doing an emergency restart, or an FDR region that is doing fast database recovery, this IMS is not in sync with the OLCSTAT data set. This is probably because a X70' log record was not successfully logged by the last Global Online Change.

For restarting IMS, Global Online Change may have occurred since this IMS initialized.

End of change

0012

The IMS restart command conflicts with the last global online change.

Start of change0013End of change

Start of changeGlobal Online Change is not supported. Global Online Change is not supported for RSR.End of change

System action:

IMS initialization terminates abnormally with this abend code.

Programmer response:

Start of changeFor the OLCSTAT data set abend subcodes (0001, 0002, and 0007), correct the OLCSTAT data set error and retry IMS initialization. For abend subcode 0003, save the IMS memory dump and contact your IBM support center. For abend subcode 0010, wait until global online change is finished before retrying IMS initialization. For abend subcode 0011, retry IMS initialization. If an XRF alternate takeover or the DBCTL warm standby terminated abnormally, you should emergency restart the active IMS. For abend subcode 0012, retry IMS initialization and issue an IMS restart command that does not conflict with the last global online change. For abend subcode 0013, define DFSCGxxx OLC=LOCAL and restart IMS.End of change

Module:

DFSOLCSO

2990

Explanation:

A user-written edit/compression routine has detected a processing error while attempting compression or expansion services.

System action:

The application ends abnormally.

Programmer response:

Ensure the edit/compression routine has been built and linked properly. Examine the problem-related data described in IMS Version 9: Failure Analysis Structure Tables (FAST) for Dump Analysis.

Problem determination:

4, 17a, 17b, 18, 19, and the source/link listings of the edit/compression routine.

2991

Explanation:

A user-written edit/compression routine has detected a processing error while attempting compression or expansion services.

System action:

The application ends abnormally.

[Ref here](#): IBM