



Interpreting CICS Messages

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Objectives

Interpreting CICS Messages

In this module, you will discover how to interpret CICS messages by using action and severity codes.

You will see how to access messages by using the IBM CICS message manual or the CMAC transaction. You will also look at the components of information in each CICS message and abend code.

After completing this module, you will be able to:

- Recognize the Priority of CICS Messages
- Identify Additional Information Associated with CICS Messages
- Identify How to Use the CMAC Transaction to Display Message Information



CICS startup message

```
DFHSI1517 CICSP1 Control is being given to CICS.
```

CICS error message

```
DFHAC2236 11/26/16 09:21:27 PRODCICS Transaction PT08  
abend ASRA in program PTP362 term T123 backout successful.
```

CICS operational message

```
DFHDU0305I CICSPRD1 Transaction Dump Data set switched to DFHDMPB.
```

As an operator, you will receive different types of CICS messages. Some messages are informational and no action is required. Other messages indicate a problem that you must investigate. You will then forward the details to the appropriate support personnel.



IBM Knowledge Center

Marketplace

Search Content Products

CICS Transaction Server

CICS Transaction Server for z/OS 5.3.0

Reference

- Diagnostics
 - CICS messages**
 - CICSplex SM Messages and Codes
 - AXM server environment messages
 - Transaction abend codes
 - System abend and dump codes
 - SDUMP contents and IPCS CICS VI
 - Summary data for PG and US keyw
 - Trace entries
 - Data areas
 - Diagnosis Reference
 - Extended recovery facility (XRF)
 - Application development

CICS messages Version 5.3.0

CICS® produces different types of messages for different users of the product. The messages are intended as a quick reference to get started with problem determination. CICS messages begin with the characters DFH.

Subtopics

- [DFH01nnnn messages](#)
- [DFH42nn message](#)
- [DFH51nn messages](#)
- [DFH52nn messages](#)
- [DFH55nn messages](#)
- [DFH56nn messages](#)
- [DFH7xxx \(DFHExP\) command-level translator diagnostic messages](#)
- [DFHACnnnn messages](#)
- [DFHADnnnn messages](#)
- [DFHAInnnn messages](#)
- [DFHAMnnnn messages](#)
- [DFHAPnnnn messages](#)
- [DFHAUnnnn messages](#)

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Descriptions of the various messages that CICS can produce, along with details of transaction and system abend codes can be accessed online from the IBM Knowledge Center.

Click **Expand / Compress** to view the entire graphic.





The screenshot shows a 'Table of Contents' for CICS messages. The list includes DFHAC2202, DFHAC2203, DFHAC2204, DFHAC2205, DFHAC2206 (highlighted), DFHAC2215, DFHAC2216, DFHAC2217, DFHAC2218, and DFHAC2219. A callout box for DFHAC2206 displays the following components:

Message identifier and text	User response
Explanation	Destination
System action	Module

Explanation: Transaction *tranid* is abnormally terminated with abend code *abcode*. Any changes to recoverable resources in the local system that have been performed by the current unit of work are backed out.

abcode is either a CICS transaction abend code or a user abend code generated by a CICS ABEND ABCODE(*abcode*) command. This command is issued either by a user program or by an IBM program, for example, a programming language library module.

If possible, a conditional message *condmsg* from the remote system will be appended to this message.

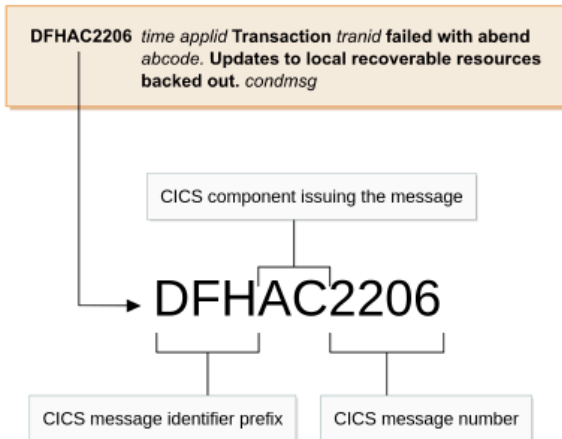
When this message is issued in the terminal owning region because a remote transaction has failed, there may be no recoverable resources to be backed out in the local system. In this case, the conditional message tells you whether or not resources in the remote system have been backed out.

The IBM Knowledge Center displays CICS messages in related groups, and in alphabetical order, making it easy to locate the one you are searching for.

Mouse-over the message components for an example of the type of information displayed.



Message identifier and text



The first part of a CICS system message is the message identifier or message code. Message identifiers appear in the forms **DFHnnnn** and **DFHccnnnn** where the DFH prefix identifies the message as a CICS system message; cc identifies the CICS component that issued the message; and nnnn is the message number.





Message identifier and text

DFHSI1538 **D** applid Install GRPLIST Errors. Is startup to be continued - Enter 'GO' or 'CANCEL'.

CICS action code

Action codes	
A	Immediate action is required.
D	Immediate decision is required.
E	Eventual action is required.
I	No action is required.

The message identifier may also have a one-letter suffix or action code, or be followed by a one-letter severity code. The action codes are:

- A** - Immediate action is required, for example, the mounting of a tape.
- D** - Immediate decision is required, which is usually a response to a prompt.
- E** - Eventual action is required, but it does not have to be immediate.
- I** - Information only and no action is required.



Message identifier and text

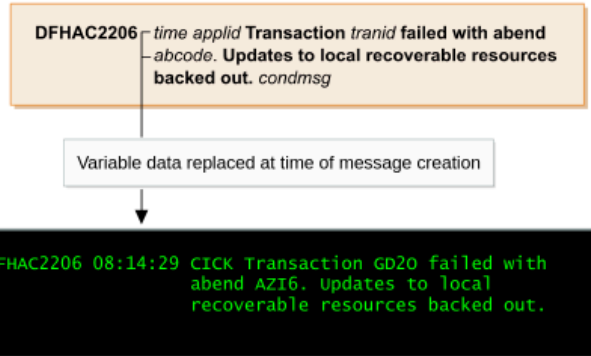
DFH5178 **S** PROCESSING IS TERMINATED.
SEVERE CSD ERROR OCCURRED.

CICS severity code

Severity Codes	
E	Error. Action required before processing can continue.
I	Information. No action required.
W	Warning. There may be a problem but processing continues.
S	Severe error. CICS processing suspended.

The severity codes are:

- E** - Error; an action is required before processing can continue.
- I** - Information only; no action is required.
- W** - Warning; there may be a problem but processing continues.
- S** - Severe error and CICS processing will be suspended.



Explanation

Transaction tranid is abnormally terminated with abend code abcode. Any changes to recoverable resources in the local system that have been performed by the current unit of work are backed out.

abcode is either a CICS transaction abend code or a user abend code generated by a CICS ABEND ABCODE(abcode) command. This command is issued either by a user program or by an IBM program (for example, a programming language library module). If possible, a conditional message condmsg from the remote system will be appended to this message.

When this message is issued in the terminal owning region because a remote transaction has failed, there may be no recoverable resources to be backed out in the local system. In this case, the conditional message tells you whether or not resources in the remote system have been backed out.

The message identifier is followed by the message text, which may contain a mixture of standard message text and variable information relating to the CICS component that the message is referencing, for example an application identifier. The message text is followed by an explanation that describes the circumstances that led to the display of the message.

Examples

System action	User response
None.	None.
Normal processing continues.	Enter a reply at the console.
The CSD utility ignores the command.	See the description of abend code abcode for guidance.
CICS does not initialize the invoked transaction. Other processing continues and message DFHAC2003 is sent to destination CSMT.	If the command failed because of syntax errors, correct the command.
The transaction (task) is purged.	Initialize the CSD file. You may first have to determine why a previous initialization attempt failed.
The task is abnormally terminated with a dump.	Notify the system programmer.

The system action describes what CICS will do after the message has been issued. It may indicate that processing will continue or that CICS has performed some other action in response to a problem.

The user response contains the suggested action to be taken by the relevant person. This response may be a simple reply, an instruction to alter the system configuration, or a suggestion on how to investigate a problem further. In many cases, it will inform you that no action is necessary.

Examples

Destination	Module
Console	DFHSSIN
SYSPRINT	DFHAPDM, DFHAPSIP
Terminal end user	DFHKEDD, DFHKEDS, DFHKEGD, DFHKEIN, DFHKESTX
CSMT	

The destination indicates the device or log to which the message is sent. This may be the console, the user's terminal, SYSPRINT which is the CICS system's printed output, or a transient data queue like CSMT, the master terminal. You will have already seen the message so this information will probably not be useful.

The module is the CICS module that determined that the message be issued. This is specified in more detail than in the cc of the message identifier. Messages often appear in multiples and are usually of interest only to system programmers who must investigate possible errors in CICS system logic.

Message

DFHAC2236 *date time applid* **Transaction** *tranid*
abend secondary *abcode* **in program**
program name term termid. Updates to
local recoverable resources will be
backed out(. *EXCI job =*)*exci_id*.
condmsg

Explanation:

System action:

User response: See the description of the abend code
abcode for guidance.....

Abend code description

AEXZ
Explanation: A command has failed due to a serious failure in
a CICS component (resource manager).

System action: The transaction is abnormally terminated
with abend code AEXZ. CICS takes a transaction dump,
unless module DFHDUIO is not loaded.

User response: Use the transaction dump to determine the
cause of the failure. For further assistance, or if module
DFHDUIO is not loaded and no transaction dump is available,
contact your system programmer.

Modules: DFHACP, DFHBEP, DFHBREX, DFHBRIC,
DFHBRMS, DFHBRSP, DFHBRTC, DFHBSTS, DFHBSTZO,
DFHCCKRN, DFHEDCP, DFHEDFP.....

CICS messages may refer to abend codes in their text. A description of these abend codes, and any required actions, is also located in the IBM Knowledge Center portal. Consider the following message:

DFHAC2236 10/04/2016 11:12:32 PRODCICS Transaction ERTE abend AEXZ in program DFHD2EX1 term 102T backout successful.

If you looked up message DFHAC2236, you would see a user response that recommends reading the description of the abend code, which in this case is AEXZ.



Explanation

The task has terminated abnormally because of a program check.

System action

The task is abnormally terminated and CICS issues either message DFHAP0001 or DFHSR0001. Message DFHSR0622 may also be issued.

```
DFHAC2206 08:33:02 CICS Transaction PGZ1 failed with abend ASRA.  
Updates to local recoverable resources backed out.
```

User response

Refer to the description of the associated message or messages to determine and correct the cause of the program check.

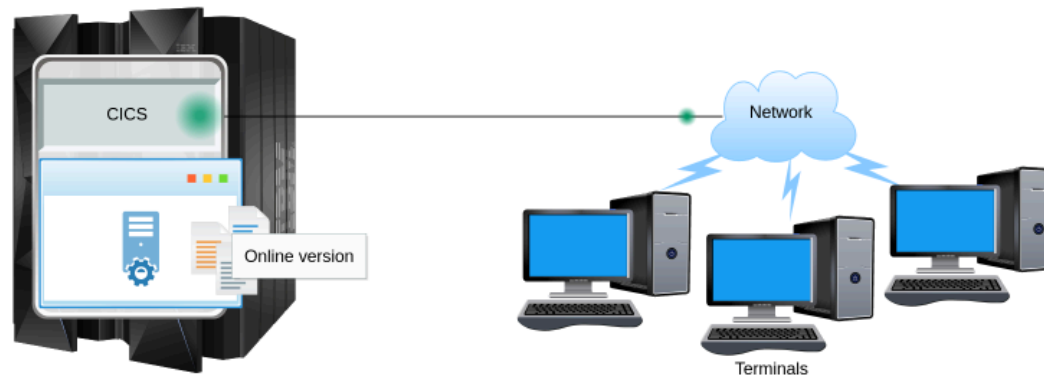
Module

DFHSRP

For every abend code, the IBM Knowledge Center provides the following information:

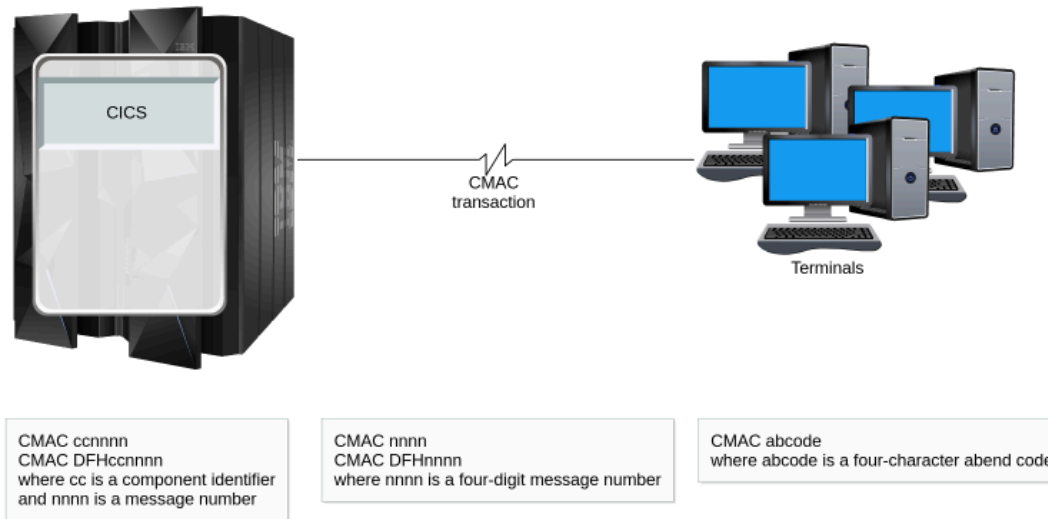
- Explanation
- System action
- User response
- Module

As with messages, the information that is most important to you will be contained in the explanation, system action, and user response.



Some organizations install an online version of the IBM CICS Messages and Codes manual. Depending on how CICS was implemented, this will be available on a single CICS system, or on all CICS systems, or not at all.

If it is available, the online manual can be accessed by using the CMAC transaction, which can be entered only on CICS terminals. The CMAC transaction cannot be used on the system console.



The different formats that can be entered for the CMAC command are shown here. After providing a message number or abend code, you will be taken directly to the message information screen, which displays the same information in the IBM CICS Messages and Codes manual. For example, the following commands can be used to display information about message DFHAC2236:

`CMAC AC2236`
`CMAC DFHAC2236`

Click Play to see a demonstration.



```
DFHCMC01          Display On-line Messages and Codes
Type the required message identifier, then press Enter.

Component ID ==>> (for example, TC for Terminal Control
                   FC for File Control, etc.)
                   This field is required for Messages in the
                   form DFHxxxxxx, Where xx is the Component ID.

Message Number => (for example, 1060, 5718, or Abend Code
                  such as ASRA, etc.)

F3=Exit to CICS
```

If you invoke the CMAC command without an argument, you will be presented with a screen that is similar to the one shown here, and prompted to enter the message identifier.