

CICS Abend-AID/FX

Quick Reference

Release 4.4



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Introduction

This quick reference, formerly titled *CICS Abend-AID/FX Reference Summary*, provides brief summary information about the following topics:

- Accessing and exiting the product
- Online help
- CICS Abend-AID/FX navigation and commands
- PF-key definitions
- Transaction abend source support
- Trace table entries.

For additional information, please refer to the other documents in the CICS Abend-AID/FX documentation set, or use the online help facility.

Technical Support

At Compuware we strive to make our products and documentation the best in the industry. Feedback from our customers helps us to maintain our quality standards.

If problems arise while installing this product, consult the CICS Abend-AID/FX documentation or the CICS Abend-AID/FX technical representative at your site. If problems persist, please obtain the following information before calling Compuware's 24-hour product support hotline. This information may be required to help determine the cause of the problem:

- The CICS Abend-AID/FX release you are using. To find the release, enter the **SERVINFO** fast-path command on any CICS Abend-AID/FX screen. Position the cursor on the **RELEASE** field of the displayed screen and press Enter.
- The CICS release you are using.
- The DB2 release you are using.
- The exact error message, if any, that was displayed.
- All CICS Abend-AID/FX output for the task you were trying to perform.
- The MVS dump containing the CICS Abend-AID/FX failure.
- A tape copy of the SVC, SLIP, or SYSMDUMP dump you were trying to import or view.
- The CICS region JES job log.
- The MVS SYSLOG for the involved time period.
- Screen prints of the Dump Analysis Message Log that show the results of importing the region dump.

Note: To display the Dump Analysis Message Log, either select a region dump from the Directory with the G (Messages) line command, or type **MLOG** in the COMMAND (or OPTION) field on any CICS Abend-AID/FX screen and press Enter. For MLOG to function, however, you must first select a region dump from the CICS Abend-AID/FX Directory.

- The contents of the viewing server, TDCAS, and CICS region JES output files.
- Any relevant SMP/E output.
- Any other relevant screen prints.

Refer to Appendix D, “Internal Transaction Abends” in the *CICS Abend-AID/FX User’s Guide* for a description of the internal transaction abend entries that may be displayed on the CICS Abend-AID/FX Directory or the user abends you may encounter.

If Compuware requests documentation, please send it to the following address:

CICS Abend-AID/FX Technical Support
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Accessing CICS Abend-AID/FX

CICS Abend-AID/FX supports the following access methods:

ISPF/PDF Select the option defined for CICS Abend-AID/FX on your ISPF/PDF Primary Option (or other) menu, or execute the CLIST defined for CICS Abend-AID/FX.

VTAM If your site uses a session manager, CICS Abend-AID/FX may be defined as an option that you can select from the application selection (or other) menu.

If your site has not defined CICS Abend-AID/FX as a menu option, enter the following logon command:

```
LOGON APPLID(applid-name)
```

Note: The parentheses are required as shown.

Once you enter the logon command, CICS Abend-AID/FX displays the Server Logon screen, which shows your terminal ID in the Userid field by default. Enter your user ID in this field if you want to use the settings established in your user profile. If your site is using external security, you must enter your user ID and password.

CICS Enter an AADF transaction command directly from CICS on any blank screen. The following AADF transaction commands are valid:

Note: Before you can access CICS Abend-AID/FX from CICS, the transaction dump interface must be active in the CICS region. For specifics, refer to Appendix A, “Supplied Transaction” in the *CICS Abend-AID/FX User’s Guide*.

- **AADF:** Displays the CICS Abend-AID/FX Directory for all transaction and region abends matching the job name of the CICS region.
- **AADFS:** Displays the CICS Abend-AID/FX Summary.
- **AADFT:** Displays the Diagnostic Summary for the most recent transaction abend that occurred at your terminal in the CICS region.
- **AADFTM:** Displays the Primary Options menu for the most recent transaction abend at your terminal in the CICS region.
- **AADFX:** Displays the Diagnostic Summary for the most recent transaction abend in the CICS region.

- **AADFXM:** Displays the Primary Options menu for the most recent transaction abend in the CICS region.
- **AADF number:** Displays the Diagnostic Summary for the specified directory entry.
- **AADM:** Displays the CICS Abend-AID/FX demonstration transaction menu.

For the steps required to establish these access methods, refer to the *CICS Abend-AID/FX Installation and Customization Guide*.

CICS Abend-AID/FX Summary

The CICS Abend-AID/FX Summary is the first screen displayed after accessing the product through ISPF, VTAM, or the AADFS command in CICS. To select an entire region or region group, place the cursor on the appropriate Region Descriptions name and press Enter. To select either a single entry type or all entries from a region or region group, place the cursor on the appropriate numeric value and press Enter.

Figure 1. CICS Abend-AID/FX Summary

```

CICS Abend-AID/FX --- CICS Abend-AID/FX Summary ---- Row 000001 of 000053
COMMAND ==>                                     SCROLL ==> PAGE

Region Descriptions  Tran  ----- Region Entries -----
                   Total  Total Abend Cancel Snap SVD Other-CICS Non-CICS
TOTAL ENTRIES      94    60   18    0   10  14    16    2
Dev. Accounting     8     0    0    0    0  0     0     0
Prod. Accounting    0     0    0    0    0  0     0     0
Production Sales   20     3    0    0    1  2     0     0
CICH2F              0     0    0    0    0  0     0     0
CICSDEMF            0     0    0    0    0  0     0     0
Online Technical Support available at: frontline.compuware.com
To display Copyright/Trade Secret notice select COPYRIGHT

```

CICS Abend-AID/FX Directory

The CICS Abend-AID/FX Directory lists all entries based on your selection on the CICS Abend-AID/FX Summary. Note the abend code, transaction code, program, and offset. Press the default RIGHT PF key (PF11) to see the terminal ID, user ID, and comments. Place the cursor on the entry you want to view and press Enter to display the Primary Options menu.

Figure 2. CICS Abend-AID/FX Directory

```

CICS Abend-AID/FX ---- CICS Abend-AID/FX Directory ----- Row 00001 of 00094
COMMAND ==> SCROLL ==> PAGE
==>
M Menu      L Lock      H Dup History  R Recall      T Terminate Analysis
S Diag      U Unlock    I Information  E Migrate     C Change Priority
D Delete    G Messages  A Analyze     P Print       N Contact Information

  Entry      Job Name Code   Tran Date      Time  Program  Offset Dups Status
  *-----* *-----* *-----* *--* *-----* *-----* *-----* *--* *-----*
- 0000151    H01AC124 TOMI   XASM 12JAN2002 16:21 DLICAL4  002816  0 COMPLETE
- 0000150    H01AC124 TOMI   XCB2 12JAN2002 16:21 DLICAL3  0026F6  0 COMPLETE
- 0000149    H01AC124 TOMI   XCB2 12JAN2002 16:21 DLICAL3  0026F6  0 COMPLETE
- 0000148    H01AC124 COLT   XCB2 12JAN2002 16:19 DLICAL2  000432  0 COMPLETE
- 0000147    H01AC124 COLT   XASM 12JAN2002 16:19 DLICAL2  000432  0 COMPLETE
Type a line command and press Enter to process it

```

Directory Line Commands

Below are the available line commands on the CICS Abend-AID/FX Directory.

For Transaction Abends and Region Dumps

- D** Deletes the entry.
- I** Displays the Entry Information screen.
- M** Displays the Primary Options menu.
- N** Displays the Contact Information screen.
- P** Prints a complete transaction abend report or a region dump summary report.
- S** Displays the Diagnostic Summary.

For Transaction Abends Only

- H Displays history information for suppressed duplicate dumps
- L Locks the entry from automatic deletion.
- U Unlocks the entry for automatic deletion.

For Region Dumps Only

- A Initiates dump analysis.
- C Changes the priority for scheduled dump analysis.
- E Migrates the dump dataset.
- G Displays the Dump Analysis Message Log.
- R Recalls the migrated dump dataset.
- T Terminates dump analysis.

Primary Options Menu

The CICS Abend-AID/FX Primary Options menu is the central access point for all analysis and storage. Press the default RETURN PF key (PF4) to return to this menu from any other screen. As an alternative, enter the **RETURN** primary command or the **MM** fast-path command. Position the cursor on the **DIAG** mnemonic and press Enter to display the Diagnostic Summary.

Figure 3. Primary Options Menu for Transaction Abend Analysis

```

CICS Abend-AID/FX ----- Primary Options -----
OPTION ==>

1  DIAG    Diagnostic Summary      7  FILE    File Request Summary
2  PROG    Program Information     8  DB2     DB2 Information
3  TRACE   CICS Trace              9  L3270   Last 3270 Screen
4  TERM    Terminal Detail         10 *MQINFO WebSphere MQ Information
5  TASK    Task Detail             11 *CWI    CICS Web Interface
6  CB      Control Blocks/Storage  12 LEOCB  Language Environment OCB

D  DIRECTRY FX Directory          R  SRCDIR Source Directory
S  SUMMARY FX Summary            U  USER   User Control Facility
X  EXIT    Exit

```

Diagnostic Summary

The Diagnostic Summary is the suggested starting point for abend/dump resolution. It contains a detailed description of the problem, the failing program, and the probable cause.

Figure 4. First Page of Diagnostic Summary for Transaction Abends

```

CICS Abend-AID/FX ----- Diagnostic Summary ----- Row 000001 of 000065
COMMAND ==>                                     SCROLL ==> PAGE

An ASRA abend occurred in program CCAADEMO.  The abending transaction was
AADM running at terminal D492 for user ID CICSUSER.

Analysis of the abend:

The Data Exception is caused when a decimal instruction is attempted on a
field that does not contain valid packed data, eg. contains an invalid digit
(not 0-9), or its last byte contains an invalid sign (Not F, C, OR D).

000413                                COMPUTE CURR-PAY    EQUAL WA-HOURS * WA-RATE

This statement is contained in paragraph "300-EMPLOYEE-PAY-RTN" of program
CAADEMO.

```

Exiting CICS Abend-AID/FX

To exit CICS Abend-AID/FX from any screen, type **EXIT** or **=X** in the **COMMAND** (or **OPTION**) field, and then press Enter.

Online Help

Online help is available for any CICS Abend-AID/FX screen, field, system message, or command.

Screen Help

Screen help explains the purpose of each screen. To display screen help, position the cursor *off* any data field or system message, and then press the default **HELP** PF key (PF1).

Field Help

At a minimum, field help defines a field's label. In many cases, field help also describes the purpose of the field and how to use the information it contains. To display field help, position the cursor on the field, and then press the default **HELP** PF key (PF1).

Message Help

Message help explains the meaning and significance of CICS Abend-AID/FX informational, error, and warning messages. To display help for CICS Abend-AID/FX messages, position the cursor on the message, and then press the default **HELP** PF key (PF1).

Command Help

Command help describes the function, syntax, and restrictions (if any) of primary and fast-path commands. To display command help, use one of the following methods:

- In the **COMMAND** (or **OPTION**) field, type **HELP** followed by the name of the command. Next, press Enter. For example, to display help text for the **FIND** command, type:

```
HELP FIND
```

- Type either **CMDLIST** or **HELP COMMANDS** in the **COMMAND** (or **OPTION**) field, and then press Enter to display the list of commands. Place the cursor on the desired command, and then press Enter.

- To list the commands *available* from the currently displayed screen or field, use the ASSIST command or press the default ASSIST PF key (PF24).

Note: ASSIST is valid on only some screens at the screen level, but is available for all tab-selectable fields.

CICS Abend-AID/FX Navigation and Commands

This section describes the CICS Abend-AID/FX features for navigating within and between screens: the cursor point-and-shoot feature, masking and sorting, fast-path commands, and jump commands. It also describes the use of primary and line commands that perform specific functions.

Cursor Point-and-Shoot Feature

The cursor point-and-shoot feature gives you direct access to menu items, specific locations in storage, and to detailed information about specific data elements. Simply tab to the menu item, storage address, or key data element field. Press the Enter key or appropriate PF key, or enter the corresponding primary command. If you're using a workstation with an emulator to access CICS Abend-AID/FX, refer to the *CICS Abend-AID/FX User's Guide* for information about using a mouse with the cursor point-and-shoot feature.

Masking and Sorting

The scrollable data area on CICS Abend-AID/FX list screens, such as the CICS Abend-AID/FX Directory shown in Figure 2 on page 3, includes a line of asterisks (*) beneath the column headings, called the *mask line*. This mask acts as a filter to display only the data you want to see. Overtyping the asterisks with the characters of the data you want to display, and pressing Enter.

You can also sort the column data by each of the column headings by entering the SORT primary command with a specified column heading. This command rearranges the column data.

To restore the column mask for all columns and to restore the original view of the list, enter the RESET primary command.

Fast-Path Commands

Most screens have an assigned *fast-path command*, such as DIAG for the Diagnostic Summary or TRACE for the Abbreviated Trace Listing. With fast-path commands, you can access many screens in the product from other screens. Simply type the appropriate command in the COMMAND (or OPTION) field, and then press Enter.

For more information about fast-path commands, refer to the *CICS Abend-AID/FX User's Guide*.

Jump Commands

Another method for accessing screens directly is to use *jump commands*. These commands are ISPF-like selection strings that uniquely identify the screens *listed on the menus*. Not all CICS Abend-AID/FX screens are listed on the menus.

For example, to access the Program Summary Information screen, which is the second selection on the Program Information menu, type =2.2 or >2.2 in the COMMAND (or OPTION) field, and then press Enter. The number 2 starts the command string, because the Program Information menu is the second selection on the Primary Options menu as shown in Figure 3 on page 5.

Jump Command Prefixes

By definition, a jump command is preceded by either an equal sign (=) or a greater than sign (>). Which sign you use determines the path CICS Abend-AID/FX takes when you exit the screen with the END command or PF key (PF3). Preceding the jump command with the equal sign (=) returns you to the Primary Options menu; the greater than sign (>), to the previous screen where you entered the jump command.

For more information about jump commands, refer to the *CICS Abend-AID/FX User's Guide*.

Primary Commands

Primary commands, such as the FIND or LPRINT command, perform specific functions, other than just displaying CICS Abend-AID/FX screens as do fast-path and jump commands. Refer to the *CICS Abend-AID/FX User's Guide* or use the CICS Abend-AID/FX online help for a complete description of each primary command and its valid syntax. Refer to "Command Help" on page 6 for specifics on using the online help.

Frequently Used Fast-Path and Primary Commands

Below are some of the most frequently used fast-path and primary commands. The first column shows the command and any required parameter(s). The second column names the displayed screen or menu for fast-path commands, or describes the resultant action for primary commands. Note that the characters in uppercase are the minimum abbreviation for the command.

For Transaction Abends and Region Dumps

Directory, Server, and Abend/Dump Information

DIRectory	CICS Abend-AID/FX Directory.
INFO	Entry Information screen.
SERVInfo	Server Information screen.
SUMMARY	CICS Abend-AID/FX Summary.

General Navigation

BOTTOM	Displays the bottom of a screen's scrollable area.
CANCEL	Cancels the current operation.
DOWN	Scrolls down.
END	Ends the current operation and returns to the previous display.
EXIT	Terminates the current session.
Find string	Locates the specified data string.
LEFT	Scrolls left.
MAINmenu	Primary Options menu.
MM	Primary Options menu.
RESet	Resets the masking and sorting on list screens.
RETURN	Returns to the Primary Options menu.
RFIND	Repeats the previously issued Find command.
RIGHT	Scrolls right.

Sort	Sorts the list by the specified column heading.
TOP	Scrolls to the top of a screen's scrollable area.
UP	Scrolls up.

Memory Display and Navigation

CB	Control Blocks/Storage screen.
CHAIN	Runs a control block chain based on user-specified criteria.
COre address	Displays storage located at the specified address.
DECOde address	Disassembles a single assembler instruction at the specified address.
DISAsm address	Disassembles all assembler instructions in storage, starting at the specified address.
DSECT	Displays storage in DSECT format.
Find x'string'	Locates the specified hexadecimal, character,
c'string'	or mixed-case character data string.
t'string'	
HEXD	Displays storage in hexadecimal format.
MAPd	Displays storage in DSECT format.
@offset	Positions the display at the fullword address at the specified hexadecimal offset.
-offset	Scrolls the display backward to the specified hexadecimal offset.
+offset	Scrolls the display forward to the specified hexadecimal offset.
RFIND	Repeats the previously issued Find command.
RESet	Resets the display to offset zero.
SMAP	Storage Map Display.
UNSTck address	Interprets the store clock date and time.

Paperclip Function

CLIP	Displays the first (oldest) entry from the paperclip table.
PCLP	Current Paperclip Table screen.
SACLIP	Saved Paperclip List screen.
SAVE	Saves the current paperclip table.

Diagnosis

DIAG	Diagnostic Summary.
TRACE	Abbreviated Trace Listing screen.

Customization

ATTRIBUTE	Screen Attributes screen.
BORDERs ON	Controls display of screen borders.
OFF	
KEYS	PF Key Definitions screen.
PROFile	User Profile screen.
USER	User Controls menu.

Printing

LIST	Print Options and Initiation screen.
LPRINT	Prints logical screen images and reports.
PRINT	Prints physical screen images and reports.

The optional parameters #ALL, #DB2ALL, #SUMMARY, and #DB2SUMM for the LPRINT and PRINT commands let you print CICS Abend-AID/FX reports. Refer to the *CICS Abend-AID/FX User's Guide* or use the online help for a description of these parameters and the reports they generate.

REXX Application Program Interface (API)

REXX exec-name	Processes a REXX EXEC.
-----------------------	------------------------

For Transaction Abends Only***Diagnosis***

ABENDtxt abendcode	Displays information about the specified abend code.
IBMmsg abendcode	Displays the IBM message text for the specified abend code.

Duplicate Dump Information

HISTory	Duplicate History Log.
----------------	------------------------

Program Information

DFHRpl	DFHRPL Concatenation screen.
LEOcb	LE Options Control Block screen.
PGMdct programname	Program Detail screen.
PGMLink	Program Link Information screen.
PGMSumm	Program Summary Information screen.
PROG	Program Information menu.
RPL	DFHRPL Concatenation screen.

COBOL Programs

COBoI programname	COBOL Storage Areas menu.
DSA programname	Memory Display for the Dynamic Storage Area.
EXTRn programname	Memory Display for external cells storage.
LINK programname	Program Storage screen for the linkage section.
LOCL programname	Program Storage screen for local storage.
TGT programname	Memory Display for TGT storage.
WORK programname	Program Storage screen for working storage.

COBOL and PL/I Programs

PLIST programname	Program Listing screen.
SD	Source Directory screen.
SOURCE ON	Toggles source processing ON or
OFF	OFF.
SRCDIR	Source Directory screen.
SRCINST ON	Toggles source support instructional
OFF	window ON or OFF.

PL/I Programs

AUTO programname	PL/I Automatic Storage List screen.
CONTRol programname	PL/I Controlled Storage List screen.
EXTERnal programname	PL/I External Storage List screen.
PLI programname	PL/I Storage Areas menu.
STATic programname	Memory Display for static storage areas.

Assembler Programs

PSW	Program Status Word screen.
REGs	Registers screen.

Transaction and Task Information

EIBS	System Execute Interface Block screen.
EIBu	User Execute Interface Block screen.
ENQ	Enqueues Held screen.
TASK	Task Detail screen.

Terminal and Screen Information

DATAstrm	Data Stream Analysis screen.
SCREEn	Last 3270 screen image.
TERm	Terminal Detail screen.

File and Database Information

DB2	DB2 Information menu.
DLI	DL/I Information menu.
FILE	File Request Summary.

Hogan and MSA Information

HOGAN	Hogan Information menu.
MSA	MSA Information menu.

CICS Web Interface Information

CWI	Web Information Summary menu.
------------	-------------------------------

For Region Dumps Only***Dataset Import***

IMPorT	Dataset Import screen.
---------------	------------------------

Storage Identification

MATch	Locates data matching the specified parameters and displays corresponding TCBS, TCAs, and KETASKs that have addressability to the data.
WHERE	Displays a list of storage areas and control blocks that contain the specified address or symbol.
WHO	Lists TCBS, TCAs, and KETASKs that have addressability to the specified address.

Domain Information (CICS Transaction Server Version 1.3 and More Current)

WB	Web Domain menu.
-----------	------------------

Domain Information (CICS Version 4 and More Current)

DOMains	CICS Domain Analysis menu.
----------------	----------------------------

CICS Tables Information (CICS Version 2 Only)

TABLEs	CICS Tables menu.
---------------	-------------------

Task/Wait Analysis Information (CICS Version 4 and More Current)

TASKList	Task/Wait Analysis screen.
-----------------	----------------------------

TAsks	Task/Wait Analysis menu.
--------------	--------------------------

TASKSUmm	Task Summary.
-----------------	---------------

Task/Wait Analysis Information (CICS Version 2 Only)

TAsks	Task/Wait Analysis screen.
--------------	----------------------------

Dump Import and Analysis Messages

MLOG	Dump Analysis Message Log.
-------------	----------------------------

IPCS

IPCS	IPCS Command Facility screen.
-------------	-------------------------------

MVS Virtual Storage

ASMap	Allocated Storage Map
--------------	-----------------------

SASP	Summarized CSA Subpools screen
-------------	--------------------------------

CSASUm	Common Service Area Summary
---------------	-----------------------------

LPAmap	Link Pack Areas Map
---------------	---------------------

LSQAsum	LSQA Summary
----------------	--------------

LSQASP	Summarized LSQA Subpools screen
---------------	---------------------------------

MVSStg	MVS Storage Analysis menu
---------------	---------------------------

NUCmap	Nucleus Map
---------------	-------------

PVTSP	Allocated Private Subpools screen
--------------	-----------------------------------

PVTSUm	Private Area Summary
SQASP	Summarized SQA Subpools screen
SQASUm	SQA Summary
VSMaP	Virtual Storage Map

Line Commands

Line commands perform specific functions for individual items on CICS Abend-AID/FX list screens such as the CICS Abend-AID/FX Directory and the Program Summary Information screen, among others. Line commands are displayed at the top of the screen. Enter them to the left of the selected list item. Use the online help for an explanation of any line command.

Refer to “Directory Line Commands” on page 3 for a list of the available line commands on the CICS Abend-AID/FX Directory.

PF Keys

This section lists the PF keys defined in CICS Abend-AID/FX. Enter **KEYS** as a fast-path command to display the PF Key Definitions screen, which lists the current PF-key settings. Press Enter to toggle between the displays for PF13–PF24 and PF1–PF12. Overtyping any settings you want to change. Press the default END PF key (PF3) to save your changes.

Table 1. Default PF Key Definitions

Key	Command	Description
PF1/PF13	HELP	Provides cursor-sensitive information.
PF2/PF14	SPLIT	Divides the display screen into two logical, functionally independent screens. Valid for ISPF access only.
PF3/PF15	END	Ends the current function and redisplay the previous level screen or menu.
PF4/PF16	RETURN	Redisplays the Primary Options menu.
PF5	RFIND	Repeats the last FIND command executed.
PF6	CCMENU	For transaction abends only. Displays the CICS Abend-AID transitional menu. This pop-up menu displays CICS Abend-AID commands and their equivalents in CICS Abend-AID/FX.
PF7	UP	Scrolls backward through a screen’s scrollable area.
PF8	DOWN	Scrolls forward through a screen’s scrollable area.

Key	Command	Description
PF9	SWAP	Moves the cursor to the other logical screen when the display is in split screen mode. Valid for ISPF access only.
PF10	LEFT	Scrolls toward the first column of data.
PF11	RIGHT	Scrolls toward the last column of data.
PF12	RETRIEVE	Redisplays the last command entered in the COMMAND or OPTION field.
PF17	DISASM	Disassembles <i>all</i> assembler instructions in storage. CICS Abend-AID/FX displays this information on the Storage Disassembly screen, starting with the address specified.
PF18	HEXD	Displays storage in hexadecimal format.
PF19	DSECT	Displays storage in DSECT format.
PF20	INFO	Displays the Entry Information screen for the current dump.
PF21	WHO	For region dumps only. Lists TCBS (for any dump), TCAs (for CICS dumps only), and KETASKs (for CICS dumps only) that have addressability to the address specified.
PF22	MATCH	For region dumps only. Lists TCBS (for any dump), TCAs (for CICS dumps only), and KETASKs (for CICS dumps only) that have data matching the data at the address specified.
PF23	LPRINT	Prints a logical image of a screen to a sequential dataset.
PF24	ASSIST	Displays the commands available for the current screen, scrollable table, or field.

Transaction Abend Source Support

This section describes CICS Abend-AID/FX source support for transaction abends.

Source Directory

The Source Directory allows you to browse and manage programs compiled using the Compuware COBOL language processor or the Compuware PL/I language processor. To access the source directory, select a transaction entry from the CICS Abend-AID/FX Directory and then enter either the **SD** or **SRCDIR** fast-path command. A list of source listing files available for the selected entry is displayed.

Enter the **S** line command to display the Source Program Directory for a source listing file.

Figure 5. Source Directory

```

CICS Abend-AID/FX ----- Source Directory ----- Row 000001 of 000003
COMMAND ==>                                SCROLL ==> PAGE

To add a dataset to the list, select Add

S Directory    I Information    X Include/Exclude    D Delete

Dataset Name                                     Exclude  Defined  Remote  Re
*****                                     Status  By       Server  Us
- FX.BETA.TEST.PGMLIST                           User    FXSRVR3
- FX.BETA.DEMO.LISTFILE                          User    FXSRVR3
- FX.BETA.QA.LISTFILE                             CICS
***** BOTTOM OF DATA *****
    
```

Enter the **S** line command to select and browse a program in the Source Program Directory for a source listing file.

Figure 6. Source Program Directory

```

CICS Abend-AID/FX ----- Source Program Directory ----- Row 000001 of 000014
COMMAND ==>                                SCROLL ==> PAGE

Dataset Name..... FX.BETA.DEMO.LISTFILE

S Select          L Lock          I Information
U Unlock          D Delete

Program  Compile  Compile  Return  Language  Size  Locked  Completion
*****  *      *      *      *      *      *      *      *
- CELPROG1 06JAN2002 10:55:35 4 COBIIR3 63K  LOCKED-M INCOMPLETE
s CCAADEMO 02JAN2002 10:51:14 0 COBIIR3 191K LOCKED-M COMPLETE
- CCAADEMO 26MAR2002 13:59:14 8 COBIIR3 159K LOCKED-M COMPLETE
- CCASQLD 08APR2002 14:45:29 4 OSVSCOB 223K LOCKED-M COMPLETE
    
```

Adding a File to the Source Directory

Source listing files defined to CICS at the time the abend occurred display as Defined By CICS, as shown in Figure 5 on page 18. To add a file to the Source Directory, press Enter at the Add field. Source listing files defined in this way display as Defined By User on the Source Directory.

You can use any of the line commands displayed on the screen. These commands affect only the display of the user-defined source datasets list on the Source Directory for the logged-on user who executes them and do not affect the actual datasets. The X (Include/Exclude) and D (Delete) line commands are *not* valid for source datasets that display as Defined By CICS.

Using Distributed Viewing Support

Distributed Viewing Support (DVS) lets you view a CICS transaction abend entry using source support when the source listings for the abending program reside on an MVS system other than the one on which the abend occurred. For example, if you develop applications at a central site and distribute them to other remote sites, DVS eliminates the need to distribute source listing datasets with the applications.

If your site has implemented Distributed Viewing Support, you can add a user-defined source dataset name as described above for a listing that resides on an MVS system other than the one on which the abend occurred. A valid user ID and password are required for access to the remote server as well as READ authority for the source listing dataset. Refer to the *CICS Abend-AID/FX User's Guide* for more information about using Distributed Viewing Support.

Mismatched Source Processing

CICS Abend-AID/FX compares the compile date and time of the abending program with the compile date and time of programs in the source listing file(s). If no match exists, the Source Mismatch Selection screen is displayed.

Figure 7. Source Mismatch Selection Screen

```

CICS Abend-AID/FX ----- Source Mismatch Selection -----
COMMAND ==>

The program compile date and time does not match a source listing

      Program Information                               Most Current Source Infomation
Program Name..... CCAADEMO                           Source Program Name..... CCAADEMO
Compile Date..... 14JAN2002                          Source Compile Date..... 21JAN2002
Compile Time..... 10:27:07                            Source Compile Time..... 16:07:58
Program Language..... COBOL II                       Program Language..... COBOL II
Language Release..... V1R3MO                          Language Release..... V1R4MO

      Select one of the following options:
To continue using the most current program listing, select CURRENT
To display available listings for selected program, select LISTINGS
To continue without source-level support, select NO SOURCE

```

You can do one of the following:

- Use the cursor point-and-shoot feature and press Enter at the CURRENT field to select the most current source listing for source processing in all subsequent displays of the program.
- Use the cursor point-and-shoot feature and press Enter at the LISTINGS field to display the Source Program Directory for source mismatch selection, which displays every occurrence of a listing for the selected program in all available source listing files.
- Use the cursor point-and-shoot feature and press Enter at the NO SOURCE field to suppress source processing in all subsequent displays of the program.

Trace Table Entries

CICS Abend-AID/FX displays trace table entries when you enter the TRACE fast-path command. Of particular interest are the trace entries created when an application issues EXEC CICS requests (the EIP trace entries). A method for reviewing EIP entries is described below.

Selecting EIP Trace Entries

Do the following steps for the appropriate CICS version.

CICS Transaction Server for z/OS and OS/390

1. Press Enter at the SELECT field on the Abbreviated Trace Listing screen to display the Trace Selection Criteria window.
2. Enter AP in the Domain Id field and 00E1 in the Trace Point Id field.

Figure 8. Trace Selection Criteria Window

```

CICS Abend-AID/FX ---- Abbreviated Trace Listing----- Row 000001 of 000125
COMMAND ==>                                     SCROLL ==> CSR
                                                ==>

To display the Trace Listing in short format select SHORT
To display the Trace Listing in full format select FULL
To specify selection criteria select SELECT

      KE      Trace
Entry Task Task Point Interpretation Trace Selection Criteria
000001 002B 00060 AP 0591 APXM EXIT Domain Id..... AP
000002 002B 00060 AP 1730 TFBF ENTR Trace Point Id..... 00E1
000003 002B 00060 US 0401 USXM ENTR Kernel Task Number..... ____
000004 002B 00060 XS 0401 XSXM ENTR Task Identifier..... ____
000005 002B 00060 XS 0402 XSXM EXIT Exception Entries..... -
000006 002B 00060 US 0402 USXM EXIT Help=PF01 End=PF03
000007 002B 00060 AP 1731 TFBF EXIT
000008 002B 00060 XS 0701 XSRC ENTRY CHECK_CICS_RESOURCE PCCC,TRANSATTACH
000009 002B 00060 XS 0702 XSRC EXIT CHECK_CICS_RESOURCE/OK

```

3. Press Enter at the SHORT field to display the Short Trace Listing.
4. From the Short Trace Listing, identify the time, function code, response code, and return address. An ENTRY and EXIT entry displays for each EXEC CICS call.

Figure 9. Short Trace Listing

```

CICS Abend-AID/FX ----- Short Trace Listing ----- Row 000001 of 000056
COMMAND ==>                                     SCROLL ==> CSR

To display the Trace Listing in full format select FULL
To display the Trace Listing in abbreviated format select ABBREV
To specify selection criteria select SELECT

Entry Task Interpretation
000025 00060 AP 00E1 EIP ENTRY GETMAIN
          REQ(0004) FIELD-A(00140D40 ... ) FIELD-B(08000C02 ....)
          RET-800ABE3C 16:28:38.2476510002 **.*****

000028 00060 AP 00E1 EIP EXIT GETMAIN OK
          REQ(00F4) FIELD-A(00000000 ....) FIELD-B(00000C02 ....)
          RET-800ABE3C 16:28:38.2479501252 00.0002991250

```

5. Press Enter at the FULL field to display the Full Trace Listing.
6. The Full Trace Listing displays the same data as the Short Trace Listing in an extended format, and also includes the Kernel Domain task number and TCB.

Figure 10. Full Trace Listing

```

CICS Abend-AID/FX ----- Full Trace Listing ----- Row 000001 of 000056
COMMAND ==>                                SCROLL ==> CSR

To display the Trace Listing in abbreviated format select ABBREV
To display the Trace Listing in short format select SHORT
To specify selection criteria select SELECT

Entry  Task  Interpretation
000025 00060 AP 00E1 EIP ENTRY GETMAIN REQ(0004) FIELD-A(00140D40 ... )
        FIELD-B(08000C02 ....) KE_NUM-002B TCB-008D2D08 RET-800ABE3C
        TIME-16:28:38.2476510002 INTERVAL-**,*****

000028 00060 AP 00E1 EIP EXIT GETMAIN OK REQ(00F4) FIELD-A(00000000 ....)
        FIELD-B(00000C02 ....) KE_NUM-002B TCB-008D2D08 RET-800ABE3C
        TIME-16:28:38.2479501252 INTERVAL-00.0002991250
    
```

CICS Version 4

Follow the procedure described above for CICS Transaction Server for z/OS and OS/390. However, note that CICS version 4 has only two trace displays: abbreviated and full.

CICS Version 2

1. Press Enter at the SELECT field on the Trace Listing screen to display the Trace Selection Criteria window.
2. Enter E1 in the Trace Id field.

Figure 11. Trace Selection Criteria Window, CICS Version 2

```

CICS Abend-AID/FX ----- Trace Listing ----- Row 000001 of 000039
COMMAND ==>                                SCROLL ==> PAGE
                                                ==>

To specify selection criteria select SELECT

ID  Reqd  Task  Reg 14  Resource  Trace Selection Criteria
D0  0604  00074  506C70FA
FC  0503  00074  056B27E0  Trace Id..... E1
F0  2C04  00074  606B3F00
EA  0003  00074  406C4DC8  DFHCICST  Request Id..... ____
EA  0005  00074  00682F4C
E5  0C03  00074  506B29AE  SUEK      Task Identifier..... ____
E5  0005  00074  406BAA74
E7  0004  00074  006B3DAA
E7  0004  00074  006B3DAA  Help=PF01  End=PF03
F2  8804  00074  406B3E22  DLICAL3
EA  0003  00074  40668430  DLICAL3  TMP PPT LOCATE
    
```

3. Press the default RIGHT PF key (PF11) to see complete trace information.