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- FFST/MVS Release 2, program number 5695-044
- FFST/VM Release 2, program number 5684-158
- OS/390* Version 2 Release 4, program number 5647-A01
- All subsequent releases, versions, and modifications until otherwise indicated in new editions

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- OS/390
- System/370
- SystemView
- Virtual Machine/Enterprise Systems Architecture
- VM/ESA
- VTAM
About This Book

First Failure Support Technology* (FFST*) is an IBM* licensed program that provides immediate notification and first failure data capture (FFDC) for software events. IBM’s SystemView* strategy incorporates FFST as part of its problem management discipline. This book applies to the following FFST products running in the specified environments:

- FFST for Multiple Virtual Storage (FFST/MVS*) in a Multiple Virtual Storage/Enterprise Systems Architecture (MVS/ESA*) environment
- FFST for Virtual Machine (FFST/VM*) in a Virtual Machine/Enterprise Systems Architecture* (VM/ESA*) environment

FFST/MVS also incorporates its own technology by including software probes in its own code. FFST/MVS processes these software probes using its internal FFDC function. When one of these internal software probes is triggered, FFST/MVS issues a symptom string that describes the event. This symptom string appears in the dump and in the generic alert. The dump is a member of a partitioned data set, which is specified in the FFST/MVS startup procedure. The FFDC messages describe the member name and the data set that contain the dump; you can format the dump using the FFST dump formatting program, EPWDMPFM. For more information, see Chapter 3, “Using FFST Output” on page 3-1.

The software probes that FFST/MVS processes with its FFDC function can also be triggered for FFST/VM. However, FFST/VM does not have the FFDC function. As a result, when one of these software probes is triggered, FFST issues messages containing only the software probe’s symptom string.

This book explains how to perform the following tasks:

- Use commands to control FFST operation
- Use the different types of FFST output to identify and analyze software events

Who Should Use This Book

The following people should read this book:

- System operators who need to control FFST operation
- Support personnel who use FFST output to identify and analyze software events

How to Use This Book

The FFST/MVS FFST/VM Operations Guide is divided into the following sections:

- Chapter 1, "FFST Overview"
  This chapter explains what FFST is.
- Chapter 2, "Controlling FFST Operation"
  This chapter explains how to control FFST operation using a set of FFST commands.
- Chapter 3, "Using FFST Output"
  This chapter explains how to use FFST output to identify and analyze software events.
- Appendix A, "FFST Messages"
  This appendix provides a list of the messages that can appear while you are using FFST.
- Appendix B, "FFST for MVS Transition Code Function"
This appendix describes the transition code software probes that FFST uses to report ABENDS occurring in authorized products and dumps being issued by CICS transactions.

- Appendix C, "S/390 Channel Attached Device Support"

This appendix describes the support provided by FFST for S/390 channel attached devices.

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**Highlighting Conventions Used in This Book**

- **bold** Keys you press (for example, Enter) appear in bold.
- **example** Text you type or text that appears on the screen appears in example font.
- **italics** A term appears in italics the first time it is defined.

Variables also appear in italics. Substitute specific values for these variables.
Summary of Changes

Summary of Changes
for SC31-8604-00
as Updated September, 1997,
online only

This revision changes the FFST information to unlicensed. There are no functional changes associated with this edition.

Summary of Changes
for LC33-1016-01
as Updated September, 1996
online only for LK2T-6702-01

The following changes appear only in the online version of this publication.

This revision deletes references to the FASTService service offerings. It also incorporates minor editorial changes.
Chapter 1. FFST Overview

Advances in hardware manufacturing and technology have enabled the computer industry to vastly improve the reliability of circuitry and reduce hardware cost. Less expensive hardware has stimulated extensive use of circuitry to detect failures or deteriorating circuit performance and 'call home', pointing out what component should be replaced. The results are significant reduction in repair time and even more significant reductions in service skill and labor.

As hardware reliability improves, software problems account for a greater portion of system and application interruptions because software has not enjoyed the same degree of advancement in technology as hardware. Although great strides have been made in quality, often measured as errors per 1000 lines of code, the amount of code and system complexity have increased to make this improvement barely visible. Currently, the industry offers programs based on several different failure capture techniques requiring a variety of personnel skills and system resources to recognize and resolve failures across a system.

There are at least five major problems that exist in the software service arena today:

1. Detecting problems as early as possible before the environment changes
2. Capturing the correct data to debug the software problem- the first time the error occurs
3. Capturing only the data required to debug the error (i.e., minimize the need for full address space dumps).
4. Immediate notification of the error
5. Uniquely identifying the error in order to determine if it is a condition that was already detected and reported to the support organization.

First Failure Support Technology (FFST) for MVS and FFST for VM are program products that provides an encapsulation of software services required to service IBM program products. Using services of the operating system, FFST attempts to bring a consolidated approach for problem recognition, diagnostic data capture, and problem reporting for IBM program products.

Note: Each place throughout this document, the name FFST implies FFST for MVS and FFST for VM except where it is specifically mentioned that it is FFST for MVS or FFST for VM.

FFST provides the following services for IBM products:

- **customized dump** - promotes the collection of only the data required to debug a software problem
- **symptom string** - provides a unique problem 'label' that can be used to quickly determine if a software problem has already been detected. The symptom string is contained in each output in this list.
- **symptom record** - error log entry built to IBM's Symptom Record Architecture (SRA) standard and placed in LOGREC.
- **messages** - indication on the operator console that a problem has occurred and FFST was called to collect the data and report the problem.
- **network notification** - indication through an System Network Architecture (SNA) Generic Alert that a problem has occurred and FFST was called to collect the data and report the problem. Included in the Generic Alert is key information which includes the machine on which the problem occurred and the name of the dump data set if a dump was requested by the detecting product.

It should be noted that there are situations that will continue to require full address space dumps. For certain types of problems it is very difficult for a programmer to determine what data may be required to diagnose a failure. For these problems, a capture of the complete environment will be required.
IBM programmers continue to improve their defensive programming techniques within their software in order to assure the instances of needing full address space dumps to diagnose a failure will be kept to a minimum.

**FFST Components**

FFST is composed of four components:

- **software probe** - call statements placed in IBM program products which are used to access FFST services. Each probe statement has a unique identifier, up to eight characters in length. This identifier can be used in controlling the operation of FFST through the MODIFY commands specified in “FFST MODIFY Command Overview” on page 2-3. The first three characters of the probe identifier indicate which product was issuing the call to FFST. For example, if FFST is called with a probe identifier that starts with 'ISTxxxxx', this call was from the VTAM program product.

  In order to protect the operating system from the excessive use of resources by FFST, FFST will automatically disable any probe statement that exceeds a using-product specified criteria. If this occurs, FFST will ignore any calls for services by that probe statement with a matching symptom string. After the problem is fixed which caused a probe statement to be executed at a high rate, FFST can be reset to start accepting calls by the probe statement through the FFST MODIFY command set. See “FFST MODIFY Command Overview” on page 2-3.

- **configuration table** - a single CSECT module built and shipped with the program product that chooses to use FFST services. It contains information that identifies the using product. Its name is passed to FFST when that program product initializes with FFST. (Each product that requires FFST services must issue an FFST initialization call to inform FFST that it may be requiring FFST services.)

- **Data Structure Table (DST)** - a single CSECT module built and shipped with the program product that chooses to use FFST service. It contains static information which FFST uses to determine what data is to be captured for each software probe used by that product and information used to build the Generic Alert. It minimizes the amount of static data that must be passed in the software probe call. A single product may choose to use more than one DST. The name of the DST which contains the information for a specific software probe is specified in the software probe call.

- **Problem source identifier (PSI)** - the main component of FFST which collects the data specified on the probe statement and generates the diagnostic data outputs specified by the calling product. It utilizes the FFST configuration table to determine the identity of the caller and uses the data structure table (DST) to determine what diagnostic data is to be captured (i.e., customized dump, Generic Alert, console messages, error log entry in LOGREC). The processing performed by the PSI is controlled by the FFST MODIFY commands. See “FFST MODIFY Command Overview” on page 2-3.

**FFST Outputs**

FFST provides the program product caller with the option of choosing from four diagnostic outputs. Each of these outputs is explained in the sections that follow. Each output is fully controllable through the FFST MODIFY commands which are described in “FFST MODIFY Command Overview” on page 2-3.

**Customized Dump (MVS)**

When a software probe is executed and the caller chooses to request a dump, FFST will dynamically allocate a data set and generate an unformatted dump. The name of the data set will be as follows:

user_name.system_name.applid.DMPxxxxx

where:
• **user_name** is the high level qualifier selected by the customer and entered through the FFST MODIFY command facility. See “FFST MODIFY Command Overview” on page 2-3 for more details. The default value FFST uses is 'FFST'.

  **Note:** If 'FFST' is not an acceptable value, then this name must be changed in order to avoid a dump creation failure due to a data set security violation.

• **system_name** is the name of the MVS system, taken from SYS1.PARMLIB

  **Note:** If the name begins with a numeric, an 'S' is appended to the beginning of the system name.

• **applid** is a short name of the using product (e.g., VTAM, NETVIEW) which the using product specifies.

• **xxxxx** is a sequence number which makes the dump data set name unique

In order to read the dump, the FFST dump formatter EPWDMPFM has to be used. See “Formatting a Customized Dump for FFST/MVS” on page 3-1 which describes the use of this tool.

**Customized Dump (VM)**

When a software probe is executed and the caller chooses to request a dump, FFST will create a dump using SDUMP or VMDUMP. For GCS, the dump is sent to the user id set up to receive dumps at GCS Group build. For CMS, the dump destination is customizable. The default is where the user id setup as the destination for system dumps.

In order to read the dump, the FFST dump formatter EPWDMPFV has to be used. See “Formatting a Customized Dump for FFST/VM” on page 3-8 which describes the use of this tool.

**Error Log Entry**

When a software probe is executed and the caller chooses to request an error log entry, FFST generates an error log entry and place sit in the LOGREC data set. This entry, built using the Symptom Record Architecture format, can be formatted and printed using the Environmental Record Editing and Printing (EREP) program. See “Using the Symptom String” on page 3-18.

This entry contains a summation of the problem detected by the caller and includes key information such as the primary symptom string which uniquely identifies the problem and the name of the dump data set (MVS only) into which the dump was placed, if a dump was requested.

**Messages**

When a software probe is executed and the caller chooses to present problem information through the operator console, FFST generates a series of messages which include the primary symptom string for the problem, the name of the dump data set, if a dump was requested, and the volume serial number on which the dump data set resides. See “Using the Console Message” on page 3-27 for details of these messages.

**Generic Alert**

When a software probe is executed and the caller chooses to notify a network operator of the problem, FFST generates an SNA Generic Alert summarizing the problem and passes the alert to the IBM NetView® program product for processing. The alert contains information key to the problem and includes the identity of the machine on which the problem occurred, the name of the program product that detected the problem, the date and time of the problem, the name of the dump data set into which the dump was placed, and the primary symptom string. See “Using the Generic Alert” on page 3-28 for details of the alert and how it is processed by the NetView program product.
Probe Message Log

In addition to the diagnostic outputs described above, FFST generates a probe execution entry and places it in the FFST probe message log each time a probe is executed. This log can be used to keep a history of all the products that requested FFST services. Through the FFST start up procedure, two logs may be specified: primary and secondary. When the primary is filled, FFST must be switched over to use the secondary log. See "Using the Probe Message Log Entry" on page 3-27 for details of the probe message log and how to use its contents.

FFST Usage

When a product calls FFST for data capture services, FFST indicates this event through the following message:

EPW0401I  procname: EVENT DETECTION INVOKED BY applname

where procname is the name of the procedure that started FFST and applname is the name of the calling program product (e.g., VTA M, NetView). This message is a clear indication that FFST was called by a product and there could be a software problem. FFST messages to follow will provide information about the error. Using the information in the following chapters, the FFST outputs can be collected and used when working with the IBM Support Center to determine the cause of the problem. Whenever the FFST MODIFY command facility is being utilized to control FFST support for a specific application, the applname value in the EPW0401I message is the value to be used on the APPLID operand.

In addition to program products that use FFST services through software probes, FFST for MVS provides a system monitor capability that watches the programming environment for problems that may occur where FFST is not called to process the data from the situation. This function is provided by watching for dump requests from authorized program products through the MVS Post Dump Exit (IEAVTSEL) facility (PN40734) and watching for dump requests from CICS transactions through the CICS dump user exit (PN45724). This monitoring capability is known as the FFST Transition Code function and is described in detail in Appendix B, “FFST for MVS Transition Code Function” on page B-1.

FFDC Function

FFST utilizes its own technology to detect internal problems. This function is called FFDC. EPW00xxI messages are issued by FFST which pertain to the FFDC function. When an FFDC probe trips, messages are issued containing the symptom string and a dump is also taken. This dump is a member of a pre-allocated partitioned dump data set, which can also be formatted using the FFST dump formatter.
Chapter 2. Controlling FFST Operation

FFST provides START, MODIFY, and STOP commands that let you control its operation. You can use these commands two different ways:

- Through the FFST operator's console
- Through a startup command list that establishes the FFST operating environment at FFST initialization

The format for FFST commands depends on whether you are using them in an MVS or VM operating environment. This chapter uses the following conventions to explain the different command formats:

**UPPERCASE BOLDFACE** Indicates actual command names, keywords, or operands. These values must be spelled as shown but can be typed in either uppercase or lowercase.

**lowercase italic** Indicates variables that show the type of information required, rather than a specific value. When you type the command, substitute an actual value (usually the name of a resource) for the lowercase italic characters.

**Underscore** Indicates the default value that FFST uses if you do not specify another value.

**Brackets [ ]** Indicate an optional specification. Any commas, equal signs, parentheses, or other symbols between the brackets are also optional. Do not include the brackets when typing the command.

**Vertical bar |** Separates the possible options for a single keyword. If a group of options separated by vertical bars appears between brackets, you do not have to choose any of the options in that group; FFST uses the default value.

**Equal sign, comma, parentheses, and asterisk = , ( )** Enter these symbols as shown, unless they appear between brackets. When they appear between brackets, you do not have to include them unless you choose to include the associated optional operand.

The sections in this chapter provide the following information:

- General information about how to use FFST commands, including command syntax and definitions of command parameters
- Instructions for using FFST commands from a command console, including specific examples of FFST commands
- Instructions for using FFST commands in a startup command list

**Understanding FFST Commands**

This section provides the following information for the FFST START, MODIFY, and STOP commands:

- The command syntax
- A list of available operands
- An explanation of each of the command parameters
FFST START Command Overview

When used to control FFST operation, the START command has the following format:

<table>
<thead>
<tr>
<th>Platform</th>
<th>Command Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVS</td>
<td>START</td>
</tr>
<tr>
<td>VM</td>
<td>FFST START</td>
</tr>
</tbody>
</table>

The FFST START command has the following operands:

- **[LANG=lang][ENU]**
- **[FMODE=NORMAL][DEBUG]**
- **[PAGE=pagenum][200]**
- **[START=stmemnam][START00]**

**Note:** The EPWFFST sample start-up procedure can be changed to include an additional parameter called START. The value for this parameter should be included as the fourth parameter on the EXEC statement in the JCL.

If you include more than one operand, you must separate the operands with commas. For example:

```
operand1=option,operand2=option
```

The following list explains each of the FFST START command parameters:

**START|S**

The command used to initialize FFST. For FFST/MVS, the FFST subsystem is initialized in its own address space. For FFST/VM, FFST is initialized in its own virtual machine. Once FFST is initialized, it can process triggered software probes which can be controlled by a set of MODIFY commands.

For the first start after initial program load (IPL), the procedure reads the checkpoint data set if the following conditions are true:

- **MVS** The FFSTCKPT DD name appears in the startup job control language (JCL).
- **VM** The FFSTCKPT file exists and the file definition is specified as it is in the FFST STARTUP EXEC file.

The checkpoint data set restores the environment from the last time FFST was active. In addition, whenever FFST is started, the system reads and processes a startup command list, if one exists. For more information, see “Using a Startup Command List” on page 2-29.

**procname**

The procedure name for the operation. (This parameter applies to MVS only.) The recommended value is EPWFFST.FFST. If you use EPWFFST.FFST as the procedure name in the START command, you can use FFST as the procedure name in the MODIFY commands. For more information about the procedure name used in MODIFY commands, see “FFST MODIFY Command Overview” on page 2-3.

You can find sample JCL for this procedure in the install library on the install tape, along with the other install jobs.

**FFST**

The parameter that indicates the command applies to FFST. (This parameter applies to VM only.) The recommended value is FFST.
LANG=
The keyword used to specify the National Language Support (NLS) abbreviation for the language in which the FFST messages are to appear. The default (and the only value currently allowed for the LANG parameter) is ENU.

FMODE=
The keyword used to indicate the type of messages you want FFST to issue. This keyword can have the following values:

NORM
FFST issues only its standard messages. NORMAL is the default value.

DEBUG
FFST issues flow messages in addition to its standard messages. Use this option only when necessary.

PAGE=
A keyword, used only for FFST/MVS, that indicates the number of fixed pages of storage to be preallocated for any software probe triggered while running disabled. A value that is too low can result in a software probe not having enough pages available to take an FFST dump. A value that is too high can adversely affect system performance. The default value for the PAGE parameter is 200.

START=
A keyword that indicates the FFSTPARM start list member name to be used. The default value is START00.

**FFST MODIFY Command Overview**

When used to control FFST operation, the MODIFY command has the following format:

<table>
<thead>
<tr>
<th>Platform</th>
<th>Command Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVS</td>
<td>MODIFY</td>
</tr>
<tr>
<td>VM</td>
<td>FFST</td>
</tr>
</tbody>
</table>

The FFST MODIFY command has the following operands:

[ACTION|A=
DISABLE|DIS|
ENABLE|EN|
CLEAR|CL|
DISPLAY|D|

CHANGE|CH|
RESET|R|
HALT|

[QUICK]

[APPLID|AP=applname|FFST]

[VENDOR|V=vendorname|IBM|IBM CORPORATION]

[PROBEID|P=xxxxyyyy|xxxxyy|*xxx*]

[OPTIONS|OPT=
(DUMP
SYMRC
GENAL
SYMST
SUPDP

Chapter 2. Controlling FFST Operation 2-3
The following MODIFY operands are available for MVS only:

[DUMPQUAL|DQ=dumpqualifier]
[DUMPVOL|DV=dump_volume_serial_number]

The following MODIFY operand is available for VM only:

[DUMPRCV|DR=userid]

The following rules apply when you use these operands:

- If you include more than one operand, you must separate the operands with commas.
- If you include more than one option on an operand, you must separate the options with commas and enclose them in parentheses.

For example:

operand1=option,operand2=(option1,option2),operand3

The following list explains each of the FFST MODIFY command parameters:

**MODIFY|F**

The command used to communicate with the FFST/MVS program.

**MODIFY|M**

The command used to communicate with the FFST/VM program.

**procname**

The procedure name for the operation. (This parameter applies to MVS only.) The recommended value is FFST.

**FFST**

The parameter that indicates the command applies to FFST. (This parameter applies to VM only.)

**ACTION|A=**

The keyword used to indicate the action you want to perform.

This keyword can have the following values:

**DISABLE|DIS**

The parameter used to disable output options, probe statements, and probe message logging.

**ENABLE|EN**

The parameter used to enable output options, probe statements, and probe message logging.

**CLEAR|CL**

The parameter used to clear any knowledge of probe statements and to clear a message log which FFST maintains.

**DISPLAY|D**

The parameter used to display the operating status of FFST, an application known to FFST, or probe statements in an application known to FFST.

*Note:* DISPLAY is the default value for ACTION.
**CHANGE|CH**
The parameter used to change the destination of FFST dumps and generic alerts.

**RESET|R**
The parameter used to reset the destination of FFST dumps and alerts to the default value.

**HALT**
The parameter used to stop the execution of the FFST program once all currently running and pending processes are complete.

**QUICK**
The keyword used to indicate that FFST will stop running without waiting for all applications to terminate their interfaces to FFST. This keyword is allowed only with an ACTION=HALT command.

**APPLID|AP=**
The keyword used to identify the application affected by the command. This keyword can have either of the following values:

- `applname`
  The name of the application you want the MODIFY command to affect.

**FFST**
The MODIFY command affects the FFST program.

**VENDOR|V=**
The keyword used to indicate the application's owner. For IBM products, use IBM or IBM CORPORATION. For vendor products, use the documented vendor name.

**PROBEID|P=**
The keyword used to identify the probe statement to be affected by the command. You can use any of the following values:

- `xxxxyynn`
  Specifies a single probe statement, where:
  - `xxx` is the probe identifier prefix (the first 3 characters of the probe identifier).
  - `yyy` is the source file identifier (the third, fourth, and fifth characters of the probe identifier).
  - `nn` is the number that uniquely identifies the individual probe statement.

- `xxxxyyy*`
  Specifies a group of probe statements that share the same probe identifier prefix and source file identifier, where:
  - `xxx` is the probe identifier prefix.
  - `yyy` is the source file identifier.

- `xxx*`
  Specifies a group of probe statements that share the same probe identifier prefix, where `xxx` is the probe identifier prefix.

**Note:** If you type a command that includes a probe identifier prefix that is unknown to FFST, you must include the APPLID parameter.

**OPTIONS|OPT=**
The keyword used to identify the FFST output options affected by the command.

You can use any of the following parameters with the OPTIONS keyword:
DUMP
The MODIFY command affects FFST dump support.

SYMRC
The MODIFY command affects symptom record support.

GENAL
The MODIFY command affects generic alert support.

SYMST
The MODIFY command affects symptom string message support.

SUPDP
The MODIFY command affects duplicate dump suppression.

ALL
The MODIFY command affects all the preceding output options.

DEFINE|DEF
The keyword used to identify a new application. If you use the APPLID keyword to specify an application that is not known to FFST, include the DEFINE parameter to indicate that it is new.

LOGID|L=
The keyword used to indicate that the command is to affect the probe message log function. When you use LOGID you have three options:

- You can type LOGID without specifying a value if you also specify ACTION=ENABLE or ACTION=DISABLE. If you do not specify a value, the FFST probe message logging function will be enabled or disabled.
- You can type LOGID=n or LOGID=FFSTLOGn, where n is a numeric value between 1 and 9. Using this notation means that the log data set specified on DD name FFSTLOGn will be enabled, disabled, or cleared. When a data set is cleared, the clear is scheduled, which means that FFST will not clear the data set at the time of the command, but will consider the data set available the next time it becomes the current data set, and will clear it then.

Note: Up to 9 DD statements may be specified for probe message logs in the FFST start-up JCL. However, FFST will only use as many as are sequentially specified, starting at 1. In other words, if FFSTLOG1, FFSTLOG2 and FFSTLOG4 are in the JCL, only FFSTLOG1 and FFSTLOG2 will be used, and are the only ones that you may specify a modify command for.
- You can type LOGID=REUSE if you also specify ACTION=ENABLE or ACTION=DISABLE. This indicates that the REUSE function is to be enabled or disabled. REUSE means that when FFST switches to the next log data set, FFST will reuse that data set (clearing it automatically first), even if it contains log information. If REUSE is disabled, FFST will not reuse a data set that contains any data, unless a CLEAR command has been issued for it.

Note: FFST message log switching initially starts with FFSTLOG1 data set, and continues through the last FFSTLOGx DD in the FFST JCL. When that is full, FFST starts over with FFSTLOG1. Also, all log information is stored in the FFST checkpoint data set, so the environment will be restored after recycling of FFST, even after an IPL of the operating system.

ALRCVID|AL=
The keyword used to identify the NetView* alert receiver that is to receive FFST generic alerts. When you use ALRCVID, you have two options:

- If you are using ACTION=RESET, you can type ALRCVID without specifying a value. FFST assumes you want to reset the value to the default of "NETVALRT".
- You can type ALRCVID=alertreceiver where alertreceiver is one of the following values:
– If you are using ACTION=CHANGE, alertreceiver is the alert receiver you want to use.
– If you are using ACTION=RESET, alertreceiver is the name of the current alert receiver (the receiver you want reset to the default value).

**DUMPQUAL|DQ=**
The keyword used to indicate the high-level data set qualifier for all FFST dump data sets. (This parameter applies to MVS only.) FFST dump data set names have the format dumpqual.sysname.prodqual.DMPxxxxx. At FFST initialization, the default dumpqual value is “FFST.”

When you use DUMPQUAL, you have two options:

- If you are using ACTION=RESET, you can type DUMPQUAL without specifying a value. FFST assumes you want to reset the value to the default.
- You can type DUMPQUAL=dumpqualifier where dumpqualifier is one of the following values:
  - If you are using ACTION=CHANGE, dumpqualifier is the dump data set qualifier you want to use.
  - If you are using ACTION=RESET, dumpqualifier is the name of the current dump data set qualifier (the qualifier you want reset to the default value).

**DUMPVOL|DV=**
The keyword used to identify the volume serial number on which FFST dump data sets are allocated. (This parameter applies to MVS only.) When you use DUMPVOL, you have two options:

- If you are using ACTION=RESET, you can type DUMPVOL without specifying a value. FFST assumes you want to reset the value to the default.
- You can type DUMPVOL=dump_volume_serial_number where dump_volume_serial_number is one of the following values:
  - If you are using ACTION=CHANGE, dump_volume_serial_number is the volume serial number you want to use.
  - If you are using ACTION=RESET, dump_volume_serial_number is the name of the current volume serial number (the number you want reset to the default value).

**DUMPRCV|DR=**
The keyword used to identify the userid to which FFST CMS dumps will be sent. (This parameter applies to VM only.) When you use DUMPRCV, you have two options:

- If you are using ACTION=RESET, you can type DUMPRCV without specifying a value. FFST assumes you want to reset the value to the default of SYSTEM.
- You can type DUMPRCV=userid where userid is one of the following values:
  - If you are using ACTION=CHANGE, userid is the CMS userid you would like all FFST CMS dumps to be sent to.
  - If you are using ACTION=RESET, userid is the name of the current userid (the userid you want reset to the default value).

**FFST STOP Command Overview**

Although the preferred way to stop FFST is to use a MODIFY command with the ACTION=HALT parameter, you can also use the STOP command. The STOP command has the following format:
The following list explains each of the STOP command parameters:

**STOP**
- The command used to stop execution of the FFST program.

**procname**
- The procedure name for the operation. (This parameter applies to MVS only.) The recommended value is FFST.

**FFST**
- The parameter that indicates the command applies to FFST. (This parameter applies to VM only.)

---

### Using FFST Commands from a Console

You can control FFST operation by issuing commands from an FFST console. The following sections explain how to use these console commands.

**Note:** In this chapter, the phrase "an application known to FFST" refers to an application that has executed a probe statement, or an application specified in an FFST MODIFY command.

### Starting FFST

When used to start FFST, the START command has the following operands:

<table>
<thead>
<tr>
<th>Platform</th>
<th>Command Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVS</td>
<td>STOP</td>
</tr>
<tr>
<td>VM</td>
<td>FFST STOP</td>
</tr>
</tbody>
</table>

For more information about these operands, see “FFST START Command Overview” on page 2-2

**Example 1:** To start FFST in debug mode, type one of the following commands:

- MVS START EPWFFST.FFST,FMODE=DEBUG
- VM FFST START FMODE=DEBUG

**Example 2:** To start FFST/MVS with 100 preallocated pages of fixed storage, type the following command:

```
START EPWFFST.FFST,PAGE=100
```

### Disabling FFST Functions

The MODIFY ACTION=DISABLE command lets you perform the following tasks:

- Disable a probe statement or group of probe statements
- Disable FFST output options
- Disable FFST probe message logging
When you use the MODIFY ACTION=DISABLE command to disable a probe statement or an FFST output option, the APPLID or PROBEID keyword indicates the command's level of control. There are 5 levels of control:

- **FFST (the highest level).** FFST will not process any probes.
- **A specific application.** FFST will not process any probes from a specified application.
- **A group of probe statements that have the same probe identifier prefix.** (The probe identifier prefix is the first 3 characters of the probe identifier.)
- **A group of probe statements that have the same probe identifier prefix and the same source file identifier.** (The source file identifier is the third, fourth, and fifth characters of the probe identifier.)
- **A single probe statement (the lowest level).**

If you disable probe statements or output options at one of these levels, the command also affects all levels below that level. In addition, if you want to use a MODIFY ACTION=ENABLE command to enable the disabled probe statements or output options, you must issue that command at the same level. For example, if you disable an output option at the application level, you cannot enable it for a single probe statement in that application by issuing a MODIFY ACTION=ENABLE command at the probe statement level. Nor can you enable the output option for all the probe statements in the application by issuing a MODIFY ACTION=ENABLE command at the FFST level. You must issue the MODIFY ACTION=ENABLE command at the application level. Knowledge of the probe statement and the number of times the probe has tripped is not cleared as with the MODIFY ACTION=CLEAR command.

**Disabling Probe Statements for FFST**

When you disable probe statements at the FFST level, FFST does not process any triggered software probes.

When used to disable probe statements at the FFST level, the MODIFY command has the following operands:

```
ACTION|A=DISABLE|DIS
APPLID|AP=FFST
```

For example, to disable probe statements at the FFST level, type one of the following commands:

```
MVS  MODIFY FFST,ACTION=DISABLE,APPLID=FFST
VM   FFST MODIFY ACTION=DISABLE,APPLID=FFST
```

**Disabling Probe Statements for an Application**

When you disable probe statements at the application level, FFST does not process any software probes triggered in that application.

When used to disable probe statements at the application level, the MODIFY command has the following operands:

```
ACTION|A=DISABLE|DIS
APPLID|AP=applname
VENDOR|V=vendorname|IBM|IBM CORPORATION
[DEFINE|DEF]
```
For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to disable all the probe statements in IBM’s VTAM* application, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=VTAM, VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE, APPLID=VTAM, VENDOR=IBM

Disabling Probe Statements by Probe Identifier

When you disable a probe statement or probe statements by probe identifier, FFST does not process any triggered software probes with a probe identifier you specified.

When used to disable probe statements by probe identifier, the MODIFY command has the following operands:

ACTION|A=DISABLE|DIS
PROBEID|P=xxxxyyyy\[xxxyyy*/xxx*
VENDOR|V=vendorname|IBM|IBM CORPORATION
[APPLID|AP=applname]
[DEFINE|DEF]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

Example 1: To disable a single probe statement with the probe identifier ISTTSC07, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, PROBEID=ISTTSC/07, VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE, PROBEID=ISTTSC/07, VENDOR=IBM

Example 2: To disable all the probe statements that have a probe identifier prefix of IST and a source file identifier of TSC, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, PROBEID=ISTTSC\[TSC\], VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE, PROBEID=ISTTSC\[TSC\], VENDOR=IBM

Example 3: To disable all the probe statements that have a probe identifier prefix of IST, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, PROBEID=IST\[\], VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE, PROBEID=IST\[\], VENDOR=IBM

Disabling Output Options for FFST

When you disable an output option at the FFST level, FFST does not generate the output for any triggered probe statements.

When used to disable output options at the FFST level, the MODIFY command has the following operands:

ACTION|A=DISABLE|DIS
APPLID|AP=FFST
OPTIONS|OPT=
(DUMP
SYMRC
2-10  OS/390 FFST/MVS V1R2.0 Operations Guide
GENAL
SYMST
SUPDP
(ALL)

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To disable the generic alert output option at the FFST level, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=FFST, OPTIONS=GENAL
VM  FFST MODIFY ACTION=DISABLE, APPLID=FFST, OPTIONS=GENAL

**Example 2:** To disable the symptom record and duplicate dump suppression output options at the FFST level, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=FFST, OPTIONS=(SYMRC,SUPDP)
VM  FFST MODIFY ACTION=DISABLE, APPLID=FFST, OPTIONS=(SYMRC,SUPDP)

**Example 3:** To disable all the output options at the FFST level, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=FFST, OPTIONS=ALL
VM  FFST MODIFY ACTION=DISABLE, APPLID=FFST, OPTIONS=ALL

**Disabling Output Options for an Application**

When you disable an output option at the application level, FFST does not generate the output for any probe statements triggered in the specified application.

When used to disable FFST output options at the application level, the MODIFY command has the following operands:

- **ACTION|A=DISABLE|DIS**
- **APPLID|AP=applname**
- **VENDOR|V=vendorname|IBM|IBM CORPORATION**
- **OPTIONS|OPT=**
  - **DUMP**
  - **SYMRC**
  - **GENAL**
  - **SYMST**
  - **SUPDP**
  - (ALL)
  - [DEFINE|DEF]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To disable the FFST generic alert output option for IBM’s VTAM application, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=GENAL
VM  FFST MODIFY ACTION=DISABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=GENAL

**Example 2:** To disable the FFST symptom record and duplicate dump suppression output options for IBM’s VTAM application, type one of the following commands:

MVS  MODIFY FFST, ACTION=DISABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=(SYMRC,SUPDP)
Example 3: To disable all the FFST output options for IBM's VTAM application, type one of the following commands:

MVS  MODIFY FFST,ACTION=DISABLE,APPLID=VTAM,VENDOR=IBM,OPTIONS=ALL
VM   FFST MODIFY ACTION=DISABLE,APPLID=VTAM,VENDOR=IBM,OPTIONS=ALL

Disabling Output Options by Probe Identifier

When you disable an output option by probe identifier, FFST does not generate the output for any triggered probe statement with a probe identifier you specified.

When used to disable FFST output options by probe identifier, the MODIFY command has the following operands:

ACTION|A=DISABLE|DIS

PROBEID|P=xxxxxxnn|xxxxyy*|xxx*

OPTIONS|OPT=

(DUMP
SYMRC
GENAL
SYMST
SUPDP
|ALL)
VENDOR|V=vendorname|IBM|IBM CORPORATION

[APPLID|AP=applname]
[DEFINE|DEF]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

Example 1: To disable the FFST generic alert output option for a single probe statement with the probe identifier ISTTSC07, type one of the following commands:

MVS  MODIFY FFST,ACTION=DISABLE,PROBEID=ISTTSC07,OPTIONS=GENAL,VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE,PROBEID=ISTTSC07,OPTIONS=GENAL,VENDOR=IBM

Example 2: To disable the FFST symptom record and duplicate dump suppression output options for all the probe statements that have a probe identifier prefix of IST and a source file identifier of TSC, type one of the following commands:

MVS  MODIFY FFST,ACTION=DISABLE,PROBEID=ISTTSC*,OPTIONS=(SYMRC,SUPDP),VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE,PROBEID=ISTTSC*,OPTIONS=(SYMRC,SUPDP),VENDOR=IBM

Example 3: To disable all the FFST output options for probe statements that have a probe identifier prefix of IST, type one of the following commands:

MVS  MODIFY FFST,ACTION=DISABLE,PROBEID=IST*,OPTIONS=ALL,VENDOR=IBM
VM   FFST MODIFY ACTION=DISABLE,PROBEID=IST*,OPTIONS=ALL,VENDOR=IBM
Disabling FFST Probe Message Logging

When used to disable the FFST probe message logging function, the MODIFY ACTION=DISABLE command has the following format:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Operands</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODIFY</td>
<td>F procname ,ACTION</td>
</tr>
</tbody>
</table>

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to disable message logging for DD name FFSTLOG3, type the following commands:

MVS MODIFY FFST,ACTION=DISABLE,LOGID=FFSTLOG3
VM FFST MODIFY ACTION=DISABLE,LOGID=FFSTLOG3

To disable the REUSE function, type the following commands:

MVS MODIFY FFST,ACTION=DISABLE,LOGID=REUSE
VM FFST MODIFY ACTION=DISABLE,LOGID=REUSE

To disable the FFST's message logging function, type the following commands:

MVS MODIFY FFST,ACTION=DISABLE,LOGID
VM FFST MODIFY ACTION=DISABLE,LOGID

Enabling FFST Functions

The MODIFY ACTION=ENABLE command lets you perform the following tasks:

- Enable a probe statement or group of probe statements
- Enable FFST output options
- Enable FFST probe message logging

Note: Probe statements, probe message logging, and all the FFST output options are enabled by default. You only need to enable them if they have been disabled using the MODIFY ACTION=DISABLE command.

When you use the MODIFY ACTION=ENABLE command to enable a probe statement or an FFST output option, the APPLID or PROBEID keyword indicates the command's level of control. There are 5 levels of control:

- FFST (the highest level).
- A specific application.
- A group of probe statements that have the same probe identifier prefix. (The probe identifier prefix is the first 3 characters of the probe identifier.)
- A group of probe statements that have the same probe identifier prefix and the same source file identifier. (The source file identifier is the third, fourth, and fifth characters of the probe identifier.)
- A single probe statement (the lowest level).

When you issue a MODIFY ACTION=ENABLE command, you must issue it at the same level at which you issued the corresponding MODIFY ACTION=DISABLE command.
For example, if you disable probe statements at the application level, you cannot enable a single probe statement in that application by issuing a MODIFY ACTION=ENABLE command at the probe statement level. Nor can you enable all the probe statements in the application by issuing a MODIFY ACTION=ENABLE command at the FFST level. You must issue the MODIFY ACTION=ENABLE command at the application level.

### Enabling Probe Statements for FFST

When you enable probe statements at the FFST level, FFST processes any triggered software probes that were previously disabled at the FFST level, unless they were also disabled at the application level or by probe identifier.

When used to enable probe statements at the FFST level, the MODIFY command has the following operands:

- **ACTION|A=ENABLE|EN**
- **APPLID|AP=FFST**

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to enable probe statements at the FFST level, type one of the following commands:

**MVS**  
MODIFY FFST,ACTION=ENABLE,APPLID=FFST

**VM**  
FFST MODIFY ACTION=ENABLE,APPLID=FFST

### Enabling Probe Statements for an Application

When you enable probe statements at the application level, FFST processes any triggered software probes in the application that were previously disabled at the application level, unless they were also disabled at the FFST level or by probe identifier.

When used to enable all the probe statements at the application level, the MODIFY ACTION=ENABLE command has the following operands:

- **ACTION|A=ENABLE|EN**
- **APPLID|AP=applname**
- **VENDOR|V=vendorname|IBM|IBM CORPORATION**

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to enable all the probe statements in IBM's VTAM application, type one of the following commands:

**MVS**  
MODIFY FFST,ACTION=ENABLE,APPLID=VTAM,VENDOR=IBM

**VM**  
FFST MODIFY ACTION=ENABLE,APPLID=VTAM,VENDOR=IBM

### Enabling Probe Statements by Probe Identifier

When you enable probe statements by probe identifier, FFST processes any triggered software probes previously disabled at the same probe identifier level, unless they were also disabled at one of the following levels:

- FFST level
- Application level
- A higher or lower probe statement level
When used to enable probe statements by probe identifier, the MODIFY command has the following operands:

\[
\text{ACTION}|A=\text{ENABLE}|EN
\]

\[
\text{PROBEID}|P=\text{xxxxyyynn}^{*}|\text{xxx}^{*}
\]

\[
\text{VENDOR}|V=\text{vendorname}^{*}|\text{IBM}^{*}\text{CORPORATION}
\]

\[
\text{APPLID}|AP=\text{applname}^{*}
\]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To enable a single probe statement with the probe identifier ISTTSC07, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=ISTTSC07,VENDOR=IBM

VM  FFST MODIFY ACTION=ENABLE,PROBEID=ISTTSC07,VENDOR=IBM

**Example 2:** To enable all the probe statements that have a probe identifier prefix of IST and a source file identifier of TSC, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=ISTTSC*,VENDOR=IBM

VM  FFST MODIFY ACTION=ENABLE,PROBEID=ISTTSC*,VENDOR=IBM

**Example 3:** To enable all the probe statements that have a probe identifier prefix of IST, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=IST*,VENDOR=IBM

VM  FFST MODIFY ACTION=ENABLE,PROBEID=IST*,VENDOR=IBM

**Enabling Output Options for FFST**

When you enable an output option at the FFST level, FFST generates the output for any software probe for which the output was previously disabled at the FFST level, unless it was also disabled at the application level, by probe identifier, or in the probe statement.

When used to enable output options at the FFST level, the MODIFY command has the following operands:

\[
\text{ACTION}|A=\text{ENABLE}|EN
\]

\[
\text{APPLID}|AP=\text{FFST}
\]

\[
\text{OPTIONS}|OPT=\text{(DUMP SYMRC GENAL SYMST SUPDP |ALL)}
\]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To enable the generic alert output option at the FFST level, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,APPLID=FFST,OPTIONS=GENAL

VM  FFST MODIFY ACTION=ENABLE,APPLID=FFST,OPTIONS=GENAL
Example 2: To enable the symptom record and duplicate dump suppression output options at the FFST level, type one of the following commands:

MVS  MODIFY FFST, ACTION=ENABLE, APPLID=FFST, OPTIONS=(SYMRC, SUPDP)
VM   FFST MODIFY ACTION=ENABLE, APPLID=FFST, OPTIONS=(SYMRC, SUPDP)

Example 3: To enable all the output options at the FFST level, type one of the following commands:

MVS  MODIFY FFST, ACTION=ENABLE, APPLID=FFST, OPTIONS=ALL
VM   FFST MODIFY ACTION=ENABLE, APPLID=FFST, OPTIONS=ALL

Enabling Output Options for an Application

When you enable an output option at the application level, FFST generates the output for any triggered software probes for which the output was previously disabled at the application level, unless the output was also disabled at the FFST level, by probe identifier, or in the probe statement.

When used to enable FFST output options at the application level, the MODIFY command has the following operands:

ACTION|A=ENABLE| EN
APPLID|AP=applname
VENDOR|V=vendorname|IBM|IBM CORPORATION
OPTIONS|OPT=
  (DUMP
    SYMRC
    GENAL
    SYMST
    SUPDP
  |ALL)

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

Example 1: To enable the FFST generic alert output option for IBM’s VTAM application, type one of the following commands:

MVS  MODIFY FFST, ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=GENAL
VM   FFST MODIFY ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=GENAL

Example 2: To enable the FFST symptom record and duplicate dump suppression output options for IBM’s VTAM application, type one of the following commands:

MVS  MODIFY FFST, ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=(SYMRC, SUPDP)
VM   FFST MODIFY ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=(SYMRC, SUPDP)

Example 3: To enable all the FFST output options for IBM’s VTAM application, type one of the following commands:

MVS  MODIFY FFST, ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=ALL
VM   FFST MODIFY ACTION=ENABLE, APPLID=VTAM, VENDOR=IBM, OPTIONS=ALL
Enabling Output Options by Probe Identifier

When you enable an output option by probe identifier, FFST generates the output for any triggered software probes for which the output was previously disabled at the same probe identifier level, unless the output was also disabled at one of the following levels:

- FFST level
- Application level
- A higher or lower probe statement level
- In the probe statement

When used to enable FFST output options by probe identifier, the MODIFY command has the following operands:

- `ACTION|A=ENABLE|EN`
- `PROBEID|P=xxxxyyynn/xxxxyy*/xxx*`
- `OPTIONS|OPT= (DUMP SYMRC GENAL SYMST SUPDP |ALL) VENDOR|V=vendornamelmIBM|IBM CORPORATION`
- `[APPLID|AP=applname]`

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To enable the FFST generic alert output option for a single probe statement with the probe identifier ISTTSC07, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=ISTTSC/zerodot7,OPTIONS=GENAL,VENDOR=IBM

VM   FFST MODIFY ACTION=ENABLE,PROBEID=ISTTSC/zerodot7,OPTIONS=GENAL,VENDOR=IBM

**Example 2:** To enable the FFST symptom record and duplicate dump suppression output options for all the probe statements that have a probe identifier prefix of IST and a source file identifier of TSC, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=ISTTSC/c5197,OPTIONS=(SYMRC,SUPDP),VENDOR=IBM

VM   FFST MODIFY ACTION=ENABLE,PROBEID=ISTTSC/c5197,OPTIONS=(SYMRC,SUPDP),VENDOR=IBM

**Example 3:** To enable all the FFST output options for probe statements that have a probe identifier prefix of IST, type one of the following commands:

MVS  MODIFY FFST,ACTION=ENABLE,PROBEID=IST/c5197,OPTIONS=ALL,VENDOR=IBM

VM   FFST MODIFY ACTION=ENABLE,PROBEID=IST/c5197,OPTIONS=ALL,VENDOR=IBM

Enabling FFST Probe Message Logging

When used to enable the FFST probe message logging function, the MODIFY ACTION=ENABLE command has the following format:

- `Operation Operands`
  - `MODIFY|F procname ,ACTION|A=ENABLE|EN`
For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to enable message logging for DD name FFSTLOG3, type one of the following commands:

MVS
MODIFY FFST, ACTION=ENABLE, LOGID=FFSTLOG3

VM
FFST MODIFY ACTION=ENABLE, LOGID=FFSTLOG3

To enable the REUSE function, type one of the following commands:

MVS
MODIFY FFST, ACTION=ENABLE, LOGID=REUSE

VM
FFST MODIFY ACTION=ENABLE, LOGID=REUSE

To enable FFST’s message logging function, type one of the following commands:

MVS
MODIFY FFST, ACTION=ENABLE, LOGID

VM
FFST MODIFY ACTION=ENABLE, LOGID

Note: Enabling a probe message log will make it available for use the next time FFST loops through to that data set. This command no longer causes a change in the log data set being used.

Clearing Message Logs and Knowledge of Probe Statements

The MODIFY ACTION=CLEAR command lets you perform the following tasks:

- Clear any knowledge of a probe statement. When you clear knowledge of a probe statement, FFST discards all the counter values and any other information associated with that probe statement. The next time the probe statement is executed, FFST treats it as a probe statement that is being executed for the first time. When you clear knowledge of probe statements for FFST or an application, FFST also enables any output options previously disabled at the same level.
- Clear a probe message log and make that message log the active message log.

The following sections explain how to perform these tasks.

Clearing Knowledge of All Probe Statements for FFST

When used to clear knowledge of all probe statements, the MODIFY command has the following operands:

ACTION|A=CLEAR|CL
APPLID|AP=FFST

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to clear knowledge of all the probe statements known to FFST, type one of the following commands:

MVS
MODIFY FFST, ACTION=CLEAR, APPLID=FFST

VM
FFST MODIFY ACTION=CLEAR, APPLID=FFST
Clearing Knowledge of the Probe Statements in an Application

When used to clear any knowledge of probe statements in a specific application, the MODIFY command has the following operands:

ACTION\|A=CLEAR|CL

APPLID|AP=applname

VENDOR\|V=vendorname|IBM|IBM CORPORATION

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to clear any knowledge of all the probe statements in IBM's VTAM application, type one of the following commands:

MVS MODIFY FFST,ACTION=CLEAR,APPLID=VTAM,VENDOR=IBM

VM FFST MODIFY ACTION=CLEAR,APPLID=VTAM,VENDOR=IBM

Clearing Knowledge of Probe Statements by Probe Identifier

When used to clear knowledge of probe statements by probe identifier, the MODIFY command has the following operands:

ACTION\|A=CLEAR|CL

PROBEID\|P=xxxyyynn|xxxyyy*|xxx*

VENDOR\|V=vendorname|IBM|IBM CORPORATION

[APPLID\|AP=applname]

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Example 1:** To clear knowledge of a single probe statement with the probe identifier ISTTSC07, type one of the following commands:

MVS MODIFY FFST,ACTION=CLEAR,PROBEID=ISTTSC07,VENDOR=IBM

VM FFST MODIFY ACTION=CLEAR,PROBEID=ISTTSC07,VENDOR=IBM

**Example 2:** To clear knowledge of all the probe statements that have a probe identifier prefix of IST and a source file identifier of TSC, type one of the following commands:

MVS MODIFY FFST,ACTION=CLEAR,PROBEID=ISTTSC*,VENDOR=IBM

VM FFST MODIFY ACTION=CLEAR,PROBEID=ISTTSC*,VENDOR=IBM

**Example 3:** To clear knowledge of all the probe statements that have a probe identifier prefix of IST, type one of the following commands:

MVS MODIFY FFST,ACTION=CLEAR,PROBEID=IST*,VENDOR=IBM

VM FFST MODIFY ACTION=CLEAR,PROBEID=IST*,VENDOR=IBM

Clearing a Probe Message Log

When used to clear a probe message log, the MODIFY ACTION=CLEAR command has the following format:

**Operation** | **Operands**
---|---
MODIFY|F procname | ACTION\|A=CLEAR|CL

,LOGID\|L=n|FFSTLOGn

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For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to schedule the clearing of message log FFSTLOG3, type one of the following commands:

**MVS**  
MODIFY FFST, ACTION=CLEAR, LOGID=FFSTLOG3

**VM**  
FFST MODIFY ACTION=CLEAR, LOGID=FFSTLOG3

**Note:** Clearing a probe message log will not cause the data set to be immediately cleared, unless it is the current data set. The clear will be done the next time FFST loops through to the specified data set. Also, this command is not needed if you are using the REUSE function.

### Displaying Status

The MODIFY ACTION=DISPLAY command lets you display the operating status for the following entities:

- FFST
- The applications known to FFST
- Individual probe statements

The following sections explain how to display each of these statuses.

### Displaying FFST Status

When used to display FFST status, the MODIFY command has the following operands:

```
[ACTION|A=DISPLAY|D]
APPLID|AP=FFST
[VENDOR|V=vendorname|IBM|IBM CORPORATION]
```

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to display FFST status, type one of the following commands:

**MVS**  
MODIFY FFST, APPLID=FFST

**VM**  
FFST MODIFY APPLID=FFST

The status display for FFST includes the following information:

- FFST’s operating status.
- A list of the applications known to FFST. (Include the VENDOR keyword if you want to limit this list to the applications of a specific vendor.)

Figure 2-1 on page 2-21 and Figure 2-2 on page 2-21 are examples of FFST status displays.
Displaying Application Status

When used to display application status, the MODIFY command has the following operands:

**[ACTION]**<br>
**A=DISPLAY**<br>
**D**

**APPLID**<br>
**AP=applname**

**VENDOR**<br>
**V=vendorname**

**IBM**

**IBM CORPORATION**

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to display the status of IBM's FFSTV1R2 application, type one of the following commands:

**MVS**

`MODIFY FFST,APPLID=FFSTV1R2, VENDOR=IBM`

**VM**

`FFST MODIFY APPLID=FFSTV1R2, VENDOR=IBM`

When FFST displays operating status for an application, it includes the following information:

- The application’s name and operating status
- The probe identifier for each probe statement in the application

Figure 2-3 on page 2-22 and Figure 2-4 on page 2-22 are examples of a status display for IBM application FFSTV1R2.
The following probe IDs have tripped at least once:

- EPWIVP/zerodot4

Figure 2-5 on page 2-23 is an example of a status display for a probe statement with probe identifier EPWIVP03.
Figure 2-5. FFST Probe Statement Status Display (PROBEID=EPWIVP03)

Figure 2-6 is an example of a status display for a group of probe statements whose probe identifiers begin with the characters EPWIVP.

Figure 2-6. FFST Probe Statement Status Display (PROBEID=EPWIVP*)

Figure 2-7 is an example of status displays for a group of probe statements whose probe identifiers begin with the characters EPW.

Figure 2-7. FFST Probe Statement Status Display (PROBEID=EPW*)

Example 1: To display the status of a single probe statement with the probe identifier EPWIVP03, type one of the following commands:

MVS MODIFY FFST,PROBEID=EPWIVP03,VENDOR=IBM
VM FFST MODIFY PROBEID=EPWIVP03,VENDOR=IBM

Example 2: To display the status of all the probe statements that have a probe identifier prefix of EPW and a source file identifier of IVP, type one of the following commands:

MVS MODIFY FFST,PROBEID=EPWIVP*,VENDOR=IBM
VM FFST MODIFY PROBEID=EPWIVP*,VENDOR=IBM

Example 3: To display the status of all the probe statements that have a probe identifier prefix of EPW, type one of the following commands:

MVS MODIFY FFST,PROBEID=EPW*,VENDOR=IBM
VM FFST MODIFY PROBEID=EPW*,VENDOR=IBM

Changing Output Destinations

The MODIFY ACTION=CHANGE command lets you perform the following tasks for the specified platform:

MVS Change the destination of unformatted dumps and generic alerts for FFST or for an application known to FFST.
VM Change the destination of the receiver id for dumps and generic alerts for FFST or for an application know to FFST.
The following sections explain how to perform these tasks.

**Changing Dump Destination for FFST/MVS**

When used to change the destination of unformatted dumps for FFST/MVS, the MODIFY command has the following operands:

- `ACTION|A=CHANGE|CH`
- `DUMPQUAL|DQ=dumpqualifier`
- `DUMPVOL|DV=dump_volume_serial_number`
- `[APPLID|AP=FFST]`

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Note:** You do not have to include both DUMPQUAL and DUMPVOL. You can choose to include just one or the other.

For example, to send FFST unformatted dumps to a data set with high-level qualifier FFSTDUMP and volume serial number R12NB4, type the following command:

```
MODIFY FFST,ACTION=CHANGE,DUMPQUAL=FFSTDUMP,DUMPVOL=R12NB4
```

**Changing Dump Destination for a Specific MVS Application**

When used to change the destination of unformatted dumps for a specific application running in an MVS environment, the MODIFY command has the following operands:

- `ACTION|A=CHANGE|CH`
- `APPLID|AP=applname`
- `[DEFINE|DEF]`
- `VENDOR|V=vendorname|IBM|IBM CORPORATION`
- `DUMPQUAL|DQ=dumpqualifier`
- `DUMPVOL|DV=dump_volume_serial_number`

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

**Note:** You do not have to include both DUMPQUAL and DUMPVOL. You can choose to include just one or the other.

For example, to send FFST unformatted dumps for IBM's VTAM application to a data set with high-level qualifier FFSTDUMP and volume serial number R12NB4, type the following command:

```
MODIFY FFST,ACTION=CHANGE,APPLID=VTAM,VENDOR=IBM,DUMPQUAL=FFSTDUMP,DUMPVOL=R12NB4
```

**Changing Dump Destination for FFST/VM**

When used to change the dump receiver id for FFST/VM, the MODIFY command has the following operands:

- `ACTION|A=CHANGE|CH`
- `DUMPRCV|DR=userid`
- `[APPLID|AP=FFST]`

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.
Note: This command will only change the dump receiver id for FFST probe dumps in CMS. All GCS dumps and unexpected abend dumps are sent to the user id defined at GCS Group build time. If a destination is not specified, the default is the user id that is defined to receive system dumps.

For example, to send FFST dumps to a userid with the name FFSTDUMP, type the following command:

```
FFST MODIFY ACTION=CHANGE,DUMPRCV=FFSTDUMP
```

Changing Dump Destination for a Specific VM Application

When used to change the dump receiver id for FFST/VM, the MODIFY command has the following operands:

Note: This command will only change the dump receiver id for dumps taken in CMS. All GCS dumps and unexpected abend dumps are sent to the user id defined at GCS Group build time.

```
ACTION|A=CHANGE|CH
APPLID|AP=applname
[DEFINE|DEF]
VENDOR|V=vendorname|IBM|IBM CORPORATION
DUMPRCV|DR=userid
```

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

Note: If a destination is not specified, the default is the userid that is setup to receive system dumps.

For example, to send FFST dumps for IBM's VTAM application to a userid with the name FFSTDUMP, type the following command:

```
FFST MODIFY ACTION=CHANGE,APPLID=VTAM,VENDOR=IBM,DUMPRCV=FFSTDUMP
```

Changing Generic Alert Destination for FFST

When used to change the destination of generic alerts for FFST, the MODIFY command has the following operands:

```
ACTION|A=CHANGE|CH
ALRCVID|AL=alertreceiver
[APPLID|AP=FFST]
```

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to send FFST generic alerts to NetView alert receiver RCV001, type one of the following commands:

```
MVS  MODIFY FFST,ACTION=CHANGE,ALRCVID=RCV001
VM   FFST MODIFY ACTION=CHANGE,ALRCVID=RCV001
```

Changing Generic Alert Destination for a Specific Application

When used to change the destination of generic alerts for a specific application, the MODIFY command has the following operands:

```
ACTION|A=CHANGE|CH
APPLID|AP=applname
[DEFINE|DEF]
VENDOR|V=vendorname|IBM|IBM CORPORATION
```

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ALRCVID|AL=alertreceiver

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to send FFST generic alerts for IBM's VTAM application to NetView alert receiver RCV001, type one of the following commands:

**MVS**  
MODIFY FFST, ACTION=CHANGE, APPLID=VTAM, VENDOR=IBM, ALRCVID=RCV001

**VM**  
FFST MODIFY ACTION=CHANGE, APPLID=VTAM, VENDOR=IBM, ALRCVID=RCV001

### Resetting Output Destinations

The MODIFY ACTION=RESET command lets you perform the following tasks for the specified platform:

**MVS**  
- Reset the destination of unformatted dumps and generic alerts for FFST or for an application known to FFST. For FFST, the values are reset to the following FFST defaults:
  - Customized dump destination defaults are a high-level dump data qualifier of FFST and no dump volume.
  - The default alert receiver is NETVALRT.
- For a specific application, the values are reset to the current FFST values.

**VM**  
- Reset the dump destination userid for FFST or an application known to FFST. The default is the system userid setup to receive dumps. Reset the destination of generic alerts for FFST or for an application known to FFST. For FFST, the value is reset to the FFST default alert receiver, NETVALRT. For a specific application, the value is reset to the current FFST value.

**Note:** This command will only reset the dump receiver id for dumps taken in CMS. All GCS dumps and unexpected abend dumps are sent to the user id defined at GCS Group build time.

The following sections explain how to perform these tasks.

### Resetting Dump Destination for FFST/MVS

When used to reset the destination of unformatted dumps for FFST/MVS, the MODIFY command has the following operands:

**ACTION|A=RESET|R**

**DUMPQUAL|DQ=[dumpqualifier]**

**DUMPVOL|DV=[dump_volume_serial_number]**

**[APPLID|AP=FFST]**

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

You do not have to include both DUMPQUAL and DUMPVOL. You can choose to include just one or the other.

**Example 1:** To reset the high-level dump data set qualifier to the FFST default, type the following command:

MODIFY FFST, ACTION=RESET, DUMPQUAL

**Example 2:** To reset the FFST dump data set high-level qualifier and volume to the FFST default, type the following command:

MODIFY FFST, ACTION=RESET, DUMPQUAL, DUMPVOL
Resetting Dump Destination for a Specific MVS Application

When used to reset the destination of unformatted dumps for a specific MVS application, the MODIFY command has the following operands:

- \texttt{ACTION|A=RESET|R}
- \texttt{APPLID|AP=applname}
- \texttt{[DEFINE|DEF]}
- \texttt{VENDOR|V=vendorname|IBM|IBM CORPORATION}
- \texttt{DUMPQUAL|DQ=dumpqualifier}
- \texttt{DUMPVOL|DV=dump_volume_serial_number}

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

The destination is reset to the FFST value. You do not have to include both DUMPQUAL and DUMPVOL. You can choose to include just one or the other.

For example, to reset the dump data set high-level qualifier and volume for IBM's VTAM application to the FFST values, type the following command:

\texttt{MODIFY FFST,ACTION=RESET,APPLID=VTAM,VENDOR=IBM,DUMPQUAL,DUMPVOL}

Resetting Dump Destination for FFST/VM

When used to reset the dump destination userid for FFST/VM, the MODIFY command has the following operands:

- \texttt{ACTION|A=RESET|R}
- \texttt{DUMPRCV|DR=userid}
- \texttt{[APPLID|AP=FFST]}

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

\textbf{Example 1:} To reset the dump destination userid for FFST back to the default, type the following command:

\texttt{MODIFY FFST,ACTION=RESET,DUMPRCV}

Resetting Dump Destination for a Specific VM Application

When used to reset the dump destination id for a specific VM application, the MODIFY command has the following operands:

- \texttt{ACTION|A=RESET|R}
- \texttt{APPLID|AP=applname}
- \texttt{[DEFINE|DEF]}
- \texttt{VENDOR|V=vendorname|IBM|IBM CORPORATION}
- \texttt{DUMPRCV|DR=userid}

\textbf{Note:} This command will only reset the dump receiver id for dumps taken in CMS. All GCS dumps and unexpected abend dumps are sent to the user id defined at GCS Group build time. For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

The destination is reset to the FFST value.
For example, to reset the dump destination id for IBM's VTAM application to the FFST values, type the following command:

```
FFST MODIFY ACTION=RESET,APPLID=VTAM,VENDOR=IBM,DUMPRCV
```

### Resetting Generic Alert Destination for FFST

When used to reset the destination of generic alerts for FFST, the MODIFY command has the following operands:

```
ACTION|A=RESET|R
ALRCVID|AL=[alertreceiver]
[APPLID|AP=FFST]
```

For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to reset the destination of FFST generic alerts to the FFST default, type one of the following commands:

MVS  MODIFY FFST,ACTION=RESET,ALRCVID

VM   FFST MODIFY ACTION=RESET,ALRCVID

### Resetting Generic Alert Destination for a Specific Application

When used to reset the destination of generic alerts for a specific application, the MODIFY command has the following operands:

```
ACTION|A=RESET|R
APPLID|AP=applname
[DEFINE|DEF]
VENDOR|V=vendorname|IBM|IBM CORPORATION
ALRCVID|AL=[alertreceiver]
```

The destination is reset to the FFST value. For more information about these operands, see “FFST MODIFY Command Overview” on page 2-3.

For example, to reset the generic alert destination for IBM's VTAM application to the FFST value, type one of the following commands:

MVS  MODIFY FFST,ACTION=RESET,APPLID=VTAM,VENDOR=IBM,ALRCVID

VM   FFST MODIFY ACTION=RESET,APPLID=VTAM,VENDOR=IBM,ALRCVID

### Stopping FFST

You can stop FFST using any of the following commands:

- MODIFY ACTION=HALT

  If you use this command, FFST completes all currently running and pending processes before it stops. Also, if there are any applications that have an active interface to FFST, FFST does not stop running until each of these applications terminates its interface.

Using the MODIFY ACTION=HALT command is the preferred method for stopping FFST. It has the following formats:

MVS  MODIFY FFST,ACTION=HALT

VM   FFST MODIFY ACTION=HALT
• **MODIFY ACTION=HALT,QUICK**

If you use this command, FFST stops running after the operator replies to a message which verifies this action. (A product cannot terminate its interface to FFST while FFST is not running.) FFST completes both currently running and pending processes before it stops.

The **MODIFY ACTION=HALT,QUICK** command has the following formats:

- **MVS**
  
  ```
  MODIFY FFST,ACTION=HALT,QUICK
  ```

- **VM**
  
  ```
  FFST MODIFY ACTION=HALT,QUICK
  ```

• **STOP**

This command has the same effect as the **MODIFY ACTION=HALT,QUICK** command, except that FFST does not complete pending processes before it stops. The **STOP** command has the following formats:

- **MVS**
  
  ```
  In an MVS environment, use one of the following commands:
  ```

  ```
  STOP FFST
  ```

- **VM**
  
  ```
  In a VM environment, use one of the following commands:
  ```

  ```
  FFST STOP
  ```

---

**Warnings:**

- Using the **MVS CANCEL** or **FORCE** command to stop FFST can cause unpredictable results, including abends, in applications using FFST.

- For **VM**, issuing an **IPL** of the FFST machine can cause unpredictable results, including abends, in applications using FFST.

---

**Using a Startup Command List**

The FFST startup command list is a partitioned data set specified through a DD statement in the FFST JCL for MVS or, for VM, through the **START00** **FFSTPARM** file. This list lets you provide FFST with a set of operational control commands that you want it to process when the FFST Problem Source Identifier (PSI) is started. These commands establish the FFST working environment. The commands you can use in this list are explained in “Using FFST Commands from a Console” on page 2-8.

When you create this command list, keep the following guidelines in mind:

- For **MVS**, the DD name is **FFSTPARM** and the default member name is **START00**, which can be overridden with a parameter on the MVS **START** command.

- For **VM**, the file name is **START00** and the file type is **FFSTPARM**.

- Any record with an asterisk (*) in column 1 is treated as a comment line and is ignored.

- Any record can be **WIDTH=x** (starting in column 1) to specify that FFST looks for commands in columns 1 through x of the following records. (The default value for x is 72.)

- Any non-comment record not containing other FFST commands can contain **TRN=trnmemnm**, where **trnmemnm** is the **FFSTPARM** member name used for the FFST transition ABEND code parameter list. The default name is **TRNSABCD**.

- Any non-comment record not containing other FFST commands can contain **HWR=hwrmemnm**, where **hwrmemnm** is the **FFSTPARM** member name used for the FFST hardware support parameter list. The default name is **EPWHWR01**.

---

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If MVS 5.2 is used, any record can contain system symbolics (such as &SYSNAME, &SYSCLONE, etc.) which will be interpreted (by the ASASYMBM facility) before being processed.

Figure 2-8 is an example of an FFST startup command list for MVS and VM.

* FFST START PARAMETERS
  * DISABLE ALL PROBES THAT HAVE A PROBE IDENTIFIER PREFIX OF EPW
    P=EPW*, V=IBM, A=DIS
  * DISPLAY THE STATUS OF ALL PROBE STATEMENTS THAT HAVE A PROBE IDENTIFIER PREFIX OF EPW
    P=EPW*, V=IBM
  * CHANGE THE WIDTH OF THE COMMAND LINE TO 60 CHARACTERS
    WIDTH=60
  * DISPLAY THE STATUS OF FFST
    AP=FFST
  * DISPLAY THE STATUS OF FFST APPLICATION FFSTVIR2
    AP=FFSTVIR2, V=IBM
  * ENABLE ALL PROBES THAT HAVE A PROBE IDENTIFIER PREFIX OF EPW
    P=EPW*, V=IBM, A=EN
  * DISABLE THE SYMREC FUNCTION FOR APPLICATION FFSTVIR2
    AP=FFSTVIR2, V=IBM, A=DIS, OPT=SYMRC
  * CHANGE THE WIDTH OF THE COMMAND LINE BACK TO 72 CHARACTERS
    WIDTH=72
Chapter 3. Using FFST Output

When an event triggers a software probe, FFST can generate the following output to help you identify, track, and analyze the event:

- A customized dump that is smaller than the traditional full-address space dump for MVS and smaller than the full-virtual machine dump for VM. (FFST initially creates an unformatted dump. You can use the dump formatting tool provided with FFST to create a formatted version of the dump. For more information, see “Formatting a Customized Dump for FFST/MVS” or “Formatting a Customized Dump for FFST/VM” on page 3-8.
- A symptom string that uniquely identifies the event. FFST places the symptom string in the following output:
  - The formatted customized dump
  - The symptom record
  - The console message
  - The probe message log
  - The generic alert (if you have NetView)
- A symptom record placed in SYS1.LOGREC for MVS or sent to the OPERSYMP machine for VM. This symptom record contains the symptom string and other information about the event.
- A console message that contains the application name, probe identifier, and primary symptom string.
- A probe message log entry. The probe message log records each probe statement that is executed.
- A Systems Network Architecture (SNA) generic alert which can be viewed.

In addition, this chapter also documents return codes for FFST initialization, executed probe statements, and FFST termination.

Unless application programmers disabled a particular type of output for a specific software probe during product development, you can enable each of these types of output using a set of FFST commands. You can also use these commands to disable any of the FFST outputs. For more information, see Chapter 2, “Controlling FFST Operation.”

This chapter explains how to use the different types of FFST output.

Note: FFST also generates various messages that contain information about FFST operation. Appendix A, “FFST Messages,” provides explanations and suggested responses for these messages.

Using the Customized Dump

Before you can read an FFST customized dump, you must format it using the FFST/MVS dump formatter, EPWDMPFM, or the FFST/VM dump formatter, EPWDMPFV. The following sections explain how to format an unformatted dump and how to use the formatted output.

Formatting a Customized Dump for FFST/MVS

The EPWDMPFM program is an Interactive Problem Control System command list (IPCS CLIST) that lets you format unformatted FFST/MVS dumps. When FFST/MVS generates a customized dump, it saves the unformatted dump in a dynamically allocated data set. EPWDMPFM reads the dump data set and writes the formatted output to an output data set. You can view this data set using the online time-sharing option (TSO) browse function or the MVS utility, IEBGENER.
You can run EPWDMPFM under IPCS or under TSO. When run under TSO (as shown in the examples in this section), EPWDMPFM enters IPCS, formats the dump, and then exits IPCS. In addition, if you want to run EPWDMPFM from a TSO ID, you must first concatenate the FFST/MVS CLIST library to your TSO library list (SYSPROC) and the FFST/MVS panel library to your TSO panel library list (ISPLLIB).

The following sections explain how to perform the following tasks:

- Use the EPWDMPFM program to format an unformatted dump.
- Use the online help provided with EPWDMPFM.
- Print a customized dump after it is formatted.

Running EPWDMPFM for FFST/MVS

To format a customized dump with the EPWDMPFM program, perform the following steps:

1. Type EPWDMPFM on the TSO command line, as shown in Figure 3-1, and press Enter.

   Note: You may also invoke EPWDMPFM from the IPCS command line. In this case, the IPCSPRINT should have already been set up and you may use the default dump as the data set to format.

![Figure 3-1. Invoking EPWDMPFM](image)

2. Fill in the fields on the FFST DUMP FORMATTER screen (Figure 3-2 on page 3-3).
Figure 3-2. FFST DUMP FORMATTER Screen for EPWDMPFM

Note: You can process TSO commands from this screen without exiting the EPWDMPFM dump formatting routine.

DUMP LIBRARY NAME
Type the name of the file that contains the customized dump. The dump is the input for the dump formatter. (If another dump data set was specified previously, the name of that data set appears in this field. To use a new dump data set, type the new name over the existing name.)

DUMP MEMBER NAME
Type the member name for the dump if it is a member of a partitioned data set. (Some components of FFST/MVS use partitioned data sets for dumps taken because of FFST detected problems).

OUTPUT DESTINATION
Type one of the following characters to indicate where you want FFST/MVS to send the formatted output:

T EPWDMPFM displays the formatted output on your terminal.

P EPWDMPFM places the formatted output in an output data set. If the IPCSPRNT data set is already set up, EPWDMPFM stores the formatted output there. Otherwise, you can specify the name of the output data set on the FFST DUMP OUTPUT DATA SET screen (Figure 3-3 on page 3-4).

B EPWDMPFM displays the formatted output on your terminal and places it in an output data set.

Type Y (Yes) or N (No) beside the following options:

SYMPTOM STRING DATA will be part of output
If you type Y, the formatted dump includes the primary symptom string and, if one exists, the secondary symptom string.
FFST WORK AREA will be part of output
If you type Y, the formatted dump includes the FFST/MVS work area.

Note: If a problem occurs during FFST/MVS execution, FFST/MVS support might require the FFST/MVS work area as a debugging aid.

DATA STRUCTURE TABLE(S) will be part of output
If you type Y, the formatted dump includes the data structure table (DST) and the default DST (if a default DST exists).

Note: If a problem occurs during FFST/MVS execution, FFST/MVS support might require the DSTs as a debugging aid.

AREA AROUND REGISTERS will be part of output
If you type Y, the formatted dump includes an X'800' byte area around each register.

DATA STRUCTURES will be part of output
If you type Y, the formatted dump includes the data structures requested by the probe statement.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press Enter.

If you typed P or B in the OUTPUT DESTINATION field and the IPCSPRNT data set is not already set up, the FFST DUMP OUTPUT DATA SET screen (Figure 3-3) appears.

![FFST DUMP OUTPUT DATA SET Screen](image)

The OUTPUT DATA SET NAME field contains either a previously specified data set name or a data set name supplied by FFST/MVS.

An FFST/MVS-supplied data set name appears in the format `userid.OUTPUT.qual3.qual4`. If the unformatted dump data set is sequential, `qual3` and `qual4` are the last 2 qualifiers of the unformatted dump data set. If the unformatted dump data set is partitioned, `qual3` is the last qualifier of the unformatted dump data set, and `qual4` is the dump member name.
Fill in the following fields:

**OUTPUT DATA SET NAME**
Make sure the name in this field is the name of the data set in which you want EPWDMPFM to store the formatted output.

If you want to change the data set name, type the new name over the existing name. The name you type will appear automatically the next time you use EPWDMPFM.

If a user-specified data set name appears in this field and you want to regenerate the FFST/MVS-supplied data set name, type blanks over the current data set name and press **Enter**. The FFST/MVS-supplied data set name appears in the field.

**DISPOSITION**
Type one of the following options:

**NEW** Type NEW if you typed the name of a new output data set in the OUTPUT DATA SET NAME field. If you type NEW in the DISPOSITION field, you also need to perform the following steps:

- **a** In the VOLUME SERIAL WHERE DATA SET WILL BE STORED field, type the serial number of the volume where EPWDMPFM should store the output data set or leave it blank to use UNIT(SYSDA).

- **b** In the NUMBER OF PRIMARY BLOCKS TO BE ALLOCATED field, type the number of primary blocks EPWDMPFM should allocate for the data set.

- **c** In the NUMBER OF SECONDARY BLOCKS TO BE ALLOCATED field, type the number of secondary blocks EPWDMPFM should allocate for the data set.

**Note:** For BLKSZ, RECFM, and LRECL, EPWDMPFM uses the values required for an IPCSPRNT data set.

**OLD** Type OLD if you want to replace the contents of the existing output data set with the new formatted output.

**MOD** Type MOD if you want to append the new formatted output to the contents of the existing output data set.

When you finish, Press **Enter**.

If this is the first time the dump formatter is being used or if IPCS cannot find the previously specified dump directory, the FFST DUMP DIRECTORY screen (Figure 3-4 on page 3-6) appears.
If the dump formatter is being used for the first time, the default dump directory
(userid.DMPDIR) appears in the DUMP DIRECTORY field.

If a user previously specified a dump directory that IPCS cannot find, the name of that directory
appears in the DUMP DIRECTORY field. (This situation occurs, for example, if you delete the
previously specified dump directory.)

Make sure the name in the DUMP DIRECTORY field is the name of the directory you want to
use.

If you want to change the directory, type the new name over the existing name. EPWDMPFM
will automatically use that directory the next time you format a dump.

If you type the name of a new directory, indicate its volume serial number, buffer space, and
control interval size by filling in the appropriate fields.

When you finish, Press Enter.

5 Look for the following messages, which indicate when the dump formatting process starts
and when it is complete:

EPW9573I ENTERING IPCS
EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE
EPW9576I EXITING IPCS

Note: Messages EPW9573I and EPW9576I appear only if you are not already running
EPWDMPFM under IPCS. If EPWDMPFM does not display any of the messages, an error
message should appear below the TSO command line. When an error message appears,
see Appendix A, “FFST Messages,” for information about the error; then correct the
problem and retry the process.

6 When FFST/MVS message EPW9575I appears indicating that dump formatting is
complete, press Enter to use the browse function.

You can view the output online and, if necessary, print it using the MVS program
IEBPTPCH. For more information, see “Printing a Formatted Dump for FFST/MVS” on
page 3-7.

When you finish looking at the formatted dump, press F3 to redisplay the FFST DUMP
FORMATTER screen, and perform one of the following steps:
- Repeat the process to format a different dump or format the same dump using different options.
- Press F3 to exit the FFST DUMP FORMATTER screen.

FFST/MVS saves the values specified on this screen as new EPWDMPFM defaults and redispalyes the TSO COMMAND PROCESSOR screen (Figure 3-1 on page 3-2).

### Getting Help with EPWDMPFM for FFST/MVS

FFST/MVS provides help panels to assist you in using the EPWDMPFM program. To access these panels:

1. Perform one of the following steps:
   - Press F1 at any time during the formatting process.
   - Type help on the TSO command line and press Enter.

   A panel similar to the one in Figure 3-5 appears.

2. Press Enter to reveal the next panel (if one exists).

3. When you finish, press F3 to return to the screen from which you requested help.

### Printing a Formatted Dump for FFST/MVS

After you use EPWDMPFM to format a customized dump, you can use the MVS program IEBPTPCH to print the results. See Figure 3-6 on page 3-8 for a sample job to print a member from the output data set.
Formatting a Customized Dump for FFST/VM

The EPWDMPFV program is a DUMPSCAN macro that lets you format unformatted FFST/VM dumps. The customized dumps that FFST/VM generates are the same as other VM dumps, except that they use only certain address ranges. When the unformatted dump appears in your reader, you can receive it using the DUMPLOAD facility and invoke the DUMPSCAN facility to display it in an XEDIT session. You can then invoke EPWDMPFV to format the dump. EPWDMPFV places the formatted output into the XEDIT file created by DUMPSCAN.

The following sections explain how to:

- Use the EPWDMPFV program to format an unformatted dump.
- Use the online help provided with EPWDMPFV.

Running EPWDMPFV for FFST/VM

To format a customized dump with the EPWDMPFV program, perform the following steps:

1. Type the following command on the CMS command line and press Enter:

   DUMPSCAN PRBxxxxx

   where xxxxx is the problem number generated by the DUMPLOAD facility for the FFST/VM dump.

   DUMPSCAN opens an XEDIT session.

2. Type EPWDMPFV on the XEDIT command line, as shown in Figure 3-7 on page 3-9, and press Enter.
Figure 3-7. Invoking EPWDMPFV

3 Fill in the fields on the FFST DUMP FORMATTER screen (Figure 3-8).

Figure 3-8. FFST DUMP FORMATTER Screen for EPWDMPFV

Type Y (Yes) or N (No) beside the following options:

**SYMPTOM STRING DATA will be part of output**
If you type Y, the formatted dump includes the primary symptom string and, if one exists, the secondary symptom string.

**FFST WORK AREA will be part of output**
If you type Y, the formatted dump includes the FFST/VM work area.

**Note:** If a problem occurs during FFST/VM execution, FFST/VM support might require the FFST/VM work area as a debugging aid.

**DATA STRUCTURE TABLE(S) will be part of output**
If you type Y, the formatted dump includes the data structure table (DST) and the default DST (if a default DST exists).
Note: If a problem occurs during FFST/VM execution, FFST/VM support might require the DSTs as a debugging aid.

**AREA AROUND REGISTERS will be part of output**
If you type Y, the formatted dump includes an X'800' byte area around each register.

**DATA STRUCTURES will be part of output**
If you type Y, the formatted dump includes the data structures requested by the probe statement.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.

4 Look for the following messages, which indicate when the dump formatting process starts and when it is complete:

EPW9574I DUMP FORMATTING IN PROGRESS
EPW9575I DUMP FORMATTING COMPLETE

5 When FFST/VM message EPW9575I appears, indicating that dump formatting is complete, clear the screen and use normal XEDIT scrolling to browse the formatted output. To invoke the dump formatter again for the same dump (perhaps to select a different option), repeat the procedure beginning with step 2.

**Getting Help with EPWDMPFV for FFST/VM**

FFST/VM provides a help panel to assist you in using the EPWDMPFV program. To access this panel, perform the following steps:

1 Press **F1** when the FFST DUMP FORMATTER panel appears. A panel similar to the one in Figure 3-9 appears.

For an example of a formatted dump that contains this information, see “Using a Formatted Dump” on page 3-11.

When you finish, press **Enter**.
Using a Formatted Dump

When you format a dump for FFST/MVS, IPCS saves the formatted dump in the dump data set you specify. When you format a dump for FFST/VM, it places the output in the current XEDIT session, which you can file.

A formatted customized dump can contain the following information:

- Primary and secondary symptom strings. (When it appears in the customized dump, the secondary symptom string contains the register values for the triggered software probe.)
- The FFST work area.
- The applicable DSTs.
- The area around the data registers.
- The data structures specified in the DST.

Figure 3-10 on page 3-12 is a sample dump that contains all the information in the preceding list. The sample is an FFST/MVS dump formatted using EPWDMPFM. FFST/VM dumps formatted with EPWDMPFV have a similar format. For information about specifying which information you want to include in a dump, see “Running EPWDMPFM for FFST/MVS” on page 3-2 or “Running EPWDMPFV for FFST/VM” on page 3-8.
Figure 3-10 (Part 1 of 7). Sample Customized Dump
Figure 3-10 (Part 2 of 7). Sample Customized Dump
Figure 3-10 (Part 3 of 7). Sample Customized Dump
Figure 3-10 (Part 7 of 7). Sample Customized Dump

Using the Symptom String

A symptom string consists of a set of keywords and values that appear in the following format:

```
  kkkk/vvvvvvvvv  kkkk/vvvvvvvvv  kkkk/vvvvvvvvv
  . . .
```

where

- `kkkk` is a keyword.
- `vvvvvvvv` is the value associated with that keyword.

Figure 3-11 provides a list of standard FFST keywords and their meanings.
<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Abend code</td>
<td>AB/U0001</td>
</tr>
<tr>
<td>ADRS</td>
<td>Address</td>
<td>ADRS/000001C0</td>
</tr>
<tr>
<td>DEVS</td>
<td>Device type</td>
<td>DEVS/3380</td>
</tr>
<tr>
<td>FLDS</td>
<td>Field</td>
<td>FLDS/ASCB</td>
</tr>
<tr>
<td>LVLS</td>
<td>Product Level</td>
<td>LVLS/101</td>
</tr>
<tr>
<td>MS</td>
<td>Message</td>
<td>MS/IEF244I</td>
</tr>
<tr>
<td>OPCS</td>
<td>Program OP code</td>
<td>OPCS/02</td>
</tr>
<tr>
<td>OVS</td>
<td>Overlaid storage</td>
<td>OVS/CBLOCK01</td>
</tr>
<tr>
<td>PCSS</td>
<td>Any statement</td>
<td>PCSS/PF10</td>
</tr>
<tr>
<td>PIDS</td>
<td>Product ID</td>
<td>PIDS/569504402</td>
</tr>
<tr>
<td>PRCS</td>
<td>Return, status, condition code</td>
<td>PRCS/0000UNIT</td>
</tr>
<tr>
<td>REGS</td>
<td>Registers</td>
<td>REGS/GR15</td>
</tr>
<tr>
<td>RIDS</td>
<td>Resource identifications</td>
<td>RIDS/NUCLEU#L</td>
</tr>
<tr>
<td>SIG</td>
<td>Signal</td>
<td>SIG/ALARM</td>
</tr>
<tr>
<td>VALU</td>
<td>Field, register value</td>
<td>VALU/B01110101</td>
</tr>
<tr>
<td>WS</td>
<td>Coded wait</td>
<td>WS/E003F</td>
</tr>
</tbody>
</table>

Because duplicate events have identical primary symptom strings, the primary symptom string is the key to distinguishing between a new event and a known or duplicate event. If you request duplicate dump suppression, FFST uses the primary symptom string to identify duplicate events. In addition, you can use the primary symptom string to search the IBM problem database to determine whether the event is a known problem and whether any information about how to solve the problem is available.

The primary symptom string appears in the following FFST output:

- Message EPW0404I. This message appears on the console and in the probe message log. For more information, see Appendix A, “FFST Messages,” “Using the Console Message” on page 3-27, and “Using the Probe Message Log Entry” on page 3-27.
- The symptom record. For more information, see “Using the Symptom Record” on page 3-20.
- The customized dump, if requested. For more information, see “Using the Customized Dump” on page 3-1.
- If you have NetView, the generic alert. For more information, see “Using the Generic Alert” on page 3-28.

Figure 3-12 and Figure 3-13 are examples of primary symptom strings.

![Sample Primary Symptom String for FFST/MVS](Image)

![Sample Primary Symptom String for FFST/VM](Image)
The primary symptom strings in Figure 3-12 provides the following information about the event that caused the probe statement to be executed:

- The product identifier and level of the product that contains the triggered software probe (for FFST/MVS, 569504402, level 101; for FFST/VM, 568415800, level 120)
- The probe identifier (EPWIVP01)
- The name of the module that contains the triggered software probe (EPWIVP)
- A message indicating that the triggered software probe is a test probe for FFSTIVP.

The secondary symptom string appears in the following FFST output:

- Customized dump
- Symptom record
- Console message
- Probe message log

When it appears in the customized dump and the symptom record, the secondary symptom string contains the register values for the triggered software probe. These register values do not appear in the console message and the probe message log.

Figure 3-14 is an example of a secondary symptom string without register values.

```
FLDS/CPUMODEL VALU/H3090
```

Figure 3-14. Sample Secondary Symptom String

The secondary symptom string provides additional information about the event, in this case the model number of the central processing unit (CPU).

---

### Using the Symptom Record

When a probe statement is executed, FFST generates a symptom record using IBM's Symptom Record Architecture. The following sections explain how to use FFST/MVS and FFST/VM symptom records.

#### Using FFST/MVS Symptom Records

FFST places FFST/MVS symptom records in LOGREC, the MVS error record log. You can format and view a symptom record generated by FFST/MVS using the Environmental Record Editing and Printing (EREP) feature of the MVS operating system. For more information about this feature, refer to the Environmental Record Editing and Printing Program (EREP) User's Guide and Reference Manual (GC28-1378). Figure 3-15 illustrates a sample EREP job you can use to format and print a symptom record generated by FFST/MVS.

```
//STEP EXEC PGM=IFCEREP1,REGION=124K,PARM=('HIST=N,PRINT=PS,TYPE=S,ACC=N')
//SERLOG DD DSN=SYS1.LOGREC,DISP=(OLD,KEEP),UNIT=DISK,VOL=SER=EREPLB2
//DIRECTWK DD UNIT=VIO,SPACE=(CYL,(5))
//EREPPT DD SYSOUT=/c5197,DCB=BLKSIZE=133
//TOURIST DD SYSOUT=/c5197,DCB=BLKSIZE=133
//SYSIN DD DUMMY
//ACCDEV DD DUMMY
//ACCIN DD DUMMY
```

Figure 3-15. Sample EREP Job for Printing an FFST/MVS Symptom Record
An FFST/MVS symptom record contains the following sections:

- The header
- The search argument abstract
- System environment information
- Component information
- Symptom strings
- Free-format component information
- The summary

The following sections provide examples of the different parts of a symptom record and explain what they mean.

**The FFST/MVS Symptom Record Header**

The header section of an FFST/MVS symptom record provides the following information:

- The date the symptom record was created
- The time and date that the event occurred
- The version and release number of the system control program (SCP)
- The model and serial number of the CPU in which the event occurred

Figure 3-16 is an example of an FFST/MVS symptom record header.

```
TYPE: SYMPTOM RECORD REPORT: SOFTWARE EDIT REPORT DAY YEAR
REPORT DATE: 118 92
SCP: VS 2 REL 3 ERROR DATE: 118 92
MODEL: 3090
SERIAL: 070115
TIME: 11:09:32.32
```

*Figure 3-16. FFST/MVS Symptom Record Header*

**The FFST/MVS Search Argument Abstract**

The search argument abstract is identical to the primary symptom string, and IBM customers can use it to search the IBM problem database to see whether the event has occurred before.

Figure 3-17 is an example of an FFST/MVS search argument abstract.

```
SEARCH ARGUMENT ABSTRACT:
PIDS/569504402 LVLS/101 PCSS/EPWIVP01 RIDS/EPWIVP FLDS/TEST
FLDS/PROBE FLDS/FOR FLDS/FFSTIVP
```

*Figure 3-17. FFST/MVS Symptom Record Search Argument Abstract*

**FFST/MVS Symptom Record System Environment Information**

The FFST/MVS symptom record provides the following information about the system environment in which the event occurred:

- The date and time of the event
- The model and serial number of the CPU
- The name of the system, in this case NONAME
- The base control program (BCP), in this case MVS
- The release number or service level of the routine that failed
- The architecture level for the system data and component data
- System data (zeros for FFST)
Figure 3-18 on page 3-22 is an example of system environment information as it appears in an FFST/MVS symptom record.

**SYSTEM ENVIRONMENT:**
- CPU MODEL: 3090
- DATE: 118 92
- CPU SERIAL: 070115
- TIME: 11:09:32.32
- SYSTEM: FFSTESA1
- BCP: MVS
- RELEASE LEVEL OF SERVICE ROUTINE: HBB4410
- SYSTEM DATA AT ARCHITECTURE LEVEL: 10
- COMPONENT DATA AT ARCHITECTURE LEVEL: 10
- RECORD IS ASSOCIATED WITH SVC DUMP
- SYSTEM DATA: 00000000 00000000 |........|

Figure 3-18. System Environment Information in an FFST/MVS Symptom Record

### FFST/MVS Symptom Record Component Information

An FFST/MVS symptom record provides the following information about the component in which the event occurred:

- The component identifier and release number or
- The program identifier and release number or
- A description of the event that includes the following information:
  - The type of event, in this case INCORROUT for an incorrect output error
  - The ID number for the component in which the event occurred
  - The name of the routine that detected the event

Figure 3-19 is an example of component information as it appears in an FFST/MVS symptom record.

**COMPONENT INFORMATION:**
- COMPONENT ID: 569504402
- COMPONENT RELEASE LEVEL: 101
- DESCRIPTION OF FUNCTION: INCORROUT 569504402 EPWIVP

Figure 3-19. Component Information in an FFST/MVS Symptom Record

### FFST/MVS Symptom Record Symptom String Information

An FFST/MVS symptom record provides the following symptom string information:

- The primary symptom string and the secondary symptom string (if a secondary symptom string exists)
- An explanation of each of the values associated with the symptom string keywords

Figure 3-20 on page 3-23 is an example of symptom string information as it appears in an FFST/MVS symptom record.
### PRIMARY SYMPTOM STRING:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom Data</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIDS/569504402</td>
<td>569504402</td>
<td>COMPONENT IDENTIFIER</td>
</tr>
<tr>
<td>LVLS/101</td>
<td>101</td>
<td>PROGRAM PRODUCT RELEASE LEVEL</td>
</tr>
<tr>
<td>PCSS/EPWVP01</td>
<td>EPWVP01</td>
<td>SOFTWARE STATEMENT</td>
</tr>
<tr>
<td>RIDS/EPWVP</td>
<td>EPWVP</td>
<td>ROUTINE IDENTIFIER</td>
</tr>
<tr>
<td>FLDS/TEST</td>
<td>TEST</td>
<td>DATA FIELD NAME</td>
</tr>
<tr>
<td>FLDS/PROBE</td>
<td>PROBE</td>
<td>DATA FIELD NAME</td>
</tr>
<tr>
<td>FLDS/FOR</td>
<td>FOR</td>
<td>DATA FIELD NAME</td>
</tr>
<tr>
<td>FLDS/FFSTIVP</td>
<td>FFSTIVP</td>
<td>DATA FIELD NAME</td>
</tr>
</tbody>
</table>

### SECONDARY SYMPTOM STRING:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom Data</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGS/GR13</td>
<td>H02F00E00</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR14</td>
<td>02F00E00</td>
<td>ERROR RELATED HEXADECMIAL VALUE</td>
</tr>
<tr>
<td>REGS/GR15</td>
<td>82F006BA</td>
<td>ERROR RELATED HEXADECMIAL VALUE</td>
</tr>
<tr>
<td>REGS/GR01</td>
<td>01</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR02</td>
<td>02</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR06</td>
<td>00</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR07</td>
<td>00</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR08</td>
<td>00</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
<tr>
<td>REGS/GR09</td>
<td>00</td>
<td>GENERAL PURPOSE REGISTER</td>
</tr>
</tbody>
</table>

*Figure 3-20 (Part 1 of 2). FFST/MVS Symptom Record Symptom String Information*
REGS/GR/03 03 GENERAL PURPOSE REGISTER
VALU/H/009F6964 009F6964 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/04 04 GENERAL PURPOSE REGISTER
VALU/H/009F6940 009F6940 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/05 05 GENERAL PURPOSE REGISTER
VALU/H/009F3E88 009F3E88 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/06 06 GENERAL PURPOSE REGISTER
VALU/H/02F00D54 02F00D54 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/07 07 GENERAL PURPOSE REGISTER
VALU/H/00FD6978 00FD6978 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/08 08 GENERAL PURPOSE REGISTER
VALU/H/009F3190 009F3190 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/09 09 GENERAL PURPOSE REGISTER
VALU/H/080FF1C8 080FF1C8 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/10 10 GENERAL PURPOSE REGISTER
VALU/H/00000000 00000000 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/11 11 GENERAL PURPOSE REGISTER
VALU/H/009F3E88 009F3E88 ERROR RELATED HEXADECIMAL VALUE
REGS/GR/12 12 GENERAL PURPOSE REGISTER
VALU/H/082F00548 082F00548 ERROR RELATED HEXADECIMAL VALUE

Figure 3-20 (Part 2 of 2). FFST/MVS Symptom Record Symptom String Information

For more information about using symptom strings, see “Using the Symptom String” on page 3-18.

FFST/MVS Symptom Record Free-Format Component Information

FFST/MVS symptom record free-format component information, as shown in Figure 3-21, is a hexadecimal dump of the symptom record.

FREE FORMAT COMPONENT INFORMATION:
HEX DUMP OF RECORD:
HEADER

+000 4C831800 00000000 0092132F 13214347 |<C.......K......|
+010 FF070115 30900000 |........|

SYMPTOM RECORD
+000 E2D9F3F 009F0F0F7 F6F1F1F5 F6FFCA5B |SR3090070115...$|
+010 A5ACEBA5 DAB14602 40404040 40404040 |V..V....|
+020 4940C6C6 E2E3C5E2 C1F1F5F7 F6FFC8C2 |FFSTESA15752HB|
+030 C2F4F4F1 F0400080 E2E5C340 C4E0D4D7 |B4410..SVC DUMP|
+040 F1F00030 00640070 00500004 01A90131 |10........).M.Z..|
+050 000402DA 00000000 00000000 00000000 |..............|
+060 00000000 00000000 00000000 00000000 |..............|
+070 E2F9F2F1 F1F0F0F0 009F0F0F0 00000000 |SR2110569504401.|
+080 F1F0F140 00000000 00000000 00000000 |101 ............|
+090 00000000 00000000 00000000 10C9D5C3 |............INC|

Figure 3-21 (Part 1 of 2). FFST/MVS Symptom Record Free-Format Component Information
The FFST/MVS Symptom Record Summary

The FFST/MVS symptom record summary provides a summary of each software record. Figure 3-22 is an example of a symptom record summary.

**TYPE:** SYMPTOM RECORD  **REPORT:** SOFTWARE SUMMARY  **DAY** YEAR

**SCP:** VS 2 REL 3  **MODEL:** N/A  **PERIOD FROM:** 118 92

**SERIAL:** N/A  **TO:** 118 92

COUNT OF SYMPTOM RECORDS PROCESSED: 0001
COUNT OF UNIQUE SYMPTOM STRINGS: 0002
PIDS/56652891 LVLS/103 PCSS/ISTTSC01 RIDS/ISTTSCCM FLDS/PIU FLDS/INVALID PIDS/569504401 LVLS/101 PCSS/EPWIVP01 RIDS/EPWIVP FLDS/TEST FLDS/PROBE


Figure 3-22. Symptom Record Summary

---

**Chapter 3. Using FFST Output**

---
Using FFST/VM Symptom Records

FFST/VM records symptom records on the OPERSYMP machine. To view one of these symptom records, your user ID must have access to the OPERSYMP A-disk or the disk where the symptom records are stored. When you have the proper access, you can use the VIEWSYM command to look at FFST/VM symptom records. When you type VIEWSYM on a VM command line and press Enter, the Symptom Viewing Facility - Command Menu panel appears. For information about using this facility, refer to the Dump Viewing Facility Operation Guide and Reference, SC24-5530.

An FFST/VM symptom record contains the following information:

- A header that provides basic information about the event that triggered the software probe
- The primary symptom string
- The secondary symptom string (if one exists)

Figure 3-23 is an example of an FFST/VM symptom record as it is displayed by the Symptom Viewing Facility.

TOD CLOCK . . A764FD922736F304 DATE. . . . 04/26/93
TIME ZONE . . 0 TIME. . . . 17:44:44
CPU MODEL . . 3090 BASE SCP. . . 5684
CPU SERIAL. . 172604 NODEID. . . FASTVM03

DUMP TYPE . . SVC DUMP

-----------------------------------------------------------------------
PRIMARY SYMPTOM STRING:
  PIDS/568415800
  LVLS/120
  PCSS/EPWIVP01
  RIDS/EPWIVP
  FLDSP/TEST
  FLDSP/PROBE
  FLDSP/FOR
  FLDSP/FFSTIVP

SECONDARY SYMPTOM STRINGS:
  REGS/GR13
  VALU/H00010E3C
  REGS/GR14
  VALU/H800106F6
  REGS/GR15
  VALU/H00000000
  REGS/GR00
  VALU/H91000000
  REGS/GR01
  VALU/H000106FC
  REGS/GR02
  VALU/H00FDE190
  REGS/GR03
  VALU/H00FDE164
  REGS/GR04
  VALU/H00FE3400

Figure 3-23. Sample FFST/VM Symptom Record
Using the Console Message

When a probe statement is executed, FFST displays a message on the operator's console. This message contains the following information:

- The name of the detecting application
- The probe identifier of the triggered software probe
- The name of the data set and volume that contain the unformatted dump (MVS only)
- The primary symptom string
- The secondary symptom string (if one exists)

Figure 3-24 is an example of an FFST/MVS console message. The only difference between the FFST/MVS console message and an FFST/VM console message is that the second and third lines (EPW0406I and EPW0407I) would not appear in FFST/VM.

Using the Probe Message Log Entry

When a probe statement is executed, FFST adds an entry to the probe message log (for example, FFSTLOG1 or FFSTLOG2). The probe message log entry is identical to the console message. For information about how to use the information in the entry, see “Using the Console Message.”

FFST will use up to 9 probe message log data sets. These are specified in the FFST start-up JCL as DD names FFSTLOG1 through FFSTLOG9. FFST will only use the data sets that are sequentially numbered starting with FFSTLOG1. That is, if FFSTLOG1, FFSTLOG2, FFSTLOG3 and FFSTLOG5 DD statements are specified, only FFSTLOG1, FFSTLOG2, and FFSTLOG3 will be used. FFST will not recognized FFSTLOG5 as being specified. FFST initially starts with the FFSTLOG1 data set. When this data set fills up, it issues a message and automatically switches to the FFSTLOG2 data set. When this fills up, FFST will switch to the next data set. When the last data set fills up, FFST will switch back to FFSTLOG1. Each data set must be defined as fixed, LRECL 80 and BLOCKSIZE any multiple of 80. There is a message log function called REUSE. If this function is disabled, FFST will not reuse a data set that contains data. That is, when a message log switch takes place, and the next log contains data, message log processing will be temporarily suspended. FFST Will use that data set when it has been cleared (either with an ACTION=CLEAR modify command or by deleting all data by hand).

FFST log data sets can be individually disabled, enabled or cleared. When a data set is disabled, FFST will skip over that data set when it performs log switching. If it is the current data set, it will switch to the next enabled data set. If an ACTION=CLEAR modify command is entered for a data set, that log will be cleared and reused the next time FFST cycles through to use that data set. The data set is not immediately cleared (unless it is the current data set); it is merely scheduled for clearing. If the REUSE
function is enabled, FFST will reuse a log data set even if it contains data. Therefore, the ACTION=CLEAR command should be of no use if REUSE is enabled. For more information on the use of the FFST modify command, see Chapter 2, “Controlling FFST Operation.”

Using the Generic Alert

A software generic alert is a Systems Network Architecture (SNA) function that notifies a network operations center when a software problem disrupts end-user services. If you use NetView in conjunction with FFST, the following events occur when a probe statement is executed:

- FFST generates a generic alert and passes it to NetView on the local processor (the processor where the probe statement was executed).
- Through local NetView, the generic alert can be:
  - Displayed
  - Logged
  - Sent to a NetView focal point

A generic alert generated by FFST contains the following information:

- The processor on which the software application that executed the probe statement
- The identification of the software application that executed the probe statement
- The date and time that the probe statement was executed
- A description of the event that caused the probe statement to be executed
- The event's primary symptom string
- The name of the data set that contains the customized dump for the event
- The probable cause of the event
- Recommended recovery actions for the event

Figure 3-25 is an example of the NetView generic alert Recommended Action screens.

```
Figure 3-25 (Part 1 of 2). NetView Generic Alert Recommended Action Screens
```
I143 - REPORT THE FOLLOWING:
- SYMPTOM CODE PIDS/56954401 LVLS/101 PCSS/EPWIVP01
- SYMPTOM CODE RIDS/EPWIVP FLS/TEST FLS/PROBE
- SYMPTOM CODE FLS/FOR FLS/FFSTIVP

ENTER ST (MOST RECENT STATISTICS), DM (DETAIL MENU), OR D (EVENT DETAIL)

CMD=>

Figure 3-25 (Part 2 of 2). NetView Generic Alert Recommended Action Screens

Figure 3-26 is an example of the NetView generic alert Event Detail Screens.

Figure 3-26 (Part 1 of 3). NetView Generic Alert Event Detail Screens
Note: The preceding screen contains an MVS example.
For VM, number 4, CENTRAL PROCESSING UNIT, would be
FFST/GCS.sysname.FFSTV1R2.DMP, where sysname is the
name of the user's system.
Also, for number 6, UNIT would appear, but MVSST2 would not.

Figure 3-26 (Part 2 of 3). NetView Generic Alert Event Detail Screens

Figure 3-27 on page 3-31 is an example of the NetView generic alert product set identification screens.
Figure 3-27 (Part 1 of 2). NetView Generic Alert Product Set Identification Screens

Note: The preceding screen contains an MVS example. For VM, the serviceable component identifier would be 568415800, the component release level would be 120, and the software common name would be FFST/VM Version 1 Release 2.

For more examples of generic alerts, refer to the NetView Operation Primer (SC30-3363) or the NetView Customization Guide (SC31-6016).
# FFST Probe Return Codes

The following table contains the return codes which are returned on Probe Initialization, Probe Statement Execution and Probe Termination.

<table>
<thead>
<tr>
<th>Hexadecimal Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000000</td>
<td>The request was completed successfully.</td>
</tr>
<tr>
<td>00000104</td>
<td>EPWCNTRL INIT requested a conditional wait and FFST is not yet active.</td>
</tr>
<tr>
<td>00000110</td>
<td>The FFST subsystem is not defined to MVS.</td>
</tr>
<tr>
<td>00000210</td>
<td>The FFST initialization stub module is not linked.</td>
</tr>
<tr>
<td>00000310</td>
<td>The FFST interface module is not in an accessible library.</td>
</tr>
<tr>
<td>00000410</td>
<td>The product configuration module is not found.</td>
</tr>
<tr>
<td>00000710</td>
<td>The DCB specified in the EPWCNTRL INIT macro could not be opened.</td>
</tr>
<tr>
<td>00000810</td>
<td>Insufficient storage to allocate a temporary work area.</td>
</tr>
<tr>
<td>00000910</td>
<td>The previous attempt to initialize FFST failed. See the console message for more information.</td>
</tr>
<tr>
<td>00000B10</td>
<td>The configuration load module was not link edited with the reusable attribute (REUS).</td>
</tr>
<tr>
<td>0000150C</td>
<td>The EPWCNTRL INIT function was requested specifying a configuration that indicates SHARED, but another configuration with the same prefix that also indicates SHARED is active.</td>
</tr>
<tr>
<td>0000160C</td>
<td>The EPWCNTRL INIT function was requested specifying a configuration that does not match another configuration with the same prefix that is active in the same address space.</td>
</tr>
<tr>
<td>0000170C</td>
<td>The EPWCNTRL INIT function failed because the pre-exit was not found on an accessible library.</td>
</tr>
<tr>
<td>0000180C</td>
<td>The EPWCNTRL INIT function failed because the post-exit was not found on an accessible library.</td>
</tr>
<tr>
<td>0000190C</td>
<td>The EPWCNTRL INIT function failed because the configuration load module was link-edited as re-entrant.</td>
</tr>
<tr>
<td>00001A0C</td>
<td>The EPWCNTRL INIT function failed because a DST specified shared storage or page-fixed storage, but the product is not authorized to use these facilities.</td>
</tr>
<tr>
<td>00001B0C</td>
<td>The EPWCNTRL INIT function failed because the configuration specified that it be page-fixed, but the product is not authorized to perform this function.</td>
</tr>
<tr>
<td>00001C0C</td>
<td>The EPWCNTRL INIT function failed because the configuration is marked shared, but the default DST is not marked shared.</td>
</tr>
<tr>
<td>00001D0C</td>
<td>The first byte of a DST does not contain the correct identifier. The load module specified may not actually be a DST.</td>
</tr>
<tr>
<td>00001E0C</td>
<td>The EPWCNTRL INIT function failed because a DST is marked shared, but the configuration is not.</td>
</tr>
<tr>
<td>00001F0C</td>
<td>The EPWCNTRL INIT function failed because a DST is marked page-fixed, but the configuration is not.</td>
</tr>
<tr>
<td>0000200C</td>
<td>The EPWCNTRL INIT function failed because allocation of a temporary area of storage failed.</td>
</tr>
<tr>
<td>Return Code</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>00000000</td>
<td>The request was completed successfully.</td>
</tr>
<tr>
<td>00000204</td>
<td>The probe statement was disabled by the system operator.</td>
</tr>
<tr>
<td>00000008</td>
<td>A minor error occurred - See the message log for more information.</td>
</tr>
<tr>
<td>0000010C</td>
<td>The probe parameter list contains an incorrect comma.</td>
</tr>
<tr>
<td>0000020C</td>
<td>The probe parameter list does not begin with the required asterisk(*).</td>
</tr>
<tr>
<td>0000030C</td>
<td>The probe parameter list contains a DST name that is too long.</td>
</tr>
<tr>
<td>0000040C</td>
<td>The probe parameter list contains a probe identifier that is too long.</td>
</tr>
<tr>
<td>0000050C</td>
<td>The probe statement list contains a flag that is not 4 characters long.</td>
</tr>
<tr>
<td>0000060C</td>
<td>The probe parameter list contains a parameter count that is too large.</td>
</tr>
<tr>
<td>0000070C</td>
<td>The probe parameter list does not end with the correct characters (').</td>
</tr>
<tr>
<td>0000080C</td>
<td>Product initialization was not performed or product initialization failed.</td>
</tr>
<tr>
<td>0000090C</td>
<td>The system is unable to allocate a work area for FFST.</td>
</tr>
<tr>
<td>00000A0C</td>
<td>SETFRR failed.</td>
</tr>
<tr>
<td>00000B0C</td>
<td>The DST is not found.</td>
</tr>
<tr>
<td>00000C0C</td>
<td>The DST is not Release 2 level.</td>
</tr>
<tr>
<td>00000D0C</td>
<td>The DST is marked invalid.</td>
</tr>
<tr>
<td>00000E0C</td>
<td>Information for the probe statement is not found in the DST.</td>
</tr>
<tr>
<td>00000F0C</td>
<td>The cyclic redundancy check (CRC) failed.</td>
</tr>
<tr>
<td>0000100C</td>
<td>The probe identifier describes an entry in the DST that is not a probe entry.</td>
</tr>
<tr>
<td>0000110C</td>
<td>The probe statement does not support AR mode.</td>
</tr>
<tr>
<td>0000120C</td>
<td>A SDBSTR value is inaccessible.</td>
</tr>
<tr>
<td>0000130C</td>
<td>The issuer of the IPROBE macro is in secondary mode.</td>
</tr>
<tr>
<td>0000140C</td>
<td>An unexpected abend occurred.</td>
</tr>
<tr>
<td>0000210C</td>
<td>CNFGLMOD was used on the probe statement, but the probe statement was not issued in TCB mode.</td>
</tr>
<tr>
<td>0000220C</td>
<td>FFST disabled the probe statement because it was issued a specified number of times within a specified time period.</td>
</tr>
<tr>
<td>00000510</td>
<td>The FFST subsystem is not active or the FFST virtual machine is not active.</td>
</tr>
<tr>
<td>00000610</td>
<td>The FFST entry point value is 0.</td>
</tr>
</tbody>
</table>
Figure 3-30. Probe Termination Return Codes

<table>
<thead>
<tr>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000000</td>
<td>The request was completed successfully.</td>
</tr>
<tr>
<td>00000210</td>
<td>The FFST termination stub module is not linked.</td>
</tr>
<tr>
<td>00000310</td>
<td>The FFST interface module is not in an accessible library.</td>
</tr>
<tr>
<td>00000410</td>
<td>The product configuration module is not found.</td>
</tr>
<tr>
<td>00000510</td>
<td>The FFST subsystem is not active or the FFST virtual machine is not active.</td>
</tr>
<tr>
<td>00000810</td>
<td>Insufficient storage to allocate a temporary work area.</td>
</tr>
<tr>
<td>00000A10</td>
<td>The product’s interface to FFST is not initialized.</td>
</tr>
</tbody>
</table>
Appendix A. FFST Messages

This appendix lists in numerical order all the messages that can appear during FFST operation. Along with the actual message text, this appendix provides an explanation for each message, as well as the following information:

**System Action**
Indicates how the system responds to the condition that generated the message.

**Operator Response**
Indicates how the system operator should respond to the message.

**Programmer Response**
Indicates how the programmer should respond to the message.

**Suppression Level**
Indicates whether or not the message can be suppressed. The suppression level is one of the following values:

- **DEBUG**
The message appears because the DEBUG parameter was included as input for the task that issues the message.

- **Suppressible (SUP)**
The operator can suppress the message by entering a MODIFY command.

- **Unsuppressible (UNSUP)**
The operator cannot suppress the message. FFST issues the message whenever the conditions that generate the message exist.

**Blank Suppression**
FFST messages that allow blank suppression do not include extra blanks in the message text.

**Destination**
Indicates where the message is sent or where it can be viewed. The destination can be any of the following locations:

- **Console**
  FFST sends the message to the operator's console.

- **Terminal**
  FFST sends the message to a user's terminal.

- **Message log**
  FFST records the message in the probe message log.

- **Output data set**
  EPWDMPFM messages are included in the formatted dump.

An identifier precedes each of the FFST messages in this appendix. This identifier has the following format: EPW aaxxy where:

- **EPW** is the prefix for all FFST messages.
- **aaxxy** is a unique 4-digit numeric identifier where:
  - **aa** indicates the process that generated the message:
    - 00 Preinitialization.
    - 02 Initialization.
03 Termination.
04 Probe statement operation.
05 Message log operation.
06 Command processing.
07 Message processing.
10 Customer Information Control System (CICS*) application processing (MVS only).
90 Installation verification program processing.
95 CLIST processing. These messages appear in a dump processed by one of the FFST CLISTs.
99 Debug processing.

- xx is a decimal value from 01 to 99.

- y indicates the type of message and is one of the following values:
  I Information. The message is for information only. No action is required.
  E Error. The message indicates that an error occurred.
  D Debug. The message appears only when FFST is running in debug mode.

In most FFST messages, the procname variable is the procedure name you designate for FFST in your MVS JCL. **BOLD UPPERCASE CHARACTERS** represent the actual text of the message, while **lowercase italic characters** represent the variable information that is different each time the message appears. When FFST issues a message, it replaces these variables with actual information.

**Note:** Messages EPW0051 through EPW0066 and message EPW0204 apply only to FFST/MVS.

EPW0000E INITIALIZATION FAILED - *reason*

**Explanation:** The initialization of FFST failed for one of the following reasons:

- TOO MANY PARAMETERS SPECIFIED- More than 3 input parameters were specified with the FFST procedure.
- INVALID LANG PARAMETER SPECIFIED- The specified LANG parameter is invalid. LANG can be only 3 characters long and, when specified, must be the first parameter. If this parameter is not specified, the default value for LANG is ENU.
- INVALID MODE PARAMETER SPECIFIED- The specified MODE parameter is invalid. MODE can either be NORMAL or DEBUG and, when specified, must be the second parameter. If this parameter is not specified, the default value for MODE is NORMAL.
- INVALID PAGE PARAMETER SPECIFIED- The specified PAGE parameter is invalid. PAGE can be any number between 1 and 2000 and, when specified, must be the third parameter. If this parameter is not specified, the default value for PAGE is 200.
- INSUFFICIENT STORAGE FOR IFCVT- Not enough storage was available to allocate the IFCVT control block.
- ESTAE COULD NOT BE ESTABLISHED- The FFST extended specify task abnormal exit routine could not be established.
- MESSAGE PROCESSING FAILURE- FFST message processing could not be established.
- FFST NOT AUTHORIZED- FFST is not an authorized program.

**System Action:** System processing continues, but no FFST processing can occur.

**Operator Response:** Give the FFST initialization output to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:
- TOO MANY PARAMETERS SPECIFIED-Specify up to 3 parameters on the FFST procedure, each separated by a comma.
- INVALID LANG PARAMETER SPECIFIED-Specify the LANG parameter correctly.
- INVALID MODE PARAMETER SPECIFIED-Specify the MODE parameter correctly.
- INVALID PAGE PARAMETER SPECIFIED-Specify the PAGE parameter correctly.
- INSUFFICIENT STORAGE FOR IFCVT-Ensure that the required storage is available for FFST before it is initialized.
- ESTAE COULD NOT BE ESTABLISHED-Determine why an ESTAE could not be established.
- MESSAGE PROCESSING FAILURE-Determine why FFST cannot issue messages.
- FFST NOT AUTHORIZED-Ensure that FFST is in an authorized library and is linked as an authorized program.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0001E COMMAND FAILED - reason**

**Explanation:** A MODIFY command failed for the following reason:

- FFST IS NOT ACTIVE-FFST is not running in the FFST virtual machine.

**System Action:** System processing continues, but no FFST processing can occur.

**Operator Response:** Start FFST if necessary.

**Programmer Response:** The response depends on the reason for the failure:

- FFST IS NOT ACTIVE-Issue the FFST START command.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0051I FFSTFFDC: INITIALIZATION COMPLETE**

**Explanation:** Initialization of the FFDC function of FFST is complete.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0052I FFSTFFDC: INITIALIZATION FAILED - CSECT CHECKING OF modulename FAILED**

**Explanation:** Initialization of the FFDC function of FFST failed because a required FFDC module was not correct, where modulename is the FFDC module that failed the initialization check.

**System Action:** Processing continues.

**Operator Response:** Give the FFST initialization output to the system programmer.

**Programmer Response:** Verify that the installation of FFST completed successfully.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
EPW0053I FFSTFFDC: INITIALIZATION FAILED - LOAD OF *modulename* FAILED

Explanation: Initialization of the FFDC function of FFST failed because a required FFDC module could not be loaded, where *modulename* is the FFDC module that failed the load function.

System Action: Processing continues.
Operator Response: Give the FFST initialization output to the system programmer.
Programmer Response: Determine why the FFDC module could not be found in the FFST data sets.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0054I FFSTFFDC: INITIALIZATION FAILED - *funcname* PROCESSING FAILURE

Explanation: Initialization of the FFDC function of FFST failed because a required FFDC function failed to complete initialization, where *funcname* is the FFDC function that failed.

System Action: Processing continues.
Operator Response: Give the FFST initialization output to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0055I FFSTFFDC: FUNCTION *funcname* NOT AVAILABLE

Explanation: An FFDC function is not available, where *funcname* is the unavailable FFDC function.

System Action: Processing continues.
Operator Response: Give the FFST initialization output to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0056I FFSTFFDC: TERMINATION COMPLETE

Explanation: Termination of the FFDC function of FFST is complete.

System Action: Processing continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
EPW0057I FFSTFFDC: FUNCTION HAS BEEN INVOKED BY FFSTV1R2

Explanation: An FFDC software probe was triggered to gather documentation for a FFST/FFDC problem. Other EPW00xxI messages follow this message.

System Action: Processing continues.
Operator Response: Give the FFST/FFDC documentation to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0058I FFSTFFDC: DUMP CAN BE FOUND IN: dumpmembername

Explanation: An FFDC software probe was triggered and a dump was taken, where dumpmembername is the associated dump member in the dump data set. This message can be issued when EPW0057I is issued.

System Action: Processing continues.
Operator Response: Give the FFST/FFDC documentation to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0059I FFSTFFDC: ON DATA SET: dumpdataset

Explanation: An FFDC software probe was triggered and a dump was taken, where dumpdataset is the name of the dump data set that contains the dump members. This message can be issued when EPW0057I is issued.

System Action: Processing continues.
Operator Response: Give the FFST/FFDC documentation to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0060I FFSTFFDC: SOFTWARE PROBE HAS BEEN DISABLED

Explanation: The FFDC function of FFST disabled a software probe because it was triggered more than 10 times. This message can be issued when EPW0057I is issued.

System Action: Processing continues.
Operator Response: Give the FFST/FFDC documentation to the system programmer.
Programmer Response: Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
**EPW0061I FFSTFFDC: DUMP SERVICES FAILED - RETURN CODE=retcode**

**Explanation:** An FFDC software probe was triggered and the dump services function failed, where retcode is the return code passed back by the dump services function. This message can be issued when EPW0057I is issued. Figure A-1 provides explanations for the possible retcode values.

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0104</td>
<td>An input/output (I/O) error occurred while FFST was writing the dump. An incomplete dump is available.</td>
</tr>
<tr>
<td>0000</td>
<td>0204</td>
<td>FFST successfully wrote the dump, but it could not write the directory index member (FPSIDINO). A dump member called DUMP xxxx may be available.</td>
</tr>
<tr>
<td>0000</td>
<td>010C</td>
<td>FFST could not write the dump from the dump services member name to dump data set name DUMP xxxx. No dump is available.</td>
</tr>
<tr>
<td>0000</td>
<td>020C</td>
<td>An I/O error occurred while FFST was writing a dump data set. No dump is available.</td>
</tr>
<tr>
<td>0000</td>
<td>030C</td>
<td>Not enough storage was available below the 16MB line to allocate a dump work buffer. No dump is available.</td>
</tr>
<tr>
<td>0000</td>
<td>040C</td>
<td>FFST could not open the specified dump data set. No dump is available.</td>
</tr>
<tr>
<td>0000</td>
<td>050C</td>
<td>No space was available to write the dump on the primary extent, and all 16 extents had been used. No dump is available.</td>
</tr>
</tbody>
</table>

**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

**EPW0062I FFSTFFDC: SYMPTOM RECORD SERVICES FAILED - RETURN CODE= retcode**

**Explanation:** An FFDC software probe was triggered and the symptom record services function failed, where retcode is the return code passed back by the symptom record services function. This message can be issued when EPW0057I is issued. Figure A-2 provides explanations for the possible retcode values.

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0104</td>
<td>The symptom record component completed successfully and the symptom record was recorded.</td>
</tr>
<tr>
<td>0000</td>
<td>0204</td>
<td>The SYMREC macro service routine successfully completed.</td>
</tr>
<tr>
<td>0004</td>
<td>0004</td>
<td>One or more errors were detected on the SYMREC macro statement. The entire input record was recorded. The symptom record component processed unsuccessfully for the following reason.</td>
</tr>
<tr>
<td>0164</td>
<td>0164</td>
<td>The input symptom record was successfully copied. However, an attempt to write section 1 information from the completed symptom record failed. The area was inaccessible to a write request.</td>
</tr>
<tr>
<td>0008</td>
<td>0008</td>
<td>One or more errors were detected on the SYMREC macro statement. A partial symptom record was recorded. The symptom record component processed unsuccessfully for one of the following reasons.</td>
</tr>
<tr>
<td>0158</td>
<td>0158</td>
<td>The total length of the input symptom record exceeds the maximum.</td>
</tr>
</tbody>
</table>
**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**Explanation:** An FFDC software probe was triggered and the generic alert services function failed, where `retcode` is the return code passed back by the generic alert services function. This message can be issued when EPW0057I is issued. Figure A-3 provides explanations for the possible `retcode` values.

---

### Figure A-2 (Page 2 of 2). Symptom Record Return Codes

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>015C</td>
<td>000C</td>
<td>Optional segments of the input symptom record were inaccessible. The record includes the accessible entries of the input symptom record.</td>
</tr>
<tr>
<td>0104</td>
<td></td>
<td>The first 2 bytes of the input symptom record do not contain the SR operand.</td>
</tr>
<tr>
<td>0108</td>
<td></td>
<td>The input symptom record does not contain the required entries for section 2.</td>
</tr>
<tr>
<td>010C</td>
<td></td>
<td>The input symptom record does not contain the required entries for section 2.1.</td>
</tr>
<tr>
<td>0114</td>
<td></td>
<td>The input symptom record does not contain the required entries for section 3.</td>
</tr>
<tr>
<td>0128</td>
<td></td>
<td>Portions of the input symptom record were inaccessible to a write request.</td>
</tr>
<tr>
<td>012C</td>
<td></td>
<td>Required portions of the input symptom record were inaccessible to a write request.</td>
</tr>
<tr>
<td>0134</td>
<td></td>
<td>The input symptom record address is in inaccessible storage.</td>
</tr>
</tbody>
</table>
| 0144        | 0010        | A serious error was in the symptom record component. The error is not related to SYMREC macro statement. No symptom record was recorded. The symptom record component processed unsuccessfully for one of the following reasons:
  - Optional segments of the input symptom record were inaccessible. The record includes the accessible entries of the input symptom record.
  - A serious error was on the SYMREC macro statement. No symptom record was recorded. The symptom record component processed unsuccessfully for one of the following reasons:
    - The LOGREC buffer had space insufficient to accommodate the symptom record.
    - The SYMREC macro service routine could not acquire storage for its work area and a copy of the symptom record.
    - A failure occurred while moving the symptom record to the LOGREC buffer.
    - The SYMREC macro service routine has a logic error.
    - The installation prevented the unauthorized caller from writing the symptom record to SYS1.LOGREC.
  - Program attributes of the job issuing the SYMREC macro are not written using the symptom record component standards. |
| 0F04        |             | The LOGREC buffer had space insufficient to accommodate the symptom record. |
| 0F08        |             | The SYMREC macro service routine could not acquire storage for its work area and a copy of the symptom record. |
| 0F0C        |             | A failure occurred while moving the symptom record to the LOGREC buffer. |
| 0F10        |             | The SYMREC macro service routine has a logic error. |
| 0F1C        |             | The installation prevented the unauthorized caller from writing the symptom record to SYS1.LOGREC. |
| 0014        |             | The symptom record component is not operable. |

### Figure A-3 (Page 1 of 2). Generic Alert Return Codes

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0000</td>
<td>An alert was passed to NetView.</td>
</tr>
<tr>
<td>0000</td>
<td>0004</td>
<td>The symptom record was found to be invalid.</td>
</tr>
<tr>
<td>0000</td>
<td>0008</td>
<td>A cause category of UNDETERMINED was found with other cause categories.</td>
</tr>
<tr>
<td>0000</td>
<td>000A</td>
<td>An invalid cause category was found.</td>
</tr>
</tbody>
</table>
### Figure A-3 (Page 2 of 2). Generic Alert Return Codes

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Return Code</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0004</td>
<td>000C</td>
<td>The specified receiver is not active. The PPI has received a copy of the NMVT, CP-MSG, or data buffer.</td>
</tr>
<tr>
<td>000A</td>
<td>000C</td>
<td>The PPI is available to process user requests.</td>
</tr>
<tr>
<td>000C</td>
<td>000C</td>
<td>Connection is delayed.</td>
</tr>
<tr>
<td>000E</td>
<td>000C</td>
<td>The receiver program is active.</td>
</tr>
<tr>
<td>000F</td>
<td>000C</td>
<td>The receiver program is inactive.</td>
</tr>
<tr>
<td>0010</td>
<td>000C</td>
<td>The receiver program is already active.</td>
</tr>
<tr>
<td>0012</td>
<td>000C</td>
<td>The receiver ECB is not zero.</td>
</tr>
<tr>
<td>0014</td>
<td>000C</td>
<td>The request type is not valid.</td>
</tr>
<tr>
<td>0016</td>
<td>000C</td>
<td>The program issuing this request is not executing in primary addressing mode.</td>
</tr>
<tr>
<td>0017</td>
<td>000C</td>
<td>The user program is not authorized.</td>
</tr>
<tr>
<td>0018</td>
<td>000C</td>
<td>The PPI is not active.</td>
</tr>
<tr>
<td>0019</td>
<td>000C</td>
<td>The ASCB address is not correct.</td>
</tr>
<tr>
<td>001A</td>
<td>000C</td>
<td>The receiver program is not defined.</td>
</tr>
<tr>
<td>001C</td>
<td>000C</td>
<td>User requests are not supported for NetView V1R2 or earlier releases.</td>
</tr>
<tr>
<td>001E</td>
<td>000C</td>
<td>No data buffer in the receiver buffer queue.</td>
</tr>
<tr>
<td>001F</td>
<td>000C</td>
<td>The receiver buffer is not large enough to receive the incoming data buffer.</td>
</tr>
<tr>
<td>0020</td>
<td>000C</td>
<td>No NetView storage is available.</td>
</tr>
<tr>
<td>000C</td>
<td>0021</td>
<td>The buffer length is not valid.</td>
</tr>
<tr>
<td>0022</td>
<td>000C</td>
<td>The NMVT buffer length exceeds 512 bytes.</td>
</tr>
<tr>
<td>0023</td>
<td>000C</td>
<td>The receiver buffer queue is full.</td>
</tr>
<tr>
<td>0024</td>
<td>000C</td>
<td>ESTAE recovery cannot be established as requested.</td>
</tr>
<tr>
<td>0025</td>
<td>000C</td>
<td>Work area is not on a double word boundary.</td>
</tr>
<tr>
<td>0026</td>
<td>000C</td>
<td>Number of connects allowed to PPI for user exceeded.</td>
</tr>
<tr>
<td>0027</td>
<td>000C</td>
<td>Number of connects to PPI exceeded.</td>
</tr>
<tr>
<td>0028</td>
<td>000C</td>
<td>Invalid SENDER-ID or RECEIVER-ID.</td>
</tr>
<tr>
<td>005A</td>
<td>000C</td>
<td>A processing error has occurred.</td>
</tr>
<tr>
<td>005F</td>
<td>000C</td>
<td>Data transport error; reason in RPB.</td>
</tr>
<tr>
<td>0000</td>
<td>0010</td>
<td>An unrecognized code point type was found.</td>
</tr>
<tr>
<td>0000</td>
<td>0014</td>
<td>A symptom string entity of less than 5 or more than 15 characters was found.</td>
</tr>
<tr>
<td>0000</td>
<td>0018</td>
<td>Unknown error. The alert was probably not sent.</td>
</tr>
</tbody>
</table>

**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.
EPW0064I FFSTFFDC: SYMPTOM STRING FOLLOWS:

**Explanation:** An FFDC software probe was triggered and the symptom string for that software probe is being displayed. Message EPW0065I follows this message. This message can be issued when EPW0057I is issued.

**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

EPW0065I symptomstring

**Explanation:** An FFDC software probe was triggered and the symptom string for that software probe is being displayed, where symptomstring is the symptom string for the software probe. Message EPW0064I precedes this message. This message can be issued when EPW0057I is issued.

**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

EPW0066I FFSTFFDC: END OF MESSAGE GROUP

**Explanation:** An FFDC software probe was triggered; this is the last message issued for the software probe. This message is issued when EPW0057I is issued.

**System Action:** Processing continues.

**Operator Response:** Give the FFST/FFDC documentation to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

EPW0201I procname: INITIALIZATION OF FFST IN PROGRESS

**Explanation:** FFST initialization is in progress. Additional messages can be issued during the initialization process. When the initialization process is complete, FFST issues a message indicating that the initialization process is finished.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.
**EPW0202I** procname: INITIALIZATION OF FFST COMPLETE  

**Explanation:** FFST initialization is complete. Software probes and commands can now be processed.

**System Action:** Processing continues.

**Operator Response:** This message is informational. You can now enter any of the following FFST commands:

- `MODIFY ACTION=DISABLE`
- `MODIFY ACTION=ENABLE`
- `MODIFY ACTION=CLEAR`
- `MODIFY ACTION=DISPLAY`
- `MODIFY ACTION=CHANGE`
- `MODIFY ACTION=RESET`
- `MODIFY ACTION=HALT`
- `STOP`

For more information about these commands, see Chapter 2, “Controlling FFST Operation” on page 2-1.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0203E** procname: INITIALIZATION OF FFST FAILED - reason  

**Explanation:** FFST initialization failed. The failure occurred for one of the following reasons:

- **ALREADY ACTIVE**—The system already initialized FFST.
- **ANOTHER FFST IS SET AS THE CMS INTERFACE**—Another GCS machine has already initialized itself as the FFST machine.
- **AUTHNAME COMMAND FAILED**—The GCS AUTHNAME command failed.
- **INSUFFICIENT STORAGE**—The system does not have enough storage to allocate the required control blocks and load the required modules.
- **IUCVINI SET COMMAND FAILED**—The GCS IUCVINI command failed.
- **LOAD FAILED FOR AN FFST MODULE**—During initialization, FFST attempted to load one of its modules and the load failed.
- **MACHEXIT MACRO FAILED**—The GCS MACHEXIT command failed.
- **PROCESSING ERROR**—An internal processing error occurred in FFST.
- **START COMMAND NOT USED TO INVOKE EPWINIT**—FFST was not invoked with the MVS START command. The job was submitted or called in some other way.
- **SUBSYSTEM NOT FOUND**—You did not define FFST as a subsystem of MVS.

**System Action:** System processing continues, but no FFST processing can occur.

**Operator Response:** If `reason` is "ALREADY ACTIVE," this message is informational; no action is required. If `reason` is any of the other defined values, give the FFST initialization output to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:

- **ALREADY ACTIVE**—None.
- **ANOTHER FFST IS SET AS THE CMS INTERFACE**—Log off the other FFST machine or do not attempt to bring another FFST up.
- **AUTHNAME COMMAND FAILED**—Have the system programmer verify that the FFST saved segment exists.
- **INSUFFICIENT STORAGE**—Ensure that the required storage is available for FFST before it is initialized.
• IUCVINI SET COMMAND FAILED-Have the system programmer verify that the FFST saved segment exists.

• LOAD FAILED FOR AN FFST MODULE-An FFST module could not be found in the FFST load library structure. See message EPW0207I for the module name. Ensure that this module is available during FFST initialization.

• MACHEXIT MACRO FAILED-Have the system programmer verify that the FFST saved segment exists.

• PROCESSING ERROR-The FFST/FFDC process should have been invoked. Gather this documentation and contact the IBM support center.

• START COMMAND NOT USED TO INVOKE EPWINIT-Invoke FFST using the MVS START command.

• SUBSYSTEM NOT FOUND-The FFST/FFDC process should have been invoked. Use this documentation to determine which subsystems have been defined to MVS. Ensure that subsystem FFST is defined. For more information, refer to "System Considerations - MVS" in the FFST program directory.

Suppression Level: UNSUP.  
Blank Suppression: Yes.  
Destination: Console.

---

**EPW0204I procname: MVS LEVEL LESS THAN 2.2 - SYMREC NOT SUPPORTED**

**Explanation:** FFST determined that the level of MVS is lower than Version 2.2. The FFST SYMREC function requires MVS Version 2.2 or newer.

**System Action:** Processing continues, but the SYMREC function of FFST is not active.

**Operator Response:** None.

**Programmer Response:** To use SYMREC, reinstall FFST on an MVS system that is Version 2.2 or newer.

**Suppression Level:** UNSUP.  
**Blank Suppression:** Yes.  
**Destination:** Console.

---

**EPW0205I procname: LOAD FAILED FOR modulename - reason**

**Explanation:** During initialization, FFST failed while attempting to load modulename for one of the following reasons:

• COMMAND PROCESSING NOT AVAILABLE-The required command processing subtask could not be invoked.

• DUMP SERVICES FUNCTION NOT AVAILABLE-The required dump services subtask could not be invoked.

• SYMREC FUNCTION NOT AVAILABLE-The required symptom record services subtask could not be invoked.

• GENERIC ALERT FUNCTION NOT AVAILABLE-The required generic alert services subtask could not be invoked.

• CHECKPOINT FUNCTION NOT AVAILABLE-The required checkpoint services subtask could not be invoked.

• HARDWARE EVENT MONITOR NOT AVAILABLE-The required hardware event services subtask could not be invoked.

**System Action:** System processing continues, but FFST initialization terminates.

**Operator Response:** Report the message and give the FFST initialization output to the system programmer.
Programmer Response: One or more required subtasks could not be loaded. Ensure that the FFST startup procedure correctly identifies the load library structure that contains the FFST modules.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

---

**EPW0206I** **procname**: MESSAGE LOG INITIALIZATION FAILED - *reason*

**Explanation:** The message logging function for FFST is disabled. During initialization, FFST did not successfully initialize the FFST message log for the following reason:

- **UNABLE TO ALLOCATE LOG BUFFER** - Not enough storage was available below the 16MB line to allocate the message log buffer.

**System Action:** FFST initialization continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:

- **UNABLE TO ALLOCATE LOG BUFFER** - Before the system attempts to initialize FFST, ensure that the required storage is available. After correcting this problem, restart FFST to activate the message logging function.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

---

**EPW0207I** **procname**: LOAD FAILED FOR MODULE *modulename*

**Explanation:** FFST tried to load module *modulename*, but the module was not found in any FFST load library.

**System Action:** System processing continues, but FFST processing terminates.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** Message EPW0203E precedes this message. Ensure that module *modulename* is available during FFST initialization.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

---

**EPW0208I** **procname**: INVALID WIDTH VALUE IN START MEMBER *membername*

**Explanation:** During the processing of FFST startup parameters, the WIDTH parameter in *membername* was found to be invalid. For FFST/VM, the term "START MEMBER *membername*" refers to the file called *membername* FFSTPARM.

**System Action:** FFST initialization continues, but the WIDTH parameter is ignored.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** Review the WIDTH start parameter in *membername* and ensure that the value specified for WIDTH is not greater than 80.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
**EPW0209I**  
**procname: cmd**

**Explanation:**  This message appears during FFST initialization when commands are being processed from an FFST startup command list. It displays the command currently being processed.

**System Action:**  Processing continues.

**Operator Response:**  None.

**Programmer Response:**  None.

**Suppression Level:**  UNSUP.

**Blank Suppression:**  No.

**Destination:**  Console.

---

**EPW0210E**  
**procname: INVALID SYNTAX IN FFSTPARM START MEMBER memname**

**Explanation:**  One or more records in member *memname* in the FFSTPARM data set contains a syntax error. FFST is expecting one of the following on a record:

- A comment, indicated by an asterisk ("*") in column 1
- An indication of the width to be used, indicated by the keyword "WIDTH=" starting in column 1
- An indication of the transition ABEND code parameter list FFSTPARM member name, indicated by the keyword "TRN=
- An indication of the hardware support parameter list FFSTPARM member name, indicated by the keyword "HWR="
- A command that can be interpreted exactly as it would appear on an FFST modify command, after the procedure name

**System Action:**  The rest of the record containing the syntax error is ignored, the rest of the member is processed, and FFST initialization continues.

**Operator Response:**  Recycle FFST after the syntax error is corrected.

**Programmer Response:**  Correct the syntax error.

**Suppression Level:**  UNSUP.

**Blank Suppression:**  Yes.

**Destination:**  Console.

---

**EPW0250I**  
**procname: FFST INITIALIZATION FOR applname COMPLETE**

**Explanation:**  The initialization of *applname* has completed. This application is now ready to use FFST.

**System Action:**  Application initialization continues.

**Operator Response:**  None.

**Programmer Response:**  None.

**Suppression Level:**  UNSUP.

**Blank Suppression:**  Yes.

**Destination:**  Console.
EPW0251E procname: FFST INITIALIZATION FOR applname FAILED - reason

Explanation: The initialization of applname failed for one of the following reasons:

- ANOTHER SHARED CONFIGURATION FOUND-The 3-character prefix for applname matches another configuration that is marked SHARED, but these configurations do not match.
- UNMATCHING CONFIGURATION USED-The 3-character prefix for applname matches another configuration but does not match the configuration being initialized.
- ALLOCATE FAILED FOR WORK AREA-The system does not have enough storage to allocate the requested number of FFST work areas.
- LOAD FAILED FOR PRE-EXIT-The load for the applname pre-exit failed.
- LOAD FAILED FOR POST-EXIT-The load for the applname post-exit failed.
- CONFIGURATION IS LINK-EDITED AS REENTRANT-The configuration for applname has been link edited with the REENTRANT attribute.
- NOT AUTHORIZED TO USE SHARED OR FIXED STORAGE-applname is not executing in an authorized mode, but the DST requests a load of this table into the system's common storage area or fixed storage.
- NOT AUTHORIZED TO PAGE-FIX CONFIGURATION-applname is not executing in an authorized mode, but the configuration requests a load into fixed storage.
- FRR SETUP FAILED-FFST could not establish a functional recovery routine (FRR).
- LOAD FAILED FOR DST dstname-The load for DST dstname failed.
- GETMAIN FAILED FOR DST dstname-The system does not have enough storage to allocate space for DST dstname.
- CONFIGURATION NOT SHARED, UNLIKE DST dstname-DST dstname is marked SHARED, but the configuration is marked NOT SHARED.
- CONFIGURATION PAGEABLE, UNLIKE DST dstname-DST dstname is marked FIXED, but the configuration is marked PAGEABLE.
- CONFIGURATION SHARED, UNLIKE DEFAULT DST-The product's configuration indicates that it is going to be used in a shared environment, so the default DST must also be used in a shared environment. However, the default DST does not indicate this option.
- INCORRECT IDENTIFIER FOUND IN DST-The referenced DST does not begin with the correct identifier for a DST.

System Action: System processing continues, but the initialization of applname to FFST fails.

Operator Response: Give the FFST output to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- ANOTHER SHARED CONFIGURATION FOUND-Gather the required documentation and contact the IBM support center for applname.
- UNMATCHING CONFIGURATION USED-Gather the required documentation and contact the IBM support center for applname.
- ALLOCATE FAILED FOR WORK AREA-Ensure that sufficient storage is available to execute applname. If you cannot correct the problem, gather the required documentation and contact the IBM support center for applname.
- LOAD FAILED FOR PRE-EXIT-Ensure that all load libraries are available for applname. If you cannot correct the problem, gather the required documentation and contact the IBM support center for applname.
- LOAD FAILED FOR POST-EXIT-Ensure that all load libraries are available for applname. If you cannot correct the problem, gather the required documentation and contact the IBM support center for applname.
- CONFIGURATION IS LINK-EDITED AS REENTRANT-Gather the required documentation and contact the IBM support center for applname.
NOT AUTHORIZED TO USE SHARED OR FIXED STORAGE-Gather the required documentation and contact the IBM support center for applname.

NOT AUTHORIZED TO PAGE-FIX CONFIGURATION-Gather the required documentation and contact the IBM support center for applname.

FRR SETUP FAILED-Gather the required documentation and contact the IBM support center for FFST.

LOAD FAILED FOR DST dstname-Ensure that all load libraries are available for applname. If you cannot correct the problem, gather the required documentation and contact the IBM support center for applname.

GETMAIN FAILED FOR DST dstname-Gather the required documentation and contact the IBM support center for applname.

CONFIGURATION NOT SHARED, UNLIKE DST dstname-Gather the required documentation and contact the IBM support center for applname.

CONFIGURATION PAGEABLE, UNLIKE DST dstname-Gather the required documentation and contact the IBM support center for applname.

CONFIGURATION SHARED, UNLIKE DEFAULT DST-Gather the required documentation and contact the IBM support center for applname.

INCORRECT IDENTIFIER FOUND IN DST-Gather the required documentation and contact the IBM support center for applname.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

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**EPW0253I proname: DST dstname FOR applname MARKED INVALID - reason**

**Explanation:** After the DST dstname for application applname was loaded, it was marked invalid for one of the following reasons:

- VALIDITY CHECK FAILED FOR DST-The validity checking algorithm found an invalid value when validating the entire DST.
- VALIDITY CHECK FAILED FOR ENTRY entryname-The validity checking algorithm found an invalid value for entry entryname.
- LOAD FAILED FOR EXIT exitname-Exit exitname could not be loaded because it was not found in an available library. If DST dstname is marked shared, the exit was not found in an LPALST library (MVS) or a shared segment (VM).

**System Action:** System processing and the initialization of applname to FFST continue.

**Operator Response:** Give this message to the system programmer.

**Programmer Response:** If the reason is LOAD FAILED FOR EXIT exitname, check that the installation of applname was correct. If necessary, gather the required documentation and contact the IBM support center for applname.

**Suppression Level:** UNSUP.
Blank Suppression: Yes.
Destination: Console.
EPW0254I  procname: name BEING CHANGED FROM oldname TO newname

Explanation: During the initialization of an application, existing information was changed to match the information from the configuration, where name is either APPLICATION NAME, VENDOR NAME, or PRODUCT LONG NAME, newname is the new name of the application or vendor, and oldname is the old name of the application or vendor.

System Action: System processing continues.

Operator Response: None.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW0270I  procname: ENF LISTEN REQUEST FAILED - reason

Explanation: The FFST transition code issued an ENFREQ macro with the LISTEN option, but it failed for one of the following reasons:

- DUPLICATE LISTEN REQUEST-Another listen request had been issued from the same place in FFST code.
- ENFDS TABLE IS FULL-The table that contains the information for the listen has no more room to satisfy the request.
- ENF MODULE ERROR-An event notification facility (ENF) module failed. Look for another message to explain this failure.
- ENF NOT INITIALIZED-The ENF function is not available to process the listen request.
- STORAGE NOT AVAILABLE-Not enough temporary storage is available to process the listen request.

System Action: FFST initialization continues.

Operator Response: Report the message to the system programmer.

Programmer Response: If the reason is DUPLICATE LISTEN REQUEST, report the problem to FFST support. Otherwise, contact MVS support.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Console.

EPW0271I  procname: EPWCNTRL INIT FAILED - reason

Explanation: The FFST transition code issued an EPWCNTRL macro with the INIT option, but it failed for one of the following reasons:

- THE FFST INTERFACE MODULE IS NOT IN AN ACCESSIBLE LIBRARY-Module EPWPINIT should be in linklist, but is not found.
- MODULE EPWTRNCF COULD NOT BE FOUND-The configuration module for the transition code, EPWTRNCF, was not found in the load library.
- INSUFFICIENT STORAGE TO ALLOCATE A TEMPORARY WORK AREA-Not enough storage is available to process the request.
- EPWCNTRL INIT FAILED PREVIOUSLY-A previous INIT request was issued and failed. Look for a previous FFST message describing the failure.

System Action: FFST initialization continues.

Operator Response: Report the message to the system programmer.
Programmer Response: If the reason is THE FFST INTERFACE MODULE IS NOT IN AN ACCESSIBLE LIBRARY or MODULE EPWTRNCF COULD NOT BE FOUND, check to see that the installation of FFST was successful. Otherwise, contact FFST support.

Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Console.

**EPW0301I** procname: TERMINATION OF FFST IN PROGRESS

**Explanation:** FFST termination is in progress. Termination started for any of the following reasons:

- The operator entered the MODIFY ACTION=HALT command.
- The operator entered the STOP command.
- FFST detected an unrecoverable error.

**System Action:** FFST termination continues.

**Operator Response:** If the message is the result of a MODIFY ACTION=HALT command or a STOP command, the operator does not need to respond. If an abnormal termination occurs, use prior messages to determine the cause.

**Programmer Response:** None.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0302I** procname: TERMINATION OF FFST COMPLETE

**Explanation:** FFST termination is complete. Termination occurred either as a result of an unrecoverable error or because an operator entered a MODIFY ACTION=HALT or STOP command.

**System Action:** System processing continues, but no further FFST processing occurs.

**Operator Response:** The operator does not need to respond unless FFST needs to be restarted. To restart FFST, follow the normal startup procedure.

**Programmer Response:** None.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0303E** procname: TERMINATION OF FFST FAILED - PROCESSING ERROR

**Explanation:** FFST termination failed because of an internal processing error.

**System Action:** System processing continues. The operator may need to flush FFST from the system.

**Operator Response:** Give the FFST termination output to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.
**Blank Suppression:** Yes.
**Destination:** Console.
**EPW0304E**  
**proname: ABEND abendcode IN MODULE modulename AT OFFSET displacement**

**Explanation:** An abend occurred in an FFST module, where:
- **abendcode** is the abend code.
- **modulename** is the module where the abend occurred.
- **displacement** is the offset into the abending module.

**System Action:** System processing continues. FFST may recover from the abend and continue processing. If FFST does not recover, it must be restarted.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** If message EPW0305E does not follow this message, the FFST/FFDC process should have been invoked to provide necessary failure data. Gather this data and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

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**EPW0305E**  
**ABEND PSW IS abendpsw**

**Explanation:** An abend occurred in an FFST module, where abendpsw is the abend PSW. This message follows message EPW0304E.

**System Action:** System processing continues. FFST may recover from the abend and continue processing. If FFST does not recover, it must be restarted.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

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**EPW0306E**  
**ABEND REGISTERS GR00 THRU GR15 ARE:**

**Explanation:** An abend occurred in an FFST module, and the registers at the time of the abend follow this message. This message follows messages EPW0304E and EPW0305E.

**System Action:** System processing continues. FFST may recover from the abend and continue processing. If FFST does not recover, then it must be restarted.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

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**EPW0307E**  
**GRreg= value GRreg= value GRreg= value GRreg= value**

**Explanation:** An abend occurred in an FFST module, where **reg** is a general register number 00 through 15 and value is the hexadecimal value of the general register. This message follows messages EPW0304E, EPW0305E, and EPW0306E.

**System Action:** System processing continues. FFST may recover from the abend and continue processing. If FFST does not recover, then it must be restarted.

**Operator Response:** Give the FFST output to the system programmer.

**Programmer Response:** Gather the required documentation and contact the IBM support center.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0308I FFST TERMINATION WAITING FOR ABOVE APPLICATIONS TO TERMINATE
Explanation: You issued a MODIFY ACTION=HALT command, and FFST found that the applications listed in message EPW0625I still have an active interface to FFST.
System Action: FFST does not stop running until each of the specified applications terminates its interface to FFST.
Operator Response: If you want FFST to stop running immediately, terminate the specified applications or issue the MODIFY ACTION=HALT command with the QUICK keyword.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0309I ENTER 'YES' TO CONTINUE TERMINATION, OR 'NO' TO KEEP FFST ACTIVE
Explanation: You issued a MODIFY ACTION=HALT,QUICK command or a STOP command, and FFST found that the applications specified in message EPW0625I still have an active interface to FFST.
System Action: If the operator responds "yes," FFST termination continues. If the operator responds "no," FFST continues to run. If the response is neither "yes" or "no," message EPW0702E is issued, and this message is issued again.
Operator Response: Respond "yes" if you want FFST to stop running without waiting for the specified applications to terminate their interface to FFST. Respond "no" if you do not want to terminate FFST at this time.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0350I FFST TERMINATION FOR applname COMPLETE
Explanation: Application applname terminated its interface to FFST.
System Action: If the following conditions are true, FFST termination begins:
- Before beginning its own termination, FFST is waiting for applications to terminate their interfaces to FFST.
- Application applname is the last application with an active interface to FFST.
Otherwise, no action is taken.
Operator Response: None
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
**EPW0370I procname: ENF DELETE REQUEST FAILED - reason**

**Explanation:** The FFST transition code issued an ENFREQ macro with the DELETE option, but it failed for one of the following reasons:

- **ENFDS TABLE IS FULL** - The table that contains the information for the delete has no more room to satisfy the request.
- **ENF MODULE ERROR** - An ENF module failed. Look for another message to explain this failure.
- **ENF NOT INITIALIZED** - The ENF function is not available to process the delete request.
- **STORAGE NOT AVAILABLE** - Not enough temporary storage is available to process the delete request.
- **INVALID TOKEN USED** - The ENFREQ macro was issued specifying a token that was invalid.

**System Action:** FFST termination continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** If the reason is INVALID TOKEN USED, report the problem to FFST support. Otherwise, contact MVS support.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Console.

**EPW0371I procname: EPWCNTRL TERM FAILED - reason**

**Explanation:** The FFST transition code issued an EPWCNTRL macro with the TERM option, but it failed with one of the following reasons:

- **THE FFST INTERFACE MODULE IS NOT IN AN ACCESSIBLE LIBRARY** - Module EPWPTERM should be in linklist, but is not found.
- **MODULE EPWTRNCF COULD NOT BE FOUND** - The configuration module for the transition code, EPWTRNCF, was not found in the load library.
- **INSUFFICIENT STORAGE TO ALLOCATE A TEMPORARY WORK AREA** - Not enough storage is available to process the request.
- **INITIALIZATION WAS NOT DONE** - The EPWCNTRL INIT was never issued, or it failed when it was issued.

**System Action:** FFST termination continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** If the reason is THE FFST INTERFACE MODULE IS NOT IN AN ACCESSIBLE LIBRARY or MODULE EPWTRNCF COULD NOT BE FOUND, check to see that the installation of FFST was successful. Otherwise, contact FFST support.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Console.

**EPW0401I procname: EVENT DETECTION INVOKED BY applname FOR PROBEID :mvprobeid**

**Explanation:** Application applname issued a probe statement with an identifier of probeid. FFST gathers the requested documentation and may save the information in a dump data set, and/or send the information (via generic alert) to Netview. Messages EPW0402I and EPW0404I should follow this message, unless FFST is suppressing the symptom string messages.

**System Action:** Processing continues.

**Operator Response:** Report the message to the programmer responsible for application applname. (Also include the information in messages EPW0402I and EPW0404I.)
Programmer Response: Use the information provided to determine why FFST issued the probe statement.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console, message log.

EPW0402I procname: SYMPTOM STRING FOR PROBEID probeid FOLLOWS:

Explanation: This message follows message EPW0401I, unless FFST is suppressing the symptom string messages, where probeid is the probe identifier associated with the symptom string.

System Action: Processing continues.

Operator Response: Report the message to the programmer responsible for application applname. (Also include the information in messages EPW0401I and EPW0404I.)

Programmer Response: Use the information provided to determine the cause of the problem that triggered the software probe.

Suppression Level: SUP.
Blank Suppression: Yes.
Destination: Console, message log.

EPW0403E EVENT DETECTION FAILED - reason

Explanation: The processing of a software probe failed for one of the following reasons:

- DUMP SERVICES FAILURE-A dump services request failed. See message EPW0412I for the reason for the failure.
- GENERIC ALERT FAILURE-FFST issued a generic alert request that failed. See message EPW0412I for the reason for the failure.
- SYMREC SERVICES FAILURE-FFST issued a SYMREC macro that failed. See message EPW0412I for the reason for the failure.
- PROCESSING ERROR-An internal processing error occurred in FFST.

System Action: System processing and FFST probe processing continue.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- DUMP SERVICES FAILURE-Use message EPW0412I that follows to determine the cause of the failure.
- GENERIC ALERT FAILURE-Use message EPW0412I that follows to determine the cause of the failure.
- SYMREC SERVICES FAILURE-Use message EPW0412I that follows to determine the cause of the failure.
- PROCESSING ERROR-Gather the required documentation and contact the IBM support center.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console, message log.
EPW0404I symptomstring

Explanation:  This message follows message EPW0402I and is the symptom string for the probe statement identified by message EPW0402I.

System Action:  Processing continues.

Operator Response:  Record the symptom string, and give it to the programmer responsible for application applname identified in message EPW0401I.  (Also include the information in messages EPW0401I and EPW0402I.)

Programmer Response:  Use the information provided to determine why the application issued the probe statement.

Suppression Level:  SUP.

Blank Suppression:  Yes.

Destination:  Console, message log.

EPW0405I PROBEID probeid HAS BEEN DISABLED

Explanation:  FFST disabled software probe probeid because it was triggered more than a specified number of times during a specified time period.  (The default threshold is 10 times in 10 minutes.)  FFST disabled this software probe to reduce the performance impact.  Until probeid is enabled with a MODIFY ACTION=ENABLE command, FFST does not issue any more messages related to the same symptom string in message EPW404I for this software probe.

System Action:  Processing continues.

Operator Response:  Report the message to the programmer responsible for application applname specified in message EPW0401I.  (Also include the information in messages EPW0402I and EPW0404I.)

Programmer Response:  Use the information provided to determine why the probe statement was issued.

Suppression Level:  UNSUP.

Blank Suppression:  Yes.

Destination:  Console, message log.

EPW0406I DUMP DATASET IS: datasetname

Explanation:  The datasetname variable indicates the name of the data set that contains the customized dump.  This variable can be up to 44 characters long.  If the data set name is SYS1.DUMP xx , check message IEA911E to ensure that a complete dump is available.  If only a partial dump was taken, the SYS1.DUMP xx data sets may not be large enough to hold a complete system dump.

System Action:  Processing continues.

Operator Response:  Report the message to the programmer responsible for the application identified in message EPW0401I.

Programmer Response:  Use the information provided to locate the dump associated with this event.

Suppression Level:  UNSUP.

Blank Suppression:  Yes.

Destination:  Console, message log.
EPW0407I FOUND ON VOLUME: volumename

Explanation: This message is the second in a group of messages beginning with EPW0406I. The volumename variable identifies the volume of the data set that contains the customized dump.

System Action: Processing continues.

Operator Response: Report the message to the programmer responsible for the application applname in message EPW0401I. (Also include the information in message EPW0406I.)

Programmer Response: Use the information provided to locate the dump associated with this event.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console, message log.

EPW0409I probereasoncode

Explanation: This message is issued to indicate any nonfailure reason that occurred during probe processing, where probereasoncode can be:

- ONLY A PARTIAL DUMP IS AVAILABLE-The dump is incomplete and only a partial dump exists.
- NO DUMP IS AVAILABLE BECAUSE OF A DUMP ERROR-An error occurred during the dump process and no dump is available.
- PAGE OF STORAGE NOT ACCESSIBLE FOR COPYING-A storage area for the dump is not accessible.
- INSUFFICIENT STORAGE TO COPY PAGE OF STORAGE-Not enough storage is available to contain the dump.
- ERROR OCCURRED DURING WRITE TO DUMP DATA SET-An I/O error occurred while FFST was writing the dump.
- ABEND OCCURRED IN PRE-EXIT-An abend occurred during the process of the pre-probe exit.
- PROBE ABSTRACT VALUE WAS TRUNCATED-The software probe abstract is longer than 80 characters and has been truncated.
- SYMPTOM STRING VALUE WAS TRUNCATED-A symptom string value is greater than the maximum and has been truncated.
- GENERIC ALERT TEXT OVERRIDE VALUE WAS TRUNCATED-A generic alert text override value is greater than the maximum and has been truncated.
- ABEND0C4-PROBE ABSTRACT NOT AVAILABLE-An abend occurred while FFST was trying to access the storage that contains the software probe abstract.
- GENERIC ALERT DESCRIPTOR NAME NOT FOUND IN DST-A generic alert description name was not found in the referenced DST.
- GENERIC ALERT CAUSE NAME NOT FOUND IN DST-A generic alert cause name was not found in the referenced DST.
- GENERIC ALERT TRUNCATED-EXCEEDS 512 BYTES-The generic alert is greater than 512 bytes and has been truncated.
- NOT AUTHORIZED TO ACCESS ALTERNATE ASID-The program that issued the software probe is not authorized to access an alternate address space identifier (ASID).
- ALESERV ADD FAILED FOR PASSED DATASPACE TOKEN-The program that issued the software probe has provided incorrect information to access a dataspace.
- ABEND0C4-INVALID POINTER FOUND DURING DATA COLLECTION-An abend occurred while FFST was trying to access storage to be included in the customized dump.
- NOT ENOUGH AVAILABLE SPACE IN THE WORK AREA TO CONTINUE-All available space in the software probe work area has been used.
• DATA STRUCTURE NAME NOT FOUND IN THE DST-A data structure name was not found in the referenced DST.

• ABEND0C4-INVALID POINTER FOUND DURING SYMREC BUILD-An abend occurred while FFST was trying to access storage that contained a value for the symptom string.

• DUMP HAS BEEN SUPPRESSED-A new dump has not been taken for this event.

• LEVELS NOT FOUND IN SYMPTOM STRING-SET TO 999-The LVLS keyword was not found in the symptom string and has been set to a default value of 999.

**System Action:** System processing and FFST probe processing continue.

**Operator Response:** Report the message to the programmer responsible for the application *applname* in message EPW0401I.

**Programmer Response:** The response depends on the reason:

• **ONLY A PARTIAL DUMP IS AVAILABLE**-Correct the cause for the partial dump. If it is a SDUMP data set, it may be too small to contain a full dump.

• **NO DUMP IS AVAILABLE BECAUSE OF A DUMP ERROR**-Correct the cause for the I/O error to the dump data set.

• **PAGE OF STORAGE NOT ACCESSIBLE FOR COPYING**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **INSUFFICIENT STORAGE TO COPY PAGE OF STORAGE**-Report this problem to the IBM support center.

• **ERROR OCCURRED DURING WRITE TO DUMP DATA SET**-Correct the cause for the I/O error to the dump data set.

• **ABEND OCCURRED IN PRE-EXIT**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **PROBE ABSTRACT VALUE WAS TRUNCATED**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **SYMPTOM STRING VALUE WAS TRUNCATED**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **GENERIC ALERT TEXT OVERRIDE VALUE WAS TRUNCATED**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **GENERIC ALERT CAUSE NAME NOT FOUND IN DST**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **GENERIC ALERT TRUNCATED-EXCEEDS 512 BYTES**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **NOT AUTHORIZED TO ACCESS ALTERNATE ASID**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **ALESERV ADD FAILED FOR PASSED DATASPACE TOKEN**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **ABEND0C4-INVALID POINTER FOUND DURING DATA COLLECTION**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.

• **NOT ENOUGH AVAILABLE SPACE IN THE WORK AREA TO CONTINUE**-Report this problem to the IBM support center.

• **DATA STRUCTURE NAME NOT FOUND IN THE DST**-Report this problem to the support organization responsible for the application *applname* in message EPW0401I.
- ABEND0C4-INVALID POINTER FOUND DURING SYMREC BUILD-Report this problem to the support organization responsible for the application applname in message EPW0401I.
- DUMP HAS BEEN SUPPRESSED-This is not a problem. Duplicate dump suppression has caused the dump to be suppressed.
- LEVELS NOT FOUND IN SYMPTOM STRING-SET TO 999-This is not a problem. LVLS has been set to a default value.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, message log.

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**EPW0412I epw0403ereason**

**Explanation:** Message EPW0403E has been issued to indicate that an FFST function has failed. This message will identify the reason for the failure, where epw0403ereason can be:

- DYNAMIC ALLOCATION RETURN CODE = retcode - Dynamic allocation of a dump data set failed, and retcode is the return code.
- DYNAMIC UNALLOCATION RETURN CODE = retcode - Dynamic unallocation of a dump data set failed, and retcode is the return code.
- SMS DYNAMIC ALLOCATION FAILURE (97XX), REASON CODE = retcode - Dynamic allocation of a dump data set failed, and retcode is the SMS reason code.
- NO DUMP INDEX NUMBER AVAILABLE.- No dump numbers are available.
- FAILURE TO OPEN DYNAMICALLY ALLOCATED DUMP DATA SET-FFST is not able to open the dynamically allocated dump data set.
- SDUMP SUPPRESSED-ANOTHER SDUMP IN PROGRESS-An SVC dump was suppressed because the capture phase of another SVC dump was in progress.
- SDUMP SUPPRESSED-REQUESTED BY INSTALLATION-An SVC dump was suppressed by a request by the installation (for example, DUMP=NO at IPL or CHNGDUMP SET,NODUMP).
- SDUMP SUPPRESSED-SLIP NODUMP COMMAND-An SVC dump was suppressed by a SLIP NODUMP command.
- SDUMP SUPPRESSED-SYS1.DUMP DATA SET NOT AVAILABLE-An SVC dump was suppressed because a SYS1.DUMP data set was not available.
- SDUMP SUPPRESSED BY MVS DAE-An SVC dump was suppressed by MVS DAE processing.
- SDUMP FAILURE-PROGRAM NOT AUTHORIZED-An SVC dump failed because the application program was not authorized.
- NetView RECEIVER IS NOT ACTIVE-The specified NetView alert receiver is not active.
- NetView IS AVAILABLE TO PROCESS USER REQUESTS-NetView is now available to process generic alert requests.
- NetView RECEIVER PROGRAM IS ACTIVE-The specified NetView alert receiver program is active.
- NetView RECEIVER PROGRAM IS INACTIVE-The specified NetView alert receiver program is inactive.
- NetView RECEIVER PROGRAM IS ALREADY ACTIVE-The specified NetView alert receiver program is already active.
- NetView RECEIVER ECB IS NOT ZERO-The specified NetView alert receiver event control block (ECB) is not zero.
- INVALID REQUEST TYPE-Invalid NetView alert receiver request type.
- PROGRAM NOT EXECUTING IN PRIMARY ADDRESSING MODE-The program issuing the generic alert is not executing in primary addressing mode.
- USER PROGRAM IS NOT AUTHORIZED-The program issuing the generic alert is not running in authorized mode.

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Appendix A. FFST Messages A-25
- NetView SUBSYSTEM IS NOT ACTIVE-The NetView generic alert subsystem is not active.
- ASCB ADDRESS IS NOT CORRECT-The specified ASCB address is not correct.
- RECEIVER PROGRAM IS NOT DEFINED-The specified NetView receiver program is not defined.
- NetView RELEASE DOES NOT SUPPORT USER REQUEST-The specified NetView release does not support the generic alert request.
- NO DATA BUFFER IN THE RECEIVER BUFFER QUEUE-No available buffer in the receiver buffer queue.
- RECEIVER BUFFER SIZE TOO SMALL FOR INCOMING DATA-The specified NetView receiver buffer size is too small for the incoming data.
- NO NetView STORAGE IS AVAILABLE-No available storage in NetView for the generic alert.
- INVALID BUFFER LENGTH-The network management vector transport (NMVT) buffer length is invalid.
- NMVT BUFFER LENGTH EXCEEDS 512 BYTES-The NMVT buffer length is greater than 512 bytes.
- RECEIVER BUFFER QUEUE IS FULL-The specified NetView receiver buffer queue is full.
- ESTAE RECOVERY CANNOT BE ESTABLISHED-An ESTAE recovery cannot be established as requested.
- INVALID SENDER-ID OR RECEIVER-ID-The NMVT buffer contains an invalid send or receiver identification.
- NetView PROCESSING ERROR-A NetView processing error occurred.
- DELIMITER NOT FOUND BETWEEN SDB KEYWORDS-No blank delimiter was found between the structure database keywords.
- WRITE OF SECTION 1 FAILED-The input symptom record was successfully copied. However, an attempt to write section 1 information from the complete symptom record failed. The area was found nonaccessible to a write request.
- SYMPTOM RECORD EXCEEDS MAXIMUM LENGTH-The total length of the input symptom record exceeds the maximum.
- OPTIONAL SYMPTOM RECORD SEGMENTS INACCESSIBLE-Optional segments of the input symptom record were found nonaccessible. The record includes the accessible entries of the input symptom record.
- SR NOT IN THE FIRST 2 BYTES OF SYMPTOM RECORD-The first 2 bytes of the input symptom record do not contain the SR operand.
- INCOMPLETE SECTION 2 OF THE SYMPTOM RECORD-The input symptom record does not contain the required entries for section 2.
- INCOMPLETE SECTION 2.1 OF THE SYMPTOM RECORD-The input symptom record does not contain the required entries for section 2.1.
- INCOMPLETE SECTION 3 OF THE SYMPTOM RECORD-The input symptom record does not contain the required entries for section 3.
- SYMPTOM RECORD SEGMENTS INACCESSIBLE-Portions of the input symptom record were found nonaccessible to a write request.
- SYMPTOM RECORD REQUIRED SEGMENTS INACCESSIBLE-Required portions of the input symptom record were found nonaccessible to a write request.
- SYMPTOM RECORD IN INACCESSIBLE STORAGE-The input symptom record is in nonaccessible storage.
- PROGRAM NOT AUTHORIZED TO ISSUE SYMREC MACRO-The program issuing the SYMREC macro is not authorized.
- INSUFFICIENT SPACE IN LOGREC BUFFER-Space in the LOGREC buffer is insufficient to accommodate the symptom record.
INSTALLATION PREVENTED UNAUTHORIZED USE OF SYMREC-The installation prevented the unauthorized caller from writing the symptom record to SYS1.LOGREC.

INSUFFICIENT STORAGE FOR SYMREC SERVICES-The SYMREC macro service routine could not acquire storage for its work area and for a copy of the symptom record.

MOVE OF SYMPTOM RECORD TO LOGREC FAILED-Failure occurred while moving the symptom record to the LOGREC buffer.

LOGIC ERROR IN SYMREC MACRO SERVICES-The SYMREC macro service routine has a logic error.

SYMPTOM RECORD COMPONENT NOT OPERABLE-The symptom record component is not operable.

System Action: System processing and FFST probe processing continue.

Operator Response: Report the message to the programmer responsible for the application applname in message EPW0401I.

Programmer Response: The response depends on the reason:

- DYNAMIC ALLOCATION RETURN CODE = retcode - Report this problem to the IBM support center.
- DYNAMIC UNALLOCATION RETURN CODE = retcode - Report this problem to the IBM support center.
- SMS DYNAMIC ALLOCATION FAILURE (97XX), REASON CODE = retcode - Report this problem to your MVS system programmer.
- NO DUMP INDEX NUMBER AVAILABLE.- Report this problem to your MVS system programmer. Any previous dumps that are no longer needed should be deleted.
- FAILURE TO OPEN DYNAMICALLY ALLOCATED DUMP DATA SET- Report this problem to the IBM support center.
- SDUMP SUPPRESSED-ANOTHER SDUMP IN PROGRESS-Report this problem to the support organization responsible for the application applname in message EPW0401I.
- SDUMP SUPPRESSED-REQUESTED BY INSTALLATION-If an SVC dump is desired, change the IPL start parameter or issue a CHNGDUMP command to allow dumps.
- SDUMP SUPPRESSED-SLIP NODUMP COMMAND-If an SVC dump is desired, issue a command to reset the SLIP NODUMP command.
- SDUMP SUPPRESSED-SYS1.DUMP DATASET NOT AVAILABLE-If an SVC dump is desired, clear out a SYS1.DUMP data set.
- SDUMP SUPPRESSED BY MVS DAE-If an SVC dump is desired, report this problem to your MVS system programmer.
- SDUMP FAILURE-PROGRAM NOT AUTHORIZED-Report this problem to the support organization responsible for the application applname in message EPW0401I.
- NetView RECEIVER IS NOT ACTIVE-The specified NetView alert receiver is not active.
- NetView IS AVAILABLE TO PROCESS USER REQUESTS-None.
- NetView RECEIVER PROGRAM IS ACTIVE-None.
- NetView RECEIVER PROGRAM IS INACTIVE-Activate the NetView alert receiver program.
- NetView RECEIVER PROGRAM IS ALREADY ACTIVE-None.
- NetView RECEIVER ECB IS NOT ZERO-Report this problem to the IBM support center.
- INVALID REQUEST TYPE-Report this problem to the IBM support center.
- PROGRAM NOT EXECUTING IN PRIMARY ADDRESSING MODE-Report this problem to the IBM support center.
- USER PROGRAM IS NOT AUTHORIZED-Report this problem to the IBM support center.
- NetView SUBSYSTEM IS NOT ACTIVE-Verify that the NetView subsystem has been started.
- ASCB ADDRESS IS NOT CORRECT-Report this problem to the IBM support center.

Appendix A. FFST Messages A-27
- RECEIVER PROGRAM IS NOT DEFINED-Verify that the NetView receiver program has been defined to NetView.
- NetView RELEASE DOES NOT SUPPORT USER REQUEST-Report this problem to the IBM support center.
- NO DATA BUFFER IN THE RECEIVER BUFFER QUEUE-Report this problem to the IBM support center.
- RECEIVER BUFFER SIZE TOO SMALL FOR INCOMING DATA-Report this problem to the IBM support center.
- NO NetView STORAGE IS AVAILABLE-Report this problem to the IBM support center.
- INVALID BUFFER LENGTH-Report this problem to the IBM support center.
- NMVT BUFFER LENGTH EXCEEDS 512 BYTES-Report this problem to the IBM support center.
- RECEIVER BUFFER QUEUE IS FULL-Report this problem to the IBM support center.
- ESTAE RECOVERY CANNOT BE ESTABLISHED-Report this problem to the IBM support center.
- INVALID SENDER-ID OR RECEIVER-ID-Report this problem to the IBM support center.
- NetView PROCESSING ERROR-Report this problem to the IBM support center.
- DELIMITER NOT FOUND BETWEEN SDB KEYWORDS-Report this problem to the IBM support center.
- WRITE OF SECTION 1 FAILED-Report this problem to the IBM support center.
- SYMPTOM RECORD EXCEEDS MAXIMUM LENGTH-Report this problem to the IBM support center.
- OPTIONAL SYMPTOM RECORD SEGMENTS INACCESSIBLE-Report this problem to the IBM support center.
- SR NOT IN THE FIRST 2 BYTES OF SYMPTOM RECORD-Report this problem to the IBM support center.
- INCOMPLETE SECTION 2 OF THE SYMPTOM RECORD-Report this problem to the IBM support center.
- INCOMPLETE SECTION 2.1 OF THE SYMPTOM RECORD-Report this problem to the IBM support center.
- INCOMPLETE SECTION 3 OF THE SYMPTOM RECORD-Report this problem to the IBM support center.
- SYMPTOM RECORD SEGMENTS INACCESSIBLE-Report this problem to the IBM support center.
- SYMPTOM RECORD REQUIRED SEGMENTS INACCESSIBLE-Report this problem to the IBM support center.
- SYMPTOM RECORD IN INACCESSIBLE STORAGE-Report this problem to the IBM support center.
- PROGRAM NOT AUTHORIZED TO ISSUE SYMREC MACRO-Report this problem to the IBM support center.
- INSUFFICIENT SPACE IN LOGREC BUFFER-Report this problem to the IBM support center.
- INSTALLATION PREVENTED UNAUTHORIZED USE OF SYMREC-Report this problem to your MVS system programmer.
- INSUFFICIENT STORAGE FOR SYMREC SERVICES-Report this problem to the IBM support center.
- MOVE OF SYMPTOM RECORD TO LOGREC FAILED-Report this problem to the IBM support center.
- LOGIC ERROR IN SYMREC MACRO SERVICES-Report this problem to the IBM support center.
- SYMPTOM RECORD COMPONENT NOT OPERABLE-Report this problem to your MVS system programmer.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console, message log.

**EPW0413I procname: PROBEID probeid FAILED - reason**

**Explanation:** The software probe with the probe identifier `probeid` failed for one of the following reasons:

- **INVALID PARAMETERS-MORE THAN 25 CHARACTERS** - More than 25 characters were found in the first parameter passed by the software probe.

- **INVALID PARAMETERS-FIRST CHARACTER NOT *-** The first character of the first parameter passed by the software probe does not contain an asterisk.

- **INVALID PARAMETERS-DST NAME LONGER THAN 8** - The DST name passed by the software probe was more than 8 characters long.

- **INVALID PARAMETERS-PROBEID LONGER THAN 8** - The probe identifier passed by the software probe was more than 8 characters long.

- **INVALID PARAMETERS-COMMA DOES NOT FOLLOW FLAGS** - A comma does not follow the flags passed by the software probe.

- **INVALID PARAMETERS-COUNT LONGER THAN 3** - More than 3 input parameter were passed by the software probe.

- **INVALID PARAMETERS-CRC VALUE LONGER THAN 7** - The CRC value passed by the software probe was more than 7 characters long.

- **FFST INITIALIZATION OF PRODUCT NOT COMPLETE** - The initialization of the product issuing the software probe has not completed.

- **NO WORK AREA AVAILABLE** - No FFST work areas are available to process the software probe.

- **SETFRR FAILED** - FFST was not able to establish an FRR recovery routine.

- **ESTAE FAILED** - FFST could not run its abnormal exit routine.

- **SPECIFIED DST NOT FOUND** - The DST specified by the software probe could not be found in the available libraries.

- **SPECIFIED DST INCOMPATIBLE WITH PRESENT RELEASE** - The DST specified by the software probe is not compatible with the current release of FFST.

- **INVALID DST SPECIFIED** - The DST specified by the software probe is invalid.

- **PROBE ENTRY NOT FOUND IN SPECIFIED DST** - The software probe entry could not be found in the DST specified by the software probe.

- **PROBE INCOMPATIBLE WITH ENTRY IN DST** - The software probe entry is not compatible with the entry in the DST specified by the software probe.

- **ENTRY IN SPECIFIED DST IS NOT A PROBE** - The software probe entry in the DST specified by the software probe is not a software probe entry.

- **PROBE DOES NOT MATCH AR MODE OF PROBE IN DST** - The access Register (AR) mode of the software probe entry of the DST specified by the software probe, does not match the AR mode of the issuing software probe.

- **PROBE SDBSTR VALUE IS INVALID** - The SDBSTR value specified by the software probe is invalid.

- **PROBE ISSUER IN SECONDARY MODE** - The software probe is being issued while running in secondary mode.

- **PROBE DISABLED - INVOKED TOO MANY TIMES** - The symptom string for the probe has been seen by FFST more often than the threshold value allows. Therefore, FFST disabled this probe so no outputs will be generated for it.

- **UNEXPECTED ABEND OCCURRED** - An unexpected abend occurred while processing a software probe.

**System Action:** System processing continues and FFST probe processing continues.

**Operator Response:** Report the message to the programmer responsible for the application `applname` in message EPW0401I.
**Programmer Response:** The response depends on the reason:

- **INVALID PARAMETERS-MORE THAN 25 CHARACTERS-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-FIRST CHARACTER NOT *-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-DST NAME LONGER THAN 8-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-PROBEID LONGER THAN 8-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-COMMA DOES NOT FOLLOW FLAGS-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-COUNT LONGER THAN 3-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID PARAMETERS-CRC VALUE LONGER THAN 7-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **FFST INITIALIZATION OF PRODUCT NOT COMPLETE-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **NO WORK AREA AVAILABLE-**Report this problem to the IBM support center.
- **SETFRR FAILED-**Report this problem to the IBM support center.
- **ESTAE FAILED-**Determine why FFST could not run the ESTAE.
- **SPECIFIED DST NOT FOUND-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **SPECIFIED DST INCOMPATIBLE WITH PRESENT RELEASE-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **INVALID DST SPECIFIED-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **PROBE ENTRY NOT FOUND IN SPECIFIED DST-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **PROBE INCOMPATIBLE WITH ENTRY IN DST-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **ENTRY IN SPECIFIED DST IS NOT A PROBE-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **PROBE DOES NOT MATCH AR MODE OF PROBE IN DST-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **PROBE SDBSTR VALUE IS INVALID-**Report this problem to the support organization responsible for the application `applname` in message EPW0401I.
- **PROBE ISSUER IN SECONDARY MODE-**Report this problem to the IBM support center.
- **PROBE DISABLED - INVOKED TOO MANY TIMES-**Report this problem to the IBM support center.
- **UNEXPECTED ABEND OCCURRED-**Report this problem to the IBM support center.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, message log.
EPW0414I PROBEID probeid FOR applname HAS BEEN ISSUED

Explanation: The software probe with the probe identifier probeid has been issued for application applname. This message is issued only for a FFST/VM GCS application. It is issued to the virtual machine which is running.

System Action: System processing continues and probe processing continues.

Operator Response: Refer to the FFST console or FFST probe message log to determine the results.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Product's GCS Console

EPW0501I procname: MESSAGE LOG TEMPORARILY DISABLED - reason

Explanation: FFST temporarily disabled the message log for one of the following reasons:

- GETMAIN FAILED FOR LOG CONTROL BLOCK-FFST attempted to allocate storage for a control block to handle the probe message logs, which failed.
- NO DATA SETS CAN BE USED-DD name FFSTLOG1 was not defined.
- UNEXPECTED ABEND OCCURRED-An unexpected abend occurred during message log processing. After determining and correcting the problem, the operator can enable the log with the MODIFY LOG command.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- I/O ERROR OCCURRED-Correct the problem that caused the I/O error. When the problem is corrected, the operator can enable the message log with the MODIFY LOG command.
- MESSAGE LOG IS FULL-Either copy the message log to another data set or print the message log. After the log is copied or printed, the operator can enable and clear the message log with the MODIFY LOG,CLEAR command.
- OPEN FAILED FOR ddname -Correct the problem that caused the failure. When the problem is corrected, the operator can enable the message log with the MODIFY LOG command.
- BLOCKSIZE NOT A MULTIPLE OF 80-Correct the problem that caused the failure. When the problem is corrected, the operator can enable the message log with the MODIFY LOG command.
- UNEXPECTED ABEND OCCURRED-Report this problem to the IBM support center.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0502I procname: CHECKPOINT FUNCTION UNAVAILABLE - reason

Explanation: reason may be:

- OPEN DCB FAILED-During checkpoint processing, an open request for the DCB for the checkpoint data set failed.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- OPEN DCB FAILED-Report this problem to the IBM support center.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0503E** procname: CHECKPOINT PROCESSING FAILED - reason

Explanation: reason may be:
- OPEN DCB FOR OUTPUT FAILED-During checkpoint processing, an open request for output failed for the checkpoint data set.
- ALLOCATION OF WORK BUFFER FAILED-During checkpoint processing, the allocation of a work buffer failed.
- DATA SET FULL-RECOVERY ACTION REQUIRED-The data set is not big enough to hold all the required checkpoint data.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:
- OPEN DCB FOR OUTPUT FAILED-Report this problem to the IBM support center.
- ALLOCATION OF WORK BUFFER FAILED-Report this problem to the IBM support center.
- DATA SET FULL-RECOVERY ACTION REQUIRED-Delete and reallocate a larger FFST checkpoint data set.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0504I** procname: FFSTPARM MEMBER memname READ SUCCESSFULLY

Explanation: FFST read member memname from the FFSTPARM data set successfully. This message is issued to confirm that the member read is the one that is desired.

System Action: System processing continues, and member memname is interpreted.

Operator Response: None, unless memname is not the member that was intended to be used.

Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

**EPW0505I** procname: FFSTPARM MEMBER memname NOT FOUND

Explanation: FFST could not find member memname in the FFSTPARM data set. This message may not indicate an error, as there are default names for the members that can be read, and they may be optional.

System Action: Processing continues.

Operator Response: None, unless member memname should have been found, or is mis-spelled. In this case, recycle FFST after the system programmer corrects the problem.

Programmer Response: None, unless the member should have been found.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
EPW0506E  procname: I/O ERROR OCCURRED ATTEPTING TO READ FFSTPARM MEMBER memname.

Explanation: FFST attempted to read member memname from the FFSTPARM data set, but an I/O error occurred during the attempt.

System Action: System processing continues, but FFST processing of member memname is bypassed.

Operator Response: Recycle FFST after the I/O error has been corrected.

Programmer Response: Correct the I/O error and have the operator recycle FFST.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW0507E  procname: LOGID ddname MARKED DISABLED - reason

Explanation: FFST found an error with the message log ddname. reason may be:

- I/O ERROR OCCURRED-An I/O error other than an out of space condition occurred.
- OPEN FAILED-An OPEN request for ddname failed.
- DATA SET HAS INVALID ATTRIBUTES-The data set defined on DD ddname is not defined as fixed, logical record length 80, or block size a multiple of 80.

System Action: Processing continues, but FFST will not use the log data set defined on DD ddname until the problem is corrected and an ACTION=ENABLE modify command is issued.

Operator Response: Report the message to the system programmer, and issue a modify command with ACTION=ENABLE for ddname when the problem has been corrected.

Programmer Response: The response depends on the reason for the failure:

- I/O ERROR OCCURRED-An I/O error other than an out of space condition occurred.
- OPEN FAILED-An OPEN request for ddname failed.
- DATA SET HAS INVALID ATTRIBUTES-The data set defined on DD ddname is not defined as fixed, logical record length 80, or block size a multiple of 80.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW0508I  procname: LOGID ddname FULL - ATTEMPTING NEXT LOG

Explanation: FFST attempted writing messages to log data set ddname, but it encountered an out-of-space condition. Message log processing is switching to the next enabled log data set.

System Action: FFST attempted writing messages to log data set ddname, but it encountered an out-of-space condition. Message log processing is switching to the next enabled log data set.

Operator Response: None, unless REUSE is not enabled, and case message EPW0510I will be issued. Also, issue a modify command with ACTION=CLEAR to logid ddname if REUSE is not enabled and when the data in the data set is no longer needed.

Programmer Response: If necessary, offload the data in the data set defined on DD ddname to a backup data set and request that the operator clear the data set.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
EPW0509I  procname: NOW USING LOGID ddname

Explanation: FFST is writing messages to the data set defined on DD ddname. This message is issued during FFST initialization, after a log switch has taken place, and when a data set is again being used after being suspended.

System Action: FFST begins writing messages to the data set defined on DD ddname.

Operator Response: None.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW0510I  procname: MESSAGE LOG SUSPENDED - REUSE NOT ENABLED, AND LOGID ddname NOT EMPTY

Explanation: A message log switch has taken place, and the REUSE function is disabled, but the data set defined on DD ddname still contains data and has been cleared.

System Action: FFST message log processing is temporarily suspended, and will resume when logid ddname has been cleared.

Operator Response: Issue a modify command with ACTIO=CLEAR for DD ddname when the data set can be reused.

Programmer Response: Determine if the data contained in the data set defined on DD ddname can be erased. If so, request that the operator clear the message log.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW0601I  procname: cm COMMAND COMPLETE

Explanation: FFST completed processing the command cm, where cm is one of the following commands:

DISABLE
ENABLE
CLEAR
DISPLAY
CHANGE
RESET
HALT

System Action: Processing continues.

Operator Response: This message is informational. It indicates that FFST completed processing the specified command.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
**EPW0602I procname: cm COMMAND CANCELLED**

**Explanation:** The system cancelled the command cm because the necessary resources are unavailable. (For example, FFST may not be able to obtain storage for a command control block.)

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Wait for the necessary resources to become available and reenter the command. If the message appears again, perform the problem determination action.

**Programmer Response:** Correct the problem as indicated in the problem determination output.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0603E procname: INVALID PARAMETER parm ENTERED**

**Explanation:** FFST does not recognize parameter parm. This parameter is not valid on any FFST modify command.

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Try the command again with the correct parameter.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0604E procname: REQUIRED PARAMETER parm MISSING**

**Explanation:** You did not include the required parameter parm in the command you entered.

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Try the command again with the required parameter.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0605E procname: CONFLICTING PARAMETERS ENTERED**

**Explanation:** The command contains conflicting parameters.

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Try the command again without the conflicting parameters. For more information about FFST commands, see Chapter 2, “Controlling FFST Operation” on page 2-1.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.
**EPW0606E** proname: INVALID VALUE FOR PARAMETER parm

**Explanation:** The value you used for parameter parm was not one of the allowed values for the command you entered.

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Try the command again with the correct parameter value.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0607E** proname: INVALID SYNTAX - reason

**Explanation:** You entered a command using incorrect syntax. FFST could not process the command for one of the following reasons:

- MULTIPLE VALUES NOT ALLOWED ON PARAMETER parm—Parameter parm was entered with a value or values that were enclosed in parentheses. Multiple values are not allowed for this parameter.
- MISSING RIGHT PARENTHESIS—Multiple values were coded for a parameter (as indicated with a left parenthesis), but no matching right parenthesis was found.
- MISSING COMMA—Multiple values were coded for a parameter, but no comma separated the right parenthesis from the next parameter.
- VALUE CODED FOR PARAMETER parm—No value is allowed for parameter parm, but you coded one.
- MISSING VALUE FOR PARAMETER parm—FFST requires that parameter parm have a value to be coded with it, but no value was found.

**System Action:** The system does not execute the command. Other processing continues.

**Operator Response:** Try the command again using the correct syntax.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0608E** proname: MODIFY COMMAND FAILED - reason

**Explanation:** You entered an FFST MODIFY command that failed for one of the following reasons:

- APPLID OR PROBEID REQUIRED WITH ACTION action—You entered a command with ACTION=action, but this command requires that either APPLID or PROBEID or both be coded.
- VENDOR REQUIRED IF FASTService NOT INSTALLED—FASTService is not installed, but you did not code the VENDOR parameter. VENDOR implies an FFST product; its absence implies FASTService.
- INVALID PROBEID—You coded the PROBEID parameter, but its value was invalid for one of the following reasons:
  - The value was less than 3 characters.
  - An asterisk (*) was found in an invalid position.
  - There were characters following an asterisk.
- UNKNOWN APPLID - USE "DEFINE" TO DEFINE—You coded the APPLID parameter, but the application was not defined to FFST at the time. If you want to define the application name, use the DEFINE parameter to do so.
• UNKNOWN PROBEID PREFIX—For a command with ACTION=DISPLAY, you coded PROBEID but not APPLID, and the prefix portion of the probe identifier was not known to FFST. If you know which APPLID is associated with this prefix, code APPLID also.

• VENDOR NOT ALLOWED—You entered a command and used the VENDOR parameter, but that parameter is not allowed with APPLID=FFST (for an ACTION of ENABLE, DISABLE, or CLEAR) or APPLID=FASTSERV (for any action).

• PROBEID NOT ALLOWED WITH APPLID=FFST or APPLID=FASTSERV—You entered a command with APPLID=FFST or APPLID=FASTSERV, but also coded PROBEID.

• OPTIONS NOT ALLOWED—You entered a MODIFY command with ACTION=DISPLAY, but also coded OPTIONS.

• DEFINE NOT ALLOWED—You entered a MODIFY command with ACTION=DISPLAY, but also coded DEFINE.

• UNKNOWN APPLID applid—You entered a MODIFY command with ACTION=DISPLAY and APPLID=applid, but applid is not known to FFST.

• UNKNOWN PROBEID probeid—You entered a MODIFY command with ACTION=DISPLAY and PROBEID=probeid, but FFST could not find any probe identifiers that match probeid.

• FASTService NOT INITIALIZED—You entered a MODIFY command with APPLID=FASTSERV or without the VENDOR parameter, but the FASTService product was not initialized.

• LOAD FAILED FOR MODULE modname—You specified ACTION=CHANGE and GAEXIT=modname, but module modname could not be loaded.

• GENERIC ALERT EXIT DOES NOT MATCH CURRENT gaexit—You entered ACTION=RESET and the GAEXIT parameter with a name, but the name does not match the current generic alert exit name, gaexit.

• NO GENERIC ALERT EXIT CURRENTLY LOADED—You entered ACTION=RESET and the GAEXIT parameter, but a generic alert exit was not previously loaded.

• NetView RECEIVER ID DOES NOT MATCH CURRENT alrcvid—You entered ACTION=RESET and the ALRCVID parameter with a name, but the name does not match the current NetView receiver identifier, alrcvid.

• DUMP VOLUME DOES NOT MATCH CURRENT dumpvol—You entered ACTION=RESET and the DUMPVOL parameter with a name, but the name does not match the current dump volume, dumpvol.

• DUMP QUALIFIER DOES NOT MATCH CURRENT dumpqual—You entered ACTION=RESET and the DUMPQUAL parameter with a name, but the name does not match the current qualifier, dumpqual.

• COMMAND TOO LONG—The command entered is too long in length.

• LOGID VALUE REQUIRED FOR ACTION=CLEAR—If you wish to clear a log data set, you must specify a log DD name.

• LOGID CANNOT BE REUSE WITH ACTION=CLEAR—The REUSE value may only be used on a modify command that specifies ACTION=ENABLE or ACTION=DISABLE.

• DDNAME NOT FOUND FOR dname—You entered a modify command indicating LOGID=dname, but the DD statement for this message log does not exist.

System Action: The system does not execute the command. Other processing continues.

Operator Response: Determine the reason for the failure, and either enter the command correctly or correct the reason for the failure.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
**EPW0610I**  
**procname:** DISPLAY FOR applprobid applprobname **FOLLOWS:**

**Explanation:** This message is the first in a group of messages that are the result of a MODIFY ACTION=DISPLAY command. Additional messages follow this message, where applprobid is either APPLID or PROBEID and applprobname is the application name or software probe identifier.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW0611I**  
applprobid COUNTS PROBE DUMP SYMRC GENAL SYMST SUPDP

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

- **applprobid**  This field contains either APPLID or PROBEID
- **COUNTS**  Total and unique count of software probes.
- **PROBE**  Status of software probe for the application.
- **DUMP**  Status of dumps for an application.
- **SYMRC**  Status of symptom records for an application.
- **GENAL**  Status of generic alerts for an application.
- **SYMST**  Status of symptom string message EPW0402I for an application.
- **SUPDP**  Status of dump suppression for an application.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Console.

---

**EPW0612I**  
apprbid totct/prbct stat stat stat stat stat

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

- **apprbid**  Application name or software probe identifier.
- **totct**  Number from 0 to 65535 representing the total number of times software probes have been triggered.
- **prbct**  Number from 0 to 65535 representing the number of different symptom strings generated for triggered software probes.
- **stat**  Status of the probe or function. An EN as the status indicates that the probe or function is enabled. A DIS as the status indicates that the probe or function is disabled.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.
Destination: Console.

**EPW0613I**

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message displays as a blank separator line.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

Destination: Console.

---

**EPW0614I**

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLID</td>
<td>Application name</td>
</tr>
<tr>
<td>PRODUCT NAME</td>
<td>Product name</td>
</tr>
<tr>
<td>VENDOR</td>
<td>Vendor name</td>
</tr>
</tbody>
</table>

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

Destination: Console.

---

**EPW0615I**

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applid</td>
<td>Application name</td>
</tr>
<tr>
<td>productname</td>
<td>Product name</td>
</tr>
<tr>
<td>vendorname</td>
<td>Vendor name</td>
</tr>
</tbody>
</table>

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

Destination: Console.

---

**EPW0616I**

**Explanation:** This message is part of a group of messages that are the result of a MODIFY ACTION=DISPLAY command. This message appears if no application or probe identifiers are known to FFST, where applprobeid is either APPLICATION NAMES or PROBEIDS.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.
Blank Suppression:  No.
Destination:  Console.

EPW0617I THE FOLLOWING PROBEIDS HAVE TRIPPED AT LEAST ONCE:

Explanation:  This message is part of a group of messages that are the result of a MODIFY
ACTION=DISPLAY command and is issued if software probe identifiers are available to display.

System Action:  Processing continues.
Operator Response:  None.
Programmer Response:  None.
Suppression Level:  UNSUP.
Blank Suppression:  Yes.
Destination:  Console.

EPW0618I probeid probeid probeid probeid probeid

Explanation:  This message is part of a group of messages that are the result of a MODIFY
ACTION=DISPLAY command and is issued if software probe identifiers are available to display, where
probeid is the software probe identifier.

System Action:  Processing continues.
Operator Response:  None.
Programmer Response:  None.
Suppression Level:  UNSUP.
Blank Suppression:  No.
Destination:  Console.

EPW0620I DUM DESTINATION GA EXIT ALRT RCV MSG LOG /STATUS

Explanation:  This message is part of a group of messages that are the result of a MODIFY
ACTION=DISPLAY command.  This message displays the following fields:

DUMP DESTINATION  CMS User id which will be the receiver of all FFST CMS dumps
GA EXIT  Generic alert exit name
ALRT RCV  NetView alert receiver name
MSG LOG  Software probe message log DD name
STATUS  Software probe message log status

System Action:  Processing continues.
Operator Response:  None.
Programmer Response:  None.
Suppression Level:  UNSUP.
Blank Suppression:  No.
Destination:  Console.

EPW0621I DUMPCQUAL DUMPVOL GA EXIT ALRT RCV MSG LOG/LOGREUSE

Explanation:  This message is part of a group of messages that is the result of a MODIFY
ACTION=DISPLAY command, and acts as a header message for message EPW0622I.  This message
displays the following fields:

DUMPCQUAL  High-level dump data set qualifier
DUMPVOL  Dump data set volume serial number
GA EXIT  Generic alert exit name
ALRT RCV  NetView alert receiver name
**MSG LOG**  Software probe message log status  
**LOGREUSE**  Status of the REUSE message log function  

**System Action:**  Processing continues.  
**Operator Response:**  None.  
**Programmer Response:**  None.  
**Suppression Level:**  UNSUP.  
**Blank Suppression:**  No.  
**Destination:**  Console.

**Explanation:**  This message is part of a group of messages that is the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

- **dumpqual**  High-level dump data set qualifier  
- **dumpvol**  Dump data set volume serial number  
- **gaextnm**  Generic alert exit name  
- **alrtcvnm**  NetView alert receiver name  
- **msglogst**  Software probe message log status, where status can be:  
  - ENABLED  FFST message logging function is enabled.  
  - DISABLED  FFST message logging function is disabled.  
  - GETMFAIL  A storage allocation request had failed for a log control block.  
  - SUSPEND  FFST message logging function is not enabled, and the current log data set is not empty.  
  - NODSAVL  No available log data set DD name was found.  
- **reusest**  Status of the REUSE message log function, where status can be:  
  - ENABLED  FFST message log REUSE function is enabled.  
  - DISABLED  FFST message log REUSE function is disabled.

**System Action:**  Processing continues.  
**Operator Response:**  None.  
**Programmer Response:**  None.  
**Suppression Level:**  UNSUP.  
**Blank Suppression:**  Yes.  
**Destination:**  Console.

**THE FOLLOWING APPLICATIONS ARE STILL ACTIVE TO FFST**

**Explanation:**  You issued a MODIFY ACTION=HALT command or a STOP command, and one or more applications still have an active interface to FFST. This message is the first in a group of messages. The messages that follow list the applications that still have an active interface.

**System Action:**  None.  
**Operator Response:**  None.  
**Programmer Response:**  None.  
**Suppression Level:**  UNSUP.  
**Blank Suppression:**  Yes.  
**Destination:**  Console.
EPW0624I APPLID PRODUCT NAME VENDOR ASID

Explanation: This message is a part of a group of messages that is the result of a MODIFY ACTION=HALT command or a STOP command. It provides a header for one or more messages to follow.

System Action: None.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0625I applid productname vendor asid

Explanation: This message is part of a group of messages that is the result of a MODIFY ACTION=HALT command or a STOP command. It specifies the name of an application that still has an active interface to FFST, where:

- `applid` is the application name.
- `productname` is the name of the product.
- `vendor` is the vendor name.
- `asid` is the address space in which the application is active to FFST (MVS only).

System Action: None.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Console.

EPW0626I MSG LOG - STATUS

Explanation: This message is part of a group of messages that is the result of a MODIFY ACTION=DISPLAY command, and acts as a header for message EPW0627I. This message displays the following fields:

```
MSG LOG A list of DD names used by the message log function
STATUS The corresponding status of the message log data set.
```

System Action: Processing continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Console.

EPW0627I logddnam - logstat

Explanation: This message is part of a group of messages that is the result of a MODIFY ACTION=DISPLAY command. This message displays the following fields:

```
logddnam A DD name used for the message log function
logstat The corresponding status of the message log data set, where status can be:
```
ENABLED, CURRENT The message log is enabled, and currently being written to.

ENABLED, AVAILABLE The message log is enabled, and may be used in the future.

ENABLED, FULL The message log is enabled, but it has filled up. REUSE is disabled, so it must be cleared before it can be reused.

ENABLED, TO BE CLEARED The message log is enabled, and a modify command with ACTION=CLEAR has been issued for it. REUSE is disabled, but this log may now be reused.

ENABLED, USED The message log is enabled, and is not the current log, but it has been written to in the past. REUSE is enabled, so this data set may be reused in the future.

DISABLED BY OPERATOR The operator has issued a modify command with ACTION=DISABLE for this message log.

DISABLED - I/O ERROR An I/O error has been encountered for this message log.

DISABLED - INVALID ATTRIBUTES The data set defined for this DD statement was allocated with attributes that are not acceptable for a log data set.

SUSPENDED - DATA SET NOT EMPTY This message log is the current data set, but REUSE is DISABLED, and the data set is not empty. Message logging is temporarily suspended until the log data set is cleared.

System Action: Processing continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Console.

EPW0701I END OF MESSAGE GROUP

Explanation: This message marks the end of a message group. For more information, see the information for the other messages in the group.
System Action: Processing continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW0702E INVALID REPLY

Explanation: You replied to an outstanding FFST message, but your response was invalid.
System Action: The response is ignored.
Operator Response: Look for another iteration of the message for which your response was invalid, and reply to that message with a valid response.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.
**EPW0799I procname: MESSAGE nnnn ISSUED BUT NOT FOUND**

*Explanation:* FFST issues this message whenever a message unknown to FFST is issued. The *nnnn* variable represents the number of the unidentified message.

*System Action:* Processing continues.

*Operator Response:* Report the message to the system programmer.

*Programmer Response:* The FFST/FFDC process should have been invoked. Gather the required documentation and contact the IBM support center.

*Suppression Level:* UNSUP.

*Blank Suppression:* Yes.

*Destination:* Console.

**EPW1001I FFSTCICS: EPWTRUE IS NOW ACTIVE**

*Explanation:* FFST/CICS initialized a task related user exit (TRUE).

*System Action:* Processing continues.

*Operator Response:* None.

*Programmer Response:* None.

*Suppression Level:* UNSUP.

*Blank Suppression:* Yes.

*Destination:* Console.

**EPW1002E LOAD OF EPWCSTUB FAILED, LOAD RESPONSE WAS abendcode retcode**

*Explanation:* CICS could not load the EPWCSTUB module. The operating system returns *abendcode* in register 1 and *retcode* in register 15 after the load fails.

*System Action:* Processing continues.

*Operator Response:* Report the message to the system programmer.

*Programmer Response:* Verify that this module is available for CICS to load.

*Suppression Level:* UNSUP.

*Blank Suppression:* Yes.

*Destination:* Console.

**EPW1003E cicscmd COMMAND FOR truename FAILED - reason**

*Explanation:* CICS could not initialize a task related user exit (TRUE). The associated CICS command was *cicscmd*, the TRUE was *truename*, and the reason for the failure was *reason*. The CICS transaction issued one of the following commands:

- DISABLE
- ENABLE
- EXTRACT
- LOAD

The failure occurred for one of the following reasons:

- **ALREADY ENABLED**—CICS already enabled the program identified by *truename*.
- **CURRENTLY INVOKED BY ANOTHER TASK**—Another CICS task is currently using the program identified as *truename*.
- **EPWTRUE HAS NO WORK AREA**—CICS did not allocate any save area for EPWTRUE before *truename* issued the CICS command.
- **EPWTRUE IS NOT ENABLED**—CICS did not enable EPWTRUE before *truename* issued the CICS command.
- EXIT=YES NOT SPECIFIED IN DFHSIT—The DFHSIT being used by CICS does not specify EXIT=YES.
- MODULE NOT FOUND OR DISABLED—truename is not in the primary program operator interface task (PPT) or the load library, or its PPT is disabled.
- PROGRAM IS NOT ENABLED—CICS did not enable truename before a task issued the CICS command.
- PROGRAM NOT AUTHORIZED—CICS failed truename during CICS resource security checking.
- UNKNOWN EIBRCODE eibrcode—CICS did not recognize the external interrupt block (EIB) return code eibrcode.
- UNKNOWN EIBRESP eibresp—CICS did not recognize the EIB response code eibresp.

**System Action:** Processing continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:
- ALREADY ENABLED—Gather the required documentation and contact the IBM support center.
- CURRENTLY INVOKED BY ANOTHER TASK—Gather the required documentation and contact the IBM support center.
- EPWTRUE HAS NO WORK AREA—Gather the required documentation and contact the IBM support center.
- EPWTRUE IS NOT ENABLED—Gather the required documentation and contact the IBM support center.
- EXIT=YES NOT SPECIFIED IN DFHSIT—Specify EXIT=YES in the scanner interface trace (SIT) to be used by CICS.
- MODULE NOT FOUND OR DISABLED—Verify that truename has been defined in the PPT, CICS can locate the program, and its PPT is enabled.
- PROGRAM IS NOT ENABLED—Gather the required documentation and contact the IBM support center.
- PROGRAM NOT AUTHORIZED—Verify that truename can be loaded by CICS.
- UNKNOWN EIBRCODE eibrcode—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibrcode.
- UNKNOWN EIBRESP eibresp—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW1011I FFSTCICS: EPWTRUE IS NOT ACTIVE**

**Explanation:** CICS is closing the task related user exit (TRUE). CICS returns control to the program that issued the probe statement.

**System Action:** Processing continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.
EPW1012E EPWTRUE CALL WAS NOT FROM AN APPLICATION PROGRAM

Explanation: An application was not the requester for FFST/CICS. CICS returns control to the program that issued the request.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: Verify that the FFST/CICS function is installed correctly.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW1013E UNEXPECTED EPWTRUE CALL

Explanation: The request for FFST/CICS was not for a Task Related User Exit (TRUE). CICS returns control to the program that issued the request.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: Verify that the FFST/CICS function is installed correctly.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW1014E CICS WAIT EVENT FAILED - reason

Explanation: The operating system failed the event for which CICS was waiting for one of the following reasons:

- EIBRESP WAS eibresp—The EIB response code was eibresp.
- INVALID INTERVAL CONTROL COMMAND—The application issued an invalid interval command.
- TIME HAS EXPIRED—FFST did not return control to CICS within one minute.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- EIBRESP WAS eibresp—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.
- INVALID INTERVAL CONTROL COMMAND—Gather the required documentation and contact the IBM support center.
- TIME HAS EXPIRED—Determine why FFST is not responding to CICS requests.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
EPW1015E EPWCSTUB ATTACH FAILED - ATTACH RESPONSE WAS respcde

Explanation: CICS could not attach EPWCSTUB, where respcde is the return code from the attach.
System Action: Processing continues.
Operator Response: Report the message to the system programmer.
Programmer Response: Use the respcde value to determine why the attach failed. For more information about attach return codes, refer to either MVS/ESA Application Development Reference (GC28-1647) or OS/390 MVS Assembler Services Reference (GC28-1910).
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW1021I FFSTCICS: EPWTRUE NOW INACTIVE

Explanation: CICS terminated a task related user exit (TRUE).
System Action: Processing continues.
Operator Response: None.
Programmer Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW1022E DELETE OF EPWCSTUB FAILED - RETURN CODE WAS retcode

Explanation: During termination of the FFST/CICS Task Related User Exit (TRUE), CICS could not delete EPWCSTUB.
System Action: Processing continues.
Operator Response: Report the message to the system programmer.
Programmer Response: None.
Programmer Response: Use the retcode value to determine why the delete failed. For more information about delete return codes, refer to either MVS/ESA Application Development Reference (GC28-1647) or OS/390 MVS Assembler Services Reference (GC28-1910).
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW1023E FFSTCICS: START FOR TRANSID EPWT FAILED - reason

Explanation: CICS could not complete the CICS START command for transaction EPWT for one of the following reasons:
- EIBRESP WAS eibresp—The EIB response code was eibresp.
- INPUT/OUTPUT ERROR—An I/O error occurred during the execution of the CICS START command.
- INVALID INTERVAL CONTROL COMMAND—The application issued an invalid interval control command.
- PROGRAM NOT AUTHORIZED—CICS failed the FFST program EPWTRUE during CICS resource security checking.
System Action: Processing continues.
**Operator Response:** Report the message to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:

- **EIBRESP WAS eibresp**—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.
- **INPUT/OUTPUT ERROR**—Check to see whether the temporary storage data set is full.
- **INVALID INTERVAL CONTROL COMMAND**—Gather the required documentation and contact the IBM support center.
- **PROGRAM NOT AUTHORIZED**—Verify that CICS can load the FFST program EPWTRUE.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console.

---

**EPW1024E cicscmd COMMAND FOR truename FAILED - reason**

**Explanation:** CICS could not successfully terminate a Task Related User Exit (TRUE). The task issued the CICS command cicscmd for the TRUE truename, where cicscmd is one of the following values:

- DISABLE
- EXTRACT

The command failed for one of the following reasons:

- **CURRENTLY INVOKED BY ANOTHER TASK**—truename is currently being used by another CICS task.
- **EPWTRUE HAS NO WORK AREA**—CICS could not allocate the work area for EPWTRUE when truename issued the CICS command.
- **EXIT=YES NOT SPECIFIED IN DFHSIT**—The DFHSIT being used by CICS does not have EXIT=YES specified.
- **MODULE NOT FOUND OR DISABLED**—truename is not in the PPT or the load library, or CICS disabled its PPT entry.
- **PROGRAM IS NOT ENABLED**—CICS did not enable truename before the task issued the CICS command.
- **UNKNOWN EIBRCODE eibrcode**—FFST did not recognize the EIB return code eibrcode.
- **UNKNOWN EIBRESP eibresp**—FFST did not recognize the EIB response code eibresp.

**System Action:** Processing continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** The response depends on the reason for the failure:

- **CURRENTLY INVOKED BY ANOTHER TASK**—Gather the required documentation and contact the IBM support center.
- **EPWTRUE HAS NO WORK AREA**—Gather the required documentation and contact the IBM support center.
- **EXIT=YES NOT SPECIFIED IN DFHSIT**—Specify EXIT=YES in the SIT to be used by CICS.
- **MODULE NOT FOUND OR DISABLED**—Verify that you defined truename in the PPT, CICS can locate the program, and CICS did not disable its PPT.
- **PROGRAM IS NOT ENABLED**—Verify that CICS did not invoke the transaction EPWT.
- **UNKNOWN EIBRCODE eibrcode**—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibrcode.
- **UNKNOWN EIBRESP eibresp**—Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.
EPW1031I FFSTCICS: GLOBAL USER EXIT exitname IS NOW ACTIVE

Explanation: CICS initialized a global user exit. The exit is exitname.

System Action: Processing continues.

Operator Response: None

Programmer Response: None

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW1032I FFSTCICS: START FOR TRANSID GUET FAILED - reason

Explanation: CICS could not complete the CICS start command for transaction GUET (Global User Exit Transaction) for one of the following reasons:

- EIBRESP WAS eibresp - The EIB response code was eibresp.
- INPUT/OUTPUT ERROR - An I/O error occurred during the execution of the CICS start command.
- INVALID INTERVAL CONTROL COMMAND - The application issued an invalid interval control command.
- PROGRAM NOT AUTHORIZED - CICS failed the FFST program EPWCGUET during CICS resource security checking.

System Action: Processing continues.

Operator Response: Report the message to the system programmer.

Programmer Response: The response depends on the reason for the failure:

- EIBRESP WAS eibresp - Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.
- INPUT/OUTPUT ERROR - Check to see if the temporary storage data set is full.
- INVALID INTERVAL CONTROL COMMAND - Gather the required documentation and contact the IBM support center.
- PROGRAM NOT AUTHORIZED - Verify that CICS can load the FFST program EPWCGUET.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.

EPW1033I FFSTCICS: GLOBAL USER EXIT exitname IS NOT INACTIVE

Explanation: CICS terminated a global user exit. The exit is exitname.

System Action: Processing continues.

Operator Response: None

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Console.
**Explanation:** CICS could not initialize or terminate a global user exit. The associated CICS command was `cicscmd`, the global user exit was `exitname`, and the reason for the failure was `reason`. The CICS transaction issued one of the following commands:

- DISABLE
- ENABLE
- EXTRACT
- LOAD

The failure occurred for one of the following reasons:

- ALREADY ENABLED - CICS already enabled the program identified by `exitname`.
- CURRENTLY INVOKED BY ANOTHER TASK - Another CICS task is currently using the program identified by `exitname`.
- EPWCGUE HAS NO WORK AREA - CICS did not allocate any save area for EWPCGUE before `exitname` issued the CICS command.
- EPWCGUE IS NOT ENABLED - CICS did not enable EPWCGUE before `exitname` issued the CICS command.
- EXIT=YES NOT SPECIFIED IN DFHSIT - The DFHSIT being used by CICS does not specify EXIT=YES.
- EXITID IS NOT VALID - `exitname` is invalid.
- GALENGTH VALID ON FIRST ENABLE - GALENGTH parameter is valid only on the first enable command.
- MODULE NOT FOUND OR DISABLED - `exitname` is not in the PPT or the load library, or its PPT is disabled.
- PROGRAM ALREADY ACTIVE - EPWCGUE is already active.
- PROGRAM IS NOT ENABLED - CICS did not enable `exitname` before a task issued the CICS command.
- PROGRAM NOT AUTHORIZED - CICS failed `exitname` during CICS resource security checking.
- UNKNOWN EIBCODE `eibcode` - CICS did not recognize the EIB return code `eibcode`.
- UNKNOWN EIBRESP `eibresp` - CICS did not recognize the EIB response code `eibresp`.

**System Action:** Processing continues.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** The response depends on the reason for the failure.

- ALREADY ENABLED - Gather the required documentation and contact the IBM support center.
- CURRENTLY INVOKED BY ANOTHER TASK - Gather the required documentation and contact the IBM support center.
- EPWCGUE HAS NO WORK AREA - Gather the required documentation and contact the IBM support center.
- EPWCGUE IS NOT ENABLED - Gather the required documentation and contact the IBM support center.
- EXIT=YES NOT SPECIFIED IN DFHSIT - Specify EXIT=YES in the SIT to be used by CICS.
- EXITID IS NOT VALID - Gather the required documentation and contact the IBM support center.
- GALENGTH VALID ON FIRST ENABLE - Gather the required documentation and contact the IBM support center.
- MODULE NOT FOUND OR DISABLED - Verify that EPWCGUE has been defined in the PPT, CICS can locate the program, and its PPT is enabled.
- PROGRAM ALREADY ACTIVE - Gather the required documentation and contact the IBM support center.
- PROGRAM IS NOT ENABLED - Gather the required documentation and contact the IBM support center.
- PROGRAM NOT AUTHORIZED - Verify the EPWCGUE can be loaded by CICS.
- UNKNOWN EIBCODE eibcode - Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibcode.
- UNKNOWN EIBRESP eibresp - Gather the required documentation and contact the IBM support center. Refer to the CICS problem determination manual for your level of CICS for information about eibresp.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW1035I FFSTCICS: EPWCGUE IS NOT ACTIVE

Explanation: CICS is closing the global user exit. CICS returns control to the program that issued the request.
System Action: Processing continues.
Operator Response: None
Programmer Response: None
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW1036I FFSTCICS: EPWCGUE CALL WAS NOT FOR A GLOBAL USER EXIT

Explanation: The call to EPWCGUE was not a global user exit type request. CICS returns control to the program that issued the request.
System Action: Processing continues.
Operator Response: Report the message to the system programmer.
Programmer Response: Verify that the FFST/CICS function is installed correctly.
Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console.

EPW9000I prgmname: RETURN CODE WAS retcode - rctext

Explanation: During the execution of the installation verification procedure (IVP), an FFST-invoked function did not complete successfully, where retcode is the return code received from the FFST function and rctext is the text associated with the return code. This message follows messages EPW9002I, EPW9004I, and EPW9006I. rctext can be one of the following:

Note: In the following text, the term 'the IVP probe' refers to the probe id in message EPW9004I and the term 'the config' refers to the configuration load module used for the IVP (EPWIVCE for FFST/MVS, and EPWIVC for FFST/VM).

- PROBE HAS BEEN DISABLED BY THE OPERATOR - The operator has issued an FFST modify command to disable the IVP probe.
- INVALID PARAMETERS - MORE THAN 25 CHARACTERS - The control string for the IVP probe was too long.
- INVALID PARAMETERS - FIRST CHARACTER NOT * - An invalid identifier was found on the control string for the IVP probe.
- INVALID PARAMETERS - DST NAME LONGER THAN 8 - The Data Structure Table name specified on the IVP probe was too long.
- INVALID PARAMETERS - PROBEID LONGER THAN 8 - The probe identifier for the IVP probe was too long.
- INVALID PARAMETERS - COMMA DOES NOT FOLLOW FLAGS - An invalid delimiter was found in the control string for the IVP probe.
- INVALID PARAMETERS - COUNT LONGER THAN 3 - The count value for the number of parameters passed for the IVP probe was too long.
- INVALID PARAMETERS - CRC VALUE LONGER THAN 7 - The correlator value used for the IVP probe was too long.
- FFST INITIALIZATION OF PRODUCT NOT COMPLETE - The FFST initialization of FFSTV1R2 has not yet completed.
- NO WORK AREA AVAILABLE - A GETMAIN of a 16K work area failed when attempting to trip the IVP probe.
- SETFRR FAILED - For FFST/MVS, the recovery environment setup failed when attempting to trip the IVP probe.
- ESTAE SETUP FAILED - For FFST/VM, the recovery environment setup failed when attempting to trip the IVP probe.
- SPECIFIED DST NOT FOUND - Data Structure Table EPWIVT could not be loaded.
- SPECIFIED DST INCOMPATIBLE WITH PRESENT RELEASE - Data Structure table EPWIVT does not indicate a level of release 2.
- INVALID DST SPECIFIED - Data Structure Table EPWIVT has been previously marked invalid.
- PROBE ENTRY NOT FOUND IN SPECIFIED DST - Data Structure Table EPWIVT did not contain an entry for the IVP probe.
- PROBE INCOMPATIBLE WITH ENTRY IN DST - The level of the IVP probe is not the same level in module EPWIVP as it is in Data Structure Table EPWIVT.
- ENTRY IN SPECIFIED DST IS NOT A PROBE - Entry name of the IVP probe was found in Data Structure Table EPWIVT, but it is not a probe entry.
- UNEXPECTED ABEND OCCURRED - Some unexpected ABEND occurred in FFST code when attempting to trip the IVP probe.
- MISMATCHING SHARED CONFIGURATION FOUND - For FFST/MVS, the level of configuration load module EPWIVCE does not match the level of the main FFST configuration load module, EPWTRNCF. For FFST/VM, config EPWIVC is marked as SHARED, and another SHARED config was found that did not match EPWIVC.
- MISMATCHING CONFIGURATION FOUND IN ADDRESS SPACE - Another config with a prefix of EPW was already loaded.
- CONFIGURATION LOAD MODULE LINK-EDIT AS REENTRANT - The config has an attribute of reentrant.
- NOT AUTHORIZED TO USE SHARED STORAGE - Module EPWIVP is requesting a service that requires shared storage, but it should not be.
- INVALID IDENTIFIER IN DST - Data Structure Table EPWIVT contains an invalid identifier in its first byte.
- DST IS SHARED, CONFIGURATION IS NOT - DST EPWIVT is marked as SHARED, but the config is not marked as SHARED.
- ALLOCATE FAILED FOR TEMPORARY AREA - The IVP probe failed because a GETMAIN for a temporary area failed.
- PROBE DISABLED - INVOKED TOO MANY TIMES - The IVP probe has been tripped more than 10 times in 10 minutes. It has been automatically disabled, since it exceeded criteria specified in the config.
• **FFST SUBSYSTEM NOT DEFINED** - The subsystem name of FFST has not been defined to MVS.

• **FFST SHARED SEGMENT NOT DEFINED** - The shared segment containing FFST/VM code has not been defined to VM.

• **FFST STUB ADDRESS IS ZERO** - The probe stub module, EPWSTUB, is not link-edited with load module EPWIVP.

• **FFST INTERFACE MODULE NOT IN ACCESSIBLE LIBRARY** - For FFST/MVS, module EPWPINIT, EPWPITSK, EPWPTERM or EPWSTUB cannot be found in an accessible library.

• **FFST INTERFACE MODULE NOT ACCESSIBLE** - For FFST/VM, module EPWPINIT, EPWPITSK, EPWPTERM or EPWSTUB cannot be found in the shared segment.

• **LOAD OF CONFIGURATION MODULE FAILED** - The config cannot be found in an accessible library.

• **FFST ADDRESS SPACE IS NOT ACTIVE** - For FFST/MVS, the FFST task is not started.

• **FFST APPLICATION IS NOT ACTIVE** - For FFST/VM, the FFST START command has not been issued in the FFST virtual machine.

• **ALLOCATE OF TEMPORARY AREA FAILED** - FFST interface initialization or termination failed because a GETMAIN for a temporary area failed.

• **PREVIOUS INIT REQUEST HAD FAILED** - FFST interface initialization failed because a previous interface initialization request failed.

• **PRODUCT NOT INITIALIZED TO FFST** - FFST interface termination failed because the interface initialization did not complete.

• **CONFIGURATION LOAD MODULE NOT LINKED AS REUSABLE** - The config does not have REUSE as a link-edit attribute.

• **UNEXPECTED RETURN CODE RECEIVED** - Return code retcode is not recognized by module EPWIVP.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** The response depends on what rctext indicates:

• **PROBE HAS BEEN DISABLED BY THE OPERATOR** - Have the operator issue an FFST modify command to enable the IVP probe again and rerun the installation verification program.

• **INVALID PARAMETERS** - **MORE THAN 25 CHARACTERS** - Contact the IBM support center.

• **INVALID PARAMETERS** - **FIRST CHARACTER NOT *** - Contact the IBM support center.

• **INVALID PARAMETERS** - **DST NAME LONGER THAN 8** - Contact the IBM support center.

• **INVALID PARAMETERS** - **PROBEID LONGER THAN 8** - Contact the IBM support center.

• **INVALID PARAMETERS** - **COMMA DOES NOT FOLLOW FLAGS** - Contact the IBM support center.

• **INVALID PARAMETERS** - **COUNT LONGER THAN 3** - Contact the IBM support center.

• **INVALID PARAMETERS** - **CRC VALUE LONGER THAN 7** - Contact the IBM support center.

• **FFST INITIALIZATION OF PRODUCT NOT COMPLETE** - Contact the IBM support center.

• **NO WORK AREA AVAILABLE** - Make sure there is enough REGION size (FFST/MVS) or virtual storage (FFST/VM) available to the installation verification program. If there appears to be, contact the IBM support center.

• **SETFRR FAILED** - Contact the IBM support center.

• **ESTAE SETUP FAILED** - Contact the IBM support center.

• **SPECIFIED DST NOT FOUND** - Verify that module EPWIVT is in load library SEPWMOD3.

• **SPECIFIED DST INCOMPATIBLE WITH PRESENT RELEASE** - Contact the IBM support center.

• **INVALID DST SPECIFIED** - Look for a previous message EPW0253I for EPWIVT, and contact the IBM support center.

• **PROBE ENTRY NOT FOUND IN SPECIFIED DST** - Contact the IBM support center.
• PROBE INCOMPATIBLE WITH ENTRY IN DST - Contact the IBM support center.
• ENTRY IN SPECIFIED DST IS NOT A PROBE - Contact the IBM support center.
• UNEXPECTED ABEND OCCURRED - Look for messages EPW0304E, EPW0305E, EPW0306E and EPW0307E and then contact the IBM support center to report the ABEND.
• MISMATCHING SHARED CONFIGURATION FOUND - Make sure that the maintenance level of module EPWIVCE matches the level of EPWTRNCF.
• MISMATCHING CONFIGURATION FOUND IN ADDRESS SPACE - Contact the IBM support center.
• CONFIGURATION LOAD MODULE LINK-EDIT AS REENTRANT - Be sure that the config has been installed correctly, with the attribute of REUSE.
• NOT AUTHORIZED TO USE SHARED STORAGE - Contact the IBM support center.
• INVALID IDENTIFIER IN DST - Contact the IBM support center.
• DST IS SHARED, CONFIGURATION IS NOT - Contact the IBM support center.
• ALLOCATE FAILED FOR TEMPORARY AREA - Be sure there is enough REGION size (FFST/MVS) or virtual storage (FFST/VM) available for the installation verification program.
• PROBE DISABLED - INVOKED TOO MANY TIMES - Have the operator issue an FFST modify command to enable the IVP probe and rerun the installation verification program.
• FFST SUBSYSTEM NOT DEFINED - Follow the installation steps in the FFST program directory before running the installation verification program.
• FFST SHARED SEGMENT NOT DEFINED - Follow the installation steps in the FFST program directory before running the installation verification program.
• FFST STUB ADDRESS IS ZERO - Look at the latest results of applying maintenance to module EPWIVP to be sure that EPWSTUB is included in the load module.
• FFST INTERFACE MODULE NOT IN ACCESSIBLE LIBRARY - Be sure that modules EPWPINIT, EPWPITSK and EPWPTERM are in a LINKLIST library, and that EPWSTUB is in fixed LPA.
• FFST INTERFACE MODULE NOT ACCESSIBLE - Be sure that modules EPWPINIT, EPWPITSK, EPWPTERM and EPWSTUB are in the FFST/VM shared segment.
• LOAD OF CONFIGURATION MODULE FAILED - Make sure that the config is in load library SEPWMOD3.
• FFST ADDRESS SPACE IS NOT ACTIVE - Have the operator issue a START command for FFST before running the installation verification program.
• FFST APPLICATION IS NOT ACTIVE - Have the operator issue a START command for FFST in the FFST virtual machine before running the installation verification program.
• ALLOCATE OF TEMPORARY AREA FAILED - Be sure there is enough REGION size (FFST/MVS) or virtual storage (FFST/VM) available for the installation verification program.
• PREVIOUS INIT REQUEST HAD FAILED - Look at the previous failure of the interface initialization for the IVP.
• PRODUCT NOT INITIALIZED TO FFST - Look at the interface initialization failure.
• CONFIGURATION LOAD MODULE NOT LINKED AS REUSABLE - Be sure that the config has been installed correctly, with the attribute of REUSE.
• UNEXPECTED RETURN CODE RECEIVED - Contact the IBM support center.

Suppression Level: UNSUP.
Blank Suppression: Yes.
Destination: Console, terminal.
**EPW9001I prgmname: CONTROL INIT SUCCESSFUL**

**Explanation:** During the execution of the installation verification procedure (IVP), the FFST control initialization received a return code of 0. This does not necessarily mean, however, that the initialization function completed successfully. Message EPW0250I indicates successful completion.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Verify that the FFST IVP completed successfully. Review the messages issued and ensure that message EPW9000I was not issued.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

---

**EPW9002I prgmname: CONTROL INIT NOT SUCCESSFUL**

**Explanation:** During the execution of the installation verification procedure (IVP), the FFST control initialization function did not complete successfully. Message EPW9000I follows.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Check the return code in EPW9000I to determine why the FFST control initialization function failed. The return code might indicate an FFST installation failure.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

---

**EPW9003I prgmname: PROBE probeid SUCCESSFUL**

**Explanation:** During the execution of the installation verification procedure (IVP), a probe was issued and completed successfully, where `probeid` is the probe identifier.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Verify that the FFST IVP completed successfully. Review the messages issued and ensure that message EPW9000I was not issued.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

---

**EPW9004I prgmname: PROBE probeid NOT SUCCESSFUL**

**Explanation:** During the execution of the installation verification procedure (IVP), a probe was issued and did not complete successfully, where `probeid` is the probe identifier. Message EPW9000I follows.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Check the return code in EPW9000I to determine why the probe failed. The return code might indicate an FFST installation failure.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.
EPW9005I  prgmname: CONTROL TERM SUCCESSFUL

**Explanation:** During the execution of the installation verification procedure (IVP), the FFST control termination function completed successfully.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Verify that the FFST IVP completed successfully. Review the messages issued and ensure that message EPW9000I was not issued.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

EPW9006I  prgmname: CONTROL TERM NOT SUCCESSFUL

**Explanation:** During the execution of the installation verification procedure (IVP), the FFST control termination function did not complete successfully. Message EPW9000I follows.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Check the return code in EPW9000I to determine why the FFST control termination function failed. The return code might indicate an FFST installation failure.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

EPW9010I  prgmname: PROGRAM COMPLETE

**Explanation:** The execution of the installation verification procedure (IVP) is complete.

**System Action:** System processing continues.

**Operator Response:** Give the FFST IVP output to the system programmer.

**Programmer Response:** Verify that the FFST IVP completed successfully. Review the messages issued and ensure that message EPW9000I was not issued.

**Suppression Level:** UNSUP.

**Blank Suppression:** Yes.

**Destination:** Console, terminal.

EPW9501I  PRODUCT NAME: prodname

**Explanation:**  *prodname* is the name of the product or application that triggered the software probe.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.
EPW9502I  *type* PROGRAM

**Explanation:** The product or application that triggered the software probe is a *type* program, where *type* is either IBM or NON-IBM.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9503I COMPONENT/PROGRAM ID: *compid*, LEVEL: *level*

**Explanation:** The component or program identifier of the product or application that triggered the software probe is *compid*, and its level is *level*.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9504I TYPE OF FAILURE: *type*

**Explanation:** The triggered software probe is defined with a category of *type*.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the SYMPTOM STRING DATA option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9505I PROBE PRIMARY SYMPTOM STRING:

**Explanation:** The primary symptom string specified by the triggered software probe immediately follows this message.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the SYMPTOM STRING DATA option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.
EPW9506I PROBE SECONDARY SYMPTOM STRING:

**Explanation:** The secondary symptom string specified by the triggered software probe immediately follows this message.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the SYMPTOM STRING DATA option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9507I REGISTER SECONDARY SYMPTOM STRING:

**Explanation:** The secondary symptom string built by FFST that contains the values of all general registers at the time the software probe was triggered immediately follows this message.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the SYMPTOM STRING DATA option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9508I DATA COLLECTION WORK AREA:

**Explanation:** The 16KB work area used to process the triggered software probe immediately follows this message.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the FFST WORK AREA option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.

---

EPW9509I dsttype DATA STRUCTURE TABLE:

**Explanation:** A DST used during processing of the triggered software probe immediately follows this message, where dsttype is either SPECIFIED or DEFAULT.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** Suppressed when the DATA STRUCTURE TABLE(S) option is N.

**Blank Suppression:** No.

**Destination:** Terminal, output data set.
EPW9510I AREA AROUND REGISTER \textit{regnum} - \textit{regval}:

\textbf{Explanation:} An area of up to 400 hexadecimal bytes before and after general register \textit{regnum} which contains the value \textit{regval} immediately follows this message. If the software probe was triggered in AR mode under MVS/ESA, the general register along with its corresponding access register are used to access the storage.

\textbf{System Action:} Dump formatting continues.

\textbf{Operator Response:} None.

\textbf{Programmer Response:} None.

\textbf{Suppression Level:} Suppressed when the AREA AROUND REGISTERS option is N.

\textbf{Blank Suppression:} No.

\textbf{Destination:} Terminal, output data set.

---

EPW9511I NUMBER OF DATA STRUCTURES OF THIS TYPE EXCEEDED MAX

\textbf{Explanation:} The value specified as the maximum count on the definition of the data structure being formatted was exceeded. This data structure was dumped more times than the definition allows.

\textbf{System Action:} Dump formatting continues.

\textbf{Operator Response:} None.

\textbf{Programmer Response:} None.

\textbf{Suppression Level:} Suppressed when the DATA STRUCTURES option is N.

\textbf{Blank Suppression:} No.

\textbf{Destination:} Terminal, output data set.

---

EPW9512I EXIT ROUTINE CALLED FOR NEXT

\textbf{Explanation:} The DST exit routine specified on the data structure definition was called for processing of the next data structure in a chain.

\textbf{System Action:} Dump formatting continues.

\textbf{Operator Response:} None.

\textbf{Programmer Response:} None.

\textbf{Suppression Level:} Suppressed when the DATA STRUCTURES option is N.

\textbf{Blank Suppression:} No.

\textbf{Destination:} Terminal, output data set.

---

EPW9513I EXIT ROUTINE CALLED FOR REF

\textbf{Explanation:} The DST exit routine specified on the data structure definition was called for processing of a referenced data structure.

\textbf{System Action:} Dump formatting continues.

\textbf{Operator Response:} None.

\textbf{Programmer Response:} None.

\textbf{Suppression Level:} Suppressed when the DATA STRUCTURES option is N.

\textbf{Blank Suppression:} No.

\textbf{Destination:} Terminal, output data set.
EPW9514I EXIT ROUTINE CALLED FOR DATA STRUCTURE

Explanation: The DST exit routine specified on the data structure definition was called on initial processing of the data structure.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9515I ID CHECKING FAILED FOR DATA STRUCTURE

Explanation: When dumping the data structure, the field specified for identifier checking contained a different value than the one specified in the DST. As a result, FFST dumped up to 800 hexadecimal bytes beginning at the data structure address, and no further REF and NEXT processing occurred.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9516I LENGTH WAS FOUND TO BE ZERO

Explanation: When dumping the data structure, FFST determined that the length of the data structure was zero. As a result, FFST dumped up to 800 hexadecimal bytes beginning at the data structure address, and no further REF and NEXT processing occurred.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9517I STORAGE UNAVAILABLE DUE TO INACCESSIBILITY

Explanation: When dumping the data structure, FFST determined that, for one of the following reasons, all or part of the storage was not accessible to the program that triggered the software probe:
- The storage in the primary address space is not allocated.
- An alternate ASID was specified, but the program did not have access to it.
- An alternate dataspace was specified, but the program did not have access to it.
- An invalid ASID or dataspace was specified.
- The program was not authorized to use an alternate ASID.
As a result, no storage is dumped, and because this error was encountered, no further REF and NEXT processing occurs. Message EPW9518I follows this message.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9518I INVALID ADDRESS WAS address
Explanation: This message follows message EPW9517I. The storage at address address was inaccessible at the time the software probe was triggered.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9519I WARNING: warn
Explanation: The exception condition warn occurred while FFST was processing the probe, where warn is one of the following values:

- INVALID POINTER FOUND WHEN BUILDING PARMLIST
- INVALID POINTER FOUND WHEN BUILDING SYMREC
- DATA STRUCTURE NAME NOT FOUND IN TABLE
- RAN OUT OF ROOM DURING DATA COLLECTION
- INVALID POINTER FOUND DURING DATA COLLECTION
- LOAD OF EXIT ROUTINE FAILED
- GENERIC ALERT CAUSE NAME NOT FOUND
- GENERIC ALERT DESCRIPTOR NAME NOT FOUND

System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the FFST WORK AREA option is N.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9520I DATA STRUCTURE DEFINED IN DEFAULT DST
Explanation: The data structure was defined in the default DST, not in the specified DST.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.
EPW9521I DUMP DATA SET NAME=dsname
Explanation: The original data set to which the dump was written is named dsname.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9522I TITLE FROM DUMP=title
Explanation: The dump’s title is title. This title was received from one of the following:
• The abstract from the software probe
• The default abstract from the configuration table or DST
• A default abstract built by FFST
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9523I DATE FROM DUMP=date, TIME FROM DUMP=time.
Explanation: The dump data set was written to on date at time.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal, output data set.

EPW9524I NO DATA STRUCTURE TITLE - ENTRY NOT FOUND IN DST
Explanation: The data structure may have been dumped, but the specified entry was not found in either
the specified DST or the default DST.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: Suppressed when the DATA STRUCTURES option is N.
Blank Suppression: No.
Destination: Terminal, output data set.
EPW9550E UNEXPECTED RETURN CODE retcode RECEIVED

Explanation: The dump formatter did not have an error message set up for the error condition that was encountered. A return code of retcode was received for the operation that failed.

System Action: The dump formatter stops processing and redisplays the last panel displayed.

Operator Response: None.

Programmer Response: Report this error to FFST support.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.

EPW9551E RETURN CODE retcode ATTEMPTING TO ALLOCATE dataset

Explanation: The dump formatter attempted to allocate a dataset, where dataset is the name of a data set or TEMP DUMP DATASET. The ALLOCATE request failed with a return code of retcode.

System Action: The dump formatter stops processing and redisplays the last panel displayed.

Operator Response: Report the message to the system programmer.

Programmer Response: Determine the reason for the allocation failure, and correct the problem.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.

EPW9552E IEBGENER FAILED WITH RETURN CODE retcode

Explanation: The dump formatter attempted to copy the specified member of the partitioned dump data set to a temporary sequential dump data set using the IEBGENER utility. This process failed with return code retcode.

System Action: The dump formatter stops processing and redisplays the last panel displayed.

Operator Response: Report the message to the system programmer.

Programmer Response: Determine the reason for the failure. IEBGENER might not be in an available link library.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.

EPW9553E NO OPTIONS ARE SELECTED

Explanation: You entered N for every option on panel EPWFDFMN. To produce any output, you must choose at least one option for the dump formatter.

System Action: None.

Operator Response: None.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.
EPW9554E DATA SET dsname ALREADY EXISTS

**Explanation:** You selected NEW for the disposition of the output data set on dump formatter panel EPWFDFOD, but the data set name already exists.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFOD.

**Operator Response:** Either change the disposition to MOD or OLD, or change the name of the selected output data set.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

---

EPW9555E DATA SET dsname DOES NOT EXIST

**Explanation:** You selected OLD for the disposition of the output data set on dump formatter panel EPWFDFOD, but the data set does not exist.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFOD.

**Operator Response:** Either change the disposition to MOD or NEW, or change the name of the selected output data set to an existing data set.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

---

EPW9556E attr IS REQUIRED FOR A NEW DATA SET

**Explanation:** The name specified for an output data set is new, and you did not specify one of the required attributes. The missing attribute is attr, where attr is either VOLUME, PRIMARY SPACE, or SECONDARY SPACE.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFOD.

**Operator Response:** Specify a value for the missing attribute.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

---

EPW9557E RETURN CODE retcode ATTEMPTING TO DEFINE IPCS DUMP DIRECTORY dirname

**Explanation:** The dump formatter attempted to allocate a new VSAM dump directory with a name of dirname, and it failed with return code retcode.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFDD.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** Determine the reason for the allocation failure, and correct the problem.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.
**EPW9558E RETURN CODE retcode ON ENTRY TO IPCS**

**Explanation:** You were not already in IPCS, so the dump formatter attempted to enter IPCS with the IPCS NOPARM command. This process failed with return code retcode.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFMN.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** Determine the reason for the failure. The user might not be authorized to access or use IPCS.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9559E RETURN CODE retcode ATTEMPTING TO USE DUMP DATA SET**

**Explanation:** The dump formatter entered IPCS successfully and issued the IPCS SETDEF command to define the dump data set as the default. This command failed with return code retcode.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFMN.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** Determine the reason for the failure, and correct the problem.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9560E macro FAILED ATTEMPTING TO ACCESS DUMP**

**Explanation:** The dump formatter attempted to issue the specified macro, but the macro failed, where macro is one of the following values:

- GETMAIN
- OPEN
- READ

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFMN.

**Operator Response:** Report the message to the system programmer.

**Programmer Response:** Determine the reason for the failure, and correct the problem. If macro is READ, you may have used a partitioned data set without specifying a member name.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9561E NOT A VALID FFST DUMP. CANNOT FIND WORK AREA POINTER**

**Explanation:** The dump formatter looked at the dump header for the pointer to the FFST work area, but found it to be invalid. The dump formatter requires this address to continue dump formatting.

**System Action:** The dump formatter stops processing and redisplays panel EPWFDFMN.

**Operator Response:** Verify that the data set used as the dump data set actually contains an FFST raw dump.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.
EPW9562E WORK AREA NOT IN DUMP

Explanation: The dump formatter could not locate the FFST work area in the dump data set.

System Action: The dump formatter stops processing and redisplays panel EPWFDFMN.

Operator Response: Verify that the data set used as the dump data set actually contains an FFST raw dump.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.

---

EPW9563E DUMP FORMATTING CANCELLED - PASSWORD MISMATCH

Explanation: The password you typed on panel EPWFDFMN does not match the password in the dump.

System Action: The dump formatter stops processing and redisplays panel EPWFDFMN.

Operator Response: Get the correct password from the product’s support group.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: No.

Destination: Terminal.

---

EPW9564E UNSUPPORTED PF KEY

Explanation: While using the EPWDMPFV dump formatter for VM, you pressed a function key that is not supported. The only supported keys are F1, F3, and Enter.

System Action: The dump formatter redisplays the FFST DUMP FORMATTER screen.

Operator Response: Press a supported key (F1, F3, or Enter).

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Terminal.

---

EPW9565E SPECIFY Y OR N FOR option

Explanation: While using the EPWDMPFV dump formatter for VM, you did not use a valid value for option, where option is one of the following values:

- SYMPTOM STRING DATA
- FFST WORK AREA
- DATA STRUCTURE TABLE(S)
- AREA AROUND REGISTERS
- DATA STRUCTURES

System Action: The dump formatter redisplays the FFST DUMP FORMATTER screen.

Operator Response: Type either a Y (for yes) or an N (for no) beside the specified option.

Programmer Response: None.

Suppression Level: UNSUP.

Blank Suppression: Yes.

Destination: Terminal.
**EPW9570I ALLOCATING TEMPORARY SEQUENTIAL DATA SET**

**Explanation:** You entered a member name for a partitioned dump data set. Because IPCS requires sequential dump data sets, the dump formatter is attempting to allocate a temporary sequential data set to copy the member into.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9571I COPYING DUMP TO TEMPORARY DATA SET**

**Explanation:** You entered a member name for a partitioned dump data set, and the dump formatter is copying the dump to the temporary sequential data set that it allocated.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9572I IPCS DUMP DIRECTORY dirname HAS BEEN DEFINED**

**Explanation:** You are allocating a new dump directory named dirname entered on panel EPWFDFDD. The allocation of the VSAM cluster was successful.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.

**EPW9573I ENTERING IPCS**

**Explanation:** You were not already in an IPCS session. The dump formatter is temporarily entering an IPCS session to complete the dump formatting.

**System Action:** Dump formatting continues.

**Operator Response:** None.

**Programmer Response:** None.

**Suppression Level:** UNSUP.

**Blank Suppression:** No.

**Destination:** Terminal.
EPW9574I DUMP FORMATTING IN PROGRESS
Explanation: Setup completed successfully, and dump formatting has begun.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal.

EPW9575I DUMP FORMATTING COMPLETE
Explanation: All requested output options have been sent to the requested output destination.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal.

EPW9576I EXITING IPCS
Explanation: You were not already in an IPCS session when the dump formatter was invoked. The formatter entered the IPCS session temporarily (see message EPW9573I) to format the dump, and now is terminating the IPCS session.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal.

EPW9577I DELETING TEMPORARY DATA SET
Explanation: You entered a member name of a partitioned dump data set, so the dump formatter allocated a temporary sequential data set (see message EPW9570I) and copied the dump into it (see message EPW9571I). The dump formatter is now deleting this temporary data set because it is no longer needed.
System Action: Dump formatting continues.
Operator Response: None.
Programmer Response: None.
Suppression Level: UNSUP.
Blank Suppression: No.
Destination: Terminal.
Appendix B. FFST for MVS Transition Code Function

In order to enhance the value of FFST, system monitor functions have been included within FFST. These monitor functions allow FFST to be involved in problems for which FFST is not directly called. Monitoring capability is provided through two user exit facilities in the MVS environment: MVS post dump exit (IEAVTSEL) and a CICS global user exit. Each allows FFST to be involved in situations where a dump is being requested.

The support provided by FFST for this function is limited to the generation of an SNA Generic Alert. The alert provides notification to a network operator that a dump was requested by a product. Each monitor function is fully controlled by an FFST filter. Details of these two monitoring functions are documented below.

MVS Post Dump Exit (IEAVTSEL)

PTF UN53954 (APAR PN40734) adds a new feature to FFST. It utilizes the MVS/ESA Post Dump Exit facility (IEAVTSEL) to trip an FFST software probe when this user exit is called by MVS. This new facility will provide FFST support when an SVC dump or SYSMDUMP is taken by an authorized product.

This new routine supports a parameter list for filtering in order to suppress the calling of FFST for dump situations of little interest. Filtering can be performed using the ABEND code (for ABEND conditions) and you can also specify whether or not a probe should be tripped if this new routine gets control even though the MVS Dump Analysis and Elimination (DAE) facility of MVS has suppressed the dump because it was found to be a duplicate problem.

When an authorized product issues an SDUMP or SYSMDUMP, an FFST routine gets control and extracts key information from the MVS dump header and system diagnostic work area (SDWA). This information is passed to FFST through one of eight FFST probes. See Figure B-1 on page B-4. FFST builds a Generic Alert which is passed to a network management product such as NetView* to inform network operations of a possible program problem.

To install and activate this new function, the following steps must be performed:

1. Install PTF UN53954. (The PTF cover letter also contains these instructions.)

2. Make the FFST dump exit code, EPWTRNDX, known to MVS by modifying the IEAVTSEL object code in SYS1.LINKLIB through the use of the SPZAP program or through SMP. The following entry must be placed in this module:

   C5D7E6E3 D9D5C4E7 8/zerodot/zerodot/zerodot/zerodot/zerodot/zerodot/zerodot/zerodot
   (EPWTRNDX)

   **Note:** 80000000 can also be 00000000

   See the "MVS/ESA Installation Exits", GC28-1637, for details on how to perform this task.

3. If you do not want a probe to trip for situations where DAE has suppressed the dump, update your FFST Transition Code parameter list with the following information:

   COL. # =====> .....|....1....|....2...
   S cccccc

   Where an 'S' in column 1 indicates that if DAE suppresses the dump, FFST should also suppress the probe; 'cccccccc' is the IBM 9-character component ID of the product for which the probe should be suppressed. An '*' in column 3 indicates that all products will have the probe suppressed if DAE suppresses the dump.
Note: Another way to do this would be to use all zeros as the flag indicators in IEAVTSEL which would prevent this exit from being called when DAE suppresses a dump.

You may include as many of these statements as required. They may be intermixed with the 'I' and 'E' records currently supported by this parameter list.

4. Create one or more entries in the FFST Transition Code parameter list, member TRNSABCD of the EPWPARM data set, to suppress FFST from processing certain ABEND conditions for specific products. Each entry has the following format:

<table>
<thead>
<tr>
<th>COLUMN(S)</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I - Include only the specified ABEND codes for the specified Component ID</td>
</tr>
<tr>
<td></td>
<td>E - Exclude only the specified ABEND codes for the specified Component ID.</td>
</tr>
<tr>
<td></td>
<td>* - Interpreted as a comment record and the record is ignored.</td>
</tr>
<tr>
<td>2</td>
<td>Must be blank</td>
</tr>
<tr>
<td>3-11</td>
<td>The Component ID of the product.</td>
</tr>
<tr>
<td>12</td>
<td>Must be blank</td>
</tr>
<tr>
<td>13-x</td>
<td>One or more ABEND codes for which probe control is required. Each entry must have the format 'tcccc' where 't' is either an 'S' for system ABEND or a 'U' for user ABEND; 'cccc' is up to a four-character ABEND code. Each entry must be separated by a blank.</td>
</tr>
</tbody>
</table>

5. Re-IPL your system.

Note: Each time the FFST Transition Code parameter list is changed, FFST must be deactivated and then reactivated before the changes will take affect.

Examples of filter statements can be found in “Transition Code Parameter List” on page B-6.

Further probe control is available by using the MODIFY probe control facility of FFST. The probe identifier values utilized by the FFST Transition Code and a description of when they are tripped are listed below:

<table>
<thead>
<tr>
<th>Probe ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPWTRN05</td>
<td>This probe is tripped when the Transition Code gets control from the post dump exit for a non-ABEND condition, a product component ID was found, and it was for a dump that DAE did not suppress.</td>
</tr>
<tr>
<td>EPWTRN06</td>
<td>This probe is tripped when the Transition Code gets control from the post dump exit for a non-ABEND condition, a product component ID was NOT found, and it was for a dump that DAE did not suppress.</td>
</tr>
<tr>
<td>EPWTRN07</td>
<td>This probe is tripped when the Transition Code gets control from the post dump exit for an ABEND condition, a product component ID was found, and it was for a dump that DAE did not suppress.</td>
</tr>
<tr>
<td>EPWTRN08</td>
<td>This probe is tripped when the Transition Code gets control from the post dump exit for an ABEND condition, a product component ID was NOT found, and it was for a dump that DAE did not suppress.</td>
</tr>
</tbody>
</table>
EPWTRN11 This probe is tripped when the Transition Code gets control from the post dump exit for a non-ABEND condition, a product component ID was found, and it was for a situation the DAE suppressed the dump.

EPWTRN12 This probe is tripped when the Transition Code gets control from the post dump exit for a non-ABEND condition, a product component ID was NOT found, and it was for a situation that DAE suppressed the dump.

EPWTRN13 This probe is tripped when the Transition Code gets control from the post dump exit for an ABEND condition, a product component ID was found, and it was for a situation that DAE suppressed the dump.

EPWTRN14 This probe is tripped when the Transition Code gets control from the post dump exit for an ABEND condition, a product component ID was NOT found, and it was for a situation that DAE suppressed the dump.

A quick summary of these Probe IDs and the conditions under which they are tripped follows:

---

**CICS Dump Global Exit**

APAR PN45724 adds a new feature to FFST. It utilizes a CICS global exit that gets control when a CICS transaction issues a dump. This new feature causes an FFST software probe to execute when this user exit is called by CICS.

This new routine supports a parameter list for filtering to suppress the calling of FFST for dump situations of little interest. Filtering can be performed using the ABEND code (for ABEND conditions).

To correctly install this update you will need to reference the program directory that was shipped with FFST and reference the "System Considerations - CICS" section, and perform the following steps:

- Define the FFST CICS global user exit, EPWCGUEI, in your initialization program list table (PLT).
  Add the following statement after the entry for EPWTRUEI:
  ```
  DFHPLT TYPE=ENTRY,
  PROGRAM=EPWCGUEI
  ```

- Define the FFST CICS global user exit, EPWCGUET, in your termination program list table (PLT).
  Add the following statement after the entry for EPWTRUET:
  ```
  DFHPLT TYPE=ENTRY,
  PROGRAM=EPWCGUET
  ```

- Define the FFST CICS global user exit programs EPWCGUE, EPWCGUEI, and EPWCGUET and transaction GUET as CICS resources. Define the programs and transaction using the CEDA transaction:
  ```
  CEDA DEFINE PROGRAM(EPWCGUE)
  LANGUAGE(ASSEMBLER)
  RESIDENT(YES)
  GROUP(EPWFFST)
  CEDA DEFINE PROGRAM(EPWCGUEI)
  LANGUAGE(ASSEMBLER)
  GROUP(EPWFFST)
  CEDA DEFINE PROGRAM(EPWCGUET)
  LANGUAGE(ASSEMBLER)
  GROUP(EPWFFST)
  CEDA DEFINE TRANSACTION(GUET)
  PROGRAM(EPWCGUET)
  ```

- Use FFST installation job EPW12011 as a model to correctly link edit modules EPWCGUE,
Figure B-1. Illustration of the FFST probe IDs used by Transition Code

EPWCGUEI, and EPWCGUET. Modify this job as follows:

change EPWTRUEI to EPWCGUEI
change EPWTRUET to EPWCGUET
change EPWTRUE to EPWCGUE
add RENT to the link-edit parm options for each step
change RMODE=24 to RMODE=ANY in step3

Run this job.

In order to test the installation of this new function, run the FFST CICS installation verification program (CIVP). This program invokes the CICS dump facility which will drive this new function. When CIVP is run, an additional output will be produced because this transaction invokes the global user exit. The output is a primary and secondary symptom string.

The format of the primary and secondary symptom strings generated by this new function follows:

PRIMARY SYMPTOM STRING:

PIDS/programid LVLS/lvl RIDS/applid RIDS/moduleid AB/Uabcode
PCSS/transid

where:

programid = 9 character component ID OR 8 character application name
lvl = 3 character release/level value
applid = 8 character application name
moduleid = 8 character detecting module name
abcode = 4 character transaction ABEND code
transid = 4 character transaction identifier

SECONDARY SYMPTOM STRING:

PCSS/date PCSS/time PCSS/dumpid PCSS/userid PCSS/termid
PCSS/systemid

where:

date = date of transaction dump
time = time of transaction dump
dumpid = transaction dump identifier
userid = user identifier or *USERID*
termid = terminal identifier
systemid = system identifier
Add entries in member TRNSABCD in the FFST EPWPARM data set to register CICS applications or filter
CICS ABEND codes. This global user exit is given the transaction name GUET, which is used as the
application name. For applications that are IBM-written, code a registration record to make a correlation
between the given application name and the IBM program id (component ID). You should also code the
long name and vendor ID for the application.

**MVS Dump Frequency Threshold Support**

APAR PN51328 adds a new feature to FFST/MVS. It utilizes the ENF LISTEN function for the x'47'
record in MVS 5.2. After the PTF is installed and FFST is started, an exit gets control when MVS DAE
detects that a threshold has been reached which pertains to a certain number of instances of a symptom
string seen by DAE in a certain amount of time. When this threshold is reached, the FFST exit gets
control, converts the MVS symptom string to its RETAIN equivalent, and executes an FFST software
probe.

You may add entries in the transition code parameter list (default name TRNSABCD) to register products
in the same way as described in “MVS Post Dump Exit (IEAVTSEL)” on page B-1. The probe identifier
values utilized by this new function and a description of when they are tripped are listed below:

<table>
<thead>
<tr>
<th>Probe ID</th>
<th>Description</th>
</tr>
</thead>
</table>
| EPWTRN15 | This probe is tripped when the Transition Code gets control via the MVS ENF 47 exit for a
          | non-ABEND condition and a product component ID is found. |
| EPWTRN16 | This probe is tripped when the Transition Code gets control via the MVS ENF 47 exit for a
          | non-ABEND condition and a product component ID is not found. |
| EPWTRN17 | This probe is tripped when the Transition Code gets control via the MVS ENF 47 exit for an
          | ABEND condition and a product component ID is found. |
| EPWTRN18 | This probe is tripped when the Transition Code gets control via the MVS ENF 47 exit for an
          | ABEND condition and a product component ID is not found. |

A quick summary of these probe IDs and the conditions under which they are tripped follows:

**Specifying IBM Product Identification Information**

Both the MVS post dump exit and the CICS dump exit contain most of the information FFST requires to
perform its functions. Some of the information missing is the three-character REL number which indicates
the release level of the product and a short descriptive name of the product (i.e., APPLID). In order to
pass this information to FFST, the FFST parameter list supports a registration record which has the
following format:
Figure B-2. Illustration of the FFST probe IDs used by Transition Code

<table>
<thead>
<tr>
<th>COLUMN(S) DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 R - Registration record - used to pass product identification information to FFST for Transition Code probe statements.</td>
</tr>
<tr>
<td>* - Interpreted as a comment record and the record is ignored.</td>
</tr>
<tr>
<td>2 Must be blank</td>
</tr>
<tr>
<td>3-11 The component ID of the product. For CICS transactions, this is the component id that FFST will use when a matching application identifier is found.</td>
</tr>
<tr>
<td>12 Must be blank</td>
</tr>
<tr>
<td>13-15 The three-character REL number of the product which indicates its release number or level.</td>
</tr>
<tr>
<td>16 Must be blank</td>
</tr>
<tr>
<td>17-24 Application identifier - short name (For CICS transactions, this is the program name to match against for registration).</td>
</tr>
<tr>
<td>25 Must be blank</td>
</tr>
<tr>
<td>26-55 Application identifier - long name</td>
</tr>
<tr>
<td>56 Must be blank</td>
</tr>
<tr>
<td>57-72 Vendor name</td>
</tr>
</tbody>
</table>

Examples of registration statements can be found in “Transition Code Parameter List.”

Transition Code Parameter List

The FFST Transition Code parameter list, (a member of the FFSTPARM data set, the default name being TRNSABCD) can be used to control the Transition Code function of FFST and assign identification information required by FFST. The following is an example of this parameter list:
*** THIS IS A SAMPLE PARAMETER LIST FOR FFST TRANSITION PROCESSING ***

* THE FOLLOWING RECORD TYPES ARE SUPPORTED
  *
  * - COMMENT RECORD
  * E - EXCLUDE RECORD
  * I - INCLUDE RECORD
  * R - REGISTRATION RECORD
  *

EXCLUDE RECORD FORMAT

* COLUMN(S)
  *
  * 1 - RECORD TYPE - 'E' FOR EXCLUDE
  * 2 - BLANK
  * 3-11 - PROGRAM IDENTIFIER
  * 12 - BLANK
  * 13-72 - ABEND CODE(S)
  *

EXAMPLE:

This next record will exclude Transition Code support for all products
that don't pass MVS a valid component ID when the MVS dump facility is
called. (FFST defaults the component ID to '999999999'). This next
statement is HIGHLY recommended.

E 999999999 1230008

This next record will exclude Transition Code support for all products
from which a S0122 ABEND (operator cancel) occurred.

E * S0122 1230008

This next record will exclude Transition Code support for the product
with a component ID of 569511111 and ABEND codes S0FCA and S0FDA.

E 569511111 S0FCA S0FDA

This next record will exclude Transition Code support for the CICS
transaction 'TRN1' when any user ABEND starting with the value 'A'
occurs.

Figure B-3 (Part 1 of 2). Sample Parameter List for FFST Transition Processing
E TRN104402 UA*

******************************************************************************
******************************************************************************
******************************************************************************
******************************************************************************

**
* COLUMN(S)
* * 1   - RECORD TYPE - 'I' FOR INCLUDE
* 2   - BLANK
* 3-11 - PROGRAM IDENTIFIER
* 12  - BLANK
* 13-72 - ABEND CODE(S)
* *

******************************************************************************
******************************************************************************
******************************************************************************
******************************************************************************

** EXAMPLE:

*
*
**|-------|*|----------------------------------------------------------|
I 569504402 S00C4

******************************************************************************
******************************************************************************
******************************************************************************
******************************************************************************

**
* COLUMN(S)
* *
* 1   - RECORD TYPE - 'R' FOR REGISTRATION
* 2   - BLANK
* 3-11 - PROGRAM IDENTIFIER
* 12  - BLANK
* 13-15 - PROGRAM LEVEL
* 16  - BLANK
* 17-24 - PROGRAM SHORT NAME (UP TO 8 CHARACTERS)
* 25  - BLANK
* 26-55 - PROGRAM LONG NAME (UP TO 30 CHARACTERS)
* 56  - BLANK
* 57-72 - VENDOR NAME (UP TO 16 CHARACTERS)
* *

******************************************************************************
******************************************************************************
******************************************************************************
******************************************************************************

** EXAMPLE:

*
*
**|-------|*|*|------------------|*|------------------|
R TRN104402 001 TRANS001 CICS transaction 001 ABC CORPORATION
R FFST04402 101 EPWCIVP FFST CICS IVP IBM CORPORATION

******************************************************************************
******************************************************************************
******************************************************************************
******************************************************************************

Figure B-3 (Part 2 of 2). Sample Parameter List for FFST Transition Processing
Appendix C. S/390 Channel Attached Device Support

ServiceView is IBM's strategic approach to promote commonality in solutions for the support and service of both hardware and software products developed by the IBM Corporation. ServiceView implementations will be provided in a series of stages. Stage I addresses the centralized management of S/390 channel-attached devices through the use of the System Network Architecture (SNA) Generic Alert.

FFST provides this function through a Small Programming Enhancement (SPE) (PTF UN57519) called FFST S/390 Channel Attached Support which works with the IBM NetView program product to generate and processes these Generic Alerts. This SPE provides Generic Alert support for the following devices:

- **DASD**
  - 3990 - models 001, 002, 003, 006, 007
  - 9343 - models C02, C04, D04
  - 9341
  - 9393
  - 3390 - models 001, 002, 003, 009
  - 9035 - model 002
  - 9345 - models 001, 002
  - 9391 - models 001, 002
  - 9395 - model 001

- **ESCON channels**
- **ESCON Director**
  - 9032
  - 9033

- **Printers**
  - 3800
  - APF1 (e.g., 3825, 3827, 3835)

FFST provides this support through a new FFST module, EPWSVC76, loaded from LPALIB by NetView initialization and then called by NetView when a LOGREC record is generated to report an error for one of the above devices (PTF UW00254 and Netview Release 2.3 and higher). EPWSVC76 receives control from NetView and is passed the record. This module places the record on an FFST data queue where it is dequeued and processed by FFST. When FFST receives the record, it generates an SNA Generic Alert from its contents. Probable cause and recommended repair action information along with error sense data are placed in the Generic Alert which is then sent to NetView by FFST through the NetView Program to Program Interface (PPI).

**FFST Controls**

FFST provides two ways in which Generic Alert generation for a supported LOGREC record can be controlled. The following sections detail this control.
FFST Probe Control

FFST creates Generic Alerts for host channel-attached devices through a series of FFST probes - one for each device type supported. Each one of these probes are shipped as active. To completely disable Generic Alert support for one or more of the supported device types, the following MODIFY command can be entered at the MVS console:

F ffstproc ,ACTION=DISABLE,PROBEID=EPWHWSxx,VENDOR=IBM

where 'xx' is:
- 'A3' for DASD devices
- 'A2' for ESCON channel
- 'ED' for ESCON Director
- 'PP' for printer devices (permanent errors)
- 'PT' for printer devices (temporary errors)

To enable the support, the following MODIFY command can be entered at the MVS console:

F ffstproc ,ACTION=ENABLE,PROBEID=EPWHWSxx,VENDOR=IBM

where 'xx' is:
- 'A3' for DASD devices
- 'A2' for ESCON channel
- 'ED' for ESCON Director
- 'PP' for printer devices (permanent errors)
- 'PT' for printer devices (temporary errors)

See “FFST MODIFY Command Overview” on page 2-3 for a complete description of the FFST MODIFY commands.

Parameter List Control

In order to provide a more granular filter criteria, the FFST S/390 Channel Attached Support SPE utilizes a parameter list to determine if a Generic Alert is to be generated for a specific device and/or for a specific type. This parameter list resides within the partitioned data set specified by the FFSTPARM DD card within the FFST start up procedure. The default name for the member containing this parameter list is EPWHWR01 (which can be overridden in the FFSTPARM start list) and each record within the member has the following format, as illustrated below.

**Column** | **Description**
--- | ---
1 | Action code. One of the following values:
   - **I** - (Include) generate the Generic Alert if the criteria data in this record matches the information in the LOGREC record.
   - **E** - (Exclude) don't generate the Generic Alert if the criteria data in this record matches the information in the LOGREC record.
   - * Comment record, all information in this record is ignored.
2 | Blank
3-4 Record type.
   - 'A3' - indicates that this record is to control an alert for a DASD device. (The LOGREC record generated for a DASD error is a type A3 record.)
   - 'A2' - indicates that this record is to control an alert for an ESCON channel. (The LOGREC record generated for an ESCON channel error is a type A2 record.)
   - '30' - indicates that this record is to control an alert for a problem reported by an OBR (type 30) LOGREC record. (The ESCON Director and printer devices report their problems through an OBR record and are currently the only device types supported.)

5 Blank

6-9 Machine type. One of the following values:
   tttt - a four character machine type value (e.g., 3990, 9033) which indicates either the failing machine type value (when columns 3-4 are set to either 'A3' or '30') or the machine type value of the local device to which the ESCON channel is attached (when columns 3-4 are set to 'A2').
   * - indicates all machine types.

10 Blank

11-13 Model number. One of the following values:
   mmm - a three character model number value (e.g., 001, 002) which indicates either the failing machine model number (when columns 3-4 are set to either 'A3' or '30') or the machine model number of the local device to which the ESCON channel is attached (when columns 3-4 are set to 'A2').
   * - indicates all model numbers or that a model number is not applicable.

14 Blank

15-21 Serial number. One of the following values:
   ssssssss - up to a seven character serial number which indicates either the failing machine serial number (when columns 3-4 are set to either 'A3' or '30') or the machine serial number of the local device to which the ESCON channel is attached (when columns 3-4 are set to 'A2').
   * - indicates all serial numbers.

22 Blank

The remaining data in the parameter list record is device type dependent. The format for each device type is illustrated below.

**DASD Parameter List Record**

23-26 Symptom Code. One of the following values:
   ssss - a four hexadecimal character symptom code from offset 22-23 in the DASD 32-byte sense code.
   * - indicates all symptom codes or that a symptom code is not applicable.

27-80 Ignored, can be used for comments.

**ESCON Channel Parameter List Record**

23-26 One of the following values:
   tttt - a four character machine type value (e.g., 3990, 9033) of the remote device to which the ESCON channel is attached.
* - indicates all remote machine types.

cc - a two character CHPID value, followed by two blanks, which specifies the ESCON channel for which this parameter list record applies. If a CHPID value is specified, then the remaining fields do not apply and are ignored.

27 Blank

28-30 Model number. One of the following values:

mmm - a three character model number value (e.g., 001, 002) of the remote device to which the ESCON channel is attached.

* - indicates all model numbers or that a model number is not applicable.

31 Blank

32-38 Serial number. One of the following values:

ssssss - up to a seven character serial number of the remote device to which the ESCON channel is attached.

* - indicates all serial numbers.

39-80 Ignored, can be used for comments.

**ESCON Director Parameter List Format**

There are no additional fields utilized for an ESCON Director problem.

**Printer Device Parameter List Format**

There are no additional fields utilized for a printer problem.

**Parameter List Control Logic**

When FFST receives a LOGREC record for a device it supports, it uses the information from the parameter list to determine if the Generic Alert should be generated. If the criteria specified in a parameter list record (e.g., machine type, model number, symptom code) matches the data in the LOGREC record, then the Action code (position 1 in the record) is examined. If it is an 'I', then a Generic Alert is generated. If it is an 'E', then a Generic Alert is not generated. (A record with an asterisk in column 1 is ignored.) All records in the parameter list are searched for matching criteria. The last record with a matching criteria will be used by FFST to control the generation of the Generic Alert. If no match is found or if this parameter list does not exist, then the Generic Alert is generated.

The following is a sample parameter list:
This is a sample start up parameter list for the FFST channel attached support feature.

A2 (ESCON) record control

The following control records are examples of how to control the generation of an SNA Generic Alert for ESCON channel problems.

If SNA Generic Alert support is to be completely disabled for any ESCON channel problem, enter the following MODIFY command at the MVS console:

```
F FFST,A=DIS,V=IBM,PROBEID=EPWHWSA2
```

Selective alert control for the A2 records is provided on a basis of:
- the machine type, model number, serial number of the machine that detected the problem (i.e., Incident node) and on the basis of the Attached node using either the machine type, model number, and serial number, or the CHPID of the channel that had the error.

This first record is a control record that will stop an alert being generated for a problem with an ESCON link between a 9/zerodot21 CPU, model number 48/zerodot, serial number 12/zerodot82, and a 9/zerodot33 switch, model 001, serial number 0950002.

```
E A29021480004016190330010950002
```

Figure C-1 (Part 1 of 4). Sample Startup Parameter List for FFST Channel Attached Support
* This next record is a control record that will stop an alert being generated for a problem with an ESCON link between a 9021 CPU, model number 480, serial number 0040161, and any device to which the CPU is attached.

E A2 9021 480 0040161 * * *
*....1....|....2....|....3....|....4 <=column scale

* This next record is a control record that will stop an alert being generated for a problem with an ESCON link between a 9021 CPU, model number 480, serial number 0040161, on CHPID 2A.
* (Note, the CHPID value must be 2 characters in length. This distinguishes it from an Attached Machine Type value which is 4 characters in length.)

E A2 9021 480 0040161 2A
*....1....|....2....|....3....|....4 <=column scale

The following control records are examples of how to control the generation of an SNA Generic Alert for a problem occurring in a DASD device. If SNA Generic Alert support is to be completely disabled for all DASD devices, enter the following MODIFY command at the MVS console:

F FFST,A=DIS,V=IBM,PROBEID=EPWHWSA3

Selective alert control for DASD devices is provided on a basis of the machine type, model number, serial number of the machine that detected the problem.

This first record is a control record that will stop an alert from being generated for a problem on a 3390 DASD, model number 003, with a serial number of T3505 and a symptom code (byte 22-23 of the sense field in the A3 record) of X'2313'.

Action Record Machine Model Serial Machine
* Code Type Type Number Number Type
* (1) (3) (6) (11) (15) (23) <=Start column of value

E A3 3390 003 T3505 2313
*....0....1....1....2....2....3 (column scale)
* 5 0 5 0 5 0

Figure C-1 (Part 2 of 4). Sample Startup Parameter List for FFST Channel Attached Support
**This next record is a control record that will stop an alert from**
**being generated for a problem on a 3990 DASD, model number 001, all**
**serial numbers, all symptom codes (byte 22-23 of the sense field in**
**the A3 record).**

E A3 3990 001

**This next record is a control record that will stop an alert from**
**being generated for a problem on a 3990 DASD, all models, all serial**
**numbers, with a symptom code (byte 22-23 of the sense field in the**
**A3 record) of X'9980'.**

E A3 3990 9980

**These next two control records will stop the generation of Generic**
**Alerts for problems on all 9343 DASD devices except for a model C04**
**for which Generic Alerts will be generated.**

E A3 9343

I A3 9343 C04

Selective alert control for Long OBR records is provided on a basis**
**of the machine type, model number, and serial number of the machine**
**that detected the problem.**

This first record is a control record that will stop an alert from**
**being generated for an ESCON Director with a machine type of 9032, a**
**model number of 001, and a serial number of 0000324.**
| Action Record Incident Incident Incident |
|---|---|---|---|
| Code | Type | Machine | Model | Serial |
| (1) | (3) | (6) | (11) | (15) |

```
E 30 9032 001 0000324
*....|....1....|....2....|....3....|....4 <= column scale
*--------------------------------------------------------------*
* This next record is a control record that will stop an alert from *
* being generated for any printer with a machine type of 3827 and a *
* model number of 001. *
*--------------------------------------------------------------*
E 30 3827 001 *
*....|....1....|....2....|....3....|....4 <= column scale
```

*Figure C-1 (Part 4 of 4). Sample Startup Parameter List for FFST Channel Attached Support*
Glossary of Terms and Abbreviations

This glossary contains terms and definitions from the following publications:

- The American National Standard Dictionary for Information Systems, ANSI X3.172-1990, copyright 1990 by the American National Standards Institute (ANSI). Definitions are identified by the symbol (A) after the definition.
- The Information Technology Vocabulary, developed by Subcommittee 1, Joint Technical Committee 1, of the International Organization for Standardization and the International Electrotechnical Committee (ISO/IEC JTC1/SC1). Definitions from published parts of this vocabulary are identified by the symbol (I) after the definition; definitions taken from draft international standards, committee drafts, and working papers being developed by ISO/IEC JTC1/SC1 are identified by the symbol (T) after the definition, indicating that final agreement has not yet been reached among the participating national bodies of SC1.

For acronyms and abbreviations, the definition usually consists only of the words represented by the acronym or abbreviation; for complete definitions, see the entries for the words.

Reference Words Used in the Entries

The following reference words are used in this glossary:

- Synonymous with. Appears in the commentary of a preferred term and identifies less desirable or less specific terms that have the same meaning.
- Synonym for. Appears in the commentary of a less desirable or less specific term and identifies the preferred term that has the same meaning.
- Contrast with. Refers to a term that has an opposed or substantively different meaning.
- See. Refers to multiple-word terms that have the same last word.
- See also. Refers to related terms that have similar (but not synonymous) meanings.

access. (1) The manner in which files or data are referred to by a computer. (2) To obtain data from or put data in storage.
activate. (1) To make a resource ready to perform its function. (2) To pass control to a program, procedure, or routine. Contrast with deactivate.
active. The state of a resource when it has been activated and is operational.
address. A character or group of characters that identifies a register, a particular part of storage, or some other data source or destination. (A)
address space identifier (ASI). A unique, system-assigned identifier for an address space.
alert. (1) In SNA, a record sent to a system problem management focal point to communicate the existence of an alert condition. (2) In the NetView program, a high-priority event that warrants immediate attention. This database record is generated for certain event types that are defined by user-constructed filters.
allocate. To assign a resource to perform a task.
aplication. A collection of software components used to perform specific types of work on a computer.
aplication program. A program written for or by a user that applies to the user’s work, such as a program that does inventory control or payroll.
AR. Access register.
ASCB. Address space control block.
ASID. Address space identifier.
Automated Service Interface (ASI). A component of FFST that consists of an IBM-supplied AS/400* that provides automatic problem management through an electronic connection to Information/Management and the vendor support organization.

B

BCP. Base control program.
call. (1) The action of bringing a computer program, routine, or subroutine into effect, usually by specifying the entry conditions and jumping to an entry point. (I) (A) (2) To transfer control to a procedure, program, routine, or subroutine.

call. (1) The action of bringing a computer program, routine, or subroutine into effect, usually by specifying the entry conditions and jumping to an entry point. (I) (A) (2) To transfer control to a procedure, program, routine, or subroutine.

character. (1) A member of a set of elements that is used for the representation, organization, or control of data. (T) (2) A letter, digit, or other symbol that is used as part of the organization, control, or representation of data. A character is often in the form of a spatial arrangement of adjacent or connected strokes. (A) (3) A data type indicating that the data is a character or a string of characters.

CICS. Customer Information Control System.

CLIST. Command list.

command. A statement used to request a function of the system. A command consists of the command name abbreviation, which identifies the requested function, and its parameters.

command line. On a display screen, a display line, usually at the bottom of the screen, in which only commands can be entered.

command list (CLIST). A list of commands and statements designed to perform a specific function for the user.

command list (CLIST). A list of commands and statements designed to perform a specific function for the user.

comment. In programming languages, a language construct for the inclusion of text in a program and having no impact on the execution of the program. Comments are used to explain certain aspects of the program. (I) Note: Comments serve as documentation instead of as instructions. They are not processed by a compiler.

communication scanner processor (CSP). A processor in the 3725 Communication Controller that contains a microprocessor with control code. The code controls transmission of data over links attached to the CSP.

component. Hardware or software that is part of a functional unit.

configuration. (1) The manner in which the hardware and software of an information processing system are organized and interconnected. (T) (2) The physical and logical arrangement of devices and programs that make up a data processing system.

console. A part of a computer used for communication between the operator or maintenance engineer and the computer. (A)

customized dump. A dump that contains only the data specified as necessary to diagnose and solve a specific software problem processed by FFST. Contrast with full-address space dump. See raw customized dump and formatted customized dump.

data set. A unit of data storage and retrieval, consisting of a collection of data in one of several prescribed arrangements and described by control information to which the system has access.

data structure. The syntactic structure of symbolic expressions and their storage allocation characteristics. (T)

database. A collection of data with a given structure for accepting, storing, and providing, on demand, data for multiple users. (T)

deactivate. To take a resource of a node out of service, rendering it inoperable, or to place it in a state in which it cannot perform the functions for which it was designed. Contrast with activate.

display. To present data visually. (I) (A)

debugging. Acting to detect and correct errors in software or system configuration.

decimal. (1) Pertaining to a system of numbers to the base 10. Decimal digits range from zero through nine. (2) A data type indicating that the data is a decimal number.

disable. To make nonfunctional. Contrast with enable.

dump. (1) Data that has been dumped. (T) (2) To record, at a particular instant, the contents of all or part of one storage device in another storage device. Dumping is usually for the purpose of debugging. (T)
dump data set. A data set that contains the data areas used by a program that has failed.

**E**

ECB. Event control block.

EIB. External interrupt block.

enable. To make functional. Contrast with disable.

ENF. Event notification facility.

ey entry. An element of information in a table, list, queue, or other organized structure of data or control information.

ESTAE. Extended specify task abnormal exit.

event. (1) In the NetView program, a record indicating irregularities of operation in physical elements of a network. (2) An occurrence of significance to a task.

event control block (ECB). A control block used to represent the status of an event.

extended architecture (XA). An extension to System/370* architecture that takes advantage of continuing high performance enhancements to computer system hardware.

extended specify task abnormal exit (ESTAE). An MVS macroinstruction that provides recovery capability and gives control to the user-specified exit routine for processing, diagnosing an abend, or specifying a retry address.

**F**

FFDC. First failure data capture.

FFST. First Failure Support Technology.

FFST/MVS. First Failure Support Technology for Multiple Virtual Storage.

FFST/VM. First Failure Support Technology for Virtual Machine.

field. On a data medium or a storage, a specified area used for a particular class of data; for example, a group of character positions used to enter or display wage rates on a screen. (T)

file. A named set of records stored or processed as a unit. (T)

first failure data capture (FFDC). An FFST function that processes internal FFST software probes.

First Failure Support Technology (FFST). Technology and software that provide first failure data capture (FFDC) in a complex environment.

First Failure Support Technology for Multiple Virtual Storage (FFST/MVS). The version of FFST designed to work with MVS.

First Failure Support Technology for Virtual Machine (FFST/VM). The version of FFST designed to work with VM.

focal point. (1) An entry point that provides centralized management and control for other entry points for one or more network management categories. (2) In the NetView program, the focal point domain is the central host domain. It is the central control point for any management services element containing control of the network management data.

formatted customized dump. A customized dump that has been formatted with the EPWDMPFM or EPWDMPFV program. Contrast with raw customized dump.

FRR. Functional recovery routine.

full-address space dump. A dump that contains the contents of all virtual storage at the time the dump was taken. Contrast with customized dump.

functional recovery routine (FRR). A recovery routine that is used by the locked programs, the service request blocks, and the supervisor control routines.

**G**

generic alert. Encoded alert information that uses code points (defined by IBM and possibly customized by users or application programs) stored at an alert receiver, such as the NetView program.

**H**

help panel. Information displayed by a system in response to a help request from a user.

hexadecimal. (1) Pertaining to a numbering system with base of 16. Valid numbers use the digits zero through nine and characters A through F, where A represents 10 and F represents 15. (2) A data type indicating that the data is a hexadecimal number.
**incorrect output error.** An error that occurs when an application processes invalid data. Errors in an interface between software components, routines, or application programs cause incorrect output.

**input/output (I/O).** Pertaining to input, output, or both.

**installation verification procedure (IVP).** A procedure distributed with a system that tests the newly generated system to verify that the basic facilities of the system are functioning correctly.

**Interactive Problem Control System (IPCS).** A component of VM that permits online problem management, interactive problem diagnosis, online debugging for disk-resident CP abend dumps, problem tracking, and problem reporting.

**Interactive System Productivity Facility (ISPF).** An IBM licensed program that serves as a full-screen editor and dialogue manager. Used for writing application programs, it provides a means of generating standard screen panels and interactive dialogues between the application programmer and terminal user.

**interface.** A shared boundary between two functional units, defined by functional characteristics, signal characteristics, or other characteristics, as appropriate. The concept includes the specification of the connection of two devices having different functions. (T)

**I/O.** Input/output.

**IPCS.** Interactive problem control system.

**ISPF.** Interactive System Productivity Facility.

**IVP.** Installation verification procedure.

**J**

**JCL.** Job control language.

**job control language (JCL).** A control language used to identify a job to an operating system and to describe the job’s requirements.

**K**

**KB.** Kilobytes; 1024 bytes.

**link pack area (LPA).** An area of main storage containing reenterable routines from system libraries. Their presence in main storage saves loading time.

**load module.** All or part of a computer program in a form suitable for loading into main storage for execution. A load module is usually the output of a linkage editor. (T)

**log.** (1) A collection of messages or message segments placed in an auxiliary storage device for accounting or data collection purposes. (2) To record; for example, to log all messages issued when FFST probe statements are triggered.

**LPA.** Link pack area.

**M**

**MB.** Megabyte; 1048576 bytes.

**member.** A partition of a partitioned data set.

**message.** Information not requested by a user but displayed by an application in response to an unexpected event, or when something undesirable could occur.

**module.** In programming languages, a language construct that consists of procedures or data declarations and that can interact with other such constructs. (I)

**Multiple Virtual Storage (MVS).** Implies MVS/370, the MVS/XA product, and the MVS/ESA product.

**Multiple Virtual Storage/Enterprise Systems Architecture (MVS/ESA).**

**Multiple Virtual Storage for Extended Architecture (MVS/XA).** An IBM licensed program consisting of MVS/System Product Version 2 and the VMS/XA Data Facility Product, operating on a System/370 processor in the System/370 extended architecture mode. MVS/XA allows virtual storage addressing to 2 gigabytes. See also MVS.

**MVS.** Multiple Virtual Storage.

**MVS/ESA.** Multiple Virtual Storage/Enterprise Systems Architecture.

**MVS/XA.** Multiple Virtual Storage/Extended Architecture.
NetView. An S/370-based IBM licensed program used to monitor a network, manage it, and diagnose its problems.

Network. A configuration of data processing devices and software connected for information interchange.

Network management vector transport. A management services request/response unit (RU) that flows over an active session between physical unit management services and control point management services (SSCP-PU session).

NMVT. Network management vector transport.

Offset. The distance from the beginning of an object to the beginning of a particular field.

Operator. A person or program responsible for managing activities controlled by a given piece of software such as FFST.

Output. (1) Data that has been processed. (2) Data transferred from storage to an output device.

Page. In a virtual storage system, a fixed-length block that has a virtual address and is transferred as a unit between real storage and auxiliary storage. (I) (A)

Partitioned data set. A data set in direct access storage that is divided into partitions, called members, each of which can contain a program, part of a program, or data.

Pattern-matching character. A special character such as an asterisk (*) or a question mark (?) that can be used to represent one or more characters. Any character or set of characters can replace a pattern-matching character.

Pointer. A data element that indicates the location of another data element. (T)

PPT. Primary program operator interface task.

Primary program operator interface task (PPT). In NCCF, a subtask that processes all unsolicited messages received from the ACF/VTAM® program operator interface (POI) and delivers them to either the controlling operator or command processor. The primary POI task also processes the initial command specified to execute when NCCF is initialized and timer request commands scheduled to execute under the PPT.

Primary symptom string. A 132-byte unit of SRA information containing information about a software problem. This information includes architected keywords, environmental data, and software program identification. See secondary symptom string.

Probe identifier. A unique eight-character identifier used to identify a probe statement.

Probe identifier prefix. The first three characters of a probe identifier.

Probe statement. The part of an FFST software probe that calls the FFST PSI.

Problem determination. The process of identifying the source of a problem; for example, a program component, a machine failure, telecommunication facilities, user or contractor-installed programs or equipment, an environment failure such as a power loss, or a user error.

Problem management. (1) In SystemView, the discipline that encompasses the detecting, analyzing, correcting, and tracking of incidents and problems in system management. (2) The management discipline that manages a problem from its detection through its final resolution. Problem management is composed of the following functions:

- Problem determination
- Problem diagnosis
- Problem bypass and recovery
- Problem resolution
- Problem tracking and control

Problem Source Identifier (PSI). A component of FFST that consists of a software program running in the host system and invoked by probe statements to collect data, build symptom strings, and notify the system’s operator and support group.

Program identifier. A character string up to nine characters long that identifies a specific application program.

PSI. Problem Source Identifier.

Raw customized dump. A customized dump that has not yet been formatted with the EPWDMPFM or EPWDMPFV program. Contrast with formatted customized dump.

Record. A set of one or more related data items grouped for processing.
**referenced data structure.** A data structure that is logically linked to another data structure of a different type.

**register.** A part of internal storage having a specified storage capacity and usually intended for a specific purpose. (T)

**release.** A distribution of a new product or new function and APAR fixes for an existing product.

**requester.** A resource (for example, a software application) that requests a service from another resource. Contrast with **server.**

**reset.** To put all or part of a data processing device back into a prescribed state. (I) (A)

**return code.** A value returned to a program to indicate the results of an operation requested by that program.

**S**

**scanner interface trace (SIT).** A record of the activity within the communication scanner processor (CSP) for a specified data link between a 3725 Communication Controller and a resource.

**SCP.** System control programming.

**scroll.** To move all or part of the display image vertically to display data that cannot be observed within a single display image.

**secondary symptom string.** A unit of structured SRA information that provides information about a problem, including the general purpose registers and additional user-selected keywords. This information supplements the information in the primary symptom string. See **primary symptom string.**

**server.** A resource (for example, a software application) that provides a service to another resource. Contrast with **requester.**

**SIT.** Scanner interface trace.

**SNA.** Systems Network Architecture.

**software probe.** An FFST component embedded in application source code that checks for should-not-occur conditions and calls the FFST PSI.

**source file.** (1) A file that contains source statements for such items as high-level language programs and data description specifications. (2) A file of programming code that has not been compiled into machine language.

**source file identifier.** The three-characters that indicate the name of the application program’s source file. This identifier is characters 4–6 of the unique probe identifier.

**SRA.** Symptom Record Architecture.

**startup command list.** A list of commands invoked at FFST initialization to establish the FFST operating environment.

**statement.** In programming languages, a language construct that represents a step in a sequence of actions or a set of declarations. (I)

**subsystem.** A secondary or subordinate system, usually capable of operating independent of, or asynchronously with, a controlling system. (T)

**symptom record.** An architectural design used to format data in multiple sections, including a symptom string and other customer-specified information. This symptom record is used to generate a generic alert and is logged in the ASI problem database.

Symptom Record Architecture (SRA). A multisection data logging format with each data section less than 64KB in size. This architecture is used by FFST with the exception of the 64KB size restriction for section 5 of the output record. NetView also uses this architecture for its generic alerts.

**symptom string.** A structured character string generated by the PSI when FFST processes a specific software problem. See **primary symptom string** and **secondary symptom string.**

**system.** A set of equipment and software that forms an autonomous whole capable of performing information processing and information transfer.

**system control programming (SCP).** IBM-supplied programming that is fundamental to the operation and maintenance of the system. It serves as an interface with licensed programs and user programs and is available without additional charge.

SystemView. IBM’s system management strategy for planning, coordinating, and operating heterogeneous, enterprise-wide information systems. This strategy consists of the SystemView structure and SystemView-conforming products.

**Systems Network Architecture (SNA).** In IBM networks, the description of the layered logical structure, formats, protocols, and operational sequences that are used for transmitting information units through networks, as well as controlling the configuration and operation of networks.
**T**

Time Sharing Option (TSO). An operating system option. For S/370, the option provides interactive time sharing from remote terminals.

TRUE. Task related user exit.

TSO. Time Sharing Option.

**U**

user. A person who requires the services of a computing system.

user exit. A point in an IBM-supplied program at which a user routine can be given control.

**V**

value. A quantity assigned to a constant, variable, parameter, or symbol.

variable. In programming languages, a language object that can take different values, one at a time. The values of a variable are usually restricted to a certain data type. (I)

version. A separate IBM licensed program, based on an existing IBM licensed program, that usually has significant new code or function. Each version has its own license, terms, conditions, product type number, monthly charge, documentation, test allowance (if applicable), and programming support category. Note: Numbering of versions starts with Version 2. The first release of an IBM licensed program is referred to as Release 1 with no indication of version number.

virtual machine (VM). (1) A virtual data processing system that appears to be at the exclusive disposal of a particular user, but whose functions are accomplished by sharing the resources of a real data processing system. (T) (2) A functional simulation of a computer and its associated devices. Each virtual machine is controlled by a suitable operating system; for example, the conversational monitor system (CMS).

Virtual Machine/Enterprise Systems Architecture (VM/ESA). An IBM licensed program that manages the resources of a single computer so that multiple computing systems appear to exist. Each virtual machine is the functional equivalent of a "real" machine.

virtual storage. The storage space that can be regarded as addressable main storage by the user of a computer system in which virtual addresses are mapped into real addresses. The size of virtual storage is limited by the addressing scheme of the computer system and by the amount of auxiliary storage available, not by the number of main storage locations. (I) (A)

Virtual Telecommunications Access Method (VTAM). A set of programs that maintain control of the communication between terminals and application programs running under DOS/VS, OS/VS1, and OS/VS2 operating systems.

VM. Virtual Machine.


VTAM. Virtual Telecommunications Access Method.