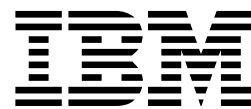


System Automation for OS/390

AOC/MVS IMS Automation Operator's Guide

Version 1 Release 4



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Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page ix.

Third Edition (June 1999)

This edition applies to Version 1 Release 4 of AOC/MVS IMS Automation Feature (5685-151), and to all subsequent releases and modifications until otherwise indicated in new editions.

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Contents

Notices	ix
Trademarks	ix
About This Book	xi
About IMS Automation	xi
What IMS Automation Does	xi
Functions of the IMS Automation Panels	xii
Who Should Use This Book?	xii
What Is In This Book?	xii
What Is In IMS Automation?	xiii
What's New in This Book?	xiv
Related Publications	xiv
The SA S/390 Library	xiv
Related Product Information for the Base Program	xv
Related Product Information for Workstation Operations	xvi
Chapter 1. Understanding IMS Automation	1
SA OS/390 IMS Customization and the Automatic Restart Manager	2
Manually Moving a Subsystem to a Secondary	3
Cautions and Additional Information	4
IMS Automation Programmers' Tools	4
Using IMS Automation Panels	6
IMS Automation Panel Hierarchy	6
Panel Characteristics	7
Using Fast Path	8
Using Fast Path within the IMS Automation	8
Using Fast Path from NetView	8
Selecting Subsystems to Work with	10
Selecting an Option from the Main Menu Panel	11
Chapter 2. Checking IMS Subsystem Status	13
Listing the Status of All Subsystems	13
Getting Detailed Status	14
Chapter 3. Starting and Shutting Down Subsystems	21
About Automation	21
Startups	22
Using the STARTIMS Command	26
Usage Notes	26
Example	26
Shutdowns	27
Using the SHUTIMS Command	30
Usage Notes	30
Examples	31
Working with Service Periods and Triggers	32
Using Service Periods	32
Using Future Dates	33
Displaying Service Period Schedules	33
Overriding Scheduled Service Periods	34
Using Startup and Shutdown Triggers	35

Chapter 4. Master Terminal Functions	39
Database Control Command Interface	39
TCO Functions	42
TCO Main Menu Option 1 — Load a Specific Member	43
TCO Main Menu Option 2 — Enable TCO Processing	46
TCO Main Menu Option 3 — Disable TCO Processing	47
TCO Main Menu Option 4 — View Control File Definitions	48
Maintaining Message Regions	51
XRF and Non-XRF Options	52
Chapter 5. Displaying Critical Messages	53
To View Critical Messages:	54
Chapter 6. Broadcasting Messages to IMS Subsystems	55
Chapter 7. IMS Automation Support Functions	57
Trace Functions	58
Program-to-Program Interface	59
Message Options	60
Interface Panels Display Options	61
Chapter 8. Messages	63
Message Format	63
Message List	64
Glossary of IMS Automation Terms	139
Index	143

Figures

1.	IMS Automation in the MVS Environment	1
2.	IMS Automation Main Menu—Panel Characteristics	7
3.	Subsystem Selection Panel	10
4.	IMS Automation Main Menu	11
5.	Subsystem List panel	14
6.	Inquire Subsystem Components Panel	14
7.	Detailed Subsystem Information Panel for an IMS Control Region	15
8.	Detailed Subsystem Information Panel for a DB Control Region	16
9.	Subsystem/Defined Regions Display Panel for an IMS Control Region	17
10.	Subsystem/Defined Regions Display Panel for a DB Control Region	18
11.	Subsystem/Active Regions Display for an IMS Control Region	18
12.	Subsystem/Active Regions Display for a DB Control Region	19
13.	Takeover Reason Code Panel	19
14.	Start Functions Panel	22
15.	Manual Restart Window	23
16.	Start Confirmation Panel	23
17.	Start Failure Panel	24
18.	Start Notification Panel	24
19.	Operator Shutdown Panel	27
20.	Shutdown Confirmation Panel	28
21.	Service Periods Panel	32
22.	Seven Day Service Periods Panel	33
23.	Service Period Override—Example	34
24.	Triggers List—Sample	36
25.	Triggers Conditions Panel—Sample	37
26.	Master Terminal Menu	39
27.	DBCTL Command Panel	40
28.	DBCTL Command Results Panel	41
29.	Master Terminal Menu	42
30.	TCO Main Menu	42
31.	TCO Main Menu	43
32.	TCO Member Load Panel	43
33.	TCO Member Load Panel	44
34.	TCO Member Load Panel	44
35.	TCO Member Load Panel	45
36.	TCO Main Menu	46
37.	TCO Main Menu	46
38.	TCO Main Menu	47
39.	TCO Main Menu	47
40.	TCO Main Menu	48
41.	TCO Control File Display Menu	48
42.	TCO Configuration Display Panel	49
43.	TCO Control File Display Menu	49
44.	TCO Configuration Display Panel	50
45.	Master Terminal Menu	51
46.	Message Region Panel for an IMS Control Region	51
47.	Message Region Panel for a DB Control Region	51
48.	Message Region Panel for Active XRF Subsystem	52
49.	Critical Messages Manager Panel	53
50.	Detail Display of Critical Message	54

51.	Broadcast Messages Panel	55
52.	Broadcast Notification Panel—Broadcast Successful	56
53.	Broadcast Notification Panel—Broadcast Failure	56
54.	Support Functions Panel	57
55.	Set Trace Panel	58
56.	Program-to-Program Interface (PPI) Panel	59
57.	Set Message ID Display Panel	60
58.	Set Interface Panels Display Panel	61

Tables

1.	SA S/390 Library	xiv
2.	Related Product Books	xv
3.	Related Product Books	xvi
4.	Fast Path Entries	9

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About This Book

This book describes how to operate the AOC/MVS IMS Automation Feature, hereafter referred to as SA OS/390 IMS Automation Feature or simply IMS Automation. This is due to the fact that AOC/MVS 1.4 has been withdrawn and replaced by System Automation for OS/390 (SA OS/390).

About IMS Automation

IMS Automation provides a single-point-of-control for IMS startup, shutdown, recovery, and extended recovery facility (XRF) takeover operations, based on the automation environment supported by SA OS/390. IMS Automation provides new functions that are not available in NetView, IMS, or SA OS/390, resulting in a more comprehensive automation capability than is possible with these products individually. It offers synergy for the separate capabilities of IMS and NetView, incorporating the strengths of each product into a very effective operations manager for IMS processing activities.

The benefits of IMS Automation are multiplied in an XRF IMS environment where the purpose is to maintain an alternate IMS subsystem. In such an environment, IMS Automation can transfer workload to another set of available resources (takeover) quickly and with minimal disruption. The end user benefits through the significantly reduced impact of IMS outages (scheduled and unscheduled). Overall benefits include enhanced operator productivity and reduced error potential.

What IMS Automation Does

IMS Automation provides automation functions in the following four categories:

Startup

The IMS startup function enables the operator to start up an IMS subsystem according to predefined start procedures in either an XRF or non-XRF environment. In addition, the IMS Automation operator can bypass these procedures and manually start IMS subsystems.

Shutdown

The IMS shutdown function allows the operator to select from three shutdown types (NORMAL, IMMEDIATE, and FORCE). It also provides the ability to select the shutdown option (DUMPQ, BACKUP, FREEZE, PURGE, DUMP, and NODUMP), and to cancel pending shutdown request.

Recovery

The IMS recovery function allows IMS subsystem recovery in an XRF environment or restart in a non-XRF environment. Errors detected during startup and shutdown processes are analyzed, resulting in automated recovery actions or the issue of error notification messages to the operator. IMS region failures, application transaction abends, archiving errors, OLDS failures, RECON errors, and MSC link failures are automatically recovered when possible, or the operator is advised about the manual recovery actions required.

Takeover

The IMS takeover function allows the transfer of resources from a failing active IMS subsystem to the alternate IMS subsystem in an XRF environment.

Functions of the IMS Automation Panels

With the IMS Automation panels, you can:

- Display the status of an IMS subsystem and its dependent regions
- Initiate IMS subsystems
- Start, stop, and display IMS message regions
- Display the takeover reason code
- Display active IMS regions
- Display the IMS subsystem shutdown status
- Shut down an IMS subsystem
- Work with DBCTL subsystems
 - Display commands that have been issued for selected DBCTL subsystems
 - Re-issue commands and issue new commands for selected DBCTL subsystems
 - Display results of above issued commands for selected DBCTL subsystems
- Access the TCO interface
 - Load members for selected TCO subsystems
 - Enable or disable the TCO facility for selected TCO subsystems
- Display control file entries for selected subsystems
- Broadcast messages to selected subsystems or domains.

Who Should Use This Book?

Evaluators of IMS Automation

Those users who evaluate productivity and high availability tools for IMS to determine whether to purchase IMS Automation. These users are assumed to have a basic understanding of NetView and the IMS operating environment.

Programmers

The system programmers identified and scheduled for training who

- Understand MVS console operations, concepts, and system programming
- Understand IMS console operations and system programming
- Have attended prior SA OS/390 training.

Operators

The system operators identified and scheduled for training who

- Understand MVS, VTAM, and IMS console operations
- Have attended prior SA OS/390 training.

To thoroughly understand the role of an IMS Automation operator, you will need some hands-on experience with SA OS/390.

What Is In This Book?

This book includes the following:

- Chapter 1, Understanding IMS Automation provides an overview of IMS Automation operations, introduces the main menu, and describes status checking tools.

- Chapter 2, Checking IMS Subsystem Status provides information on how to check IMS Automation subsystem status. Two kinds of status are available:
 - All IMS subsystems known to this SA OS/390
 - Detailed status information for a specific IMS subsystem
- Chapter 3, Starting and Shutting Down Subsystems describes the startup and shutdown options available to the operator from the IMS Automation interface. It also explains how to use service periods to schedule startups and shutdowns and how to use triggers to define required startup and shutdown conditions.
- Chapter 4, Master Terminal Functions describes the master terminal functions available to the operator from the IMS Automation interface. These include access to DBCTL and TCO functions and the ability display, startup, and shutdown the IMS message regions.
- Chapter 6, Broadcasting Messages to IMS Subsystems explains how to send messages to specific IMS subsystem users.
- Chapter 7, IMS Automation Support Functions describes support functions available to the operator from the IMS Automation interface.
- Chapter 8, Messages lists the IMS Automation messages, explains message conditions, and describes any required actions.

What Is In IMS Automation?

With the IMS Automation Option, operators can:

- Perform automated startup, shutdown, XRF takeover, and FDR recovery.
- Display status of subsystems, active regions, and shutdown status
- Start message and control regions
- Start, stop, and display IMS message regions
- Schedule regular startups and shutdowns with service periods
- Define initialization conditions with startup and shutdown triggers
- Perform TCO and DBCTL functions from the IMS Automation interface
- Display and obtain information about critical messages
- Broadcast messages to specific subsystems
- Perform support functions, including setting traces and working with the program-to-program interface (PPI)

IMS Automation functions support:

- Subsystems other than IMS related subsystems
- Fast path regions
- BMP regions with their own outstanding WTOR
- Dependent regions defined as regular subsystems
- Common Queue Server (CQS) regions
- Fast Database Recovery (FDR) regions
- IMS Automation supplied automated operator exits calling user-defined automated operations exits

What's New in This Book?

Changes to this book since Release 3 are:

- Modifications supporting Release 4 of SA OS/390 IMS Automation
- System Automation for OS/390 IMS Automation support of Version 1 Release 4 of SA OS/390 and MVS/ESA SP Version 5.2 automatic restart manager (ARM), which allows a subsystem to be restarted on another system image of the sysplex. This is available in the SA OS/390 IMS automatic restart manager special program enhancement (SPE).
- Technical changes reflecting service updates.

Related Publications

The SA S/390 Library

The following table shows the information units in the SA S/390 library:

<i>Table 1. SA S/390 Library</i>	
Title	Order Number
<i>SA S/390 General Information</i>	GC28-1541
<i>SA S/390 Licensed Program Specifications</i>	GC28-1540
<i>SA S/390 Planning and Installation</i>	GC28-1549
<i>SA S/390 Customization</i>	GC28-1566
<i>SA S/390 Operations</i>	GC28-1550
<i>SA S/390 Messages and Codes</i>	GC28-1569
<i>SA S/390 Technical Reference</i>	GC28-1593
<i>AOC/MVS CICS Automation General Information</i>	GC23-3813
<i>AOC/MVS CICS Automation Operator's Guide</i>	SC23-3815
<i>AOC/MVS CICS Automation Programmer's Reference and Installation Guide</i>	SC23-3814
<i>AOC/MVS IMS Automation General Information</i>	GC23-3816
<i>AOC/MVS IMS Automation Operator's Guide</i>	SC23-3818
<i>AOC/MVS IMS Automation Programmer's Reference and Installation Guide</i>	SC23-3817
<i>AOC/MVS OPC Automation General Information</i>	GC23-3819
<i>AOC/MVS OPC Automation Operator's Guide and Scheduler's Reference</i>	SC23-3821
<i>AOC/MVS OPC Automation Programmer's Reference and Installation Guide</i>	SC23-3820

The System Automation for S/390 books (except Licensed Program Specifications) are also available on CD-ROM as part of the following collection kits:

- IBM Online Library OS/390 Collection (SK2T-6700)
- IBM Online Library Networking Collection (SK2T-6012)

These softcopy collections include the IBM Library Reader, a program that enables you to view online documentation.

SA S/390 Homepage

For the latest news on SA S/390, visit the SA S/390 homepage at <http://www.s390.ibm.com/products/sa/>

Related Product Information for the Base Program

The following table shows the books in the related product libraries that you may find useful for support of the SA S/390 base program.

Table 2 (Page 1 of 2). Related Product Books	
Title	Order Number
<i>MVS/ESA MVS Configuration Program Guide and Reference</i>	GC28-1817
<i>MVS/ESA Planning: Dynamic I/O Configuration</i>	GC28-1674
<i>MVS/ESA Support for the Enterprise Systems Connection</i>	GC28-1140
<i>MVS/ESA Planning: APPC Management</i>	GC28-1110
<i>MVS/ESA Application Development Macro Reference</i>	GC28-1822
<i>MVS/ESA SP V5 System Commands</i>	GC28-1442
<i>MVS/ESA SPL Application Development Macro Reference</i>	GC28-1857
<i>NetView for MVS V3R1 Administration and Security Reference</i>	SC31-8045
<i>NetView for MVS V3R1 Automation Implementation</i>	SC31-8050
<i>NetView for MVS V3R1 Automation Planning</i>	SC31-8051
<i>NetView for MVS V3R1 Command Reference</i>	SC31-8047
<i>NetView for MVS V3R1 Customization Guide</i>	SC31-8052
<i>NetView for MVS V3R1 Customization: Writing Command Lists</i>	SC31-8055
<i>NetView for MVS V3R1 Installation and Administration Guide</i>	SC31-8043
<i>NetView for MVS V3R1 RODM and GMFHS Programming Guide</i>	SC31-8049
<i>NetView for MVS V3R1 User's Guide</i>	SC31-8056
<i>NetView for MVS V3R1 Tuning Guide</i>	SC31-8048
<i>OS/390 Hardware Configuration Definition: User's Guide</i>	SC28-1848
<i>OS/390 Information Roadmap</i>	GC28-1727
<i>OS/390 Information Transformation</i>	GC28-1985
<i>OS/390 Introduction and Release Guide</i>	GC28-1725
<i>OS/390 V1R2.0 JES Commands Summary</i>	GX22-0041
<i>OS/390 Licensed Program Specifications</i>	GC28-1728
<i>OS/390 Printing Softcopy Books</i>	S544-5354
<i>OS/390 Starting Up a Sysplex</i>	GC28-1779
<i>OS/390 Up and Running!</i>	GC28-1726
<i>Planning for the 9032 Model 3 and 9033 Enterprise Systems Connection Director</i>	SA26-6100

<i>Table 2 (Page 2 of 2). Related Product Books</i>	
Title	Order Number
<i>Resource Access Control Facility (RACF) Command Language Reference</i>	SC28-0733
<i>S/390 MVS Sysplex Overview – An Introduction to Data Sharing and Parallelism</i>	GC23-1208
<i>S/390 MVS Sysplex Systems Management</i>	GC23-1209
<i>S/390 Sysplex Hardware and Software Migration</i>	GC23-1210
<i>S/390 MVS Sysplex Application Migration</i>	GC23-1211
<i>S/390 Managing Your Processors</i>	GC38-0452
<i>TSO/E REXX/MVS Users Guide</i>	SC28-1882
<i>TSO/E REXX/MVS Reference</i>	SC28-1883
<i>VSE/SP Unattended Node Support</i>	SC33-6412
<i>VSE/ESA 1.1.0 Unattended Node Support</i>	SC33-6512
<i>VTAM Version 3 Release 3 Network Implementation Guide</i>	SC31-6404
<i>VTAM Version 3 Release 4 Network Implementation Guide</i>	SC31-6434

Related Product Information for Workstation Operations

The following are the books in the related product libraries that you may find useful for support of SA S/390 workstation operations.

<i>Table 3 (Page 1 of 2). Related Product Books</i>	
Title	Order Number
<i>APPC System Definitions in MVS/ESA and OS/2</i>	GG66-3224
<i>APPC Programming Considerations</i>	GG24-3818
<i>APPC Application Examples</i>	GG24-3819
<i>Distributed Console Access Facility User's Guide</i>	GE13-0061
<i>IBM Communications Manager/2 Version 1.1</i>	G221-3630
<i>IBM Communications Manager/2 Version 1.1 Information and Planning Guide</i>	SC31-7007
<i>IBM Communications Manager/2 Version 1.1 Workstation Installation Guide</i>	SC31-6169
<i>IBM Communications Manager/2 Version 1.1 Configuration Guide</i>	SC31-6171
<i>IBM Communications Manager/2 Version 1.1 User's Guide</i>	SC31-6108
<i>IBM Operating System/2 Version 2.1 Using the Operating System</i>	S61G-0905
<i>IBM Operating System/2 Warp</i>	SR28-5668
<i>NetView for MVS V3R1 Graphic Monitor Facility User's Guide</i>	SC31-8095
<i>Official Guide to Using OS/2 Warp</i>	SR28-5659
<i>Personal Communications Programmer's Guide</i>	SC31-8660
<i>Personal Communications Reference</i>	SC31-8259

<i>Table 3 (Page 2 of 2). Related Product Books</i>	
Title	Order Number
<i>Personal Communications Tell Me About OS/2 Access Feature</i>	SC31-8257
<i>Personal Communications Up and Running</i>	SC31-8258

Chapter 1. Understanding IMS Automation

SA OS/390 IMS Automation (or IMS Automation) provides a simple and consistent way to monitor and control all of the IMS subsystems¹ within your organization, both local and remote. It runs under:

- MVS
- NetView with the program-to-program interface (PPI)
- SA OS/390

Its main menu and a series of panels simplify the monitor and control tasks available with IMS Automation, enabling the operator to perform those tasks across systems from a single operator session. Figure 1 shows where IMS Automation fits into an MVS environment.

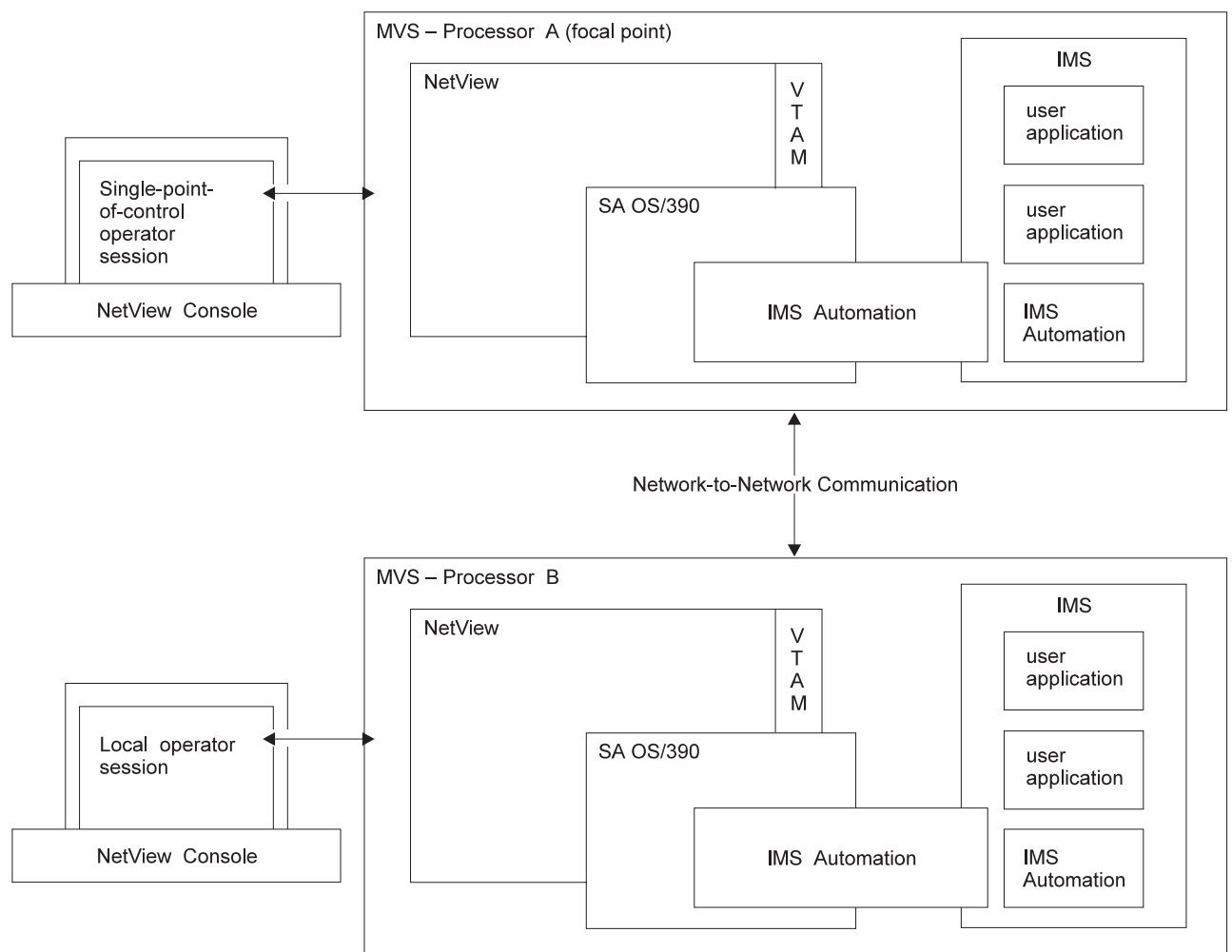


Figure 1. IMS Automation in the MVS Environment

Large complex systems often use two distinct groups of personnel:

¹ IMS users are more familiar with the term *IMS systems* rather than *IMS subsystems*. However, resources automated by SA OS/390 are called *subsystems* in all documentation for the SA OS/390 automation features. Therefore, for the sake of consistency, the term *IMS subsystems* is used and can be considered synonymous with *IMS systems*.

- Those who control production and manage the scheduling of work.
- Those who manage the online systems (generally operated by master terminal operators).

Changes in either group can dramatically affect the working conditions of the other. Sometimes, communications between these two groups are not timely or crisp. Unfortunately, this can lead to errors, loss in productivity, and a certain level of frustration.

The impact of these problems can be minimized in an automated environment. SA OS/390 and IMS Automation enable the programmer to make system-wide changes in a common control facility. In a highly automated environment, little operator intervention or awareness of these interrelated changes is necessary. Thus, the intent of automation is to:

- Perform routine operator tasks consistently and efficiently
- Standardize startup, shutdown, and recovery procedures
- Optimize the availability of resources.

Though many operator tasks are automated, operator intervention is sometimes required. With the IMS Automation operator interface, you can:

- Retrieve detailed information for a subsystem
- Manually initiate the startup or shutdown processes for a subsystem, a group of subsystems, or all of the subsystems on a specific NetView domain
- Override the defined startup and shutdown conditions
- Broadcast messages
- Use the following support functions:
 - Set a trace
 - Work with the program-to-program interface
 - Set message defaults for your user ID
 - Set the interface panels display options.

SA OS/390 IMS Customization and the Automatic Restart Manager

The IMS Automation customization that is currently used with IMS Automation 1.3 can be used unchanged with IMS Automation 1.4.

Version 1 Release 3 of SA OS/390 provides support for MVS/ESA SP 5.2 automatic restart manager (ARM), which allows a subsystem to be restarted on another system image of the sysplex. Underlying SA OS/390's support of ARM is the concept of association, which defines the primary image on which the subsystem is expected to run and the secondary (or fallback) images on which the subsystem can run if the primary system is lost. For more information on this, see "How SA OS/390 Coordinates with MVS Automatic Restart Manager" in *System Automation for OS/390 Customization*. It is recommended that the SA OS/390 definition dialogs be used when specifying the system association and ARM element name. In IMS Automation, a subsystem name can occur in the ACF file for more than one system, but it must have a primary association with **only** one system.

When system associations have been defined for a subsystem managed by IMS Automation, the subsystem is initially brought up on the primary system, and IMS Automation continues to manage it there until one of the following occurs:

- ARM moves the subsystem to a secondary system because the primary system becomes inoperable
- The operator changes the automation status to MOVED

Following an ARM move to a secondary system, the secondary system takes control of the subsystem for the remainder of the current service period as defined on the secondary system. When the service period ends or when a SHUTSYS command is issued, control passes back to the primary system (whether the primary system is available or not). If the primary system is re-IPLed while the subsystem is still active on the secondary, the primary does not restart the subsystem.

It is recommended that each system use the same service periods and triggers. You can accomplish this for your policy data by using the same %INCLUDE statements in the control file for each system. Note, however, that overrides apply only to the system on which the override was entered.

An operator can also manually move a subsystem to a secondary system. This may be appropriate when the primary system is down for an extended period of time and it is necessary to run the subsystem on a secondary system across multiple service periods.

Manually Moving a Subsystem to a Secondary

If you are running on MVS/ESA SP 5.2 and are exploiting ARM support (note that ARM is not exploited if the subsystem utilizes XRF), ARM ensures that a subsystem is not started on more than one system in the sysplex.

If ARM is not being exploited for your subsystems or if a subsystem has associations defined to systems outside the scope of a single sysplex, this protection is not guaranteed. In these cases manually moving a subsystem must be done with care. The IMS Automation feature attempts to ensure that only one instance of a subsystem is active, but certain operational procedures must be followed.

The steps required to manually move a subsystem to a secondary system are:

Primary System	Secondary System
1. Shut down the subsystem if active.	
2. Change the automation status to MOVED using SA OS/390 panels or the SETSTATE command.	
	3. Start the subsystem using SA OS/390 or SA OS/390 IMS feature panels or commands. Service periods and triggers defined on the secondary system are used.
	4. When you no longer want the subsystem managed from this system: <ul style="list-style-type: none"> a. Shut the subsystem down, if active. b. SETSTATE the automation status to MOVED. This causes the automation status to be set to FALLBACK, and it informs the focal point that this system is no longer responsible for managing the subsystem.
5. Set the automation status to RESTART or CTLDOWN.	

Cautions and Additional Information

If your subsystem is not exploiting ARM or the subsystem associations extend beyond a single sysplex, do step 4 above before re-IPLing the primary system.

If a start command for the subsystem is issued directly using the MVS console rather than using SA OS/390 or IMS Automation, feature verification routines are not driven. This can result in two instances of the subsystem running simultaneously (if ARM is not being exploited) and the focal point data being incorrect.

When starting a secondary subsystem using the IMS Automation feature, the focal point system is queried to determine whether another domain is already managing the subsystem. If the focal point cannot be contacted (for example, a link is down), the verification cannot be completed.

IMS Automation Programmers' Tools

Programmers are mentioned several times in this book. They are responsible for customization and administration of SA OS/390 and IMS Automation. To define the system resources and automation processes, they work with the following components:

NetView

The environment in which automation routines are controlled and invoked. Several of the NetView components are used by our automation routines, such as the NetView Automation Table, the Command Model Statements member, and the Operator Definition member.

The NetView Automation Table receives console messages and calls automation routines based on those messages.

Control file

The SA OS/390 control file defines the:

- Environment where automation will occur

- Resources to be automated
- Extent and characteristics of automation.

Status file

The SA OS/390 status file keeps a log of startup and shutdown information, such as:

- When a subsystem is initialized
- When a subsystem is shut down
- Service periods.

Automation operators

Execute actions similar to human operators through defined procedures and actions specified in the control file.

Interface and single-point-of-control

A comprehensive set of panels are provided that allow the operator to monitor and control IMS subsystems from a NetView console. When single-point-of-control is used, all IMS subsystems, local and remote, can be controlled from one operator session. Single-point-of-control uses the NetView-to-NetView task (NNT) as the interface to other NetView domains.

Program-to-program interface

This component of NetView is used by IMS Automation to enable users to send and receive data from other programs. There is a NetView side and an IMS side to the program-to-program interface.

State/Action tables

Invoke automation on the basis of event and status relationships.

The above list does not represent a comprehensive description of all of the automation components. These are listed here because they are mentioned in this operator's guide. If you need more information about them, refer to the SA OS/390 programmer's documentation or the *AOC/MVS IMS Automation Programmer's Reference and Installation Guide*. There is also some overview material in the *AOC/MVS IMS Automation General Information*.

Using IMS Automation Panels

This section contains information about selecting tasks from the panels, using panel fields and PF keys, getting help, and specifying how your messages will display.

To start an IMS Automation operator session, enter **IMS** on a NetView command line. This invokes the IMS Automation Main Menu.

IMS Automation Panel Hierarchy

The main menu panel lists all of the tasks available with the operator interface. You access second-level panels through the main menu. (There are third- and fourth-level panels as well!)

On these panels, you will:

- Select from a list of options
- Supply information IMS requires to perform a request
- Sometimes do a combination of both.

On many panels, some fields contain preselected options; these are the default values. You can change these values by typing over the field entries or by clearing the defaults and selecting new options.

Panel Characteristics

EVIK0000 **1** IMS Automation: Main Menu **2** Page: 1 of 1
Date: 05/22/95
Time: 17:02:00
Domain: CNM01

Subsystem, Group or Domain _____ (? for list) **3**

Select an option.

4 — **1** Display detailed status of an IMS subsystem
2 Start an IMS subsystem, group or domain
3 Shutdown an IMS subsystem, group or domain
4 Display start and shutdown trigger conditions
5 Perform service periods functions
6 Perform Master Terminal Operator functions
7 Display critical messages
8 Send message to specific IMS subsystem
9 Provide support functions
5 **99** Provide access to user defined local functions

6 Command ==> **7**
F1=Help F2=End F3=Return **8** F6=Roll

Figure 2. IMS Automation Main Menu—Panel Characteristics

All IMS Automation panels have the following characteristics:

- 1** The panel name identifies the panel purpose.
- 2** When data will not fit on one screen, “Page” gives you the sequence of the panel you are viewing and the number of panels in the set. Multi-page examples include message logs.
- 3** You select the subsystem or subsystems you will work with here. Most of the IMS Automation panels include this field, allowing you to change subsystems without having to return to the main menu.
- 4** You select an option from this menu.
- 5** IMS Automation enables your system programmer to integrate locally developed functions into the IMS Automation interface. If local functions have been implemented, you would select this option to display a menu of them.
- 6** IMS Automation responds to actions/requests with messages in this area.
- 7** On the command line, you enter IMS Automation operator commands as well any other command you can normally enter on a NetView panel. You can also enter fast path entries to specific panels (see “Using Fast Path” on page 8).
- 8** You use function keys primarily to navigate through the panels. Their labels are self-explanatory. If you see an unusual function key on a panel and you do not know what it is used for, refer to the panel help by pressing PF1.

Using Fast Path

IMS Automation offers a *fast path* option that lets you go directly to any screen in its interface. You can use fast path both from within IMS Automation and from base automation, that is, from NetView.

Panels have identifying numbers based on their option number from the main menu. You *fast path* by entering = and a panel's identifying number on the command line. Several of the second-level panels have numbered menu options on them which take you to third-level panels. Fast path entries for third-level panels add the decimal point and second-level option number.

Some panels require that a subsystem, group, or domain be specified to process the fast path entry. If one is not specified on the panel, you will need to specify one by appending a comma and the name to the fast path entry.

Table 4 on page 9 lists fast path entries for first-, second-, and third-level panels and indicates which functions require a subsystem, group, or domain specification.

Using Fast Path within the IMS Automation

To fast path to a panel from within IMS Automation, enter =X on the command line, where X is either a number or a question mark (?). X is the number of the option from the main menu.

Example: You enter =1 to access the panel corresponding to option 1, the Inquire panel. You enter =1.5 to access the panel corresponding to option 5 from the Inquire panel, Takeover code.

A fast path to the main menu panel is defined to a key.

Note: You can return to the main menu panel from other panels by pressing PF4.

Using Fast Path from NetView

To fast path to an IMS Automation panel from NetView, enter:

IMS nn,subsys

on the command line, where *nn* is the number corresponding to the option panel and *subsys* is the name of the IMS subsystem you want to work with.

Example:

Entering

IMS 9.2,IMS10AA

will take you from NetView into IMS Automation, to the program-to-program interface panel, with the subsystem IMS10AA specified.

<i>Table 4. Fast Path Entries</i>	
Enter	To get to this panel:
=?	Subsystem selection and status
=?.1	List all subsystems
=?.2	List all subsystem groups
=?.3	List subsystems by domains
=1	Inquire Subsystem Components
=1.1,subsys	Subsystem Information
=1.2,subsys	Subsystem/Defined Regions Display
=1.3,subsys	Subsystem/Active Regions Display
=1.4,subsys	Shutdown Status Display
=1.5,subsys	Takeover Reason Code
=2	Start Functions
=3	Operator Shutdown
=4	Triggers List
=5	Service Periods Functions
=5.1,subsys	One Day Service Periods
=5.2,subsys	Seven Days Service Periods
=5.3,subsys	Service Periods Overrides
=6	Master Terminal Menu
=6.1,subsys	Database Control (DBCTL)
=6.2,subsys	Timer Controlled Operations
=6.2.1,subsys	Load TCO member
=6.2.2,subsys	Enable TCO processing
=6.2.3,subsys	Disable TCO processing
=6.2.4,subsys	View control file definitions
=6.3,subsys	Message Region
=7	Critical Messages
=8	Broadcast Messages
=9	Support Functions
=9.1,subsys	Trace Functions
=9.2,subsys	Program-to-Program Interface
=9.3,subsys	Set Message ID Display
=9.4,subsys	Set Interface Panel Display Options
=0	Main Menu

Selecting Subsystems to Work with

The IMS Automation Main Menu panel includes the following field:

Subsystem, Group or Domain _?_____ (? for list)

Enter a question mark in this field to display the following selection panel:

```

EVIKQ000          IMS Automation: Subsystem Selection          Page: 1 of 1
                                                            Date: 05/22/95
                                                            Time: 17:01:30
                                                            Domain: CNM01

Select an option . . . . . 1 List all IMS Subsystem names
                           2 List all Group names
                           3 List all Domain names

Include status on display  2 1 Yes
                           2 No

Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 3. Subsystem Selection Panel

When this panel displays, enter:

- 1 To list all of the IMS subsystems known to SA OS/390 on your system. (The programmer sets this up in the control file.) If this is a focal point system, then the IMS subsystems on the connected systems will also be listed. If you define secondary systems, these may not appear if their current status is MOVED or FALLBACK.

The “Include status on display” option is **only** valid for **subsystem** listings. Because list retrieval with status takes longer, the default is **NO** to not include status on display.

- 2 In the control file, the system programmer can group subsystems and give them a name. Groups of subsystems can cross NetView domains. Select this option to list the group names.
- 3 Domain refers to the set of subsystems in a specific NetView domain. Select this option to list all the domains known to this SA OS/390.

Note: To list multiple domains you must be on a focal point system.

Selecting an Option from the Main Menu Panel

The following list briefly describes the options you can select from the main menu, shown in Figure 4.

EVIK0000	IMS Automation: Main Menu	Page: 1 of 1
Subsystem, Group or Domain	IMS10AA_ (? for list)	Date: 05/22/95
		Time: 17:02:00
		Domain: CNM01
Select an option.		
—	1 Display detailed status of an IMS subsystem	
	2 Start an IMS subsystem, group or domain	
	3 Shutdown an IMS subsystem, group or domain	
	4 Display start and shutdown trigger conditions	
	5 Perform service periods functions	
	6 Perform Master Terminal Operator functions	
	7 Display critical messages	
	8 Send message to specific IMS subsystem	
	9 Provide support functions	
	99 Provide access to user defined local functions	
Command ==>		
F1=Help	F2=End	F3=Return
		F6=Roll

Figure 4. IMS Automation Main Menu

Display detailed status of an IMS subsystem

Use this option to retrieve detailed information for the subsystem name entered in the “Subsystem, group or domain” field. You cannot specify a group or domain with this option. See Chapter 2, “Checking IMS Subsystem Status” on page 13.

Start an IMS subsystem, group, or domain

Use this option to initiate the startup process on a subsystem, a group of subsystems, or subsystems on a specific domain. See Chapter 3, “Starting and Shutting Down Subsystems” on page 21.

Shutdown an IMS subsystem, group, or domain

Use this option to initiate the shutdown process on a subsystem, a group of subsystems, or subsystems on a specific domain. See Chapter 3, “Starting and Shutting Down Subsystems” on page 21.

Display start and shutdown trigger conditions

Use this option to display a list of triggers, external events which must be met when startups and shutdowns are initiated.

Perform service periods functions

Use this option if you want to work with service periods for a specific subsystem. See “Working with Service Periods and Triggers” on page 32.

Perform Master Terminal Operator functions

Use this option to access DBCTL and TCO functions and to display, start, or stop message regions for a specific system. For more information, see Chapter 4, “Master Terminal Functions” on page 39.

Display critical messages

This facility displays critical messages in a scrollable format. Once displayed, messages can be deleted. See Chapter 5, “Displaying Critical Messages” on page 53.

Send message to specific IMS subsystem

Use this option to send a message to a specific subsystem. See Chapter 6, “Broadcasting Messages to IMS Subsystems” on page 55.

Provide support functions

Select this option to:

- Set a trace option
- Maintain the program-to-program interface
- Set message defaults
- Set the interface panels display options.

See Chapter 7, “IMS Automation Support Functions” on page 57.

Provide access to user-defined local functions

IMS Automation allows your system programmer to add functions to this operator interface. If functions have been added at your installation, you would select this option to view a menu of them.

Chapter 2. Checking IMS Subsystem Status

This section explains how to:

- List the status for all IMS subsystems known to this SA OS/390.
- List detailed status information for a specific IMS subsystem.

Listing the Status of All Subsystems

When you enter a question mark in the “Subsystem, group or domain” field, the Figure 3 on page 10 displays.

Notice that the bottom half of the screen gives you the option to display the status of the subsystems. (This option is only valid when “List all IMS subsystem names” is selected.)

```
Include status on display    1 1  Yes
                             2   No
Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu
```

Retrieving the status takes some time, so the default is set for No, **2**. If you enter **1** in this field, the next panel will display the status of each IMS subsystem.

If this is a focal point system and you are set up to use single-point-of-control, then the status will be retrieved from each NetView domain known to this focal point system. If you define secondary systems, these may not appear if their current status is MOVED or FALLBACK.

See Figure 5 for an example of the Subsystem List panel showing the status of each IMS subsystem.

```

EVIKQ010          IMS Automation: Subsystem List          Page: 1 of 1
                                                           Date: 05/22/95
                                                           Time: 17:03:00

Enter S to select a subsystem.

  Subsystem  Jobname  Domain  Status
  _ IMS10Z    IMS10ZJ  AOF10  UP
  _ IMS10Y    IMS10Y   AOF10  STOPPED
  _ IMS10A1   IMS10AA  AOF10  STOPPED
  _ IMS10A2   IMS10AB  AOF10  STOPPED
  _ IMS01C    IMS401C  AOF01  UP

Command ==>
F1=Help      F2=End      F3=Return   F4=IMS Menu   F6=Roll

```

Figure 5. Subsystem List panel

IMS subsystem statuses are the same as those used for all resources automated by SA OS/390. Refer to the SA OS/390 base documentation for status descriptions.

Getting Detailed Status

To view in detail the status of a specified subsystem (this option is not valid for a group or domain), select option 1 on the main menu panel to display the following Inquire Subsystem Components panel:

```

EVIKQ100          IMS Automation: Inquire Subsystem Components Page: 1 of 1
                                                           Date: 05/22/95
                                                           Time: 17:03:30
                                                           Domain: CNM01
Subsystem . . . . . IMS10A1 (? for list)
Select an option . . . . .
    _ 1 Detailed Subsystem status
    _ 2 Defined dependent Region
    _ 3 Active dependent Regions
    _ 4 Shutdown status of active terminals
    _ 5 Explanation of Takeover reason code

```

Figure 6. Inquire Subsystem Components Panel

From this screen, you can select the type of status display desired. These options include:

- Subsystem** Displays detailed status of subsystem specified. See Figure 7 on page 15 for an IMS control region example or Figure 8 on page 16 for a DB control region example.
- Defined Regions** Displays child systems defined in the control file for the specified subsystem and the status of each.

Active Regions Invokes the Subsystem/Active Regions Display panel, which lists the subsystem status, any active regions, jobnames, and tasknames.

This screen contains an extra refresh key, PF9. Pressing PF9 sets the screen to update displayed information approximately every ten to twelve seconds. Pressing PF9 a second time stops the refresh cycle.

Shutdown Invokes the Shutdown Status Display panel, which lists terminals shutdown and the type of shutdown that occurred.

Takeover reason code Displays the reason code and explanation for a takeover. If no takeover has occurred, the Takeover Cause field will display, No Takeover Reason Code available. See Figure 13 on page 19.

You can display the detailed status for another subsystem by entering the subsystem name in the “Subsystem” field and pressing ENTER.

EVIKQI00		IMS Automation: Subsystem Information		Page: 1 of 1	
Subsystem		IMS10A1_ (? for list)		Date: 09/22/95 Time: 17:04:00	
Subsystem status . . . : UP		Since : 16:42		10/10/95	
Job : IMS10AA		Job number . . . : 9843			
NetView domain . . . : AOF10					
VTAM information					
Specific appl. name: IMS10AA		DC status . . . : UP			
Generic appl. name : IMSESA1		XRF : YES			
Active sessions : 1		XRF mode . . . : ACTIVE			
Pending sessions : 0					
Last start		Last shutdown			
Initiated : 16:40:28 10/10/95		Initiated . . . : 17:06:00		10/05/95	
Completed : 16:42:35 10/10/95		Completed . . . : 17:07:56		10/05/95	
Start type: AUTO		Abend code :			
Next start : none		Next shutdown :		none	
Command ==>					
F1=Help	F2=End	F3=Return	F4=IMS Menu	F5=Refresh	F6=Roll

Figure 7. Detailed Subsystem Information Panel for an IMS Control Region. If the startup or shutdown occurred while NetView was up and running, the “Last start” and “Last shutdown” data will be accurate. If NetView was not running when the startup/shutdown occurred, the data may be inaccurate.

EVIKQID0		IMS Automation: Subsystem Information		Page: 1 of 1	
Subsystem IMS01C_ (? for list)				Date: 09/22/95 Time: 17:04:00	
Subsystem status . . . : UP		Since : 16:42		10/10/93	
Job : IMS401C		Job number . . . : 9843			
NetView domain . . . : AOF01		IMSID : I41C			
Command Character . . : ?					
Last start		Last shutdown			
Initiated : 16:40:28 10/10/95		Initiated . . : 17:06:00 10/05/95			
Completed : 16:42:35 10/10/95		Completed . . : 17:07:56 10/05/95			
Start type: AUTO		Abend code :			
Next start : none		Next shutdown : none			
Command ==>					
F1=Help		F2=End	F3=Return	F4=IMS Menu	F5=Refresh F6=Roll

Figure 8. Detailed Subsystem Information Panel for a DB Control Region. If the startup or shutdown occurred while NetView was up and running, the “Last start” and “Last shutdown” data will be accurate. If NetView was not running when the startup/shutdown occurred, the data may be inaccurate.

To display any regions that are defined to the subsystem, select option 2 from the Inquire Subsystems Components panel. Figure 9 on page 17 shows the panel for an IMS control region, and Figure 10 on page 18 shows the panel for an DB control region.

EVIKQA00 IMS Automation: Subsystem/Defined Regions Display				Page: 1 of 1
				Date: 05/22/95
				Time: 17:04:30
Subtype: CTL		Subsystem: IMS10A1	JOB: IMS10AA	Status: UP
Outstanding Reply: 11		AVM: ON	XRF: YES	DC Status: UP
XRF Mode: ACTIVE		XRF Status: ACTIVE	ALTSYS: ON	Last HSBID: 1
Subtype	Region	Job	Status	
DBRC	DBRIMSAA	DBRIMSAA	UP	
DLS	DLIIMSAA	DLIIMSAA	UP	
TP	MSGIMSAA	MSGIMSAA	UP	
TP	MSGIMSAB	MSGIMSAB	UP	
TP	MSGIMSAC	MSGIMSAC	UP	
FP	FPIMSAA	FPIMSAA	STOPPED	
BMP	BMPIMSAA	BMPIMSAA	STOPPED	
Command ==>				
F1=Help F2=End F3=Return F4=IMS Menu F5=Refresh F6=Roll				

Figure 9. Subsystem/Defined Regions Display Panel for an IMS Control Region

All defined regions display whether or not they are currently active. In Figure 9, the subsystem is IMS10A1 and the job is IMS10AA. For each region, the panel displays the subtype, region, job name, and status. Subtypes include:

- DBRC** Database recovery control region
- DLS** Data language interface control region
- TP** Normal online message region (transaction processing)
- FP** Fast path message region
- BMP** Batch message processing region
- OTHER** Other subsystems that are children of IMS CTL region.

```

EVIKQAD0      IMS Automation: Subsystem/Defined Regions Display      Page: 1 of 1
                                           Date: 05/22/95
                                           Time: 17:04:30

Subtype: CTL      Subsystem: IMS01C      JOB: IMS401C      Status: UP
IMSID:  I41C      Command Character: ?

-----
Subtype Region      Job      Status      Subtype Region      Job      Status
-----
DBRC      DBRIMSC      DBRIMSC      UP
DLS        DLIIMSC      DLIIMSC      UP
BMP        BMPIMSA1     BMPIMSA1     STOPPED
BMP        BMPIMSCA     BMPIMSCA     STOPPED
BMP        BMPIMSCB     BMPIMSCB     STOPPED
BMP        BMPIMSCC     BMPIMSCC     UP
-----

```

```

Command ==>
F1=Help      F2=End      F3=Return      F4=IMS Menu      F5=Refresh      F6=Roll

```

Figure 10. Subsystem/Defined Regions Display Panel for a DB Control Region

To display only the dependent regions that are currently active, select option 3 from the Inquire Subsystems Components panel. Figure 11 shows the panel for an IMS control region, and Figure 12 on page 19 shows the panel for an DB control region.

```

EVIKQD00  IMS Automation: Subsystem/Active Regions Display      Page: 1 of 1
                                                    Date: 05/22/95
                                                    Time: 17:05:00

      Subsystem Job: IMS10AA      DBRC Job: DBRIMSAA      DLI Job: DLIIMSAA
Subsystem Status: UP      DBRC Status: ACTIVE      DLI Status: ACTIVE
      DC Status: UP      XRFMODE: ACTIVE      XRF Status: ACTIVE
-----
      Subsystem Name: IMS10A1      Active Regions: 4
ID      Type      Job      Taskname      ID      Type      Job      Taskname
--      ---      -
4      TP      MSGIMSAB      WAITING
3      TP      MSGIMSAC      WAITING
2      TP      MSGIMSAA      WAITING
1      BMP      PPIIMSA      PPIIMSA
-----
Command ==>
F1=Help      F2=End      F3=Return      F4=IMS Menu      F5=Refresh      F6=Roll
F9=Autoref

```

Figure 11. Subsystem/Active Regions Display for an IMS Control Region

```

EVIKQDD0  IMS Automation: Subsystem/Active Regions Display      Page: 1 of 1
                                           Date: 05/22/95
                                           Time: 17:05:00
Subsystem Job: IMS401C      DBRC Job: DBRIMSC      DLI Job: DLIIMSC
Subsystem Status: UP      DBRC Status: ACTIVE      DLI Status: ACTIVE
Command Character: ?

-----
Subsystem Name: IMS401C      Active Regions: 1
ID      Type      Job      Taskname      ID      Type      Job      Taskname
--      ---      ---      -
1      BMP      BMPIMSC      WAITING
-----

Command ==>
F1=Help      F2=End      F3=Return      F4=IMS Menu      F5=Refresh      F6=Roll
F9=Autoref

```

Figure 12. Subsystem/Active Regions Display for a DB Control Region

To display the reason code associated with an XRF takeover, select option 5 from the Inquire Subsystem Components panel.

```

EVIKQT00      IMS Automation: Takeover Reason Code      Page: 1 of 1
                                           Date: 05/22/95
                                           Time: 17:06:00
Subsystem Name . . . IMS10AA
Takeover Reason Code: 54
Takeover Cause:
  04 - IRLM failure.
  10 - Timeout of LOG surveillance.
  40 - Timeout of RDS surveillance.

```

Figure 13. Takeover Reason Code Panel

Chapter 3. Starting and Shutting Down Subsystems

This chapter discusses how to start and shut down subsystems. It also explains how you can use service periods and triggers to schedule startups and shutdowns.

Service periods are schedules that define when subsystems will be regularly started and shutdown. Systems programmers define service periods in the SA OS/390 control file. Triggers enable you to associate external events with startup and shutdown processes. When startups or shutdowns are initiated, IMS Automation validates the request against scheduled service periods and triggers lists.

Subsystems can be started and shut down individually or in groups. A group can be all of the subsystems in a given NetView domain, in which case the domain name is used, or a group can be a set of subsystems as defined by the IMS Automation programmer. To select a subsystem, group, or domain, or to list their names, refer to "Selecting Subsystems to Work with" on page 10.

About Automation

The IMS Automation programmer specifies startup and shutdown commands in the SA OS/390 control file for each IMS subsystem. If you manually initiate a startup or shutdown process, once that process starts, normal automation processes will occur.

Some sample control file entries that affect startup and shutdown include:

SUBSYSTEM

This control file entry has several keywords that are used during startup and shutdown processes. In order for you to be able to use the operator interface to start a subsystem, the keyword STARTCMD=YES must be specified.

STARTUP

When STARTCMD=YES is specified in the SUBSYSTEM entry (required for IMS Automation), commands defined with the STARTUP entry are used. At least one command must be defined.

SHUTNORM

This entry defines the commands and replies to be executed when a normal shutdown is initiated. For message regions (such as online, fastpath, or batch message regions), specific entries relating to your unique IMS installation requirements may apply.

SHUTIMMED

This entry defines the commands and replies to be executed when an immediate shutdown process is initiated. For message regions (such as online, fastpath, or batch message regions), specific entries relating to your unique IMS installation requirements may apply.

SHUTFORCE

This entry defines the commands and replies to be executed when a forced shutdown process is initiated. For message regions (such as online, fastpath, or batch message regions), specific entries relating to your unique IMS installation requirements may apply.

Startups

Select Startup, option 2, from the main menu panel, to display the IMS Automation: Start Functions panel.

```
EVIKI100          IMS Automation: Start Functions          Page:  1 of  1
Subsystem, Group or Domain  IMS05Z__ (? for list)          Date:  05/22/95
                                                                    Time:  17:08:00

Select a start type . . .  _ 1 Default start type
                             2 Auto start
                             3 Cold start
                             4 Build the messages queues
                             5 Load MSDB during warm start
                             6 Supply the IMS restart command

*****
* Warning: The following options are used for XRF systems only.      *
*****

Select a start option . .  _ 1 Start XRF active only
                             2 Start XRF alternate only

Next start   : 05/29/95   11:55          Next shutdown   : 05/29/95   17:00

Command ==>
F1=Help      F2=End      F3=Return    F4=IMS Menu      F6=Roll
```

Figure 14. Start Functions Panel

On this panel, you select from several types of startups:

- DEFAULT** Uses the default startup type defined in the control file by the IMS Automation programmer.
- AUTO** Uses the restart data set to determine the startup type. AUTO is the the startup type used if the IMS Automation programmer has not specified a default in the control file.
- COLD** Initiates a cold start per the COLD control file entry.
- BUILDQ** Uses the BUILDQ control file entry.
- WARMSDBL** Loads the Main Storage Data Base (MSDB) during a warm start.

MANUAL Allows you to enter your own restart command, including startup commands defined during IMS Automation customization. Selecting a Manual start type invokes the following pop-up window:

```

EVIKI101          IMS Automation: Start Functions          Page: 1 of 1
                                                           Date: 05/22/95
Subsystem, Group or Domain  IMS10AA  (? for list)         Time: 17:08:30

+-----+
| Enter IMS restart command on the next line:              |
|_____|
| Or enter the user defined restart command name on the    |
|_____|
| Or select one of the user defined restart commands:      |
|  USERSTART,ERE1='ERE COLDCOMM'                          |
|  s USERSTART,/NRE                                         |
|  -                                                         |
|_____|

```

Figure 15. Manual Restart Window

Start Confirmation, Failure, and Notification: After you issue a start command from the Start Functions panel, the Start Confirmation panel will display. Figure 16 shows a sample confirmation panel from a manual restart command of /NRE.

```

EVIKI110          IMS Automation: Start Confirmation      Page: 01 of 01
                                                           Date: 05/22/95
Subsystem, Group or Domain : IMS10AA                     Time: 17:09:00
                                                           More:
Select an option . . . . .  1 1 Continue the start request
                           2 2 Cancel the start request

Start type . . . . . : MANUAL
Start options . . . . . : XRF
Manual command . . . . . : /NRE.

Next start   : 05/29/95  07:45      Next shutdown  : 05/29/95  17:15

The following subsystems in IMS IMS10AA are selected for startup:
DBRIMSAA  MSGIMSAC
DLIIMSAA  FPIMSAA1
MSGIMSAA  BMPIMSAA1
MSGIMSAB

Command ==>
F1=Help    F2=End    F3=Return  F4=IMS Menu    F6=Roll

```

Figure 16. Start Confirmation Panel

On the Start Confirmation panel, you can select 1 to proceed with startup or 2 to cancel the command.

Each time a start command is issued, IMS Automation checks the control file to determine if a start command is valid under the current conditions. If IMS Automation finds a conflict, in some cases it will give you the option to override the condition and start the subsystem anyway. Startup overrides are valid only when the:

- Subsystem's parent is not active or up
- Subsystem status is already STARTED
- Subsystem is outside its service period
- Service period is invalid
- Trigger conditions are not met.
- Subsystem's current status is MOVED or FALLBACK and subsystem is not managed by another domain.

If, for instance, you issue a start command, and the specified subsystem is **outside** its service period, the command will fail. Figure 17 shows a sample Start Failure panel.

```

EVIKI120          IMS Automation: Start Failure                      Page: 1 of 1
Subsystem . . . . . : IMS05Z                                         Date: 05/22/95
                                                                    Time: 17:09:30

The subsystem IMS05Z could not be started because:

    IMS05Z is outside its service period.

Select an option . . . . . _ 1 Continue the start request
                             2 Skip processing for this subsystem
                             3 Display service periods
                             4 Display start trigger conditions
                             5 Cancel the start request

Next start   : 05/29/95 11:55      Next shutdown  : 05/29/95 17:00

Command ==>
F1=Help      F2=End      F3=Return   F4=IMS Menu      F6=Roll
  
```

Figure 17. Start Failure Panel

If startup initiates successfully, IMS Automation displays a Start Notification panel, such as Figure 18.

```

EVIKI130          IMS Automation: Start Notification                Page: 01 of 01
Subsystem . . . . . : IMS05Z                                         Date: 05/22/95
                                                                    Time: 17:10:00
                                                                    More:

Start command was issued for the following subsystem(s):
    IMS05Z
  
```

Figure 18. Start Notification Panel

In an XRF system, you may also choose to start the subsystem as either the XRF Active subsystem or the XRF Alternate subsystem. This choice overrides the automation control file; it is optional.

Starting a Group of Subsystems: When you request a startup for a group or a domain, the startup routine processes each subsystem one at a time. Startup conditions are verified with status messages, such as IMS Start process initiated successfully. If conflicts arise, you are asked to confirm or cancel. When you confirm or cancel, the startup process continues for remaining subsystems.

Using the STARTIMS Command

In addition to the menu-driven panels, IMS Automation provides the STARTIMS line-mode command for starting subsystems. You can issue the STARTIMS command from any NetView command line or from within a CLIST. The parameters on the STARTIMS command are the same options you have when using the menus.

STARTIMS <i>subsys, startup_type</i> [<i>, xrf_options</i>]

subsys The name of the IMS

startup_type IMS Automation supports the following startup types:

- **AUTO**
- **BUILDQ**
- **COLD**
- **WARMSDBL**

xrf_options IMS Automation supports the following XRF options:

- **ACTIVE**
- **BACKUP**
- **NOXRF**

Usage Notes

1. STARTIMS does not bypass service-period or trigger restrictions.
2. STARTIMS does minimal syntax checking and flows through the standard IMS startup process.
3. You must use the full-screen operator panels if any conditions are not satisfied.
4. Of course, STARTIMS does not support a start type of MANUAL from within a CLIST. A MANUAL start requires operator intervention and cannot run unattended.

Example

```
STARTIMS IMS10AA,WARMSDBL,ACTIVE
```

Shutdowns

Select Shutdown, option 3 from the main menu panel, to display the IMS Automation: Operator Shutdown panel, shown in Figure 19.

```

EVIKT100                IMS Automation: Operator Shutdown
Subsystem Name . . . . . IMS10A1_ (? for list)      Date: 05/22/95
                                                    Time: 17:11:00
Shutdown Type . . . . . 1 1 Normal shutdown
                               2 Immediate shutdown
                               3 Force shutdown
                               4 Cancel pending shutdown request

Restart subsystem . . . . 2 1 Yes
                               2 No
                               3 Control

Broadcast message . . . . 2 1 Yes
                               2 No

Press F8 for shutdown option, current value: *

Next start  : none                Next shutdown : none

COMMAND ==>
F1=Help      F2=End      F3=Return      F6=Roll
              F8=Options

```

Figure 19. Operator Shutdown Panel

This panel allows you to start or abort a shutdown. You select shutdown and control type from the options. You can only abort a shutdown if IMS Automation has not yet initiated the actual shutdown process. If the delay timer has not expired, you can abort the shutdown by selecting option 4. The delay timer is set in the control file.

Selecting Shutdown Type

- **Normal** tells SA OS/390 to perform a normal shutdown as defined in the control file entry SHUTNORM.
- **Immediate** performs an immediate shutdown as defined in the control file entry SHUTIMMED.
- **Force** performs a forced shutdown as defined in the control file entry SHUTFORCE.

Selecting Shutdown Control

- **Restart** tells IMS Automation to restart the subsystem(s) after the shutdown process is complete.
- **Broadcast** sends a message throughout the subsystem(s) notifying users of a planned shutdown. For more information, see Chapter 6, “Broadcasting Messages to IMS Subsystems” on page 55.

Selecting Shutdown Option: Press PF8 to display available IMS shutdown options.

- **DUMPQ**
- **BACKUP**
- **FREEZE**
- **PURGE**
- **DUMP**
- **NODUMP**

Refer to IMS documentation for descriptions of these IMS shutdown options.

After you have completed selections on the Operator Shutdown panel, when you press ENTER, the Shutdown Confirmation panel will display:

EVIKT110	IMS Automation: Shutdown Confirmation	Page: 01 of 01
		Date: 05/22/95
Subsystem, Group or Domain	IMS10A1	Time: 17:11:30
		More:
Select an option	1 1 Continue the shutdown 2 Cancel the shutdown	
Shutdown type	NORM	
Shutdown option	*	
Restart subsystem(s) . . .	NO	
Broadcast message	NO	
Next start : NONE	Next shutdown : NONE	
The following subsystems in IMS IMS10A1 are selected for shutdown:		
DBRIMSAA MSGIMSAC		
DLIIMSAA FPIMSAA1		
MSGIMSAA BMPIMSAA1		
MSGIMSAB		
Command ==>		
F1=Help	F2=End	F3=Return F4=IMS Menu F6=Ro11

Figure 20. Shutdown Confirmation Panel

The Shutdown Confirmation panel displays your set of shutdown selections. If, after reviewing them, you wish to change them, select option 2 to cancel this shutdown command and return to the Shutdown Functions panel. If your selections are correct, select option 1 to issue this shutdown command.

When you issue a shutdown command, IMS Automation checks the service period definitions to determine if a shutdown is currently allowed. If IMS Automation finds a conflict, it will inform you of the problem and give you options. In certain conditions, you may continue the shutdown. Shutdown overrides are valid only when:

- IMS is not active
- The subsystem status is not UP
- The subsystem is outside its service period
- An invalid service period is scheduled
- Trigger conditions are not met.

Shutting Down a Group of Subsystems: When you request a shutdown for a group or a domain, the shutdown process cycles through each subsystem. Shutdown conditions are verified. If conflicts arise, you are asked to confirm or cancel. After you confirm or cancel, the shutdown process continues.

Using the SHUTIMS Command

In addition to the menu-driven panels, IMS Automation provides the SHUTIMS line-mode command for shutting down subsystems. Like the STARTIMS command, you can issue the SHUTIMS command from any NetView command line or from within a CLIST. The parameters on the SHUTIMS command are the same options you have when using the menus.

```
SHUTIMS  subsys ,shutdown_type
          [,shutdown_options
          ,restart_options
          ,broadcast_options]
```

shutdown_type SHUTIMS supports the following shutdown types:

- **NORMa****l**
- **IMMEDI****ate**
- **FORCE** (requires either the DUMP or NODUMP shutdown option)
- **ABORT**

shutdown_options SHUTIMS supports the following shutdown options:

- *
- **DUMPQ** (designates point where message queues can be rebuilt)
- **BACKUP** (shuts down this alternate XRF system)
- **FREEZE** (terminates the pending actions — waits for SYNCPT)
- **PURGE** (empty IMS queues, so no work remains)
- **DUMP** (used only with FORCE shutdown type)
- **NODUMP** (used only with FORCE shutdown type)

restart_options **Yes|No|Ctl**. By default, IMS Automation does not restart the IMS after shutdown.

broadcast_options **Yes|No**. By default, IMS Automation does not broadcast a message to operators that the IMS is shutting down.

Usage Notes

1. SHUTIMS does not bypass service-period or trigger restrictions.
2. SHUTIMS does minimal syntax checking and flows through the standard IMS shutdown process.
3. You must use the full-screen operator panels if any conditions are not satisfied.
4. Do not specify YES on the broadcast option when you issue SHUTIMS from a CLIST, because IMS Automation displays a fill-in-the-blank panel when the broadcast option is YES.
5. The default shutdown option is asterisk (*), which will use the shutdown options defined in the control file for the shutdown type you specified.

Examples

Example 1

```
SHUTIMS IMS10AA,IMMED,*,Y,N
```

In this example, the shutdown type is IMMED. The '*' indicates that the SHUTDOWN option from the automation control file is to be used. Restart and no broadcast (Y,N) are also specified.

Example 2

```
SHUTIMS IMS10AA,FORCE,NODUMP
```

In this example, the shutdown type is FORCE. FORCE requires either the DUMP or NODUMP option; NODUMP is the shutdown option used in this example. By default, restart is not attempted and no message is broadcast.

Working with Service Periods and Triggers

Service periods are schedules that define when subsystems will be regularly started and shutdown. Systems programmers define service period windows in the SA OS/390 control file with the SERVICE entry. Timeframes are indicated by start and stop times, and up to five timeframes may be specified for each day.

Overrides are temporary changes to the scheduled startup and shutdown times defined by the programmer in the SA OS/390 control file. The operator makes these changes by overtyping displayed service periods.

The trigger function enables you to associate an external event with initiation of startup or shutdown processes. This allows batch jobs and other applications to signal IMS Automation that IMS startup or shutdown processing may proceed.

When using the operator panels to start or stop an IMS subsystem region, the service periods and startup/shutdown triggers are checked to validate that a manual startup or shutdown request is in accordance with startup and shutdown trigger conditions. If a conflicting request is made, such as a startup when all of the startup triggers are not set, IMS Automation notifies you of the conflict and asks you to confirm the IMS startup.

When a conflict occurs, a panel displays that allows you to go to the service period or trigger panels. This is helpful when you must decide whether to continue with the startup or shutdown. Service periods and triggers apply only to the control region of an IMS complex. Service periods and triggers may not be used for the DLI, DBRC, TP, FP, or BMP regions.

Using Service Periods

Service periods help you determine when to initiate a subsystem startup or shutdown. For instance, if a subsystem did not start at the time specified in its service period, you may need to issue a start command from the operator interface. Select option 5, service periods, from the main menu panel, to display the following panel:

EVIKP000	IMS Automation: Service Periods Functions	Page: 1 of 1
Subsystem	IMS10A1 (? for list)	Date: 12/16/95
Start date	12 / 16 / 95 (MM/DD/YY)	Time: 17:12:00
Select an option	1 One day schedule	
	2 Seven day schedule	
	3 Overrides to schedules	

Figure 21. Service Periods Panel

Use this panel to work with the service periods defined for this subsystem. The “start date” field indicates the starting date of the timeframe you will be working with. The default is the current date, but you can change it by typing over it.

Select one of the following options:

One day schedule

Work with the day specified in the “start date” field.

Seven day schedule

Work with a seven-day period, beginning with the date specified in the “start date” field.

Overrides to schedules

This option displays overrides that were entered from the operator interface. Overrides are listed starting with the date specified in the “start date” field.

Note: Installing APAR OW2355I prevents you from unintentionally modifying schedules in the past. This is also valid for overrides, except for deletion.

Using Future Dates

A common global variable controls the century of a given date. This means that the future date can lie within a range of the next day until the last day of the year. The value of the year is computed as follows:

`(yy + global_var) // 100`

where `//` returns the remainder of the division.

If the common global variable is not set or does not have a value between 20 and 80, a value of 30 is assumed.

Displaying Service Period Schedules

When you select option 2 to display a seven-day schedule, a panel similar to the following will display:

EVIKP200	IMS Automation: Seven Day Service Periods	Page: 01 of 01
Subsystem	IMS10A1	Date: 10/12/95
		Time: 17:12:30
		More: - +
Overtime to modify or type D to delete the overrides.		
	Start/Stop	Start/Stop
Tue 10/12/95	****	****
<u>Wed 10/13/95</u>	****	1700
<u>Thu 10/14/95</u>	0800	1000 1400 1700 2000 2359
<u>Fri 10/15/95</u>	DOWN	DOWN
<u>Sat 10/16/95</u>	0700	1200 1300 1345
<u>Sun 10/17/95</u>	0800	1700
<u>Mon 10/18/95</u>	0630	****
Command ==>		
F1=Help	F2=End	F3=Return
F7=Backward	F8=Forward	F4=IMS Menu
		F6=Roll

Figure 22. Seven Day Service Periods Panel. Days with underscores beside them are overrides. In this example, regularly scheduled service periods occur on Tuesday, so there is no underscore beside that day.

The information on this panel either comes from the SA OS/390 control file, or, for an override, from data keyed in by the operator. Overrides are highlighted.

Four asterisks (****) in a time field indicate that a subsystem will remain active into the next day. This means that the first day ends with four asterisks, and the next day must begin with four asterisks. DOWN indicates that the subsystem is down for the entire day (from midnight to midnight).

Note: If DOWN is specified, it must be in both the Start and Stop fields.

In Figure 22 on page 33, IMS10A1 is scheduled to be up every day except Friday. IMS10A1's regular start and stop times are 0800 and 1700 and are defined in the automation control file. Starting on Monday, IMS10A1 starts at 0630 and is to be continually available until Wednesday at 1700. Thursday's override specifies an automated startup at 0800 with a shutdown at 1000, another startup at 1400 with a shutdown at 1700, and finally a startup at 2000 with a shutdown at 2359.

If you had selected option 3 to display the overrides, you would get a panel that looks very similar to the panel displayed when option 2 is selected. The difference is that only the overrides are shown. You can change and delete overrides from this panel.

Overriding Scheduled Service Periods

You can make temporary changes to the defined startup and shutdown schedule by typing over displayed service period timeframes. For example compare the following schedules:

Start/Stop				Start/Stop			
Thu	12/16/95	0800	1800	Thu	12/16/95	0800	1800
Fri	12/17/95	0800	1800	<u>Fri</u>	12/17/95 0800 ****		
Sat	12/18/95	DOWN	DOWN	<u>Sat</u>	12/18/95 **** 1800		
Sun	12/19/95	DOWN	DOWN	Sun	12/19/95	DOWN	DOWN
Mon	12/20/95	0800	1800	Mon	12/20/95	0800	1800
Tue	12/21/95	0800	1800	Tue	12/21/95	0800	1800
Wed	12/22/95	0800	1800	Wed	12/22/95	0800	1800

Figure 23. Service Period Override—Example

The left panel shows a regular, seven-day service period schedule. In the panel to the right, the operator has overtyped the timeframes for Friday and Saturday. Notice that the overrides are highlighted and that an underscore appears beside the override timeframe. To delete an override, type D in the underscore beside the override and press the ENTER key. The schedule then reverts to the service period information contained in the control file.

In addition to overriding service periods from the Service Period panel, you can also override service periods by issuing start and shutdown commands from the operator interface. When you issue a start or shutdown request, IMS Automation checks the service periods entries in the control file. If the request conflicts with service period entries, IMS Automation returns a prompt, asking if you want to override the service period. You can override service periods with start and

shutdown commands only when a service period is invalid or when a subsystem is outside its service period.

Overrides are not always valid. For instance, you cannot override a service period for a date or time that has already passed.

Consider the following example:

```

EVIKP200          IMS Automation: Seven Day Service Periods      Page: 01 of 1
Subsystem . . . . . : IMSA                                     Date: 12/16/95
                                                             Time: 14:47:00
                                                             More: - +
Overtyping to modify or type D to delete the overrides.

          Start/Stop  Start/Stop  Start/Stop  Start/Stop  Start
Thu 12/16/95 1445  1715
Fri 12/17/95 0745  1715
```

In this example, the operator has attempted to override the scheduled service period and force the startup of IMSA at 1445. Note, however, that the Time field (in the upper right corner) contains the value 1447. Since the requested start time has already passed, the attempted override is invalid. The operator will receive the following message:

Original time has passed and cannot be changed.

Using Startup and Shutdown Triggers

The startup and shutdown trigger functions associate an external event with the startup or shutdown of an IMS subsystem. This allows batch jobs and other applications to signal IMS Automation that IMS startup or shutdown processing may proceed.

Startup external triggers verify that all defined actions have completed prior to IMS subsystem startup. Shutdown triggers specify external events which should occur before the IMS subsystem can be stopped. System programmers define trigger conditions in the SA OS/390 control file.

When you select option 4, Triggers, from the main menu, the IMS Automation: Triggers List panel displays.

```
EVIKE100          IMS Automation: Triggers List                      Page: 1 of 1
Subsystem . . . . . IMS10AA (? for list)                          Date: 12/16/95
                                                                    Time: 17:14:00
                                                                    More:
Enter S to select a trigger.

  Type      Condition names
S Startup  SERVICE JOBA JOBB JOBC

_ Startup  JOBD1

_ Shutdown JOBA JOBB JOBC JOBD

Command ==>
F1=Help      F2=End      F3=Return  F4= IMS Menu      F6=Roll
```

Figure 24. Triggers List—Sample

In Figure 24, three trigger conditions are defined for subsystem IMS10AA. The first one states that a startup is to be initiated when triggers JOBA, JOBB, and JOBC are set, but only during a service window period. If a service window is not open when all three triggers are set, a startup will be initiated as soon as a window is open.

The second condition states that a startup should be initiated when trigger JOBD is set, whether we are in a service period window or not.

The last condition, SHUTDOWN, states that a shutdown can be initiated when all four triggers are set, even if the service period window is still open.

Triggers that have been set are highlighted. If a service period window is open, and SERVICE is specified, then the word SERVICE is highlighted.

You can manually change the trigger conditions. To do this, enter an S in the field beside the trigger that you want to change. In this case, we have selected to change the first trigger condition. This displays the following panel:

EVIKE200		IMS Automation: Triggers Conditions		Page: 1 of 1
Subsystem : IMS10AA		Trigger Type.....: STARTUP		Date: 12/16/95
Enter S in status field to set or U to unset.				Time: 17:14:30
				More:
Name	Status	Auto unset	Description	
Service	U		IMS10AA is outside the service period	
JOBA	S	Start	Account's receivable by day's end	
JOBB	S		Accounts billable by day's end	
JOBC	U		Overdue accounts	

Figure 25. Triggers Conditions Panel—Sample

This panel lists all trigger conditions for the selected trigger set. The panel fields contain the trigger:

- Name, or SERVICE (if a service period window is taken into consideration).
- Status, (S for SET or U for UNSET).
- “Auto unset” condition. If used, this field will contain one of the following:
 - START** Unset this trigger when a startup is initiated.
 - UP** Unset this trigger when a startup is complete.
 - DOWN** Unset this trigger when a shutdown is complete.
- Description, or, if this is a SERVICE condition, a statement indicating whether or not this IMS subsystem is within a service period window.

Use this panel to set or unset trigger conditions. Enter S (for SET) or U for (UNSET) in the status field and press ENTER.

Chapter 4. Master Terminal Functions

The master terminal functions provide IMS with a full-screen panel interface to perform DBCTL and TCO functions and to maintain IMS message regions. Select option 6, Master Terminal, to display the IMS Automation: Master Terminal Menu:

```

EVIKM000          IMS Automation: Master Terminal Menu
Subsystem or Domain. . . . IMS10AA_ (? for list)
Select an Option . . . .  _ 1 DB Ctl (IMS V3)
                          2 TCO (IMS V3)
                          3 Message Regions
Date: 05/23/95
Time: 09:22:00
Domain: CNM01
```

Figure 26. Master Terminal Menu

The following sections provide a brief description of each of the panels accessed from this panel.

Database Control Command Interface

Database Control is a feature of IMS, valid only for IMS 3.1 and higher. This function saves the last ten commands issued to DB Ctl for the selected subsystem. For the function to work, valid IMS subsystems must be described in the control file.

To use DBCTL, enter a valid name in the subsystem field and select option 1 on the Master Terminal Menu. The DBCTL Command panel displays.

This panel displays the ten most recently issued commands for a selected subsystem. From this list, you can receive the reply from IMS to a command that was issued. You can also enter a new command and view the resulting reply.

EVIKMD01	IMS Automation: DBCTL Command	Page: 1 of 1 Date: 05/23/95 Time: 09:23:00
Select IMS Command or enter New Command for IMS10AA		
The 10 most recently used commands will be retained. If a new command is entered, it will be placed at the top of the stack.		
_ nre chkpt 0 format all S dis prog all _ _ _ _ _ _ _		
Command ==> F1=Help F2=End F3=Return F4=IMS Menu F5=Refresh F6=Roll		

Figure 27. DBCTL Command Panel

To Receive Replies from Recent Messages: Enter an **S** before one of the listed commands, then press the ENTER key.

To Issue a New Command:

1. Tab to a blank line.
2. Type **S** in the underscore.
3. Tab once to the entry field.
4. Type the DBCTL command you want to issue.
5. Press the ENTER key to process the command.

The selected or entered command becomes the latest command. It is placed at the top of the list, shifting the rest of the commands down one position. The tenth command, if present, will be dropped. DBCTL returns a reply panel about the selected/entered command, such as the one shown in Figure 28 on page 41.

```
EVIKMD02          IMS Automation: DBCTL Command Results          Page:  1 of  3
Results from IMS10AA for DIS PROG ALL                          Date: 05/23/95
                                                                Time: 09:24:00

DFS000I MESSAGE(S) FROM ID=IMSZ
*   PROGRAM      TRAN      TYPE
    DBF#FPU0      FPU
    DBFSAMP1      BMP
    DBFSAMP2      BMP
    DBFSAMP3      FPM
    DBFSAMP4      TP
    DBFSAMP5      BMP
    DBFSAMP6      BMP
    DFHSAM04      BMP
    DFHSAM05      BMP
    DFHSAM14      BMP
    DFHSAM15      BMP
    DFHSAM24      BMP
    DFHSAM25      BMP

COMMAND ===>
F1=Help      F2=End      F3=Return      F6=Roll
              F8=Forward
```

Figure 28. DBCTL Command Results Panel

If panel EVIKMD02 shows more than one page of output in the upper right hand corner, you may scroll forward using PF8, and backward again using PF7. If the output is many pages, you may find it useful to use enhanced scrolling, by entering either “+n” to go forward “n” number of pages or “-n” to go backward “n” number of pages in the display.

TCO Functions

The Timer-Controlled Operations (TCO) interface lets you issue TCO commands from the IMS Automation interface. Select Option 2 from the Master Terminal Function menu for TCO functions:

```

EVIKM000          IMS Automation: Master Terminal Menu
Subsystem or Domain. . . . IMS10AA_ (? for list)
Select an Option . . . . . 2 1 DB Ctl (IMS V3)
                             2 TCO (IMS V3)
                             3 Message Regions
Date: 05/23/95
Time: 09:25:00
Domain: AOF01
```

Figure 29. Master Terminal Menu

The following panel will be displayed:

```

EVIKMT00          IMS Automation: TCO Main Menu
Subsystem or Domain. . . . IMS10AA_ (? for list)
TCO Status . . . . . : Available
Select an option . . . . . _ 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions
Page: 1 of 1
Date: 05/23/95
Time: 09:26:30
```

Figure 30. TCO Main Menu

From this TCO Main Menu, you can perform four functions:

1. Load a specific member
2. Enable TCO processing
3. Disable TCO processing
4. View the control file definitions

TCO Main Menu Option 1 — Load a Specific Member

Select Option 1 from the TCO Main Menu to load a specific member:

```

EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
                                                    Date: 05/23/95
Subsystem or Domain. . . . . IMS01A__ (? for list) Time: 09:28:00

TCO Status . . . . . : Available

Select an option . . . . . 1 1 Load a specific member
                           2 Enable TCO processing
                           3 Disable TCO processing
                           4 View the Control file definitions


Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 31. TCO Main Menu

The following panel will be displayed. Enter a '?' to see a member list:

```

EVIKMT10      IMS Automation: TCO Member Load    Page: 1 of 1
                                                    Date: 05/23/95
Subsystem Name . . . . . : IMS01A                Time: 09:28:30

TCO Status . . . . . : Available

Member . . . . . ?_____ (? for list)

Alternate Destination . . _____

Maximum Segment Size . . . _


Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 32. TCO Member Load Panel

Select a member:

EVIKMT10	IMS Automation: TCO Member Load	Page: 1 of 1
		Date: 05/23/95
		Time: 09:29:00
Subsystem Name : IMS01A		
TCO Status : Available		
+-----		
Member	Select one of the user supplied TCO members	
	_ STRTLNES START LINES	
Alterna	s ASGNTRAN ASSIGN TRANSACTIONS	
Maximum	_ DISPROG DISPLAY ACTIVE PROGRAMS	
+-----		
F1=Help F3=Cancel		
+-----		
Command ===>		
F1=Help	F2=End	F3=Return F4=IMS Menu F6=Roll

Figure 33. TCO Member Load Panel

The member name will be inserted. Press ENTER to load:

EVIKMT10	IMS Automation: TCO Member Load	Page: 1 of 1
		Date: 05/23/95
		Time: 09:29:30
Subsystem Name : IMS01A		
TCO Status : Available		
Member : ASGNTRAN (? for list)		
Alternate Destination . . _____		
Maximum Segment Size . . . _		
Command ===>		
F1=Help	F2=End	F3=Return F4=IMS Menu F6=Roll

Figure 34. TCO Member Load Panel

You will receive a message that the command is in progress:

EVIKMT10	IMS Automation: TCO Member Load	Page: 1 of 1 Date: 05/23/95 Time: 09:30:00
Subsystem Name : IMS01A		
TCO Status : Available		
Member : ASGNTRAN (? for list)		
Alternate Destination . . _____		
Maximum Segment Size . . . _		
COMMAND IN PROGRESS		
Command ==>		
F1=Help	F2=End	F3=Return F4=IMS Menu F6=Roll

Figure 35. TCO Member Load Panel

TCO Main Menu Option 2 — Enable TCO Processing

Select Option 2 from the TCO Main Menu to enable TCO processing:

```

EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                  Time: 09:30:30

Select an option . . . . . 2 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions


Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 36. TCO Main Menu

You will receive a message when the START command has completed:

```

EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                  Time: 09:31:00

Select an option . . . . . _ 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions


DFS058I 10:00:44 START COMMAND COMPLETED  I31A
Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 37. TCO Main Menu

TCO Main Menu Option 3 — Disable TCO Processing

Select Option 3 from the TCO Main Menu to disable TCO processing:

```
EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                    Time: 09:32:00

Select an option . . . . . 3 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions

Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 38. TCO Main Menu

You will receive a message when the PSTOP command has completed:

```
EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                    Time: 09:32:30

Select an option . . . . . _ 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions

DFS058I 10:02:05 PSTOP COMMAND COMPLETED  I31A
Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 39. TCO Main Menu

TCO Main Menu Option 4 — View Control File Definitions

Select Option 4 from the TCO Main Menu to view the control file definitions:

```

EVIKMT00      IMS Automation: TCO Main Menu      Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                  Time: 09:33:00

Select an option . . . . . 4 1 Load a specific member
                             2 Enable TCO processing
                             3 Disable TCO processing
                             4 View the Control file definitions

Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 40. TCO Main Menu

The following panel will be displayed. Select Option 1 to view the TCO command entries:

```

EVIKMT40      IMS Automation: TCO Control File Display Menu  Page: 1 of 1
Subsystem or Domain. . . . . IMS01A__ (? for list)  Date: 05/23/95
TCO Status . . . . . : Available                  Time: 09:33:30

Select an option . . . . . 1 1 View the TCO command entries
                             2 View the TCO load members

Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 41. TCO Control File Display Menu

The following panel will be displayed:

```
EHKK3D0X      CFG  COMMAND =  IMS01A TCO                      Page 1 of 1
AUTOMATION CONFIGURATION DISPLAY - ENTRY= IMS01A
-----
TYPE IS TCO
REPLY          = (INIT,, 'DFSTCF LOAD DFSTCF .')
REPLY          = (SPEC,, 'DFSTCF LOAD &EHKVAR1 .')
REPLY          = (START,, '/START LTERM DFSTCFI .')
REPLY          = (STOP,, '/PSTOP LTERM DFSTCFI .')
END OF MULTI-LINE MESSAGE GROUP

Action ==>
          PF1= Help          PF3= Return          PF5= Refresh
          PF6= Roll
```

Figure 42. TCO Configuration Display Panel

Select Option 2 from the TCO Control File Display Menu to view the TCO load members:

```
EVIKMT40      IMS Automation: TCO Control File Display Menu    Page: 1 of 1
                                                         Date: 05/23/95
Subsystem or Domain. . . . IMS01A__ (? for list)             Time: 09:35:00
TCO Status . . . . . : Available
Select an option . . . . . 2 1 View the TCO command entries
                             2 View the TCO load members

Command ==>
F1=Help      F2=End      F3=Return  F4=IMS Menu      F6=Roll
```

Figure 43. TCO Control File Display Menu

The following panel will be displayed:

EHKK3D0X	CFG	COMMAND =	IMS01A TCOMEMBERS	Page 1 of 1
AUTOMATION CONFIGURATION DISPLAY - ENTRY= IMS01A				

TYPE IS TCOMEMBERS				
STRTLNES = 'START LINES'				
ASGNTRAN = 'ASSIGN TRANSACTIONS'				
DISPROG = 'DISPLAY ACTIVE PROGRAMS'				
END OF MULTI-LINE MESSAGE GROUP				
Action ==>				
PF1= Help		PF3= Return		PF5= Refresh
PF6= Roll				

Figure 44. TCO Configuration Display Panel

Maintaining Message Regions

IMS Automation enables the operator to start or stop any number of IMS message regions. The Message Region panel displays only the message regions defined in the control file for a specified subsystem. To display the Message Region panel, select option 3 from the Master Terminal Function panel:

```

EVIKM000          IMS Automation: Master Terminal Menu
Subsystem or Domain. . . . IMS10AA_ (? for list)
Select an Option . . . . . 3 1 DB Ctl (IMS V3)
                             2 TCO (IMS V3)
                             3 Message Regions
Date: 05/23/95
Time: 09:38:00
Domain: AOF01
```

Figure 45. Master Terminal Menu

Figure 46 shows a sample Message Region panel for an IMS control region and Figure 47 shows a sample Message Region panel for a DB control region.

```

EVIKM300          IMS Automation: Dependent Regions
Subtype: CTL      Subsystem: IMS10Z  JOB: IMS10ZJ  Status: UP
Outstanding Reply: 92      XRF: NO    DC Status: UP
Enter I to Initiate or T to Terminate
-----
Req Region  Type  Status  Message
-  MSGIMSZA TP   STOPPED  Job=MSGIMSZA
-  MSGIMSZB FP   STOPPED  Job=MSGIMSZB
-  MSGIMSZC BMP   STOPPED  Job=MSGIMSZC
```

Figure 46. Message Region Panel for an IMS Control Region

```

EVIKM3D0          IMS Automation: Dependent Regions
Subtype: CTL      Subsystem: IMS01C  JOB: IMS401C  Status: UP
IMSID: I41C      Character: ?
Enter I to Initiate or T to Terminate
-----
Req Region  Type  Status  Message
-  BMPIMSCC BMP   UP       Job=BMPIMSCC
```

Figure 47. Message Region Panel for a DB Control Region

Starting a Message Region: To start a message region, enter I for initiate in the request field beside the subsystem.

Stopping a Message Region: To stop a message region, enter T for terminate in the request field beside the subsystem.

XRF and Non-XRF Options

The Message Region panels differ for XRF and non-XRF systems. In non-XRF systems, the Message Regions panel will not contain fields which apply specifically to XRF systems; these fields are AVM, XRF Mode, XRF Status, ALTSYS, and Last HSBID.

```

EVIKM300      IMS Automation: Dependent Regions
Page: 1 of 1
Date: 05/23/95
Time: 09:41:00

Subtype: CTL      Subsystem: IMS10AB  JOB: IMS10AB  Status: UP
Outstanding Reply: 12  AVM: ON  XRF: YES  DC Status: UP
XRF Mode: ACTIVE  XRF Status: ACTIVE  ALTSYS: OFF  Last HSBID: 1
Enter I to Initiate or T to Terminate
-----
Req Region  Type  Status  Message
-  MSGIMSAB TP   STOPPED  Job=MSGIMSAB
```

Figure 48. Message Region Panel for Active XRF Subsystem

The Message Region panel contains the following fields:

- Subtype** The type of subsystem. The most common types you will encounter are CTL for control, TP for online message region, FP for fast path region, or BMP for batch message processing region.
- Subsystem** The subsystem name specified.
- JOB** The job name.
- Status** Subsystem status.
- Outstanding Reply** When IMS comes up, it issues a WTOR. This number is the current number you can use to issue IMS commands.
- AVM** Availability Manager. This is the controller of an XRF system that determines when a partner or backup system will take over.
- XRF** Tells whether this is an XRF subsystem or not. Message Region displays for non-XRF subsystems omit some of these fields.
- DC Status** Data Communication Status field. When this value is YES, the system has logon capability.
- XRF Mode** Identifies this subsystem as the ACTIVE or BACKUP partner in the XRF pair.
- XRF Status** Identifies the status of the XRF subsystem pair.
- ALTSYS** Identifies the status of the alternate system in an XRF environment.
- Last HSBID** Identifies the last HSBID used in an XRF environment.
- IMSID** Identifies the IMS subsystem.
- Character** Identifies the console command character.

Chapter 5. Displaying Critical Messages

Through the Critical Message Manager, IMS Automation utilizes the SA OS/390 Status Display Facility (SDF). The Critical Message Manager displays critical messages in a prioritized, scrollable format. Messages are defined as critical in the NetView Automation Table.

Select option 7 from the main menu to display Figure 49.

EVID0001

IMS MONITOR PANEL

Critical Messages

Archive

MSC Links

OLDS

Recons

Timers

Transactions

===>

PF1=HELP 2=DETAIL 3=END 4=HWD 6=ROLL 7=UP 8=DN

05/22/95

12=TOP

Figure 49. Critical Messages Manager Panel. If critical messages have accumulated for a category, the category will be highlighted.

SDF's IMS Monitor Panel, shown in Figure 49, lists categories of critical messages. If the CMM has accumulated any critical messages for a category, that category will be highlighted, according to severity of message.

To View Critical Messages:

1. Tab to the category you wish to view.
2. Press PF2 to display the detailed list.

Figure 50 shows a sample critical message display.

```
----- DETAIL STATUS DISPLAY -----                                1 OF 6

COMPONENT: DXR008E                                SYSTEM   : SY1
COLOR      : YELLOW                                PRIORITY  :    501
DATE       : 05/22/95                                TIME      : 17:07:30
REPORTER   : AUT01                                NODE       : CNM01
REFERENCE VALUE: IMS10AA-DXR0108E
JOB IMS10AA - DXR008E IRLM INITIALIZATION ABEND

===>
1=HELP      3=RETURN      6=ROLL 7=UP 8=DOWN 9=ASSIST 10=DELETE 11=BOTTOM 12=TOP
```

Figure 50. Detail Display of Critical Message

Chapter 6. Broadcasting Messages to IMS Subsystems

The Broadcast function allows you to send a message throughout the system, as needed. For instance, if you need to shut down a specific subsystem, you could warn users of the planned shutdown. The IMS Automation Broadcast facility utilizes the program-to-program interface (PPI) between NetView and an IMS control region. This PPI interface must be available for the Broadcast facility to work. The Broadcast facility is also used when an operator selects a timed termination of an IMS complex. IMS Automation issues a message to notify users of a pending shutdown. The operator can cancel the shutdown any time during the interval defined by the shutdown timer. When that interval has passed, the operator cannot cancel the shutdown.

Figure 51 displays a sample Broadcast Messages panel:

EVIKB100	IMS Automation: Broadcast Messages	Page: 1 of 1 Date: 05/23/95 Time: 09:43:00
Subsystem, Group, or Domain IMS10AA_ (? for list)		
Message Enter text of message to be broadcast		
IMS10AA will be shut down at 14:00 today for approximately 30 minutes.		
Please plan accordingly.		

Options Enter 'Y' in one of the following:		
Active	Y	Send to terminals currently available (no parms)
Line	—	Line names or ALL (will default to PTERM ALL)
Pterm	—	Physical terminal names or ALL
Lterm	—	Logical terminal names or ALL
Master	—	Master terminal(s) only (no parms)
SYSID	—	Master terminal SYSID names or ALL
MSNAME	—	Master terminal MSNAME names or ALL
Node	—	VTAM Node names or ALL
Parameters Enter parameters for selected option:		

Command ==>		
F1=Help	F2=End	F3=Return F4=IMS Menu F6=Roll

Figure 51. Broadcast Messages Panel

The Broadcast panel contains both required and optional fields. You **must** specify

- Message text
- Subsystem, group, or domain
- Destination.

To select destination, you must select one of the following:

Select:	To send the message to:
Active	Currently active terminals only
Line	All physical terminals on a specific line
Pterm	The physical terminal specified
Lterm	The logical terminal specified.
Master	The master terminal and any specified secondary master terminal
SYSID	The ID of a system in a multi-system configuration

MSNAME The logical link path in a multi-system configuration
Node The specified VTAM node

After you issue a Broadcast command, IMS Automation will return a Broadcast Notification panel, telling you whether the message was delivered successfully. Figure 52 and Figure 53 illustrate a successful and failed Broadcast, respectively.

```

EVIKB110          IMS Automation: Broadcast Notification      Page: 01 of 01
                                                           Date: 05/23/95
Subsystem. . . . . : IMS10AA                                Time: 09:43:30

Broadcast command was issued for the following subsystem(s):
  IMS10AA
```

Figure 52. Broadcast Notification Panel—Broadcast Successful

```

EVIKB120          IMS Automation: Broadcast Notification      Page: 01 of 01
                                                           Date: 05/23/95
Subsystem. . . . . : IMS10AB                                Time: 09:44:00

Broadcast command failed for the following subsystem(s):
  Subsystem  Fail Reason
  IMS10AB    EVI136E ERROR ON PPI REQUEST 014, RC = 026
```

Figure 53. Broadcast Notification Panel—Broadcast Failure

Chapter 7. IMS Automation Support Functions

IMS Automation support functions enable you to:

- Enable or disable tracing of the IMS Automation
- Operate the program-to-program interface (PPI)
- Set message options
- Set the interface panels display options.

Select option 9 from the IMS Automation main menu to invoke the Support Functions panel shown in Figure 54.

EVIKJ000	IMS Automation: Support Functions	Page: 1 of 1
		Date: 05/23/95
Subsystem or Domain. . . .	IMS10AA_ (? for list)	Time: 09:45:00
		Domain: CNM01
Select an option	1 Trace functions	
	2 Program-to-Program Interface	
	3 Set Message Id Options	
	4 Set Interface Panels Option	

Figure 54. Support Functions Panel

Trace Functions

Setting trace on will trace any entry into or exit from an IMS Automation module. Tracing is not specific to a given subsystem. If a subsystem is entered, the trace option will be invoked on the domain in which the subsystem is defined. You can, however, enable trace only for your user ID.

Select option 1 from the Support Functions panel to access the Set Trace panel, shown in Figure 55. From this panel, you can enable or disable tracing of IMS Automation.

EVIKJ100IMS Automation: Set TracePage: 1 of 1
Date: 05/23/95
Time: 09:46:00

Domain or Subsystem. . . . IMS10AA (? for list)
Operator id MYUSERID

Trace option for operator: DEFAULT
Select an option -

1 ON Turn on entry and exit tracing for operator
2 OFF Suppress entry and exit tracing for operator
3 DEFAULT Use trace option for domain (domainwide default)
Note: Affects tracing for operator in all IMS subsystems of domain.

Domain affected : CNM01
Trace option for domain : ON
Select an option -

1 ON Turn on entry and exit tracing for domain
2 OFF Suppress entry and exit tracing for domain
Note: Affects tracing in all IMS subsystems of domain.

Command ==>
F1=Help F2=End F3=Return F4=IMS Menu F6=Roll

Figure 55. Set Trace Panel

Program-to-Program Interface

Select **2** from the Support Functions panel to access the Program-to-Program Interface panel, shown in Figure 56.

The Program-to-Program Interface panel displays the status of the:

- Specified subsystem
- Program-to-program interface at the IMS side
- Program-to-program interface at the NetView side (EVINTASK)
- NetView Subsystem Interface (SSI), which passes the buffers for the program-to-program interface.

From this panel, you can start, stop, or refresh the program-to-program interface for the IMS subsystem or for the NetView side (EVINTASK). The refresh option updates the in-storage PPI table currently executing in an IMS environment.

```

EVIKJ200      IMS Automation: Program-to-Program Interface      Page:  1 of  1
                                                         Date: 05/23/95
Subsystem . . . . . IMS10Z__ (? for list)                    Time: 09:47:00

Subsystem status . . . . : UP
Subsystem PPI status . . : ACTIVE

Select an option . . . . -  * Start subsystem PPI
                           2 Stop subsystem PPI
                           3 Refresh subsystem PPI

EVINTASK status . . . . : ACTIVE
NetView subsystem status : ACTIVE
Domain affected. . . . . A0F10

Select an option . . . . -  * Start EVINTASK
                           2 Stop EVINTASK

Command ==>
F1=Help      F2=End      F3=Return    F4=IMS Menu  F5=Refresh  F6=Roll
```

Figure 56. Program-to-Program Interface (PPI) Panel. Asterisks appear for options which are invalid at the time this panel is displayed.

If an asterisk (*) displays instead of a start option number, IMS Automation will not allow you to select that option. For example, if the subsystem status is both **UP** and **ACTIVE**, starting the subsystem will not be an option.

Message Options

Select 3 from the Support Functions panel to access the Set Message Id Display panel, shown in Figure 57.

```

EVIKJ300          IMS Automation: Set Message Id Display          Page:  1 of  1
                                                            Date: 05/23/95
Domain or Subsystem. . . . . IMS10AA (? for list)              Time: 05:48:00
Operator id . . . . . MYUSERID

Message option for operator: DEFAULT
Select an option . . . . . _

    1  ON              Display message id with panel messages
    2  OFF             Suppress message id from panel messages
    3  DEFAULT         Use display option for domain(domainwide default)
Note: Affects messages for operator in all IMS subsystems of domain.

Domain affected . . . . . : CNM01
Message option for domain. : OFF
Select an option . . . . . _

    1  ON              Display message id with panel messages
    2  OFF             Suppress message id from panel messages
Note: Affects messages in all IMS subsystems of domain.

Command ==>
F1=Help      F2=End      F3=Return      F4=IMS Menu      F6=Roll
```

Figure 57. Set Message ID Display Panel

From this screen you can set message options for the operator or for the domain. Setting the option to **ON** will cause messages displayed on the operator panels to include the message ID numbers. Setting the option to **OFF** will suppress message ID numbers. You can set this option for all IMS subsystems within a domain (system-wide default), or you can override the default for a specific user in the domain.

Interface Panels Display Options

Select 4 from the Support Functions panel to access the Set Interface Panels Display panel, shown in Figure 58.

```
EVIKJ400          IMS Automation: Set Interface Panels Display  Page:  1 of  1
                                                           Date: 05/31/95
Domain or Subsystem. . . . . IMS01A__ (? for list)          Time: 17:01
Operator id . . . . . GULLA__

Operator panel interface . : DEFAULT
Select an option . . . . . _

      1  ON                Display interface panels from SHUTSYS and SETSTATE
      2  OFF                Suppress interface panels
      3  DEFAULT            Use option for domain (domainwide default)
Note: Panels will be displayed or suppressed for all IMS's in the domain.

Domain affected . . . . . : A0F01
Domain panel interface . . : ON
Select an option . . . . . _

      1  ON                Display interface panels from SHUTSYS and SETSTATE
      2  OFF                Suppress interface panels
Note: Panels will be displayed or suppressed for all IMS's in the domain.

Command ==>
F1=Help      F2=End      F3=Return      F4=IMS Menu      F6=Roll
```

Figure 58. Set Interface Panels Display Panel

IMS Automation panels can be automatically invoked, when appropriate, via the SHUTSYS and SETSTATE commands. (The decision whether to invoke the panels is made by evaluating the SHUTSYS and SETSTATE command parameters.) When the command is for an IMS system with the appropriate options, the panels are invoked.

The ability to call the IMS Automation panels can be suppressed or enabled by using this panel to set the option on or off. This option can be set for all IMS subsystems within a domain (system-wide default) or can be overridden for a specific user in the domain.

Chapter 8. Messages

Messages generated by the IMS Automation are built from the DFS, and DXR messages issued by IMS/VS, in addition to the AVM, IOS, and IEF messages issued by the MVS Availability Manager, the Input/Output Supervisor, and the MVS Job Scheduler respectively.

IMS Automation supports the NetView Help Message command (HM). By entering HM plus the message ID on a NetView or IMS Automation command line, you can access the message documentation online.

Message Format

The message format is **EVIⁿⁿⁿmsgtext**, where:

nnn is the message number
a is the letter code for the type of message
msgtext is the actual text of the message.

The messages include the following types with corresponding formats:

Immediate Action: EVIⁿⁿⁿ**A** *msgtext*

Immediate system operator action is required; a system operator **must do** something **now**.

Immediate Decision: EVIⁿⁿⁿ**D** *msgtext*

A system operator must make a **decision now** by selecting a reply from the enumerated options and responding to the system immediately. The associated task is suspended until the operator communicates the decision to the system.

Error: EVIⁿⁿⁿ**E** *msgtext*

A program error has occurred.

Information: EVIⁿⁿⁿ**I** *msgtext*

This message is supplied for advisory purposes. Although the message may provoke system operator action, it requires none.

Warning: EVIⁿⁿⁿ**W** *msgtext*

A problem has occurred that requires attention by a system operator.

Important note for system programmers

The IMS messages use message classes 0, 40, 43, 44, 46, 47 and 60. This means that the notify operator entries in the control file need to have these message classes defined in the CLASS= parameter.

In the next section, messages are listed alphanumerically with the following information, as needed:

- Message class
- Message explanation
- List of variables
- Description of the system action
- Operator response
- System programmer response.

Message List

EVI000I *date time module* **ENTRY/EXIT** *parms/RC=retcode*.

Explanation: When the trace option is activated, all IMS Automation CLISTS will issue this message on entry and exit.

Operator Response: None.

EVI001I **CNMSCAN failed. RC =** *retcode*

Explanation: The IMS Automation security module called the HLL service routine CNMSCAN. CNMSCAN returned a non-zero return code *retcode*. The message will be listed in the Automation log.

System Action: EVISX001 returns with a return code of 12.

Operator Response: Notify your system programmer.

System Programmer Response: Determine the cause of the error from the value of *retcode*.

Problem Determination: Return codes from HLL service routines are documented in *NetView Customization: Using PL/I and C*. Contact your IBM Support Center (ISC).

EVI002W **"NO_STORAGE" returned from CNMSCOP**

Explanation: The IMS Automation security module called the HLL service routine COMSEC. COMSEC returned the **NO_STORAGE** return code.

System Action: EVISX001 returns with a return code of 12.

System Programmer Response: Research the NetView storage problem. Verify the size of NetView, and review the NetView storage estimations. If you do not learn the source of the NetView storage problem, contact your IBM Support Center (ISC).

EVI003I **Security check - OPID =** *operid*, **KEYWORD=** *keyword*

Explanation: Operator *operid* attempted to perform an IMS Automation function for which the operator is not authorized.

Operator Response: If you believe you should have authorization for this IMS function, contact your system programmer.

EVI004I **Security check - OPID=** *operid*, **KEYVALUE=** *keyvalue*

Explanation: Operator *operid* attempted to perform an IMS Automation function for which the operator is not authorized.

Operator Response: If you believe you should have authorization for this IMS function, contact your system programmer.

EVI005I "BAD_KEYWORD" returned from CNMSCOP - Logic error.

Explanation: The IMS Automation security module called the HLL service routine CNMSCOP. CNMSCOP returned the **CNM_BAD_KEYWORD** return code.

System Programmer Response: Internal error. Contact your IBM Support Center (ISC).

EVI006I "COMMAND_NA" returned from CNMSCOP - Logic error.

Explanation: The IMS Automation security module called the HLL service routine CNMSCOP. CNMSCOP returned the **CNM_COMMAND_NA** return code.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI007E Unexpected return code from CNMSCOP - RC= *retcode*.

Explanation: The IMS Automation security module called the HLL service routine CNMSCOP. CNMSCOP returned the return code *retcode*, this was not expected.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI015I DSIMQS failed in RS - RC = *retcode*, DOMAIN = *domainid*.

Explanation: DSIMQS is NetView's message queueing service. When DSIMQS attempted to send a message through the single-point-of-control structure, it failed because of *retcode*. Most likely, the user to whom DSIMQS tried to deliver the message has either logged off or was forced off. The DSIMQS return codes are in your NetView customization (Assembler) documentation.

System Programmer Response: Determine if the user was logged off or forced off after issuing an IMS remote request. Contact your IBM Support Center (ISC) for further assistance.

EVI020I Wrong number of parameters.

Explanation: This is an internal message. IMS Automation received more parameters for a transaction than it expected.

Operator Response: Internal message; contact your IBM Support Center (ISC).

EVI021I Invalid parameter(s) *parm*.

Explanation: This is an internal message. A post request was issued, but the post or event is not specified.

Operator Response: Contact your IBM Support Center (ISC).

EVI022I Bad return code *retcode* from RS.

Explanation: IMS Automation issued an internal command and received a non-zero return code. This may indicate an internal error.

Operator Response: Contact your IBM Support Center (ISC).

EVI023W POST request issued for *subsystem* but no Triggers are defined.

Explanation: The post request failed because there were no trigger entries defined in the SA OS/390 control file.

System Action: Processing of the POST request is terminated.

System Programmer Response: Define the need trigger entries

EVI024W Post request issued for *subsystem* but *event* is not posted.

Explanation: The required for status record was not found for the *event*. See message EVI053I for additional information.

System Action: Processing of the POST request is terminated.

EVI025I Invalid syntax in CFG Trigger entry for *subsystem*

Explanation:

System Action: Processing of the POST request is terminated.

System Programmer Response: Correct the trigger entry in the control file.

EVI026I Issued for IMS *subsystem* EVENT *event*

Explanation: The required command to start or stop the subsystem was issued.

Operator Response: None.

EVI050I EVISTS command failed, RC = *retcode* < EHK030I *taskname* is inactive. >

Explanation: Error was detected during the syntactical and validity checking of the EVISTS command by EVISCSTS. If the EHK030I text appears, the SA OS/390 status file is inactive. The reason code specifies the error detected.

The reason code can have one of the following values:

Code:	Means...
228	Invalid parameters
229	Limit value of zero not allowed
230	Limit value not numeric
231	REPL Request but keyword specified
232	invalid range, from > to
233	ID, from or to not numeric
234	Date value without the slashes
235	Keywords from and to invalid
236	From/To and id mutually exclusive
237	From/To and id mutually exclusive
238	To keyword but no from keyword
239	3rd value not belong (ID,FROM,TO)
240	2nd value not belong (ID,FROM,TO)
241	Inconsistent record type
242	Value length error
243	Missing begin bracket
244	Missing end bracket
245	Missing values in multi-value kw
246	Missing values in multi-value kw
247	Max number of occurrences exceeded
248	Less than 3 PDB entries
249	Conflict between the values
250	ID keyword not specified
251	Invalid request
252	Invalid record type
253	Conflict between explicit RECTYPE
254	Bad request

Operator Response: If the reason code is 254, contact your IBM Support Center (ISC). For all others, determine the cause of the error from the reason code. Correct the error, then retry the EVISTS command.

EVI051I No record found within the above range.

Explanation: There is no record with matching key qualifiers existed within the range specified by the FROM and TO keywords. It includes both the physical and logical no-record-found cases. For the values of the range, refer to EVI055I and EVI052I preceding this message. The related command is EVISTS.

Operator Response: None.

EVI052I Thru ID=*to-id* RECTYPE= *type*.

Explanation: This is the second message in a group of messages which display the values of all the parameters (or the specific parameters) of the specified resource id range. The *to-id* is the resource identifier which specifies the end of the range. The related command is EVISTS.

Operator Response: None.

EVI053I *request failed for ID=id. details*

Explanation: The request for the record has failed. The *request* can be DISP (display), FLDS (display fields), REPL (replace) or DEL (delete). The *id* is the resource identifier which forms part of the key of record failed to be processed. The related command is EVISTS. The *details* provides further information about the error encountered. It can take the form of:

NO RECORD	The record requested does not exist.
VSAM RC=<i>xyyy</i>	The VSAM RPL error codes (RPLERRCD)
ERRCODE=<i>zz</i>	The error detected by the logic of EVESMSTS, <i>zz</i> can have one of following values:
	01 VSAM get error
	02 VSAM get update error
	03 VSAM put new error
	04 VSAM put update error
	05 VSAM erase error
	07 ID length error
	08 Second VSAM action not done, but request is not REPL or DEL
	09 Invalid request other than DISP,FLDS,REPL,DEL on initial entry
	0A Invalid request other than DISP,FLDS,REPL,DEL on redrive entry
	0B Incorrect RECTYPE specified
	0C Invalid operator on EXTEVENT, neither SET nor RESET
	0D Record is full, and no slot is empty
	0E VSAM get generic error

System Programmer Response: For 0D, too many events were specified to the status file, so correct the status file. For all others, contact your IBM Support Center (ISC).

Problem Determination: Error codes from VSAM are documented in *MVS/XA VSAM Administration: Macro Instruction Reference*.

EVI054I *request successful for ID=id.*

Explanation: The request for the record has been completed successfully. The *request* can be REPL (replace) or DEL (delete). The *id* is the resource identifier which forms part of the key of the record just processed. The related command is EVISTS.

Operator Response: None.

EVI055I *request requested for ID=id.*

Explanation: This is the header for a group of messages which display the values of all the parameters (or the specific parameters) of the specified resource id. The *request* can be DISP (display) or FLDS (display fields). The *id* is the resource identifier. The related command is EVISTS.

Operator Response: None.

EVI056I **ID = id**

Explanation: Part of a multi-line message group when the range is specified with the FROM and TO keywords. It indicates the resource identifier to which the information of the following EVI057I message belongs. The *id* is the resource identifier. The related command is EVIESTS.

Operator Response: None.

EVI057I *keyword=values*

Explanation: Part of a multi-line message group starting with EVI055I. It shows the keyword with the corresponding values. The related command is EVISTS.

EVI058I *msgtext*

Explanation: Part of a multi-line message group starting with EVI055I. It contains data from the status file. The related command is EVISTS.

EVI059I **END**

Explanation: Identifies the end of a multi-line message group. The related command is EVISTS.

Operator Response: None.

EVI120I **Command accepted for subsystem, APPLID = applid.**

Explanation: An EVISNCCI or an EVISNMOD command has been validated and is accepted.

Operator Response: None.

EVI121E **Error on DS/xxx request in progname, RC = retcode**

Explanation: IMS Automation found an error on a DS/xxx macro request issued in the program identified by *progname*. *retcode* is the contents of register 15.

Possible return codes include:

Code:	Means...
04	Unrecognized keyword
08	Syntax error
12	Operand error
16	Duplicate keyword
20	Conflicting keyword
24	Required keyword(s) omitted
28	Incorrect data length

Operator Response: None.

System Programmer Response: Analyze the NetView log and determine if there is a logic error. If the problem is an IMS Automation logic error, contact your IBM Support Center (ISC).

Problem Determination: Refer to *Customization: Using Assembler*, for return codes from the DS/xxx macro requests.

EVI122E *taskname* task not active.

Explanation: A DSIMQS macro request failed because the addressed task identified by *taskid* was not active. This error could occur for the EVINTASK OPT and for one of the request or response server (auto)tasks specified in the EVINTASK initialization member.

Operator Response: If the EVINTASK task is not active, start the task by issuing the "START TASK =EVINTASK" command. If one of the request or response server tasks is not active, start the autotask by issuing the "AUTOTASK OPID=*taskid*" command.

System Action: When the error is met, a return code of 8 is passed to the issue of the EVISNCCI command.

System Programmer Response: Determine why *taskid* was not active.

EVI123E Input error at displacement *disp*, code = *retcode*.

Explanation: There is a format error in an EVISNCCI, EVISNMOD, or EVISUSMF command. The error begins at *disp* in the command string, and *retcode* can have one of the following meanings:

Code: Means...

04 Unrecognized keyword
08 Syntax error

Either the command string ended with a comma, or data was found after a blank in the command string, or no ending data delimiter was found.

The operand specification was incorrect, that is, an incorrect TYPE was specified on an EVISNCCI command.

12 Operand error
16 Duplicate keyword
20 Conflicting keyword.

Mutually exclusive keywords have been specified, such as TYPE= and OPID=.

24 Required keyword(s) omitted.
28 Incorrect data length.

The data length on a ACK response was not zero, or the data length on a NACK response was larger than 100 bytes.

Operator Response: Refer to the list of return codes for an explanation.

Programmer Response: Correct the failing command statement.

EVI124E Segment error, CODE = *ccc*.

Explanation: While processing a segmented EVISNCCI command, IMS Automation found an error of the following type:

04 Segment sequence error.

A middle or last segment has been offered while no first segment with identical ID was available, or a first segment has been offered while another first segment with the same ID already exists.

08 Too much data.

In a series of segments with identical IDs, the total amount of data exceeds 32656 bytes.

12 Segment-chain corrupted.

Storage used for saving segment data has been overwritten.

EVI125E No storage available on *DSIxxx* request in *progrname*.

Explanation: An error has been met on a *DSIxxx* request in the specified program, indicating that no NetView storage is available.

Operator Response: None.

System Programmer Response: Investigate NetView storage use. If you cannot locate the source of the storage problem, contact your IBM Support Center (ISC).

EVI127E Error on *command* call in **EVISNCCI**, **RC=** *retcode*.

Explanation: An error has been encountered on the specified command processor.

Operator Response: None.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI128I Positive acknowledgement.

Explanation: A positive response (ACK) has been received on an EVISNCCI converse request.

Operator Response: None.

EVI129I *msgtext*

Explanation: A negative response (NACK) has been received on an EVISNCCI converse request or an error has been detected during the processing of the request. In the latter case, *msgtext* contains the EVI1nnE message text explaining the error.

Operator Response: Browse the NetView log to determine the cause of the error.

EVI130I EVINTASK ready.

Explanation: EVINTASK OPT initialization has completed successfully.

Operator Response: None.

EVI131I EVINTASK OPT terminated.

Explanation: The named task has terminated.

The named task (which is the PPI interface that handles communication between NetView and the IMS BMP subsystem) has terminated.

System Action: None.

Operator Response: None, if it is required that this interface be down. If this interface is required and if other error messages have been issued along with this message, refer the problem to your system programmer.

System Programmer Response: Refer to the manual *AOC/MVS IMS Automation Programmer's Reference and Installation Guide*. Check that the customization as detailed in the manual relating to the program-to-program interface has been performed correctly.

EVI132I Initialization member *memname* not found.

Explanation: The EVINTASK initialization member *memname* could not be found in one of the DSIPARM data sets.

Operator Response: None.

System Programmer Response: Ensure that the initialization member specified by MEM= keyword on the TASK statement for EVINTASK is contained in one of the DSIPARM data sets. Restart the task by issuing the "START TASK = EVINTASK" command.

EVI133I Error in *memname* at line *linenum*, CODE = *retcode*.

Explanation: An error of type *retcode* is on line *linenum* of the EVINTASK initialization member *memname*.

- 01** Unrecognized keyword
- 02** Duplicate specification
- 03** Operand specification error
- 04** Too many server keywords
- 05** No valid servers specified

Operator Response: None.

System Programmer Response: Correct the failing statement in the EVINTASK initialization member *memname* and restart the task with the "START TASK = EVINTASK" command.

EVI134I No storage available on *DSIxxx* request in *programe*.

Explanation: An error has been met on a *DSIxxx* request in the specified program, indicating that no NetView storage is available.

Operator Response: None.

System Programmer Response: Investigate NetView storage use. If you cannot locate the source of the storage problem, contact your IBM Support Center (ISC).

EVI135I Error on PPI, request in *command*, RC = *retcode*.

Explanation: An error has been encountered on program-to-program interface request in *command*.

Operator Response: None.

System Programmer Response: Analyze the NetView log and determine the cause of the error. If the error is caused by IMS Automation logic error, contact your IBM Support Center (ISC).

Problem Determination: Program-to-program interface request numbers *reqid* and program-to-program interface request return codes *retcode* are documented in *Application Programming Guide: Program-to-Program Interface*.

EVI136I Error on PPI request *reqid*, RC = *retcode*.

Explanation: An error has been encountered on program-to-program interface request *reqid*.

Operator Response: None.

System Programmer Response: Analyze the NetView log and determine the cause of the error. If the error is caused by IMS Automation logic error, contact your IBM Support Center (ISC).

Problem Determination: Program-to-program interface request numbers *reqid* and program-to-program interface request return codes *retcode* are documented in *Application Programming Guide: Program-to-Program Interface*.

EVI137I NetView subsystem not available.

Explanation: An error has been encountered to a program-to-program interface request indicating that no NetView subsystem was available to act as a program-to-program interface server.

Operator Response: After the NetView subsystem is restarted, start the EVINTASK PPT by issuing the "START TASK=EVINTASK" command.

System Programmer Response: Determine why no NetView subsystem was active.

EVI138I Internal error *r* occurred - IOS = *ss*

Explanation: IMS Automation encountered an error on an IMS request from the IMS Automation BMP.

Operator Response: None.

System Programmer Response: Analyze the return code and determine the cause of the error. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC). Refer to the IMS customization manual for an explanation of the IOS return codes.

EVI139I *subsystem* has not received PPI initialization information from IMS AOIEXIT.

Explanation: The IMS Automation program operator BMP has received a message from the AOIEXIT that does not contain the PPI initialization information.

System Programmer Response: Ensure that the IMS Automation AOIEXIT is the only program query manager to the BMP queue name. Also ensure that the correct queue has been specified.

EVI140I Incorrect PPI buffer received.

Explanation: The program-to-program interface buffer sent to the EVINTASK OPT was not correct. Possible causes include:

- Program-to-program interface buffer header was incomplete.
- Request type was incorrect (not C, S, R, A, or N).
- Length specification was inconsistent.

Operator Response: None.

System Programmer Response: Correct the routine that created the incorrect program-to-program interface buffer. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC).

EVI141I Incorrect MQS buffer received in *module*.

Explanation: The MQS message buffer, containing a program-to-program interface request that was sent to the EVINTASK OPT, was not correct. Possible causes include:

- Program-to-program interface buffer header was incomplete.
- Request type was incorrect (not C, S, R, A, or N).
- Length specification was inconsistent.

Operator Response: This problem is caused by IMS Automation logic error. Contact your IBM Support Center (ISC).

EVI142I Function *function* not found in *memname*.

Explanation: A program-to-program interface buffer sent to the EVINTASK OPT contained a function and type specification for which no entry in the EVINTASK initialization member *memname* was found.

Operator Response: None.

Programmer Response: Correct the routine that created the incorrect program-to-program interface buffer if the function name *function* was incorrect.

System Programmer Response: Add a request or response server for *function* in the EVINTASK initialization member *memname* if the function name was correct.

EVI143I **Error on load of CNMNETV module, ABEND = *yyy*, RC = *retcode*.**

Explanation: While attempting to load the NetView program-to-program interface module, an abend occurred.

System Programmer Response: Ensure the data set that contains the module CNMNETV is concatenated to the STEPLIB DD on the LINKLST.

EVI144I **EVISROUT unsuccessful RC= *retcode* (*fdbk*) for jobname *jobname*.**

Explanation: The message routing routine was unsuccessful in routing a message to the proper automated operator for processing.

Operator Response: None.

Programmer Response: None

System Programmer Response: If RC=104, the message is trapped by the automation table, but the subsystem is not defined as a valid IMS subsystem. For all other return codes, contact your IBM Support Center (ISC).

EVI145I **Error on load of processing table, ABEND = *axxx*, RC = *retcode*.**

Explanation: While attempting to load the IMS Automation program-to-program interface processing table (EVIPINM), and abend occurred.

System Programmer Response: Ensure that the data set that contains the IMS Automation processing table (module EVIPINM) is concatenated to the STEBLIB DD on the LINKLST.

EVI146I **IMS Automation BMP receiver ID *rcvrid* defined and initialized for *jobname*.**

Explanation: This message occurs during BMP startup. It indicates that IMS BMP has successfully defined and initialized itself as a program-to-program interface receiver named *rcvrid* for IMS control region *jobname*.

Operator Response: None.

EVI147I **IMS Automation BMP receiver ID *rcvrid* deactivated.**

Explanation: This message occurs during BMP shutdown. It indicates that the IMS BMP *rcvrid* has disconnected itself from the program-to-program interface.

Operator Response: None.

EVI148I **Segment-chain *segment-chain identifier* cancelled.**

Explanation: An EVISNCCI cancel request successfully freed all saved segments for the *segment-chain identifier*.

Operator Response: None.

EVI149I **Segment-chain *segment-chain identifier* not found.**

Explanation: An EVISNCCI cancel request (TYPE=C) was issued. The specified *segment-chain identifier* could not be found.

Operator Response: None.

EVI150I **Command in progress.**

Explanation: The IMS Automation automated operator has issued the command to IMS.

Operator Response: None.

EVI151E Invalid command requested.

Explanation: The IMS Automation automated operator program has issued a command to IMS and that command has been detected as invalid.

Operator Response: Check the syntax of the command entered.

EVI152E Restricted command for automated operator program.

Explanation: The IMS Automation automated operator program has issued a command to IMS which is a restricted command for the automated operator program to issue. This command must be issued through the outstanding reply.

EVI153E Command violates security.

Explanation: The IMS Automation automated operator program issued a command to IMS with a DL/I call for which it does not have the security authorization to do so.

The DL/I status code of CD is returned.

System Action: The NetView PPI connection is not established between the IMS BMP and NetView.

Operator Response: Notify your system programmer

System Programmer Response: Ensure that the IMS automated operator program transaction has the appropriate security authorization.

Refer to *IMS/ESA Messages and Codes*, Appendix D, for DL/I Status Codes.

EVI154I BMP waiting for DFS551 initialization message

Explanation: The IMS Automation BMP will not initialize until it receives a DFS551I message containing the IMS Automation BMP region name. The DFS551I message is routed to the BMP from the IMS Automation automated operator exit.

Operator Response: None.

System Programmer Response: Message EVI155I BMP RECEIVED DFS551I should quickly follow message EVI154I. If EVI155I is not received, modify your EVISPINM table so that message DFS551I is specified with AUTO=Y.

EVI155I BMP received DFS551 initialization message

Explanation: The IMS Automation BMP received a good DFS551I message from the IMS Automation automated operator exit.

Operator Response: None.

System Programmer Response: IMS Automation BMP initialization continues.

EVI161E EVISPPII: subtask abend S*/U*****

Explanation: An abend has been detected by the IMS Automation program-to-program interface BMP program.

Operator Response: None.

System Programmer Response: Analyze the system/user abend and determine the cause of the error. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC).

EVI162E Shared storage address for PPI is invalid

Explanation: The IMS Automation automated operator exit appends the address of a shared storage area to each message sent to the IMS Automation BMP program. The IMS Automation BMP program detected that the storage pointed to by this address is invalid. This is normally caused by queued transactions being held across an IMS restart or takeover.

Operator Response: None.

System Programmer Response: Copy the IMS Automation BMP procedure to a new name. Start the new name using the MVS start command. This new procedure will clear all the queued messages. Shut down and restart the IMS Automation BMP using the PPI start/stop option of IMS Automation operator panels. If the problem persists, contact your IBM Support Center (ISC).

EVI200E Automated operator exit initialized for IMS level *level*.

Explanation: The automated operator exit initialized for the current running level of IMS is *level*.

Operator Response: None.

EVI201E Load successful for initialization member = *tablename*.

Explanation: The processing table for the BMP program-to-program interface program has loaded successfully

EVI202E Automation check error for subsystem name *subsystem*, RC= *retcode*. Invalid parameters or timeout error.

Explanation: This message gives the return code from a EHKESCHK.

Operator Response: If the return code indicates a timeout occurred, then retry the action. If the error indicates invalid parameters, then contact your IBM Support Center (ISC).

EVI203E Termination of PPI requested by terminal *termid*.

Explanation: The IMS Automation automated operator program has been terminated by a request from terminal *termid*.

EVI204E Start of PPI requested by terminal *termid*.

Explanation: Startup of the IMS Automation automated operator program has been requested by terminal *termid*.

EVI205E Load unsuccessful for initialization member = *tablename*. RC= *retcode*.

Explanation: IMS Automation attempted unsuccessfully to load the processing table for the BMP program-to-program interface program.

Operator Response: None.

System Programmer Response: Verify the processing table resides in a library that is concatenated with the STEPLIB DD statement. Also, verify that the IMSID used to generate the processing table is correct. If the IMSID has changed, you will need to build a new processing table. If the IMSID is correct, analyze the LOAD command return code to determine the cause of the error. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC).

EVI206E GETMAIN failure for *storage_type* storage

Explanation: The automated operator exit was unable to get required storage for processing.

Operator Response: None

System Programmer Response: Investigate cause of storage shortage. IMS should abend under most storage failure conditions. If IMS continues to run, contact your IBM Support Center (ISC) for assistance in trapping the out-of-storage condition.

System Action: The automated operator exit will bypass processing for the message or command. If IMS recovers from the storage shortage, the automated operator exit will also recover and continue normally.

EVI207E Locate failure for work entry storage

Explanation: The automated operator exit was unable to find an existing storage element for in-progress message.

Operator Response: None

System Programmer Response: This message can occur if the EVISPINM table was not loaded during IMS initialization but was subsequently reloaded with the PPI REFRESH capability.

If this is not the cause, contact your IBM Support Center (ISC) with a storage dump. A storage overlay or an IMS Automation logic error has occurred.

System Action: The automated operator exit will bypass processing for the message or command. The next message should be processed normally.

EVI208I UEHUBUFF error, *error_type* , *msgid/cmd*

Explanation: The automated operator exit was unable to get storage to send a message to the BMP PPI program, or the storage retrieved was too small to contain the message plus any extensions.

Operator Response: None.

System Programmer Response: This message can occur if IMS returns an out-of-storage condition, which should be researched using a dump of the IMS control region. The other possible cause is the automated operator exit obtained too little storage to contain the message. If this is the case, contact your IBM Support Center (ISC) with the text of the EVI208I message.

System Action: The automated operator exit will bypass processing for the message or command documented in the EVI208I message text. The next message or command should be processed normally.

EVI209I Start PPI failed, unable to GETMAIN storage

Explanation: The automated operator exit was unable to get required storage for processing.

Operator Response: If IMS continues processing, issue the "S PPI*msid*" command to start the BMP PPI job.

System Programmer Response: Investigate cause of storage shortage. IMS should abend under most storage failure conditions. If IMS continues to run, contact your IBM Support Center (ISC) for assistance in trapping the out-of-storage condition.

System Action: The start command for the BMP PPI will not be issued. If IMS recovers from storage shortage, the automated operator exit will also recover and continue normally.

EVI210I **Exit processing conflict, MSG=***msgid/cmd***, RC=** *retcode***, SEGMENT=**
segment_type

Explanation: The automated operator exit detected a conflict between the IMS Automation provided exit and the user defined automated operator exit. The message id defined in the EVI210I message text can be found in the processing table for the PPI interface EVISPINM or a customized EVI~~l~~msid. The actions IMS Automation should take are defined in this table. The return code in EVI210I is the return code from the user defined automated operator exit. *segment_type* will be "F" for first, "M" for a middle segment, and "L" for the last segment of a message group.

Operator Response: None.

System Programmer Response: Investigate and resolve the message conflict. Resolutions may require changing the processing table for the PPI interface or changing the user defined automated operator exit. Possible conflicts are:

1. IMS Automation has AUTO=Y coded, and the user defined exit has returned one of the following conditions:
 - a. RC=16 indicating an attempt to get storage.
 - b. RC=0 or RC=8 indicating an attempt to route the message to an alternate destination with Reg1 pointing to data.
 - c. RC=20 indicating an attempt to cancel any already routed messages.
2. IMS Automation has SUP=Y coded and the user defined exit has returned one of the following conditions:
 - a. An RC=0 or RC=8 indicating an attempt to route the message to an alternate destination with Reg1 pointing to UEHCPYBF.
 - b. RC=8 indicating an attempt to prematurely end the message segments and route the message at the same time, and Reg1 is ≠ 0 or RC=8, and Reg0 is pointing to a different destination name than the last destination name.
3. IMS Automation has WTO=Y coded and the user defined exit has returned the following condition:
 - a. RC=8 indicating an attempt to prematurely end the message segments and route the message at the same time, and Reg1 is ≠ 0 or RC=8 and Reg0 is pointing to a different destination name than the last destination name.
4. The MSG= field of the EVI210I message says /LOG indicating IMS Automation is attempting to route a /LOG EVI45n command to the BMP PPI. The /LOG EVI45n command is an internal IMS Automation command and will not be found in the PPI processing table EVISPINM or EVI~~l~~msid. The action taken for the /LOG EVI45n command is the same as the action taken for coding AUTO=Y in the PPI processing table. In this situation, the user defined exit returned one of the following:
 - a. RC=16 indicating an attempt to get storage.
 - b. RC=0 or RC=8 indicating an attempt to route the message to an alternate destination with Reg1 pointing to data.
 - c. RC=20 indicating an attempt to cancel any already routed messages.

System Action: The definitions coded for IMS Automation AUTO=Y, SUP=Y, or WTO=Y will take precedence and the user defined automated operator exit will be ignored.

If a storage request, RC=16, causes a conflict, IMS Automation will call the user exit a second time with a UEHUBUFF address of zero and a UEHB1NSTG no storage flag, turned on.

EVI211E Level mismatch for initialization member = *name*, expected level = *level*

Explanation: The automated operator exit detected a mismatch between the IMS Automation automated operator exit and the processing table for the PPI interface EVISPINM or EVILIMSID. The automated operator exit cannot initialize.

The name is the PPI table name on which the mismatch occurs. The expected level is the level number the automated operator exit expected.

Operator Response: None

System Programmer Response: Investigate and resolve the mismatch. To resolve:

1. Browse the load module for the PPI interface table EVISPINM
 - a. In the load module, the first 8 bytes should be an EVISPINM eyecatcher.
 - b. Following the EVISPINM eyecatcher is an EVILVL with a 2 character hex number indicating the table level.
2. Compare the table level to the level issued on EVI211I. Each fix level will increment the level indicator so they should match.
3. If the table level is higher than the level issued on EVI211I, an APAR or a PTF has been applied and the table was reassembled without the corresponding APAR or PTF level of the automated operator exit having been included in the IMS nucleus gen.
4. If the automated operator exit is higher, the table has not been reassembled at the appropriate level of APAR or PTF.

System Action: The automated operator exit will not initialize until the mismatch is resolved.

EVI212I Automated operator exit *name* was found

Explanation: The IMS Automation automated operator exit found the user defined automated operator exit name in message EVI212I.

Operator Response: None

System Programmer Response: None

System Action: The exit name in EVI212I will be called in each message the automated operator exit processes.

EVI213I Automated operator exit *name* was not found

Explanation: The IMS Automation automated operator exit could not find the user defined automated operator exit named in message EVI213I.

Operator Response: None

System Programmer Response: None, unless you were expecting an exit to be loaded or processed:

1. If expecting an exit to load, check to ensure the exit is linked to a library in the IMS control region steplib chain, or ensure the exit was correctly linked to the IMS nucleus gen.
2. If a user defined exit was linked to the IMS Automation nucleus, it must be named or have an entry point of EVIAOUE0.

System Action: IMS Automation will bypass calling a user defined exit.

EVI214E Subsystem name *subsys* is longer than 8 characters and ignored.

Explanation: SA OS/390-IMS initialization found the subsystem *subsys* in the ACF file whose name is longer than 8 characters. Because the name is used in NetView KEYCLASS definition its length is limited to 8 characters.

Operator Response: None.

System Programmer Response: Change the subsystem name in the ACF file and reload the ACF file.

System Action: The subsystem *subsys* will not be automated by SA OS/390-IMS.

EVI302I Automation is off for subsystem *subsystem*, MSGID=*msgid*. No action taken.

Explanation: A message was received (*msgid*) that would have initiated an automation process, but automation is off for this subsystem.

User Response: If a shutdown or startup is required for this subsystem, use the operator interface.

Note: Automation is controlled with the automation flags defined in the SA OS/390 control file.

EVI303I Automation is off for subsystem *subsystem*, MODULE=*module*. No action taken.

Explanation: An automated action was invoked, but automation is off.

User Response: If a shutdown or startup is required for this subsystem, use the operator interface.

Note: Automation is controlled with the automation flags defined in the SA OS/390 control file.

EVI304I TIMED STARTUP IGNORED. *subsystem* ALREADY ACTIVE.

Explanation: The start time for the *subsystem* had arrived, but the subsystem was already active.

System Action: The startup request is ignored.

Operator Response: None.

EVI305I TIMED SHUTDOWN IGNORED. *subsystem* ALREADY INACTIVE.

Explanation: The stop time for the *subsystem* had arrived, but the subsystem had already been stopped.

System Action: The shutdown request is ignored.

Operator Response: None.

EVI306I TIMED STARTUP IGNORED. *subsystem* STATUS IS STARTED.

Explanation: The start time for the *subsystem* had arrived, but the subsystem is already starting.

System Action: The startup request is ignored.

Operator Response: None

EVI307I *subsystem shutdown failed during NetView restart. RC=retcode.*

Explanation: IMS resync is invoked whenever NetView restarts and finds an IMS subsystem up. At the point, service periods are checked to see if that subsystem is supposed to be up or down. When it is supposed to be down, IMSTIMD is invoked. IMSTIMD has sent a return code indicating that it could not shut down the subsystem. IMSTIMD may not be able to shut down the subsystem for a variety of reasons, most commonly that all trigger conditions were not met.

Operator Response: None.

EVI308I **Timed shutdown of *subsystem* by *operid* in domain *domainid*.**

Explanation: This message is issued by the module that invokes the shutdown. It tells you that the subsystem was shut down by a timer. The message will be issued on the NetView. where the shutdown occurs.

Operator Response: None required.

EVI309I **Event driven shutdown of *subsystem* by *operid* in domain *domainid*.**

Explanation: An event was posted causing a subsystem shutdown through the trigger posting facility. This message tells you when and why a given shutdown was triggered.

Operator Response: None required.

EVI310I **Operator shutdown of *subsystem* by *operid* in domain *domainid*.**

Explanation: When the operator shuts down the subsystem from the operator interface, this message occurs, identifying what operator in what domain invoked the shutdown.

Operator Response: None.

EVI311I **Timed startup of *subsystem* by *operid* in domain *domainid***

Explanation: This message is issued by the module that invokes the startup. It is informational to let you know that the subsystem was started by a timer.

EVI312I **Event driven startup of *subsystem* by *operid* in domain *domainid*.**

Explanation: Some event was posted through the posting interface that drove the startup function.

Operator Response: None required.

EVI313I **Operator startup of *subsystem* by *operid* in domain *domainid*.**

Explanation: When the operator starts the subsystem from the operator interface, this message occurs, identifying what operator in what domain invoked the startup.

Operator Response: None.

EVI314I **Event driven shutdown ignored. *subsystem* already inactive when event *eventid* was set.**

Explanation: All the events required for a shutdown trigger were met, but when IMS Automation initiated shutdown, it found that the subsystem was already inactive. No further action was needed.

Operator Response: None required.

EVI315I Set event *eventid* for *subsystem* OK. Some events in trigger list not yet set.

Explanation: This message is issued when one but not all of a list of events are set. IMS Automation will not be able to act on the trigger until all of the list of events are set.

Operator Response: None required.

EVI316I Set event *eventid* for *subsystem* OK. Shutdown initiated.

Explanation: This message is issued when an event is posted that completes a trigger's list of events, initiating shutdown.

Operator Response: None required.

EVI317I Set event *eventid* for *subsystem* OK. Startup initiated.

Explanation: This message is issued when an event is posted that completes a startup trigger's list of events, initiating startup.

Operator Response: None required.

EVI318I Unset of event *eventid* for *subsystem* OK.

Explanation: This messages confirms that the operator has successfully unset an event *eventid* for the specified subsystem.

Operator Response: None required.

EVI319I Set event *eventid* for *subsystem* OK. Automation OFF - No action taken.

Explanation: This message is issued when, although events are properly set, automation is turned off, so no action can be taken.

Operator Response: None required.

EVI320I Event driven startup ignored. *subsystem* was already active when the event *eventid* was set.

Explanation: The startup trigger was set after the subsystem was already active.

Operator Response: None required.

EVI321I Event driven startup ignored. *subsystem* status was started when event *eventid* was set.

Explanation: The startup trigger was set after the subsystem was already started.

Operator Response: None required.

EVI322I Shutdown not required. Subsystem *subsystemis* not active.

Explanation: The subsystem is already inactive.

Operator Response: None required.

EVI323I Please enter 'YES' or 'NO.'

Explanation: A value other than "yes" or "no" was entered in a field where only "yes" or "no" is accepted.

Operator Response: Enter either yes or no.

EVI324I Abort option not valid with restart or broadcast options.

Explanation: Abort is used to terminate a shutdown in progress. The restart and broadcast options initiate a shutdown, so abort is not valid with them.

Operator Response: Specify valid sets of options.

EVI325I DBCTL is not supported with subsystem *subsystem*.

Explanation: The actual IMS nucleus used for this startup does not support DBCTL.

System Action: The request is denied.

Operator Response: Notify your systems programmer to determine if this control region is to support DBCTL.

System Programmer Response: If this control region is to support DBCTL, verify that the correct procedure has been started with the correct nucleus that supports DBCTL.

EVI326I No TCO definitions found.

Explanation: When attempting to issue the requested command(s) for the TCO option selected by the operator, the process was unable to find any entries in the control file for this request.

System Action: The request is denied.

Operator Response: Notify your system programmer that the function selected is not defined in the control file.

System Programmer Response: Verify that the control file contains the required entries for the function selected by the operator.

EVI327I Request was partially issued.

Explanation: When attempting to issue the commands defined in the control file, the command reply routine encountered invalid syntax on the call.

System Action: The request continues.

Operator Response: None.

EVI328I Invalid TCO parameters defined.

Explanation: When attempting to issue the commands defined in the control file, the command reply routine encountered invalid syntax on the call.

System Action: The request is denied.

System Programmer Response: Trace the requesting EXEC and determine the cause of the error. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC).

EVI329I No outstanding REPLYID was found.

Explanation: When attempting to issue the commands defined in the control file, the command reply routine determined that there was no outstanding reply ID.

System Action: The request is denied.

EVI330I *subsystem shuttype* **SHUTDOWN CANNOT PROCEED; PROGRAM** *termid*
termsts termspl **IS STILL ACTIVE**

Explanation: IMS shutdown cannot proceed because there are still active programs with outputs in progress.

Operator Response: Manually disconnect all (active, Q, and so on) programs with IMS to allow IMS shutdown.

EVI350I **TCO HAS NOT BEEN INITIALIZED, REQUEST REJECTED**

Explanation: A TCO function has been attempted and TCO is not supported by this IMS at this time.

System Action: The request function is not executed.

Operator Response: Ensure that the IMS that is associated with the request is active. Use option 1, inquiry, from the SA OS/390 IMS Automation panels to find out. If it is active, check with your system programmer to ensure that this IMS has been setup to include IMS TCO support.

System Programmer Response: Ensure that the IMS associated with the TCO request has been setup to include IMS TCO support. For example, IMS uses 2 logical terminals, as well as a DD statement in the IMS start up PROC to support TCO requests to start, stop, and load a TCO member.

EVI351I **MEMBER NAME IS REQUIRED FOR THIS SELECTION**

Explanation: A member name has not been entered.

System Action: No action, for example, member load takes place without the member name.

Operator Response: Enter a valid name or ? for a selection list.

EVI352I **MEMBER NAME CAN ONLY CONTAIN CHARACTERS A-Z, 0-9, AND @ # \$**

Explanation: Member name contains invalid characters.

Operator Response: Correct the name and continue.

EVI353I **SEGMENT SIZE MUST BE BETWEEN 1-99**

Explanation: If a segment size is specified, it must be a number greater than 0 and less than 100.

Operator Response: Correct the value and continue.

EVI354I **THERE ARE NO USER TCO MEMBERS DEFINED**

Explanation: A member list was requested but no TCO members have been specified in the automation control file.

Operator Response: Enter the name of the TCO member if you know it. If a member list is desired, see your system programmer to have the automation control file updated.

System Programmer Response: To supply a member list, code an entry-type pair as shown below:

```
subsystem TCOMEMBERS,
          NAME=(member name,'comment'),
          ...
```

EVI355I **TCO MEMBER LIST SELECTION CANCELED**

Explanation: A member list was selected and then cancelled by the operator.

EVI356I TCO STATUS FOR *subsystem* IS *status*.

Explanation: This informational message gives the current status of Time Controlled Operations (TCO) for this IMS control region. Status will be one of three values, either "available," "unavailable," or "terminated."

Operator Response: None required.

EVI400E EHKEAISM *msgnum* RC = *retcode*.

Explanation: An error occurred while IMS Automation was formatting a message.

System Programmer Response: Analyze the return code and determine the cause of the error. If the error is caused by an IMS Automation logic error, contact your IBM Support Center (ISC). The return code in the message is the return code from the message formatter (AOFMSG from SA OS/390).

EVI401I Subsystem name is required.

Explanation: A subsystem name must be entered in the **Subsystem Name** field.

System Action: The startup process is terminated.

Operator Response: Enter a subsystem name or a ? in the **Subsystem Name** field; press the ENTER key.

EVI402I Invalid subsystem name.

Explanation: IMS Automation does not find the entry in the subsystem name field in the control file.

Operator Response: Check the entry, and re-enter the subsystem name or enter a ? to view a list of valid subsystem names.

Note: If communications to a subsystem's domain are not established, then the subsystem name may appear unknown or invalid to IMS Automation

EVI403I Not authorized to access subsystem *subsystem*.

Explanation: An attempt was made to perform an automation function on a subsystem, but the operator ID is not authorized to work with that subsystem.

User Response: Ask the programmer to provide authorization. This is described in the IMS Automation Programmer's Reference and Installation Guide.

EVI404I Not authorized for function *function* on subsystem *subsystem*.

Explanation: An attempt was made to perform an automation function on a subsystem, but the operator ID is not authorized to perform that function.

User Response: Ask the programmer to provide authorization. This is described in the *IMS Automation Programmer's Reference and Installation Guide*.

EVI405I Function key *key* is not active. Please try again.

Explanation: Either a PF, PA, or the ENTER key was pressed at a point when it is not active for this panel.

User Response: Enter a valid entry for this panel.

EVI406I Invalid selection character entered.

Explanation: A character entered is not valid input for the field.

Operator Response: Enter the correct character.

EVI407I First screen already displayed.

Explanation: You tried to scroll above the first display screen.

EVI408I Last screen already displayed.

Explanation: You tried to scroll beyond the last display screen.

EVI409I Invalid selection entered.

Explanation: The selection entered is not valid for this subsystem or panel.

Operator Response: Enter another selection. Press PF1 for help information, if needed.

EVI410I Enter a selection.

Explanation: You pressed enter without making a selection.

Operator Response: Select an option and press enter.

EVI411I At least one shutdown type selections must be non-blank.

Explanation: A shutdown type selection is required.

System Action: The shutdown process terminates.

Operator Response: Choose the appropriate shutdown type and press enter. If you want information about selecting shutdown types, press PF1 to view Help information.

EVI412I Choose only one of the shutdown type selections.

Explanation: More than one shutdown type is selected.

System Action: The shutdown process terminates.

Operator Response: Select a single shutdown type, and press the ENTER key.

EVI413I Invalid name for subsystem, group, or domain.

Explanation: IMS Automation does not find the name in the "Subsystem, group, or domain field" in the control file.

Operator Response: Check the entry, listing valid subsystem, group, or domain names if necessary; re-enter the correct name.

EVI414I Choose only one of the shutdown options.

Explanation: More than one shut down option has been selected.

Operator Response: Select a single shutdown option, then press Enter to proceed.

EVI415I Invalid fast path selection *fpid*.

Explanation: The entry is an invalid fastpath address.

Operator Response: Check the fastpath table in the Operator's Guide and re-enter.

EVI416I *option* can be selected only with shutdown type of FORCE.

Explanation: The DUMP or NODUMP shutdown option may be selected only with a shutdown type of FORCE.

System Action: The shutdown process is terminated.

Operator Response: Use the control file defined shutdown option default (make no selection), or select an option other than DUMP or NODUMP.

EVI417I *option is not valid with a shutdown type of FORCE.*

Explanation: Shutdown type FORCE has been selected with shutdown option DUMPQ, BACKUP, FREEZE or PURGE, making an invalid combination.

System Action: The shutdown process is terminated.

Operator Response: Use the control file defined shutdown option default (make no selection), or select DUMP or NODUMP; press the ENTER key.

EVI418I *option is not a valid selection for Verify.*

Explanation: Either YES (default) or NO must be entered in the **Verify Shutdown** field.

Operator Response: Enter YES or NO in the **Verify Shutdown** field; press the ENTER key.

EVI419I **Selection *option* is invalid. Type a number between LOWLIMIT and HIGHLIMIT.**

Explanation: The entry field accepts only input between the lower limit and the upper limit as shown in the message text.

Operator Response: Choose an option that is within the valid range.

EVI420I **The subsystem name is unknown. Try again.**

Explanation: The requested subsystem name is not defined in the control file as an IMS control region, so startup cannot proceed.

Operator Response: Verify the subsystem name. To retry, press PF3 to return to the Main Menu panel. Enter a valid subsystem name and press the ENTER key. If the error persists, notify your system programmer.

System Programmer Response: Browse the control file member to verify the subsystem name and definition.

EVI421I **Request ignored, 'IMS' is not up.**

Explanation: The requested action is invalid because IMS is not up.

Operator Response: Startup the IMS subsystem. After a successful startup, retry the request.

EVI422I **Abort was successfully performed.**

Explanation: The requested Abort Shutdown was completed successfully.

Operator Response: None required.

EVI423I **Error - Message size=msgsz. Message Type=msgtyp.**

Explanation: An invalid message type was encountered as a result of the issued command.

Operator Response: Retry the operation. If the error persists, notify your systems programmer.

EVI424I **Abort failed. Shutdown already in progress.**

Explanation: To succeed, Abort must be issued before IMS Automation has initiated the shutdown process. Because the shutdown process had begun, the requested abort failed.

Operator Response: Re-start the subsystem, if desired.

EVI425I Abort failed. No shutdown was scheduled.

Explanation: No shutdown for the specified IMS subsystem was scheduled prior to the abort shutdown request.

System Action: The abort shutdown request is terminated.

EVI426I Abort failed. Refer to log.

Explanation: An invalid command was issued to NetView, or a timeout condition has occurred.

System Action: The request is terminated.

Operator Response: Refer to the NetView log to determine the cause of the abort failure. If further help is required, notify your system programmer.

System Programmer Response: Browse the NetView log to determine the cause of the problem. Browse the control file member for the specified IMS subsystem name to verify the THRESHOLDS parameter definition.

EVI427I Abort failed. Unexpected return code = *retcode*

Explanation: The abort shutdown failed.

Operator Response: Refer to ? to determine the cause based on the return code.

System Action: The shutdown is proceeding.

EVI428I Processing terminated. Error during parent-child lookup.

Explanation: During a parent-child lookup, no control file entry was found for the specified IMS subsystem.

System Action: The shutdown process is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the control file member for the specified IMS subsystem name to verify the IMS subsystem definition.

EVI429I IMS automation shutdown process initiated for *subsystem*

Explanation: The automation shutdown process has been initiated for the specified IMS subsystem.

Operator Response: None required.

EVI430I Processing terminated. Automation check error.

Explanation: control file defined input parameters are incorrect, or a timeout condition has occurred.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Browse the control file member for the specified IMS subsystem name to verify the THRESHOLDS parameter definition.

EVI431I Processing terminated. Syntax error *option = value*.

Explanation: The specified IMS subsystem is not defined in the control file, or the input parameters selected are incompatible with the IMS subsystem definition in the control file.

System Action: The shutdown process is terminated.

Operator Response: Verify the input parameters selected; if appropriate, reenter and press the ENTER key. If further help is required, notify your system programmer.

System Programmer Response: Browse the control file member for the specified IMS subsystem name to verify the IMS subsystem definition.

EVI432I Processing terminated. Terminate automation flag OFF for *subsystem*

Explanation: The Terminate Automation Flag is turned off for the specified IMS subsystem, or for the entire IMS Automation environment.

System Action: The shutdown process is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the control file member for the specified IMS subsystem name to verify the definition of the TERMINATE entry.

EVI433I *shutdown* processing terminated. *subsystem* status is *status*.

Explanation: The specified IMS subsystem status must be UP to be shut down.

System Action: The shutdown process is terminated.

EVI434I IMS broadcast initiated for *subsystem*.

Explanation: The requested message was broadcast to subsystem *subsystem*.

Operator Response: None required.

EVI435I IMS broadcast failed for *subsystem*. Shutdown still scheduled.

Explanation: The requested broadcast failed.

Operator Response: Retry.

EVI436I IMS cold start aborted at user request.

Explanation: Cold start has been aborted, per your request.

Operator Response: None required.

EVI437I Start aborted: Input parms cannot be blank.

Explanation: Startup cannot proceed because the input parameters are blank.

Operator Response: Supply the required parameters, referencing help if needed, and retry the startup.

EVI438I Start aborted: Automation check RC=*retcode*.

Explanation: control file defined input parameters are incorrect, or a timeout condition has occurred.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Browse the control file member for the specified IMS subsystem name to verify the THRESHOLDS parameter definition.

EVI439I Start aborted: Global Automation flag is OFF.

Explanation: The global automation flag is turned off for the specified IMS subsystem or for the entire IMS Automation environment.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the control file member for the specified IMS subsystem name to verify the definition of the AUTOMATION entry.

EVI440I Subsystem not in IMS Automation control file.

Explanation: The **Subsystem Name** field does not contain a valid subsystem name or a ?.

System Action: The startup process is terminated.

Operator Response: In the **Subsystem Name** field, enter either a subsystem name or a ? for a selection list of IMS subsystems defined in the control file. Press the ENTER key.

EVI441I INITSTART exit was not invoked.

Explanation: The operator attempted to invoke a startup, but the required initstart was not invoked.

Operator Response: Correct the control file automation flag entry for INITSTART or RESTART for that subsystem, ensuring that the IMS-supplied exit is specified on the automation flag.

EVI442I IMS subsystem *subsystem* is already executing.

Explanation: A command to start this subsystem was issued from the operator interface through the startup function, but the subsystem is already active. The command was ignored.

Operator Response: None required.

EVI443I Please enter the message text.

Explanation: The ENTER key was pressed, but no message text was entered for the Broadcast function.

Operator Response: Enter message text to be broadcast.

EVI444I *subsystem* shutdown aborted, exit *exit_name* denied shutdown, rc = *retcode*

Explanation: When attempting to shutdown the subsystem through the operator interface, a user exit denied the shutdown to continue. The *exit_name* identifies the exit that aborted the shutdown and *retcode* is the return code from this exit.

Operator Response: Research why the exit aborted

EVI445I *subsystem* status is currently STARTED.

Explanation: When a startup was attempted from the operator panel, the MVS Display Active command did not find the subsystem as ACTIVE in the system. However, the current subsystem status is STARTED, as though an active START command is about to be issued.

Operator Response: Operator can override the current status and start it.

EVI446I *subsystem* startup failed, exit *exit_name* denied startup, rc = *retcode*.

Explanation: When attempting to startup the subsystem through the operator interface, an exit **other than** IMS Automation's denied the startup. The *exit_name* identifies the exit that denied the startup, and *retcode* is the return code from this exit.

Operator Response: Research why the exit denied the startup. You cannot override this.

EVI447I This function is not yet supported.

Explanation: An attempt was made to execute a function that is not supported.

Operator Response: Choose another function.

EVI448I Cannot delete overrides for current or previous days.

Explanation: Since overrides change the normal IMS start/stop times, you cannot change a date which has passed.

EVI449I Invalid input. Correct highlighted fields.

Explanation: The data entered in the highlighted fields is incorrect.

Operator Response: Enter the correct data. Press PF1 for help if more information is required.

EVI450I PPI refresh.

Explanation: A request has been issued to refresh the processing table used by the IMS Automation automated operator program.

Operator Response: None required.

EVI451I PPI shutdown.

Explanation: A request has been issued to shut down the IMS Automation automated operator program.

Operator Response: None required.

EVI452I PPI start.

Explanation: A request has been issued to start the IMS Automation automated operator program.

Operator Response: None required.

EVI453I Unable to determine XRF partner status info for *subsystem*.

Explanation: IMS Automation is unable to obtain status information for the alternate XRF subsystem *subsystem*.

EVI454I Invalid value (*parm=value*) found.

Explanation: The option specified is not valid for the subsystem.

Operator Response: Correct the options, and retry the operation. If you are unable to resolve the problem, contact your system administrator.

System Programmer Response: Verify that the option specified is valid in an XRF context.

EVI455I System is not XRF-capable.

Explanation: The operator is attempting to start the IMS control region as an XRF-capable subsystem, but the subsystem is not XRF-capable.

Operator Response: See your system programmer.

System Programmer Response: If this subsystem is supposed to be XRF capable, verify that the IMS stage one gen is specified correctly. Contact your IBM Support Center (ISC), if necessary.

EVI456I *subsystem XRF partner prtnrid has status of status.*

Explanation: The subsystem's XRF partner is in the indicated status.

Operator Response: Cancel the startup or proceed.

Note: Continuing with startup may be disruptive if the partner status is up.

System Programmer Response: Verify the subsystem definition. Contact your IBM Support Center (ISC), if necessary.

EVI457I *subsystem start type startyp invalid with option opt.*

Explanation: The specified start type is not valid with this option.

Operator Response: Correct the start type or option and retry the operation.

System Programmer Response: Verify start type definitions. Contact your IBM Support Center (ISC), if necessary.

EVI458I *subsystem HSBID conflict with XRF partner HSBID.*

Explanation: When the operator attempted to startup an IMS XRF complex, IMS Automation detected the same HSBID for both the active and the partner.

System Action: XRF startup will not proceed.

Operator Response: Contact the system programmer.

System Programmer Response: Investigate the problem by checking the HSBID entries in the configuration file and, if identical, adjust the incorrect entry.

EVI459I *subsystem unconnectable XRF alternate, VTAM NODE= nodeid.*

Explanation: The *nodeid* of the XRF alternate is not in the required CONNECTIBLE VTAM state.

System Action: Startup process terminates.

EVI460I **Action key keyid not active, Please try again.**

Explanation: Either a PF, PA, or the ENTER key was pressed at a point when it is not active for this panel.

Operator Response: Enter a valid entry for this panel.

EVI461I **Invalid option specified, Please try again.**

Explanation: An invalid character was entered.

Operator Response: Enter the correct character.

EVI462I **Application for subsystem is undefined.**

Explanation: The subsystem name, group, or domain was not found.

Operator Response: Enter a valid subsystem name, group, or domain. If you do not know the name, enter a question mark (?) in the "Subsystem, group, or domain" field to list the names.

Note: If the domain is not currently communicating with the focal point system, then the subsystem or domain will be unknown to IMS Automation.

EVI463I Enter an IMS subsystem name or ? for selection list.

Explanation: IMS Automation is waiting for you to select a subsystem.

Operator Response: Enter a valid subsystem name. If you do not know the name, enter a question mark (?) in the “Subsystem, group, or domain” field to list subsystem names.

EVI464I Enter selection code.

Explanation: IMS Automation is waiting for you to select an option.

Operator Response: Choose an option from the list and enter its number in the option selection field.

EVI465I *module unable to obtain data for subsystem.*

Explanation: IMS Automation was unable to obtain the specified data for the subsystem. This may indicate a loss of communications with a remote system, or other network problems such as congestion.

Operator Response: Retry the failing operation. If problem persists, notify your systems programmer.

System Programmer Response: Resolve network problems, if found. It may be necessary to increase the ENVIRON TIMEOUT values.

EVI466I *module time-out waiting for application messages.*

Explanation: A timeout was received while waiting for a response from IMS. The program-to-program interface is unavailable now either because IMS is down or the communication link is down.

Operator Response: None required.

System Programmer Response: Verify the PPI is active. It may be necessary to increase the ENVIRON TIMEOUT values if the PPI is operational.

EVI467I Subsystem entry is not an IMS subsystem.

Explanation: The specified name may be a domain or group name, and IMS Automation requires a subsystem name in this field.

Operator Response: Verify that the name in the **Subsystem Name** field is a subsystem defined in the control file. If it is not, re-enter or select from a list of valid subsystems. If the specified name is a valid subsystem, contact your system programmer.

EVI468I Maximum of one selection permitted.

Explanation: An attempt was made to select more than one item, but only one is allowed.

Operator Response: Select one item.

EVI469I No domains found.

Explanation: IMS Automation initialization probably has not yet completed.

Operator Response: If initialization appears to have completed successfully, then contact your IBM Support Center (ISC).

EVI470I No groups found.

Explanation: Group definitions are optional, and no group definitions were found in the control file.

Operator Response: None.

EVI471I No subsystems found.

Explanation: IMS Automation can display no subsystems because either IMS Automation has not initialized or no subsystems for the user can be found.

Operator Response: Check to make sure that IMS subsystems do exist in your environment, by checking the control file entries. Verify that IMS Automation has completed startup. If the problem persists, contact your IBM Support Center (ISC).

EVI472I Please enter the status option desired.

Explanation: The ENTER key was pressed but no status option was entered.

Operator Response: Enter a valid status option.

EVI473I Please enter the type of list desired.

Explanation: The ENTER key was pressed but no list type was selected.

Operator Response: Select a valid list type.

EVI474I Please select a domain.

Explanation: The ENTER key was pressed but no domain was selected.

Operator Response: Select a valid domain.

EVI475I Please select a group name.

Explanation: The ENTER key was pressed but no group was selected.

Operator Response: Select a valid group.

EVI476I Please select a subsystem name.

Explanation: The ENTER key was pressed but no subsystem was selected.

Operator Response: Select a valid subsystem.

EVI477I Please select an option.

Explanation: The ENTER key was pressed, but no selection was entered.

Operator Response: Enter a valid selection.

EVI478I Invalid selection. Must be from 1 to 5.

Explanation: The entry contained a character other than 1 to 5, inclusive.

Operator Response: Enter a selection using a number from 1 through 5.

EVI479I Subsystem name is undefined.

Explanation: The name entered in the subsystem field is not defined in the control file

Operator Response: Re-enter or type ? for a list of valid subsystem names.

EVI480I Subsystem status=*status*, Cannot obtain shutdown information.

Explanation: The current subsystem status will not allow a /DISPLAY SHUTDOWN STATUS command to be executed.

EVI481I This function is not available, please select another.

Explanation: The requested function is not available.

Operator Response: Choose another function.

EVI482I Invalid data entered.

Explanation: Invalid data was given to a CLIST.

Operator Response: None.

System Programmer Response: Determine why invalid data came into the CLIST. If the problem is an IMS Automation logic error, contact your IBM Support Center (ISC).

EVI483I *subsystem* parent subsystem not active.

Explanation: You attempted to start a subsystem whose parent subsystem is not active. Multiple parents may not be active for an IMS system that has multiple parents defined.

Operator Response: You can override this and start the subsystem.

EVI484E NoValue condition raised in *clist* on line *linenum*.

Explanation: A REXX variable was met which did not have a value assigned.

Operator Response: If it is user-written code, resolve the problem. If it is program-offering code, contact your IBM Support Center (ISC).

EVI485I *subsystem* is not a valid subsystem, group or domain, please re-enter.

Explanation: The subsystem name, group, or domain was not found.

Operator Response: Enter a valid subsystem name, group, or domain. If you do not know the name, enter a question mark (?) in the "Subsystem, group, or domain" field to list the names.

Note: If the domain is not currently communicating with the focal point system, then the subsystem or domain will be unknown to IMS Automation.

EVI486I Invalid status option entered, please try again.

Explanation: An invalid status option was entered.

Operator Response: Review status entry. Press PF1 for help information, if needed.

EVI487I *subsystem* parent subsystem status is not UP.

Explanation: Although the parent subsystem is ACTIVE, its status is not currently UP; that is, it may be STARTING, ABENDING, and so on. Multiple parents may not be UP for an IMS system that has multiple parents defined.

Operator Response: You can override the error and start the subsystem.

EVI488E IMS INITSTART exit failed, RC=*retcode*.

Explanation: The operator attempted to invoke a startup, but the INITSTART exit returned a non-zero return code.

System Action: The startup process terminates.

EVI489E *modnam failed: parm parameter was missing.*

Explanation: This message is issued from the IMSPOST routine. A required parameter was missing.

Operator Response: None.

System Programmer Response: Correct the call to IMSPOST.

EVI490I **Enter a Start Type selection.**

Explanation: A **Start Type** selection is required.

System Action: The startup process is terminated.

Operator Response: Select a **Start Type**; press the ENTER key.

EVI491I **Status of *subsystem* is *status*, unable to process request for ACTIVE data**

Explanation: The request for active dependent regions for the subsystem *subsystem* was not completed because the subsystem was not available.

System Action: The data is not displayed.

EVI492I **Manual command is required for this selection.**

Explanation: The IMS Restart command field was blank

System Action: Waits for operator input.

Operator Response: Enter a restart command.

EVI493I **IMS Start aborted at user request.**

Explanation: The requested start was aborted due to a subsequent request.

EVI494I **IMS Start process initiated successfully.**

Explanation: Startup of IMS subsystem completed successfully.

EVI495I **Subsystem, group, or domain is required.**

Explanation: The ENTER key was pressed from the main menu, but no entry was specified in the "Subsystem, group, or domain" field.

Operator Response: Supply a subsystem, group, or domain name, or enter a ? to select from a list.

EVI496I **No broadcasts were issued.**

Explanation: The request to broadcast a message to one or more subsystems could not be performed. The error panel will explain why the broadcast was not issued.

Operator Response: Try again later.

EVI497I **Paging is allowed for groups and domains only.**

Explanation: The user tried to page forward/backward while processing a subsystem.

Operator Response: None required.

EVI498I The combination of parameters entered is invalid.

Explanation: The combination of parameters entered is invalid.

Operator Response: Review your entries and try again. If the selected parameters appear correct, consult your system programmer.

EVI500E Request invalid: Enter I or T to Initiate/Terminate.

Explanation: The operator requested a function which is not supported by this panel.

Operator Response: Validate the request.

EVI501I IMSCMD failed. RC=*retcode*

Explanation: The IMSCMD validation checking or security checking failed. The return code describes the reason for the failure. The return code can have the following values:

1-100 Return code from IMSQRY. Refer to return codes for IMSQRY.

103 Input error. Either the IMS name is missing, the command is missing, or both are missing.

104 The name entered is not an IMS subsystem.

105 Security check failure. Operator is not authorized for the specific IMS command.

106 Security check failure. Operator is not authorized for the IMS subsystem.

107 Security check failure. Operator is not authorized to issue any IMSCMD functions.

110 The specific IMS command is not supported thru the IMS automated operator function.

111 Security check failure. Unexpected error condition.

112 Security check failure. Unexpected return code.

Operator Response: Use the return code to determine the failure reason. If invalid input was entered, re-enter with valid input. If not authorized for the function, request authorization from your security administrator. If an unexpected return was received, contact IBM Support.

System Programmer Response: None.

System Action: The command will be ignored.

EVI502E Parent IMS message region not found. Request rejected.

Explanation: IMS Automation did not find the specified subsystem.

Operator Response: Verify the status of the subsystem's parent region. Contact your system programmer, if necessary.

System Programmer Response: Verify the subsystem definitions. Contact your IBM Support Center (ISC), if necessary.

EVI503E Unexpected reason code from *cmd*, RC=*retcode*

Explanation: An unexpected return code, *retcode*, was received from the command *cmd*.

System Action: The requested function is not successfully completed.

Operator Response: Contact your IBM Support Center (ISC).

EVI504E Original time has passed and cannot be changed.

Explanation: A time entered on the service periods panel is earlier than the current time.

Operator Response: Enter service period times beyond the current time.

EVI505E IMS message region not active. Request rejected.

Explanation: You have attempted to perform an operation such as shutdown on a message region that is not active.

EVI506I Parm *parm* for *subsystem* not defined in control file.

Explanation: The requested parameter for the subsystem was not defined in the control file.

System Action: The process terminates.

System Programmer Response:

EVI507I Field *fld* for *subsystem* not defined in status file.

Explanation: The requested field for the subsystem was not defined in the control file.

System Action: The process terminates.

EVI508I Operator replied "GO"

Explanation: The operator issued a "GO" command while a CLIST was waiting for a message from another command or remote system.

Operator Response: Do not issue a "GO" command while a CLIST is waiting for a message from another command or remote system.

System Programmer Response: None.

EVI509E Internal error detected in CLIST *clist*, PARMS=*parm*.

Explanation: IMS Automation has detected an internal error in the specified CLIST.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI510E Unexpected message received from *module*, MSG=*msgid*.

Explanation: IMS Automation has detected an internal error indicated by the text of MSG.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI511E Syntax error in *module* on line *linnum*, see message IRX00nn.

Explanation: IMS Automation has detected an internal syntax error in line *linenum*.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI512I No triggers defined for *subsystem*.

Explanation: No startup/shutdown trigger conditions are defined for the specified subsystem.

Operator Response: None required.

EVI513I Select only one restart command option.

Explanation: More than one restart command option was selected.

Operator Response: Select only one restart command option.

EVI514I Communication to subsystem *subsystem* timed out.

Explanation: The wait time expired for communication to the remote system *subsystem*.

Operator Response: Check the status of *subsystem*. Retry the operation.

System Programmer Response: If this error occurs frequently, consider increasing the WAITTIME parameter or investigate link problems.

EVI515I Trace options DOMAIN=*domainid*, TRACED=*domopt*, OPER=*operid*, TRACEO=*option*.

Explanation: This is an internal message that IMS Automation uses to set service options associated with diagnostic tracing.

Operator Response: None.

EVI516I Message options DOMAIN=*domainid*, MSGD=*domopt* OPER=*operid*, MSGO=*option*.

Explanation: This is an internal message that IMS Automation uses to set service options associated with message ID display.

Operator Response: None.

EVI517I INTERFACE PANEL OPTIONS DOMAIN= *domainid*,INTFCD=*code*, OPER=*operid*,INTFCO=*code*

Explanation: This is an internal message for the interface panel options

Operator Response: None

EVI518I Operator ID must be entered for operator option.

Explanation: The operator ID is required to change the option selected on the screen.

Operator Response: Enter the operator ID.

EVI519I Subsystem *name* not defined.

Explanation: IMS Automation did not find the specified subsystem in the control file.

Operator Response: Enter a valid subsystem name in the Subsystem field, or enter a "?" to view a list of valid subsystems.

EVI521I *autotype* automation for *refid* is set OFF. Request rejected.

Explanation: Automation Flag was set to off, and the requested function did not occur.

System Action: The specified function was not executed.

EVI522I CLIST *exec_name* was unable to locate an exit for entry=*name1* type=*name2*.

Explanation: An IMS Automation routine (*exec_name*) attempted to invoke an exit for IMS Automation, but no exit was defined. No action needs to be taken unless you expected IMS Automation to find an exit.

EVI523I *exec_name encountered error in parent definition for region_name*

Explanation: An IMS Automation routine (*exec_name*) determined an error was made in the SA OS/390 parent definitions for a dependent region (*region_name*). Possible causes are:

- The region must be defined as a direct child of the control region with no other parents specified. DBRC and DLISAS regions are such regions.
- The region is defined with startoptions or shutoptions of parent, but it is not defined as a direct child of the control region.
- The region is defined with startoption or shutoptions of parent, but it has multiple parents coded.

System Action: Processing continues, but no action is taken on the region.

System Programmer Response: Correct the parent definitions for *region_name* which is defined in error.

EVI524I *control_region1 incorrectly defined as child of control_region2*

Explanation: The IMS control region (*control_region1*) was defined as either a child or a grandchild of IMS control region (*control_region2*). IMS Automation does not support a control region being a dependent of another control region.

System Programmer Response: Modify the parent definitions for IMS control region *control_region1* to ensure the region is not a dependent of IMS control region *control_region2*.

System Action: Processing continues. Unpredictable results may occur.

EVI526I *Userexit exit_name has been issued for subsystem*

Explanation: The IMS control region (*subsystem*) had a user exit defined. This user exit was invoked during IMS Automation processing.

EVI527I *Previous stop-time is not "*****".*

Explanation: The "*****" in service periods shows that a link will remain active the next day. If the last stop-time is "****", then the next start-time must also be "*****", thus indicating the continuity. Here, the operator modified the service hours and specified "*****" as the first start-time, but the previous stop-time is not "*****".

Operator Response: Either change the last stop-time to "*****" or change the first start-time to an actual time.

EVI528I *No times allowed after "DOWN"*

Explanation: When "DOWN" is the first start/stop time, no times can be entered later that day. The operator modified the service hours and specified "DOWN" as the first start-time, but additional times follow it.

Operator Response: Update the service hours.

EVI529I *No times allowed after "*****".*

Explanation: Because "*****" shows that a subsystem will remain active into the next day, no times are allowed after the "*****".

Operator Response: Update the service hours.

EVI530I Next start-time is not "***".**

Explanation: The "*****" in service periods indicates that a link will remain active the next day. If the last stop-time is "*****", then the next start-time must also be "*****", thus indicating the continuity. In this case, the operator modified the service hours and specified "*****" as the last stop-time, but the next start-time is not "*****".

Operator Response: Either change the last stop-time to actual hours, or change the first start-time to "*****".

EVI531I Times not in ascending order.

Explanation: Times entered must be in ascending order.

Operator Response: Re-enter times in ascending order.

EVI532I Previous stop-time is "***".**

Explanation: The operator modified the service hours and did not specify "*****" as the first start-time, but the previous day's last stop-time is "*****".

Operator Response: Update the service hours correctly.

EVI533I Incorrect time specified.

Explanation: The time entered was not a valid time.

Operator Response: Re-enter time within the following rules:

- Valid start-times are 0000 to 2359, ****, and DOWN.
 - **** and DOWN are only valid as first start-time values.
 - No times are allowed after **** or DOWN.
 - Valid stop-times are 0001 to 2400 and ****.
 - **** is only allowed as the last stop-time and first start-time (both together).
-

EVI534I Next start-time is "***".**

Explanation: The next day's first start-time is "*****", but when the operator modified the service hours, "*****" was not specified as the last start time.

Operator Response: Update the service hours correctly.

EVI535I Deletion disallowed as it creates a schedule conflict.

Explanation: The Service Period Override cannot be deleted because deleting it would create a conflict in the existing schedule.

Operator Response: Update the service hours.

EVI536E CLIST *clist* incorrectly invoked, parms=*parmval*.

Explanation: The CLIST *clist* was invoked with parameters *parmval*, but the invocation was not according to the interface defined for that CLIST.

System Action: The requested function is not performed.

Operator Response: The problem is caused by an IMS Automation internal error. Contact your IBM Support Center (ISC).

EVI537I Initiate for region *regid* sent to IMS.

Explanation: This message confirms that the 'start-region' command has been sent to the IMS control region to initiate the identified message region.

The variable *regid* is substituted with the jobname of the message region and *IMS* is substituted with the subsystem name of the IMS control region.

System Action: The IMS control region starts the identified message region.

Operator Response: None.

System Programmer Response: None.

EVI538I Terminate for region *regid* sent to IMS.

Explanation: This message confirms that the 'stop-region' command has been sent to the IMS control region to terminate the identified message region.

The variable *regid* is substituted with the jobname of the message region and *IMS* is substituted with the subsystem name of the IMS control region.

System Action: The IMS control region stops the identified message region.

Operator Response: None.

System Programmer Response: None.

EVI539E *subsystem* IMS region *regid* executing. Request rejected.

Explanation: IMS Automation rejected the IMS message region start command because the message region is already active.

Operator Response: None.

EVI548I Cannot change times for previous days.

Explanation: You cannot change the start/stop times for a date that has passed.

EVI549I Date out of range.

Explanation: The date could generate a schedule conflict because it is in the range of 12/26/yy and 12/31/yy where yy is computed by the common global variable *AOC.CENTURY.SWITCH* and the current year.

Operator Response: Correct the date and re-enter.

EVI550I Unexpected timeout from *cmd* in *clist*. Processing terminated.

Explanation: A message was expected but was not received before the "WAIT" time expired.

Operator Response: None.

EVI551I Unexpected return code (RC=*retcode*) from *cmd* in *clist*. Processing terminated.

Explanation: An unexpected return code, *retcode*, was received from the command *cmd*.

Operator Response: Contact your IBM Support Center (ISC).

EVI552I Unexpected WAIT Event (WC=wc) from cmd in clist. Processing terminated.

Explanation: A message was expected, but instead an unexpected event code returned.

Operator Response: Refer to *NetView Customization Writing Command Lists* for an explanation of the code. If it is an unexplained wait code (e.g. an error code), then contact your IBM Support Center (ISC). If it is a G code (as in GO), the operator should not enter G0 while waiting for that command to process.

EVI553I Unexpected message (EVInnn) from cmd in clist. Processing terminated.

Explanation: The CLIST was waiting on several messages. The message received was not the message expected. Typically this indicates an error.

Operator Response: Contact your IBM Support Center (ISC).

EVI554I Failed command: cmdtxt.

Explanation: The identified command was executed, but it failed to complete normally.

Operator Response: None required.

EVI555I Message received: msgid msgtext.

Explanation: An unexpected message was received: *msgtext*.

Operator Response: Contact your IBM Support Center (ISC).

EVI556I Unexpected event eventid.

Explanation: An unexpected event occurred during message WAIT processing.

Operator Response: Retry the operation.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI557I Defined in ACF but not active instance

Explanation: Secondary system associations have been defined for this subsystem. This instance is not the instance that is being actively managed. Most likely this instance is in FALLBACK or MOVED status.

Operator Response: Perform desired action from the domain managing the subsystem or from the focal point.

EVI560I Invalid Domain or Subsystem name.

Explanation: The name entered was not a valid subsystem or domain. If communications are down with the subsystem or domain, then correct names may be returned as invalid or unknown.

Operator Response: Enter a name that is currently valid.

EVI560I Invalid Domain or Subsystem name.

Explanation: The name entered was not a valid subsystem or domain. If communications are down with the subsystem or domain, then correct names may be returned as invalid or unknown.

Operator Response: Enter a name that is currently valid.

EVI561I Not authorized to access domain domainid.

Explanation: The user does not have security authorization to the requested domain.

Operator Response: Check with the system programmer regarding authorization.

EVI562I Not authorized for function *function* on domain *domainid*.

Explanation: The user does not have security authorization for the requested action in the specified domain.

Operator Response: Check with the system programmer regarding authorization.

EVI563I Both start and stop times must be entered, or both must be blank.

Explanation: A start or stop time is entered. Either both a start and stop time must be entered, or both must be blank.

Operator Response: Enter both start and stop times, or blank out both.

EVI564I All other time periods must be blank.

Explanation: A blank time period was encountered or a time period was skipped. Time periods must be contiguous.

Operator Response: If there is a blank time period, either blank out the other periods or fill in the blank one.

EVI565I Invalid time.

Explanation: The specified time is not valid. The time must be between 0000 and 2359.

Operator Response: Enter a valid time.

EVI566I Only the first start and stop time may be "DOWN"

Explanation: Only the first service period for a day may be specified as "DOWN". "DOWN" indicates that the specified subsystem must be down for the entire day. The user attempted to enter DOWN in other than the first service period.

Operator Response: Correct the start time.

EVI567I Time must also be "DOWN"

Explanation: In either the Start or Stop first service period, DOWN was specified. DOWN must be specified in both the first Start and first Stop service period.

Operator Response: Either enter DOWN in both the Start and Stop first service period, or enter some valid time in both.

EVI568I Only the first start time may be "***"**

Explanation: "*****" were specified in a Start field other than the first one. "*****" is a valid entry only in the first Start field, because it indicates that a service period continued from the previous day.

Operator Response: Correct the time.

EVI569I Time must be numeric.

Explanation: The start/stop time entered is not numeric, asterisks, or DOWN.

Operator Response: Correct the time.

EVI570I The first start and stop time cannot be blank.

Explanation: The first start/stop time must be entered. They are required parameters.

Operator Response: Correct the time by entering valid times in the first fields.

EVI571I Service periods not supported.

Explanation: No service periods exist for the requested subsystem.

Operator Response: None required.

EVI572I Parent IMS in backup mode.

Explanation: An attempt has been made to shutdown message regions of an IMS in XRF backup mode.

Operator Response: Review operational procedures for XRF backup systems.

EVI573I Invalid date, please reenter.

Explanation: The date entered is not valid.

Operator Response: Enter a valid date.

EVI574I Deletion disallowed as it creates a schedule conflict.

Explanation: The overrides cannot be deleted because it would create a conflict in the schedule as it exists.

Operator Response: Either change the schedule to eliminate the conflict or leave the override.

EVI575I *subsystem* is outside its service period.

Explanation: The user has attempted to start up *subsystem* outside the service period.

Operator Response: Override the service period and continue with startup, or abandon startup.

EVI576I *subsystem* is within its service period.

Explanation: The user attempted to stop a subsystem which was within a service period window, so the subsystem should remain UP.

Operator Response: Either ignore the service period and continue the shutdown, or skip this subsystem and go on to another.

EVI577I Critical threshold exceeded for tran=*tranid*, prog=*progrname* in *subsystem*.

Explanation: The critical threshold for the specified program has been exceeded.

System Action: IMS Automation will attempt no further recovery.

Operator Response: Notify your system programmer.

System Programmer Response: Investigate transaction/program failures. Increase THRESHOLD entries if necessary.

EVI578I Changed time must be later than current time.

Explanation: The time change entered was earlier than or equal to the current time.

Operator Response: Either re-enter time change later than the current time, or abort time change.

EVI579I Startup of *subsystem* initiated.

Explanation: Startup has been initiated for the specified IMS subsystem.

Operator Response: None required.

EVI580I Shutdown of *subsystem* initiated.

Explanation: Shutdown has been initiated for the specified IMS subsystem.

Operator Response: None required.

EVI581I Cannot page backward before start date.

Explanation: The operator attempted to scroll backward before a start date. This is not possible.

EVI582I No overrides found.

Explanation: The operator requested a display of service period overrides, but IMS Automation found none.

Operator Response: None.

EVI583I Use S to select a trigger for display.

Explanation: An invalid entry has been entered for this panel.

Operator Response: Enter S beside the trigger to display trigger conditions.

EVI584I *subsystem* startup trigger conditions are not satisfied.

Explanation: The trigger conditions required to start up the specified IMS subsystem have not yet occurred.

Operator Response: None required.

EVI585E EVIEXPST failed: type parameter must be STARTUP, SHUTDOWN, or blank.

Explanation: EVIEXPST (a synonym for IMSPOST) failed because the parameter is neither of type startup or shutdown nor blank.

Operator Response: Correct the type parameter and re-enter.

EVI586E EVIEXPST failed: function parameter must be SET or UNSET.

Explanation: EVIEXPST (a synonym for IMSPOST) failed because the function parameter was neither SET nor UNSET.

Operator Response: Enter the correct function parameter, SET or UNSET.

EVI587I *subsystem* shutdown trigger conditions are not satisfied.

Explanation: The trigger conditions which would cause the specified IMS subsystem to shut down have not yet occurred.

Operator Response: None required.

EVI588I Syntax error in *entry* etc.

Explanation: There is a syntax error in the CLIST.

Operator Response: Notify your system programmer.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI589E Error condition raised in *module* on line *linnum*. Return code = *retcode*

Explanation: There is an IMS Automation internal error.

Operator Response: Notify your system programmer.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI591I Security authorization failed.

Explanation: The operator lacks authorization to perform the requested function for the specified subsystem.

Operator Response: None required.

EVI593I Either destination or operator class must be specified.

Explanation: An attempt was made to broadcast a message, but a destination or operator class was not provided.

Operator Response: Provide a destination or operator class.

EVI594I Invalid operator or class.

Explanation: The operator or class entered was invalid.

Operator Response: Enter a valid operator or class.

EVI597I Use S or U to Set or Unset an event.

Explanation: On IMS Automation's Trigger panel, some key other than S or U was pressed.

Operator Response: Enter an S or U to set or unset an event.

EVI598I Type 'D' if delete required.

Explanation: An invalid character was entered in the Delete field.

Operator Response: Enter "D" to delete the override.

EVI599A Invalid service period — code *code* period *day* period *period*

Explanation: A routine has invoked the service period processing routine. The return code indicates that the service period data is invalid. This is caused by incorrect data in the control file.

Destination:

code The error code values are:

Code Explanation:

0004 Invalid data for service period. The data is either too long, not numeric, the hours are greater than 23, or the minutes are greater than 59.

0008 Data is following down-down or stop period of ****.

0012 Start period other than first contains ****.

0016 Coding of service period down is missing. Code down-down in first period only.

0020 Either a start or stop time for a period is in error.

0024 Time values are not ascending.

0028 Continuation error. A service period ending with **** does not have **** starting on the following day.

0032 Continuation error. A service period ending with down or a valid time value has **** for the next day.

0036 The day value coded on the service period entry is invalid.

0040 A control file entry starting with day= was found, but the format was invalid. Unable to determine day or times.

day The day coded in the control file entry.

Note: If day is the default, an entry for the day was not coded and down-down is the default schedule.

period The service period found is not correct.

System Action: All service period definitions for this subsystem will be ignored.

Operator Response: Refer the problem to your system programmer.

System Programmer Response: Review the Automation Control File and make the necessary changes to the service periods. Refer to the *AOC/MVS IMS Automation Programmer's Reference and Installation Guide* for syntax.

EVI601W RESTARTABORT cmd not issued for *subsystem* by *mod* (no recognized reason message for DFS3626I).

Explanation: DFS3626I was received in *mod* while waiting for two messages: DFS3626I and DFS166 or DFS0812A. One of the latter two has not occurred. A 15-second timeout is started to await the missing reason message. If received, the appropriate restart command is issued. Otherwise, message EVI602A is issued to signal the operator that manual attention is necessary to continue the restart.

Operator Response: Determine the proper restart command and issue it.

EVI602A Operator intervention required for *subsystem* - received DFS3626I - RESTART HAS BEEN ABORTED.

Explanation: DFS3626I was received in *mod* while waiting for two messages: DFS3626I and DFS166 or DFS0812A. One of the latter two has not occurred and a 15-second timeout has expired awaiting the missing reason message.

Operator Response: Determine the proper restart command and issue it.

EVI610I Timed startup pending subsys startup triggers not set.

Explanation: The timer routine attempted to start a subsystem. A timer popped and the subsystem should have started, but in checking the conditions, IMS Automation found that the startup triggers were not set, so at least one or more conditions for the IMS startup have not yet been met.

Operator Response: Determine why the startup triggers have not been met. Check the trigger definitions.

EVI611I Timed startup failed. *subsystem* denied start by *exit_name* (RC=*return_code*). Exit processing denied startup.

Explanation: When IMS Automation attempting to do timed startup for a given subsystem, an exit other than IMS Automation's denied the startup.

Operator Response: Research why the non-IMS Automation exit denied the startup.

EVI612I Timed shutdown pending. Subsys shutdown triggers not set.

Explanation: The timer routine attempted to shutdown a subsystem. A timer popped and the subsystem should have shutdown, but in checking the conditions, IMS Automation found that the shutdown triggers were not set, so at least one or more conditions for the IMS shutdown have not yet been met.

Operator Response: Either go through the IMS Automation trigger panels to determine why the triggers are not set and set them, or shut down the subsystem manually.

EVI614A Delayed shutdown of *subsystem* failed, received RC = *retcode* from *clist*.

Explanation: The operator attempted to issue a Delay Shutdown. When the Shutdown was issued, certain return codes may have been overridden, such as being outside the service period. When the specified Delay has passed and IMS Automation tried to initiate shutdown, it checked to see if the conditions were valid. In doing that check, IMS Automation received the noted return code. The function was unable to complete because a different return code (other than that overridden by the operator) was received.

Operator Response: Check the return code, and shut down the subsystem now, if required.

EVI615A Multiple primary systems defined for *subsystem*.

Explanation: More than one primary system has been defined for *subsystem*. This is an error, as there can only be one primary system for each subsystem.

Operator Response: Use manual AOC SETSTATE commands to be sure *subsystem* is up and running on the desired system. Notify your system programmer of this definition error.

System Programmer Response: Check your control file definition statements. Remove duplicate primary associations for *subsystem*.

EVI616A Posted startup failed. *subsystem* denied start by *exit_name* (RC=*return code*).

Explanation: When IMS Automation attempting to do posted startup for a given subsystem, an exit other than IMS Automation's denied the startup.

Operator Response: Research why the non-IMS Automation exit denied the startup.

EVI617A Timed startup pending. *subsystem* parent subsystem *subsystem* not active.

Explanation: IMS Automation attempted a Timed Startup for the subsystem. However, the parent subsystem was not active. IMS Automation will wait until the parent subsystem is active to perform the startup.

Operator Response: If the subsystem needs to be up immediately, without the parent subsystem, then start the subsystem through the operator interface.

EVI618A Timed startup pending. *subsystem* parent subsystem *subsystem* status not UP.

Explanation: IMS Automation attempted a Timed Startup for the subsystem. However, the parent subsystem was not UP. IMS Automation will wait until the parent subsystem is UP to perform the startup.

Operator Response: If the subsystem startup is needed immediately, bring up the subsystem through the operator interface.

EVI619A Timed startup failure. *subsystem unexpected error - RC=retcode*

Explanation: EVIEI111 returned the return code rc.

Operator Response: Contact your systems programmer.

System Programmer Response: Contact your IBM Support Center (ISC).

EVI620I Timed shutdown failed. *subsystem unexpected error = RC=retcode.*

Explanation: A scheduled shutdown failed due to the specified return code.

EVI621I Timed startup failure. *subsystem status is status*

Explanation: Startup was initiated by a timer, but failed because the subsystem status is STOPPED or BROKEN.

EVI622I Broadcast cancelled because *msgtext.*

Explanation: Broadcast could not be performed successfully because of the specified conditions, and so it was cancelled.

EVI623I Broadcast cancelled because of unexpected event *msgtext.*

Explanation: Broadcast expected a reply message but instead received the specified event, so broadcast was cancelled.

EVI624I Timeout on *subsystem*, broadcast cancelled.

Explanation: Broadcast received a timeout instead of the reply message it expected from the identified subsystem.

EVI626I User start type *startyp* was not found.

Explanation: The requested user start command was not found in the control file.

Operator Response: Review the syntax for the user-defined start command and reissue.

EVI627I Error occurred while retrieving the user start type.

Explanation: While IMS Automation attempted to return the requested user start command, an error occurred.

Operator Response: Retry the function. If the error persists, contact your system programmer.

System Programmer Response: Determine the reason for failure.

EVI628I There are no user start types defined.

Explanation: When IMS Automation attempted to retrieve the user-defined start types for display, an error occurred, so they are unavailable.

Operator Response: Retry the function. If the error persists, contact your system programmer.

System Programmer Response: Determine the reason for failure.

EVI629A Invalid service period - code *code day day period period conflict conflict*

Explanation: This message indicates that the service period entered is not valid. For instance, it could be a non-numeric entry.

Destination:

code The error code values are:

Code Explanation:

- 0004** Invalid data for service period. The data is either too long, not numeric, the hours are greater than 23, or the minutes are greater than 59.
- 0008** Data is following down-down or stop period of ****.
- 0012** Start period other than first contains ****.
- 0016** Coding of service period down is missing. Code down-down in first period only.
- 0020** Either a start or stop time for a period is in error.
- 0024** Time values are not ascending.
- 0028** Continuation error. A service period ending with **** does not have **** starting on the following day.
- 0032** Continuation error. A service period ending with down or a valid time value has **** for the next day.
- 0036** The day value coded on the service period entry is invalid.
- 0040** A control file entry starting with day= was found, but the format was invalid. Unable to determine day or times.

day The day coded in the control file entry.

Note: If day is the default, an entry for the day was not coded and down-down is the default schedule.

period The service period found is not correct.

conflict Indicates whether a conflicting period was detected.

System Action: All service period definitions for this subsystem will be ignored.

Operator Response: Refer the problem to your system programmer.

System Programmer Response: Review the Automation Control File and make the necessary changes to the service periods. Refer to the *AOC/MVS IMS Automation Programmer's Reference and Installation Guide* for syntax.

EVI630I ID=*id* CONNECTION=*connid*

Explanation: This is the first line of a multi-line message which identifies the related subsystem.

Operator Response: Internal message; no response needed.

EVI631I No service periods defined for *subsys linkid*.

Explanation: IMS Automation found no service periods defined in the control file for this subsystem.

Operator Response: Internal message; no response needed.

EVI632I *n,hhmm-hhmm,...*

Explanation: This internal message shows a service period schedule where *n* is the number of the day in the week (where 1 is Monday).

Operator Response: Internal message; no response needed.

EVI633I *yyymmdd,hhmm-hhmm,...*

Explanation: This internal message shows service period override for a specified date.

Operator Response: Internal message; no response needed.

EVI634I END

Explanation: This is an internal message which marks the end of a multi-line message.

EVI635I No overrides for *subsystem*.

Explanation: A FUNCTION=COMPOSITE was issued to list a schedule with overrides, but no overrides were found in the status file.

Operator Response: Internal message; no response needed.

EVI636I Invalid request.

Explanation: IMS Automation received incorrect parameters.

Operator Response: Internal message; no response needed.

EVI637I Internal failure code *code*.

Explanation: An internal failure has occurred.

Operator Response: Contact your IBM Support Center (ISC) with the code.

EVI638I No overrides for *subsystem linkid*.

Explanation: A FUNCTION=COMPOSITE was issued to list a schedule with overrides, but no overrides were found in the status file.

Operator Response: Internal message; no response needed.

EVI639I Desired UP/DOWN start *hhmm yymmdd* stop *hhmm yymmdd*.

Explanation: This internal message tells IMS Automation what the current service schedule is and when the next start/stop times are.

Operator Response: Internal message; no response needed.

EVI640E *cmd* received message *msgtext*

Explanation: The command issued has received an unexpected message.

Operator Response: Contact your IBM Support Center (ISC).

EVI641E *subsystem area (ident)* invoked by an undefined message ID *msgid*

Explanation: State-action processing has been initiated with an undefined message identifier.

System Programmer Response: Review state-action definitions, if problem persists contact your IBM Support Center (ISC)

EVI642E Broadcasts to *numscsfl* out of *numatmptd* subsystems were successful.

Explanation: Of the *numatmptd* broadcasts to subsystems attempted, *numscsfl* were successful.

Operator Response: Check the status of unsuccessful targets, and retry broadcast to them when they are available.

EVI643E *subsystem area (module) called without setting EVIEY001_EVENT*

Explanation: The module has been invoked without supplying the necessary event parameter.

System Programmer Response: Review automation table invocations for state action for syntax, contact the IBM Support Center (ISC) if the problem persists.

EVI644E *Action action for state/action member memname cannot be located in DSICLD.*

Explanation: A REXX EXEC specified in a state/action table is missing.

Operator Response: Correct the action name, or have the system programmer to add the missing EXEC to the library.

EVI645E *State state for state/action member memname is invalid.*

Explanation: State is invalid.

Operator Response: Review and correct State/Action Table member.

EVI646E *State state for state/action member memname is greater than defined states.*

Explanation: An EVENT record references "state," but the state is invalid.

Operator Response: Review and correct State/Action Table member.

EVI647E *Field fldnam for state/action member memname is invalid.*

Explanation: The field is invalid.

Operator Response: Review and correct State/Action Table member.

EVI650A *subsystem state/action table tabsubsys msgid not found.*

Explanation: The specified state/action table is not found. This may indicate initialization failure.

Operator Response: Review the log for failures.

EVI651E *subsystem timer expired to unlock area for remotsubsys in domain remotdom.*

Explanation: A lock for a state/action table was unlocked by the times.

Operator Response: Look for previous activity related to this subsystem, and check for other possible errors.

EVI652E *subsystem failed to obtain subsystem lock for area in domain domainid.*

Explanation: The requested lock is not available.

Operator Response: Look for previous activity related to this subsystem, and check for other possible errors.

EVI653E *subsystem failed to locate an area for message msgid msgtext.*

Explanation: A message is automated, but could not be found in any area table.

Operator Response: None.

System Programmer Response: Verify that the state/action table is correctly defined. If the message should not be trapped, remove it from the NetView automation table and the state/action table.

EVI670A Broadcast was issued but not all subsystems responded.

Explanation: A broadcast was issued to one or more subsystems, but the 'WAIT' time expired before all responses were received.

Operator Response: Determine whether any IMS or communications links dropped during the broadcast.

EVI671I *ims* Active elsewhere

Explanation: The user has attempted to start a subsystem which is enabled for ARM. There is already a subsystem active in the sysplex with the ARM element name specified in the ACF.

Operator Response: If the subsystem is active on another domain, it must be shut down and the automation status SETSTATE changed to MOVED before retrying the request. Otherwise, have the automation specialist verify that the ARM element name specified in the ACF for this subsystem is uniquely defined in the sysplex.

EVI672I *ims* Status is MOVED or FALLBACK

Explanation: Automation status indicates that the subsystem is not expected to be active on this domain.

Operator Response: Verify the request is being issued to the correct domain, that the subsystem is not active elsewhere, and that the automation status for this subsystem has been set to MOVED or FALLBACK on all other domains.

After verification, continue with startup.

EVI673I *ims* Being started by an external agent (status is EXTSTART)

Explanation: An external agent (such as ARM) is currently attempting to restart the subsystem.

Operator Response: Wait 5 minutes to allow the external agent time to complete its startup attempt. If the subsystem is still not active, reissue the request.

EVI674I *ims* Unexpected RC when seeking focal point confirmation *domain*

Explanation: A start for a subsystem that is not currently controlled by this domain was requested. An attempt was made to verify that no other domain was controlling this subsystem, but the focal point could not be contacted.

Operator Response: Verify that the subsystem should be started here and that no other domain is controlling the subsystem before continuing.

EVI675E *subsystem* changed from MOVED/FALLBACK but controlled by domain *domain*

Explanation: An attempt was made to change the status from MOVED or FALLBACK, SA OS/390 accepted this change. However, it is inconsistent with the SA OS/390 IMS feature information.

If the domain shown in the message is UNKNOWN, the focal point could not be contacted to verify that no other domain was controlling the subsystem. Otherwise, another domain controls this subsystem and the status is changed back to MOVED or FALLBACK.

Operator Response: Contact the system programmer or automation specialist to ensure this subsystem should be on this system.

System Programmer Response: If the subsystem is controlled by another domain, first change the status on the controlling domain to MOVED or FALLBACK, then reissue the status change on the new domain.

EVI676E MVS operator starting *ims* on domain *domain* reason text

Explanation: The operator started a subsystem that is not currently controlled by this domain from the MVS console. This could result in conflicting information in the SA OS/390 IMS displays.

Depending on the reason text, the subsystem is already controlled by another domain or the focal point could be contacted to ensure the subsystem is not being managed by another domain. In the first case, automation is not in effect.

Operator Response: Contact the system programmer or automation specialist to ensure this subsystem should be on this system.

System Programmer Response: If the subsystem is controlled by another domain and the system where the operator issued the start is the desired domain, change the SA OS/390 status of the controlling domain to MOVED.

EVI677I *ims* controlled by another domain *domain*

Explanation: The user has attempted to start a subsystem that is controlled by another domain.

Operator Response: In order to start the subsystem here, shut down the subsystem on the other domain (if it is active) and SETSTATE the automation status to MOVED before retrying to start the subsystem on this domain.

EVI678E Required level of SA OS/390 is not running on this system.

Explanation: The prerequisite level of SA OS/390 is not installed on this system. This can cause unpredictable errors.

Operator Response: Contact your systems programmer to check that the required level of SA OS/390 is installed.

EVI679E SUBSYSTEM *ims* already controlled by domain *domain1*, but is being started on domain *domain2* by ARM.

Explanation: ARM is in the process of moving the specified subsystem to domain2. However, the focal point indicates that the subsystem is already controlled by domain1.

Operator Response: Only one domain should be managing the subsystem. Remove the subsystem from domain1's control by changing the subsystem status to MOVED or FALLBACK on domain1.

EVI682A Post failure. *subsystem* unknown, unable to set shutdown event *event*.

Explanation: When IMS Automation tried to use the IMSPOST function, the subsystem name was unknown, so IMS Automation could not set the event.

Operator Response: Determine whether a valid name was specified for the IMSPOST function. If the specified name **is valid**, then communication is probably not now available to the system where that subsystem resides. Manually post the event on that remote system when communication becomes available.

EVI683A Post failure. *subsystem* unknown, unable to set startup event *event*.

Explanation: When IMS Automation tried to use the IMSPOST function, the subsystem name was unknown, so IMS Automation could not set the event.

Operator Response: Determine whether a valid name was specified for the IMSPOST function. If the specified name **is valid**, then communication is not now available to the system where that subsystem resides. Manually post the event on that remote system when communication becomes available.

EVI684A Post failure. *domainid* domain unknown, unable to reset event *event*.

Explanation: When IMS Automation to use the IMSPOST function, the domain name was unknown, so IMS Automation could not set the event.

Operator Response: Determine whether a valid name was specified for the IMSPOST function. If the specified name **is valid**, then communication is not now available to that domain. Manually post the event on that remote system when communication becomes available.

EVI685A Post failure. *subsystem* unexpected RC. Event *eventid* type *eventyp* RC *retcode*.

Explanation: IMS Automation received a non-zero return code from IMSPOST. It issues this message and other corresponding messages, depending on the return code.

Operator Response: Contact your IBM Support Center (ISC) with the return code.

EVI686W Subsystem *subsystem* initialize hang. Status has been *status* since *when*.

Explanation: During IMS initialization, timers were set to indicate when IMS successfully completed initialization and they would then be purged. The timers have not been purged, indicating that initialization has been hung for the specified length of time.

Operator Response: Check the logs to see if the initialization is in fact hung or if the initialization is just proceeding slowly. If this message occurs frequently, change the timer definition in the control file.

EVI687I Event Driven Startup pending. *imsname* parent subsystem *subsystem* not active.

Explanation: When an IMSPOST was run to post a startup, the preliminary check revealed that the parent subsystem was not active. Startup will not occur until the parent subsystem becomes active.

Operator Response: Activate the parent subsystem, and IMS itself will come up.

EVI688I Event Driven Startup pending. *imsname* parent subsystem *subsystem* status not up.

Explanation: An event was posted that completed the startup trigger conditions. When IMS Automation attempted to perform the startup, it found that the parent subsystem was active but not yet up. Therefore, start up for the subsystem cannot occur until after the parent system is up.

Operator Response: None.

EVI689A Event Driven Startup failure. *subsystem* status is *status_value*

Explanation: An event was posted and all the startup conditions were met; however, when IMS Automation tried to initiate the startup, it found the subsystem status was STOPPED or BROKEN. The startup cannot proceed.

Operator Response: Manually start the subsystem, or change status with SETSTATE to DOWN.

EVI690I PPI response from *applid* for function *function* job *jobname* maxline *totline*.

Explanation: This message is sent as the first line of the multi-line WTO created by the common response handler EVISNRSP. *applid* identifies the PPI response sender. The job *jobname* is the IMS control region that responded to the request. The values *maxline* and *totline* contain the maximum response line length and the total length of the response data sent to NetView.

EVI691I Response line--

Explanation: This message is sent as the data portion of a multi-line WTO created by the common response handler EVISNRSP.

EVI692I END

Explanation: This message is sent as the last line of the multi-line WTO created by the common response handler EVISNRSP. It signifies that the response has been completed.

EVI693I PPI continue response from *applid* for function *function* job *jobname* maxline *totline*.

Explanation: This message is sent as the first line of the multi-line WTO created by the common response handler, EVISNRSP, if the response is greater than 1K. This message follows message EVI690I if the multi-line WTO ends with "Message EVI694I continue." The variable *applid* identifies the PPI response sender; *jobname* is the job name of the IMS control region that responded to the request. The values *maxline* and *totline* contain the maximum response line length and the total length of the response data sent to NetView.

EVI694I CONTINUE

Explanation: This message is used internally for data transfer in PPI functions, as a continuation of message EVI694I.

EVI697I FROM = *domain_1* DOMAIN = *domain_2* OPID = *opid*

Explanation: This message is used internally for data transfer functions. EVI697 defines sender and receiver.

The variable *domain_1* shows the domain ID of the sender.

The variable *domain_2* shows the domain ID of the receiver.

The variable *opid* shows the operator ID or task the data will be sent to.

System Action: Data will be sent to the specified operator or task on the specified domain.

Operator Response: None.

System Programmer Response: None.

EVI698I This is an internal message in single point-of-control environment

Explanation: This message is used internally for data transfer functions. EVI698 contains the message text.

EVI699I This is an internal message in the single point-of-control environment.

Explanation: This message is used internally for data transfer functions. EVI699 is the end statement.

EVI700I *data*

Explanation: This internal message is used to pass single-point-of-control information on a IMS query.

Operator Response: Internal message; no action required.

EVI701I Operator *operid* initiated *lit* for IMS *subsystem*.

Explanation: Requested action was initiated by the operator.

EVI702I **No action taken for *subsystem*. Subsystem (*subsystem*) is not defined in automation control file.**

Explanation: Missing or invalid parameters were passed to the CLIST.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the automation control file member to verify the subsystem name that is in question. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI703D *lit1* will proceed in *nn* seconds -- Reply "GO" to proceed or "CANCEL" to abort.

Explanation: A request action will be invoked in the specified number of seconds. The operator is given a second chance to abort the request or to invoke it immediately.

Operator Response: Either enter GO to proceed, or enter CANCEL to abort the request.

EVI704I *subsystem* - IMS DC status updated to be *status*.

Explanation: DC status entry in the status file is updated with a value of "status" (refer to status value in the message).

EVI705E **Jobname for *subtype* subsystem, *subsystem*, is *jobname*. Does not match DBRC job, *nstidb/nstidl*, that is running for IMS subsystem, *subsystem*.**

Explanation: Jobname for DBRC and/or DLI specified in Automation Control File member does not match the name of DBRC and/or DLI currently attached to IMS.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the jobname value specified in the Automation Control File member.

EVI706E **Syntax error - parameter "*parmtype*" = "*parmvalue*". *msgtext***

Explanation: Invalid value specified in the Automation control file member for keyword (refer to PARAMETER value in EVI706E message).

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the value for the keyword "parmtype" in the Automation control file member.

EVI707W **CQS subsys not in UP status. Shutdown of IMS subsys rejected**

Explanation: During IMS shutdown, automation detected that the CQS for this IMS is not up and aborts the IMS shutdown request.

System Action: IMS shutdown request is rejected.

Operator Response: Determine why CQS is down. If CQS should not be down, bring up CQS and the perform IMS shutdown.

System Programmer Response: Correct the value for the keyword "parmtype" in the Automation control file member.

EVI708W Subsystem *subsystem* startup hang. Status has been *status* since *hhmm*.

Explanation: During IMS startup, timers were set to indicate when IMS successfully completed startup and they would then be purged. The timers have not been purged, indicating that startup has been hung for the specified length of time.

Operator Response: Check the logs to see if the startup is in fact hung or if the startup is just proceeding slowly. If this message occurs frequently, change the timer definition in the control file.

EVI709E Automation control file entry with **ENTRY** = *subsystem* and **TYPE** = *parm* not successfully retrieved. *msgtext*

Explanation: Parm/subsystem entry not defined and/or incorrectly specified in the Automation control file member.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the Automation control file member to determine and correct the error.

EVI711A Subsystem *resname* is abending: **ALTSYS**=*altsys* but backup has a status of *altstat*; Operator must initiate or ensure that takeover is proceeding.

Explanation: The subsystem identified by *resname* is abending; the operator must manually initiate takeover.

EVI712I IMS subsystem, *subsystem* (**AS mode**), is completely activated.

Explanation: IMS startup monitor has completed. All IMS components are active.

EVI713W *subsystem* startup failure *msgtext*.

Explanation: Request to start IMS failed due to its VTAM APPLID having an invalid status.

System Action: CLIST is terminated.

Operator Response: Correct the status of IMS VTAM APPLID and retry the request.

EVI714I XRF surveillance not started for *restype resname* due to *msgtext*.

Explanation: Duplicate XRF surveillance request was ignored as the surveillance task is already active.

System Action: CLIST is terminated.

EVI715I DBRC stopped for *restype resname* by XRF surveillance - **JOBNAME** *jobname*.

Explanation: Automation has issued command to purge DBRC on the old Active IMS subsystem to release reserves by DBRC which prevent takeover from proceeding.

EVI716I XRF surveillance started for IMS *subsystem*.

Explanation: The surveillance task has been started for the XRF subsystem to monitor the program of the takeover process.

EVI720I Unable to process shutdown, – automation is set to OFF for *subsystem*.

Explanation: Shutdown processing was unable to shut down the subsystem as the shutdown flag was set to OFF.

The variable *subsystem* shows the name of the affected subsystem.

System Action: None.

Operator Response: Notify the system programmer.

System Programmer Response: Use the SETAUTO command to set the shutdown flag to ON and reinitiate the shutdown.

EVI721I Shutdown rejected, the *subsystem_name* has no shutdown type *shut_type* DEFINED.

Explanation: The shutdown type specified for this shutdown request has not been defined in the automation control file for the indicated subsystem.

The variable *subsystem_name* indicates the subsystem in question. The variable *shut_type* shows the type of shutdown: NORM, IMMED, or FORCE.

System Action: None.

Operator Response: Either shut down the subsystem manually, or reissue the shutdown request with a higher priority shutdown type.

System Programmer Response: Include the shutdown type specification in the automation control file definition.

EVI717W No action taken for *subsystem/shuttyp/rseid/ keyword* keyword not defined in automation control file.

Explanation: Missing or invalid keyword has been defined in the Automation control file member.

System Action: CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct and/or define the required keyword in the Automation control file member.

EVI718W *lit1* failed for *lit2*. Control region *lit3* active.

Explanation: Request to start IMS failed as the IMS subsystem is already in the system; or request to shutdown IMS failed as the IMS subsystem is not in the system.

System Action: CLIST is terminated.

EVI719W IMS command *command* could not be issued. *msgtext*

Explanation: Attempt to stop IMS active regions during an IMS shutdown has not completed.

Operator Response: Manually stop all IMS active regions to allow IMS to shutdown (if applicable).

EVI722W No action taken for *subsystem/tgprtnrdom/shuttyp/starthsb*. Automation status file request/update failed for keyword *keyword*.

Explanation: Request to retrieve or to update the status file entry (entries) was unsuccessful for keyword(s). Refer to keyword name(s) in the EVI722W message.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log and the status file to determine the error.

EVI723A Manual startup detected for *subsystem name*. Operator intervention required to complete startup. See help panel.

Explanation: During automated shutdown of the identified subsystem, the automation detected signs of a manual startup. Automated shutdown processing is immediately terminated.

System Action: CLIST EVIETH00H terminates. No shutdown cleanup is done. The RTIMER timer-loop driving the shutdown monitoring is also stopped.

Operator Response: Subsequent automation of the manually started subsystem may not occur because automated controls have been overridden. Verify outstanding SA OS/390 shutdown is cancelled; manually respond to all appropriate IMS WTOR prompts; activate VTAM node as necessary; SETSTATE control and dependent subsystems to UP status; subsequent manual shutdown will likely be required.

EVI725W No action taken for *subsystem*. Automation status file initialization for *subsystem* failed due to error or system timeout.

Explanation: IMS startup initialization routine failed.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine problem cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI726W No action taken for *subsystem*. Keyword *keyword* not defined in automation status file.

Explanation: Missing or invalid parameters were passed to the CLIST.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine problem cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI727W IMS *resource_name* "DOWN" processing problem. *msgtext*

Explanation: IMS is coming "DOWN." IMS Automation could not find the required commands for the selected SHUTTYPE, (such as NORM, IMMED, or FORCE). These commands are defined in the automation control file.

System Action: The CLIST is terminated.

Operator Response: Verify and take appropriate actions for the resource in error. Manually shut down the IMS. It is possible that the automation control file has missing commands for shutdown selected.

EVI728W IMS *resname* "UP" processing problem. *msgtext*

Explanation: IMS is "UP," but the IMS start sequence failed because resource checking failed.

System Action: The CLIST is terminated.

Operator Response: Verify and take appropriate actions for the resource in error. Manually restart the IMS start sequence.

EVI729I IMS system *subsystem* automation startup phase processing complete.

Explanation: IMS automation startup phase completed.

EVI730I Command *command* has been routed to the partner domain *prtndom*.

Explanation: Command has been routed to the partner domain/system for execution.

EVI732W For IMS *subsystem* - APPLID *applid* status is *status*.

Explanation: Invalid VTAM status for the requested "applid"

System Action: The CLIST is terminated.

Operator Response: Correct the status of VTAM APPLID, and retry the request.

EVI733W Start failed for *subsystem*. Minor node (*minornode*) is not defined to VTAM.

Explanation: IMS startup sequence failed because an invalid node was specified in the automation control file member.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the value for IMS APPLIDs in the Automation Control File member.

EVI734A *shuttype* shutdown of *subsystem* - Backup is monitoring; TKO will proceed.

Explanation: The operator is given a second chance to abort or to confirm the request to shutdown IMS.

Operator Response: Enter an appropriate reply.

EVI735W The active may have failed. Please verify and enter "/SWI SYSTEM FORCE" to enable (*subsystem*) TKO to proceed.

Explanation: Automation has detected a takeover condition. However, because automatic takeover has not been specified by the installation, the operator must verify the Active IMS subsystem and reply with an appropriate command on the Alternate IMS subsystem to allow takeover to proceed, if applicable.

Operator Response: Verify the Active IMS, and enter an appropriate command to allow takeover to proceed, if applicable.

EVI736W "*entry_type*" control file entry not found - *action*.

Explanation: Automation issued a request to change a specific value upon a takeover. Refer to the message text to determine the specific value. The required entry and/or type parameter has not been specified by the installation.

EVI737A Backup IMS subsystem, *subsystem*, has not completed shutdown. *msgtext*.

Explanation: Shutdown of the Alternate IMS subsystem has not completed. If the installation has specified SHUTGO=YES in the Automation control file member, the Active IMS subsystem will be notified to proceed with its shutdown. Otherwise, manual intervention by the operator is required to allow IMS shutdown to proceed.

Operator Response: Depending on the text of the message, either no action is required or manual intervention by the operator is required to allow IMS to shutdown.

EVI739W XRF surveillance shutting down for IMS=*subsystem*, REASON=*msgtext*.

Explanation: XRF surveillance task is shutting down.

msgtext:

- 1 TAKEOVER COMPLETED
- 2 STATUS IS NORMAL/PROBABLY NORMAL
- 3 ALTERNATE HAS TAKEN OVER
- 4 OLD ACTIVE IS TERMINATING
- 5 RECOVERY AUTOMATION IS OFF FOR THIS SYSTEM
- 6 THIS SYSTEM IS NOT XRF CAPABLE
- 7 ALTERNATE NOT UP TO PERFORM TAKEOVER
- 8 PARTNER DOMAIN,SUBSYS,SUBID NOT AVAILABLE
- 9 CONTROL REGION NOT AVAILABLE FOR TAKEOVER
- 10 BAD RETURN CODE (rc) RETURNED FROM (cmd)
- 11 DBRC DEPENDENT SUBSYSTEM NOT FOUND FOR (subsys)
- 12 MY/PARTNER STATUS (XRFStatus) IS INVALID - WATCH IS TERMINATING
- 13 SUBSYSTEM ID IS INCORRECT

System Action: The surveillance task is shut down.

Operator Response: Depending on the text indicated by *msgtext*, either no action is required (1,2,3,4), or the system programmer should be contacted.

System Programmer Response:

- 5 Check to see if the recovery automation flag is correct
- 6 Check to see why the XRF status is NOXRFC or the XRF ACF environ parameter is not YES
- 7 Check why the status of the alternate subsystem is not UP
- 8 Check why partner domain,subsystem,subid failed as per EVI706E
- 9 Check if the XRF status for the control region is valid
- 10 Refer to documentation for the failing command
- 11 Check logs for possible EVI465, EVI551, or EVI524 to indicate error
- 12 Check the XRF status for each of the XRF subsystems to be valid
- 13 Check that the subsystem indicated is valid

EVI740A Default HSB *deflthsb* and starting HSB *hsbid* found to be different - Reply "GO" to confirm or "CANCEL" to abort.

Explanation: A request has been issued to start an XRF IMS subsystem with a HSBID different than the default HSBID setting in the control file. The operator is given a second chance to confirm or to abort the request.

EVI741A *subsys - subsys_type subsystem subsystem is status_description; its status entry = status.*

Explanation: Startup monitoring has found the subsystem in the indicated status.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the cause of the error. The IMS startup timer value may require a change to allow IMS to come up completely before the timer is triggered.

EVI743A **Cannot issue checkpoint command for *subsystem*. Please proceed with manual shutdown!!!**

Explanation: Automation attempt to issue an IMS shutdown command failed. Manual intervention is required to shutdown IMS.

System Action: CLIST is terminated.

Operator Response: Manually shutdown IMS and notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI744I **Multiple requests from alternate IMS *subsystem* to issue SNAPQ to IMS *tgprtnrsub* - Automation will not reissue.**

Explanation: Duplicate requests from the Alternate IMS subsystem to issue a /CHE SNAPQ command. Automation will bypass duplicate requests.

System Action: CLIST is terminated.

EVI745W **Unable to issue one or more *rs* IMS replies or commands- *msgtext*.**

Explanation: Automation attempted to issue one or more failing IMS termination post checkpoint commands.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the problem cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI746A **Request ignored; invalid partner data.**

Explanation: Request to retrieve information for a partner IMS subsystem failed due to missing or invalid values specified in the control file.

System Action: CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the partner IMS subsystem information in the control file.

EVI747I *subsystem* **is now in status status; will not continue processing since subsystem is not in AUTOTERM status.**

Explanation: IMS subsystem has completed its shutdown phase. IMS shutdown monitor CLIST has terminated its processing.

System Action: CLIST is terminated.

EVI748A *subsystem shuttype* **shutdown is not complete; there is no active region or terminal; operator intervention is required.**

Explanation: Automation has determined that there are no resources which would prevent IMS from shutting down. However, IMS is still not terminating. Manual intervention by the operator is required.

System Action: CLIST is terminated.

Operator Response: Take an appropriate action to bring down IMS.

EVI749A *subsystem shuttype* **shutdown cannot complete; some regions or terminals are still active; operator intervention is required.**

Explanation: Automation has determined that there are active regions and/or terminals which will prevent IMS from shutting down. Manual intervention by the operator is required to allow IMS to shutdown.

System Action: CLIST is terminated.

Operator Response: Take an appropriate action to allow IMS to come down.

EVI750I **BACKUP *altsubsys* on domain *domainid* was not started for subsystem *subsystem* because ALTSTART was not requested.**

Explanation: The operator attempted to start up the XRF complex with a start type of DEFAULT, which starts both the primary and backup subsystem. Startup initiated for the primary, but not for the alternate or backup subsystem. Startup was not initiated for the backup because the ENVIRON control file entry has ALTSTART=NO.

Operator Response: Manually start the backup subsystem with a start type of AUTO and start option 2 for ALTERNATE.

System Programmer Response: If you wish to enable operators to bring up both partners in the XRF complex together, specify ALTSTART=YES on the ENVIRON control file entry.

EVI751I **RESYNC processing terminated for subsystem *subsystem*, module=*module*.**

Explanation: The resynchronization process for the IMS subsystem has been terminated due to the no-zero return code from the requested function.

Operator Response: None.

System Programmer Response: Check the return code and correct the problem.

EVI752I *subsystem* **AS mode - subtype *subsystem*, *subsystem*, is already up; but its status entry = *status*.**

Explanation: Discrepancy found between the IMS component and its status in the Automation status file.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log, the control file, and the status file to determine the cause of the error. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI753A Backup system *subsystem* cannot be started without the active system
tgprtnrsub - Partner status *prtnrst*s.

Explanation: Request to start an IMS Alternate subsystem failed. The Active IMS must be "UP" before retrying the request.

System Action: The CLIST is terminated.

Operator Response: Ensure that the Active IMS is "UP," then retry the request.

EVI754A Active system *subsystem* cannot be started with the partner system
tgprtnrsub - Status of "prtnrsts".

Explanation: Request to start an IMS Active failed. The Alternate IMS subsystem status must not be "STARTED," "STARTED2" or "UP."

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Investigate the problem. Manually modify the status of the Alternate IMS subsystem and have the operator retry the request.

EVI755A *subsystem shuttype* shutdown cannot proceed; terminal *termid* *termsts*
termspl is still active.

Explanation: IMS shutdown cannot proceed because there are still active terminals with outputs in progress.

Operator Response: Manually disconnect all (active, Q, and so on) sessions with IMS to allow IMS shutdown.

EVI756A *subsystem shuttype* shutdown cannot proceed. Active *regtype* region with
 ID=*regid*; JOBNAME=*regjob*; TASKNAME=*regtask*.

Explanation: Normal IMS shutdown cannot proceed because there are still active regions processing work.

Operator Response: Wait until the active regions have finished, or manually force them to terminate.

EVI757A *subsystem* regions and/or terminals found active during "keyword"
 shutdown - "shuttype" shutdown proceeding (SHUTGO=*shutgo*).

Explanation: Automation has detected that there are still active regions in IMS that will prevent IMS from shutting down. However, since the installation has selected the option to escalate the shutdown process after "n" minutes (shutdown timer value), next level of IMS shutdown is proceeding (NORMAL→IMMEDIATE→FORCE).

EVI758A *subsystem* - Issuing command to terminate active sessions on APPLID
applid.

Explanation: Command has been issued to terminate IMS active sessions.

EVI759A Request *reqtype* failed for node *nodeid* due to error or time out.

Explanation: Request to activate/deactivate a node failed (refer to value in the EVI759A message).

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Verify and correct the IMS VTAM major node value in the control file (if applicable). Also browse the NetView log to determine the error cause.

EVI760A *subsystem* - **Issuing command to terminate active regtype region with ID=regid, JOBNAME= regjob, TASKNAME=regtask.**

Explanation: Command has been issued to terminate IMS active regions.

EVI761A *subsystem* - **No reply to command because the status of subsystem is status.**

Explanation: Request to issue an IMS command failed without returning a reply. IMS may have terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine whether there is a problem.

EVI762E *subsystem/jobname* - **Cancel on WAIT command.**

Explanation: Request to invoke a command with wait was cancelled.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine why the wait command was cancelled.

EVI763A *subsystem process* - **Some components are inactive.**

Explanation: IMS startup monitor has completed. Some of the IMS components are not active.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Start timer value may require adjustment to allow IMS to come up completely before the timer is triggered.

EVI764A **Cannot determine the progress of startup for IMS subsystem *subsystem* because "/DIS A" command failed. Startup monitor rescheduled.**

Explanation: Attempt to verify IMS startup failed.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI765A *subsystem* **still has active regions; normal termination is aborted.**

Explanation: Request for IMS normal shutdown has terminated because regions are still active and work is being processed.

System Action: The CLIST is terminated.

Operator Response: Retry after all normal work has completed, or request an immediate shutdown (if applicable).

EVI766A *subsystem* - **region regid has an active regtype task with JOBNAME=regjob and TASKNAME=regtask.**

Explanation: Regions are still active and work is being processed.

EVI768A Did not process *msgid* message to complete abend recovery processing for *subsystem*.

Explanation: Automation has not processed the message to complete the abend recovery for the IMS subsystem.

System Action: The CLIST is terminated.

EVI769A *subsystem* has not completely abended; its current status is *status*.

Explanation: The IMS subsystem is still in abending mode.

System Action: The CLIST is terminated.

EVI770W *msgid* message has already been processed.

Explanation: The CLIST was invoked by a duplicate message.

System Action: The CLIST is terminated.

EVI771W *subsystem* IS NOT A SUBSYSTEM ENTRY.

Explanation: The requested subsystem is not defined to automation.

System Action: The CLIST is terminated.

Operator Response: Check the name of the subsystem and retry.

EVI772A Request to start *subsystem* as an XRF alternate failed due to discrepancy in LHSBID *lhsbid*. Manually restart.

Explanation: Request to start an IMS Alternate subsystem failed. HSBID value stored in the Automation status file does not match the IMS Active partner's HSBID.

System Action: The CLIST is terminated.

Operator Response: Activate the NNT gateway defined between the two IMS subsystems, and manually issue an IMS (/CHE or /CHE SNAPQ) command on the Active IMS subsystem.

EVI773E *altstatus* is not a valid value for *altsys* entry in status file.

Explanation: Invalid value found for a status entry in the status file.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to locate the error source, and manually correct the status entry value. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI774E Invalid control file value. ENTRY = *subsystem*, TYPE = *parmtype*, PARAMETER = *parm*, PARAMETER VALUE = *parmvalue*.

Explanation: Invalid value defined in the control file. Refer to values in the EVI774E message.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the value of the keyword in error in the Automation control file member.

EVI775E *msgid* is not a valid message ID for this CLIST to process; this CLIST processes the *msgcode* message.

Explanation: The CLIST was invoked by an unsupported message.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the Message Automation Table member, or modify the CLIST to support the message.

EVI776E *status* is not a valid resource status for subsystem *subsystem* within this CLIST processing.

Explanation: Invalid subsystem status found in the status file. CLIST processing is terminated.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine the error cause. Correct the status and retry. Manual intervention may be required.

EVI777E *subsystem* is not automated for restart; should not be processing this CLIST.

Explanation: The automated restart function has not been selected by the installation. Processing is terminated.

System Action: The CLIST is terminated.

Operator Response: Manually restart IMS.

EVI778A IMS subsystem *subsystem* is running as *mode*; but its XRFMODE = *xrfmode*.

Explanation: Discrepancy found between the IMS type (XRF/non-XRF) and the XRFMODE value in the Automation status file.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log, the control file, and the status file to determine the error cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI779A Takeover watch continuing - verify *subsystem* on domain *domainid* (XRFSTATUS=*status*) is aware of takeover of *prtnrsub* on domain *prtnrdom* (XRFSTATUS=*prtnrst*s).

Explanation: Takeover is proceeding. The operator must monitor the takeover process.

Operator Response: Monitor the takeover process.

EVI780A Potential "CPC" failure for subsystem *subsystem* on domain *domainid*.

Explanation: During an XRF takeover, Automation has detected a potential CPC failure on the HOST domain. Manual intervention is required to allow the takeover to proceed.

Operator Response: Notify your system programmer.

System Programmer Response: Gather necessary documentation and determine the course of action to be taken to allow the takeover to proceed. If HOST domainid has not failed, analyze the logs for the cause of this message. Otherwise, take note of any additional

messages issued and take any appropriate actions to allow the takeover to proceed (this may require an IPL of the HOST domainid).

EVI781A **IMS takeover** *tkostatus subsystem subsystem on domain domainid - XRF status is status.*

Explanation: Takeover is in progress. Refer to the status value in the EVI781A message.

Operator Response: Monitor the takeover process.

EVI782A **"AVMSTS" is "OFF" for subsystem. Please ensure that subsystem terminated, then reply "UNLOCK" to MSG "AVM005A" on the "BACKUP".**

Explanation: AVM is not active to prevent IOs. Therefore, the operator must make sure that the old Active IMS subsystem has terminated before replying "UNLOCK" to message AVM005A on the Alternate/new Active IMS subsystem.

Operator Response: Verify to ensure that the old Active IMS subsystem has terminated before replying "UNLOCK" to message AVM005A on the Alternate/new Active IMS subsystem.

EVI783A **subsystem is abending; takeover will automatically proceed.**

Explanation: The Active IMS subsystem is abending. The Alternate IMS subsystem has begun the takeover process.

EVI784A **Please verify automation. Manually enter "SWITCH" command on domain domainid for subsystem if required.**

Explanation: Surveillance has detected a potential problem in the Alternate IMS subsystem during takeover. The operator must verify automation and monitor the takeover process. Manual intervention may be required to allow takeover to proceed.

Operator Response: Manually verify automation/subsystem, and take appropriate actions to allow takeover to continue.

EVI785A **Potential "TAKEOVER" problem with "subsystem" on domain domainid. Please verify and take actions.**

Explanation: Surveillance has detected a potential problem in the subsystem domain. The operator must verify and take appropriate actions to allow takeover to proceed.

Operator Response: Manually verify and take appropriate actions to allow the takeover process to continue.

EVI786A **Manually reply "UNLOCK" to message "AVM005A" after the OLD Active IMS subsystem has become IO-FREE.**

Explanation: During an XRF takeover, Automation was unable to determine if the old Active IMS subsystem was IO-FREE and was therefore unable to reply to the AVM005A WTOR. Manual intervention is required.

Operator Response: If the Old active IMS system status is IO-FREE, then reply UNLOCK to the AVM005A WTOR. Otherwise, take appropriate actions to allow the Old Active IMS system to become IO-FREE and then reply UNLOCK to the AVM005A WTOR.

EVI787A **IMS XRF takeover completed by subsystem.**

Explanation: The Alternate IMS subsystem has completed its takeover.

EVI788A Default IMS start type of *starttype* is not allowed. Startup processing halted for IMS subsystem *subsystem*.

Explanation: Missing or invalid starttype specified in the control file.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Correct the starttype value in the control file.

EVI790A IMS (*resname*) startup failure *subsystem lit*

Explanation: Request to start an IMS Alternate failed. HSBID value stored in the status file does not match with the partner IMS Active's HSBID.

System Action: The CLIST is terminated.

Operator Response: Activate the NNT gateway defined between the two IMS's, and manually issue an IMS (/CHE or /CHE SNAPQ) command on the Active IMS subsystem.

EVI791W *autotype* Automation for *restype resname*. Job *jobname* is set off - function

Explanation: Automation Flag was set to off, and the requested function did not occur.

System Action: Specified function was not executed.

EVI792E Route command to domain "*tgprtnrdom*" failed and unable to restart. Please notify support.

Explanation: NNT gateway between the Active and the Alternate IMS subsystem is not active.

Operator Response: Notify your system programmer.

System Programmer Response: Activate NNT gateway between the two IMS subsystems, and retry the command.

EVI793A Outstanding reply *msgid msgtext*

Explanation: Automation Flag was set to off, and the outstanding reply was not responded to.

Operator Response: Reply to the request manually.

EVI794E Initialization exit processing failed for IMS feature. *msgtext*.

Explanation: IMS automation initialization exit failed during phase indicated.

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log and the control file member to determine the cause of the error. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn "trace off" to "trace i." For a NetView CLIST, change "&Control Err" to "&Control All."

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI796A Cannot determine the progress of startup for IMS subsystem, *subsystem*; not STARTED (*status*) or UP.

Explanation: IMS startup monitor terminated because IMS status was not “STARTED” or “UP.”

System Action: The CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView and system logs to determine the cause of the error.

EVI797W XRF status update not done for *resname resid = subsystem1 subsystem2* - Subsystems not found or takeover process not ready.

Explanation: Status update failed due to discrepancy between the resource name for the XRF complex defined in the DFSHSBxx member of IMS proclib. and the IMS subsystem name.

System Action: CLIST is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Browse the NetView log to determine problem cause. Determine whether the CLIST is NetView CLIST language, or a REXX CLIST. If the affected CLIST is REXX, turn “trace off” to “trace i.” For a NetView CLIST, change “&Control Err” to “&Control All.”

Attention: If the CLIST is resident, do a dropcl, loadcl for the CLIST or recycle NetView.

EVI820I *subsystem* ARCHIVE JOB *jobname* HAS NOT COMPLETED FOR *olds_ddname*

Explanation: IMS Automation has detected a possible problem with the archive job for this online data set (OLDS). Possible causes follow:

- The archive job may not have started because, although it is scheduled, there are no available JES initiators.
- The archive job is copying data from the OLDS to the system log data set (SLDS) slower than expected.

System Action: Processing continues.

Operator Response: Look at the job queues to see if the archive job has no available JES initiator; determine if the archive job is not running because its job class is lower than the other jobs running.

If the archive job is processing slowly, correct the problem.

If you cannot find the cause of the problem or if the archive job seems to be executing normally, contact your systems programmer.

System Programmer Response: Investigate the problem and correct.

Note: If you find that the archive job is executing in an acceptable amount of time, you may want to adjust the setting of the archive timer. The archive timer is set on the OLDS control file entry as shown:

```
OLDS,
    ARCHIVETIME=00:20:00
```

```
:
```

In this example, IMS Automation issues the EVI820I message whenever the archive job runs longer than 20 minutes. The default interval for the archive timer is 10 minutes.

EVI821I *subsystem* **ARCHIVE JOB** *jobname* **PROBABLY FAILED FOR**
olds_archive_timer

Explanation: When IMS Automation last checked, this archive job was processing, but now the online data set (OLDS) indicates that an archive is needed. The cause is probably an archive job failure.

System Action: Processing continues.

Operator Response: First, determine if the archive job actually failed. If so, correct the problem. If the archive job did not fail, determine the reason the OLDS needs a dataset. If you cannot find the cause of the problem, contact your systems programmer.

System Programmer Response: Investigate the problem and correct.

EVI822I *subsystem* **OLDS** *olds_ddname* **HAS ERROR STATUS OF** *archive_status -*
other_status

Explanation: IMS Automation has detected a problem with the online data set (OLDS).

Destination:

subsystem The IMS name

olds_ddname The OLDS that has an error status

archive_status The archive status for this OLDS

other_status The "other_status" value as shown when you issue the DISPLAY OLDS
command for this IMS (DIS OLDS).

System Action: Processing continues.

Operator Response: Determine the cause of the OLDS error and correct the error. If you cannot find the cause of the problem, contact your systems programmer.

System Programmer Response: Investigate the problem and correct.

EVI823I *subsystem* **OLDS STATUS MISMATCH BETWEEN** *primary_olds (archive_status*
other_status) **AND** *secondary_olds (archive_status other_status)*

Explanation: This IMS is running dual-OLDS logging. IMS Automation has detected that the statuses for the primary OLDS and the secondary OLDS, which should be identical, are different. Therefore, this dual-OLDS pair is unusable.

Destination:

subsystem The IMS name

primary_olds_ddname The primary OLDS ddname (DFSOLPnn)

archive_status The archive status for this OLDS

other_status The "other status" as shown when you issue the DISPLAY OLDS
command for this IMS (DIS OLDS)

secondary_olds The secondary OLDS ddname (DFSOLSnn)

System Action: Processing continues.

Operator Response: Call your systems programmer.

System Programmer Response: Refer to the IMS documentation to correct the OLDS problem.

EVI824I **Archive job started for OLDS** *ddname* **on** *subsystem*.

Explanation: Archive job has started for the dataset.

EVI825I SPARE OLDS *ddname* ON *subsystem* STARTED.

Explanation: The number of available online data sets (OLDS) has dropped below the minimum needed (as defined in the control file), so IMS Automation started one of the spare OLDS.

Note: This message is issued each time IMS Automation starts another spare OLDS.

System Action: Processing continues. The OLDS are filling quicker than the archive jobs are copying the data from the OLDS to the system log data sets (SLDS). If the problem continues, all OLDS could potentially fill and thus stop the IMS.

Operator Response: Determine the cause of the problem that made it necessary for IMS Automation to start the spare OLDS, then correct the problem. Possible causes are an archive job that is not processing correctly or a problem running a batch job. If you cannot find the cause of the problem, contact your systems programmer.

System Programmer Response: Investigate the problem and correct.

EVI826W *subsystem* is waiting for an online log data set to be archived.

Explanation: All non-stopped OLDS require archiving, so they may be reused. The *subsystem* is suspending processing until an OLDS is available.

Operator Response: Submit an archive job to free an OLDS.

EVI827A *subsystem* is using the last allocated online log data set.

Explanation: The subsystem is using the last available dataset.

Operator Response: Archive already-used logs, or allocate additional datasets.

EVI828I *subsystem threshold_type* THRESHOLD EXCEEDED FOR OLDS SWITCH

Explanation: One IMS online data set (OLDS) has filled and so IMS has switched to another OLDS. The switch from one OLDS to another has occurred sooner than expected. One possible cause is a problem running a batch job.

Destination:

subsystem The IMS affected

threshold_type CRIT, FREQ, or INFR. These threshold types are settings on the THRESHOLDS *subsystem_OLDS* control file entry.

- CRIT** The critical threshold indicates the OLDS are switching at a rate that is a potentially urgent threat to the IMS.
- FREQ** The frequent threshold indicates the OLDS are filling up and switching at a fast rate, but slower than the critical threshold rate.
- INFR** The infrequent threshold is an early warning of a potential problem with the OLDS filling too quickly.

System Action: Processing continues.

Operator Response: Determine the reason that the switch from one OLDS to another is happening so quickly. Possible causes are an archive job that is not processing correctly or a problem running a batch job. If you cannot find the cause of the problem, call your systems programmer.

System Programmer Response: Investigate the problem and correct.

Note: If you find that the OLDS are filling at a normal rate and the IMS is not threatened, adjust the threshold settings in the control file as shown:

```
THRESHOLDS subsystem_OLDS,
            CRIT=(05,00:30),FREQ=(03,00:30),INFR=(01,00:30)
```

Make these settings low enough to detect and correct OLDS problems before the IMS stops.

EVI829I *subsystem* **STATUS CHANGE UNEXPECTED - ddname FROM first_status TO second_status**

Explanation: IMS Automation detected that the status of the ddname changed to a value that was unexpected. The cause is probably an internal program error.

System Action: Processing continues.

Operator Response: Contact your IBM Support Center (ISC).

System Programmer Response: None.

EVI830W **SPARE RECON IS NOT AVAILABLE FOR** *subsystem*

Explanation: A RECON data set error has occurred. A RECON data set may have filled or there may be an I/O error.

System Action: Processing continues.

Operator Response: Contact your systems programmer.

System Programmer Response: Follow your site's documented procedures for RECON recovery.

EVI831I **DUAL RECON COPY IS NOT ACTIVE FOR** *subsystem*

Explanation: Only one RECON data set is available, so dual RECON cannot run.

System Action: Processing continues.

Operator Response: Call your systems programmer.

System Programmer Response: Follow your site's documented procedures for RECON recovery.

EVI832W *subsystem* **HAS RECON STATUS OF status FOR ddname - DSN data_set_name**

Explanation: The RECON has a status of *discarded* or some other error status.

System Action: Processing continues.

Operator Response: Call your systems programmer.

System Programmer Response: Follow your site's documented procedures for RECON recovery.

EVI833A *subsystem* **has exceeded THRESHOLD of nn OLDS data sets in BACKOUT status.**

Explanation: The user defined threshold for the maximum number of online log data sets with a status of BACKOUT has been exceeded.

System Action: None.

Operator Response: Ensure that this condition is normal and that the remaining OLDS data sets are not being set to the BACKOUT condition. The /DISPLAY OLDS command can be used to display the status of all OLDS.

The following responses are acceptable:

1. No response. IMS continues processing.
2. In an MVS environment, additional OLDS may be activated with the /START OLDS command.

System Programmer Response: None.

EVI834I *subsystem* **needs another OLDS dataset - OLDS shortage**

Explanation: IMS has issued message DFS3260I. Because of I/O errors and/or /STOP OLDS commands, two or less online log data sets (OLDS), are available which can be used by IMS.

System Action: If two OLDS remain, IMS continue processing. If there is only one, IMS initiates a /CHE FREEZE.

Operator Response: The /DISPLAY OLDS command can be used to display the status of all OLDS. When two data sets remain, any one of the following responses is acceptable:

1. No response, IMS continues processing.
2. In an MVS environment, additional OLDS may be activated via the /START OLDS command.
3. The checkpoint command may be used to initiate an IMS shutdown.

System Programmer Response: None.

EVI835A **ALL SPARE OLDS IN USE FOR** *subsystem*

Explanation: All spare OLDS data sets are in use and no more are available. When the last available OLDS is full, IMS will stop.

System Action: Processing continues. The OLDS are filling more quickly than the archive jobs are copying the data from the OLDS to the system log data sets (SLDS). If the last OLDS fills, IMS stops.

Operator Response: Immediate action is required. Possible problems are an archive job that is not processing correctly or a problem running a batch job. If you cannot find the cause of the problem, call your systems programmer.

System Programmer Response: Investigate the problem and correct.

EVI836I *subsystem* **SPARE OLDS** *spare_olds_ddname* **FAILED TO START DURING OLDS RECOVERY**

Explanation: The number of available OLDS has dropped below the minimum number required. IMS Automation attempted to start a spare OLDS, but the OLDS failed to start.

System Action: Processing continues. The OLDS are filling more quickly than the archive jobs are copying the data from the OLDS to the system log data sets (SLDS). If the problem continues, all OLDS could potentially fill and stop the IMS.

Operator Response: Report the spare OLDS problem to your systems programmer. Determine the cause of the problem that made it necessary for IMS Automation to start a spare OLDS.

System Programmer Response: Probably, the spare OLDS that IMS Automation is trying to start does not exist. To correct the problem, determine which OLDS IMS Automation is searching for and define that OLDS, or change the spare OLDS to an existing, defined OLDS that is not in use. To see which OLDS are IMS Automation spares, browse the OLDS entry in the control file:

```
OLDS,
  SPARES=(05,99)
```

```
:
```

In this example, the two OLDS that are used as spares are 05 (DFSOLP05) and 99 (DFSOLP99). Make this entry match the names of existing, defined OLDS. If you define new OLDS, you must stop and restart IMS before the changes take effect.

EVI837A *subsystem* **AVAILABLE OLDS BELOW MINIMUM - NO SPARES DEFINED**

Explanation: IMS Automation has detected that the number of available online data sets (OLDS) has dropped below the minimum required number (as defined in the control file). IMS Automation cannot start any spare OLDS because none have been defined in the control file.

System Action: Processing continues. The OLDS are filling more quickly than the archive jobs are copying the data from the OLDS to the system log data sets (SLDS). If the problem continues, all OLDS could potentially fill and stop the IMS.

Operator Response: Determine the cause of the problem and correct. Possible problems are an archive job that is not processing correctly or a problem running a batch job. If you cannot correct the problem, call your systems programmer.

System Programmer Response: Investigate the problem and correct. To define OLDS as IMS Automation spares, edit the OLDS control file entry:

```
OLDS,
  SPARES=(05,99)
```

```
:
```

In this example, the two OLDS that are used as spares are 05 (DFSOLP05) and 99 (DFSOLP99). Make this entry match the names of existing, defined OLDS. If you define new OLDS, you must stop and restart IMS before the changes take effect. Refer to the *AOC/MVS IMS Automation Programmer's Reference and Installation Guide* for more information.

EVI838A *subsystem* **OLDS RECOVERY CANNOT OCCUR - NO SPARES DEFINED**

Explanation: IMS Automation cannot start any spare OLDS because none have been defined in the control file.

System Action: Processing continues. If the OLDS recovery is activated and additional OLDS are needed, IMS Automation will not be able to start any. Should a problem occur, all OLDS could potentially fill and stop the IMS.

Operator Response: None.

System Programmer Response: Investigate the problem and correct. To define OLDS as IMS Automation spares, edit the OLDS as control-file entry:

```
OLDS,
  SPARES=(05,99)
```

```
:
```

In this example, the two OLDS that are used as spares are 05 (DFSOLP05) and 99 (DFSOLP99). Make this entry match the names of existing, defined OLDS. If you define new OLDS, you must stop and restart IMS before the changes take effect. Refer to the *AOC/MVS IMS Automation Programmer's Reference and Installation Guide* for more information.

EVI839I *subsystem* **MINIMUM OLDS DEFINITION OF *minimum_number* IS TOO LARGE - NORMAL OLDS VALUE IS *normal_number* - DEFAULT USED.**

Explanation: The minimum number of online data sets (OLDS) that must be available at all times cannot be larger than the normal number of OLDS. The default minimum number is 50% of the normal number of OLDS.

Destination:

subsystem The IMS affected.

minimum_number The minimum number of available OLDS needed at all times (defined in the control file).

normal_number The number of OLDS shown when you issue the DISPLAY OLDS command (DIS OLDS). The normal number includes all OLDS that IMS started at initialization or that operators started (not including spares). Existing OLDS that are not available are not part of the normal number of OLDS.

System Action: Processing continues.

Operator Response: None.

System Programmer Response: Change the minimum number of OLDS to a number equal to or less than the normal number. Edit the OLDS control file entry:

```
OLDS,
  MINIMUM=05,
```

:

In this example, the minimum number of OLDS that must be available at all times is five. Therefore, the normal number of OLDS should be five or more.

EVI841I *recovery area recovery is off (subsystem) for transaction program with abend abendtype in job jobname.*

Explanation: Automated recovery for the specified area is turned off, and an abend has been detected.

EVI890I *msgtext*

Explanation: This message is used internally for transferring data.

Operator Response: None.

EVI891E *msgtext*

Explanation: This message is used internally for transferring data.

Operator Response: None.

EVI892E *msgtext*

Explanation: This message is used internally for transferring data.

Operator Response: None.

EVI894I *message routing information*

Explanation: This is an internal message that contains routing information. Its format will vary.

Operator Response: Internal message; no action required.

EVI895I **Message routing information.**

Explanation: This is an internal message that contains routing information. Its format will vary.

Operator Response: Internal message; no action required.

EVI896I *data to maintain.*

Explanation: This is an internal message that contains maintenance information. Its format will vary.

Operator Response: Internal message; no action required.

EVI897I END

Explanation: This is an internal message that marks the end of a multi-line message.

Operator Response: Internal message; no action required.

Glossary of IMS Automation Terms

This glossary defines special IMS terms used in the library and words used with other than their everyday meaning. In some cases, a definition may not be the only one applicable to a term, but it gives the particular sense in which it is used in the IMS Automation Option library.

abend. Abnormal end of task.

ACB. Access Method Control Block (VTAM and VSAM).

access method. A technique for moving data between main storage and input/output devices.

ANSI. American National Standards Institute.

AOST. Automated Operator Station Task.

APAR. Authorized program analysis report.

application program. A program written for or by a user that applies to the user's work. In data communication, a program used to connect and communicate with stations in a network, enabling users to perform application-oriented activities.

automation. Computer system control of operation processes.

authorized program analysis report (APAR). A request for correction of a problem caused by a defect in a current unaltered release of a program.

batch. An accumulation of data to be processed.

batch message processing. In IMS/VS, a batch processing program that accesses online data bases and message queues.

BMP. Batch Message Processing Region.

CCTL. Coordinator Controller.

central processing complex (CPC). A conglomeration of several processors and other devices in one or more physical units. This usually means several processors running under the control of a single MVS/ESA operating system. For example, a 3090 model 400 processor complex can run as a four-processor CPC, or it can be partitioned into the equivalent of two 3090 model 200s, each of which runs as a CPC with its own operating system.

CICS. Customer Information Control System.

CLIST. Command List.

CMM. Critical Message Manager.

CNM. Communications Network Management.

command. In IMS, an instruction similar in format to a high-level programming language statement.

command list (CLIST). A list of commands and statements designed to perform a specific function for the user. Command lists can be written in REXX or in NetView Command List Language.

common state handler (CSH). Routine that IMS Automation calls from the NetView Automation Table to drive the actions defined in state/action tables.

concurrent. Pertaining to the occurrence of two or more activities within a given interval of time.

control file. In IMS Automation, the SA OS/390 file where a system programmer defines the automation environment, resources to be automated, and the extent and characteristics of automation.

control file entry. An entry in the control file that carries out specific functions on the basis of defined parameters and keywords associated with that entry. Some control file entries are unique to IMS Automation.

CPC. Central Processing Complex.

critical message manager (CMM). Facility in IMS Automation which displays critical messages in a scrollable format and enables operators to access information relating to the critical messages displayed.

CSA. Common Storage Area.

CSH. Common State Handler.

database. A collection of data fundamental to a system.

database backout. The function of removing changes made to user data sets by in-flight transactions.

database recovery. The function of restoring the user data sets, starting with a backup copy and applying all changes made to each data set after the backup was taken.

data security. The protection of data against unauthorized disclosure, transfer, modifications, or destruction, whether accidental or intentional.

data set. The major 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.

DBCTL. Data Base Control.

DEDB. Data Entry Data Base.

DLISAS. Data Language Interface Separate Address Space (IMS Batch).

domain. In IMS, a set of subsystems on a specific NetView domain defined by the system programmer in the control file.

end user. In IMS, anyone using IMS to do a job, usually by interacting with an application program (transaction) by means of a terminal.

exception. An abnormal condition such as an I/O error encountered in processing a data set or a file, or using any resource.

Fast Path. IMS Automation function which enables the user to access any IMS Automation interface panel by entering = and an identifying number.

Fast Path Message Region. In IMS, a region that executes programs that require good response characteristics and that have large transaction volumes. Message processing is grouped for load balancing and synchronized for database integrity and recovery.

focal point system. In IMS, a system in which multiple subsystems are interconnected. One subsystem serves as a focal point of control, and the others are referred to as intermediate or distributed systems.

group. In IMS, a set of subsystems defined under one group name by the system programmer in the control file.

HM. Help Message.

HSBID. Hot Standby Identifier.

HSSP. High-Speed Sequential Processing.

initial program load (IPL). The initialization procedure that causes an operating system to commence operation.

initialization. Actions performed by IMS to construct the environment in the IMS region to enable IMS applications to be run. A process started by SA OS/390 and IMS Automation to construct the environment in which automation will occur.

installation. A particular computing system, in terms of the work it does and the people who manage it, operate it, apply it to problems, service it and use the

work it produces. The task of making a program ready to do useful work. This task includes generating a program, initializing it, and applying PTFs to it.

Installation Verification Procedure (INSTALL/IVP).

Procedure distributed with the system that tests the newly generated system to verify that the basic facilities are functioning correctly.

INSTALL/IVP. Install/Installation Verification Procedure.

Integrated Resource Lock Manager (IRLM). In IMS Automation, this facility is used as a lock manager, both as a single lock manager and in a data sharing environment.

intercommunication facilities. A generic term covering intersystem communication (ISC) and multiregion operation (MRO).

intersystem communication (ISC). Communication between separate systems by means of SNA networking facilities or by means of the application-to-application facilities of an SNA access method. ISC links IMS systems, and it may be used for user application-to-user application communication, or for transparently executing IMS functions on a remote IMS system.

IPL. Initial Program Load.

IRC. Interregion communication.

IRLM. Integrated Resource Lock Manager.

ISC. Intersystem Communication.

IVP. Installation Verification Procedure.

keyword. A symbol that identifies a parameter. A part of a command operand that consists of a specific character string.

local. In data communication, pertaining to devices that are attached to a CPC by cables, rather than data links.

local device. A device, such as a terminal, whose control unit is directly attached to a computer's data channel. No data link is used. Contrast with remote device.

lock manager. Feature of IMS Automation responsible for serializing the recovery process in areas where multiple subsystems can invoke recovery actions.

member. See partitioned data set.

MPP. Message Processing Program.

MSC. Multiple Systems Coupling.

MSDB. Main Storage Data Base.

MTO. Master Terminal Operator.

Multiple Systems Coupling (MSC). An IMS/VS feature that permits geographically dispersed IMS/VS systems to communicate with each other.

NCCF. Network Communications Control Facility.

network. An interconnected group of nodes. The assembly of equipment through which connections are made between data stations.

network configuration. In SNA, the group of links, nodes, machine features, devices, and programs that make up a data processing system, a network, or a communication system.

Network Communications Control Facility (NCCF). IBM licensed program consisting of a base for command processors that can monitor, control, and improve network operations.

non-XRF (non-XRF IMS). Represent IMS in a non-XRF configuration.

NPDA. Network Problem Determination Aid/Application.

OLDS. Online Log Data Set.

online. Pertaining to a user's ability to interact with a computer. Pertaining to a user's access to a computer via a terminal.

panel. In IMS Automation, the set of information displayed on a single screen of the user interface.

parameter. (ISO) A variable that is given a constant value for a specified application and that may denote the application.

partitioned data set (PDS). 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. Synonymous with program library.

parent. In IMS Automation, system programmers can define a *parent* subsystem such that the subordinate subsystems (children) cannot be started until the *parent* is active or a *parent* cannot be shut down until all its children/subsystems are inactive.

PDS. Partitioned Data Set.

platform control file (platform control file entries). Specifies that this is an entry or function of SA OS/390.

PPI. Program-to-program interface.

preprocessor. Routine in IMS Automation that enables the programmer to define unique GLOBALV names to store the state value of certain processes.

processor (ISO). In a computer, a functional unit that interprets and executes instructions.

Program-to-program interface (PPI). A NetView component used by IMS Automation to enable users to send or receive data buffers from other programs. It also allows system and application programs to send alerts to the NetView hardware monitor.

PTF. Program Temporary Fix.

PUT. Program update tape.

RACF. Resource Access Control Facility.

RDS. Restart Data Set.

RECON. Recovery Control.

recovery routine. A routine entered when an error occurs during the performance of an associated operation. It isolates the error, assesses the extent of the error, and attempts to correct the error and resume operation.

remote. In data communication, pertaining to devices that are connected to a data processing system through a data link.

remote device. A device, such as a terminal, connected to a data processing system through a data link.

remote system. In IMS intercommunication, a system that the local IMS system accesses via intersystem communication or multiregion operation.

resource. Any facility of the computing system or operating system required by a job or task, including main storage, input/output devices, the processing unit, data sets, and control or processing programs.

Resource Access Control Facility (RACF). A licensed program that provides for access control by identifying and verifying users to the system, authorizing access to DASD data sets, logging detected unauthorized access attempts, and logging detected accesses to protected data sets.

RMF. Resource Management Facility.

roll. In IMS Automation, the option to begin/rollover to another NetView session. This action is assigned to the PF6 key.

SDF. Status Display Facility. The display facility for SA OS/390.

security. Prevention of access to or use of data or programs without authorization.

service. The carrying out of effective problem determination, diagnosis, and repair on a data processing system or software product.

service periods. In IMS Automation, the time between the initiation of startup and shutdown automation for specific IMS subsystems.

single-point-of-control. Feature of IMS Automation enabling the operator to monitor and control IMS subsystems from a single NetView console.

SLDS. System Log Data Set.

SMU. Security Maintenance Utility.

SNA. Systems Network Architecture.

software. (ISO) Programs, procedures, rules, and any associated documentation pertaining to the operation of a computer system. Contrast with hardware.

startup. The operation of starting up IMS by the system operator.

state/action table. In IMS Automation, state/action tables are a matrix of system events, states, and actions created by the system programmer. When an event occurs, the system references the state/action table and takes appropriate action.

status. In IMS Automation, the state of an application—active, inactive, starting, stopping, recovering, and so on—at a moment in time.

status code. In IMS/VS, a two-character code in the program communication block (PCB) mask that indicates the results of a DL/1 call.

status file. In IMS Automation, a file used to log startup and shutdown information.

subsystem. A secondary or subordinate system. A resource defined to SA OS/390 and IMS Automation.

system. In IMS, an assembly of hardware and software capable of providing the facilities of IMS for a particular installation.

system initialization table. A table containing user-specified data that will control a system initialization process.

systems network architecture (SNA). The description of the logical structure, formats, protocols, and operational sequences for transmitting information units through and controlling the configuration and operation of networks.

task. (ISO) A basic unit of work to be accomplished by a computer. Under IMS, the execution of a transaction for a particular user.

TCO. Timer-Controlled Operations.

terminal. A point in a system or communication network at which data can either enter or leave. In IMS, a device, often equipped with a keyboard and some kind of display, capable of sending and receiving information over a communication channel.

terminal operator. The user of a terminal.

transaction. A transaction may be regarded as a unit of processing (consisting of one or more application programs) initiated by a single request, often from a terminal. A transaction may require the initiation of one or more tasks for its execution.

trigger. A set of conditions defined in the control file as required conditions for startup or shutdown initialization on a particular IMS Automation subsystem.

update. To modify a file with current information.

VSCR. Virtual Storage Constraint Relief.

VTAM. Virtual Telecommunications Access Method. VTAM is one of the ways IMS communicates with terminals.

WTOR. Write To Operator with Reply.

XRF. Extended recovery facility, a software function that minimizes the effects of various failures on the end users.

Index

B

broadcasting messages 55

C

CMM (Critical Message Manager) 53
conditions, trigger 36
control file
 definitions 4
 sample entries 21
Critical Message Manager (CMM) 53

D

Database Control command interface 39
DBCTL functions 39
detailed status 14
displaying
 Critical Message Manager (CMM) 53
 message region 51
 service period schedules 33
 subsystem status 13
 subsystems, groups, or domains 10

E

error messages 64
EVLInna messages 64

H

help
 message, online 63
 panel 7

I

IMS Automation
 in MVS environment 1
 programmers' tools 4

L

listing
 subsystem status 13
 subsystems, groups, or domains 10

M

maintaining message regions 51
manual startup 23
master terminal functions
 Database Control interface 39

master terminal functions (*continued*)

 TCO interface 42

message regions, maintaining 51

messages

 broadcasting 55
 format 63
 list 64
 online help 63
 setting options 60

O

online message help 63
overrides, service period 34

P

panel

 Active Dependent Regions 18, 19
 Broadcast 55
 characteristics 7
 critical message detail 54
 Critical Message Manager 53
 Defined Dependent Regions 17, 18
 fast path entries 8
 IMS Monitor 53
 Inquire Subsystem Components 14
 main menu 10, 11
 Master Terminal Menu 39, 42, 51
 Message Region 51
 Operator Shutdown 27
 Program-to-Program Interface 59
 Service Periods Functions 32
 Set Interface Panels Option 61
 Set Message Id 60
 Set Trace 58
 Shutdown Confirmation 28
 Start Confirmation 23
 Start Failure 24
 Start Functions 22
 Start Notification 24
 Subsystem Information 15, 16
 Subsystem List 13
 Subsystem Selection 10
 Support Functions 57
 Takeover Reason Code 19
 TCO 42
 Triggers List 35
PPI (Program-to-Program Interface) 59
program-to-program interface (PPI) 59
programmers' tools, IMS Automation 4

S

- SA OS/390 control file 4
- schedules, displaying service period 33
- scheduling startups and shutdowns 32
- service periods
 - displaying schedules 33
 - overriding 34
 - overview 21
- setting
 - interface panels display options 61
 - message options 60
- shutdowns, subsystem
 - aborting 27
 - initiating 27
 - options 27
 - SHUTIMS command 30
 - with service periods 32
- SHUTIMS command 30
- STARTIMS command 26
- starting subsystems
 - manual 23
 - options 22
 - STARTIMS command 26
 - user-defined 23
 - with service periods 32
- subsystems
 - listing status 13
 - selecting 10
 - SHUTIMS command 30
 - shutting down 27
 - STARTIMS command 26
 - starting 22
- support functions
 - interface panels display options 61
 - message options 60
 - program-to-program interface 59
 - trace 58

T

- takeover reason code 15
- TCO functions 42
- Timer-Controlled Operations (TCO) interface 42
- trace functions 58
- triggers 35

U

- user-defined startup 23

X

- XRF systems
 - starting 25
 - takeover reason code 15

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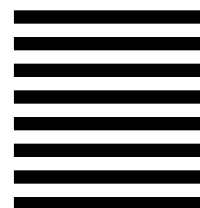
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