

CA OPS/MVS® Event Management and Automation

OPSVIEW User Guide

Release 12.1



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Documentation Changes

The following documentation updates have been made since the last release of this documentation:

Note: In PDF format, page references identify the first page of the topic in which a change was made. The actual change may appear on a later page.

- Updated [The S Line Command](#) (see page 387) section.
- Added the [Include Indirect Destinations](#) (see page 387) section.
- Added the [How to Manage PPRC environment \(Option 3.6.1\)](#) (see page 203) section.
- Added the [How to Restore Global Variables and RDF Tables \(Option 7.6\)](#) (see page 449) sections.
- Updated the [Display Systems Attached to a Control Unit \(Option 3.5.4\)](#) (see page 198) section.
- Updated the [Define Display Criteria](#) (see page 189) section.
- Added the [Access WebCenter Control Panel \(Option 4.14\)](#) (see page 395) sections.
- Updated the [Access the OPSVIEW Control Option](#) (see page 214) section.
- Updated the [Display and Define SOF Managed Systems \(Option 3.5.1\)](#) (see page 193) section.
- Updated the [Display and Define SOF Managed Systems \(Option 3.5.1\)](#) (see page 193) section.

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Chapter 1: Introduction

This section contains the following topics:

[OPSVIEW Overview](#) (see page 21)

[Access OPSVIEW Help and Tutorial](#) (see page 22)

OPSVIEW Overview

OPSVIEW is the operations interface for CA OPS/MVS. Administrators and automations personnel use OPSVIEW panels to perform various z/OS system functions and is the primary vehicle for controlling CA OPS/MVS itself.

Typically, to interact with a computer system, you must type a long series of cryptic commands at a console. In response, the system returns terse messages that usually do not contain all the information that you need to manage the system. Such an environment may be difficult to understand and use and is often error-prone.

With OPSVIEW, CA OPS/MVS combines the variety of the CA OPS/MVS facilities, the familiarity of the TSO CLIST language, and the power of ISPF in an easy-to-use interface.

OPSVIEW consists of these options:

- Parameters option
- OPSLOG option
- Editors option
- System Control option
- Control option
- Command option
- Utilities option
- Support option
- Changes option
- ISPF option
- CA SYSVIEW

Access OPSVIEW Help and Tutorial

OPSVIEW contains online help that is context sensitive. OPSVIEW also contains an online tutorial, which is a combination of all of the help panels for all of the individual OPSVIEW applications.

To access OPSVIEW online help

From within OPSVIEW, enter HELP on the command line.

To access the online tutorial

Select option T from the OPSVIEW Primary Options Menu.

Chapter 2: OPSVIEW Basics

This section contains the following topics:

- [How to Use OPSVIEW](#) (see page 23)
- [Before You Use OPSVIEW](#) (see page 24)
- [OPSVIEW Command—Start an OPSVIEW Session](#) (see page 24)
- [Overview of the OPSVIEW Primary Options Menu](#) (see page 26)
- [Control the OPSVIEW Options](#) (see page 27)
- [Support for ISPF Point-and-Shoot](#) (see page 31)

How to Use OPSVIEW

This chapter provides basic information about how to use the OPSVIEW operations interface for CA OPS/MVS.

You can take advantage of OPSVIEW the following two ways:

- Use the facilities OPSVIEW provides.

Since the TSO interactive facilities are available with OPSVIEW, you can accomplish any operational procedure using OPSVIEW that you can using a z/OS console. Using OPSVIEW makes these procedures easier to perform.

The following table describes one way you can set up your workstation to use OPSVIEW:

Use this component...	To...
z/OS (MCS) console	Display unsolicited messages.
TSO terminal	Run OPSVIEW (enter commands and view their output). You can run OPSVIEW in ISPF split-screen mode, with control functions such as option 6 (Command) running on one logical screen and option 1 (OPSLOG) running on the other.

- Write your own OPSVIEW applications.

Because OPSVIEW is written almost entirely in the TSO CLIST and OPS/REXX languages, you can easily extend it with your own programs.

CA OPS/MVS provides sample programs that you can customize or modify to meet the unique requirements of your site. For descriptions of the sample programs distributed with CA OPS/MVS, see the *CA OPS/MVS User Guide*.

Before You Use OPSVIEW

Before you can invoke OPSVIEW under your TSO logon ID, you must pre-allocate various data sets. For a list of these data sets, see the *CA OPS/MVS Administration Guide*.

To add the OPSVIEW libraries to existing TSO logon IDs, the OPS.CCLXCLS0 data set provides these CLISTs:

OPCONCAT

Adds a data set to an existing concatenation of partitioned data sets. For the two positional parameters of the OPCONCAT CLIST, specify the ddname of the concatenation and the dsname of the library you want to add.

Use the BEFORE and AFTER keywords to specify where you want the library to be positioned in the concatenation.

Default: BEFORE

Example:

```
OPCONCAT SYSPROC 'OPS.CCLXCLS0' AFTER
```

OPDECONC

Removes a data set from an existing concatenation of partitioned data sets. For the two positional parameters of the CLIST, specify the ddname of the concatenation and the dsname of the library you want to remove.

During execution, some options of OPSVIEW allocate user-specific data sets. These data sets always have a prefix that is equal to the user ID rather than the value specified by the PREFIX() keyword of the TSO PROFILE command.

Most OPSVIEW applications will not work unless the CA OPS/MVS started task is up and running. For information about CA OPS/MVS setup, see the *Administration Guide*.

OPSVIEW Command—Start an OPSVIEW Session

To begin an OPSVIEW session, issue the OPSVIEW command from within any ISPF-based application (including ISPF/PDF), or from the READY prompt in native TSO mode.

This command has the following format:

```
OPSVIEW  
  [option]  
  [SYSID(sysid)]  
  [SUBSYS(ssid)]  
  [COMMAND(commandtext)]
```


option

(Optional) If you issue the OPSVIEW command without the option keyword, CA OPS/MVS takes you to the OPSVIEW Primary Options Menu panel, where you can select an option. If you prefer to bypass the menu panel, use the option keyword to indicate the subapplication that you want to use, and CA OPS/MVS takes you directly to it.

For example, enter this command to bypass the menu panel and move directly to the Tutorial option (Option T):

```
OPSV T
```

SYSID(*sysid*)

(Optional) For *sysid*, specify the name of the remote system to which all OPSCMD commands are to be routed for this invocation.

Default: The system to which you are logged on.

If you want to specify this keyword, the Multi-System Facility (MSF) must be installed and there must be an active MSF session between this system and the remote system.

SUBSYS(*ssid*)

(Optional) For *ssid*, specify the z/OS subsystem identifier being used by the copy of CA OPS/MVS whose services you want your OPSVIEW session to use.

Default: OPSS, which is the CA OPS/MVS default z/OS subsystem identifier.

COMMAND(*commandtext*)

(Optional) For *commandtext*, specify an initial z/OS or JES command to be executed in the OPSVIEW option 6 (Command). If you specify a value for both the COMMAND and the option keywords, the COMMAND keyword overrides the option keyword.

Overview of the OPSVIEW Primary Options Menu

When you invoke OPSVIEW, a menu appears as shown in the following sample.

This panel appears if you do not specify a specific OPSVIEW option when you issue the OPSVIEW command. If you specify a particular OPSVIEW option, you go directly to the panel for that option.

```
CA OPS/MVS ----- OPSVIEW Primary Options Menu ----- Subsystem OPS99

0  Parms      Set OPSVIEW and ISPF default values          User ID - USER99
1  OPSLOG    Browse OPSLOG                          Time   - 10:35
2  Editors   AOF Rules, REXX programs, SQL Tables   Release - 11.9
3  Sys Cntl  Display/Modify System Resources              SP    - 0
4  Control   Control CA OPS/MVS
5  Support   Support and Bulletin Board information
6  Command   Enter JES2/MVS/IMS/VM commands directly
7  Utilities Run CA OPS/MVS Utilities
A  AutoMate  CA AutoMate rules edit and control
I  ISPF      Use ISPF/PDF services
S  SYSVIEW   CA SYSVIEW
T  Tutorial  Display information about OPSVIEW
U  User      User-defined applications
X  Exit      Exit OPSVIEW

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Option ==>
F1=HELP      F2=SPLIT      F3=END        F4=RETURN     F5=RFIND      F6=RCHANGE
F7=UP        F8=DOWN       F9=SWAP       F10=LEFT      F11=RIGHT     F12=RETRIEVE
```

Select an Option from the OPSVIEW Primary Options Menu

To select an option, enter its option code in the Option field.

For example, to browse the OPSLOG, type 1 in the Option field and press Enter.

Options on the OPSVIEW Primary Options Menu

You can select the following options by entering an alphanumeric character:

Option	Description
0-Parms	Modify OPSVIEW options, ISPF parameters, or the OPSLOG Browse profile, or set up a list of stored commands for option 6.

Option	Description
1-OPSLOG	View all of the events that occurred in your z/OS system that were seen by CA OPS/MVS; for example, z/OS operator commands and JES messages.
2-Editors	Edit and test AOF rules; maintain the AOF test compiled rules library; access EasyRule; edit, compile, and execute REXX EXECs; maintain the REXX compiled program library; and access the CA OPS/MVS relational table editor and the application parameter editor.
3-Sys Cntl	Control system resources without entering z/OS or JES commands.
4-Control	Control the copy of CA OPS/MVS that is running on this system. You can perform these tasks: set product storage limits; set product debugging and trace flags; globally control the MSF, AOF, EPI, and SSM; view status information about the OSF and the ECF; start or stop a copy of CA OPS/MVS; and display and modify both standard and temporary global variables.
5-Support	Access the CA product support information.
6-Command	Enter z/OS, JES, and other subsystem commands and view the output on a scrollable display.
7-Utilities	Browse a saved or copied OPSLOG, create CA OPS/MVS parameter cards for the IMS Operations Facility to use, create a backup of your global variable data set, convert your old OPS/REXX programs and AOF rule data sets to a newer format, and access the MPF conversion utility and the Automation Analyzer.
A-AutoMate	Convert Automate rules to the CA OPS/MVS format; edit Automate rules, Statvars, and RDF tables; control, browse, and test Automate rules; clean up the Automate ATMRULES rule set.
I-ISPF	Invoke the ISPF menu under OPSVIEW.
S-SYSVIEW	Access the CA SYSVIEW product, with which you can monitor and control your z/OS system. For information, see the CA SYSVIEW product documentation.
T-Tutorial	Display a full-screen tutorial about using OPSVIEW.
U-User	Access a dummy menu, which you can modify and then use to invoke your user-defined applications.
X-EXIT	Terminate your OPSVIEW session.

Control the OPSVIEW Options

Typically, OPSVIEW options operate just like any ISPF option. This section discusses information that will help you to control OPSVIEW.

Types of OPSVIEW Displays

There are four types of OPSVIEW displays:

Menu Display

Presents you with several options, and you must select one of them. When you are done using the function you selected, OPSVIEW redisplay the menu.

Data Entry Display

Prompts you for data. If a particular field is required, OPSVIEW will not let you continue using the function until you enter a value for the field.

Formatted Scrollable Display

Presents you with a tabular display of data. You can use scroll commands, such as UP and DOWN.

Unformatted Scrollable Display

Shows data that is not in columns.

Commands Used to Scroll Data

When you are viewing a formatted or unformatted scrollable display, use these ISPF commands to scroll on the data:

UP

To view data that is off the screen and logically above the onscreen data.

DOWN

To view data that is off the screen and logically below the onscreen data.

Command Keywords That Modify Scrolling Action

To modify the action of the UP or DOWN command, use the keywords shown in the following table.

Note: You can also use the Scroll field on most scrollable displays to modify the scrolling action. To do so, enter one of the following keywords into the Scroll field:

Keyword	How it modifies the scrolling
CSR	Scrolls the display to the current cursor position. If you issue the UP command, the line with the cursor is scrolled to the bottom of the display. If you issue the DOWN command, the line with the cursor is scrolled to the top of the display.
MAX	Scrolls the display to the very top or very bottom of the data.

<i>nnnn</i>	Scrolls the display by the number of lines specified in place of <i>nnnn</i> .
PAGE	Scrolls the display a full screen of data.

Set Up PF Keys for Scrolling

If you want, you may set up PF keys with scroll commands. Doing so is particularly advisable if you use the CSR keyword when scrolling. The OPSVIEW default profile data sets contain PF key settings for scroll keys.

To view or modify the settings, issue the KEYS command.

How to Split the OPSVIEW Panel

Issue the SPLIT command to separate OPSVIEW into two sessions. The active session is the one containing the cursor.

To take this action...	Use this ISPF command...	Or do this...
Move between sessions	SWAP	Move the cursor from one logical screen to the other (if it is visible).
Terminate a session	=X	Back out through the OPSVIEW Primary Options Menu of the session.

ISPF Command Summary

Because OPSVIEW is an ISPF-based application, you need to be familiar with ISPF commands to take full advantage of it.

Here are some of the more useful ISPF commands you can use in OPSVIEW:

DOWN

Scrolls a display downward.

END

Terminates the current display and return to the previous panel. If you are using OPSVIEW option T (Tutorial), entering END terminates the tutorial.

HELP

Accesses the CA OPS/MVS online tutorial; HELP is context-sensitive. For example, if you are in OPSVIEW option 6 and you issue the HELP command, you will get help for option 6, which is the MVS/JES command processor.

JUMP

Jumps from one option to another without backing up through menus. To jump to an option enter an equal sign (=), followed by an option specification, into any field in OPSVIEW that is preceded by at least two equal signs followed by an arrow (= =>). For example, if you enter =3.2 on the Command line of the OPSVIEW General Settings panel, OPSVIEW takes you to suboption 2 of primary option 3.

KEYS

Displays the current PF key settings and lets you modify them if necessary.

LEFT

Scrolls a display to the left.

LIST

Allocates, prints, or lists the ISPF data set. This can be used with the P and PP line commands to print OPSLOG Browse data. For more information, see the chapter "OPSVIEW OPSLOG Option."

PRINT

Records the current screen image in the ISPF list file and prints it.

RETRIEVE

Retrieves previously entered commands and displays them on the command line.

RETURN

Returns to the OPSVIEW Primary Options Menu.

RIGHT

Scrolls a display to the right.

SPLIT

Splits the display into two logical displays. The split occurs at the line on which the cursor is positioned.

UP

Scrolls a display upward.

Support for ISPF Point-and-Shoot

Many OPSVIEW displays support a point-and-shoot line command and the point-and-shoot SORT primary command. A detailed description of point-and-shoot command support for each such display is included in the appropriate section of this manual.

For general information about the point-and-shoot feature of ISPF, see the IBM publications, including the *z/OS ISPF User's Guide*.

Chapter 3: OPSVIEW Parameters Option

This section contains the following topics:

- [Access the OPSVIEW Parms Option \(Option 0\)](#) (see page 33)
- [Modify OPSVIEW Options \(Option 0.1\)](#) (see page 34)
- [Store a Command List \(Option 0.2\)](#) (see page 37)
- [Set ISPF Parameters \(Option 0.3\)](#) (see page 38)
- [Set the OPSLOG Browse Profile \(Option 0.4\)](#) (see page 38)
- [Set or Change EasyRule Settings \(Option 0.5\)](#) (see page 38)

Access the OPSVIEW Parms Option (Option 0)

You can perform the following tasks with the OPSVIEW Parms option:

- Modify OPSVIEW options.
- Set up and edit a list of stored commands for OPSVIEW option 6 (Command).
- Access an IBM application to modify your ISPF parameters.
- Modify your OPSLOG Browse profile.

To access the OPSVIEW Parms Menu, enter **0** on the OPSVIEW Primary Options Menu.

You see a display similar to the following:

```
Parms ----- S034 --- O P S V I E W ----- Subsystem OPSD
OPTION ==>

1 General Settings      - Set/Change OPSVIEW and OPSCMD settings
2 Stored Commands      - Edit stored command list (used in option 6)
3 ISPF Parms           - Modify terminal and user characteristics
4 OPSLOG Browse Profile - Modify the OPSLOG Browse profile
5 EasyRule Settings    - Set/change EasyRule settings
```

Modify OPSVIEW Options (Option 0.1)

Use OPSVIEW option 0.1 to modify several important values. All of the OPSVIEW applications use these values to determine how the applications work.

To access OPSVIEW option 0.1

1. Use one of the following methods:
 - Enter **1** on the OPSVIEW Parm Menu.
 - Use the ISPF jump function by entering **=0.1** into any valid field in OPSVIEW.

The General Settings panel similar to the following one displays. Note that this panel contains a setting to control Action Verifications separately for AOF Test:

```

General Settings ---- XE44 --- O P S V I E W -----
COMMAND ==>
OPSCMD Max Lines ==> 1000 ( 1 to 5000 )
OPSCMD Wait Time ==> ( blank for default, or 1 to 60 )
OPSCMD Echo ==> Y ( Y or N )
OPSCMD Subsystem ==> OPSS
Action Verification ==> Y ( Y or N )
AOF Test Action Ver ==> Y ( Y or N )
Max Test Globals ==> ( blank for default, or 1 to 99999 )
Max Test Temp GLVs ==> ( blank for default, or 1 to 99999 )
AOF Alloc Subsys ==> ( blank for default, or subsystem name )
AOF REXX Workspace ==> ( blank for default, or
                        40960 to 2000000000 )
SSM Monitor Display ==> ( B/V/E )
Enter CANCEL to abort.
Enter END to confirm settings.
    
```

2. Set or modify the OPSVIEW options by entering the desired values into the fields on the General Settings panel. These fields are described next.

OPSVIEW Options General Settings Fields

The OPSVIEW General Settings panel has the following fields:

OPSCMD Max Lines

Specifies the maximum number of lines of z/OS or JES command output that CA OPS/MVS accepts before it returns control to the user. If you need to enter a command that generates a large amount of output, it is best to issue the command through the OPSCMD command with the NOOUTPUT option, and then to view the response in OPSLOG Browse.

OPSCMD Wait Time

Indicates the maximum number of seconds CA OPS/MVS waits for output from a z/OS or JES command before CA OPS/MVS returns control to the user. Blank, which is the recommended value, means OPSCMD uses its default heuristic algorithm.

OPSCMD Echo

Indicates whether CA OPS/MVS echoes z/OS and JES commands to the terminal.

OPSCMD Subsystem

Indicates the four-character name of the CA OPS/MVS subsystem to which OPSCMD commands are routed. Typically you have only one copy of CA OPS/MVS, and its name is OPSS.

Action Verification

Indicates whether CA OPS/MVS performs potentially damaging operations immediately or requests confirmation. Set the field to Y if you want CA OPS/MVS to request confirmation; set it to N if you want CA OPS/MVS to act without confirmation.

Note: The setting for this field affects OPSVIEW options 2, 3.2, 4.5, 4.8, 4.12, and 7.1.4.

AOF Test Action Ver

Indicates whether CA OPS/MVS performs potentially damaging operations in AOF Test immediately or requests confirmation. Set the field to Y if you want OPSVIEW to request confirmation; set it to N if you want OPSVIEW to act without confirmation.

Note: The setting for this field affects OPSVIEW option 2.1.

Max Test Globals

Indicates the maximum number of standard global variables that the AOF test environment can use. Setting this value is equivalent to setting the GLOBALMAX parameter for the main CA OPS/MVS address space. If you do not set the value here, CA OPS/MVS uses the GLOBALMAX default value, which is 5000.

Max Test Temp GLVs

Indicates the maximum number of temporary global variables that the AOF test environment can use. Setting this value is equivalent to setting the GLOBALTEMPMAX parameter for the main CA OPS/MVS address space. If you do not set the value here, CA OPS/MVS uses the default value of the GLOBALTEMPMAX parameter.

AOF Alloc Subsys

Indicates the four-character name of the subsystem that manages allocation of and input/output processes for AOF rule data sets. This field is usually blank for standard z/OS allocation and input/output. If you use the CA Librarian product and you want it to manage all AOF data sets, use this field to specify the name of the CA Librarian subsystem (usually LAM).

Note: If you use CA Librarian, you cannot use the CA OPS/MVS auto-enable option for AOF rules.

WARNING! If your AOF Test rule sets are in standard z/OS PDS or PDSE data sets, this field must be left blank. If this field is not left blank, attempting to use the AOF Test facility results in dynamic allocation errors (error code x'035C' and information code x'005F').

AOF REXX WorkSpace

Indicates the size of the AOF REXX workspace. The default is 1.5 megabytes. Generally, you should not need to change the value of this field unless instructed to do so by a CA Customer Support representative.

SSM Monitor Display

Indicates the default viewing mode for SSM and SSMGA resource monitors 4.11.2 and 4.11.G respectively. The possible values are:

B

Browse prohibits all type over changes

V

View allows type over changes with verification

E

Unrestricted type over changes.

All modes allow resource changes using line commands. The viewing mode can be changed dynamically on the monitor panel as required and is not intended as a user security control parameter.

Store a Command List (Option 0.2)

Use OPSVIEW option 0.2 to create, store, and edit a list of z/OS or JES commands to use in OPSVIEW option 6 (Command). The stored commands list editor is a customized version of the ISPF/PDF editor.

To store a command list

1. Access OPSVIEW option 0.2 using any of the following methods:
 - Enter **2** on the OPSVIEW Parms Menu.
 - Use the ISPF jump function by entering **=0.2** into any valid field in OPSVIEW.
 - Issue the **SEEDIT** command from the MVS/JES Command Processor panel (Option 6). When you access option 0.2 in this way, CA OPS/MVS returns you directly to option 6 when you exit option 0.2.

When you access option 0.2, you see a display similar to the following one. The top half of the display contains instructional text, and the bottom half is a scrollable data entry display.

```

Stored Command List Editor ---- MSI1 ----- COLUMNS 001 072
COMMAND ==>                                SCROLL ==> CSR
Use the Edit Window below to enter in any MVS or JES command. Only one
command may be entered per line. Commands may be documented with
comments following the /* delimiter.
Example:
          000100 D TS,ALL           /* list TSO users
          000200 D TS,USERA        /* list TSO user USERA
***** ***** TOP OF DATA *****
000100 D TS                       /*DISPLAY # OF TSO USERS
000200 D TS,L                     /*DISPLAY TSO USERS, SHORT FORM
000300 D TS,ALL                   /*DISPLAY TSO USERS, LONG FORM
000400 *I A                       /*DISPLAY ACTIVE JOBS
000500 *I B                       /*DISPLAY BACKLOG JOBS
***** *****BOTTOM OF DATA *****

```

2. Type the commands into the bottom half of the display.
Enter only one command per line.
3. Enter a comment for a command. The comment must begin with a delimiter consisting of a slash followed by an asterisk (/ *).

You have used the Stored Command List Editor panel to store the command list.

Set ISPF Parameters (Option 0.3)

Use OPSVIEW option 0.3 to access the IBM standard application for modifying terminal and user characteristics.

To access this application, use one of the following methods:

- Enter **3** on the OPSVIEW Parms Menu.
- Use the ISPF jump function by entering **=0.3** into any valid field in OPSVIEW.

Set the OPSLOG Browse Profile (Option 0.4)

Using OPSLOG Browse, you can view all automation events. Because the number of events can be large, you can set your OPSLOG Browse Profile to filter out some of them. By doing so, you can browse a subset of events that includes only the type of events you want to see. You can use OPSVIEW option 0.4 to set the OPSLOG Browse Profile.

To set the OPSLOG Browse Profile, use one of the following methods

- Select option 0.4 using one of the following methods:
 - Enter **4** on the OPSVIEW Parms Menu.
 - Use the ISPF jump function by entering **=0.4** into any valid field in OPSVIEW.
- Issue the **PROFILE** command directly from OPSLOG Browse (OPSVIEW option 1), this section does not cover how to set the profile.

For general information about OPSLOG Browse and instructions on setting the OPSLOG Browse Profile, see the chapter “[OPSVIEW OPSLOG Option](#) (see page 41).”

Set or Change EasyRule Settings (Option 0.5)

By using OPSVIEW screen 0.5, you can set the EasyRule profile. EasyRule respects the setting for the option Include User Code Areas.

To set or change EasyRule settings

- Select option 0.5 using one of the following methods:
 - Enter **5** on the OPSVIEW Parms Menu.
 - Use the ISPF jump function by entering **=0.5** into any valid field in OPSVIEW.

The EasyRule Options screen displays.

Setting the EasyRule Profile

User code areas are reserved spaces in a rule that was generated by EasyRule. Users are free to use ISPF edit to add or change REXX code in a user code area, but code outside these areas should only be changed by using EasyRule. The EasyRule Options screen allows you to choose whether to generate user code areas by default, as illustrated in the following example:

```
EasyRule Options -----
Command ==>

Options
  Enter "S" to select option
  S  Include user code areas

Enter CANCEL to abort.
Enter END to confirm settings.
```

The Save panel provides three user code area controls, including Initialize, Terminate, and Mainline, which select whether their respective areas will be generated. Users are free to set these three controls manually, or to allow all three to default to the Screen 0.5 value.

EasyRule uses the profile setting each time you edit a new or existing rule. You can override the default, but each time you edit a rule, the default setting will again be applied, even if you have previously overridden it for the same rule.

Following is an illustration of the EasyRule Save screen. The profile setting affects the default answers for the Do you intend ... lines.

```
EasyRule ----- XAE1 --- O P S V I E W ----- Subsystem OPSQ
Option ==>

      EEEEE   AAAA   SSSSS  YY  YY  RRRRR  UU  UU  LL   EEEEE
      EE     AA  AA  SS     YYYY  RR  R  UU  UU  LL   EE
      EEEE   AAAAAA  SSSSS   YY   RRRRR  UU  UU  LL   EEEE
      EE     AA  AA   SS     YY   RR  RR  UU  UU  LL   EE
      EEEEE   AA  AA   SSSSS  YY     RR  RR  UUUU  LLLLL  EEEEE

      1  SAVE   -  SAVE the Rule that was built and EXIT
      2  CANCEL -  EXIT and DO NOT SAVE the Rule that was built
      3  BROWSE -  Browse the generated OPS/REXX code
      4  ALTER  -  Return to the panels to modify the Rule

DO YOU WANT TO BE ABLE TO MODIFY THIS RULE WITH EASYRULE?   ==> Y (Y/N)
DO YOU INTEND TO INSERT USER PROCESSING CODE IN THIS RULE?  ==> Y (Y/N)
DO YOU INTEND TO INSERT USER INITIALIZATION CODE IN THIS RULE? ==> Y (Y/N)
DO YOU INTEND TO INSERT USER TERMINATION CODE IN THIS RULE? ==> Y (Y/N)

Press END to SAVE and Return
```


Chapter 4: OPSVIEW OPSLOG Option

This section contains the following topics:

[Overview of the OPSVIEW OPSLOG Option \(Option 1\)](#) (see page 42)

[How to Control the Way OPSLOG Processes z/OS Messages \(JES3 Users Only\)](#) (see page 47)

[Introduction to Setting Your OPSLOG Browse Profile](#) (see page 48)

[How to Use the OPSLOG PROFILE and PROFILEX Commands](#) (see page 49)

[Access and Use the OPSLOG Browse Profile Panels](#) (see page 53)

[Overview of Options for the OPSLOG Browse Profile Panel](#) (see page 56)

[The OPSLOG Browse Profile Support of Wildcards](#) (see page 59)

[How to Navigate the OPSLOG Event Stream](#) (see page 59)

[DISPLAY Command—Change OPSLOG Browse Display Format](#) (see page 60)

[How to Display Event Information in One Window](#) (see page 71)

[How to View a List of All Possible OPSLOG Columns](#) (see page 73)

[SYSTEM Command—Access a Remote OPSLOG](#) (see page 76)

[SYSWAIT Command—Override the MSFSYSWAIT Value](#) (see page 76)

[GOMODE Command—Automatic Update Mode](#) (see page 77)

[LOCATE Command—Locate Events in OPSLOG](#) (see page 78)

[LOGNAME Command—Browse an OPSLOG Log Name](#) (see page 79)

[LONGCMD Command—Increase Command Input Width](#) (see page 79)

[SHORTCMD Command—Standard Command Input Width](#) (see page 80)

[How to Assign a Label in OPSLOG Browse](#) (see page 80)

[Print Data from OPSLOG Browse](#) (see page 81)

[How to Issue z/OS and JES Commands from OPSLOG](#) (see page 82)

[How to Issue IMS Commands from OPSLOG](#) (see page 83)

[View Command Output from Within OPSLOG](#) (see page 83)

[How to Find Character Strings in OPSLOG Browse Event Text](#) (see page 84)

[How to Find Character Strings in OPSLOG Browse Display Columns](#) (see page 86)

[Guidelines for Using Any Form of the FIND Command](#) (see page 88)

Overview of the OPSVIEW OPSLOG Option (Option 1)

In its OPSLOG, CA OPS/MVS keeps copies of all automation events. Events are continuously added to the OPSLOG as they occur. The OPSLOG resides in a data space owned by the CA OPS/MVS main product address space, which is the OPSMAIN address space. You use the CA OPS/MVS BROWSEMAX parameter to control the number of events kept in OPSLOG.

To view the events, use either of the following:

- The OPSVIEW Browse option under TSO
- The OPSLOG WebView client/server application on a PC that is connected to the application through an Internet or intranet path

Multiple users can simultaneously access the OPSLOG data using any combination of OPSLOG WebView and OPSLOG Browse sessions.

Choose Your Viewer

To access OPSLOG Browse, enter **1** on the OPSVIEW Primary Options Menu. The OPSLOG Browse display appears.

To access OPSLOG WebView, enter your local Internet or intranet URL in Internet Explorer. This URL is defined at OPSLOG WebView installation. We recommend using a URL of the following format:

```
intranet.companyname.com/OPSLOG
```

However, local practices at your installation may require that you use a URL of a different format. Users are required to log on to OPSLOG WebView at the start of a session using their TSO user ID and password. Your system security package (CA Top Secret, RACF, and so on) verifies that the user is authorized. You may also use a CA OPS/MVS security rule to limit the access to a select list of users.

Navigation through the OPSLOG data is similar in OPSLOG Browse and OPSLOG WebView; however, OPSLOG WebView is a Windows application that has the look and feel of a typical Windows application. Drop-down menus provide access to search and positioning commands in OPSLOG WebView, whereas the OPSVIEW option uses line commands for the same purpose. Other differences will be noticeable as you navigate through the application.

Information on how to use OPSLOG WebView is documented in context sensitive help screens, which you can access by pressing the F1 key once OPSLOG WebView has started.

Note: The remainder of this chapter describes the use of the OPSVIEW OPSLOG function under TSO/ISPF.

OPSLOG Browse Status Information

The following display is an example of a typical OPSLOG Browse panel:

```

OPSLOG Browse OPS31A   S034 DD_OPSLOG           - 12:23:54 20SEP2007 COLS 001 070
Command ==>                               Scroll ==> CSR
Time  ----+-----1----+-----2----+-----3----+-----4----+-----5----+-----6----+-----7
12:23:55 SE '12.23.55 JOB05279 $HASP165 GORST03I ENDED AT USILCA11 MAXCC=0',LO
12:23:55 SE '12.23.55 JOB05279 $HASP165 GORST03I ENDED AT USILCA11 MAXCC=0',LO
12:23:56 IEF234E K 3707,542453,PVT,DMSAR,DMSAR
12:23:56 STK Exit 1 Non-Silo Drives Selected
12:23:56 CTS014 IEF234E K 3707,542453,PVT,DMSAR,DMSAR
12:23:56 STK Exit 1 Non-Silo Drives Selected

12:23:56 DMS2944 AUTO RESTORE MANAGER WILL NOTIFY YOU UPON COMPLETION...
12:23:56 DMS3754 A SUBSYSTEM RECALL REQUEST FOR DSN=M81A.DSNDBC.R7Q1DB9.DBXR1
12:23:56 DMS3754 IS IN PROGRESS FOR JOBNAME = M81ADBM1
12:23:56 TSS7000I DEVDB2 Last-Used 20 Sep 07 00:26 System=CA31 Facility=STC
12:23:56 TSS7001I Count=15226 Mode=Fail Locktime=None Name=DB2 STARTED TASKS
12:23:56 HZS0001I CHECK(CA_CYBERMATION,CYB_INTERVAL):
12:23:56 ESP6435I Monitored SSIDs:
12:23:56 HZS0001I CHECK(CA_CYBERMATION,CYB_INTERVAL):
12:23:56 ESP6436I SSID N56M is INACTIVE
12:23:56 HZS0001I CHECK(CA_CYBERMATION,CYB_INTERVAL):
12:23:56 ESP6436I SSID N560 is INACTIVE
12:23:56 HZS0001I CHECK(CA_CYBERMATION,CYB_INTERVAL):
12:23:56 ESP6436I SSID S113 is INACTIVE
***** ***** BOTTOM OF MESSAGES *****

```

Notice the information shown in the top line of the panel; it can help you to determine the status of OPSLOG Browse fields:

MSF ID

Indicates the MSF ID of the system whose OPSLOG you are browsing. In the display shown above, the MSF ID is OPS31A.

SMF ID

Indicates the SMF ID of the operating system to which you are logged on. The value in this field helps you discern whether you are viewing the OPSLOG of the local system or the OPSLOG of a remote system. In the display shown above, the SMF ID is CA31.

Log name

Indicates the log name of the OPSLOG you are browsing. In the display shown above, the log name is DD_OPSLOG.

HH:MM:SS DDMMYYYY

Indicates the current date and time, and is updated when you press ENTER.

More information:

[SYSTEM Command—Access a Remote OPSLOG](#) (see page 76)

[LOGNAME Command—Browse an OPSLOG Log Name](#) (see page 79)

Move Around In OPSLOG

To move around in the OPSLOG Browse display, use the standard ISPF UP, DOWN, LEFT, and RIGHT PF keys. Use the Scroll field to change the scroll amount.

More information:

[OPSVIEW Basics](#) (see page 23)

OPSLOG Browse Primary Commands

The following lists the OPSLOG Browse primary commands, with the number of characters of the command name that must be specified (that is, the shortest abbreviation of the command name that is allowed):

Command	Abbreviation in Chars	Command Name
DISPLAY	1	DISPLAY command
LOCATE	1	LOCATE command
LOGNAME	4	LOGNAME command
LONGCMD	3	LONGCMD command
SHORTCMD	2	SHORTCMD command
FIND	1	FIND command
RFIND	5	RFIND command
GOMODE	2	GO (Auto update) command
/	1	/ command
OC	2	OC command
OPSCMD	2	OPSCMD command
PRX	3	PROFILEX command
PROFILEX	8	PROFILEX command
PROFILE	2	PROFILE command

Command	Abbreviation in Chars	Command Name
OPSQW	5	OPSQW command
SYSTEM	3	SYSTEM command
cursor position	N/A	No command, Press Enter
SYSWAIT	4	SYSWAIT command

Note: The shortest allowable command abbreviation may change with each new release or service pack of CA OPS/MVS.

How OPSLOG Browse Differs from ISPF/PDF Browse

Although OPSLOG Browse looks similar to ISPF/PDF Browse, the differences are:

- When you enter OPSLOG Browse after setting your OPSLOG Browse Profile, this message appears:
Data displayed is filtered by a profile specification.
- OPSLOG Browse has no data set specification panel.
- OPSLOG Browse displays a stream of the CA OPS/MVS automation events; the display is constantly updated as additional events occur. As long as you do not enter a command that alters your position in the OPSLOG (such as the FIND command), OPSLOG Browse repositions to the current bottom of the OPSLOG each time you press Enter.
- You can use the GOMODE command to place OPSLOG Browse in automatic update mode. When OPSLOG Browse is in this mode, you do not have to press Enter to refresh the screen. Instead, CA OPS/MVS automatically updates the data at a user-specified interval.
- In addition to the set of commands that OPSLOG Browse provides, you can issue system commands from the OPSLOG Browse command line.
- By using the OPSLOG Browse DISPLAY command, you can request that OPSLOG Browse display supplemental columns of information.
- The intensity and color of the events displayed by OPSLOG Browse mimic those of the console message display. However, be aware that AOF rules may have modified the color without making the same changes to the messages displayed on the console.

More information:

[GOMODE Command—Automatic Update Mode](#) (see page 77)

[DISPLAY Command—Change OPSLOG Browse Display Format](#) (see page 60)

Echoing of Command Text to OPSLOG Browse

Images of z/OS and subsystem commands issued by users from consoles or programs appear in the OPSLOG Browse event stream. This occurs for each command because z/OS issues a WTO with the text of the command as a message. JES3 is an exception. If your site uses JES3, you may be aware that JES3 does not echo its commands. If you want JES3 commands to appear in the OPSLOG Browse display, you must install the CA OPS/MVS IATUX18 exit. For more information about this task, see the Administration Guide.

Images of all commands that users issue using CA OPS/MVS facilities, including JES3 messages, automatically appear in the OPSLOG Browse display. Thus, JES3 commands that users issue through OPSVIEW, the Programmable Operations Interface (POI), and the Automated Operations Facility (AOF) appear in the display.

The OPSLOG and Early Messages

When CA OPS/MVS is started through SUB=MSTR before JES is started, the early messages-including NIP messages-are copied into the OPSLOG to provide a more complete log of events.

Prior to z/OS 1.4.2, the following applies:

- NIP messages do not execute AOF rules.
- NIP messages may not be available on systems that use OPERLOG as the hard copy medium, since they are purged before CA OPS/MVS can copy them.
- NIP messages are identified in the OPSLOG with a unique exit type of NIP, and the character string NIPMSG always appears in the message ID column. Since NIP messages are captured after they were actually issued, some related data columns in the OPSLOG might not contain valid data.

For z/OS operating environments 1.4.2 and higher that have applied the required fixes to support APAR OA10401, the following applies:

- The AOFNIPMESSAGES parameter determines whether NIP messages can execute AOF rules.
- After the primary JES has started and SYSLOG processing is active, NIP messages appear in the OPSLOG as standard messages.
- NIP messages are identified in the OPSLOG with a unique exit type of NIP.

Note: You cannot capture NIP messages if you have not applied the required fixes for your operating environment to support APAR OA10401.

How to Control the Way OPSLOG Processes z/OS Messages (JES3 Users Only)

JES3 relies on sysplex services to perform the message routing functions that prior JES3 versions performed internally. Currently, all JES3 messages originate from the subsystem interface. Because of this, JES3 sites must use the BROWSEMESSAGES parameter to determine which copies of the message go into the OPSLOG. This section provides some background information about the JES3 environment and describes the values you can specify on the BROWSEMESSAGES parameter.

Typically, when a JES3 complex has local processors in addition to a global processor, CA OPS/MVS is active on all processors in the complex. Active Multi-System Facility (MSF) sessions exist between all of the copies of CA OPS/MVS. In this setup, each copy of CA OPS/MVS maintains an OPSLOG Browse data area, but the set of messages accessed by OPSLOG Browse running on a local processor differs from the set of messages accessed by OPSLOG Browse running on a global processor.

The following describes these differences:

Local processor

OPSLOG can access only those z/OS messages that originated on that local processor. It does not have access to JES3 messages (even those pertaining to work running on a local processor).

Global Processor

Current versions of JES3 allocate extended consoles on each JES3 local processor with an MSCOPE of the JES3 global processor. This causes sysplex services to transport all JES3 messages from the local processors to the global processor. From a historical perspective, this is similar in functionality to the services formerly provided by the IATUX31 exit.

Values for the BROWSEMESSAGES Parameter (JES3 Users Only)

Use the BROWSEMESSAGES parameter to determine which copies of messages go into the OPSLOG. The following table describes the values you can specify on the parameter. The values are meaningful for the JES3 global processor only; it is best to let the value of the BROWSEMESSAGES parameter default (to a value of MVS) on local processors.

For current versions of JES3, use the following table:

Value	Messages that go into OPSLOG
MVS	Include only those messages that originated on this system.

MVSGLOBAL	Include both the messages issued directly on this system and those messages transported to this system through sysplex console services.
NONE	No messages go into OPSLOG.

We recommend the following regarding the use of the BROWSEMESSAGES parameter:

- JES2 sites should use a value of MVS.
- JES3 sites should use a value of MVSGLOBAL on the JES3 global processor, and a value of MVS on the JES3 local processors.

To avoid confusion between what appears in the OPSLOG and which events are processed by the AOF, give the BROWSEMESSAGES and AOFMESSAGES parameters identical values.

Note: For more information about specifying the BROWSEMESSAGES parameter, see the *Parameter Reference*.

Introduction to Setting Your OPSLOG Browse Profile

Using OPSLOG Browse, you can view all automation events, such as unsolicited z/OS and JES messages. Because the amount of events can be very large, you can set an OPSLOG Browse profile to filter out some of them. By doing so, you can browse a subset of events that includes only the type of events you want to see.

There are two places you can specify your profile criteria:

- In the fields on the OPSLOG Browse Profile panel
- On the command line on the primary OPSLOG Browse panel

The following may help you to decide which method is best for you:

- OPSLOG Browse Profile panel
If you are a new user of CA OPS/MVS or you are unfamiliar with the OPSLOG Profile options, you may find it easier to set your profile from the OPSLOG Browse Profile panel. The panel provides fields for setting each of the options, which means that you do not have to depend upon your memory to know what options are available.
- OPSLOG Browse panel
If you are familiar with the options, you may prefer to set your profile criteria directly on the primary OPSLOG Browse panel.

More information:

[How to Use the OPSLOG PROFILE and PROFILEX Commands](#) (see page 49)
[Access and Use the OPSLOG Browse Profile Panels](#) (see page 53)

How to Use the OPSLOG PROFILE and PROFILEX Commands

You can use the PROFILE or PROFILEX commands for the following tasks:

- Clear old values from your profile.
- Set new option values.

The difference between the PROFILE and PROFILEX commands is that PROFILEX applies to exclusions. If you want to set your OPSLOG Browse Profile directly from the primary OPSLOG Browse panel, use the PROFILE or PROFILEX command. These commands can be entered on the OPSLOG Browse command line.

PROFILE Command

The PROFILE command sets your OPSLOG Browse Profile directly from the primary OPSLOG Browse panel.

This command has the following format:

```
PROFILE  
  [criteria [newvalue1] [newvalue2] [newvalue3] [newvalue4]]  
  [LIST]  
  [SET {profilid}]  
  [CLEAR]
```

criteria

(Optional) This is any of the filtering criteria described in subsequent panels. If the criteria are omitted, then the profile panel is displayed.

newvalue1-4

(Optional) These are the values used to constrain the view of OPSLOG data. If omitted, then the criteria are reset.

LIST

(Optional) Lists any saved profile settings (see PROFILE ID).

SET {*profilid*}

(Optional) Sets the profile to the profile ID designated by *profilid*. If *profilid* is omitted, then the command is equivalent to a PROFILE CLEAR command. If the profile ID specified is invalid or does not exist, then the profile panel is displayed.

For example, the following command may be entered from the OPSLOG Browse display to set the profile variables to the values of a pre-existing profile ID named MYSTUFF:

```
PROFILE SET MYSTUFF
```

CLEAR

(Optional) Resets all profile filters to null. This displays all of the messages in OPSLOG.

Note: Issuing the PROFILE command without specifying any arguments will display the OPSLOG Browse Profile panel.

PROFILEX Command

The PROFILEX command applies to exclusions.

This command has the following format:

```
PROFILEX [criteria [newvalue1] [newvalue2] [newvalue3] [newvalue4]]
```

criteria

(Optional) This is any of the filtering criteria described in subsequent panels. If the criteria are omitted, then the profile panel is displayed.

newvalue1-4

(Optional) These are the values used to constrain the view of OPSLOG data. If omitted, then the criteria are reset.

Note: If you issue the PROFILEX command without specifying any arguments, then the OPSLOG Browse Profile panel is displayed.

Examples: PROFILE and PROFILEX Commands

The following examples apply to the PROFILE and PROFILEX commands.

If an option permits multiple values, you can specify more than one value on the PROFILE command. For example:

```
PROFILE USER UA3LD21 UAIRB35
```

- **Example 1: Clearing Values From Your Profile**

To clear all the values from your profile for a particular option, specify that option on the PROFILE command, but do not specify any values for it. For example, if your current browse session displays events that come from only one job name, and you want to clear that display filter, enter this command:

```
PROFILE JOBNAME
```

As a result, events are no longer filtered by any job name.

- **Example 2: Setting a New Profile Value**

To set a new filter, specify the filtering criteria directly. For example, if you want to see events for a specific job, such as VTAM, enter this command:

```
PROFILE JOBNAME VTAM
```

As a result, only events produced by VTAM appear in your OPSLOG Browse display.

Suppose you enter this command:

```
PROFILE MSGID IST*
```

As a result, the events in your OPSLOG Browse display include only those VTAM events with message IDs that begin with the letters IST.

- **Example 3: Setting Multiple Values for an Option**

Suppose you want to see only those events associated with user IDs UA3LD21 and UAIRB35. Issue this command:

```
PROFILE USER UA3LD21 UAIRB35
```

If you issue the above command, you get the same result as if you issued these two commands:

```
PROFILE USER UA3LD21
```

```
PROFILE USER UAIRB35
```

■ **Example 4: Switching Profile IDS**

Suppose you have the following profiles defined:

- IST
- OPS
- DSN

While viewing the IST profile, you decide you want to review the OPS profile. From the command line in OPSLOG Browse, issue the following command:

```
PROFILE SET OPS
```

To return to the IST profile, issue the following command

```
PROFILE SET IST
```

Access and Use the OPSLOG Browse Profile Panels

Use these procedures to access and use the OPSLOG Browse profile panels.

To access and use the panels

1. Issue either one of these commands from the command line on the primary OPSLOG Browse panel:

PROFILE or PROFILEX

You see a display similar to the one shown here:

```

----- OPSLOG Browse Profile -----
Command =>
Profile ID      ( ? for list )
Specify I for Include (DEFAULT) and X FOR eXclude
Jobname I =>      I =>      I =>      I =>
I =>      I =>      I =>      I =>
MSGID  I =>      I =>      I =>      I =>
I =>      I =>      I =>      I =>
Ruleset I =>      I =>      I =>
Color  I =>      I =>      I =>      I =>
SYSNAME I =>      I =>      I =>      I =>
User   I =>      I =>      I =>      I =>
.
Event Profiles - specify Y or N
MSG => Y  CMD => Y  DIS => Y  DOM => Y  ENA => Y
EOM => Y  GLV => Y  OMG => Y  REQ => Y  SEC => Y
TOD => Y  SCR => Y  ARM => Y  EOS => Y  EOJ => Y
TLM => Y  USS => Y  API => Y  RULETRACE => Y
Point Shoot - specify Y or N      Timeformat C(current) or M(message)
POINTSHOOT => Y                    TIMEFORMAT => M
-----
| No level 2 profile - SCROLL DOWN for level 2 profile entry |
-----
Press ENTER key to update profile. Enter END command to return to OPSLOG.

```

This menu contains the following option for choosing which time format you prefer:

TIMEFORMAT option

Reflects the time of the timestamp on the top right of the opslog browse panel.

Valid values are:

M

(Default) Reflects the time of the first message shown in opslog.

C

Reflects the current time.

Default: M

2. Scrolling down from the primary Profile Panel.

The following secondary level Profile Panel displays:

```

----- OPSLOG Browse Second Level Profile -----
Command ==>
NOTE: Any non-blank entry in this second level profile will result in
      additional processing and may cause some delay in your OPSLOG session.
-----
| Scan for TEXT | Scan columns |
| TEXT is case sensitive | FROM | TO |
|-----|-----|
| | |
|-----|-----|

ASID ==>      ==>      ==>      ==>

Exit Type ==>      ==>      ==>
Valid Exit Types: MVS, JES3, IMS, OMG, DSN, TRAC, NIP, CICS, CNSV,
                  CA7, and NONE

Press ENTER key to update profile. Enter END command to exit.
    
```

3. Enter a question mark (?) in the entry field Profile ID of the first level profile panel. You will see a display similar to this one:

```

----- OPSLOG Browse Profile -----
C +-----+
| Current profile IDs Row 1 to 3 of 3 | Active id - MIST -
| Command ==> | d X FOR eXclude
J | Line Commands: S Select D Delete | I ==> | I ==>
| | | I ==> | I ==>
M | EXCLA | I ==> | I ==>
| JOBID | I ==> | I ==>
R | + MIST - | I ==>
C | ***** Bottom of data ***** | I ==> | I ==>
S | F1=HELP F2=SPLIT F3=END | I ==> | I ==>
U | F4=RETURN F5=RFIND F6=RCHANGE | I ==> | I ==>
+-----+
Event Profiles - specify Y or N
MSG => Y CMD => Y DIS => Y DOM => Y ENA => Y
EOM => Y GLV => Y OMG => Y REQ => Y SEC => Y
TOD => Y SCR => Y ARM => Y EOS => Y EOJ => Y
TLM => Y USS => Y API => Y RULETRACE => Y

Point Shoot - Specify Y or N
POINTSHOOT => Y

-----
| No level 2 profile - SCROLL DOWN for level 2 profile entry |
-----
Press ENTER key to update profile. Enter END command to return to OPSLOG.
    
```

The Current Profile ID panel displays the different settings you have saved under individual IDs.

A SAVE command entered with a valid profile ID creates a new entry into the table displayed above. An ID may be entered into the Profile ID entry field before issuing the SAVE command to create a new ID or overwrite an existing ID. If an ID is not entered into this entry field, the application prompts you for a new one.

Command Only OPSLOG Browse Profile Options

The only two commands from the OPSLOG Browse Profile panel are:

- CLEAR

Clears all of the non-event-related profile entries and sets the event-related profile entries to their defaults.

- SAVE

Creates a new entry into the table displayed above when entered with a valid profile ID. An ID may be entered into the Profile ID entry field before issuing the SAVE command to create a new ID or overwrite an existing ID. If an ID is not entered into this entry field, then the application prompts you for a new one.

Guidelines for Using the OPSLOG Browse Profile Panel

The options you choose on the OPSLOG Browse Profile panel determine which automation events OPSLOG presents. For example:

- If you enter a job name in the Jobname field with an I (inclusion), only events with that job name appear on the OPSLOG Browse display. If you enter an X (exclusion) before the job name, the opposite occurs; all other events appear in the OPSLOG Browse display, with the exception of those events that have the entered job name.
- All exclusion entries are processed first. Only then are any inclusion entries applied. For example, if the job name JOB771 is entered with an I, and a MSGID of \$HASP373 is entered with an X, the OPSLOG will display all events with the job name of JOB771 except the \$HASP373 message.
- For some individual options (such as Ruleset, Color, and User), you may specify multiple values. These multiple values are linked with a logical or; thus, if you specify two values for Ruleset, the events that appear in OPSLOG Browse are those that were initiated by either rule set.
- All profile options are linked to the other options by a logical and. Thus, if you specify a value for the Jobname field and a value for the Msgid field, only those events that fit both criteria appear on the OPSLOG Browse display. However, if you specify two Jobname values (such as VTAM and TEST) and one Msgid value (such as IEF250I), those events that fit either set of criteria (a job name of VTAM and a message ID of IEF250I, or a job name of TEST and a message ID of IEF250I) appear on the OPSLOG Browse display.
- If you specify values that do not match any OPSLOG entries (for example, a job name that never existed in the system), it can affect system performance, because the entire OPSLOG data area must be searched. If this happens, CA OPS/MVS must reference many pages of virtual storage, which causes many real storage pages to be assigned.

More information:

[Overview of Options for the OPSLOG Browse Profile Panel](#) (see page 56)

Overview of Options for the OPSLOG Browse Profile Panel

There are three basic types of options on the OPSLOG Browse Profile panel:

- event-related
- non-event-related
- non-filter or command only related

Non-event-related OPSLOG Browse Profile Options

The following table shows non-event-related OPSLOG Browse Profile options:

This option...	Limits events to those that...	Value	Default	Special Instructions
JOBNAME	Are produced by this job	Up to 8 job names	None	None
MSGID	Have this message ID	Up to 8 message IDs	None	None
RULESET	Are processed by this ruleset.rule	Up to 2 rule sets	None	None
COLOR	Display in this color	Up to 4 colors	None	Valid color values are: Red, Blue, White, Pink, Yellow, Green, Turquoise, and None
SYSNAME	Are produced by this system	Up to 4 SMF IDs	None	If your OPSLOG contains events from only one system, this option does not limit events.
USER	Have matching data in the USER column of the OPSLOG	Up to 4 users	None	If your site does not update the user field for the event (for example, MSG.USER field, CMD.USER field, or OMG.USER field) during rule processing, leave this option blank. The data must be displayable and in uppercase to find a match.
Scan for Text	Have this character string in its text	Up to 3 character strings	None	A from-to target column number could limit search. This is a level 2 profile. See the warning on the panel.
ASID	Have this ASID	Up to 4 ASIDs	None	This is a level 2 profile. See the warning on the panel.
Exit Type	Have this exit type	Up to 3 exit types	None	This is a level 2 profile. See the warning on the panel.

Event-related OPSLOG Browse Profile Options

The following table shows event-related OPSLOG Browse Profile options:

This option...	Limits events to those that...	Value	Default	To use, also set...
APIevent	Pertain to generic events	Y or N	Y	BROWSEAPI parameter to YES.
ARMevent	Pertain to Automatic Restart Management events	Y or N	Y	Not applicable. Always included in the OPSLOG.
CMDevent	Are MVS, JES, IMS, or VM operator commands	Y or N	Y	BROWSECMD parameter to YES.
DISevent	Pertain to the disabling of rules	Y or N	Y	BROWSEDIS parameter to YES.
DOMevent	Pertain to delete-operator-message events	Y or N	Y	BROWSEDOM parameter to YES.
ENAevent	Pertain to the enabling of rules	Y or N	Y	BROWSEENA parameter to YES.
EOJevent	Pertain to end-of-job events	Y or N	Y	BROWSEEOJ parameter to YES.
EOMevent	Pertain to end-of-memory events	Y or N	Y	BROWSEEOM parameter to YES.
EOSevent	Pertain to end-of-step events	Y or N	Y	BROWSEEOS parameter to YES.
GLVevent	Pertain to global variable events	Y or N	Y	BROWSEGLV parameter to YES, or RULETRACE parameter to ON.
MSGevent	Are WTO, WTOR, or WTL messages; or IMS messages, including those sent to MTO if the IOF is installed	Y or N	Y	Not applicable. Always included in the OPSLOG.
OMGevent	Pertain to OMEGAMON exceptions	Y or N	Y	BROWSEOMG parameter to YES.
REQevent	Pertain to request events	Y or N	Y	BROWSEREQ parameter to YES.
RULETRACE	Reflect data resulting from the RULETRACE parameter	Y or N	Y	RULETRACE parameter to ON.
SCRevent	Pertain to EPI screen events	Y or N	Y	BROWSESCR parameter to YES.

This option...	Limits events to those that...	Value	Default	To use, also set...
SECEvent	Pertain to CA OPS/MVS security events	Y or N	Y	BROWSESEC parameter to YES.
TLMevent	Pertain to time limit-exceeding events	Y or N	Y	BROWSETLM parameter to YES.
TODevent	Pertain to time-of-day events	Y or N	Y	BROWSETOD parameter to YES.
USSevent	Pertain to UNIX System Services events	Y or N	Y	BROWSEUSS parameter to YES.

The OPSLOG Browse Profile Support of Wildcards

A wildcard is a value that you specify that ends in an asterisk (*). The asterisk matches any one or more characters. You may specify wildcards for these options: JOBNAME, MSGID, RULESET, SYSNAME, and USER.

For example, if you specify IMS* as the value for the JOBNAME option, all events with job names that begin with the characters IMS appear in the OPSLOG Browse display.

Note: For the RULESET option, you may place a wildcard for both the rule set name and the rule name (as in SYS*.IEF*).

How to Navigate the OPSLOG Event Stream

Follow these guidelines when navigating through the OPSLOG event stream:

- When you first enter OPSLOG Browse, the display is positioned at the bottom of the OPSLOG event stream. Press Enter to refresh the display with the latest events. The Bottom of Messages marker is visible.
- If the OPSLOG Browse display is positioned at the top of the event stream and the data area is full, press Enter to cause the oldest events to disappear from the display. This occurs to accommodate the addition of new events to the data area; the Top of Messages marker is visible at the top of the display.
- If you move the display from its initial position at the bottom of the event stream, it will not move (to remain at the bottom) when you press Enter. To put the display back into the mode in which it moves to the bottom of the event stream each time you press Enter, type M on the command line and press the DOWN PF key.

DISPLAY Command—Change OPSLOG Browse Display Format

Use the DISPLAY command to change the format of the OPSLOG Browse display. By issuing this command, you tell CA OPS/MVS what extra columns of information you want to view for each event appearing on the OPSLOG Browse display. The settings of the OPSLOG Browse display columns are retained across OPSLOG Browse sessions.

This command has the following format:

```
DISPLAY [keyword]
```

DISPLAY Command Optional Keywords

Because of the large number of keywords for the DISPLAY command, the following keywords are grouped alphabetically:

ADdress

The memory address of the message control block in the CA OPS/MVS main address space. The main address space is called OPSMAIN.

AFlags

The operating system automation flags for events captured by the CA OPS/MVS subsystem interface exit (SS09). An automation flag is a one-byte hexadecimal value.

- The X'80' bit indicates whether CA OPS/MVS passes this event to NetView for automation (on) or not (off). You can modify this bit in message rules by modifying the MSG.AUTOFLAG variable.
- The X'40' bit indicates whether this event is the second through nth line of a multiline WTO (on) or (off).
- The X'20' bit indicates whether this event is a command response (on) or not (off).
- The X'08' bit indicates whether this event may be modified by a subsystem (on) or not (off).
- The X'10' bit (MSG.AMRF) displays a value indicating whether the message can be retained in the Action Message Retention Facility (AMRF). 0 (do not retain this message) or 1 (retain this message).
- The X'04' bit indicates whether (on) or not (off) the message is to be suppressed from the JES JOBLLOG. You can modify this bit in message rules by modifying the MSG.JOBLLOGSUP variable.
- The X'02' bit indicates whether (on) or not (off) the message is to be WTPed (Written To Programmer). You can modify this bit in message rules by modifying the MSG.WTP variable.

The remaining bits are reserved for future use; for now they are always 0.

Asid

The ID of the address space that generated this event (ASCBASID). For JES3 sites only: if the event was generated on a different processor or you specified BROWSEMESSAGES(JES3), this value is 0. For details, see *How to Control the Way OPSLOG Processes z/OS Messages (JES3 Users Only)* in this chapter.

AUTOTokn

The z/OS automation token for events captured by the subsystem interface exit (SS09) and most commonly used by NetView. You use the AUTO(token) parameter to set this token in the appropriate MPFLSTxx member of the Logical Parmlib Concatenation. You can modify this token in a message rule by modifying the MSG.AUTOTOKN environmental variable. For details, see the IBM documentation.

AUTOTOKX

Same as the value in the AUTOTokn column, except that the value appears in hexadecimal format.

COLor

The color the event is displayed in on a color terminal. If the event displays in yellow, this column contains the word yellow displayed in yellow. Possible values are green, yellow, red, blue, white, pink, and turq (for turquoise).

Note: On a monochrome terminal the color name appears, but it does not display in its color.

CONSNAME

Synonym for the DSpname keyword. The value in this column depends upon where the event originated. If the event is a message event that originated in the JES3 IATUX31 exit, this value is the name of the JES3 Dynamic Support Program (DSP) that issued the message. Typical JES3 DSP names include CONSERV, PURGE, and SETUP. If the event originated in the generic data set interface or the OMEGAMON interface, this value indicates the report ID associated with the event. If the event originated in the subsystem interface, this value is the name of the console associated with the event.

CouNt

The number of AOF rules that processed this event.

Date

The date of the event in DD:MMM format; for example, July 11 appears as 11:JUL.

Disp

After all applicable rules have executed, the final disposition of the event as determined by the AOF. This column contains no useful information for RULETRACE events. Possible values are:

- ACC-Accept. The AOF takes responsibility for processing the command. In other words, whatever action is taken with respect to the accepted command must be taken by the rule. z/OS does not attempt to execute the command.
- DEL-Delete. An AOF rule specified that this event is to be deleted; no copy was to go to either a console or to the system log. If you set the AOFDELETE parameter to NO, the DEL value never appears. This is true because AOFDELETE(NO) prevents rules from keeping events out of the system log.
- DIS-Display. A rule flagged this event so that it was sent only to a console. No copy of the event went to the system log. If you set the AOFDELETE parameter to NO, the DIS value never appears. This is true because AOFDELETE(NO) guarantees that a copy of the event goes to the system log.
- NOA-No action. (Default)The event is a command event. The AOF does not affect the command. The command is passed to z/OS after AOF processing takes place.
- NOR-Normal. The destiny of the event was unaltered by AOF rules.
- REJ-Reject. The AOF instructs z/OS to reject the command as invalid. Regardless of the validity of the command, z/OS rejects it.
- SUP-Suppress. The event was suppressed and went only to the system log.

Default: NOA

DSpname

Synonym for the CONSNAME keyword. See the CONSNAME keyword.

ELapsedtime

The amount of elapsed time it took the AOF to process the event. This value is calculated by subtracting the store clock (STCK) value at the end of AOF processing from the beginning STCK value. Typically, if there are no interrupts during processing, the numbers are the same. If an unusually large number appears in this column, the AOF lost control of the CPU during processing of this event due to an input/output interrupt, page fault, or similar occurrence.

Event

The type of AOF event associated with this line in OPSLOG Browse. Event types are:

- API-generic event
- ARM-Automatic Restart Management
- CMD-command entry
- DIS-AOF disable
- DOM-delete-operator-message
- ENA-AOF enable
- EOJ-end-of-job
- EOM-end-of-memory
- EOS-end-of-step
- GLV-global variable
- MSG-message
- OMG-OMEGAMON exception
- REQ-request
- SCR-screen
- SEC-security
- TLM-time limit event
- TOD-time-of-day
- USS-UNIX System Services

Note: Event types displayed in lowercase are those that were generated due to the RULETRACE parameter being set to ON.

EVENTID

The identifier of the event (such as IEF250I in the case of a MSG event or DISPLAY in the case of a CMD event).

The EVENTID and MSGID columns display the same data.

EXITtype

The type of system exit in which CA OPS/MVS captured this event (MVS, IMS, OMG, DSN, TRAC, NIP, CICS, CNSV, CA7, API, or NONE). This value indicates the environment in which the AOF ran.

Flags

The MCS or IMS message flags associated with the event. The type of flag you see depends on whether the event was captured by the CA OPS/MVS z/OS subsystem interface exit (SS09) or the CA OPS/MVS IMS AOI exit.

Note: For COF events, this column displays the CICS start code.

IMSid

The ID of the IMS region that generated the event. If the event was not generated by an IMS system on the current processor, the value defaults (usually to NONE).

IMSType

The type of IMS region in which the address space that generated the event resides. Possible values are:

- BCH-The address space is a stand-alone IMS batch processing job.
- CTL-The address space is an IMS Control Region.
- DEP-The address space is associated with an IMS Control Region as a message processing region (MPR), a batch message processing region (BMP), its DLISAS address space, or its DBRC address space.
- NON-The address space has no relationship to any IMS region.
- NONE-The current event was not generated by an IMS system on the current processor.

jes3Clas

For JES3 sites only, displays the class of the event. This column contains one of these items: a standard symbolic JES3 message class code, the value NON if the event was not assigned a JES3 message class, or the low-order three hexadecimal digits of the two-byte JES3 class code if one was assigned but CA OPS/MVS failed to decode it. CA OPS/MVS assigns the value of NON to all events z/OS generates when JES3 is down.

Standard JES3 symbolic class codes are:

- ALL-The event is sent to all JES3 consoles.
- D1-D22-Codes assigned to various JES3 consoles by the installation.
- ERR-System error console.
- JES-Global processor.
- LOG-System log console.
- M1-M32-Alternate main processor configurations.
- MLG-Master log console.
- MN-Main processor consoles.
- S1-S32-Alternate support processor configurations.
- SEC-Security-related events. These events are not logged to MLOG, but OPSLOG Browse captures them.
- TAP-Tape consoles.
- TP-Teleprocessing consoles.
- UR-Unit record consoles.

JOBID

The JES JOBID of the address space that produced this event.

Jobname

The name of the job from which the event originated. If the event originated with a server, the value that appears in the JOBNAME column is the started task ID of the server, rather than the actual name of the job.

Started task IDs of servers have been changed from ASIDxxxx to ssidxxxx where ssid is the subsystem ID of the current CA OPS/MVS system, and xxxx is the address space ID of the server (as a hexadecimal value). For example, OPSS0010 is the name of a server for subsystem OPSS in address space x'10'. This permits you to filter events for individual servers or for all servers in OPSLOG Browse.

If multiple copies of CA OPS/MVS are running on one system, only the names of the servers owned by the subsystem you are browsing are changed. Servers owned by other subsystems keep their original names. However, the started task ID changes in all cases.

JobNm

The subsystem job name/number. For JES3 sites only, this value is the z/OS JOBNAME of the issuer of the event, or NONE. The value is NONE if you specified BROWSEMESSAGES(JES3) and the event originated from IATUX31. For details, see How to Control the Way OPSLOG Processes z/OS Messages (JES3 Users Only) in this chapter.

Length

The event length, not including the length prefix.

MSFDest

The MSF name of the remote copy of CA OPS/MVS to which a rule has sent a message through the OPSEND function; in other words, the message event destination.

Note: For details about the OPSEND function, see the *Command and Function Reference*.

MSFid

The Multi-System Facility name for the system on which the message event originated. The MSFID column is used when one copy of CA OPS/MVS receives messages from another copy of CA OPS/MVS through an MSF session.

CA OPS/MVS sets a value for MSFID only for unsolicited messages that an AOF rule routes to another machine through the OPSEND function. For details about the OPSEND function, see the *Command and Function Reference*.

A value for MSFID is not set for solicited message events generated in response to a command issued from a remote copy of CA OPS/MVS through the OPSRMT command and returned to the issuing system over the MSF link.

Msgid

The identifier of the message event (such as IEF250I). A message event identifier is usually just the first token in the message.

CA OPS/MVS contains support for isolating message IDs from unusual messages and providing them to the AOF separately in the MSG variable.

If you find a message event with an ID that CA OPS/MVS is not identifying correctly, call CA customer support.

MSGNo

The sequence number of the event. When data collection begins, the first event OPSLOG Browse collects is 1, the second is 2, and so on. When the capacity of the OPSLOG Browse data area is exhausted, CA OPS/MVS discards the oldest events. Due to this, the first event available from OPSLOG Browse is not necessarily number 1.

NONE

If you want to view OPSLOG events without any extra data columns, specify the NONE keyword on your DISPLAY command. If you specify the NONE keyword, it must be the only keyword you specify.

Opsflags

The CA OPS/MVS flag bytes are displayed as four hexadecimal characters. For details, see the *AOF Rules User Guide*.

RELease

The release of the CA OPS/MVS system that captured the event. CA customer support may want to use this value.

Route

The route and descriptor codes of the current event, represented as hexadecimal values. You can use these codes to debug AOF table entries and to analyze console event routing problems.

RouteX

The extended route and descriptor codes of the event, represented as hexadecimal values.

RUleset

The name of the last ruleset.rule that processed the event. If no ruleset.rule has processed the event, the value is NONE.NONE.

SPecial

The special screen character for an event. The primary characters are:

System event; requires action

Problem program event; requires action

Problem program event; no action required

Note: If a problem program tries to counterfeit a system message event by issuing a message with the same message ID as the system message, the attempt fails because z/OS prefixes the message with a plus sign (+). The plus sign permits users and rules to tell the difference.

Sysid

Any two characters (controlled by the BROWSEIDFORMAT parameter) extracted from the internal system ID field. The internal system field ID contains the name of the system from which the event originated. For JES3 systems, this name is derived from the MPNAME field of the Active Main Processor Control Table. For JES2 systems, the SYSID value is derived from the SMF ID string. For message events where the message has been reissued (for example, JES3 local messages routed by sysplex console services to the global processor), this value is derived from the WQE. This field is primarily intended for use by JES3 sites, but in some cases may also be useful to JES2 sites.

SYSName

The system name of the system that created the event.

TErmname

The terminal name associated with an event.

- For COF message events, this column contains the CICS queue name.
- For a command issued from a TSO address space, this column contains the terminal name associated with the logged-on user.
- For a command issued from CA Remote Console Release 2 or higher, this column contains the name of the terminal that the RCS user logged on with.
- For events that come from the generic data set interface, this value indicates the ddname related to the subsystem data set from which the event originated.

Time

The time when the event appeared (in HH:MM:SS format).

TimeStmp

The z/OS-provided time stamp for the event. Since times are given to the second, this value should be the same as the value in the TIME column.

Token

The cross-system WTOID for the event, when the event occurs as a result of the OPSEND('W') function executing on a remote copy of CA OPS/MVS. For details, see the *Command and Function Reference*.

User

The eight-byte value of the MSG.USER variable associated with this event. MSG.USER is an AOF variable that lets rules communicate with one another about a particular message event. Upon entry to the first rule that processes the event, the value of MSG.USER is '00'X. If it is still '00'X upon exit from the last rule, the USER column contains the value NONE. If the value changes, the USER column contains the same value to which MSG.USER was set.

USERID

The user ID of the command event issuer for the security product on your system. This is usually the RACF user ID from the ACEE or the CA ACF2 user ID from the ACFASVT. If the event was a command issued from CA Remote Console, this is the user ID of the particular RCS user who issued the command.

USERX

Same as the value in the User column, except that in this column the value appears in hexadecimal format.

Wtoid

The WTO sequence number associated with the event.

XCONID

The four-byte extended console ID associated with the event, expressed as hexadecimals.

Guidelines for Using the OPSLOG DISPLAY Command

Follow these guidelines when you issue the DISPLAY command:

- There are numerous possible values for keyword described in the tables that follow. In these tables, you will notice that some keywords are shown in all uppercase characters, while others are shown in combinations of uppercase and lowercase characters. When you issue the DISPLAY command with any of its keywords, you must enter all of the characters that are shown in uppercase. If a keyword is shown in a combination of uppercase and lowercase characters, you need to enter only those characters that are shown in uppercase.

For example, if you want to view the address space ID that generated an event, you could issue the DISPLAY command by entering D A, D AS, D ASI, D ASID, DISP A, DISPLAY AS, and so on.

- If you are not sure which keywords are available, enter the DISPLAY command with no keywords. Doing so causes a selection panel that lists all of the valid column names to appear.
- Upon entry to OPSLOG Browse, the column settings are those that you used the last time. If this is the first time you have ever entered OPSLOG Browse, the Time value is the only data value that appears for each event.
- The maximum number of keywords you may specify for the DISPLAY command at any one time is 14. Although you may select up to 14 columns of information for display, the total width of those columns must be small enough to permit at least 10 characters of the event text to be visible on the panel.
- When you issue the DISPLAY command, the extra data you request appears in columns on the far-left side of the OPSLOG Browse panel. As a result, the event text is displaced to the right.
- The extra columns of data that you request with the DISPLAY command do not scroll left or right, only the event text does.
- If you want to view the events without any extra data columns, issue the DISPLAY command with the NONE keyword.

More information:

[How to View a List of All Possible OPSLOG Columns](#) (see page 73)

How to Display Event Information in One Window

To access the Event Information panel, place your cursor anywhere on the event line in the main OPSLOG display and press Enter. Note the cursor position on the following display:

```

OPSLLOG Browse OPS31A  CA31 DD_OPLOG          - 14:10:05 20SEP2007 COLS 001 070
Command ==>                                         Scroll ==> CSR
Evn ----+----1----+----2----+----3----+----4----+----5----+----6----+----7----+
MSG $HASP100 ARSMI01Z ON L81.JR1      CONVEA          FROM ARSMI01 AT USI
MSG IEC205I  OUT5,CARTCPY5,CARTCPY5,FILESEQ=0001, COMPLETE VOLUME LIST,
MSG DSN=OUTPUT.ZZCART5,VOLS=OUT5ZZ
MSG
MSG IEC502E K 0E7A,OUT5ZZ,,CARTCPY5,CARTCPY5,OUTPUT.ZZCART5
MSG CTS014  IEC502E K 0E7A,OUT5ZZ,,CARTCPY5,CARTCPY5,OUTPUT.ZZCART5
MSG CARTCPY5(784)--COPY COMPLETED WITH *ERRORS*.. TOTAL BLOCKS=0039636, TOTAL
MSG TSS7000I ARSMI01 Last-Used 28 Jul 04 14:09 System=XAD1 Facility=BATCH
MSG TSS7001I Count=20538 Mode=Fail Locktime=None Name=MICHAEL ARSENEAU
MSG $HASP373 ARSMI01Z STARTED - INIT 1      - CLASS A - SYS XAD1
MSG IEF403I ARSMI01Z - STARTED - TIME=14.10.06
MSG CAJR250I STEPNAME STEP  PGM=  CCODE EST-COST  EXCPS  ELAPSED  TOT
MSG IEF170I 1 CARTCPY5 CAJR250I STEPNAME STEP  PGM=  CCODE EST-COST  E
MSG CAJR251I STARTING  1 TAPECOPY 0000      $1.04      0 00:30:27.70 00:00:0

```

After pressing Enter with the cursor in the position indicated in the preceding example, the following screen displays.

Note: If your terminal displays less than forty lines, you will see a completely different screen.

```

----- Display All Columns for MSG Event -----
Command ==>

| Job Name | Time | Date | ASID | MSF ID | MSF DEST | WTO ID |
| CARTCPY5 | 14:10:05 | 28JUL2004 | 0173 | OPS01P | OPS01P | 72087CFB |
-----
| MessageNum | Elapsed | SysID | AF | Flags | Disp | OPSF |
| 0440385003 | 0000128 | XA | 8A | C05000 | SUP | 2408 |
-----
| Release | JobNM | Jobid | Autotokn | Xconid | Conid |
| 04.05.00 | STC06231 | S06231 | | M00000000 | M0000 |
-----
| ConsName | IMSID | IMSType | CLS | RouteDesc | TimeStmp | SYSNAME |
| INTERNAL | NONE | NON | NON | 0020 0000 | 14.10.05 | XAD1 |
-----
| Length | Special | DSP name | User | UserX | TermName |
| 066 | | INTERNAL | NONE | 0000000000000000 | NONE |
-----
| User ID | Event | Color | Token | Hex Autotokn | Exit |
| STCSYS | MSG | NONE | | 0000000000000000 | MVS |
-----
| Message ID | Event ID | Ruleset.RuleName | Count | Address |
| IEC205I | IEC205I | SUPPRESS.SUPPALL | 01 | 08CFEF00 |
-----
Route Codes<-->64 65<-->96 97<-->128 DESC
00200000 00000000 00000000 00000000 0000
-----
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-----
IEC205I OUT5,CARTCPY5,CARTCPY5,FILESEQ=0001, COMPLETE VOLUME LIST,
-----+-----8-----+-----9-----+-----0-----+-----1-----+-----2-----+-----3-----+-----4-----
Format area:

```

Placing the cursor in any of the following fields on the preceding screen and pressing Enter displays additional information on that field in the Format area section:

- | | | |
|-------|-------|--------|
| AF | OPSF | WTOID |
| FLAGS | ROUTE | ROUTEX |

For example, placing the cursor in the AF field, as illustrated in the previous screen, displays something similar to the following in the Format area:

```

-----8-----9-----0-----1-----2-----3-----4
Formatted Automation flag
Automation requested for this message; Message may be modified by subsy
stem; Message is to be WTP'ed

```

How to View a List of All Possible OPSLOG Columns

To view a list of all possible OPSLOG data columns, issue the DISPLAY command, with no keywords, from the command line of the primary OPSLOG Browse panel. The OPSLOG Browse Column Selection panel appears:

```

OPSLOG Browse ---- S034 ---- DISPLAY: Column Selection ----- Row 1 of 45
COMMAND ==>                                     SCROLL ==> CSR
Enter relative column position, or character to select column, blank to remove.
Pos Col Name Len Description
  JOBNAME      9 The name of the job that generated the event
1  TIME        9 The time the event occurred
  DATE         6 The date the event occurred
  ASID          5 The ASID of the generator of the event
  MSFID         9 The MSF ID of the system that produced the event
  MSFDEST      9 The MSF ID of the system where the event was sent
  MSGNO        11 The number of the event
  ELAPSED       8 The elapsed time needed to process the event
  SYSID         3 The system ID where the event occurred
  AFLAGS        3 The MVS automation flags
  FLAGS         7 The IMS, MCS, or JES3 message flags
  DISP          4 The final AOF disposition of the event
  OPSFLAGS      5 The CA OPS/MVS flag bytes associated with the event
  RELEASE       9 The CA OPS/MVS release that captured the event
  JOBNM         9 The subsystem jobname/number that generated the event
  JOBID         9 The JOBID of the job that generated the event
  AUTOTOKN     9 The automation token passed to NETVIEW

```

Fields on the OPSLOG Browse Column Selection Panel

The fields on the OPSLOG Browse Column Selection panel are:

Pos

A value indicating whether this column will appear on the OPSLOG Browse panel, and if so, in what position it will appear.

If the field contains a numeric value, the value indicates the relative position of the column. For example, if you place 1 in the Pos field for SYSID, and 2 in the Pos field for JOBNM, SYSID will be the first column of information about your OPSLOG Browse panel and JOBNM will be the second. Using alphabetic rather than numeric values in the Pos field is acceptable, but will not ensure ordering of the columns. If the Pos field is blank for a particular column name, that column will not appear on the OPSLOG Browse panel.

Col Name

The name of the column.

Len

The width of the column, as it will display on the primary OPSLOG Browse panel. This value is important, because although you may select up to 14 extra columns of information for display on the OPSLOG Browse panel, the total width of those columns must be small enough to permit at least 10 characters of the event text to be visible on the panel.

Description

A short description of the information in the column.

Primary Commands for the OPSLOG Browse Column Selection Panel

The following are the primary commands you may use on the OPSLOG Browse Column Selection panel. Issue primary commands from the Command field:

CANcel

Cancels your changes and returns you to the primary OPSLOG Browse panel.

SORT

Sorts the column selection list by column name (NAME, COL, COLUMN, or COLNAME), column length (LEN), current display position (POS), or the original default (DEFAULT).

For example, suppose you specify this command:

```
SORT LEN NAME
```

As a result, CA OPS/MVS sorts the column selection list first by the length of each column and then by the column name. This sort sequence is not only useful for users viewing the selection list, but also helps CA OPS/MVS to determine relative column positions when the same value has been placed in multiple Pos fields. You may specify up to four column values for the SORT command. The NAME and DEFAULT columns have unique values.

WIDTH

Causes the current total width of the selected columns to appear. This value is important, because although you may select up to 14 extra columns of information for display on the OPSLOG Browse panel, the total width of those columns must be small enough to permit at least 10 characters of the event text to be visible on the panel. By issuing this command, you can determine whether you have selected too many columns before CA OPS/MVS issues an error message.

SYSTEM Command—Access a Remote OPSLOG

Use the SYSTEM command to access the OPSLOG of a remote system. To use the SYSTEM command, the copy of CA OPS/MVS that is running on the local system and the copy that is running on the remote system must be connected through the MSF.

This command has the following format:

```
SYSTEM {sysname|?|*}
```

sysname

Specifies the remote system name of the OPSLOG you want to browse.

?

Displays the Remote System List.

If you do not know the names of the MSF-defined systems, you can enter a question mark (?) or a blank to display the Remote System List. You can select a system name from this list.

Returns you to the local OPSLOG.

Note: By default, the local OPSLOG appears each time you select OPSVIEW option 1 (OPSLOG); the remote status of the display is not preserved from one OPSLOG Browse session to another.

SYSWAIT Command—Override the MSFSYSWAIT Value

The SYSWAIT command lets you override the MSFSYSWAIT value when you are browsing the OPSLOG on a slow remote system.

This command has the following format:

```
SYSWAIT {seconds}
```

seconds

Specifies the maximum number of seconds CA OPS/MVS waits for a response from a remote OPSLOG. The minimum value of the seconds keyword is 0 seconds, which is the default. If the value is 0, the MSFSYSWAIT parameter value is used as the wait time. The maximum value is 300 seconds.

Default: 0 seconds

GOMODE Command—Automatic Update Mode

Use the GOMODE command to place OPSLOG Browse in automatic update mode. When OPSLOG Browse is in this mode, you do not have to press Enter to refresh the screen.

This command has the following format:

```
GOMODE {seconds}
```

seconds

Specifies the number of seconds CA OPS/MVS waits until it refreshes the data on the OPSLOG Browse panel. The minimum value of seconds is 1. The maximum value is either 86400 (24 hours) or the SMF maximum wait time, whichever is smaller.

Exiting Automatic Update Mode

When OPSLOG Browse is in automatic update mode, your keyboard is locked, and you cannot make any entries. To exit automatic update mode, press the ATTN (attention) key.

Using the GOMODE Command in the AOF Test Environment

You cannot use the GOMODE command if you have accessed OPSLOG from in the AOF test environment. If you try to, CA OPS/MVS ignores the command.

LOCATE Command—Locate Events in OPSLOG

Use the LOCATE command to position the OPSLOG Browse display at a particular event.

This command has the following format:

```
Locate {evtnum}{date}{time}{date time}{time date}{label}
```

Date

Specifies the date of the event you want to locate. Use one of these formats:

- 5APR or 05APR-April 5 of current year
- 25APR-April 25 of current year
- 29FEB98 or 29FEB1998-February 29, 1998
- 29FEB2008 or 29FEB08-February 29, 2008

Evtnum

Specifies the number of the event you want to locate.

For example: 0005202418

Time

Specifies the time that the event you want to locate occurred. The time value is based on military time (for example, 13:05 is five minutes after 1 p.m.). Use one of these formats:

- hh:-Hour only
- hh:mm-Hour and minutes
- hh:mm:ss-Hour, minutes, and seconds

Label

Specifies the label for the event you want to locate.

For example:

- .a
- .ZZ

LOGNAME Command—Browse an OPSLOG Log Name

Use the LOGNAME command to do the following tasks:

- Access any of the active OPSLOGs on the system you are currently browsing.
- Indicate which active OPSLOG you want to view.

To use the LOGNAME command when specifying a system name, both the local and remote systems must be running CA OPS/MVS r11.6 or higher.

This command has the following format:

```
LOGNAME Logname | ? | *
```

Logname

Specifies the OPSLOG log name you want to browse. If the name you specify is not a valid log name or the log name is not active, the current live OPSLOG displays.

Note: A *live* OPSLOG is the log currently being updated with new events as they occur in the system. There can be only one live OPSLOG.

?

If you do not know the log names, you can enter a question mark (?) or a blank to display the log name list. You can select a log name from this list.

*

Specify an asterisk (*) when you want to return to the current live OPSLOG.

Note: By default, the current live OPSLOG appears each time you select OPSVIEW option 1 (OPSLOG); the log name selection is not preserved from one OPSLOG Browse session to another.

LONGCMD Command—Increase Command Input Width

Use the LONGCMD to change the OPSLOG browse panel if the screen width is less than 160 characters. This alternate panel lets you enter long commands by providing two line for command input.

This command has the following format:

```
LONGCMD
```

SHORTCMD Command—Standard Command Input Width

Use the SHORTCMD to revert back to the standard one-line OPSLOG browse panel from the alternate OPSLOG panel of two lines created by the LONGCMD command.

This command has the following format:

```
SHORTCMD
```

How to Assign a Label in OPSLOG Browse

OPSLOG Browse lets you assign labels to lines in OPSLOG Browse so that you can rapidly return to a prior place in OPSLOG Browse. Labels are assigned by typing the label over the MSGNO column in the OPSLOG display. Since the MSGNO column is not always displayed you may need to enter a DISPLAY primary command to display the MSGNO column.

A label in OPSLOG Browse is similar to a label in ISPF edit. It must start with a period (.) and can contain as many as seven additional alphabetic characters. Labels can be moved by entering the same label on a different line. Labels can be removed by blanking them out.

The labels are unique for each log name. The same label value can be set while browsing each log name and each label represents its own unique position within that OPSLOG.

You can rapidly reposition to a label by using the LOCATE primary command followed by the name of the label to locate.

Labels are not preserved from one OPSLOG Browse session to another.

Print Data from OPSLOG Browse

Use the P and PP line commands to print data exactly as it appears in the OPSLOG Browse display.

To print OPSLOG Browse data

1. Check to see if the MSGNO (message sequence number) column is on the OPSLOG Browse display panel. If it is not, issue this command:

```
DISPLAY MSGNO
```

2. Type one of the P line commands and press Enter.
 - If you want to print a single line of data, type a P in the prefix area of the line you want to print. If you want to print several separate lines of data, you may type P in more than one prefix area before you press Enter.
 - If you want to print a block of data, type PP in the prefix areas of both the first line in the block and the last line in the block.

The data prints to your ISPF LIST data set. The printed data consists of the data columns as they appear in your OPSLOG Browse session, followed by the entire text of the event. The text wraps to fit in the width of the data set.

Provide a Default Limit for the PP Line Command

You can use the BROWSEPRINTLIM parameter to set a default limit for the number of lines you can print with the PP line command.

The minimum value of this parameter is one. There is no maximum value, although any value you specify that is larger than the value of BROWSEMAX is meaningless. The default value for BROWSEPRINTLIM is 5000.

You can modify the value of BROWSEPRINTLIM at any time. CA OPS/MVS retains the value across sessions.

Note: For details about specifying parameters, see the *Parameter Reference*.

How to Issue z/OS and JES Commands from OPSLOG

You can issue z/OS and JES commands from the OPSLOG Browse command line. To do so, prefix the command with the OPSCMD command, OC (which is the alias of the OPSCMD command), or a slash (/).

All of the following variations of the z/OS command are acceptable from the OPSLOG Browse command line:

```
opscmd r 20,u
opscmd r 20'u'
oc r 20,u
oc r 20,'u'
/ r 20,u
/r 20,u
/r 20,'u'
```

Use these guidelines when you issue z/OS and JES commands from OPSLOG:

- The output of any z/OS or JES command you issue from OPSLOG Browse appears in the OPSLOG Browse data and in the SYSLOG.
- When you issue a system command, OPSLOG is careful not to move the display in the data stream. This is true even if the display is positioned at the Bottom of Messages and would usually move each time you interacted with the system.
- To save keystrokes, you can define a PF key with the OC command alias. For example, if you define PF key 24 with the OC command verb, you can type a z/OS command such as D TS,L in the command line and press PF24.

How to Issue IMS Commands from OPSLOG

If your site uses the IMS Operations Facility (IOF), you can issue IMS commands from the OPSLOG Browse command line. The syntax you use to issue IMS commands depends upon whether you use a slash (/) as your IMS command character.

The following describes the syntax of your IMS command character:

- A slash (/)

Use two slashes to prefix the IMS command. You may know that there really should be three slashes prefixing the command—one to tell OPSLOG that you are entering a command, one to route the command to your primary IMS, and one to act as the standard slash that begins all IMS commands. You can use three slashes, but it is not necessary. If you want to issue a command to IMS without a leading slash (for example, to enter a transaction), use the OPSCMD command with its IMSID() keyword.
- Any character other than a slash

Prefix the command with all the appropriate characters. For example, if you associated a period (.) with an IMS having an IMSID of IMST, use this syntax from the OPSLOG Browse command line to issue an IMS command to IMST:

```
./display active
```

View Command Output from Within OPSLOG

OPSLOG Browse exists to display the automation event stream of the system, so there is no separate display of the output generated by the system commands you issue from the OPSLOG Browse command line. Instead, CA OPS/MVS adds these lines of output to the OPSLOG Browse event stream. You view these events as you would any other system event output. Because some commands produce many lines of output, you may need to press Enter to refresh the screen so that you can see all of the output.

If you entered the DOWN M command to position the OPSLOG Browse display at the bottom of the event stream, it will not move to remain at the bottom when you issue a system command from the OPSLOG Browse command line. It does not move because OPSLOG Browse assumes that you are looking at the event that prompted you to issue the system command, and you want the display to remain in its current position. If you want to see the output for the system command, press Enter after you have issued the system command.

When to Use the OPSVIEW Command Processor Option (Option 6)

When you view command output from in OPSLOG, unsolicited event output may be mixed with the command reply output. If you want to issue commands and not see unsolicited event output, use OPSVIEW option 6 (the OPSVIEW MVS/JES command processor).

View Command Output in TSO Line Mode

If you issue a system command from OPSLOG Browse and you want to view the output in TSO line mode, use the OPSCMD command to issue the system command through TSO.

When you issue the command through TSO from the OPSLOG Browse command line, the ISPF Dialog Manager facilities do not tell OPSLOG Browse that an event has occurred. Therefore, the OPSLOG Browse display panel you see after you view the command output is identical to the panel you were viewing before you issued the command.

How to Find Character Strings in OPSLOG Browse Event Text

The following sections describe how to find character strings in OPSLOG Browse Event text.

FIND Command Without the Column Keyword

Use the OPSLOG Browse FIND command to locate character strings in event text. The OPSLOG Browse FIND command works very much like the ISPF/PDF FIND command.

This command has the following format:

```
FIND {string}*  
    [FIRST|LAST|NEXT|PREV]  
    [startcol|startcol endcol]  
    [evtnum]
```

string

Indicates the character string you want to find. Under either of these circumstances, enclose the string in single quotes:

- The value of the string keyword contains embedded blanks.
- The value of the string keyword is numeric, and you specify other keywords along with the string keyword. This is particularly important when you specify values for startcol, endcol, or both along with a numeric value for string.

*

Indicates that OPSLOG Browse should use the search string you specified on the previous FIND command.

FIRST

(Optional) Tells CA OPS/MVS to find the first occurrence of the string.

LAST

(Optional) Tells CA OPS/MVS to find the last occurrence of the string.

NEXT

(Optional) Tells CA OPS/MVS to search forward.

PREV

(Optional) Tells CA OPS/MVS to search backward.

startcol

(Optional) Indicates the column number at which CA OPS/MVS should begin its search for the string. CA OPS/MVS will not scan any columns that appear before this column. If you specify a value for endcol, you must also specify a value for startcol.

endcol

(Optional) Indicates the column number at which CA OPS/MVS should end its search for the string. CA OPS/MVS will not scan any columns that appear after this column. The endcol keyword is optional.

evtnum

(Optional) Indicates the number of events you want CA OPS/MVS to scan before it abandons its search. You may want to specify a high value for evtnum if you cannot narrow down the search by time range. The default maximum value for evtnum is 5000, because of the huge number of events most OPSLOG users keep online.

Guidelines for Issuing the FIND Command Without the Column Keyword

Use these guidelines when you issue the FIND command:

- If the value you specify for string contains quotes, use two single quotes to indicate each single quote inside the string. Suppose you issue this FIND command:

```
FIND 'the ''quoted'' string'
```

- As a result, CA OPS/MVS searches for this string:

```
the 'quoted' string
```

- If you prefer, you may use double quotes to delimit strings, as in:

```
FIND "the 'quoted' string"
```

- You may use the same FIND command repeatedly without re-entering it. To do this, enter the RFIND command. Do not specify any keywords for the RFIND command. It will repeat the action you specified on the last FIND command you issued.

Example: FIND Command

Suppose you want to find this string: OPS1234W XYZ. You want CA OPS/MVS to begin searching for the string in column 5 and to end the search at the last column of event text. You want CA OPS/MVS to search 10,000 events before abandoning the search. To perform the search, issue this command:

```
FIND 'OPS1234W XYZ' 5 10000
```

You do not have to specify a value for endcol because CA OPS/MVS assumes that any number greater than 256 that you specify on the FIND command is the value for the evtnum keyword.

More information:

[Guidelines for Using Any Form of the FIND Command](#) (see page 88)

How to Find Character Strings in OPSLOG Browse Display Columns

Use the OPSLOG Browse FIND command with the column keyword to locate character strings in a specific OPSLOG Browse display column.

FIND Command With the Column Keyword

This command has the following format:

```
FIND column {string|prefixstring PREFIX}
          [FIRST|LAST|NEXT|PREV]
          [startcol|startcol endcol]
```

column

Indicates the specific OPSLOG Browse display column in which you want CA OPS/MVS to search. Valid values are: COLor, Event, Jobname, Msgid, RULeset, Sysid, and User.

prefixstring

Indicates the prefix CA OPS/MVS should use to search for a string in an OPSLOG Browse display column. The prefix must be at least three characters in length. You cannot use the prefixstring keyword to search the COLor display column. If you specify a value for prefixstring, you must also specify the PREFIX keyword.

PREFIX

Indicates that the value positioned immediately before this keyword is a value for prefixstring.

For explanations of the other keywords shown in the syntax table above, see Keywords for the FIND Command in this chapter.

Examples: Using the FIND Command with the PREFIX Keyword

The following are examples of issuing the FIND command with the PREFIX keyword to find strings in a specific OPSLOG Browse display column:

- To find job names beginning with the characters AI06, such as AI06SCW, AI06GX, and AI06PDS, issue the following command:

```
FIND JOBNAME AI06 PREFIX
```

- To searches backward through the OPSLOG Browse display columns and find job names such as OPSMAIN, OPSOSF, and OPSECF, issue the following command:

```
FIND J OPS PREFIX PREV
```

- To find message IDs such as IST663I, IST664I, and IST889I, issue the following command:

```
F MSGID 'IST' PREFIX
```

- To find rule sets such as SUPPRESS.IST663I, SUPPRESS.IST664I, and SUPPRESS.IST889I, issue the following command:

```
F RULESET 'SUPPRESS' PRE
```

Guidelines for Using Any Form of the FIND Command

You can use the BROWSEFINDLIM parameter to set a default limit for the number of events that CA OPS/MVS scans before abandoning a search.

The minimum value of this parameter is 1. There is no maximum value, although any value you specify that is larger than the value of the BROWSEMAX parameter is meaningless. The default value for the BROWSEFINDLIM parameter is 5000.

You can modify the value of the BROWSEFINDLIM parameter at any time. CA OPS/MVS retains the value across sessions. If you specify a value for evtnum when you issue the FIND command, that value overrides the value of the BROWSEFINDLIM parameter.

For information about all CA OPS/MVS parameters, see the *Parameter Reference*.

Similarities and Differences

Although you use many of the same keywords for the FIND command whether you issue it to find strings in event text or strings in display columns, there are some differences. Following is a list of these differences:

- When you issue the FIND command to find a string in event text, you may use the evtnum keyword to indicate the number of events you want CA OPS/MVS to scan before it abandons its search. The maximum value you can specify for evtnum is 5000. There is no evtnum keyword when you issue the FIND command to find a string in a display column.
- If the value you specify for the column keyword is not one of the columns OPSLOG Browse is currently displaying, CA OPS/MVS still accepts the FIND command. In such cases, CA OPS/MVS repositions the cursor to the beginning of the event text area of the row on which that column would appear. To display the string CA OPS/MVS found, issue the DISPLAY command as usual. For details about the DISPLAY command, see How to Display Extra Columns of Information in this chapter.
- The PREFIX and prefixstring keywords are valid only when you are searching for a string in a display column.

Chapter 5: OPSVIEW Editors Option

This section contains the following topics:

- [Overview of the OPSVIEW Editors Option \(Option 2\)](#) (see page 90)
- [Overview of the OPSVIEW AOF Edit Option \(Option 2.1\)](#) (see page 90)
- [How to Display a List of Rule Sets](#) (see page 93)
- [How to Display a List of Rules](#) (see page 99)
- [How to Edit or Modify a Rule](#) (see page 105)
- [How to Use Test Data for AOF Rules](#) (see page 107)
- [Set Up Test Data for the AOF](#) (see page 108)
- [Overview of AOF Test Panels for Different Rule Types](#) (see page 113)
- [Using the AOF Test CMD Panel](#) (see page 114)
- [Using the AOF Test DOM Panel](#) (see page 115)
- [Using the AOF Test EOM Panel](#) (see page 116)
- [Using the AOF Test GLV Panel](#) (see page 117)
- [Using the AOF Test MSG Panel](#) (see page 119)
- [Using the AOF Test OMG Panel](#) (see page 121)
- [Using the AOF Test REQ Panel](#) (see page 122)
- [Using the AOF Test TOD Panel](#) (see page 124)
- [Common AOF Test Panel Fields](#) (see page 126)
- [How to Maintain the AOF Test Compiled Rules Library \(Option 2.2\)](#) (see page 127)
- [How to Access EasyRule \(Option 2.3\)](#) (see page 132)
- [How to Maintain REXX Source Programs \(Option 2.4\)](#) (see page 133)
- [How to Use a REXX Source Program List](#) (see page 135)
- [How to Edit a REXX Program from Option 2.4](#) (see page 139)
- [How to Execute a REXX Program from Option 2.4](#) (see page 141)
- [Understanding Execution Messages and Return Codes from Option 2.4](#) (see page 142)
- [How to Manage the REXX Compiled Program Library \(Option 2.5\)](#) (see page 142)
- [How to Use a Compiled REXX Program List](#) (see page 145)
- [How to Edit a REXX Program from Option 2.5](#) (see page 150)
- [How to Execute a REXX Program from Option 2.5](#) (see page 151)
- [Understanding Execution Messages and Return Codes from Option 2.5](#) (see page 152)
- [How to Access the Relational Table Editor \(Option 2.6\)](#) (see page 152)
- [How to Access the Application Parameter Manager \(Option 2.A\)](#) (see page 153)

Overview of the OPSVIEW Editors Option (Option 2)

You can perform these tasks with the OPSVIEW Editors option:

- Edit and test AOF rules.
- Maintain the AOF test compiled rules library.
- Access EasyRule.
- Edit, compile, and execute REXX EXECs.
- Manage the REXX compiled program library.
- Access the CA OPS/MVS relational table editor.
- Access the application parameter editor.

How to Access the OPSVIEW Editors Option

To access the OPSVIEW Editors menu, enter 2 on the OPSVIEW Primary Options Menu. You see a display similar to the following:

```
CA OPS/MVS Editors----- MSI1 -- S Y S V I E W ----- Subsystem OPSD
OPTION ==>
 1 AOF Edit      - Edit and Test AOF Rules
 2 AOF Compile   - Maintain the AOF Test Compiled Rules Library
 3 EasyRule     - Create or Modify Rules using panels
 4 REXX Edit    - Edit, Compile and Execute REXX programs
 5 REXX Compile - Manage REXX Compiled Program Library
 6 Table Edit   - Relational Table Editor for RDF
 A Appl Parms  - Application Parameter Editor
```

Overview of the OPSVIEW AOF Edit Option (Option 2.1)

The CA OPS/MVS Automated Operations Facility (AOF) enables you to program a response to system events (such as messages) by using AOF rules.

What Are AOF Rules

AOF rules are special OPS/REXX programs that support automated operations by taking advantage of extensions made to the OPS/REXX programming language.

You store your AOF rules in rule sets. A rule set is implemented as a partitioned data set (PDS). Each member of the PDS contains one rule. You must create your rule sets before using the AOF edit option. CA recommends that you use ISPF/PDF option 3.2 (Data Set Utility) to create your rule sets. However, you may use the TSO ALLOCATE command instead.

For a detailed description of the AOF and instructions for writing AOF rules, see the *AOF Rules User Guide*.

Accessing Option 2.1

To access OPSVIEW option 2.1, you can either:

- Enter 1 on the Editors menu.
- Use the ISPF jump function by entering =2.1 into any valid field in OPSVIEW.

Important! If your AOF Test rule sets are in standard z/OS PDS or PDSE data sets, the field named AOF ALLOC SUBSYS located in OPSVIEW Option 0.1 (Parameters, General Settings) must be left blank. If this field is not left blank, attempting to use the AOF Test facility will result in dynamic allocation errors (error code x'035C' and information code x'005F').

Tasks You Can Perform With the AOF Edit Option

OPSVIEW option 2.1 enables you to create, edit, and test AOF rules *before* putting them into production. The commands that you use with option 2.1, such as A (Set Auto-Enable) and Z (Reset Auto-Enable), can greatly affect your rules and their execution. Therefore, when you are in test mode within option 2.1, you should *not* work with production rule sets at all. To control rules within the production CA OPS/MVS environment, refer to OPSVIEW option 4.5.

There are several tasks you can perform with the OPSVIEW AOF edit option. The following is a list of the panels that make up the AOF edit option and the tasks you perform with each:

- Specification Display panel

The first panel you see when you access the OPSVIEW AOF edit option. This panel is the pathway into the other AOF edit option panels. Use the panel to specify the rule set that you want to view or the rule that you want to create, edit, or test. For instructions, see *Accessing Option 2.1* in this chapter.

If you want to use a customized test environment, you also use this panel to specify a test suite. For details, see *How to Use Test Data for AOF Rules* in this chapter.

- Rule Set List panel

Lists rule set statistics. For details, see *How to Display a List of Rule Sets* in this chapter.

- Rule List panel

Lists all of the rules belonging to a particular rule set and provides statistics about each. For details, see *How to Display a List of Rule Sets* in this chapter.

- Rule Edit panel

Create or modify a rule. For details, see *How to Edit or Modify a Rule* in this chapter.

- Rule Test panels

Test enabled rules. Always test your rules before making them available to the production system. To learn how to enable a rule, see the table.

The Specification Display Panel

When you access option 2.1, you see a display similar to the following:

```

AOF EDIT - Entry panel --- MS11 --- O P S V I E W ----- Subsystem OPSP
COMMAND ==>
RULE LIBRARY:
  PROJECT ==> SYS1
  GROUP   ==> *           (* for all RULESETS)
  TYPE    ==> RULES
  MEMBER  ==>           (Blank for MEMBER selection list)
OTHER PARTITIONED DATA SET:
  DATA SET NAME ==>
----- AOF TEST DATA -----
(Blank all fields below in order to test with temporary data.)
TEST DATA SET NAME:
  PROJECT ==>
  GROUP   ==>
  TYPE    ==>
  MEMBER  ==>
OTHER PARTITIONED DATA SET:

```

How to Display a List of Rule Sets

In the fields on the top half of the above Specification Display panel, use one of these methods to display a list of rule sets:

- Use the Project, Group, and Type fields to enter the name of a data set. You must enter an asterisk in either the Group or the Type field.
- Use the Data Set Name field to enter the name of a data set. You must enter an asterisk in place of one level of the data set name.

As a result, the Rule Set List panel appears. Following is a sample Rule Set List panel.

Note: OPSVIEW supports wildcards only if you use the CA OPS/MVS standard rule set naming convention, which is ruleprefix.rulesetname.rulesuffix.

If you use the alternate rule set naming convention, which supports multiple data set name high-level qualifiers, you must process the rule sets one at a time. To do so, specify their data set names in the Other Partitioned Data Set field.

For more information about establishing data set naming conventions for rule sets, see the *Administration Guide* and *AOF Rules User Guide*.

The Rule Set List Panel

The Rule Set List panel shows a listing of all the rule sets in use at your site that match the search criteria you specified on the Specification Display panel.

In the following sample, the user specified SYS1.*.RULES for the search criteria, which matched four data sets:

```

AOF CTRL - Rule Set List ----- MSI1 --- SYS1.*.RULES ----- Row 1 of 64
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: S Select   E Enable   D Disable   U Utilities
A Set Auto-Enable   Z Reset Auto-Enable   C Compile   X Delete Compile
RuleSet   Status AE CNT  W.MM Created  Changed      Size Init  Mod  ID
HSM       ENABLED N 15   01.00 03/01/04 03/10/13 16:24  87  87   1  SYSAXX
IMS       DISABLED N 83   01.02 02/02/14 03/10/16 18:05 1102 881 31  OPSJRH
JES       ENABLED  Y 130  01.00 03/10/29 03/10/05 11:30 1926 1640 721 SYSAXX
0         DISABLED N 9    01.00 01/02/04 03/10/12 12:56  86  87  30  SYSAXX
    
```

The Rule Set List panel contains more columns of information than can be viewed at one time. To see the rest of the information, use the LEFT and RIGHT PF keys to scroll. The following is another view of the Rule Set List panel. Fields on the panel are described in the following section.

```

AOF CTRL - Rule Set List ----- MSI1 --- SYS1.*.RULES ----- Row 1 of 4
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: S Select   E Enable   D Disable   U Utilities
A Set Auto-Enable   Z Reset Auto-Enable   C Compile   X Delete Compile
RuleSet   Status AE CNT  Log      Last Fired Time      Next Fire Time      Count
HSM       ENABLED N 15   Y 2004/05/21 17:37:31 2004/05/21 18:37:31 19
IMS       DISABLED N 83   Y      *      *      *      *
JES       ENABLED  Y 130  Y 2004/05/21 17:39:42  NONE      NONE      36
0         DISABLED N 9    Y      *      *      *      *
    
```

Fields on the Rule Set List Panel- Left View

The following fields of data appear on the left side of the Rule Set List panel. You see these fields when you first enter the rule set list and when you press the LEFT PF key.

Rule Set

The name of the rule set.

Status

A value indicating whether the rule set is enabled or disabled. If at least one rule in the rule set is enabled, the value of the Status field is ENABLED.

AE

The auto-enable status of the rule set. If at least one rule in the rule set is set up for auto-enable, the value of the AE field is Y.

CNT

The number of rules in the rule set.

VV.MM

The version number and modification number of the rule that was last modified in the rule set.

Created

The creation date of the rule set. The value in this field is the earliest creation date CA OPS/MVS finds for a rule in the rule set.

Changed

The date and time of the last modification made to a rule in the rule set.

Size

The value in this field is the sum of the values of the individual Size fields you see on the Rule List panel. Following is a sample. Each Size field on the Rule List panel indicates the current number of lines in a particular rule; thus the Size field on the Rule Set List panel indicates the current total number of lines in all the rules in the rule set.

Init

The value in this field is the sum of the values of the individual Init fields you see on the Rule List panel. Each Init field on the Rule List panel indicates the number of lines in a particular rule when the rule was first created; thus the Init field on the Rule Set List panel indicates the initial total number of lines for all the rules in the rule set.

Mod

The value in this field is the sum of the values of the individual Mod fields you see on the Rule List panel. Each Mod field on the Rule List panel indicates the number of lines in a particular rule that have been modified. The Mod field on the Rule Set List panel indicates the total number of lines that have been modified in the rules in the rule set.

ID

The TSO user ID of the last user who modified any rule in the rule set.

Fields on the Rule Set List Panel-Right View

The following fields of data appear on the right side of the Rule Set List panel. You see these fields when you press the RIGHT PF key.

Log

A Y/N value indicating whether the NOOPSLOG option is assigned to any enabled MSG rule in the set.

Last Fired Time

The most recent date and time that a rule executed in the rule set. If no rules are enabled, an asterisk (*) appears. If the rule set is enabled but none of the rules have executed yet, the value NONE appears.

Next Fire Time

The date and time the next time-of-day (TOD) rule is scheduled to execute in the rule set. If no rules are enabled, an asterisk (*) appears. If the rule set is enabled but none of the rules have executed yet, the value NONE appears.

Count

The total number of times rules in the set have executed.

Primary Commands for the Rule Set List Panel

Use the following primary commands on the Rule Set List panel. Issue primary commands from the Command field.

COMPILE

Invokes the AOF test compiled rules library.

GLOBAL

Invokes AOF Global Variables application for the AOF Test global variable pool

Locate ruleset

Scrolls the panel so that the line referring to ruleset is the top line on the panel.

OpsBrw

Invokes the OPSLOG Browse Test Data panel. This panel is a full-screen display of current rule test data.

Select ruleset

Selects ruleset for editing.

`SORT [col1 [A|D] [col2 [A|D] ... [coln [A|D] ...]]`

Sorts the specified column(s) in the specified order, A for Ascending or D for Descending. If not specified, the default column is Rule Set. If not specified, the default sort order is Descending, except for columns Rule Set and ID which sort Ascending by default.

For example, the following command performs a sort by descending dates and times when the rule sets were last changed within ascending dates on which the rule sets were created:

```
SORT CREATED A CHANGED
```

Point-and-shoot is enabled to SORT the AOF Rule set List using any displayed column. To SORT the AOF Rule set List using the point-and-shoot method, place the cursor on a displayed column heading and press Enter. Point-and-shoot is enabled only if no primary commands have been entered.

Line Commands for the Rule Set List Panel

Use the following line commands on the Rule Set List panel. Issue line commands in the prefix area preceding the name of the desired rule set.

A

Sets the auto-enable flag for each rule in the rule set to Y. This means that when the rule set is enabled, all the rules in it are automatically enabled.

C

Compiles all of the rules in the set into the compiled rule data set.

D

Disables all of the rules in the rule set that were previously enabled.

E

Enables all of the rules in the rule set that have values of Y in their AE fields. You enable a rule so that it can be tested. If a rule contains syntax errors, the E command fails.

S

Selects the rule set to be displayed. When you enter the S command, the Rule List panel appears. The Rule List panel lists all of the rules in the rule set you selected. For details, see The Rule List Panel in this chapter.

U

Accesses the PDS member list display for the rule set. This display is identical to the member list display you see when you choose ISPF/PDF option 3.1 (Library Utility).

X

Deletes all of the rules in the set from the compiled rule data set.

Z

For all rules in the rule set, resets the value of the AE field to N. This means that all rules in the rule set are ineligible to be enabled.

Point-and-shoot is enabled to issue the S line command for any displayed Rule set. To issue the S line command for a displayed Rule Set using the point-and-shoot method, place the cursor to the left of the Rule Set and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Display a List of Rules

There are two ways that you can display a list of rules:

- On the Specification Display panel, use the Project, Group, and Type fields to enter the name of an existing rule set, but leave the Member field blank.
- On the Rule Set List panel, issue the S line command.

When you request a list of rules, the Rule List panel appears.

The Rule List Panel

The Rule List panel shows a listing of all the rules in a rule set. Here is a sample of the Rule List panel:

```

AOF CTRL - Rule List ----- SYS1.0.RULES ----- Row 1 of 9
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands:  R EasyRule  S ISPF Edit  V View  T Test C Compile
E Enable  D Disable  A Set Auto-Enable  Z Reset Auto-Enable  X Delcomp
Test Start Date : 2007/10/17 Test Start Time : 09:45:00
Test Current Date : 2007/10/17 Test Current Time: 09:45:00
Rulename Status AE TYP VV.MM Created Changed      Size Init Mod ID
BUSY      DISABLED N ***
BUSYGLV   DISABLED N ***
CMD       ENABLED  N CMD 01.13 01/11/30 02/11/18 15:39    6   5   3 OPSJRH
DFS040I   DISABLED N *** 01.00 02/01/26 02/01/26 13:32   12  12  0 OPSJRH
DOM       DISABLED N *** 01.00 03/10/12 03/10/12 12:56    4   4   0 NA1CS75
EOM       DISABLED N *** 01.03 01/12/10 01/12/10 20:30   31  32   7 SYSAXX
GLB       DISABLED N *** 01.00 02/05/17 02/05/17 22:40    3   3   0 SYSAXX
OMG       DISABLED N *** 01.00 02/05/23 02/05/23 19:51   10  10   0 SYSAXX
REQ       ENABLED  N REQ 01.04 01/02/04 01/02/04 21:46   20  21  20 SYSAXX
TOD       ENABLED  N TOD 01.02 01/02/04 01/02/04 21:46   10  35   1 SYSAXX
TOD1      DISABLED N *** 01.03 02/05/23 02/05/23 12:29   27  27   1 SYSAXX
TOD2      DISABLED N *** 01.00 02/05/23 02/05/23 17:06   30  30   0 SYSAXX
TOD3      DISABLED N *** 01.00 01/12/10 01/12/10 18:17   12  12   0 SYSAXX
**END**

```

The Rule List panel contains more columns of information than you can view at one time. To see the rest of the information, use your LEFT and RIGHT PF keys to scroll.

Following is another view of the Rule List panel. Descriptions of the fields on the panel are presented next:

```
AOF CTRL - Rule List ----- SYS1.0.RULES ----- Row 1 of 9
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: R EasyRule S ISPF Edit V View T Test C Compile
E Enable D Disable A Set Auto-Enable Z Reset Auto-Enable X Delcomp
Test Start Date : 2007/10/17 Test Start Time : 09:45:00
Test Current Date : 2007/10/17 Test Current Time: 09:45:00
RuleName Status AE TYP Log Last Fired Time Next Fire Time Count
BUSY      DISABLED N *** * * * * * * * *
BUSYGLV   DISABLED N *** * * * * * * * *
CMD       ENABLED N CMD Y 2004/05/21 19:09:13 NONE NONE 22
DFS040I   DISABLED N *** * * * * * * * *
DOM       DISABLED N *** * * * * * * * *
EOM       DISABLED N *** * * * * * * * *
GLB       DISABLED N *** * * * * * * * *
OMG       DISABLED N *** * * * * * * * *
REQ       ENABLED N REQ Y * * * * * * * *
TOD       ENABLED N TOD Y * * * * * * * *
TOD1      DISABLED N *** * * * * * * * *
TOD2      DISABLED N *** * * * * * * * *
TOD3      DISABLED N *** * * * * * * * *
```

Types of Fields on the Rule List Panel

Two types of fields appear on the Rule List panel. The test date and test time fields that appear toward the top of the panel are modifiable. The remaining fields provide information about the individual rules in the rule set and cannot be modified.

Modifiable Fields on the Rule List Panel

The modifiable fields on the Rule List panel are:

- Test Start Date
The date you want the test to begin.
- Test Start Time
The time you want the test to begin.
- Test Current Date
The current date. This date may differ from the Test Start Date.
- Test Current Time
The current time. This time may differ from the Test Start Time.

Non-modifiable Fields on the Rule List Panel-Left View

You see the non-modifiable fields when you first enter the rule list and when you press the LEFT PF key. You cannot modify them. The informational fields that appear on the left side of the Rule List panel are:

- **Rulename**

The name of the rule. The rule name is a member name belonging to the PDS, or rule set, which is named at the top of the panel. In the sample panel shown above, the rules listed on the panel belong to the rule set named SYS1.O.RULES.

- **Status**

Indicates whether the rule is enabled or disabled. You must use the E line command to enable a rule if you want to test it.

- **AE**

The auto-enable status of the rule set.

- **TYP**

The type of the rule. If the value of the Status field is DISABLED, the value of the TYP field is ***. If the value of the Status field is ENABLED, the value of the TYP field can be any of these values:

- ARM-Automatic Restart Management rule
- CMD-Command rule
- DOM-Delete-operator-message rule
- EOJ- End-of-job rule
- EOM-End-of-memory rule
- EOS-End-of-step rule
- GLV-Global variable rule
- MSG-Message rule
- OMG-OMEGAMON rule
- REQ-Request rule
- SCR-Screen rule
- SEC-Security rule
- TLM-Time limit excession rule
- TOD-Time-of-day rule
- USS-UNIX System Services rule

- **VV.MM**

The version number and modification number of the rule. Each time a user modifies the rule, CA OPS/MVS updates this value.

- Created
The creation date of the rule.
- Changed
The date and time of the last modification made to the rule.
- Size
The current number of lines in the rule.
- Init
The number of lines in this rule when it was first created.
- Mod
The number of lines in this rule that have been modified.
- ID
The TSO user ID of the last user who modified this rule.

Non-modifiable Fields on the Rule List Panel-Right View

You see these non-modifiable fields when you press the RIGHT PF key. You cannot modify them.

The informational fields that appear on the right side of the Rule List panel are:

- Log
If the rule is an MSG rule, a Y/N value indicating whether the NOOPSLOG option is assigned to it.
- Last Fired Time
The date and time of day that the rule was last executed.
- Next Fire Time
The date and time of day that the rule is next scheduled to execute. This field applies only to time of day rules.
- Count
The total number of times the rule has been executed.

Primary Commands for the Rule List Panel

You can use the following primary commands on the Rule List panel. Issue primary commands from the Command field.

Compile

Invokes the AOF test compiled rules library.

Data

Invokes ISPF option 3.1 for the AOF test data set. This command is valid only if you entered a value into the Test Data Set Name field on the Specification Display panel.

Globals

Causes the Display Global Variables panel to appear. You can use the Display Global Variables panel to:

- Display the subnodes of a global variable.
- Drop a node.
- Remove a node and its subnodes.
- Create and modify global variables.

Locate rule

Scrolls the panel so that the line referring to rule is the top line on the panel.

OpsBrw

Invokes the OPSLOG Browse Test Data panel. This panel is a full-screen display of current rule test data.

Rules

Invokes ISPF option 3.1 for the AOF test rule data set.

Select rulename

Selects rulename so that you can edit it.

`SORT [col1 [A|D] [col2 [A|D]...[coln [A|D] ...]]`

Sorts the specified columns in the specified order: A for Ascending or D for Descending. Each column name may be abbreviated. If not specified, the default column is RuleName. If not specified, the default sort order is Descending, except for columns RuleName (which may also be abbreviated as Name), TYP, and ID which sort Ascending by default.

For example, you can issue this command to sort the rules by descending last time fired within ascending type of rule:

```
SORT TYP LAST
```

Test

Starts a test using all the rules you have enabled.

Line Commands for the Rule List Panel

Use the following line commands on the Rule List panel. Issue line commands in the prefix area preceding the desired rule.

A

Sets the auto-enable flag of the rule to Y. If you use the Rule Set List panel to enable the rule set to which this rule belongs, this rule is enabled. Contrast this command with the Z line command.

C

Compiles the rule into the compiled rule data set.

D

Disables a rule that was previously enabled.

E

Enables a rule so that you can test it. If a rule contains syntax errors, the E command fails.

R

Invokes EasyRule processing for the rule. You can use the R command for a rule only if you used EasyRule to create the rule and you have not used the S line command to edit the rule.

S

Selects the rule for ISPF editing. The panel you see when you issue the S command is similar to an ISPF edit session of the rule. You may notice slight modifications to the panel that appear to remind you that you are in the AOF edit option. You can use the ISPF HELP command when you are in the editing session.

T

Displays the AOF Test panel. For details about testing rules, see Step 3: Enter the Test Environment in this chapter.

V

Selects a rule to view (read-only).

X

Deletes the rule from the compiled rule data set.

Z

Sets the auto-enable flag of the rule to N. Even if you use the Rule Set List panel to enable the rule set to which this rule belongs, this rule will not be enabled. Contrast this command with the A line command.

Point-and-shoot is enabled to issue the S line command for any displayed Rule. To issue the S line command for a displayed Rule using the point-and-shoot method, place the cursor to the left of the RuleName and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

Note: When a rule is selected for EDIT, through either the S primary command or the S line command, and the rule is in EasyRule format, the following warning message is issued:

```
**** W A R N I N G ****
```

```
You are about to edit an AOF rule that is in EasyRule format.  
If you change the member you will not be able to use  
EasyRule to edit it in the future.
```

How to Edit or Modify a Rule

To use the AOF Edit Option to edit or modify a rule, you must access the Edit Rule panel. There are two ways that you can access the panel:

- On the Specification Display panel, use the Project, Group, Type, and Member fields to enter the name of a rule.
- On the Rule List panel, issue the S primary or S line command.

When you select a rule to edit, the Edit Rule panel appears.

The Edit Rule Panel

Here is a sample of the Edit Rule panel:

```
EDIT      RTM.QA.OPS.SAMPLE.RULES(ARCHFAIL) - 01.02      Columns 00001 00072
Command ==>                                         Scroll ==> CSR
***** ***** Top of Data *****
000100 )MSG OPS83200
000200 )PROC
000300 /*****
000400 /* Rule Name:      ARCHFAIL                               */
000500 /* Rule Type:      Message                                   */
000600 /* Rule Function:  This rule fires on the "archive creation completed"*/
000700 /*                message. It will notify a tso userid if the      */
000800 /*                archive creation did not receive a zero return code*/
000900 /* Author:        MLS                                         */
001000 /* History:       03/04/18 - Initial Creation - MLS           */
001100 /*                */
001200 /*****
001300
001400     userid = "???" /* Specify the userid to be notified */
001500     parse VAR MSG.TEXT with . "MAXRC=" retcode .
001600     if retcode = 0 then
001700         do
001800             ADDRESS TSO
001900             "SEND 'Archive creation job" MSG.JOBNAME ,
002000             "ended with return code" retcode "' USER("userid")"
002100         end /* if retcode = 0 then do */
***** ***** Bottom of Data *****
```

Note: Issuing the SAVE command to save a rule from in an editing session does not make the rule available for testing, nor does it compile the rule or check its syntax. Before you can test a rule, you must enable it by issuing the E command on the Rule Set List panel or the Rule List panel.

For detailed information about the AOF and instructions for writing AOF rules, see the *AOF Rules User Guide*. If you want information about the OPS/REXX programming language, see the *Command and Function Reference*.

How to Use Test Data for AOF Rules

If you are using the AOF edit option to test rules, you need to indicate what data the AOF should use for the test: temporary data or a test suite data set. Use the bottom half of the Specification Display panel to indicate your choice. The following list describes the difference between using temporary data and using a test suite data set:

- If you want the AOF to use temporary data to test rules

Do not make entries on the bottom half of the Specification Display panel. You must extract data from OPSLOG to use for your test.

Regardless of the type of test you run, all of the data the AOF uses for the test is temporary. The data goes away after the test session.

For an explanation of the steps to set up test data, see [How to Set Up Test Data for the AOF](#) in this chapter. You must follow these steps each time you want to use temporary data for your rule tests.

- If you want to use a more permanent testing environment to test rules

Specify the name of your test suite data set in the fields on the bottom of the Specification Display panel. If you do not specify a member name, the AOF supplies one for you. Your test suite data set must be a standard PDS library with fixed length 80-byte records.

The first time you use your test suite data set, you must extract data from OPSLOG (just as you would do if you wanted to use temporary data). The difference is that after the test session, the AOF stores the data in the data set and the member you specified so that you can use it again.

The next time you perform a test using the data, enter the name of the data set and member on the Specification Display panel, and the AOF uses the data you have stored in that member for the test.

For an explanation of the steps to set up test data, see [How to Set Up Test Data for the AOF](#) in this chapter. You must follow these steps when you want to create a test suite data set for your rule tests.

Set Up Test Data for the AOF

Follow the steps on the next several pages to set up test data for the AOF.

To set up test data for the AOF

1. Verify That the Rule Is Enabled

Before you can test a rule, it must be enabled. If you have not enabled the rule, you can do so from the Rule List panel. Enter the E line command in the prefix area of the line on which the name of the rule appears. Do this for every rule you want to test.

If the E command fails, the rule contains syntax errors. Correct the syntax errors and issue the E command again.

2. Issue the T Command for the Rule

On the Rule List panel, enter the T line command in the prefix area of the line on which the name of the rule you want to test appears. As a result, the AOF places you in the rule test environment.

3. Enter the Test Environment

When the AOF places you in the rule test environment, the actual panel you see depends upon the type of rule you selected for testing. In the following sample panel, the words AOF Test CMD appear at the upper left corner of the panel to indicate that the rule that was selected for testing is a CMD (command) rule.

If you are testing another type of rule, such as a MSG (message) or OMG (OMEGAMON) rule, the panel you see will differ slightly. All of the panels and the fields that appear on them are described under Overview of AOF Test Panels for Different Rule Types in this chapter. Regardless of the type of rule you want to test, the process of setting up test data is essentially the same.

```

AOF Test CMD ----- MSI1 --- OPSVIEW --- 13:38:09 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N   Live Commands ==> NO       Access Auto Test Data: (Y/N)
IMS Id      ==>           Exit Type      ==> MVS
Console Number ==> 1       Jobname       ==> T
Console Name ==>           Command Disp:
User Field  ==>           Command Verb:
Command     ==>
Time        -----1-----2-----3-----4-----5-----6-----7
***** ***** TOP OF MESSAGES *****
13:38:09 ENABLE 0.CMD
13:38:09 ENABLE 0.CMD
***** ***** BOTTOM OF MESSAGES *****

```

The messages that appear in the message section at the bottom of the panel shown above came from OPSLOG. They indicate that the user enabled the rule named CMD that is stored in the O rule set. At this point, the rule has not been tested.

4. Access OPSLOG Browse

From the AOF Test panel for your rule, enter a Y in the Access Auto Test Data field. As a result, the AOF puts you into OPSLOG Browse. Following is a sample panel:

```

OPSLOG Browse Test Data-- MSI1 --- AOF TEST --- 09:41:05 29JUN2007 COLS 001 059
Line commands 'E' and 'EE' available for test data extraction
COMMAND ==>                                SCROLL ==> CSR
MessageNum Message ID ----+----1----+----2----+----3----+----4----+----5----+----
0105917000 IST664I   IST664I REAL OLU=NETTX.EMCVAPP7   REAL DLU=NETTX.AH01
0105917001 IST889I   IST889I SID = D90BE39BB5E72EEB
0105917002 IST889I   IST889I SID = D90BE39BB5E72EEB
E105917003 IST264I   IST264I REQUIRED RESOURCE      AH01207Z UNDEFINED
0105917004 IST264I   IST264I REQUIRED RESOURCE      AH01207Z UNDEFINED
0105917005 IST314I   IST314I END
0105917006 IST314I   IST314I END
0105917007 OPS1400H  OPS1400H MSIADA   OPSS JES3 3.1   NONE
0105917008 OPS1400H  OPS1400H MSIADA   OPSS JES3 3.1   NONE
0105917009 OPS1181H  OPS1181H MSIADA   OPSS           MVS E MSIADA,PERFORM=002
0105917010 OPS1181H  OPS1181H MSIADA   OPSS           MVS E MSIADA,PERFORM=002
EE05917011 E           E MSIADA,PERFORM=002
0105917012 RESET     E MSIADA,PERFORM=002
0105917013 IEE304I   IEE304I MSIADA   JOB RESET
EE05917014 IEE304I   IEE304I MSIADA   JOB RESET
0105917015 OPS1450H  OPS1450H MSIADA   OPSS OPSLOG
0105917016 OPS1450H  OPS1450H MSIADA   OPSS OPSLOG
0105917017 OPS1450H  OPS1450H MSIADA   OPSS OPSLOG
0105917018 OPS1450H  OPS1450H MSIADA   OPSS OPSLOG
***** ***** BOTTOM OF MESSAGES *****

```

5. Extract Lines of Data from OPSLOG

After the AOF puts you into OPSLOG Browse, you can begin extracting data for your rule test. Use these commands to extract the data:

E

Extracts a single line of data. Place an E in the MessageNum (message number) field of each single line of data you want to extract. Notice that in the panel above, the user has placed the E command to extract a single line.

EE

Extracts a block of data. Place the characters EE in the MessageNum fields of the first and last lines of the block you want to extract. In the panel above, the user has placed the EE command to extract a four-line block.

After you enter in the E or EE commands, press PF3 (END). As shown in the panel above, you may specify multiple single line and block extractions before pressing PF3. When you press PF3, the AOF displays the AOF Test Data Selection panel, where you can view the data you extracted.

Note: When the AOF takes you into OPSLOG Browse, the MessageNum field always appears on the OPSLOG Browse Test Data panel. This occurs because the MessageNum field is the only OPSLOG Browse field that permits data entry for line commands.

6. View and Verify Extracted Data

After you extract data from OPSLOG Browse, the AOF displays the AOF Test Data Selection panel. Use this panel to view the data you extracted, and verify it is correct:

```

AOF Test Data Selection ----- OPSVIEW ----- ROW 1 OF 5
COMMAND ==>                                SCROLL ==> PAGE
Line Cmds: A-Add (DD)D-Del R-Replicate S-Select (TT)T-(Block) Test U-Update
Test Suite: Temporary Test Data
Acquire Data from OPSLOG Browse ==> (Y/N)
Job Name  Msg ID      Shortened Text
*****
MSIADA    E              E MSIADA,PERFORM=002
MSIADA    RESET          E MSIADA,PERFORM=002
*MASTER* IEE304I        IEE304I MSIADA  JOB RESET
NONE      IEE304I        IEE304I MSIADA  JOB RESET
NETVIEW   IST264I        IST264I  REQUIRED RESOURCE  AH01207Z
***** Bottom of data *****
    
```

When you look at the AOF Test Data Selection panel, you may decide to extract more data for the test, or to edit the data in some way. Steps 7 and 8 can help you.

7. Extract Additional OPSLOG Data

If you are viewing the AOF Test Data Selection panel, and you need more OPSLOG data for your rule test, enter a Y in the Acquire Data from OPSLOG Browse field. As a result, the AOF returns you to OPSLOG Browse.

After you place the E or EE commands on the new data lines you want to extract and press PF3, the AOF asks if you want to add the new lines to your existing test data or replace the existing test data with the new lines.

When you respond, the AOF returns you to the AOF Test Data Selection panel.

8. Edit the Extracted Data

Notice the line commands that appear on the sample AOF Test Data Selection panel (shown above). You can use the following commands to modify the test data you extracted from OPSLOG Browse.

A

Adds a line of test data to the AOF Test Data Selection panel. If you issue this command, the AOF takes you to the AOF Test Data Edit panel. For details, see The AOF Test Data Edit Panel in this chapter.

D

Deletes a single line of test data.

DD

Deletes a block of lines of test data. Place the command in the prefix area of both the first and the last lines in the block.

R

Copies (replicates) a line of test data.

S

Selects a line of test data for editing.

T

Tests a single line of data against all enabled rules.

TT

Tests a block of lines of test data against all enabled rules. Place the command in the prefix area of both the first and the last lines in the block. Use this command with caution; it runs a separate test for all enabled rules multiplied by the number of lines in the block.

U

Updates a line of test data. If you issue this command, the AOF takes you to the AOF Test Data Edit panel. For details, see The AOF Test Data Edit Panel in this chapter.

9. Use the Extracted Data to Test Your Rule

When you are satisfied with the data you have extracted, issue the T line command on the AOF Test Data Selection panel.

As a result, the AOF tests your rule and displays the results on the OPSLOG Browse Test Data Results panel.

Following is a sample panel:

```

OPSLOG Browse Test Data-- MSI1 --- AOF TEST --- 09:47:38 29JUN2007 COLS 001 057
----- Results from AOF Test Environment -----
COMMAND ==>                                SCROLL ==> PAGE
Ruleset.Rulename  Dis  ----+----1----+----2----+----3----+----4----+----5----+--
*****          ***          TOP OF MESSAGES          *****
O.CMD              NON  ENABLE O.CMD
O.CMD              000  ENABLE O.CMD
O.CMD              REJ  RESET MSIADA,PERFORM=002
NONE.NONE         NON  GLOBAL.RESET O.CMD MSILCD
NONE.NONE         000  OPS4200I TSO: 'SEND 'RESET command issued ' USER(MSISUPA)
O.CMD              008  RESET MSIADA,PERFORM=002
*****          ***          BOTTOM OF MESSAGES          *****

```

The results shown in the above sample indicate that the enabled rule named CMD, which is stored in the rule set named O, took these three actions:

- Rejected the RESET command
- Modified a global variable
- Issued a TSO SEND command

The AOF Test Data Edit Panel

If you use the A or U line command on the AOF Test Data Selection panel, the AOF displays the AOF Test Data Edit panel. Following is a sample panel.

If you issue the A command, all the fields on the AOF Test Data Edit panel are blank. If you issue the U command, the fields contain the data from the line of test data you selected for update. For the following sample panel, the user issued the U command.

To use the AOF Test Data Edit panel, type data into any of the blank fields or type over any existing data you want to modify. You do not have to specify data in all of the fields, but the Event Type and Text fields must always contain data.

```

AOF Test Data Edit ----- OPSVIEW -----
Using ==> Temporary Test Data
COMMAND ==>
Event Type    ==> C      Route Codes ==> 00000000000000000000000000000000
Job Name      ==> MSIADA  User Data   ==>
Console ID    ==> 22     System ID   ==> SM
Console Name  ==> ALT1XAD1
Exit Type     ==> M      IMS ID      ==> NONE
Job ID        ==>          From Sys    ==> MSIA
Addr. Space ID ==> 0020   Desc.Codes  ==> 0000
MCS Flags     ==> 000000  WTO Number  ==> 00000000
OPS Flags     ==>          Special Char ==>
Text          ==> E MSIADA,PERFORM=002
    
```

Example: Test Data Update

Suppose that you want to modify the job name shown in the sample panel above to MSILCD and the command text to RESET MSIADA,PERFORM=002. To do so, type the new values into the Job Name and Text fields and press Enter. As a result, the panel shown here appears:

```

AOF Test Data Selection ----- OPSVIEW ----- ROW 1 OF 4
COMMAND ==>                                     SCROLL ==> PAGE
Line Cmds: A-Add (DD)D-Del R-Replicate S-Select (TT)T-(Block) Test U-Update
Test Suite: Temporary Test Data
Acquire Data from OPSLOG Browse ==> (Y/N)
Job Name  Msg ID      Shortened Text
*****
MSIADA    E              E MSIADA,PERFORM=002
MSILCD    RESET          RESET MSIADA,PERFORM=002
*MASTER*  IEE304I        IEE304I MSIADA  JOB RESET
NONE      IEE304I        IEE304I MSIADA  JOB RESET
***** Bottom of data *****
    
```


Guidelines for Using the OPSLOG Browse Test Data Results Panel

Remember these points when you are viewing the results of an AOF rule test:

- Although the OPSLOG Browse Test Data Results panel incorporates all of the functions of OPSLOG Browse, it is a closed facility. This means that it receives messages from the AOF rule test panels exclusively.
- The messages that appear under the ruler are those that the AOF generated as a result of the current rule test and any other rule tests you performed during this rule test session. When you exit the AOF Edit Option, this area is cleared.
- The part of the display area to the left of the ruler provides columns of OPSLOG Browse information, such as the name of the rule that produced the message and the time the rule was processed. If you want to see additional columns of information, see How to Display Extra Columns of Information in the chapter “Using the OPSVIEW OPSLOG Option.”
- The results panel shows the results of all of the tests you ran during this rule test session. You may view the results by using the PF7 and PF8 keys to scroll up and down in the bottom half of each test panel. Or you can issue the OPSBRW command from the Rule List panel, and the AOF displays the OPSLOG Browse Test Data panel, which is a full-screen display of current rule test data.

Note: When you issue the OPSBRW command, the AOF does not display the actual OPSLOG Browse facility.

Overview of AOF Test Panels for Different Rule Types

When the AOF places you in the rule test environment, the actual panel you see depends upon the type of rule you selected for testing. For example, if you select a command rule to test, the AOF displays the AOF Test CMD panel. If you select an OMEGAMON rule, the AOF displays the AOF Test OMG panel.

When you finish typing data into an AOF test panel and press Enter, the AOF tries to match the information you specified on the panel to the enabled rules of the AOF. The AOF displays the test results in the bottom part of the AOF test panel. Once you see the results, you can press PF3 to terminate the rule test session. If you want to continue testing, you can change some of the field data and press Enter again. For more information about viewing test results, see Guidelines for Using the OPSLOG Browse Test Data Results Panel in this chapter.

Although there is a different panel for each of the eight types of AOF rules, they are very similar. In fact, many of the same fields appear on all of the AOF test panels.

The next eight sections describe how to use the AOF test panels for each rule type. Each section includes a sample panel and descriptions of all the fields that are unique to the panel. For descriptions of the fields that are common to many or all of the panels, see Common AOF Test Panel Fields in this chapter.

Using the AOF Test CMD Panel

When you select a command (CMD) rule for testing, the AOF displays the AOF Test CMD panel. The panel prompts you for information about the command rule you want to test. Following is a sample panel.

```

AOF Test CMD ----- MSI1 --- OPSVIEW --- 14:47:14 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N   Live Commands ==> NO   Access Auto Test Data: (Y/N)
IMS Id      ==>           Exit Type      ==> MVS
Console Number ==>           Jobname      ==> T
Console Name ==>           Command Disp:
User Field   ==>           Command Verb:
Command      ==> CMD
Time        -+--+1-+--+2-+--+3-+--+4-+--+5-+--+6-+--+7
***** ***** TOP OF MESSAGES *****
14:43:09 ENABLE 0.CMD
14:43:09 ENABLE 0.CMD
14:45:24 DISABLE 0.CMD
14:45:24 DISABLE 0.CMD
14:47:07 ENABLE 0.CMD
14:47:07 ENABLE 0.CMD
***** ***** BOTTOM OF MESSAGES *****

```

For details about how to write AOF command rules and how command rules are processed, see the *AOF Rules User Guide*.

Fields on the AOF Test CMD Panel

The following fields are unique to the AOF Test CMD panel. For descriptions of fields that are common to many or all of the AOF test panels, see Common AOF Test Panel Fields in this chapter.

Command

The command text you want to test.

Command Disp

The disposition of the current command. Valid values are ACCEPTED, REJECTED, and NOACTION.

Command Verb

The text of the command.

Using the AOF Test DOM Panel

When you select a delete-operator-message (DOM) rule for testing, the AOF displays the AOF Test DOM panel. The panel prompts you for information about the delete-operator-message rule you want to test. Following is a sample panel.

For details about how to write AOF delete-operator-message rules and how these rules are processed, see the *AOF Rules User Guide*.

```

AOF Test DOM ----- MSI1 --- OPSVIEW --- 16:33:03 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N Live Commands ==> NO Access Auto Test Data: (Y/N)
User Field ==> Exit Type ==> MVS
Time -----1-----2-----3-----4-----5-----6-----7
***** ***** TOP OF MESSAGES *****
15:27:24 ENABLE 0.WTO
15:27:24 ENABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:33:03 ENABLE 0.DOM
16:33:03 ENABLE 0.DOM
***** ***** BOTTOM OF MESSAGES *****

```

Fields on the AOF Test DOM Panel

All of the fields that appear on the AOF Test DOM panel are common to some or all of the other AOF test panels. For descriptions of the fields on the AOF Test DOM panel, see Common AOF Test Panel Fields in this chapter.

Using the AOF Test EOM Panel

When you select an end-of-memory (EOM) rule for testing, the AOF displays the AOF Test EOM panel. The panel prompts you for information about the end-of-memory rule you want to test. Following is a sample panel.

For details about how to write AOF end-of-memory rules and how they are processed, see the *AOF Rules User Guide*.

```

AOF Test EOM ----- MSI1 --- OPSVIEW --- 16:34:04 29JUN2007 COLS 001 070
COMMAND ==>
                                SCROLL ==> PAGE
REXX Trace ==> N Live Commands ==> NO      Access Auto Test Data: (Y/N)
Addr. Space ID ==>          Jobname ==>          Job Type ==> MVS
User Field      ==>
EOM Text        ==>
Time           ----+----1----+----2----+----3----+----4----+----5----+----6----+----7
***** ***** TOP OF MESSAGES *****
15:27:24 ENABLE 0.WTO
15:27:24 ENABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:33:03 ENABLE 0.DOM
16:33:03 ENABLE 0.DOM
16:33:55 DISABLE 0.DOM
16:33:55 DISABLE 0.DOM
16:34:04 ENABLE 0.EOM
16:34:04 ENABLE 0.EOM
***** ***** BOTTOM OF MESSAGES *****

```

Fields on the AOF Test EOM Panel

The following fields are unique to the AOF Test EOM panel. For descriptions of fields that are common to many or all of the AOF test panels, see Common AOF Test Panel Fields in this chapter.

Addr. Space ID

The four-character system name of the address space you want to test for the end-of-memory condition.

EOM Text

An EOM message of up to 128 characters that describes the terminated address space.

Job Type

The type of the job; for example, z/OS.

Using the AOF Test GLV Panel

When you select a global variable (GLV) rule for testing, the AOF displays the AOF Test GLV panel. The panel prompts you for information about the global variable rule you want to test. Following is a sample panel.

For details about how to write AOF global variable rules and how they are processed, see the *AOF Rules User Guide*.

```

AOF Test GLV ----- MSI1 --- OPSVIEW --- 18:12:31 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N   Live Commands ==> NO       Access Auto Test Data: (Y/N)
User Field   ==>           System Id       ==>
Program Name ==>
Global Variable ==>
Old value    ==>
New value    ==>
Time        -+--+1--+2--+3--+4--+5--+6--+7
***** ***** TOP OF MESSAGES *****
18:12:31 ENABLE 0.GLB
18:12:31 ENABLE 0.GLB
***** ***** BOTTOM OF MESSAGES *****

```

Fields on the AOF Test GLV Panel

The following fields are unique to the AOF Test GLV panel. For descriptions of fields that are common to many or all of the AOF test panels, see *Common AOF Test Panel Fields* in this chapter.

Global Variable

The name of the global variable that was modified.

New value

The new value of the global variable.

Old value

The old value of the global variable.

Program Name

The name of the program or rule that changed the value of the global variable from its old value to its new value.

Using the GLOBALS Command

If you want to create, view, or modify test versions of global variables, enter this command from the command line of the AOF Test GLV panel:

```
GLOBALS
```

As a result, CA OPS/MVS displays a set of test panels that appears similar to the set of panels that make up OPSVIEW option 4.8. However, be aware that although the panels may look similar, you do not enter option 4.8 when you issue the GLOBALS command. Furthermore, the global variables you work with on these test panels are not actual global variables CA OPS/MVS will use. They exist only as long as the test you are performing and will be lost when you exit the test environment.

Because the test panels are so similar to the panels in option 4.8, if you are uncertain about how to use them, see *How to Control CA OPS/MVS Global Variables (Option 4.8)* in the chapter “Using the OPSVIEW Control Option.”

You may want to allocate a data set in which to store your test global variables. If you want, you can use the permanent global variable data set in the AOF test environment. To do so, allocate the data set to SYSCHK1 ddname in your ISPF session before you enter OPSVIEW option 2.1. Use this format:

```
ALLOC F(SYSCHK1) DA('PRGRMMR.TEST.GLOBALS') SHR REU
```

You can use OPSVIEW option 0.1 to set the maximum number of global variables that the AOF test environment can use.

Using the AOF Test MSG Panel

When you select a message rule for testing, the AOF displays the AOF Test MSG panel. The panel prompts you for information about the message rule you want to test. Following is a sample panel.

For details about how to write AOF message rules and how message rules are processed, see the *AOF Rules User Guide*.

```

AOF Test MSG ----- MSI1 --- OPSVIEW --- 15:27:24 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N   Live Commands ==> NO   Access Auto Test Data: (Y/N)
Msg Id:          Msg Disp:                Hardcopy Log:
Jobname         ==>                        IMS Id        ==>
Job Id          ==>                        Exit Type     ==> MVS
MSF Sys         ==> 1                      Console Id    ==>
User            ==>                        Console Nm    ==>
Sys Id          ==>                        MCS Flags    ==>
Special Ch      ==>                        Descriptor   ==>
Route           ==>
Term Name       ==>                        Report Id    ==>
Message         ==>
Time           ----+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7
***** ***** TOP OF MESSAGES *****
15:27:24 ENABLE 0.WTO
15:27:24 ENABLE 0.WTO
***** ***** BOTTOM OF MESSAGES *****

```

Fields on the AOF Test MSG Panel

For descriptions of fields that are common to many or all of the AOF test panels, see Common AOF Test Panel Fields in this chapter. The fields that are unique to the AOF Test MSG panel are:

Descriptor

The descriptor codes of the message in binary format.

Hardcopy Log

A value indicating whether CA OPS/MVS should record the message in the JES hard copy log. Values are YES and NO.

Job Id

The job ID for the JES subsystem.

MCS Flags

The simulated MCS flags you want to associate with the current message.

For more information about MCS flags, see the *Command and Function Reference*. Read the section about the OPSBITS built-in function in the chapter covering the OPS/REXX programming language.

Message

The message text.

MSF Sys

The system identification string of the Multi-System Facility (MSF). The MSF is an optional feature of CA OPS/MVS. For more information about the MSF, see the *User Guide*.

Msg Disp

The disposition of the current message. Values are SUPPRESS, NORMAL, DISPLAY, and DELETE.

Msg Id

A message ID of up to 10 characters in length. If the first word (delimited by blanks) in the)MSG section of a rule matches this value, the AOF tests the rule. Example: IEF403I.

Route

The routing codes of the message in binary format.

Special Ch

The special screen character for the message event. The primary characters are:

System message; requires action.

Problem program message; requires action.

Problem program message; no action required.

Note: If a problem program tries to counterfeit a system message event by issuing a message with the same message ID as the system message, the attempt fails because z/OS prefixes the message with a plus sign (+). The plus sign permits people and rules to tell the difference.

Term Name

The terminal name associated with the issuer of a message event. For COF messages, this field contains the CICS queue name. For messages that come from the generic data set interface, this value indicates the ddname related to the subsystem data set from which the messages are obtained.

Usage Information for the AOF Test MSG Panel

All field values on the AOF Test MSG panel are available to AOF message rules as special variables. For example, MSG.TEXT is an AOF special variable that corresponds to the Message field on the AOF Test MSG panel. If a rule makes a change to one of these variables, the AOF Test MSG panel will reflect the change at the end of the rule test. For more information about variables, see the *AOF Rules User Guide*.

Using the AOF Test OMG Panel

When you select an OMEGAMON rule for testing, the AOF displays the AOF Test OMG panel. The panel prompts you for information about the OMEGAMON event you want to test. Following is a sample panel.

For details about how to write AOF OMEGAMON rules and how OMEGAMON rules are processed, see the *AOF Rules User Guide*.

```

AOF Test OMG ----- MSII --- OPSVIEW --- 16:38:04 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N Live Commands ==> NO Access Auto Test Data: (Y/N)
Exception Name:
User Field ==> DDNAME ==>
System Id ==> Report Id ==>
Exception Text ==>
Time -----1-----2-----3-----4-----5-----6-----7
***** ***** TOP OF MESSAGES *****
15:27:24 ENABLE 0.WTO
15:27:24 ENABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:32:27 DISABLE 0.WTO
16:33:03 ENABLE 0.DOM
16:33:03 ENABLE 0.DOM
16:33:55 DISABLE 0.DOM
16:33:55 DISABLE 0.DOM
***** ***** BOTTOM OF MESSAGES *****

```

Fields on the AOF Test OMG Panel

The following fields are unique to the AOF Test OMG panel. For descriptions of fields that are common to many or all of the AOF test panels, see Common AOF Test Panel Fields in this chapter.

DDNAME

The ddname from the OMEGAMON log data definition statement.

Exception Name

The name of an OMEGAMON exception.

Exception Text

The complete text of the OMEGAMON exception as it would appear on the console being simulated.

Usage Information for the AOF Test OMG Panel

The values of the User Field, System ID, and Exception Text fields are available to AOF OMEGAMON event rules as special variables. If a rule makes a change to one of these variables, the AOF Test OMG panel will reflect the change at the end of the rule test. For more information about the variables, see the *AOF Rules User Guide*.

Using the AOF Test REQ Panel

When you select a request rule for testing, the AOF displays the AOF Test REQ panel. The panel prompts you for information about the request event you want to test. Following is a sample panel.

For details about how to write AOF request rules and how request rules are processed, see the *AOF Rules User Guide*.

```
AOF Test REQ ----- MS11 --- OPSVIEW --- 16:39:08 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N Live Commands ==> NO Access Auto Test Data: (Y/N)
Jobname ==> Request Length: 0
User Field ==> Request Code:
Request Text ==>
Time -----1-----2-----3-----4-----5-----6-----7
***** ***** TOP OF MESSAGES *****
16:39:08 ENABLE 0.REQ
16:39:08 ENABLE 0.REQ
***** ***** BOTTOM OF MESSAGES *****
```

Fields on the AOF Test REQ Panel

The following fields are unique to the AOF Test REQ panel. For descriptions of fields that are common to many or all of the AOF test panels, see Common AOF Test Panel Fields in this chapter.

Request Code

The value in this field is the event specifier that CA OPS/MVS uses to determine which rule to execute. This value is equal to the first word in the Request Text field, and it is the first parameter that CA OPS/MVS passes to the OPSREQ command processor. The only way you can modify the value in this field is to change the value in the Request Text field; the Request Text field is described below.

Request Length

The number of characters (including blanks) in the request text.

Request Text

The text of the request. The text is made up of the parameters you want the AOF to pass to the OPSREQ command processor. For example, entering this value into the Request Text field:

```
RQCODE here is some text
```

is the same as entering this OPSREQ command:

```
OPSREQ CODE(RQCODE) TEXT('here is some text')
```

Usage Information for the AOF Test REQ Panel

The values of the Jobname, Request Length, User Field, Request Code, and Request Text fields are available to AOF request event rules as special variables. If a rule makes a change to one of these variables, the AOF Test REQ panel will reflect the change at the end of the rule test. For more information about the variables, see the *AOF Rules User Guide*.

Using the AOF Test TOD Panel

When you select a time-of-day (TOD) rule for testing, the AOF displays the AOF Test TOD panel. The panel prompts you for information about the time-of-day rule you want to test. Following is a sample panel.

For details about how to write AOF time-of-day rules and how time-of-day rules are processed, see the *AOF Rules User Guide*.

```
AOF Test TOD ----- MSI1 --- OPSVIEW --- 16:40:02 29JUN2007 COLS 001 070
COMMAND ==>
REXX Trace ==> N Live Commands ==> NO Access Auto Test Data: (Y/N)
Test Start Date : 2007/06/29 Test Start Time : 15:27:00
Test Current Date : 2007/06/29 Test Current Time : 15:27:00
Time -----1-----2-----3-----4-----5-----6-----7
***** ***** TOP OF MESSAGES *****
16:39:37 ENABLE 0.TOD
16:39:37 ENABLE 0.TOD
16:39:42 ENABLE 0.TOD
16:39:42 ENABLE 0.TOD
16:39:49 ENABLE 0.TOD1
16:39:49 ENABLE 0.TOD1
16:39:52 ENABLE 0.TOD2
16:39:52 ENABLE 0.TOD2
16:40:02 ENABLE 0.TOD4
***** ***** BOTTOM OF MESSAGES *****
```

Fields on the AOF Test TOD Panel

The following table describes fields that are unique to the AOF Test TOD panel.

Test Current Date

The current date. The value of this field may be different from the value in the Test Start Date field. You may specify a future date for the Test Current Date. The AOF automatically updates this value as time-of-day rules execute during the rule test.

Test Current Time

The current time. The value of this field may be different from the value in the Test Start Time field. You may specify a future time for the Test Current Time. The AOF automatically updates this value as time-of-day rules execute during the rule test.

Test Start Date

The date you want the test to begin. If you entered a date into the Test Start Date field on the Rule List panel, the date appears here. You cannot change the value in this field.

Test Start Time

The time you want the test to begin. If you entered a date into the Test Start Time field on the Rule List panel, the time appears here. You cannot change the value in this field.

For descriptions of fields that are common to many or the entire AOF test panel, see Common AOF Test Panel Fields in this chapter.

Common AOF Test Panel Fields

The following fields are common to many or all of the AOF test panels:

Access Auto Test Data

If you have already extracted data from OPSLOG Browse to use for your rule test and you enter a Y in this field, the AOF displays the AOF Test Data Selection panel, where you can view the extracted data. For more information about this panel, see Step 6: View and Verify Extracted Data in this chapter.

If you have not extracted data and you enter a Y, the AOF displays the OPSLOG Browse Test Data panel so that you can extract data. For more information about this panel, see Step 4: Access OPSLOG Browse in this chapter.

Console Name/Console Nm

The name of the simulated console being used to enter the command or send the message.

Exit Type

The simulated exit type associated with the current command. Types are IMS, JES3, z/OS, and OMG.

IMS ID

The four-character ID of the IMS system being simulated.

Jobname

For a message rule test, the simulated job name (TSO user ID or task name) associated with the current message.

For a command rule test or a request rule test, the simulated job name (TSO user ID or task name) associated with the current command.

For an end-of-memory rule test, the name of the test. The name of the test can be any valid job name or the wildcard character.

Live Commands

A value indicating how the AOF should treat host commands during the rule test. If the value is YES, commands are issued on your system. If the value is NO, commands are not issued, but they are simulated for test purposes.

Report Id

For events originating in the generic data set interface or the OMEGAMON interface, this value indicates the report ID associated with the event.

REXX Trace

A value indicating if and how the AOF should trace a command that REXX executes. Common values are:

N-Normal

The AOF traces only those host commands that fail.

R-Results

The AOF traces all clauses before execution, along with the final results. This is useful for general debugging.

I-Intermediates

Similar to R, but the AOF also traces all REXX clauses and intermediate results.

For details about tracing possibilities, see *The REXX Language: A Practical Approach to Programming* by M. F. Cowlshaw. You can order a copy of this book from Prentice-Hall.

Sys ID/System ID

The identification string for the system.

User/User Field

Specifies eight bytes of data you want to pass between rules that execute for the same event. Depending on what type of rule you are testing, the event can be a command, message, global variable event, OMEGAMON event message, request event, end-of-memory event, or delete-operator-message event.

How to Maintain the AOF Test Compiled Rules Library (Option 2.2)

Use the AOF test compiled rules library to store test rules in their compiled versions. By using OPSVIEW option 2.2, you can list and manipulate the rules in this library. When you are working with option 2.2, you should not be using production rule sets.

Access Option 2.2

To access this application, you can either:

- Enter 2 on the Editors menu.
- Use the ISPF jump function by entering =2.2 into any valid field in OPSVIEW.

The Specification Display Panel

When you access option 2.2, you see a display similar to the following one:

```

AOF TEST - Entry panel --- MSII --- OPSVIEW -----Subsystem OPSS
COMMAND ==>
The RULESET(s) specified below will be used as the input library
for the COMPILE command.
  PREFIX ==>
  RULESET ==>          (* for all Rule sets)
  SUFFIX ==>
----- AOF TEST COMPILED RULES LIBRARY -----
(Blank fields mean NO AOF COMPILE LIBRARY is currently allocated.)
AOF Test Compiled Rules Library:
  PROJECT ==>
  GROUP ==>
  TYPE ==>
Other partitioned Data Set:
  DATA SET NAME ==>

Press ENTER to process or END to cancel.
    
```

The AOF Specification Display panel that appears when you access OPSVIEW option 2.2 is actually made up of two distinct halves.

In the top half of the panel, you either specify the name of a rule set to display, or use an asterisk to indicate that you want to display a list of rule sets. The AOF uses the specified rule set or rule sets as the input library for the COMPILE command.

Use the bottom half of the panel to define the output data set for all compiled rules activity.

Note: Compiled rules activity includes such things as listing compiled rules, compiling rules into the compiled rules data set, and deleting rules from the compiled rules data set.

The compiled rules output data set must exist before you try to compile any rules. If you want to take advantage of the SET AUTOENABLE command, you must define the data set to AOFEXEC ddname.

Note: Data definition concatenation is not honored under AOFEXEC ddname.

The compiled rules output data set must be a partitioned data set with these attributes:

Attribute	Description
RECFM	fixed block (mandatory)
LRECL	4096 (mandatory)
BLKSIZE	4096 or greater (must be a multiple of 4096)

Attribute	Description
DIRECTORY BLOCKS	user-defined (dependent on number of rules)
SPACE	user-defined (dependent on number of rules)

After you have specified values for all of the fields on the AOF Specification Display panel, the AOF compares the specified input library to the specified compiled rules output library. It does this to determine whether any of the rules in the input library have been compiled through OPSVIEW option 2.1. If they have, a selection list appears. If no rules have been compiled yet for the rule set or rule sets you specify, no selection list appears.

Fields on the AOF Specification Display Panel

The following fields appear on the AOF Specification Display panel. All of the fields on the panel are required.

Prefix

The high-level qualifier of the input rule set or rule sets.

Rule set

To display a list of rule sets, specify an asterisk (*). To display a list of the rules in a specific rule set, specify the name of the rule set. For details, see The Compiled Rule Set List Panel in this chapter.

Suffix

The low-level qualifier of the input rule set or rule sets.

Project

The high-level qualifier or qualifiers of the compiled rules output data set.

Note: Multiple levels are allowed; their names can total up to 26 characters.

Group

The mid-level qualifier of the compiled rules output data set.

Type

The low-level qualifier of the compiled rules output data set.

The Compiled Rule Set List Panel

The Compiled Rule Set List panel appears when you specify an asterisk in the Rule Set field of the AOF Specification panel. For descriptions of commands you use to manipulate the rule sets on this panel, see Primary Commands for the Compiled Rule Set List Panel and Line Commands for the Compiled Rule Set List Panel in this chapter.

Primary Commands for the Compiled Rule Set List Panel

You may use the following primary commands on the Compiled Rule Set List panel. Issue primary commands from the Command field.

COMPILE ruleset

Compiles all of the rules in the named rule set.

DELETE ruleset

Deletes any compiled rule in the set from the compiled rules library.

LOCATE ruleset

Scrolls the display so that ruleset is positioned at the top.

RECOMPILE

Recompiles all of the previously compiled rules in all of the rule sets appearing on the display.

SELECT ruleset

Lists all of the compiled rules in the named rule set.

Line Commands for the Compiled Rule Set List Panel

You can use the following line commands on the Compiled Rule Set List panel. Enter the command in the prefix area that precedes the desired rule set.

C

Compiles all of the rules in the rule set.

D

Deletes any compiled rule in the set from the compiled rules library.

R

Recompiles all of the previously compiled rules in the rule set.

S

Selects the rule set for display on the Compiled Rule List panel.

Point-and-shoot is enabled to issue the S line command for a rule set. To issue the S line command for a rule set using the point-and-shoot method, place the cursor to the left of the desired rule set and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

The Compiled Rule List Panel

The Compiled Rule List panel appears when you:

- Specify the name of a specific rule set in the Rule Set field of the AOF Specification panel.
- Issue either the SELECT ruleset primary command or the S line command on the Compiled Rule Set List panel.

For descriptions of commands you use to manipulate the rules on the Compiled Rule List panel, see Primary Commands for the Compiled Rule List Panel and Line Commands for the Compiled Rule List Panel in this chapter.

Primary Commands for the Compiled Rule List Panel

You can use the following primary commands on the Compiled Rule List panel. Issue primary commands from the Command field.

COMPILE rule

Compiles the rule.

DELETE rule

Deletes the rule from the compiled rules library.

LOCATE rule

Scrolls the display so that rule is positioned at the top.

RECOMPILE

Recompiles all of the compiled rules appearing on the display.

Line Commands for the Compiled Rule List Panel

You can use the following line commands on the Compiled Rule List panel. Enter the command in the prefix area that precedes the desired rule.

B

Browse the source text of the rule.

C

Re-compile the rule.

D

Delete the rule from the compiled rules library.

E

Edit the source data set member of the rule (same as S).

I

List current statistics for the source data set member of the rule.

S

Edit the source data set member of the rule (same as E).

Point-and-shoot is enabled to issue the S line command for a Rule. To issue the S line command for a Rule using the point-and-shoot method, place the cursor to the left of the desired Rule and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Access EasyRule (Option 2.3)

Use OPSVIEW option 2.3 to access the CA OPS/MVS EasyRule feature. With EasyRule, a set of panels walks you through the AOF rule creation and modification processes.

Accessing Option 2.3

To access this application, you can either:

- Enter 3 on the Editors menu.
- Use the ISPF jump function by entering =2.3 into any valid field in OPSVIEW.

For more information about the EasyRule feature, see the *User Guide*.

How to Maintain REXX Source Programs (Option 2.4)

Use OPSVIEW option 2.4 to access the REXX edit facility. This facility lets you perform REXX program maintenance activities, such as editing, compiling, and testing your REXX programs. When you work in the REXX edit facility, you are working with the source versions of your REXX programs.

To enhance the performance of CA OPS/MVS, use the REXX edit facility in conjunction with OPSVIEW option 2.5., which is the REXX compiled program library. For instance, use option 2.4 to first edit, and then compile, one of your REXX programs. CA OPS/MVS saves the compiled version to your REXX compiled program library. The next time that you need to execute the program, you can save processing time by doing so directly from option 2.5. For details, see *How to Manage the REXX Compiled Program Library (Option 2.5)* in this chapter.

Prerequisites for Using Option 2.4

Allocate these libraries before you use option 2.4:

- Allocate your REXX source program library to SYSEXEC DDNAME.
- Allocate your REXX compiled program library to OPSCOMP DDNAME. Concatenation of multiple libraries will cause an error. Make sure that this library is a partitioned data set with these attributes:

RECFM

Fixed block (mandatory).

LRECL

4096 (mandatory)

BLKSIZE

4096 or greater (must be a multiple of 4096)

DIRECTORY BLOCKS

User-defined (dependent on number of programs)

SPACE

User-defined (dependent on number of programs)

- Also allocate the OPSCOMP library to the OPSEXEC concatenation

Note: The OI command uses OPSEXEC DDNAME to search for a compiled REXX program. If the program is not found in the OPSEXEC library or libraries, the SYSEXEC library is scanned next. Concatenation is allowed in the OPSEXEC library.

Access Option 2.4

To access this application, you can either:

- Enter 4 on the Editors menu.
- Use the ISPF jump function by entering =2.4 into any valid field in OPSVIEW.

The REXX Source Library Panel

When you access option 2.4, you see a display similar to the one shown here:

```
OPS/REXX----- XE61 -- O P S V I E W ----- Subsystem OPSA
Command ==>

REXX program library to be EDITED:
  Project ==> AREAS01
  Group   ==> 0
  Type    ==> REXX
  Member  ==> _____

Other Partitioned Data Set:
  Data Set Name ==> _____

----- REXX Compiled Program Library -----
(Blank fields mean the OPSCOMP DD name is currently not allocated.)
REXX Compiled Program Library:
  Project ==> AREAS01
  Group   ==> 0
  Type    ==> OPSEEXEC

Other Partitioned Data Set:
  Data Set Name ==> _____

Press ENTER to process or END to cancel.
```

Specifying Values on the REXX Source Library Panel

The REXX Source Library panel is made up of two halves. Use the top half of the panel to specify the name of the library that contains the source versions of your REXX programs.

In the bottom half of the panel, specify the name of your REXX compiled program library. As you compile programs with option 2.4, CA OPS/MVS saves the compiled versions to this library.

After you have filled in the desired fields, press Enter. In response to your specifications, the REXX Source Program List appears. For details, see How to Use a REXX Source Program List in this chapter.

Note: If you include a member name in your specifications, CA OPS/MVS bypasses the REXX Source Program List, and takes you directly to the REXX Program Edit panel instead. For details, see How to Edit a REXX Program from Option 2.4 in this chapter.

How to Use a REXX Source Program List

The REXX Source Program List is a scrollable display of all of the programs in the source library that you specified on the REXX Source Library panel. By issuing special commands from the REXX Source Program List, you can compile a REXX program, edit a REXX program, and so on. Following is a sample panel:

```

OPS/REXX----- XE61 ----- AREAS01.0.REXX ----- Row 1 of 672
Command ==>                               Scroll ==> CSR
      Line Commands: S or E Edit   C Compile   CN Nosource Compile
                   OX Execute from Source   OI Execute from OPSEXEC/SYSEXEC

```

Program	VV.MM	Created	Changed	Size	Init	Mod	ID
#4993287	01:01	2001/07/08	2001/07/08	10:52	78	78	7 AREAS01
#5001609	01:00	2001/07/08	2001/07/08	12:45	143	143	0 AREAS01
AA	01:07	1997/06/11	1997/06/15	16:57	20	3	17 AI06AA1
AAA	01:01	1998/10/18	1998/10/18	13:33	7	7	1 AI06ADA
ABORT	01:00	1999/09/17	1999/09/17	14:09	1	1	0 OPSADA
ABS	01:00	1996/06/23	1996/06/23	17:11	4	4	0 AI06ADA
ACCNT	01:00	2002/01/08	2002/01/08	18:05	37	37	0 AREAS01
ADD	01:09	1996/01/03	1996/01/04	12:35	50	12	44 AI06KHH
ADDRAOF	01:02	2000/10/22	2000/09/06	09:03	7	7	2 OPSADA
ADDRAP	01:00	2007/11/01	2007/11/01	10:42	11	11	0 AREAS01

Fields on the REXX Source Program List

The following are the fields on the REXX Source Program List:

Program

The name of the REXX program.

VV.MM

The version number and modification number of the REXX program. Each time a user modifies the program, CA OPS/MVS updates this value.

Created

The date on which the program was created.

Changed

The date and time of the last modification made to the program.

Size

The current number of lines in the program.

Init

The number of lines in the program when it was first created.

Mod

The number of lines in the program that have been modified.

ID

The TSO user ID of the last user who modified the program.

Primary Commands for the REXX Source Program List

Issue primary commands from the Command field. Use the following primary commands on the REXX Source Program List:

COMPALL or COMPALL NOSOURCE

Compiles all of the REXX programs in the source library. Specify the NOSOURCE keyword if you do not want CA OPS/MVS to save source text statements in the compiled versions.

Note: Specifying NOSOURCE reduces the amount of space taken up by a compiled program.

CA OPS/MVS stores the compiled versions of the programs in the REXX compiled program library, as specified on the REXX Source Library panel.

COMPILE progname or COMPILE progname NOSOURCE

Compiles progname. Specify the NOSOURCE keyword if you do not want CA OPS/MVS to save source text statements in the compiled version.

Note: Specifying NOSOURCE reduces the amount of space taken up by the compiled program.

CA OPS/MVS stores the compiled version of the program in the REXX compiled program library, as specified on the REXX Source Library panel.

EDIT progname

Takes you to ISPF edit, where you can modify progname (same as SELECT). For details, see How to Edit a REXX Program From Option 2.4 in this chapter.

EXECUTE progname

Takes you to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to progname.
- Set an initial TRACE value for the execution of progname.
- Press Enter to execute progname.
- Press End to cancel execution of progname.

For details, see How to Execute a REXX Program from Option 2.4 in this chapter.

Note: When you issue the EXECUTE command, CA OPS/MVS begins its search for progname in the data sets that are concatenated under OPSEEXEC ddname, which are the compiled REXX program libraries. If there are no libraries allocated to OPSEEXEC ddname (or if CA OPS/MVS cannot find the program in the allocated libraries), it continues its search in those libraries allocated to SYSEEXEC ddname.

LOCATE progname

Scrolls the list so that the line referring to progname is at the top of the panel.

SELECT progname

Takes you to ISPF edit, where you can modify progname (same as EDIT). For details, see How to Edit a REXX Program From Option 2.4 in this chapter.

SORT columnname

Sorts the specified column in default order.

For example, you could issue this command to sort the programs according to the date and time that they were last changed:

```
SORT CHANGED
```

The default order varies by column.

Note: Point-and-shoot is enabled to SORT the program list using any column heading. To SORT the program list using the point-and-shoot method, place the cursor on a column heading and press Enter.

Line Commands for the REXX Source Program List

Use the following line commands on the REXX Source Program List. Issue line commands from the prefix area that precedes the name of the program.

C

Compiles the program, and saves source text statements in the compiled version.

CA OPS/MVS stores the compiled version of the program in the REXX compiled program library, as specified on the REXX Source Library panel.

CN

Compiles the program, but does not save source text statements in the compiled version. Using the CN command rather than the C command reduces the amount of space taken up by the compiled program.

CA OPS/MVS stores the compiled version of the program in the REXX compiled program library, as specified on the REXX Source Library panel.

E

Takes you to ISPF edit, where you can modify the program (same as S). For details, see [How to Edit a REXX Program From Option 2.4](#) in this chapter.

OI

Searches for the program in the data sets (if any) that are concatenated to OPSEXEC ddname. If necessary, continues its search in the data sets concatenated to SYSEXEC ddname. If the program is found, takes you to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to the program.
- Set an initial TRACE value for the execution of the program.
- Press Enter to execute the program.
- Press End to cancel execution.

For details, see [How to Execute a REXX Program from Option 2.4](#) in this chapter.

OX

Executes the source member. When you issue the OX command, you are taken to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to the program.
- Set an initial TRACE value for the execution of the program.
- Press Enter to execute the program.
- Press End to cancel execution.

For details, see [How to Execute a REXX Program From Option 2.4](#) in this chapter.

S

Takes you to ISPF edit, where you can modify the program (same as E). For details, see How to Edit a REXX Program from Option 2.4 in this chapter.

Point-and-shoot is enabled to Edit a Source program. To Edit a Source program using the point-and-shoot method, place the cursor to the left of the desired program and press Enter. Point-and-shoot is enabled only if no line commands have been entered.

How to Edit a REXX Program from Option 2.4

To use option 2.4 to edit or modify a REXX program, you use ISPF edit through the REXX Program Edit panel.

There are two ways that you can access the panel:

- On the REXX Source Library panel, include a member name in your source library specifications.
- On the REXX Source Program List, issue either the EDIT or SELECT primary command, or either the E or S line command.

When you select a REXX program to edit, the REXX Program Edit panel appears.

The REXX Program Edit Panel (ISPF Edit)

Here is a sample REXX Program Edit panel:

```
REXX PROGRAM-- SAMUSR.0.REXX(RXTEST) - 01.06 ----- COLUMNS 001 072
COMMAND ==>                                     SCROLL ==> PAGE
***** ***** Top Of Data *****
000800
000900          ''
001000          ''
001100          lines of data
001200          ''
001300          ''
001400
001500  OMGMAXRC = 0
001600  IF EPMODE = 'TEST' THEN
001700    EPADDR = 'OMGTEST'
001800  ELSE
001900    EPADDR = 'OMEGAMON'
002000          ''
002100          ''
002200          more lines of data
002300          ''
002400          ''
002500
```

The editing display of the OPSVIEW REXX Program Edit panel is identical to the editing display of the ISPF/PDF editor. You can use any IPSF/PDF command on the REXX Program Edit panel. These include line commands such as Insert, Repeat, Move, Copy, and Block; and primary commands such as SAVE, CANCEL, and COPY.

How to Execute a REXX Program from Option 2.4

The REXX Execute Entry panel appears when you enter any of these commands from the REXX Source Program List:

- The EXECUTE primary command
- The OI line command
- The OX line command

Following is a sample REXX Execute Entry panel. Use the panel to specify arguments to be passed to your REXX program. You may specify arguments of up to 120 characters in length. You may also specify an initial TRACE value for the execution of the program. Pressing Enter executes the program and pressing End cancels the execution.

```

REXX Execute - Entry panel --- MS11 --- S Y S V I E W ----- Subsystem OPSS
COMMAND ==>
  List any ARGUMENTS to be passed to the program ARGV
  -----1-----2-----3-----4-----5-----6
  -----7-----8-----9-----10-----11-----12
  Specify initial REXX TRACE value:
  (default to none - valid values are A,C,E,F,I,L,N,O,R)
  Press ENTER to process or END to cancel.

```

You may specify the following TRACE values on the REXX Execute Entry panel:

- A**
Trace all
- C**
Trace host commands before execution only
- E**
Trace host command errors
- F**
Trace host command failures
- I**
Trace intermediate results
- L**
Trace labels only
- N**
Trace normal
- O**
Trace off

R

Trace results

Although you do not have to specify an initial TRACE value, doing so provides you with the ability to do debugging without having to add a TRACE statement to your OPS/REXX program. This can be especially useful for debugging pre-compiled programs. You do not have to go back and edit the source version of the program to add a TRACE statement to perform debugging.

Note: Any TRACE statement that is in your OPS/REXX program overrides the TRACE value that you specify on the REXX Execute Entry panel.

Understanding Execution Messages and Return Codes from Option 2.4

After you execute a REXX program from the REXX edit facility, a post-execution message appears. The content of the message is based upon the value that the REXX program returned to the REXX edit facility:

- If the program returned either 0 or a non-integer value, the post-execution message shows a return code of 0. This indicates that execution was successful.
- If the program returned an integer value other than 0, the REXX edit facility considers it to be indicative of an error condition. The post-execution message will include the returned value, and will indicate that an abnormal condition was detected during execution.

How to Manage the REXX Compiled Program Library (Option 2.5)

Use the REXX compiled program library to store compiled versions of your REXX programs. With OPSVIEW option 2.5, you can list, manipulate, and execute the programs in this library. To enhance the performance of CA OPS/MVS, you can also use option 2.5 to execute the compiled versions of your REXX programs. Executing a REXX program in this way (rather than doing so from option 2.4) eliminates the additional processing that would be necessary to compile the program.

Prerequisites for Using Option 2.5

You must meet these prerequisites before you can use option 2.5:

- Allocate your REXX compiled program library using ISPF option 3.2. This library must be a partitioned data set with these attributes:

RECFM

Fixed block (mandatory)

LRECL

4096 (mandatory)

BLKSIZE

4096 or greater (must be a multiple of 4096)

DIRECTORY BLOCKS

User-defined (dependent on number of programs)

SPACE

User-defined (dependent on number of programs)

- Also, allocate the OPSCOMP library to the OPSEXEC concatenation.
- Use option 2.4 to compile (and thus save) some of your REXX programs into the REXX compiled program library. For details, see How to Maintain REXX Source Programs (Option 2.4) in this chapter.

Access Option 2.5

To access this application, do one of the following:

- Enter 5 on the Editors menu.
- Use the ISPF jump function by entering =2.5 into any valid field in OPSVIEW.

The Compiled REXX Library Panel

When you access option 2.5, you see a display similar to the one shown here:

```
Compiled REXX----- XE61 -- O P S V I E W ----- Subsystem OP5A
Command ==>

REXX Compiled Program Library:
  Project ==> AREAS01
  Group   ==> 0
  Type    ==> OPSEEXEC

Other Partitioned Data Set:
  Data Set Name ==> _____

Display source information ==> Y (Y/N Default=N)

NOTE: Improved response time may be experienced by bypassing source
      information (Default=N).

Press ENTER to process or END to cancel.
```

Specifying Values on the Compiled REXX Library Panel

Use the top part of the panel to specify the name of the library that contains the compiled versions of the REXX programs you want to list, manipulate, and execute.

The panel prompts you to indicate whether you want CA OPS/MVS to include source information and statistics in the list of compiled programs. If you specify N, you may experience improved response time.

After you have filled in the desired fields, press Enter. In response to your specifications, the Compiled REXX Program List appears. For details, see How to Use a Compiled REXX Program List in this chapter.

How to Use a Compiled REXX Program List

The Compiled REXX Program List is a scrollable display of all the programs in the compiled library that you specified on the Compiled REXX Library panel. By issuing special commands from the Compiled REXX Program List, you can browse a REXX program, execute a REXX program, and so on. Following is a sample panel.

Note: To display this panel, the user entered Y in response to the Display source information prompt on the Compiled REXX Library panel. If the user had accepted the default of N, Program is the only data field that would appear on the following panels:

```

Compiled REXX --- XE61 --- Compiled REXX Program List ----- Row 1 of 16
Command ==>                                     Scroll ==> CSR
  Line Commands: S or E Edit   B Browse   C Compile   CN Nosource Compile
  OX Execute Compiled Program  OI Execute from OPSEXEC/SYSEXEC   D Delete
  (Press RIGHT for more information)
Program Source Input source data set
ARGTEST  Y     AREAS01.0.REXX
BENCH    Y     AREAS01.0.REXX
BENCHSTA N     AAREMBA.0.REXX
DELETED  Y     AREAS01.0.REXX
MAIN     Y     AREAS01.0.REXX
OXBATCH  N     AAREMBA.0.REXX
RDFCLEAN N     AAREMBA.0.REXX
RULESTG  Y     AREAS01.0.REXX
TREXX1   Y     AREAS01.T.REXX
VRFYPARS Y     AREAS01.QA.REXX
WXTRN    N     AREAS01.0.REXX
ZQLK1    Y     AREAS01.T.REXX
ZQLK2    Y     AREAS01.T.REXX
ZQLK3    Y     AREAS01.T.REXX
ZQLK4    Y     AREAS01.T.REXX
ZQLK5    Y     AREAS01.T.REXX
**End**

```

Since the user asked for source information, the resulting Compiled REXX Program List contains more columns of information than can be viewed at one time. To see the rest of the information, use your LEFT and RIGHT PF keys (typically PF10/22 and PF11/23) to scroll. Following is another view of the Compiled REXX Program List. This view contains the ISPF source statistics, saved at the time the REXX program was last compiled. You can use this information to determine if the source code has been changed since the last time the program was compiled. For descriptions of all the possible fields on the panel, see the following two tables:

```

Compiled REXX --- XE61 --- Compiled REXX Program List ----- Row 1 of 16
Command ==>                                     Scroll ==> CSR
      Line Commands: S or E Edit   B Browse   C Compile   CN Nosource Compile
      OX Execute Compiled Program  OI Execute from OPSEXEC/SYSEXEC   D Delete
      (Press RIGHT for more information)
Program Source VV.MM Created          Changed          Size  Init  Mod  ID
ARGTEST  Y    01.00 1996/03/13 2000/05/03 13:48      2    1    AREAS01
BENCH    Y    01.12 1990/01/04 1992/09/08 09:22     52   12    OPSADA
BENCHSTA N    01.02 1992/09/11 1992/09/11 12:20    134  115    OPSADA
DELETED  Y    01.00 2000/05/03 2000/05/03 12:15      2    2    AREAS01
MAIN     Y    01.03 1992/06/15 1994/05/03 06:47     12    7    5 OPSADA
OXBATCH  N    01.00 1993/01/05 1993/01/05 11:21      2    2    AAREMBA
RDFCLEAN N    01.00 1993/10/15 1993/10/17 08:44     38   27    AAREMBA
RULESTG  Y    01.00 2000/04/17 2000/04/17 12:20     57   44    AREAS01
TREXX1   Y    01.00 1993/01/14 1993/01/14 15:32      1    1    JBUTLER
VRFYPARS Y    01.12 1992/06/29 1996/01/19 10:22    198  55   163 AREAS01
WXTRN    N    01.00 1995/07/18 1995/07/18 07:12     44   44    AAREMBA
ZQLK1    Y    01.00 1996/10/11 1996/10/11 17:07      2    2    AREAS01
ZQLK2    Y    01.02 1996/10/11 1996/10/11 17:32      1    1    1 AREAS01
ZQLK3    Y    01.00 1996/10/11 1996/10/11 17:08      2    2    AREAS01
ZQLK4    Y    01.01 1996/10/11 1996/10/11 17:32      1    1    1 AREAS01
ZQLK5    Y    01.00 1996/10/11 1996/10/11 17:08      2    2    AREAS01
**End**

8.27.1 The REXX Program Edit Panel (ISPF Edit) (OPS/MVS 4.3 Operations Guide)

EDIT          AREAS01.0.REXX(ARGTEST) - 01.00          Columns 00001 00072
Command ==>                                     Scroll ==> CSR
    
```

Fields on the Compiled REXX Program List-Left View

The following fields of data appear on the left side of the Compiled REXX Program List. You see these fields when you first enter the Compiled REXX Program List and when you press the LEFT PF key.

Program

The name of the compiled REXX program.

Source

A value indicating whether source text statements were saved in the compiled version of the program.

Input Source Dataset

The name of the PDS library that held the source program corresponding to this compiled REXX program.

Fields on the Compiled REXX Program List-Right View

The following fields of data appear on the right side of the Compiled REXX Program List. You see these additional fields when you press the RIGHT PF key.

VV.MM

The version and modification numbers of the source program.

Created

The date on which the source program was created.

Changed

The date and time of the last modification made to the source program.

Size

The number of lines in the source program when it was compiled.

Init

The number of lines in the source program when it was first created.

Mod

The number of lines in the program that have been modified.

ID

The TSO user ID of the last user who modified the source program.

Primary Commands for the Compiled REXX Program List

The following table describes the primary commands you may use on the Compiled REXX Program List. Issue primary commands from the Command field.

BROWSE progname

Lets you browse the source version of progname.

COMPALL or COMPALL NOSOURCE

Recompiles all of the compiled REXX programs in the list. Specify the NOSOURCE keyword if you do not want CA OPS/MVS to save source text statements in the recompiled versions.

Note: Specifying NOSOURCE reduces the amount of space taken up by a compiled program.

COMPILE progname or COMPILE progname NOSOURCE

Recompiles progname. Specify the NOSOURCE keyword if you do not want CA OPS/MVS to save source text statements in the recompiled version.

Note: Specifying NOSOURCE reduces the amount of space taken up by the compiled program.

DELETE progname

Deletes progname from the REXX compiled program library.

EDIT progname

Takes you to ISPF edit, where you can modify progname (same as SELECT). For details, see How to Edit a REXX Program from Option 2.5 in this chapter.

EXECUTE progname or OX progname

Executes the compiled progname. When you issue the OX command, you are taken to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to progname.
- Set an initial TRACE value for the execution of progname.
- Press Enter to execute progname.
- Press End to cancel execution of progname.

For details, see How to Execute a REXX Program from Option 2.5 in this chapter.

Note: When you issue the EXECUTE command, CA OPS/MVS begins its search for progname in the data sets that are concatenated under OPSEXEC ddname, which are the compiled REXX program libraries. If there are no libraries allocated to OPSEXEC ddname (or if CA OPS/MVS cannot find the program in the allocated libraries), it continues its search in those libraries allocated to SYSEXEC ddname.

LOCATE progname

Scrolls the list so that the line referring to progname is at the top of the panel.

SELECT progname

Takes you to ISPF edit, where you can modify progname (same as EDIT). For details, see How to Edit a REXX Program from Option 2.5 in this chapter.

Line Commands for the Compiled REXX Program List

Use the following line commands on the Compiled REXX Program List. Issue line commands from the prefix area that precedes the name of the program.

B

Lets you browse the source program.

C

Recompiles the program, and saves source text statements in the recompiled version.

CN

Recompiles the program, but does not save source text statements in the recompiled version. Using the CN command (rather than the C command) reduces the amount of space taken up by the compiled program.

D

Deletes the program from the REXX compiled program library.

E

Takes you to ISPF edit, where you can modify the program (same as S). For details, see *How to Edit a REXX Program from Option 2.5* in this chapter.

OI

Searches for the program in the data sets (if any) that are concatenated to OPSEXEC ddname. If necessary, continues its search in the data sets concatenated to SYSEXEC ddname. If the program is found, takes you to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to the program.
- Set an initial TRACE value for the execution of the program.
- Press Enter to execute the program.
- Press End to cancel execution.

For details, see *How to Execute a REXX Program from Option 2.5* in this chapter.

OX

Executes the compiled progname. When you issue the OX command, you are taken to the REXX Execute Entry panel, where you can:

- Specify arguments to be passed to the program.
- Set an initial TRACE value for the execution of the program.
- Press Enter to execute the program.
- Press END to cancel execution.

For details, see *How to Execute a REXX Program from Option 2.5* in this chapter.

S

Takes you to ISPF edit, where you can modify the program (same as E). For details, see How to Edit a REXX Program from Option 2.5.

Point-and-shoot is enabled to issue the S line command for a program. To issue the S line command for a program using the point-and-shoot method, place the cursor to the left of the desired program and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Edit a REXX Program from Option 2.5

To use option 2.5 to edit a compiled REXX program, you use ISPF edit through the REXX Program Edit panel. To do so, issue one of these commands on the Compiled REXX Program List:

- Either the EDIT or the SELECT primary command.
- Either the E or the S line command.

When you select a REXX program to edit, the REXX Program Edit panel appears.

The REXX Program Edit Panel (ISPF Edit)

The following is a sample of the REXX Program Edit panel:

```
REXX PROGRAM-- SAMUSR.0.REXX(RXTEST) - 01.06 ----- COLUMNS 001 072
COMMAND ==>                                SCROLL ==> PAGE
***** ***** Top Of Data *****
000800
000900          ''
001000          ''
001100          lines of data
001200          ''
001300          ''
001400
001500  OMGMAXRC = 0
001600  IF EPMODE = 'TEST' THEN
001700    EPADDR = 'OMGTEST'
001800  ELSE
001900    EPADDR = 'OMEGAMON'
002000          ''
002100          ''
002200          more lines of data
002300          ''
002400          ''
002500
```

The editing display of the OPSVIEW REXX Program Edit panel is identical to that of the ISPF/PDF editor. You can use any ISPF/PDF command on this panel. These include line commands such as Insert, Repeat, Move, Copy, and Block; and primary commands such as SAVE, CANCEL, and COPY.

How to Execute a REXX Program from Option 2.5

The REXX Execute Entry panel appears when you enter any of these commands from the Compiled REXX Program List:

- The EXECUTE primary command
- The OI line command
- The OX line command

The following is a sample REXX Execute Entry panel. Use the panel to specify arguments to be passed to your REXX program. You may specify arguments of up to 120 characters in length. You may also specify an initial TRACE value for the execution of the program. Pressing Enter executes the program, while pressing End cancels the execution.

```

REXX Execute - Entry panel --- MSII --- S Y S V I E W ----- Subsystem OPSS
COMMAND ==>
  List any ARGUMENTS to be passed to the program ARGV
  -----1-----2-----3-----4-----5-----6
  -----7-----8-----9-----10-----11-----12
  Specify initial REXX TRACE value:
  (default to none - valid values are A,C,E,F,I,L,N,O,R)
  Press ENTER to process or END to cancel.

```

The TRACE values that you may specify on the REXX Execute Entry panel are:

- A**
Trace all
- C**
Trace host commands before execution only
- E**
Trace host command errors
- F**
Trace host command failures
- I**
Trace intermediate results
- L**
Trace labels only

- N**
Trace normal
- O**
Trace off
- R**
Trace results

Although you do not have to specify an initial TRACE value, doing so provides you with the ability to do debugging without having to add a TRACE statement to your OPS/REXX program. This can be especially useful for debugging pre-compiled programs. You do not have to go back and edit the source version of the program to add a TRACE statement to perform debugging.

Note: Any TRACE statement that is in your OPS/REXX program overrides the TRACE value that you specify on the REXX Execute Entry panel.

Understanding Execution Messages and Return Codes from Option 2.5

This section discusses execution messages and return codes from option 2.5.

How the Compiled REXX Facility Interprets Return Codes

After you execute a REXX program from the compiled REXX facility, a post-execution message appears. The content of the message is based upon the value that the REXX program returned to the compiled REXX facility:

- If the program returned either 0 or a non-integer value, the post-execution message shows a return code of 0. This indicates that execution was successful.
- If the program returned an integer value other than 0, the compiled REXX facility considers it to be indicative of an error condition. The post-execution message will include the returned value, and will indicate that an abnormal condition was detected during execution.

How to Access the Relational Table Editor (Option 2.6)

Use OPSVIEW option 2.6 to access the CA OPS/MVS relational table editor. With this editor, you can create and edit tables for the Relational Data Framework to use.

Access Option 2.6

To access this application, you can either:

- Enter 6 on the Editors menu.
- Use the ISPF jump function by entering =2.6 into any valid field in OPSVIEW.

Related Documentation

For information about the table editor, see the *User Guide*.

For information about the Relational Data Framework, see the *Command and Function Reference*.

How to Access the Application Parameter Manager (Option 2.A)

Use OPSVIEW option 2.A to access the CA OPS/MVS application parameter manager. This feature enables you to customize CA OPS/MVS applications to fit your site without altering actual application code. It allows you to run CA OPS/MVS from release to release, or maintenance tape to maintenance tape without having to set most parameters.

It does this by providing you with a database of settable parameter variables that represent parameters in actual code. Using these variables and their database, you set or change CA OPS/MVS parameters by altering your own variables.

Accessing Option 2.A

To access this application, you can either:

- Enter A on the Editors menu.
- Use the ISPF jump function by entering =2.A into any valid field in OPSVIEW.

Related Documentation

For detailed information about the application parameter manager, see the *Administration Guide*.

For detailed information on how to use the OPSVIEW panels, see the OPSVIEW online help.

Chapter 6: OPSVIEW System Control Option

This section contains the following topics:

- [Overview of the OPSVIEW System Control Option \(Option 3\)](#) (see page 155)
- [How to Display and Modify Address Spaces \(Option 3.1\)](#) (see page 156)
- [How to Observe and Control JES3 Print Queues \(Option 3.2\)](#) (see page 169)
- [How to Modify Job Control Panel Fields](#) (see page 174)
- [How to Use the DDname Control Panel](#) (see page 176)
- [How to Observe and Control IMS Resources \(Option 3.3\)](#) (see page 177)
- [How to Control IMS Regions \(Option 3.3.1\)](#) (see page 178)
- [How to Control IMS Transactions \(Option 3.3.2\)](#) (see page 180)
- [How to Control IMS Databases \(Option 3.3.4\)](#) (see page 184)
- [How to Edit System Broadcast Messages \(Option 3.4\)](#) (see page 186)
- [How to Manage Switch Operations \(Option 3.5\)](#) (see page 187)

Overview of the OPSVIEW System Control Option (Option 3)

With the OPSVIEW System Control option, you can display and modify system resource information without the use of a command language. There are four categories of resources you can control with this option. They are:

- Address spaces
- Print queues (JES3 sites only)
- IMS
- Broadcast messages
- Manage switch and device operations

Access the OPSVIEW System Control Option

To access the OPSVIEW System Control menu, enter 3 on the OPSVIEW Primary Options Menu. You see a display similar to the following one:

```
System Control ----- MSI1 --- O P S V I E W -----Subsystem OPSS
OPTION ==>
1 Address Space      - Control TSO users, batch jobs, started tasks
2 Print Queues      - Display, Modify, Cancel print jobs
3 IMS Manager       - Display and control IMS resources
4 Broadcast Editor   - Broadcast Message Editor
5 SOF               - ESCON/FICON Switch Operations Facility
```

Note: If your site is running JES2, the message *****JES3 only***** appears on the OPSVIEW System Control menu as the description of the Print Queues option.

How to Display and Modify Address Spaces (Option 3.1)

Use OPSVIEW option 3.1 to display and modify address spaces in which TSO users, batch jobs, started tasks, and system tasks are running.

To access OPSVIEW option 3.1, you can either:

- Enter 1 on the OPSVIEW System Control Menu.
- Enter =3.1 in any Command field in OPSVIEW.

OPSVIEW Address Space Control Panel

When you select OPSVIEW option 3.1, you see a display similar to the one shown in the next section Fields on the OPSVIEW Address Space Control Panel-First View. The data displayed on the screen can be refreshed in one of two ways, depending on whether you are in GO mode:

- If you are in GO mode-CA OPS/MVS automatically updates the information that is displayed on this panel.
- If you are not in GO mode-Press Enter to manually update the information that is displayed on this panel.

The Address Space Control panel contains more columns of information than you can view at one time. There are five different panel views. To see a different view, use your LEFT and RIGHT PF keys (typically PF10/22 and PF11/23) to scroll left and right through the views. There are cues on the header line to help you determine whether you can scroll further to the right or left. A < symbol on the left of the header lines indicates that you can scroll to the left. A > symbol on the right of the header line indicates that you can scroll to the right. For descriptions of the fields on the panel, see the following sections.

Fields on the OPSVIEW Address Space Control Panel-First View

Following is an example of the first screen of the OPSVIEW Address Space Control Panel:

```

Address Space Control --- XE61 --- O P S V I E W ----- ROW 1 OF 192
Command ==>                               Scroll ==> CSR
Line Cnds: S Sec browse, C Cancel, D Cancel w/dump, Q Quiesce, R Resume
- Job Name- St ASID Typ DPrtY SrvClass Prd Aff -- CPU -- Elapsed SwapRsn ->
*MASTER* NSW 0001 SYS (FF)255 SYSTEM 001 NONE 246.435S 33.55.20
ACF2 NSW 0018 STC (FE)254 SYSSTC 001 NONE 012.461S 33.55.12
ALLOCAS NSW 0012 SYS (FF)255 SYSTEM 001 NONE 000.059S 33.55.20
ANDOL01 OWT 009C TSU (FF)255 TS0 001 NONE 001.820S 01.45.18 TERM INPUT
ANTAS000 NSW 000D SYS (FB)251 STCPROD 001 NONE 000.053S 33.55.11
ANTMAIN NSW 000C SYS (FF)255 SYSTEM 001 NONE 002.296S 33.55.17
APPC NSW 0073 STC (FE)254 SYSSTC 001 NONE 000.156S 33.52.04
AREAS01 IN 009E TSU (FB)251 TS0 001 NONE 016.693S 03.05.31
ASCH NSW 0075 STC (FE)254 SYSSTC 001 NONE 001.777S 33.52.04
ASCHINT OWT 0085 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASCHINT OWT 0083 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASCHINT OWT 0081 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASCHINT OWT 0084 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASCHINT OWT 0086 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASCHINT OWT 0082 INI (FF)255 SYSSTC 001 NONE 000.001S NOTAVAIL DETECTED
ASTEX NSW 0076 STC (FB)251 STCPROD 001 NONE 425.674S 33.52.03
BLAMI02 OWT 00B8 TSU (FF)255 TS0 001 NONE 001.042S 00.44.00 TERM INPUT
BPXOINIT OWT 001A SYS (FF)255 SYSTEM 001 NONE 001.584S 33.53.15 DETECTED
CALDAP OWT 008A STC (FF)255 STCTEST 001 NONE 000.021S 33.51.56 DETECTED
CALDAP2 OWT 0069 JOB (FF)255 OMVS 002 NONE 000.109S 33.51.56 DETECTED

```

You see these fields when you first enter the Address Space Control panel and when you scroll to the leftmost view. The fields of data that appear on the first (leftmost) view of the Address Space Control panel are:

Job Name

The TSO user ID, batch job name, or started task name of the resource that is running in the address space.

St

The status of the address space. Values are:

- IN-Swapped in.
- IN*-In the process of being swapped in.
- NSW-Unable to be swapped.
- OU*-In the process of being swapped out.
- OUT-Swapped out and waiting; not ready to execute.
- OWT-Swapped out, but otherwise ready to execute.

ASID

The ID number of the address space.

Typ

The type of the address space. Types are:

- INI-Idle initiator
- JOB-Batch job
- STC-Started task
- SYS-System task
- TSU-TSO user

DPrtY

The dispatching priorities of the address spaces in both decimal and hexadecimal (in parentheses) format.

SrvClass

WLM service class. When the system is in Compatibility mode, this field is blank and cannot be modified. When the system is in Goal mode, the value of the SrvClass field is the only value on the Address Space Control panel that can be modified. To modify this value, overwrite this field with a valid WLM service class name. CA OPS/MVS internally invokes the OPSCMD command processor to issue a z/OS RESET command. Since the CA OPS/MVS security mechanism controls the OPSCMD command processor, you can use a security rule to restrict its use. You must have the authority to issue a z/OS RESET command.

Prd

WLM (Goal mode) or SRM (Compatibility mode) service period number for the address space.

Aff

The processor affinity. This value is either NONE, which indicates that there is no additional processor involvement, or a four-character system ID.

CPU

The elapsed CPU time used by this address space. If the value contains a suffix of S, the value indicates the number of seconds used. If the total CPU time used by the address space is greater than 60 seconds, the value appears in HH:MM:SS format.

Elapsed

The total time that has elapsed since the address space was started.

SwapRsn

The reason an address space has been swapped out. Values are:

- TERM OUT-Terminal output wait
- TERM INPUT-Terminal input wait

- LONG WAIT-Long wait
- AUX STOR-Auxiliary storage wait
- REAL STOR-Real storage wait
- DETECTED-Detected wait
- REQUESTED-Requested wait
- ENQ EXCHG-Enqueue exchange
- EXCHANGE-Exchange swap
- UNILATERAL-SRM unilateral swap
- TRANSWP-A TRANSWP is in progress
- IMP CSTORE-To improve central storage usage
- IMP PAGING-To improve system paging rate
- OUT LONG-To make room for an address space that is out too long
- APPC WAIT-APPC wait
- OMVS PROC-Waiting to process more OpenMVS work caused the swap
- OMVS OUTP-Waiting to output more OpenMVS work caused the swap

Fields on the OPSVIEW Address Space Control Panel-Second View

Scroll right to see the second view:

```

Address Space Control --- XE61 --- O P S V I E W ----- ROW 1 OF 192
Command ==>                               Scroll ==> CSR
Line Cnds: S Sec browse, C Cancel, D Cancel w/dump, Q Quiesce, R Resume
< Job Name-- Frames - Estor  WsSize - Fixed --- CSA -- ECSA --- SQA -- ESQA -->
*MASTER*   29001    0   29001    0  272664  3828960  60600  1510984
ACF2       1287    0   1287    23   86168   217856   8200   216440
ALLOCAS    2652    0   2652    0    0     1160    0     96
ANDOL01    1229    0   1229    0    136    2080    96    280
ANTAS000    765    0   765    23    0     992    0    584
ANTMAIN    1322    0   1322    0    0     1808    0    360
APPC       1259    0   1259    0   1520   73272   832   65064
AREAS01    1254    0   1254   104   136    2080    96    280
ASCH       236    0   236    0    0   30856    0    832
ASCHINT    200    0   200    0    0     528    0    352
ASCHINT    200    0   200    0    0     528    0    352
ASCHINT    200    0   200    0    0     528    0    352
ASCHINT    200    0   200    0    0     528    0    352
ASCHINT    200    0   200    0    0     528    0    352
ASCHINT    200    0   200    0    0     528    0    352
ASTEX      3106    0   3106    0  35904  1177264  3808  122808
BLAMI02    352    0   352    0    136    2816    96    280
BPXOINIT   167    0   167    49    0     0     0    70360
CALDAP     298    0   298    0    136    528    64    840
CALDAP2    910    0   910    0    0     0     0     1264
    
```

The following fields of data appear on the second panel of the Address Space Control panel. This view primarily contains storage related information about each address space. Press the RIGHT PF key from the leftmost view to see these fields.

Job Name

The TSO user ID, batch job name, or started task name of the resource that is running in the address space.

Frames

The number of real storage frames the address space uses.

Estor

The number of expanded storage frames the address space uses.

Note: When the system is in z/Architecture mode, there is no expanded storage, and this value is zero.

WsSize

The working set size, in frames, for the address space.

Fixed

The number of fixed real storage frames that the address space uses.

CSA

The amount of common service area (CSA) storage, in bytes, used by the job.

This is valid only if the Virtual Storage Manager (VSM) tracking facility has been active since the address space started.

ECSA

The amount of extended CSA storage, in bytes, used by the job.

This is valid only if the VSM tracking facility has been active since the address space started.

SQA

The amount of system queue area (SQA) storage, in bytes, used by the job.

This is valid only if the VSM tracking facility has been active since the address space started.

ESQA

The amount of extended SQA storage, in bytes, used by the job.

This is valid only if the VSM tracking facility has been active since the address space started.

Fields on the OPSVIEW Address Space Control Panel-Third View

Scroll right to see the third view:

```

Address Space Control --- XE61 --- O P S V I E W ----- ROW 1 OF 192
Command ==>                               Scroll ==> CSR
Line Cnds: S Sec browse, C Cancel, D Cancel w/dump, Q Quiesce, R Resume
< Job Name- StepName Procstep JobID -- UserID - TaskCPU EnclCPU Limit - >
*MASTER*
ACF2      ACF2      IEFPROC  NONE    NONE    011.930S 000.000S NoLimit
ALLOCAS  ALLOCAS      NONE    NONE    000.051S 000.000S NoLimit
ANDOL01  $SKKOLGA     TSU00407 ANDOL01 001.895S 000.000S NoLimit
ANTAS000 ANTAS000 IEFPROC  NONE    NONE    000.055S 000.000S NoLimit
ANTMAIN  ANTMAIN IEFPROC  NONE    NONE    001.978S 000.000S NoLimit
APPC     APPC     APPC     NONE    NONE    000.162S 000.000S NoLimit
AREAS01  $AREAS01 TSU00367 AREAS01 016.389S 000.000S 1800
ASCH     ASCH     ASCH     NONE    NONE    001.398S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00259 ASCHINT 000.001S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00256 ASCHINT 000.001S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00255 ASCHINT 000.001S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00257 ASCHINT 000.001S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00260 ASCHINT 000.001S 000.000S NoLimit
ASCHINT  ASCHINT  IEFPROC  STC00258 ASCHINT 000.001S 000.000S NoLimit
ASTEX    ASTEX    PMC28    STC00244 ACFSTCID 411.974S 000.000S NoLimit
BLAMI02  TSSLOGON TSU00437 BLAMI02 001.232S 000.000S 1800
BPXOINIT BPXOINIT BPXOINIT NONE    NONE    001.041S 000.000S NoLimit
CALDAP   CALDAP   *OMVSEX  STC00266 CALDAP   000.099S 000.000S NoLimit
CALDAP2  STEP1    CALDAP   STC00226 CALDAP   000.122S 000.000S NoLimit

```

The following fields of data appear on the third panel of the Address Space Control panel:

Job Name

The TSO user ID, batch job name, or started task name of the resource that is running in the address space.

StepName

The current step name or TSO procedure name for TSO users.

Procstep

The current procedure stepname.

JobID

The Job Entry Subsystem (JES) job ID.

UserID

The original security USERID for the address space.

TaskCPU

The total task (TCB) CPU time consumed by all job steps in the address space.

EnclCPU

The total CPU time for enclaves owned by the address space.

Limit

The CPU time limit for this job step.

Fields on the OPSVIEW Address Space Control Panel-Fourth View

Scroll right to see the fourth view:

```

Address Space Control --- XE61 --- O P S V I E W ----- ROW 1 OF 192
Command ==>                               Scroll ==> CSR
Line Cnds: S Sec browse, C Cancel, D Cancel w/dump, Q Quiesce, R Resume
< Job Name- OMVS PER SubT SwapCnt --- IOCnt SMC Note ----- >
*MASTER*          STC      0      30556 000
ACF2              STC      1      16184 000
ALLOCAS          STC      1         5 000
ANDOL01          TSO      0      3090 000
ANTAS000         STC      1         601 000
ANTMAIN          STC      1         708 000
APPC             STC      0         399 000
AREAS01          TSO      0     14059 000
ASCH             STC      0         41 000
ASCHINT          STC      0         0 000
ASCHINT          STC      0         0 000
ASCHINT          STC      0         0 000
ASCHINT          STC      0         0 000
ASCHINT          STC      0         0 000
ASCHINT          STC      0         0 000
ASTEX            STC      1     213074 000
BLAMI02          TSO      0         694 000
BPXOINIT OMVS    STC     12215      8 000
CALDAP OMVS     STC      1         742 000
CALDAP2 OMVS    OMVS     1         1042 000

```

The following fields of data appear on the fourth panel of the Address Space Control panel:

Job Name

The TSO user ID, batch job name, or started task name of the resource that is running in the address space.

OMVS

The value of this field is OMVS if the address space is an OpenMVS (USS) process.

Note: You cannot sort by OMVS.

PER

The value of this field is PER if the Program Event Recording (PER) is active in the address space.

Note: You cannot sort by PER.

SubT

The subsystem type that owns the work.

SwapCnt

The number of times the address space has been swapped out.

IOCnt

The number of input/output operations this address space has performed since the address space was started.

SMC

The number of step-must-complete requests.

Note

A description of the last action you took on this address space (from this panel).

Fields on the OPSVIEW Address Space Control Panel-Fifth View

Scroll right to see the fifth view:

```

Address Space Control --- XE61 --- O P S V I E W ----- ROW 1 OF 192
Command ==>                                         Scroll ==> CSR
Line Cmds: S Sec browse, C Cancel, D Cancel w/dump, Q Quiesce, R Resume
< Job Name- WkldName RscGroup CPUP StgP Srv Qsc WIn Pgn Dmn
*MASTER*  SYSTEM                No  No  No  No  No
ACF2      SYSTEM                No  No  No  No  No
ALLOCAS   SYSTEM                No  No  No  No  No
ANDOL01   TSO                          No  No  No  No  No
ANTAS000  STC                          No  No  No  No  No
ANTMAIN   SYSTEM                No  No  No  No  No
APPC      SYSTEM                No  No  No  No  No
AREAS01   TSO                          No  No  No  No  No
ASCH      SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASCHINT   SYSTEM                No  No  No  No  No
ASTEX     STC                          No  No  No  No  No
BLAMI02   TSO                          No  No  No  No  No
BPXOINIT  SYSTEM                No  No  No  No  No
CALDAP    STC                          No  No  No  No  No
CALDAP2   OMVS                       No  No  No  No  No
    
```

The following fields of data appear on the fifth panel of the Address Space Control panel. This view contains WLM and SRM information about the address space. Scroll to the rightmost view to see these fields.

Job Name

The TSO user ID, batch job name, or started task name of the resource that is running in the address space.

WkldName

Workload name (Goal mode).

RscGroup

Resource group name (Goal mode).

CPUP

CPU protection was assigned to this address space and SRM is honoring that protection.

Note: You cannot sort by CPUP.

StgP

Storage protection was assigned to this address space and SRM is honoring that protection.

Note: You cannot sort by StgP.

Srv

Server indicator-Yes or No (Goal mode).

Note: You cannot sort by Srv.

Qsc

Quiesce indicator-Yes or No (Goal mode).

Note: You cannot sort by Qsc.

Wln

WLM managed initiator-Yes or No (Goal mode).

Note: You cannot SORT by Wln.

Pgn

A performance group number.

When the system is in goal mode, this field is blank and cannot be modified. When the system is in Compatibility mode, this field value is the only value on the Address Space Control panel that can be modified. To modify this value, overtype this field with a valid Performance Group Number. CA OPS/MVS internally invokes the OPSCMD command processor to issue a z/OS RESET command. Since the CA OPS/MVS security mechanism controls the OPSCMD processor, you can use a security rule to restrict its use. You also need to have the authority to issue a z/OS RESET command.

Dmn

A domain number for the address space (Compatibility mode).

This field is always blank when the system is in Goal mode.

Line Commands for the Address Space Control Panel

There are several line commands you can issue from the Address Space Control panel. Enter the command in the prefix area preceding the desired address space.

C

Issues a z/OS CANCEL command to cancel an address space.

D

Issues a z/OS CANCEL command to cancel an address space and produce an SVC dump.

S

Security browse. Lists the CA Top Secret, CA ACF2, or RACF security profile of a TSO user (provided that your user ID is authorized to request it).

Q

Issues a z/OS RESET command to request that WLM QUIESCE an address space when the system is in Goal mode.

R

Issues a z/OS RESET command to request that WLM RESUME an address space when the system is in Goal mode.

Point-and-shoot is enabled to issue the S line command for any displayed Address Space. To issue the S line command for a displayed Address Space using the point-and-shoot method, place the cursor to the left of the Address Space and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

Primary Commands for the Address Space Control Panel

You can issue the following primary commands from the Address Space Control panel. Enter primary commands in the Command field, which is indicated by an arrow symbol at the top left corner of the panel.

L target, LOC, or LOCATE

If the LOCATE command is entered prior to a SORT primary command, the target is assumed to be the name of an address space. If the named address space is found, the display scrolls so that the target address space appears in the top row of the Address Space Control panel.

If the LOCATE command is issued after a SORT primary command, the target is assumed to be the column name of the preceding SORT, and the LOCATE string syntax must conform to the displayed appearance of the sorted column.

SORT field order

Sorts the address spaces according to the value of the specified field. You may specify more than one field. If not specified, the default value for field is JobName. The value for order can be A (Ascending) or D (Descending), and may be specified for each field specified. The default value for order varies by field name.

For example, to sort the address spaces by CPU time in descending order (so that the address space that has consumed the largest amount of CPU resources appears at the top of the list), issue this command:

```
SORT CPU D
```

You cannot sort on the following fields:

- OMVS
- PER
- Note
- CPUP
- StgP
- Srv
- Qsc
- Win

Point-and-shoot is enabled to SORT the Address Space List using any displayed column. To SORT the Address Space List using the point-and-shoot method, place the cursor on a displayed column heading and press Enter. Point-and-shoot is enabled only if no primary commands have been entered.

GO {n}

The GO command is used to place the application in auto-refresh or go mode. *n* is the number of seconds for the application to wait between refreshes of the data. It must be a number between 1 and 60. If *n* is not specified, the previous *n* for this session is used. If a GO command has not previously been issued for this session, a default wait of 10 seconds is used.

To exit GO mode, do the following:

- For remote terminals-press the ATTN key.
- For local (X SYSTEM) terminals-press the RESET key followed by PA1.

Note: Performing an attention when not in go mode results in the termination of the application the next time you press Enter.

Example: L target, LOC, and LOCATE

- L *target*

```
SORT CPU  
L 560.291S
```

Note: The target must match the display format.

- LOC

```
SORT ASID  
LOC 4D
```

Note: Hex value and leading zeroes are not required.

- LOCATE

```
SORT JOBNAME  
LOCATE J
```

Note: Starts scrolling at the first job name starting with J.

How to Observe and Control JES3 Print Queues (Option 3.2)

Use OPSVIEW option 3.2 to observe and control JES3 print queues.

Important! This option is available only for JES3 sites.

With option 3.2, you can zoom in on and out of different levels of the JES3 WTR queue. You can perform these tasks:

- Control individual print queues from the Print Queue List panel.
- Control individual jobs for a particular print queue from the Job Control panel.
- Control individual ddnames associated with a particular job from the ddname control panel.

To access OPSVIEW option 3.2, you can either:

- Enter 2 on the OPSVIEW System Control Menu.
- Use the ISPF jump function by entering =3.2 into any valid field in OPSVIEW.

OPSVIEW Print Queue Control Panel

When you select OPSVIEW option 3.2, you see a display similar to the following one:

```
Print Queue Control --- MSI1 ---- OPSVIEW -----  
COMMAND ==>  
Enter queue name below  
Printer Queue ==>          (blank for queue selection list)
```

From the Print Queue Control panel, you can either

- Access a list of all print queues
- Access a list of jobs associated with a particular print queue.

View a List of Print Queues

You will need to view a list of print queues when you are not sure of the name of the print queue that you want to access.

To access the Print Queue List Panel, leave the Printer Queue field on the Print Queue Control panel blank and press Enter.

A list of print queues similar to the one shown here displays:

```
Print Queue List --- MSI1 ---- O P S V I E W ----- ROW 1 OF 15
COMMAND ==>
Line Commands: Q show queue R requeue D delete
-- Queue --- Requeue - Type ----- Lines ----- Pages ----- Note -----
BOB03          PRT          124930         0
CHEMBOB        PRT           3787         0
CHEMBOB2       PRT          22590         0
CSDH074        PRT           1262         0
FRSTUL4        PRT            0         0
HOUUMKT3       PRT           5878         0
HOUPF2         PRT            192         0
RSBDG1         PRT            134         0
RSBDG1         PUN          38757         0
RSB31          PRT           8228         0
RSB41          PRT          186679         1
RSB64          PRT            188         0
RSB75          PRT          31680         0
TUL041         PRT            0         378
WRSND          PRT            22         0
*END OF OUTPUT*          *424327*      *379*
```

Fields on the Print Queue List Panel

The following lists the fields on the Print Queue List panel:

Queue

Specifies the name of the print queue.

Requeue

Specifies the name of the print queue to which you want to reroute output. Specify a value for this field if you want to use the R (for requeue) command.

Type

Specifies the general type of the queue. Values are PRT (print) and PUN (punch).

Lines

Specifies the number of lines in the queue. The total number of all lines appears in the *END OF OUTPUT* marker at the bottom of the panel.

Pages

Specifies the number of pages in the queue. The total number of all pages appears in the *END OF OUTPUT* marker at the bottom of the panel.

Note

Specifies the most recent action that was taken for a particular queue.

Commands for the Print Queue List Panel

The commands you can issue from the Print Queue List panel are described in the following table.

Some of the commands can be issued as primary or line commands, while others are valid only as primary commands.

To issue a command as a primary command, enter it in the Command field, followed by the name of the print queue you want the command to affect. To issue a command as a line command, enter it in the prefix area that precedes the desired queue.

D

Deletes all the jobs in a queue.

Valid Primary Command: Yes

Valid Line Command: Yes

L

Locate. Scrolls the panel so that the specified print queue appears at the top of the panel.

Valid Primary Command: Yes

Valid Line Command: No

Q

Display queue. Displays the job list for a queue.

Valid Primary Command: Yes

Valid Line Command: Yes

R

Requeues all the jobs in a queue. Remember that you must specify a value in the Requeue field if you want to issue this command as a line command.

Valid Primary Command: Yes

Valid Line Command: Yes

S

Show commands. Presents a menu describing all of the line commands currently available.

Valid Primary Command: Yes

Valid Line Command: Yes

SORT field, SORTA field, SORTD field

Sorts the print queues in the specified order. The value you specify for field can be any field name on the Print Queue List panel. If you specify SORT or SORTA, CA OPS/MVS sorts the queues in ascending order; if you specify SORTD, CA OPS/MVS sorts the queues in descending order.

For example, to sort the queues by number of lines in descending order, issue this command:

SORTD LINES

Valid Primary Command: Yes

Valid Line Command: No

View a List of Print Queue Jobs

You want to view a list of print queue jobs when you know the name of the particular print queue that you want to access.

To access a list of jobs for a particular print queue, do one of the following:

- Enter the name of the print queue on the Print Queue Control panel.
- Issue the Q command on the Print Queue List panel.

The Job Control panel for the print queue you specified displays, which is similar to the one shown here:

```

CSDH075 Control --- MS11 ----- O P S V I E W ----- ROW 1 OF 9
COMMAND ==>
      Line Commands: C cancel, S select, D show DDnames
-- Job ----- No.----- Lines - Pages - Dest --- Prty - Forms -- Hold ---
AK00SATA 8739          0      22  CSDH075   9  4814   N
AM60TTHF 8302         231      0  CSDH075  254 4814   N
AR49ARLP 1805         147      0  CSDH075  255 4814   N
BL05LSW  4647          24      0  CSDH075   15 4814   N
BQ45RRBA 2511          0       7  CSDH075   9  4814   N
BT90BIWK 2494        1044      0  CSDH075   9  4814   N
BT90BIWK 2496        1044      0  CSDH075   9  4814   N
BX55WIB3 3698         3073      0  CSDH075  250 4814   N
BX55WIB3 3750         3076      0  CSDH075  250 4814   N
*END OF OUTPUT* *8639* *29*
    
```

Fields on the OPSVIEW Job Control Panel

The following fields appear on the OPSVIEW Job Control panel. To view some of the fields, you must press the RIGHT PF key. Press the LEFT PF key to return the panel to its original position.

Job

The name of the job.

No.

The number of the job.

Lines

The number of lines for the job. The total number of all lines appears in the *END OF OUTPUT* marker at the bottom of the panel.

Pages

The number of pages for the job. The total number of all pages appears in the *END OF OUTPUT* marker at the bottom of the panel.

Dest

The name of the print queue. You can change the value of this field.

Prty

The print priority of the job. You can change the value of this field.

Forms

The form type. You can change the value of this field. Values are defined by your installation.

Hold

The operator hold status. You can change the value of this field. Values are Y and N.

Note

A note indicating the last action that was taken on the job. When you first access the Job Control panel this field indicates which job, if any, is active.

Type

The general type of the output. Values are PRT (print) and PUN (punch).

Class

The output class of the job.

How to Modify Job Control Panel Fields

You may need to change the values in the job control panel. You can modify Job Control panel fields either by typing new values directly over the existing field values or by using primary and line commands.

Modify Job Control Panel Fields Directly

Modify the job control panel when you need to change the values being displayed.

To directly modify the job control panel fields

1. Type new values directly over the existing values in the highlighted job control panel and press enter.

The panel is refreshed. For each modified job, a message appears in the Note column to indicate the modification and the original value.

Note: If you want to change the value of a field to the same new value for several jobs, type the new value in the field for the first job. Then place blanks over the field values for the subsequent jobs. The following sample panel illustrates this technique. The user typed NEWDEST into the second line of the Dest column and placed blanks over the Dest values for the 3rd, 4th, and 5th lines of the display. As a result of the changes specified in this panel, CA OPS/MVS will change the print queue for the AM60TTHF, AR49ARLP, BL05LSW, and BQ45RRBA jobs from CSDH075 to NEWDEST.

```

CSDH075 Control --- MSII ----- O P S V I E W ----- ROW 1 OF 9
COMMAND ==>
Line Commands: C cancel, S select, D show DDnames
-- Job ----- No.----- Lines - Pages - Dest --- Prty - Forms -- Hold ---
AK00SATA 8739      0      22  CSDH075   9  4814   N
AM60TTHF 8302     231     0  NEWDEST  254 4814   N
AR49ARLP 1805     147     0           255 4814   N
BL05LSW  4647      24     0           15 4814   N
BQ45RRBA 2511      0       7           9 4814   N
BT90BIWK 2494    1044     0  CSDH075   9 4814   N
BT90BIWK 2496    1044     0  CSDH075   9 4814   N
BX55WIB3 3698     3073    0  CSDH075  250 4814   N
BX55WIB3 3750     3076    0  CSDH075  250 4814   N
*END OF OUTPUT* *8639* *29*
    
```

Use Commands to Modify the Job Control Panel

You can issue some of the commands as primary commands or line commands, while others are valid only when you issue them as primary commands.

To issue a command as a primary command, enter it in the Command field, followed by the name of the job you want the command to affect. To issue a command as a line command, enter it in the prefix area that precedes the desired job.

You may issue the following commands from the Job Control panel.

C

Cancel. Deletes all output for the job.

Valid Primary Command: Yes

Valid Line Command: Yes

D

DDnames. Causes the ddname control panel for the job to appear.

Valid Primary Command: Yes

Valid Line Command: Yes

L

Locate. Scrolls the panel so that the specified job appears at the top of the panel.

Valid Primary Command: Yes

Valid Line Command: Yes

S

Select job. Accesses a special panel of information about the selected job. In the Current Settings column on the panel, you can view the current field values of the job. In the New Settings column, you can update any of the modifiable fields of the job.

Valid Primary Command: Yes

Valid Line Command: Yes

SORT field, SORTA field, SORTD field

Sorts the jobs in the specified order. The value you specify for field can be any field name on the Job Control panel. If you specify SORT or SORTA, CA OPS/MVS sorts the jobs in ascending order; if you specify SORTD, CA OPS/MVS sorts the jobs in descending order.

For example, to sort the jobs by number of lines in descending order, issue this command:

```
SORTD LINES
```

Valid Primary Command: Yes

Valid Line Command: No

How to Use the DDname Control Panel

This section describes how to use the ddname control panel.

Access the Panel

When you issue the D command from the Job Control panel, the ddname control panel appears. The panel lists information about all of the ddnames associated with the job. Following is a sample panel:

```
CSDH075.8032 Control --- MSII --- O P S V I E W ----- ROW 1 OF 4
COMMAND ==>                                     SCROLL ==> CSR
                Line Commands: C cancel, S select
-- DDname ----- Amount PM Copy  Dest --- Prty - Forms -- Hold -- Note --
..JESJCL          18  L   1  CSDH075  254  4814    N
..JESMSG          10  L   1  CSDH075  254  4814    N
..SYMSG           50  L   1  CSDH075  254  4814    N
.HC.SYSUT2       153  L   1  CSDH075  254  4814    N
*END OF OUTPUT*   *231*
```

Fields on the DDname Control Panel

The following DDname, Amount, PM, and Copy fields appear on the ddname control panel:

DDname

The data definition name.

Amount

The number of lines or pages, depending upon the value of the PM field.

PM

The page mode of the ddname. If the value of this field is L, the value of the Amount field is a line count. If the value of this field is P, the value of the Amount field is a page count.

Copy

The number of copies that will print for the ddname.

Commands for the DDname Control Panel

The commands you can issue from the ddname control panel are the same as those you can issue from the Job Control panel, with the exception of the D command. Of course, when you issue one of the commands on the ddname control panel, the command affects the selected ddname rather than a job.

How to Observe and Control IMS Resources (Option 3.3)

Use OPSVIEW option 3.3 to manage IMS resources, including regions, transactions, programs, and databases.

OPSVIEW provides various commands for you to use with option 3.3. In addition, OPSVIEW supports most forms of the IMS ASSIGN, DISPLAY, START, and STOP commands. If you enter an IMS command, OPSVIEW issues the command through the OPSCMD interface and displays the result as a formatted ISPF table. Security for IMS commands is provided indirectly through CA OPS/MVS and system mechanisms.

To access OPSVIEW option 3.3, you can either:

- Enter 3 on the OPSVIEW System Control Menu.
- Use the ISPF jump function by entering =3.3 into any valid field in OPSVIEW.

The OPSVIEW IMS Control Panel

When you select OPSVIEW option 3.3, you see a display similar to the following one:

```

IMS Control ----- MSI1 ---- O P S V I E W ----- Subsystem OPSS
OPTION ==>
  1 Regions          - Control IMS regions
  2 Transactions     - Control IMS transactions (SMB)
  3 Programs         - Control IMS programs   (PSB)
  4 Data Bases      - Control IMS data bases
      IMS ID ==> IMSM
      (IMS ID must be specified)
Maximum number of seconds to wait for IMS command response ==> 30
      PASSWORD ==>

```

From the IMS Control panel, use the Option field to specify the type of IMS resource you want to manage. There are several other input fields on the IMS Control panel. They are:

IMS ID

The ID of the IMS that you want to manage. You must specify a value in this field.

Maximum number of seconds to wait for IMS command response

The number of seconds CA OPS/MVS should wait for IMS to respond to a command before returning control to you. If you do not specify a value, the value defaults to the value of the OCWAIT parameter.

Password

The password for the IMS that you want to manage. You must specify a value in this field.

How to Control IMS Regions (Option 3.3.1)

This section discusses how to control IMS regions.

Access the IMS Region Display Panel

To control IMS regions, you must access the IMS Region Display panel. To do so, select option 1 when you fill in the IMS Control panel. As a result, you see a display similar to the following:

```
IMS Region Display--- MSI1 --- O P S V I E W ----- ROW 1 OF 1
COMMAND ==>
Line Commands:      P (Stop) PA (ABDUMP) PW (WFI) PC (Cancel)
                   A (Assign)
Line                Class
Command  ID  Name  Type  Tran/Step  Program  1  2  3  4
-----
          1  IPOMSG  TP   WAITING          1
-----
```

Fields on the IMS Region Display Panel

The following fields appear on the IMS Region Display panel:

Line Command

Indicates where you can enter a line command.

ID

Specifies the IMS-dependent region number used on IMS start and stop region commands.

Name

Specifies the job name of the IMS region.

Type

Specifies the type of the region. Values are TP (message processing region) and BMP (batch message processing region).

Tran/Step

Specifies the name of the transaction or step that is currently being processed by region. If there are no regions of that type, NONE is specified.

Program

When the value of the Type field is TP, the Program field indicates the name of the PSB. When the value of the Type field is BMP, the Program field indicates the job step name.

Class

Specifies the scheduling classes for the region, in selection order.

Line Commands for the IMS Region Display Panel

The following shows the line commands for the IMS Region Display panel:

A

Assigns scheduling classes to the region.

P

Stops the IMS region.

PA

Stops the IMS region and performs an abend dump.

PC

Cancel the IMS region.

PW

Stops the IMS region and waits for input.

How to Control IMS Transactions (Option 3.3.2)

This section discusses how to control IMS transactions.

Access the IMS Transaction Display Panel

To control IMS transactions, you must access the IMS Transaction Display panel. To do so, select option 2 when you fill in the IMS Control panel. As a result, you see a display similar to the one shown here:

```

IMS Transaction Display --- MSI1 --- O P S V I E W ----- ROW 1 OF 11
COMMAND ==>
Line Commands:  S (Start)      P (Stop)      A (Assign)
                  Proc
Tran             Limit  Limit  Curr Norm Lim Seg Seg Par
Name            Cls  Queue Count Count Prty Prty Prty Size Num Lim Status
-----
ADDINV          1    0    3    65535 7   7   11  0  0  0
ADDPART         2    0    2    65535 7   7   10  0  0  0
ADFUT0SA        2    0   65535 65535 1   1    1  0  0  0  STOP
ADFUT001        2    0   65535 65535 1   1    1  0  0  0
ADFUT01         2    0   65535 65535 1   1    1  0  0  0  STOP
ADFUVSA         2    0   65535 65535 1   1    1  0  0  0  STOP
CLOSE           2    0    2    65535 7   7   10  0  0  0  STOP
DBDIMSD         2    0   65535 65535 1   1    1  0  0  0  STOP
DBDIMSO         2    0   65535 65535 1   1    1  0  0  0  STOP
DBDIMSOV        2    0   65535 65535 1   1    1  0  0  0  STOP
DBDIMSP         2    0   65535 65535 1   1    1  0  0  0  PSBSTATUS
    
```

Fields on the IMS Transaction Display Panel

The following fields appear on the IMS Transaction Display panel:

Tran Name

The name of the transaction.

Cls

The scheduling class of the transaction.

Queue

The number of transactions currently waiting in the input queue.

Limit Count

The current backlog limit count.

Proc Limit Count

The number of transactions that can be processed with a single scheduling.

Curr Prty

The current priority level for the transaction.

Norm Prty

The normal priority level for the transaction.

Lim Prty

The limit priority for the transaction.

Seg Size

The maximum number of bytes in an output message segment.

Seg Num

The total number of segments for the transaction.

Par Lim

The parallel region limit.

Status

Status information about the transaction.

Line Commands for the IMS Transaction Display Panel

Use the following commands to control IMS transactions:

A

Reassigns all modifiable values. Type in new values for one or more modifiable fields on a line, then use the A command to apply the changes to take effect.

P

Stops the IMS transaction (prevents it from being scheduled or queued).

S

Starts the IMS transaction (permits it to be scheduled).

Access the IMS Program Display Panel

To control IMS programs, you must access the IMS Program Display panel. To do so, select option 3 when you fill in the IMS Control panel. As a result, you see a display similar to the one shown here:

```
IMS Program Display - MSI1 --- O P S V I E W ----- ROW 1 OF 25
COMMAND ==>
Line Commands:  S  (Start)      P  (Stop)
Line           Command  Program  Type  1      2      3
-----
          ADFUBD01    BMP      STOPPED, NOTINIT
          ADFUT0SA    TP       NOTINIT
          ADFUT001    TP       NOTINIT
          ADFUT01     TP       NOTINIT
          ADFUVSA     TP       NOTINIT
          DBDIMSB     BMP      NOTINIT
          DBDIMSO     TP       NOTINIT
          DBDIMSOV    TP       NOTINIT
          DFSSAM02    TP       STOPPED
          DFSSAM03    TP
          DFSSAM04    TP
          DFSSAM05    TP
          DFSSAM06    TP
          DFSSAM07    TP
          MFC1BDDR    BMP      NOTINIT
-----
```

Fields on the IMS Program Display Panel

The following fields appear on the IMS Program Display panel:

Line Command

An area where you can enter a line command.

Program

When the value of the Type field is TP, the Program field indicates the name of the PSB. When the value of the Type field is BMP, the Program field indicates the job step name.

Type

The type of the program. Valid values are TP (program that runs in a message processing region) and BMP (program that an operator schedules and IMS controls).

Conditions

The condition of the program. Up to three conditions may appear.

Line Commands for the IMS Program Display Panel

Use the following commands to control IMS programs:

P

Stops the IMS program (prevents it from being scheduled).

S

Starts the IMS program (permits it to be scheduled).

How to Control IMS Databases (Option 3.3.4)

To control IMS databases, you must access the IMS Database Display panel. To do so, select option 4 when you fill in the IMS Control panel. You will need the four-character ID of an active IMS region to select this page. As a result you see a display similar to the following one:

```

Data Base Display - CA99 --- 0 P S V I E W ----- Row 96 to 114 of 460

Command ==>
  IMS system: IMSX                      IMS password ==>
  Spin Log C (C N A) Cnds: S SG P PG D DG E Table size = 460
  Cmd  Resp DBname  Type  Acc Subset Conditions
-----
----- D120      ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D121      ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D122      ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D123      ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D124      ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D125      DL/I  UP          NOTOPEN
----- D13       DL/I  UP          NOTOPEN
----- D14       DEDB  UP    3      NOTOPEN
----- D15       ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D16       PHDAM UP    3
----- D17       PHIDA UP    3
----- D18       PHIDA UP   29
----- D19       ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D20       DL/I  UP          NOTOPEN
----- D21       DL/I  UP          NOTOPEN
----- D22       DL/I  UP          NOTOPEN
----- D23       ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D24       ***** UP          STOPPED, NOTOPEN, NOTINIT
----- D25       ***** UP          STOPPED, NOTOPEN, NOTINIT
  
```

This display shows a page of the scrollable OPS 3.3.4 display. Note that the subset column contains a number on rows D14, D16, D17, and D18. The presence of a number in this column indicates that an area or partition exists for that line. The E (Examine) command brings a lower level display showing the areas or partitions. Their status can be monitored or changed.

This screen displays details of the three areas associated with line D14:

```

IMS Data Base Display - CA11 --- 0 P S V I E W ----- Row 1 to 3 of 3
Command ==>
  IMS system: IMSX DB= D14      TYPE= DEDB  IMS password ==>
  Spin Log C (C N A) Cnds: S SG P PG D DG Table size = 3
  Cmd  Resp AREA    Acc  Conditions
-----
----- D14B01A  UP   N/A    N/A    N/A    N/A    NOTOPEN
----- D14B02A  UP   N/A    N/A    N/A    N/A    NOTOPEN
----- D14B03A  UP   N/A    N/A    N/A    N/A    NOTOPEN
  
```

The commands available on this screen are the same as those on the main screen, except that the E command is not supported.

Fields on the IMS Database Display Panel

The IMS Database display panel has the following fields:

CMD

Enter a line command to control one database, or one Area or Partition.

Resp

Contains the return code from IMS, if nonzero. The format is RC=n. If RC is zero (normal return) then Resp contains the last command issued, with an asterisk prefix, such as *P.

DBname

Specifies the name of the database.

Type

Specifies the IMS type of data base. Under some conditions, the type can not be determined, and asterisks are displayed.

Access

Specifies the type of access users have to the database. This field is bi-directional; it displays the current access method, and if you issue an S (Start) line command, you can type an access code in this field to select a new mode. Values are:

EX-Usage restricted to this IMS subsystem.

RD-Read exclusive (open for input only).

RO-Read-only.

UP-Updates allowed.

Subset

If non-blank, indicates the number of areas or partitions active in the database.

Conditions

Displays up to three special conditions that affect the database.

Line Commands for the IMS Database Display Panel

Use the following commands to control IMS databases:

D

Deallocate, or release the database.

DG

Deallocate, or release the database on all systems.

E

Examine areas and partitions.

P

Stop the database, area, or partition.

PG

Stop the database or area or partition on all systems.

S

Starts the database. You can also use the S command to modify the Access field. To do so, type S in the Line Command field and type a new value in the Access field.

SG

Start the database on all systems. See Access the field, above.

How to Edit System Broadcast Messages (Option 3.4)

OPSVIEW option 3.4 enables you to use the ISPF/PDF standard editor to edit messages that are broadcast to users when they log on to the system.

To access OPSVIEW option 3.4, you can either:

- Enter 4 on the OPSVIEW System Control Menu.
- Enter =3.4 in any Command field in OPSVIEW.

OPSVIEW Broadcast Messages Edit Panel

When you select OPSVIEW option 3.4, you see a display similar to the following one:

```

EDIT --- SYS1.BROADCAST ----- COLUMNS
COMMAND ==>                      SCROLL ==> PAGE
Broadcast Messages Editor -- MSI1 - O P S V I E W ----- Subsystem OPSS
***** Top Of Data *****
*-----*
*                Welcome to system MSI1                *
*---+---1---+---2---+---3---+---4---+---5---+---6-*
***** Bottom Of Data *****

```

Guidelines for Using the Broadcast Messages Edit Panel

Follow these guidelines when editing broadcast messages:

- Although the message editor limits the length of messages to 80 bytes, you must limit the length of your messages to 62 bytes if you want them to be right justified.
- Use double quotes rather than single quotes in your messages.
- Use the standard set of ISPF/PDF commands in the broadcast message editor. When you issue the END command, your changes will be saved. The next time users log on to the system, they will see the edited version of the message.

How to Manage Switch Operations (Option 3.5)

Switch Operations Facility (SOF) I/O Management provides an ISPF user interface that displays and controls the I/O resources connected through ESCON directors and FICON switches.

Use this interface to do the following:

- Navigate the entire shared I/O configuration.
- Display all connectivity from the vantage point of any specific system, switch, control unit, channel path, or device, and control all connectivity using simple line commands.
- At the level of ports within a single ESCON/FICON switch, display the port matrix of connectivity between any individual port and all other ports within the switch.
- Display and control each port-to-port connection with a single character.
- Maintain switch configuration files.

Access the Switch Operations Facility Menu

To access the Switch Operations Facility menu do one of the following:

- Enter 5 on the OPSVIEW System Control Menu.
- Use the ISPF jump function by entering =3.5 in any valid field in OPSVIEW.

The following menu displays:

```
SOF Control ----- O P S V I E W ----- Subsystem OPSZZ

Switch Operations Facility Menu      Server Sysname: A11SENF   Wait: 60
                                      Applname: OPsofServer

Local Command Sysname: *

0 Servers      - View/Select active SOF servers
1 Systems      - View/Select SOF managed systems
2 Switches     - View/Select ESCON/FICON switches
3 Channel Paths - View channel paths
4 Control Units - View control units
5 Devices      - View devices
6 Commands     - Enter SOF server commands
7 Offline Config - Configure switch ports offline

Enter END command to exit
```

Define Display Criteria

Many of the displays can produce hundreds or even thousands of lines of information, making it tedious to locate specific items by scrolling through the list. You can limit the displayed information by defining display criteria.

To define display criteria

1. Place your cursor in the I= selection line under the field you want to request specific criteria.
2. Enter a specific item or use wildcard grouping on a common pattern match in the fields you want to limit and then press enter.

The special characters asterisk (*) and question mark (?) can be placed in a character string, respectively representing multi- and single-character wildcard matching. A single asterisk (*) in any field, or omission of any masking character, is equivalent to no wildcarding.

The resulting display contains only the requested information.

Example: Limit the Displayed Information

The I= selection option displays only SOF Synames starting with SYSA:

```
Synames_____ Dev#_____ Type
I=(SYSA)
```

Display Valid Line Commands

Line commands are function-specific and only commands appropriate to a function may be used during that dialog.

To display a summary of the line commands available for a panel, enter a question mark (?) into the prefix area of any line.

Valid Line Commands

Line commands are available for most SOF dialog panels. Enter line commands into the prefix area preceding the desired line item.

The following are all available line commands; most of them are available only in a single context from a specific level of a panel dialog:

ACT

Activates the switch configuration in a switch file and synchronize the device path status with the new switch settings.

CDS

Copies a switch file to an offline configuration data set

CPY

Copies a switch file to another new or existing switch file on the same switch.

DEL

Deletes a switch file.

DID

Displays the complete device ID of the primary object being displayed

DSN

Displays offline port configuration data sets.

FIL

Displays the switch file list.

GCH

Displays global switch information.

GCU

Displays global control unit information.

GDV

Displays global device information.

GSW

Displays global switch information.

INS

Performs the insert file function, which creates a new switch file or over-writes an existing switch file with the current switch port configuration.

LCH

Displays local channel path ID (CHPID) information.

LCU

Displays local control unit information.

LDV

Displays local device information.

LSW

Displays local switch information.

LSY

Changes the default local system name for other local display commands.

MAS

Displays the port mask for viewing and modification.

MTX

Displays the switch port connectivity matrix.

NAM

Invokes a panel for changing the name of a switch or port. Overtyping name fields on the switch or port displays accomplishes the same function as this command.

PCH

Displays the switch port for a chpid.

PCU

Displays the switch port for a control unit.

PID

Displays the switch port attached node device ID for a local control unit.

POR

Displays the port information for a switch, the contents of a switch configuration file, or an offline dataset port information file.

SEL

Selects the line item for processing. When the display title command field is SELECT, the SEL line command selects the requested object. When the display command is VIEW, SEL can be a synonym for another line command.

SID

Displays the switch device ID when a switch device ID is part of the data associated with another object such as CHPID, CU, or DEVICE.

SYS

Displays all SOF managed systems.

SOF Servers

SOF servers can be local or remotely connected to other LPARs. Any LPAR can have multiple active SOF servers. Servers with the same CCI application name are part of an SOFplex that shares switch and device data.

The ISPF profile stores the last used server and retrieves it when the ISPF interface is started. If the profile server is not found, the local SOF server is used.

Display and Select SOF Servers (Option 3.5.0)

This menu displays the available SOF servers from which you can select a new server.

To display and select SOF servers

1. Choose option 0: Servers - View/Select active SOF servers from the Switch Operations Facility Menu.

A list of available servers displays as show on the following sample menu:

```

SOF                                O P S V I E W                                Row 1 to 4 of 4
                                VIEW SOF Server CCI Connections          Wait ==> 60
                                Current Server: A11SENF OPsofServer    PF11=>

Sel Sysname  Type Application Name      Status  Jobname  CCIplex
-----
I=
_ A11SENF    L  OPsofServer      ACTIVE  OPSIO
_ A11SENF    L  OPsofJXS         ACTIVE  SLEJ001S
_ A11SENF    L  OPsofQA          ACTIVE  OPSKS0F2
_ A31SENF    R  OPsofQA          ACTIVE  OPSKS0F1
***** Bottom of data *****

Command ==>
F1=Help      F3=End      F5=Previous  F6=Next      F7=Up
F8=Down      F10=Left    F11=Right   F12=Retrieve
    
```

2. Limit the number of servers by specifying filter criteria in the I= input fields and press enter.

The display refreshes listing the specified servers.

3. Enter S next to the SOF server you want to use and press enter.

The server switches to the new server.

Display and Define SOF Managed Systems (Option 3.5.1)

This menu displays system information for all systems or a system connection list for a specific switch, control unit, chpid, or device.

To display the SOF Managed Systems

1. Choose option 1: Systems - View/Select SOF managed systems from the Switch Operations Facility Menu.

A menu similar to the following displays from which you can define your criteria to limit the displayed systems and use line commands to drill-down for additional information:

```

SOF ----- O P S V I E W ----- Row 1 to 5 of 5
                                Wait ==> 60
                                Server: A11SENF

                                PF11=>
VIEW SOF Managed Systems
-----
Sel |      SOF      | System Identification | I/O Device Counts |
   | Sysname  Stat SMF | LPAR   Sysplex  CPCName | Swch Chpid  CU  Device
-----|-----|-----|-----|-----|-----|-----|-----|
I=  |          |          |          |          |          |          |          |
--- | A02SENF | DOWN  |          |          |          |          |          |
--- | X22SENF | UP    XE22 XE22 | PLEXC1 MF01 |          |          |          |
--- | X44SENF | LATE XE44 XE44 | PLEXC1 MF01 |          |          |          |
--- | A61SENF | DOWN  |          |          |          |          |          |
***** Bottom of data *****

```

2. Define your display criteria and press enter.

The SOF Managed Systems menu is refreshed and you can continue to drill down or exit to the previous menu.

3. Enter valid line commands, and press enter.

The associated menu displays.

4. Scroll to the left and right using the PF10 and PF11 keys respectively.

Additional fields of information associated with the menu display.

You can continue to drill down or exit to the previous menu.

Display ESCON/FICON Switches for Port Configuration (Option 3.5.2)

The Switches menu displays ESCON/FICON switch and port information. Use this menu to configure the switch ports.

To display the ESCON/FICON switches for port configuration

1. Choose option 2: Switches - View/Select ESCON/FICON switches from the Switch Operations Facility Menu.

A menu similar to the following sample displays which displays both a global and local view of SOF managed switches. The difference in the views is the inclusion of the local system switch device number in the output display.

```

SOF ----- O P S V I E W ----- Row 1 to 8 of 8
                                Wait ==> 60
                                Server: A11SENF

                                VIEW SOF Managed Switches

Sel |      Switch Identification      | Ports | Connected |
  | Type Mod Mfg Serial Num  SOF Name | Inst Impl Chp CU Sys
-----|-----|-----|-----|-----|-----|-----|
I=  |-----|-----|-----|-----|-----|-----|
CONTRX 410 EMC CLX060051896 Ficon for Testing      32  32  2  3  1
002094 S28 IBM 000000050851 No UCB for LSN 0006      59  59 19 40  1
002094 S28 IBM 000000050851 No UCB for LSN 0007      33  33  4 29  1
002094 S28 IBM 000000050851 No UCB for LSN 0008      32  32  4 28  1
006064 001 MCD 000083120625 Production Ficon 1        64  64 29 25  1
006064 001 MCD 000083120625 Production Ficon 2        64  64 31 22  1
009032 005 IBM 000000041203 Escon for Testing        248 248  3  0  1
***** Bottom of data *****

Command ==>                                Scroll ==> CSR
    
```

2. Enter the POR line command in the Sel field to display the ports for the switch.

A port panel for a switch similar to the following sample displays:

```

                                VIEW All Ports for Switch
                                Server: A11SENF
                                IBM 2094-S28 000000050851 8005 No UCB for LSN 0005
View Output: Y (Y/N/F)
Cmd Options: N Exec N Vary Y Backout N Force (Y/N) Maxdev= 256

Sel |      Port Properties      | Status | Attached Device |
  | Addr Num Type Name        | H B C P | Devtype Class   |
-----|-----|-----|-----|-----|-----|
I=  |-----|-----|-----|-----|-----|-----|
 8A  8A FICON                - - - - CHPID 83 UNKNOWN
 8C  8C UNKN                 - - - - CU .3590- UNKNOWN
 90  90 UNKN                 - - - - CU .3590- UNKNOWN
 92  92 UNKN                 - - - - CU .3590- UNKNOWN
 93  93 FICON                - - - - CHPID 80 UNKNOWN
 FE  00 UNKN Switch CUP      C - - - SWITCH CUP
    
```

Each port is displayed along with the following information:

- Hardware status (H) attributes

- Blocked/unblocked (B) attribute
- Dedicated connection port name (C)
- Attached device type

3. Type over fields in this panel to change the attributes and press enter.

After verification, SOF will change the port and display returned messages.

Use the valid line commands to verify what devices are connected to a particular port, restrict port use, and display additional information.

The SOF Matrix Screen provides editing capability that lets you better manage your switch ports. This screen lets you edit active port information, ports in a switch file, and ports from a data set that may not be tied to a specific switch.

Edit the Switch Ports

The SOF Matrix Screen provides editing capabilities for managing your switch ports. This screen lets you edit active port information, ports in a switch file, and ports from a data set that may not be tied to a specific switch.

To edit active switch ports

1. From OPSVIEW option 3.5 enter 2 for switches

The SOF Managed Switches screen displays.

2. Enter MTX in the prefix area of the switch you need to edit.

The editing screen displays, which is similar to the following:

```

SOF                               O P S V I E W                               Subsystem OPSZ
Command ==>                       Scroll ==> CSR
                                     Wait ==> 60
                                     Server: A99SENF

          EDIT ALL Ports for Ficon Switch
          EMC CONTRX-410 CLX060051896 0000 Test 080

|                                     |                                     |
| Port Properties                     | Port Mask                         |
Sel Addr Name                        H B C 0 0 1 2 3 4 5 6 7 8 9 A B C D E F |
---|-----|-----|-----|-----|-----|-----|-----|-----|
00 |-----|-----| L - - - - X P P P P P P P P P P P P P P P P P
01 |-----|-----| 0 - - - - P X a a a a a a a a a a a a a a a a
02 | IBM_MF01_50851_CHP2F |-----| - - - - - P a X a a a a a a a a a a a a
03 | IBM_MF01_50851_CHP30 |-----| - - - - - P a a X a a a a a a a a a a a a
04 | EMC2K_FC25_SYM0720_3D |-----| - - - - - P a a a X a a a a a a a a a a a a
05 | EMC2K_FC25_SYM0720_10D |-----| - - - - - P a a a a X a a a a a a a a a a a a
06 | Name for 06 |-----| - - - - - P a a a a a X a a a a a a a a a a a a
07 | Name for 07 |-----| - - - - - P a a a a a a X P P P P P P P P a
08 |-----|-----| - - - - - P a a a a a a P X P P P P P P a
09 |-----|-----| - - - - - P a a a a a a P P X P P P P P a
0A | Test change detections |-----| - - - - - P a a a a a a P P P X P P P P a
0B |-----|-----| - - - - - P a a a a a a P P P P X P P P a
0C |-----|-----| - - - - - P a a a a a a P P P P P X P P a
0D |-----|-----| - - - - - P a a a a a a P P P P P P X P a
F1=Help  F2=Split  F3=End  F4=Cancel  F6=Save  F7=Up  F8=Down
    
```

3. Enter ? in any line command field to see the list of line commands you can use.
4. Display blocks of 16 mask values for each port on the right of the screen by using the PF keys to scroll left and right. Display port properties on the left side of the screen using PF keys to scroll up and down.
5. Edit the values in the port properties and issue SAVE on the command line.

The values change from pending to permanent. For active ports the appropriate commands are interactively issued to modify the ports.

Display Channel Paths (Option 3.5.3)

This display lets you view channel path IDs, control unit, and device information for use in the port configuration task. These panels identify what switch attached devices will be affected by changing switch port attributes.

To display the Channel Paths

1. Choose option 3: Channel Paths - View channel paths from the Switch Operations Facility Menu.

A menu similar to the following displays the CHPID, device ID, and the switch connection attachment data.

```

SOF ----- O P S V I E W -----Row 1 to 11 of 189
          VIEW CHPIDs on ALL Systems                               Server: ALLSENF

```

Sel	Chpid Identification					Sys Count	Port	Switch Connection			
	Chpid	Type	Mod	Mfg	Serial Num			Type	Mod	Mfg	Serial Num
I=	00	002064	1C7	IBM	000000047204	0	04	006064	001	MCD	000083120625
	01	002064	1C7	IBM	000000047204	0	08	006064	001	MCD	000083120625
	02	002064	1C7	IBM	000000047204	0	04	006064	001	MCD	000083120625
	03	002064	1C7	IBM	000000047204	0	0A	006064	001	MCD	000083120625
	06	002064	1C7	IBM	000000047204	0	24	006064	001	MCD	000083120625
	4E	002064	1C7	IBM	000000047204	0	13	006064	001	MCD	000083120625
	50	002064	1C7	IBM	000000047204	0	05	006064	001	MCD	000083120625
	51	002064	1C7	IBM	000000047204	0	17	006064	001	MCD	000083120625
	52	002064	1C7	IBM	000000047204	0	1B	006064	001	MCD	000083120625
	54	002064	1C7	IBM	000000047204	0	13	006064	001	MCD	000083120625
	55	002064	1C7	IBM	000000047204	0	1F	006064	001	MCD	000083120625

```

Command ==>
                                         Scroll ==> CSR

```

2. Enter line commands to display complete switch hardware ID, change the SOF switch name, display the ports for switch, display switch devices on connected systems, display CHPIDs connected to a switch.

These panels let you limit the display to provide the desired connection information.

Display Systems Attached to a Control Unit (Option 3.5.4)

The control unit display panel displays control unit connection information. This panel lets you limit the display to control units for a specific device.

To identify z/OS systems attached to a control unit

1. From the Switch Operations Facility Menu, choose option 4: Control Units - View control units.

The following menu displays:

```

SOF ----- O P S V I E W ----- Row 1 to 11 of 66
                               Wait ==> 60
                               Server: A11SENF

          VIEW Control Units on All Systems

| Control Unit Identification | Connected |
Sel Gpos Type Mod Mfg Serial Num Tag Sys Swi Dev |
-----|-----|-----|-----|-----|-----|-----|
I=
0000 CONTRX *** EMC CLX060051896 0000 2 1 1
0001 0MDS9K *** CSC 000DEC3EED42 0000 2 1 1
0002 0MDS9K *** CSC 00059B7DBDC2 0000 2 1 1
0003 0MDS9K *** CSC 00059B7D5003 0000 2 1 1
0004 002097 *** IBM 00000001E2B2 0000 2 2 216
0005 002105 *** EMC 000000031084 0000 2 2 571
0006 002107 *** EMC 000000002084 0000 0 2 0
0007 002107 *** EMC 000000002549 0000 0 2 0
0008 002107 *** EMC 100000002084 0000 0 2 0
0009 002107 *** EMC 100000002549 0000 0 2 0
000A 002107 *** EMC 200000002084 0000 0 2 0
000B 002107 *** EMC 200000002549 0000 0 2 0

Command ==>                               Scroll ==> CSR
    
```

2. On the selection line, define the display criteria to limit the information and press enter.

The panel displays only the requested information.

3. Enter line commands to display additional panels.

Additional panels are displayed that let you do the following:

- View complete switch hardware ID
- Change the SOF switch name
- View the ports for switch
- View switch devices on connected systems
- View CHPIDs connected to a switch, and control units

Display Devices on a Local System (Option 3.5.5)

The device display panel displays a range of devices for a local system. This panel lets you limit the display to devices attached to a specific control unit.

To identify a range of devices for a local system

1. From the Switch Operations Facility Menu, choose option 5: Devices - View devices.

The following menu displays:

```

SOF ----- O P S V I E W ----- Row 1 to 11 of 2,000
          VIEW Devices on All Systems                               Server: ALLSENF

```

Sel	Gpos	Type	Mod	Mfg	Serial Num	Tag	Sys	CU	Display From	Count	Dev Total
I=									0	2000	13081
	0000	CXX000	X00	CSC	000000000000	0000		15		1	
	0001	CXX000	X00	CSC	000000000000	0020		72		2	
	0002	CXX000	X00	CSC	000000000000	0031		73		2	
	0003	CXX000	X00	CSC	770181680000	0040		88		3	
	0004	CONTRX	410	EMC	CLX060051896	0000		2		1	
	0005	C72000	600	CSC	662230500000	0020		60		2	
	0006	001731	001	IBM	209400050851	00FE		3		0	
	0007	001731	001	IBM	209400050851	01FE		3		0	
	0008	001731	001	IBM	209400050851	02FE		3		0	
	0009	001731	001	IBM	209400050851	03FE		3		0	
	000A	001731	001	IBM	209400050851	04FE		3		0	

Command ==> Scroll ==> CSR

2. On the selection line, define the display criteria to limit the information and press enter.

The panel refreshes displaying only the requested information.

3. Enter line commands to display additional panels.

Additional panels are displayed that let you view and change information.

SOF Server Commands (Option 3.5.6)

The SOF Command Processor panel lets operators execute OPS/MVS SOF commands that interface with the IBM I/O subsystem to provide advanced management capabilities for devices attached through the ESCON directors and FICON switches.

Execute New and Previously Issued Commands

There are many ways to execute commands within the SOF Command Processor.

To execute new and previously issued commands:

1. From the Switch Operations Facility Menu, choose option 6 Commands - Enter SOF server commands.

The command processor panel is displayed.

2. Type a command in the command field and press the ENTER key. No special command prefixes are needed.

Command text in the command field is passed, as is, to the SOF Command Processor. The only exception is when there are single quotes (') found in the command text. The single quotes will be doubled before being passed to the SOF Command Processor for syntax purposes.

3. Press PF5 (Previous Command) or PF6 (Next Command) to retrieve the previously issued command. The last 20 commands are stored in your ISPF profile pool.

If you have issued the command within the same SOF Command Processor dialog instance, the related output will be displayed with the command. Otherwise, the command alone will be placed on the command field.

Note: For information on controlling size of the command input line, see [Control the Command Input Line Size](#) (see page 201).

Display Command Output

There are two methods for displaying command output within the SOF Command Processor.

To display command output within the SOF Command Processor

Do one of the following:

- Execute a command and view the output in the command output area.

You may scroll up and down within the output generated by the command you entered. The amount scrolled is controlled by the setting of the SCROLL amount, just as on every other ISPF panel.

- Press PF5 (Previous) or PF6 (Next)

The previously issued commands and the associated output is displayed, if that command was executed in the current instance of the SOF Command Processor dialog.

Note: You may use the WAIT field to specify the number of seconds for which the product is to wait for the messages generated in response to your command to appear.

Control the Command Input Line Size

When the SOF Command Processor encounters a longer command than can be accommodated by the SHORTCMD command field, the SOF Command Processor automatically moves to the LONGCMD display screen.

To control the command input line size

1. On the command line issue the following commands:
 - SHORTCMD(Default)
Specifies the command line occupy one line of the display.
 - LONGCMD
Specifies the command line occupy two lines, allowing up to 126 characters of command input. This is the maximum allowed by the SOF Command.
2. Exit option 6 and return to the pre,

The setting in effect when you last exited is remembered.

Note: There is a limit on the number of lines of command output which will be captured and returned for display. If a command you enter generates more lines than this, the last line of output you see will be a message saying that some response lines were lost. The limit is the same value used by the CA OPS/MVS MVS/JES Command Processor.

Execute Commands on Other Systems

You may need to direct commands to other systems.

To execute command on other systems when you know the server name

1. Change the Server name below the Wait field and press enter.
2. Enter the command and press enter.
The command is issued against the current server.

To execute command on other systems when you do not know the server name

1. If you do not know which servers are available and which systems they are executing on, either blank out the Server field or enter a question mark (?) as the first character.
A dialog listing all of the servers and their associated systems is displayed.
2. Choose the desired server by entering S next to the server name and press enter.
The chosen server becomes the active server.
3. Issue a command to the active server.
The results are displayed and ready for review.

Configure Switch Ports Offline (Option 3.5.7)

Use this panel when a data set name specified for a port/switch configuration file does not exist or is not catalogued.

If the data set name is misspelled, hit PF7 to return to the previous panel to correct the data set name. Otherwise, enter the parameters required to allocate the new data set and hit PF3 to allocate the data set.

To configure switch ports offline

1. From the Switch Operations Facility Menu, choose option 7: Offline Config - Configure switch ports offline and press enter.

The Specify Offline Port Configuration Dataset is displayed:

```
Specify Offline Port Configuration Dataset
...                                     ...
... Port Dataset:                       ...
...   Member:                           Reflist Name: PORTINFO ...
...                                     ...
... New Dataset Allocation:             ...
...   Like DSN :                         ...
...   SMS Class: Management:            Storage:           Data: ...
...   Device  : Unit:                   Volume:           ...
...   Space   : Cylinders:                Tracks: 6       Blocks:       (Pick one) ...
...                                     Secondary: 3       Directory: 10 ...
...   Record  : Format: VB Length: 504   Blksize:       (Req for Blocks) ...
... Command ==>
```

2. Complete the required fields.

Like Dataset Name

Enter the name of an existing data set from which the new data set will inherit DCB, DSORG, and SPACE attributes unless explicitly overridden. DCB BLKSIZE is not inherited in a SMS environment and must be specified or allowed to be determined by SMS.

SMS Classes

Enter the optional names of the SMS management, storage, and data class.

Device, Unit Name, and Volume Serial

Enter a generic or esoteric unit name and a volume serial name as required.

Under TSO there is a default unit name that usually puts data sets on temporary work volumes.

For a Wizard ruleset allocation, place the data set on the same volume as the other product rulesets. For a user rules data set, place the data set on shared DASD if it will be used by multiple systems.

Space Parameters

Enter the primary space allocation amount next to the space units you want to use. If Blocks is used, enter a block size in the record section of this panel. Specify any secondary allocation and directory block amounts on the second space specification line.

Record Format and Size (DCB)

Enter the record format and logical record length. Wizard data sets should be FB format with record length 80. The block size should be the same as other ruleset data sets or you can let SMS assign the block size.

DSN Type

If you want the data set to be a PDS/E, place a Y next to the PDS/E label. Depending on your release of z/OS, you may encounter problems updating PDS/E data sets shared between systems and the requirement that SMS must be active.

When all modifications are made, make the revised file active.

How to Manage PPRC environment (Option 3.6.1)

Use OPSVIEW option 3.6.1 to manage Peer to Peer Remote Copy (PPRC) use the Synchronous Metro Mirroring environment, including paths and volume pairs. This option enables you to view and modify defined PPRC paths and pairs as well as to create new ones. In addition, PPRC environment can be saved into a file. Content of the file can be displayed or edited through other suboption.

Access the Synchronous Metro Mirroring Menu

To access the Synchronous Metro Mirroring menu, do one of the following procedures:

- Enter 6 on the OPSVIEW System Control Menu and then enter 1 on the High Availability Menu.
- Use the ISPF jump function by entering =3.6.1 in any valid field in OPSVIEW.

The following menu displays:

```
PPRC -- CA11 ----- O P S V I E W ----- Subsystem OPSU
Option ==>

Metro Mirror Menu          SOF: Server Sysname: A11SENF   Wait: 60
                           Applname: OPsofWeipe03

0 Change Server
1 Paths                    - View/Create paths
2 Pairs                    - View/Create volume pairs
3 Save environment        - Save path and volume pair definitions to file
4 View environment        - View/Edit environment definitions file

Enter END command to exit
```

SOF Servers (Option 3.6.1.0)

To change the SOF server, enter 0 on the PPRC Menu. The ISPF profile stores the last used server and retrieves it when the ISPF interface is started.

View or Modify PPRC Paths (Option 3.6.1.1)

To View or Modify PPRC paths, choose option 1 on the PPRC Menu. As a result, you see a display similar to the one shown here:

```

Remote Copy -- CA11 ----- O P S V I E W ----- Row 1 to 4 of 4
Command ==>                               Scroll ==> CSR
                                           Wait ==> 60
                                           Server: A11SENF

          VIEW PPRC Paths on All Systems

Primary command:
  CP - create a new path

Line commands
  S - View details          D - Delete path

Sel | Site | Primary Unit | | Secondary Unit | |Path|
   | SSID LSS Serial # FCA | SSID LSS Serial # FCA | Stat
--- |-----|-----| |-----| |-----|
I=  | PSITE | 8400 02 | 00000000MC711 0033 - 8500 03 | 75000000MC711 0233 - 13
   | PSITE | 8400 02 | 00000000MC711 0103 - 8500 03 | 75000000MC711 0303 - 13
   | PSITE | 8600 04 | 00000000MC711 0033 - 8700 05 | 75000000MC711 0233 - 13
   | PSITE | 8600 04 | 00000000MC711 0103 - 8700 05 | 75000000MC711 0303 - 13
  
```

The line commands available on this screen are the following:

S

Displays a pop-up window with detailed information about PPRC path.

D

Removes all PPRC paths between the selected Primary and Secondary LCU (LSS).

The primary command for the Command field follows:

CP

Runs a wizard that will guide you through PPRC path setup.

Create a new PPRC path

The wizard that helps you to establish a PPRC path consists of five steps. In first four steps, you select Primary Storage Controller, Primary Logical Control Unit (LCU), Secondary Storage Controller, and Secondary Logical Control Unit respectively. In the fifth step, you see a display similar to the following screen:

```
Remote Copy -- CA11 ----- O P S V I E W ----- Subsystem OPSU
Command ==>                               Scroll ==> CSR
                                           Wait ==> 60
                                           Server: A11SENF

Create PPRC Path -- SPECIFY FCAs AND OPTIONS

Step 5 of 5: Specify FCAs and options

Dialog Commands:
  S - Submit request   X - Exit dialog   END - Return to previous panel

--- FCAs -----
Primary - 1. ___ 2. ___ 3. ___ 4. ___ 5. ___ 6. ___ 7. ___ 8. ___
Secondary - 1. ___ 2. ___ 3. ___ 4. ___ 5. ___ 6. ___ 7. ___ 8. ___

--- OPTIONS -----
Consistency Group (Y/N): N   Subchannel Set (0/1): 0

--- PRIMARY SITE -----
Primary Storage Controller:                Primary LCU:
  Serial Number - 0000000MC711             Device Number - 8400
  World Wide Node Name - 5005076308FFC641   Logical Subsystem - 02

--- SECONDARY SITE -----
Secondary Storage Controller:              Secondary LCU:
  Serial Number - 0000000MC711             Device Number - 8500
  World Wide Node Name - 5005076308FFC641   Logical Subsystem - 03
```

In this display, specify the PPRC links through Primary and Secondary Fiber Channel Adapters (FCAs) and you can specify other options like Consistency Group and Subchannel Set.

View or Modify PPRC Pairs (Option 3.6.1.2)

To View or Modify the PPRC pairs, choose option 2 on the PPRC Menu. As a result, you see a display similar to the following screen:

```

Remote Copy -- CA11 ----- O P S V I E W ----- Row 1 to 1 of 1
Command ==>                               Scroll ==> CSR
                                           Wait ==> 60
                                           Server: A11SENF

          VIEW PPRC Mirrored Volumes on All Systems

Primary command:
  CV - Create a new volume pair

Line commands
  S - View volume pair details    D - Delete a volume pair

|   Device   | | Primary | | Secondary |
Sel Dev# Serial #   SSID LSS CCA  SSID LSS CCA  Copy State
-----
I=
  8419 0000000MC711 - 8400 02 19 - 8500 03 19 - Duplex
  841A 0000000MC711 - 8400 02 1A - 8500 03 1A - Duplex

```

The line commands available on this screen are the following:

S

Displays a pop-up window with detailed information about the PPRC pair.

D

Deletes a selected volume pair.

Note: Before issuing a DELETE PATH command, issue a DELETE VOLUME command to all active PPRC volume pairs. The DELETE PATH command can cause the issuance of an ANTP0121I message when this sequence is not followed.

The primary command for the Command field follows:

CV

Runs a wizard that guides you through the PPRC volume pair setup.

Create a new PPRC pair

The wizard that helps you to establish a PPRC pair consists of four steps. In first three steps, you select Primary Logical Control Unit (LCU), Primary volume or a range of volumes and Secondary Logical Control Unit respectively. Secondary volume or a range of volumes is derived from the second step, that is the Primary volume selection. In the fourth step, you see a display similar to the following screen:

```

Remote Copy -- CA11 ----- O P S V I E W ----- Subsystem OPSU
Command ==>                               Scroll ==> CSR
                                           Wait ==> 60
                                           Server: A11SENF

Create PPRC Pair -- SPECIFY OPTIONS

Step 4 of 4: Specify options

Dialog Commands:
  S - Submit request   X - Exit Wizard   END - Return to previous panel

--- OPTIONS -----
Critical Vol (Y/N): N   Online Secondary (Y/N): N   Subchannel Set (0/1): 0
Mode (1 - Copy, 2 - NoCopy, 3 - IncRes, 4 - Resync): 2

--- PRIMARY VOLUME(S) -----
Primary LCU:
  Device Number - 8400
  Logical Subsystem - 02
  Serial Number - 0000000MC711
Volumes to be mirrored:
  Device number of first volume - 8419
  Number of subsequent volumes - 3

--- SECONDARY VOLUME(S) -----
Secondary LCU:
  Device Number - 8500
  Logical Subsystem - 03
  Serial Number - 7500000MC711
Target mirror volumes:
  Device number of first volume - 8519
  
```

In this dialog, you can change other options that are:

- Critical Volume
- Online Secondary
- Subchannel Set
- Mode.

You can find more details about these parameters in the *z/OS DFSMS Advanced Copy Services* documentation.

Save PPRC Environment (Option 3.6.1.3)

You save a current PPRC environment into a file by selecting option 3 on the PPRC Menu. The file (PDS member) resides in a dataset whose name is specified in SOF starting procedure next to PPRC ddname. For more information, see in the *CA OPS/MVS Administration Guide*.

View or Edit PPRC Environment file (Option 3.6.1.4)

Option 4 on the PPRC Menu shows you the content of PPRC environment file. As a result of selecting the option 4, you see a display similar to the following screen:

```

Remote Copy -- CA11 ----- O P S V I E W ----- Row 1 to 5 of 5
Command ==>                               Scroll ==> CSR

PPRC Paths and Volume Pairs in environment file

Primary commands:
E - EDIT file
* - Execute all lines with exception status

Line command:
S - Select line for execution

| | | Primary Unit | | Secondary Unit | | |
Sel Type ID LSS WNN ID LSS WNN #Vols
sss ssss ssss sss sssssssssssssss ssss sss sssssssssssssss ssss
I=
Path - 8400 02 5005076308FFC641 - 8500 03 5005076308FFC641 - ---
Path - 8500 03 5005076308FFC641 - 8400 02 5005076308FFC641 - ---
Path - 8600 04 5005076308FFC641 - 8700 05 5005076308FFC641 - ---
Path - 8700 05 5005076308FFC641 - 8600 04 5005076308FFC641 - ---
Pair - 8419 02 ----- - 8519 03 ----- - 1
    
```

The line command available on this screen is:

S

Sends a command which tries to establish a PPRC path or pair that is defined by corresponding line.

The primary commands for the Command field follow:

E

Opens the file in the Edit mode.

Tries to establish all PPRC paths/pairs contained in the file.

Chapter 7: OPSVIEW Control Option

This section contains the following topics:

- [Overview of the OPSVIEW Control Option \(Option 4\)](#) (see page 213)
- [Using the Parm Option \(Option 4.1\)](#) (see page 214)
- [How to Select a Remote System \(Option 4.1.0\)](#) (see page 215)
- [How to View and Modify Parameter Settings \(Option 4.1.1\)](#) (see page 217)
- [How to View Queue Information \(Option 4.1.2\)](#) (see page 221)
- [How to View a Graphical Representation of Performance \(Option 4.1.3\)](#) (see page 225)
- [How to View Storage Usage Information \(Option 4.1.4\)](#) (see page 227)
- [How to View Module Information \(Option 4.1.5\)](#) (see page 229)
- [How to Control the Multi-System Facility \(Option 4.2\)](#) (see page 235)
- [How to Use OPSVIEW Option 4.2 to Define an MSF System](#) (see page 240)
- [How to View Operator Server Facility Status Information \(Option 4.3\)](#) (see page 243)
- [How to Use Option 4.3 to View Detailed Execution Statistics](#) (see page 247)
- [How to View Enhanced Console Facility Status Information \(Option 4.4\)](#) (see page 252)
- [How to Control the Automated Operations Facility \(Option 4.5\)](#) (see page 254)
- [How to Select the AOF Running on a Remote System \(Option 4.5.0\)](#) (see page 255)
- [How to Control the Production AOF \(Option 4.5.1\)](#) (see page 257)
- [How to Use the AOF CTRL Rule Set List Panel](#) (see page 260)
- [How to Use the AOF CTRL Rule List Panel](#) (see page 265)
- [How to Maintain the AOF Production Compiled Rules Library \(Option 4.5.2\)](#) (see page 270)
- [How to View and Control Enabled \(In Storage\) Rules \(Option 4.5.3\)](#) (see page 274)
- [How to Start a Copy of the Product \(Option 4.6\)](#) (see page 279)
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- [How to Control Global Variables \(Option 4.8\)](#) (see page 282)
- [How to Create a Subnode](#) (see page 288)
- [How to Browse a Node](#) (see page 289)
- [How to Delete a Node and Its Subnodes](#) (see page 290)
- [How to Modify the Value of a Subnode](#) (see page 291)
- [Drop a Node](#) (see page 293)
- [Show the Subnodes of a Node](#) (see page 294)
- [Browse the Hexadecimal Value of a Node](#) (see page 295)
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- [Control the External Product Interface Virtual Terminals \(Option 4.10\)](#) (see page 299)
- [How to Add a Virtual Terminal to the EPI List](#) (see page 302)
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- [How to Examine the Screen Image of a Virtual Terminal](#) (see page 304)
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- [How to Issue EPI Commands from OPSVIEW Option 4.10 Panels](#) (see page 308)
- [How to Use the System State Manager Control Option \(Option 4.11\)](#) (see page 309)
- [How to Control System State Manager \(Option 4.11.1\)](#) (see page 312)
- [How to View Monitored Resource Information \(Option 4.11.2\)](#) (see page 317)
- [Invoke the SSM Table Editor](#) (see page 326)
- [How to Generate a Relational Table of Started Tasks \(Option 4.11.3\)](#) (see page 337)
- [How to Manage Schedules of Resources \(Option 4.11.4\)](#) (see page 340)

- [How to Manage Groups of System State Manager Resources \(Option 4.11.5\)](#) (see page 341)
- [How to Use the Action Table Editor to Create and Maintain SSM Action Tables \(Option 4.11.A\)](#) (see page 342)
- [How to View SSMGA Resources Information \(Option 4.11.G\)](#) (see page 361)
- [How to Use the Resource Editor to Create and Maintain SSM Resource Tables \(Option 4.11.R\)](#) (see page 371)
- [How to View Outstanding SSMGA WTORs \(Option 4.11.W\)](#) (see page 381)
- [How to Perform CICS Operations Facility Maintenance \(Option 4.12\)](#) (see page 382)
- [How to Activate and Deactivate Destination IDs Associated with a CICS Connection](#) (see page 386)
- [How to Delete a CICS Connection](#) (see page 388)
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- [Access OPSLOG Definitions \(Option 4.13\)](#) (see page 391)
- [Access WebCenter Control Panel \(Option 4.14\)](#) (see page 395)
- [Fields on the Alert Monitor Administrative Menu Panel](#) (see page 398)
- [Fields on the SSM Resource Monitor Administration Panel](#) (see page 398)
- [Fields on the Multi-System Support Administration Panel](#) (see page 399)
- [Fields on the Customizer Panel](#) (see page 400)

Overview of the OPSVIEW Control Option (Option 4)

Use the OPSVIEW Control Option to update the running copy of CA OPS/MVS. CA OPS/MVS does not preserve the changes you make when using option 4; all changes are lost when you restart CA OPS/MVS.

You can perform these tasks with the OPSVIEW Control Option:

- View and modify product addresses and parameter values
- Control the Multi-System Facility (MSF)
- View status information about the Operator Server Facility (OSF)
- View status information about the Enhanced Console Facility (ECF)
- Control the Automated Operations Facility (AOF)
- Start a copy of CA OPS/MVS
- Stop a copy of CA OPS/MVS
- View, create, and modify global variables (both standard and temporary)
- Control the status of all External Product Interface (EPI) virtual terminals
- View and control System State Manager tables and resources
- View and maintain CICS connections
- View and maintain OPSLOG definitions

Access the OPSVIEW Control Option

To access the OPSVIEW Control Menu, enter 4 on the OPSVIEW Primary Options Menu. You see a display similar to the following:

```
Control ----- MSI1 --- O P S V I E W -----Subsystem OPSS
OPTION ==>
 1 Parms - View/Modify product addresses and parms
 2 MSF Control - Control Multi-System Facility
 3 OSF Information - View Operator Server Facility status
 4 ECF Information - View Enhanced Console Facility status
 5 AOF Control - Control Automated Operations Facility
 6 Start - Start the main product address space
 7 Stop - Stop the main product address space
 8 Global Variables - Display and Update Global Variables
10 EPI Control - Control External Product Interface
11 SSM Control - View/Control System State Manager
12 COF Control - View/Modify CICS Operations Facility
13 OPSLOG Control - View/Modify OPSLOG Definitions
14 WebCenter Control - View/Modify WebCenter LU Prefix:
Enter END command to return to primary options.
```

Using the Parms Option (Option 4.1)

Use OPSVIEW option 4.1 to:

- View and modify CA OPS/MVS parameter settings
- View information about CA OPS/MVS queues
- View a graphical representation of CA OPS/MVS performance
- View a graphical representation of CA OPS/MVS storage utilization
- View information about CA OPS/MVS modules

Access Option 4.1

To access OPSVIEW option 4.1, you can either:

- Enter 1 on the OPSVIEW Control Menu
- Use the ISPF jump function by entering =4.1 into any valid field in OPSVIEW

The Parameters Menu

From the following CA OPS/MVS Parameters menu, use the Option field to specify the option you want to use:

```
CA OPS/MVS Parameters-- MSII -- O P S V I E W -- Subsystem OPSS
OPTION ==>
 0 Parms System      - Select target MSF System ( *local* )
 1 Parms             - Set/Display product parameters
 2 Display Queues    - Display information about product Queues
 3 Display Perform   - Perform group in graphic format
 4 Display Storage   - Storage group in graphic format
 5 Modules           - Information about product Modules

Press END to return.
```

How to Select a Remote System (Option 4.1.0)

Use option 4.1.0 to select a remote system that has been defined to the MSF. Once you make your selection, you can then use options 4.1.1 through 4.1.5 to view information about the copy of CA OPS/MVS that is running on the selected system.

Initially, the default is the local system. Once you have selected another system, your system selection remains in effect until you make a new selection.

The Remote System List

When you select option 0 from the CA OPS/MVS Parameters menu, the following Remote System List window appears:

```

CA OPS/MVS Parameters--- S034 ---- O P S V I E W ----- Subsystem OPSS
OPTION ==> 0

0  Parms System    - Select target MSF System ( *local* )
1
2  S031 --- Remote System List --- OPSS ----- Row 1 to 10 of 15
3  COMMAND ==> _____ SCROLL ==> PAGE
4  Use S in the SEL column to select a system
5  or enter the END command to return.

Sel Ident  Name      Alias  Alias  Status  Action
Local OPS44A
Remote MVSXE11  v11
Remote OPS03S  MVSXE03 TS003  ACTIVE
Remote OPS07S  MVSXE07 TS007  FAILED
Remote OPS11K  C11
Remote OPS11Z
Remote OPS13S  MVSXE13 TS013  FAILED
Remote OPS19S  MVSXE19 TS019  FAILED

Press END to return
    
```

The Remote System List window lists all remote systems that have been defined to the Multi-System Facility. For each system, the window shows a system name, status, and action (if any). The Ident field indicates the type of the system (local, meaning the named system is the one to which you are logged on; or remote, meaning a cross-system connection exists).

If you defined any MSF systems with aliases, the Remote System List window will contain one or two Alias fields, depending on the following:

- If no system has more than one alias defined, one Alias field will be displayed.
- If any system has two or more aliases defined, two Alias fields will be displayed; at most, the first two aliases will be displayed for any system.

The following example panel shows a system where each MSF node has no or one alias defined:


```

CA OPS/MVS Parameters--- S034 ---- O P S V I E W ----- Subsystem OPSS
OPTION ==> 0

0 Parms System - Select target MSF System ( *local* )

-----
S034 --- Remote System List --- OPSS --- Row 1 to 9 of 9
COMMAND ==> SCROLL ==> PAGE
Use S in the SEL column to select a system
or enter the END command to return.
-----
Sel Ident Name Alias Status Action
Local OPS44A ASHER44 ACTIVE
Remote OPS03A ASHER03 ACTIVE
Remote OPS03Q QA03 FAILED
Remote OPS44C MEL44 FAILED
Remote OPS44Q QA44 ACTIVE
Remote OPS44R REZAR44 FAILED
Remote OPS44S PROD44 ACTIVE
Remote OPS44X GLENN44 FAILED
Remote OPS44Y FAILED
***** Bottom of data *****
-----

```

You can define and activate MSF systems in either of these ways:

- Use OPSVIEW option 4.2; see How to Control the Multi-System Facility (Option 4.2) in this chapter.
- Use the ADDRESS OPSCTL MSF host command environment. For details, see the *Command and Function Reference*.

How to View and Modify Parameter Settings (Option 4.1.1)

Use OPSVIEW option 4.1.1 to view the current settings of CA OPS/MVS parameters and, optionally, to modify the settings.

Access the Parms Panel

If you want to view or modify CA OPS/MVS parameter settings, you must access the CA OPS/MVS Parms panel. To do so, you can either:

- Select option 1 from the CA OPS/MVS Parameters menu.
- Use the ISPF jump function by entering =4.1.1 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```

CA OPS/MVS Parms --- XE44 ----- O P S V I E W ----- Subsystem OPSK
COMMAND ==>                                     SCROLL ==> CSR
===== Display Profile =====
Name:      Value:      Type:      Group:
Description:                               System:
=====
Line commands: S Show additional information
Name      Value      Description      ROW 1 OF 985
OPMSADDRESS  X'11710000'  MASTER BLOCK ADDRESS
OPVTADDRESS  X'0F6F7000'  ADDRESS VECTOR TABLE ADDRESS
OPJSADDRESS  X'11940000'  JES INTERFACE BLOCK ADDRESS
OPWK        X'11FB8000'  SYSTEM WORK AREA ADDRESS
OPPM        X'0E142000'  PERMANENT PRODUCT DATA AREA ADDRESS
SSVT        X'00FA4710'  SUBSYSTEM VECTOR TABLE ADDRESS
SSCT        X'00B99000'  SSCT CONTROL BLOCK ADDRESS
UX180PMS    X'00000000'  IATUX18 OPMS MESSAGE ROUTINE ADDRESS
OPMFADDRESS  X'11827000'  MSF CONTROL BLOCK ADDRESS
OPEPADDRESS  X'117C7000'  EPI CONTROL BLOCK ADDRESS
PRPL        X'18264F00'  PROCESS BLOCK POOL HEADER ADDRESS
SSAT        128          SSAT INDEX VALUE
SSEXTYPE    PREHOOKED    SUBSYSTEM EXIT ADDRESS FIELD TYPE
SSEXADDR    X'00A779A0'  SUBSYSTEM EXIT FIELD ADDRESS
MAINBLOCK   X'7F6S3F00'  MAIN PROCESS BLOCK ADDRESS
OSFQUE      1024 COMMANDS  OSF MAXIMUM EXECUTE QUEUE SIZE
OSFQUEUE    X'18691000'  OSF EXECUTE QUEUE ADDRESS
OSFMIN      2 SERVERS     OSF MINIMUM ACTIVE SERVER COUNT
OSFMAX      2 SERVERS     OSF MAXIMUM ACTIVE SERVER COUNT
OSFDORM     60 SECONDS   OSF MAXIMUM SERVER DORMANT TIME
.
.
.
    
```

Using the Display Profile Area to Subset the Parameter List

The CA OPS/MVSParms panel shows a listing of all CA OPS/MVS parameters. Although you can use the UP and DOWN PF keys to scroll the list, the list is quite long. Instead of viewing the long list, you can use the Display Profile area of the CA OPS/MVSParms panel to filter out some of the parameters. By doing so, you can view a subset of parameters that includes only those that you want to see.

The following fields are available in the Display Profile area of the CA OPS/MVSParms panel:

Name

Enter the name of the parameter you want to view. If you are unfamiliar with the exact name of the parameter, you may enter a name mask. As a result, CA OPS/MVS displays a list of all the parameters with names that include the character string you specified with the mask.

Value

Enter a value in this field to view a list of all the parameters with values that include the string you entered.

Type

Enter a parameter type in this field to view a list of the parameters that belong under that type classification. Values for this field are U (Update), I (Initialization only) and D (Display only).

Note: With a few exceptions, display-only parameters are not documented in the Parameter Reference. If you need information about display-only parameters and you cannot find it in the chapter about display-only parameters in the Parameter Reference, the best way to get it is to enter D in the Type field. Once CA OPS/MVS displays the list of display-only parameters for you, use the S line command to view more detailed information.

Group

Enter a parameter group name to view a list of the parameters belonging to that group. If you are unfamiliar with the exact name of the group you want to enter, enter a group mask. As a result, CA OPS/MVS displays a list of all the parameters with group names that include the character string you specified with the mask. Filling in the Group field provides a performance benefit to CA OPS/MVS, because it permits the application to scan only those parameters that belong to the group you specify.

Note: You can use the GROUPS primary command to view a list of CA OPS/MVS group names.

Description

Enter a description or partial description in this field to view a list of all the parameters with descriptions that include the string you entered.

System

Enter the MSF-defined system name of a remote CA OPS/MVS system to view its parameter settings.

The S Line Command

Issue the S line command in the prefix area on the CA OPS/MVSParms panel to view more detailed information about a particular parameter.

Point-and-shoot is enabled to issue the S line command for a displayed parameter. To issue the S line command for a displayed parameter using the point-and-shoot method, place the cursor to the left of the desired parameter and press Enter. Point-and-shoot is enabled only if no line commands have been entered.

Primary Commands for the Parms Panel

CA OPS/MVS provides several commands for you to use on the CA OPS/MVSParms panel. Enter primary commands in the Command field.

GROUPS

Displays a list of the CA OPS/MVS parameter group names. From the list you can select the group you want to view.

MODULES

Displays the Modules panel. This is the same as OPSVIEW option 4.1.5. For details, see How to View Information About Modules (Option 4.1.5) in this chapter.

REPORT

Causes CA OPS/MVS to generate a complete report of the subsetted parameters and to place it in your ISPF list data set. The REPORT command is also valid from the detailed panel that you see when you issue the S line command. For more information, see The S Line Command in this chapter.

SORT colname sequence

Sorts the parameters according to the value you specify for colname. Values for colname are NAME, VALUE, and DESCRIPTION. You can specify more than one colname value at a time. The sort sequence defaults to ascending, unless you specify D as the value for sequence.

Point-and-shoot is enabled to SORT the parameter list using any displayed column heading. To SORT the parameter list using the point-and-shoot method, place the cursor on a displayed column heading and press Enter.

Modifying a Parameter Value on the ParmS Panel

You can change the value of a parameter by typing directly over the value that appears in the Value field.

If you make a change to a parameter but fail to copy the change to the appropriate OPSSPA00 member of the Logical Parmlib Concatenation, the change stays in effect only for the duration of the current CA OPS/MVS session.

A Note About Display-only Parameters

With a few exceptions, display-only parameters are not documented in the *Parameter Reference*. If you need information about a display-only parameter, and you cannot find it in the *Parameter Reference*, follow this procedure:

1. Place a D in the Type field on the CA OPS/MVS ParmS panel to view a list of display-only parameters.
2. Use the S line command to view more detailed information about one of the listed display-only parameters.

How to View Queue Information (Option 4.1.2)

Use OPSVIEW option 4.1.2 to view information about how CA OPS/MVS is performing with its queues. The following are the CA OPS/MVS queues:

ATMSOURCEQUEUE

The AOF uses this queue to process Automate rules. The queue can hold up to 128 entries; you cannot modify its size.

EPICMDQUEADDR

The External Product Interface (EPI) uses this queue to receive EPI commands. The value of the EPICMDQUESIZE parameter indicates the size of this queue, which is set to 1024. You cannot modify the EPICMDQUESIZE parameter.

EXECQUEUE

The AOF uses this queue to receive AOF commands. To change the size of this queue, update the EXECQUE parameter before you initialize CA OPS/MVS. For details about specifying parameters, see the *Parameter Reference*.

MRTQUEUE

The MSF Router (MRT) subtask uses this queue to route cross-system operations that are received from other MSF-connected systems to the internal servers that perform operations on this system. MRTQUEUE holds up to 128 entries; you cannot change its size.

MSFQUEUE

The Multi-System Facility (MSF) uses this queue to receive MSF commands sent by the ADDRESS OPSTL MSF command. The MSFQUEUE holds up to 128 MSF commands; you cannot change its size.

OSFQUEUE

The Operator Server Facility (OSF) uses this queue to receive OSF commands. These OSF commands include ADDRESS TSO commands from AOF rules, commands issued with the OSF command character from a console, and commands issued in the ADDRESS OSF environment. To change the size of this queue, update the OSFQUE parameter before you initialize CA OPS/MVS. For details about specifying parameters, see the *Parameter Reference*.

OSFTSLQUEUE

The Operator Server Facility (OSF) uses this queue to receive OSFTSL commands. These OSF commands are issued in the ADDRESS OSFTSL environment. To change the size of this queue, update the OSFTSLQUE parameter before you initialize CA OPS/MVS. For details about specifying parameters, see the *Parameter Reference*.

OSFTSPQUEUE

The OSF uses this queue to receive OSFTSP commands. These OSF commands are issued in the ADDRESS OSFTSP environment. To change the size of this queue, update the OSFTSPQUE parameter before you initialize CA OPS/MVS. For details about specifying parameters, see the *Parameter Reference*.

VTAMQUEUE

The MSF uses this queue to send and receive both messages and commands between systems. The queue can hold up to 1024 entries; you cannot modify its size.

Access the Queues Panel

To view information about CA OPS/MVS queues, you must access the Queues panel. To do so, you can either:

- Select option 2 from the CA OPS/MVS Parameters menu.
- Use the ISPF jump function by entering =4.1.2 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```
Queues --- S034 ----- O P S V I E W --- OPSA ----- ROW 1 TO 9 OF 9
COMMAND ==>
System : *local*
      <--Messages--><----Maximum Queue-----> Last <Overflow> Update
Name      Added Removed Depth  Date      Time      Flag Flag Count  Count
ATMSOURCEQUEU    0      0      0 NONE      NONE      NO  NO      0      0
EPICMDQUEADDR   42     42      2 2003/09/05 20:37:50 NO  NO      0     82
EXECQUEUE       2      2      1 2003/09/05 19:09:50 NO  NO      0      3
MRTQUEUE        0      0      0 NONE      NONE      NO  NO      0      0
MSFQUEUE        0      0      0 NONE      NONE      NO  NO      0      0
OSFQUEUE        1      1      1 2003/09/05 19:08:43 NO  NO      0      1
OSFTSLQUEUE     0      0      0 NONE      NONE      NO  NO      0      0
OSFTSPQUEUE     0      0      0 NONE      NONE      NO  NO      0      0
VTAMQUEUE       0      0      0 NONE      NONE      NO  NO      0      0
***** BOTTOM OF DATA *****
```

Fields on the Queues Panel

The following fields appear on the Queues panel:

System

If you are viewing queue information about the local system, this value is *local*; if you are viewing information about a remote system, the name of the remote system appears here.

Name

The name of the queue.

Messages Added

The total number of messages sent to the queue for processing.

Messages Removed

The total number of messages received by this queue.

Maximum Queue Depth

The high water mark of the queue.

Maximum Queue Date

The most recent date on which the queue reached the value in the Maximum Queue Depth field.

Maximum Queue Time

The most recent time at which the queue reached the value in the Maximum Queue Depth field.

Last Flag

Indicates whether the CA OPS/MVS subsystem is going through its shutdown process.

Overflow Flag

Indicates whether the queue reached an overflow condition. When an overflow occurs, the command or message destined for the queue is lost.

Overflow Count

The number of times the queue reached an overflow condition.

Update Count

The total number of messages, commands, or both, the queue received.

How to View a Graphical Representation of Performance (Option 4.1.3)

Use OPSVIEW option 4.1.3 to view a graphical representation of CA OPS/MVS performance, regarding the time it takes CA OPS/MVS to process each CA OPS/MVS event in the system. The time referred to here is actual elapsed time in microseconds, rather than CPU time. The graphical representation is derived from the values in the PRODPERFORM parameter group.

Access the Performance Analysis Panel

To view a graphical representation of CA OPS/MVS event processing performance, you can either:

- Select option 3 from the CA OPS/MVS Parameters menu.
- Use the ISPF jump function by entering =4.1.3 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```

Performance Analysis --- MS11 --- O P S V I E W --- OPSA          ROW 1 OF 22
COMMAND ==>                SCROLL ==> CSR
      Elapsed Time      BLUE Fields: No Rule Fired      RED Fields: Rule(s) Fired
      in Microseconds      System: *local*                10
      Bin  Bounds      Elapsed time Monitor      Scale Count
      |-----10---20---30---40---50---60---70---80---90---100
01   100  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
01   500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
02   200  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
02  1000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
03   300  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     30
03  1500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
04   400  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     53
04  2000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
05   500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO    3300
05  2500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
06   600  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     997
06  3000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
07   700  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     199
07  3500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
08   800  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     108
08  4000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
09   900  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      79
09  4500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
10  1000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     67
10  5000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
11  1100  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     55
11  5500  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
12  1200  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO     43
12  6000  >          |-----10---20---30---40---50---60---70---80---90---100  AUTO      0
  
```

Understanding the Performance Analysis Panel

The Performance Analysis panel displays a list of 21 bins, or pairs of counters. Each bin is bound by a length of time in microseconds. For example, suppose the boundaries of bin 01 are 0 microseconds and 100 microseconds. This means that any event that takes CA OPS/MVS between 0 and 100 microseconds to process is accounted for in this bin.

The System field indicates whether you are viewing performance information about the local system or a remote system. If the information pertains to the local system, the value *local* appears in the System field; otherwise, the name of the remote system appears.

The Use of Color on the Performance Analysis Panel

For users with color terminals, the Performance Analysis panel uses color as a visual key. The panel uses blue to indicate automation events for which no rule executed and red to indicate those events for which one or more rules executed.

If you are not using a color terminal, you can easily distinguish between events by using the following primary commands to filter the display:

RULE

Displays the data for those events for which one or more rules executed.

Note: These events appear in red on a color terminal.

NORULE

Displays the data for those events for which no rules executed.

Note: These events appear in blue on a color terminal.

ALL

Displays the data for all events, regardless of whether rules were executed. ALL is the default.

Modify the Scale of the Performance Analysis Panel

By default, the scale on the Performance Analysis panel is 1000. Depending upon the number of automation events that CA OPS/MVS handles at your site, you may want to modify the scale.

For example, on the panel under Accessing the Performance Analysis Panel, most of the events CA OPS/MVS processed are accounted for in bin 05. They are accounted for in this bin because it took CA OPS/MVS between 400 and 500 microseconds to process each of these events. By looking at the Count field, you see that there are 3300 events in bin 05. But without your even having to look at the Count field, a glance at the arrow stretching across the left side of the panel would quickly indicate to you that most events fall into bin 05.

Now look at bin 08. Although the Count field clearly states that there are 108 events in bin 08, no arrow appears on the panel. The absence of the arrow seems to indicate that there are no events that fall into this bin. This contradiction occurs because of the setting of the scale, which does not permit enough detail to be shown for a site where CA OPS/MVS processes relatively few events. If you worked at the site where this sample panel appeared, and you wanted to see more detail of CA OPS/MVS performance activity, you would issue the SCALE command.

The SCALE command has the following syntax:

```
SCALE {AUTO|n}
```

AUTO

Adjusts the scale so that the panel displays event processing in thousandths of microseconds. This is the default.

n

Adjusts the scale according to the value of *n*, which can be 1 or any number that is a multiple of 10. For example, if you specify SCALE 10, the panel displays event processing in tenths of microseconds. The smaller the number you specify for *n*, the more detail you see on the panel. If you specify an invalid value for *n*, CA OPS/MVS rounds it up to the next highest multiple of 10.

How to View Storage Usage Information (Option 4.1.4)

Use OPSVIEW option 4.1.4 to view a graphical representation of CA OPS/MVS virtual storage usage.

Access the Storage Panel

To view information about CA OPS/MVS storage usage, access the Storage panel. To do so, you can either:

- Select option 4 from the CA OPS/MVS Parameters menu.
- Use the ISPF jump function by entering =4.1.4 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```

Storage --- S034 ----- O P S V I E W --- OPSA                ROW 1 OF 4
COMMANDc ==>                                                SCROLL ==> CSR
System : *local*
Type      Value      Storage display in Kilobytes scaled to 100 x Scale
          |-----10-----20---30---40---50---60---70---80---90--100
CSA       1K #
Limit    2048K |=====>
ECSA     502K |>
Limit    4096K |=====>
PRIVATE  24K #
Limit    12288K |=====>
EPRIVATE 76449K #
Limit    2097151K |=====>
***** BOTTOM OF STORAGE DATA *****
    
```

Understanding the Storage Panel

The Storage panel presents information about the virtual storage CA OPS/MVS is using. By glancing at the panel, you can see whether CA OPS/MVS virtual storage usage is dangerously close to or has already reached its limit.

If you are viewing storage utilization information about the local system, the value *local* appears in the System field. If you are viewing information about a remote system, the name of the remote system appears in the System field.

There are four pairs of lines on the panel; one pair for each virtual storage type (common storage, extended common storage, private storage, and extended private storage).

For each storage type, the first line shows the actual amount of storage that CA OPS/MVS is using. The second line shows the maximum amount of storage that CA OPS/MVS can use. For example, on the panel under Accessing the Storage Panel, CA OPS/MVS is using 502 KB of ECSA virtual storage, but it may use as much as 4096 KB.

To change the maximum amount of virtual storage that CA OPS/MVS can use, use the CSALIMIT, ECSALIMIT, PRIVLIMIT, and EPRIVLIMIT parameters. For details about specifying parameter values, see the *Parameter Reference*.

How to View Module Information (Option 4.1.5)

Use OPSVIEW option 4.1.5 to view a list of CA OPS/MVS modules. The list contains information about each module, and is particularly handy when you need to find out the release and level of the copy of CA OPS/MVS that is running on your system.

Access the Modules Panel

To access the Modules panel, you can either:

- Select option 5 from the CA OPS/MVS Parameters menu.
- Use the ISPF jump function by entering =4.1.5 into any valid field in OPSVIEW.

As a result, you see a display similar to the following:

```

Modules --- XE44 -- *local* --- O P S V I E W --- OPSA          Row 1 of 245
COMMAND ==>          SCROLL ==> CSR
===== Profile for Module Display =====
| Name      Address    Size Location  R K AM Release  Pmgr.    Date     Time
|
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Name      Address    Size Location  R K AM Release  Pmgr.    Date     Time
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
_ OPADRLFU  0B3CE5D8    2600 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 06.47
_ OPALCB    0B3454C8    2784 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.09
_ OPAMEX    0B44BA30    5584 EPRIVATE   N 2 31 11.00.00 OPSASM    2004/01/17 05.10
_ OPAMVRFU  0B2707F0    6160 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.10
_ OPAOEP    0B335250    2232 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.11
_ OPAOEX    0B2C4018    8168 EPRIVATE   N 2 31 11.00.00 OPSASM    2004/01/17 05.11
_ OPAOPR    0B2C6C08    21496 EPRIVATE  Y 2 31 11.00.00 OPSASM    2004/01/17 05.11
_ OPAORLMG  0B2CC1F8    97800 EPRIVATE  Y 2 31 11.00.00 AREAS01  2004/01/24 07.58
_ OPAPPCFU  0B3906C8    18744 EPRIVATE  Y 2 31 NONE      NONE     NONE     NONE
_ OPAPPCTP  0B33B450    2992 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.14
_ OPARRQFU  0B36B3B0     712 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 06.48
_ OPATMD    0B36B678    2440 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.17
_ OPAUCK    06FD0000   23360 ECSA COPY  Y 2 31 11.00.00 OPSASM    2004/01/17 05.17
_ OPA2CMLS  0B31ACE0     800 EPRIVATE   Y 2 31 NONE      NONE     NONE     NONE
_ OPA2OPSS  00006FF8     8 PRIVATE   Y 2 24 NONE      NONE     NONE     NONE
_ OPBOEX    0B282240    1848 EPRIVATE   N 2 31 11.00.00 OPSASM    2004/01/17 05.18
_ OPBOFU    0B2E4300   19712 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.19
_ OPBOMD    0B2E91A0     584 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.20
_ OPBOSU    0B2E9848   96184 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.20
_ OPBR14    00C5D008     8 CSA GLOBAL Y 2 31 NONE      NONE     NONE     NONE
_ OPCIFU    0B3C08F0   10000 EPRIVATE   Y 2 31 11.00.00 OPSASM    2004/01/17 05.23
_ OPCIMGRU  06F8F000    6824 ECSA COPY  Y 2 31 11.00.00 OPSASM    2004/01/17 05.23
_ OPCITRCN  0B347198    2896 EPRIVATE   Y 2 31 11.00.00 CICASM    2004/01/17 05.08

```

_	OPCK	0B202E40	448	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.24
_	OPCMR	0B301580	6784	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.24
_	OPCNRCTP	0B36C318	3096	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.25
_	OPCNSNTP	0B3B5B40	5312	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.25
_	OPCOSB	071C5000	26408	ECSA COPY	Y	2	31	11.00.00	OPSASM	2004/01/17	05.26
_	OPDAIO	0917A000	28392	ECSA COPY	Y	2	31	11.00.00	OPSASM	2004/01/17	05.27
_	OPDBFU	0B303EF8	4360	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.28
_	OPDERLFU	0B3DD640	2496	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	06.48
_	OPDOFU	070EC000	2224	ECSA COPY	Y	2	31	11.00.00	OPSASM	2004/01/17	05.29
_	OPDYAL	07818000	6936	ECSA COPY	Y	2	31	11.00.00	OPSASM	2004/01/17	05.30
_	OPECFU	0B372690	2272	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.30
_	OPEHPTP	0B397B78	9352	EPRIVATE	Y	2	31	11.00.00	OPSASM	2004/01/17	05.31

Fields on the Modules Panel

The following fields appear on the Modules panel.

Note: The top line of the panel indicates whether this module list is for the local system or a remote system. If you are viewing module information about the local system, the value *local* appears in the top line of the panel. If you are viewing module information for a remote system, the name of the remote system appears instead.

Name

The module name.

Address

The address of the module.

Size

The size of the module in bytes.

Location

The virtual storage area in which the module resides.

R

A value indicating whether the module is dynamically reloadable (Y) or not (N).

K

The numeric protection key of the module. Values are 2, 4, and 8.

AM

The addressing mode of the module. Values are 24 and 31.

Release

The release number of CA OPS/MVS to which the module belongs, or NONE.

Pgmr.

The name of the programmer who last assembled the module, or NONE.

Date

The date the module was assembled, or NONE.

Time

The time the module was assembled, or NONE.

Use the Profile Area to Subset the Module List

The Modules panel shows a listing of all CA OPS/MVS modules. Although you can use the UP and DOWN PF keys to scroll the list, the list is long. Instead of viewing the long list, you can use the profile area of the Modules panel to view a subset of modules that includes only those that you want to see.

The following describes the fields in the profile area of the Modules panel:

Name

Enter the name of the module you want to view. If you are unfamiliar with the exact name of the module, you may enter a name mask. As a result, CA OPS/MVS displays a list of all the modules with names that include the character string you specified with the mask.

Address

When you enter data into this profile field, CA OPS/MVS treats it as an address prefix. Any module having an address that begins with the data you enter appears on the display.

Size

When you enter a number into this field, any module having a size equal to or greater than the number you enter appears on the display.

Location

When you enter data into this profile field, any module with a location that contains the character string you enter appears on the display.

R

Enter a Y in this field to view only those modules that are dynamically reloadable, enter N to view those that are not.

K

If you enter a numeric protection key in this field (2,4, or 8), only those modules having that particular protection key appear on the display.

AM

If you enter an addressing mode in this field (24 or 31), only those modules with that addressing mode appear on the display.

Release

CA OPS/MVS treats data in this field as a release prefix. Any module having a release number that begins with the data you enter appears on the display.

Pgmr.

CA OPS/MVS treats data in this field as the prefix of the name of a programmer. Any module that was last assembled by a programmer whose name begins with the data you enter appears on the display.

Date

If you enter data into this field, CA OPS/MVS treats it as a date prefix. Any module with an assembly date that begins with the data you enter appears on the display.

Time

CA OPS/MVS treats the data in this field as a time prefix. Any module with an assembly time that begins with the data you enter appears on the display.

The S Line Command

Issue the S line command in the prefix area on the Modules panel to view more detailed information about a particular module.

As a result, you see a display similar to the following:

```
CA OPS/MVS Module Detail--- XE44 ----- O P S V I E W -- OPSA      Row 1 of 14
=====>                                     SCROLL ==> CSR
System: *local*
*****
ADDRESS OF MODULE OPSMMG                X'09462000'
MODULE ORIGINAL ADDRESS                  X'0C7311E8'
MODULE FINAL ADDRESS                     X'09462000'
MODULE VECTOR TABLE ENTRY ADDRESS      X'0B18F750'
MODULE SIZE                              48664 BYTES
MODULE ORIGINAL LOCATION                  EPRIVATE
MODULE FINAL LOCATION                    ECSA COPY
MODULE PROTECT KEY                       CODE (2)
MODULE AMODE                             31
MODULE VERSION                           11.00.00
MODULE PROGRAMMER NAME                   AREAS01
MODULE ASSEMBLY DATE                     01/05/00
MODULE ASSEMBLY TIME                     16.56
MODULE IS ELIGIBLE FOR RELOAD            YES
***** Bottom of data *****
```

Point-and-shoot is enabled to issue the S line command for an individual module. To issue the S line command for an individual module using the point-and-shoot method, place the cursor to the left of the desired module Name and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

Primary Commands for the Modules Panel

There are a few primary commands you can issue from the Modules panel. Enter primary commands in the Command field.

Find modulename

Finds a specific module. The display scrolls so that the modulename module appears in the top row of the Modules panel.

For example, to find the module named OPINMA, issue this command:

```
F OPINMA
```

LINES nn

Sets the number of lines per page for the REPORT command.

For example, this command sets the lines per page to 66:

```
LINES 66
```

Locate modulename

If CA OPS/MVS finds a module named modulename, the display scrolls so that the modulename module appears in the top row of the Modules panel.

For example, to cause the module named OPCMPR to appear at the top of the panel, issue this command:

```
L OPCMPR
```

REPORT

Generates a complete report of the modules and places it in your ISPF list data set.

For example:

```
REPORT
```

Select modulename

Displays detailed information about a module.

For example, this command causes CA OPS/MVS to display details about the OPINMA module:

```
S OPINMA
```

SORT colname [A|D]

CA OPS/MVS sorts the modules according to the value of one or more colnames. If not specified, the default colname is NAME. For each colname specified, you may specify A for Ascending sort, or D for Descending sort. If not specified, Ascending sort will be done by default. Column NAME will be automatically appended as a secondary sort colname if it has not been specified on the SORT command.

For example, to sort the modules according to Descending protection keys within Ascending sizes, issue this command:

```
SORT SIZE KEY D
```

Point-and-shoot is enabled to SORT the module list using any displayed column heading. Point-and-shoot uses Descending SORT order for the SIZE column and Ascending SORT order for all other columns. To SORT the module list using the point-and-shoot method, place the cursor on a displayed column heading and press the ENTER key.

How to Control the Multi-System Facility (Option 4.2)

Use OPSVIEW option 4.2 to control sessions that the Multi-System Facility, or MSF, is maintaining between copies of CA OPS/MVS.

What Is the Multi-System Facility (MSF)

The MSF extends the facilities of CA OPS/MVS into the multiple-CPU/multiple-site environment. The MSF establishes sessions between copies of CA OPS/MVS, permitting any copy to issue a command on any other copy and to receive its response.

The following communications protocols can be used for communication between systems:

- APPC
- CCI (cross-platform communication services available through the CAICCI communications server)

Accessing Option 4.2

To access OPSVIEW option 4.2, you can either:

- Enter 2 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.2 into any valid field in OPSVIEW.

The Multi-System Facility Panel

When you access option 4.2, you see a display similar to the following one. CA OPS/MVS uses the information you enter on this panel to build and issue ADDRESS OPSCTL MSF commands to control MSF sessions.

CA OPS/MVS gets the information that appears on this panel through an ADDRESS OPSCTL MSF LIST command. If the MSF fails to respond to the command due to a system problem, the Multi-System Facility panel may be blank.

Multi-System Facility --- S034 --- O P S V I E W ----- Row 1 to 6 of 10
 COMMAND ==> SCROLL ==>

Sel opt: A Activate R Restart D Delete H Help I Inactivate S Status
 SYSTEM ==> * WAIT ==> 10

----- Local System -----

Local	Status	Applid	VTAM	Retry	Max	Current	VTAM
Sel System	VTAM-CCI	VTAM	Password	Secs	Retry	Retry	Open Error
OPS44X	ACTIVE	A44IOPSX			NO	RETRY	X'00'
	INACTIVE	CCI					

----- Remote Systems -----

System	Status	APPLID	Delay	Retry	Max	Current	VTAM
Sel Name	Status	APPLID	Value	Secs	Retry	Retry	Rtcnd Fdbk2 Type
OPS03A	ACTIVE	A03IOPSA	1		NO	RETRY	X'00' X'01 APPC
OPS44A	FAILED	A44IOPSA	1		NO	RETRY	X'08' X'01 APPC
OPS44F	FAILED	A44IOPSF	1		NO	RETRY	X'08' X'01 APPC
OPS44G	ACTIVE	A44IOPSG	1		NO	RETRY	X'00' X'01 APPC
OPS44J	FAILED	A44IOPSJ	1		NO	RETRY	X'08' X'01 APPC

Fields on the Multi-System Facility Panel

If you are unsure of the meaning of any of the fields on the Multi-System Facility panel, see:

- The ADDRESS OPSCTL MSF command and the ADDRESS OPSCTL host environment descriptions in the Command and Function Reference.
- The chapter “Multi-System Facility” in the *User Guide*.

Line Commands for the Multi-System Facility Panel

CA OPS/MVS provides the following command options for you to use to control your MSF sessions. To use one of these command options, enter it in the Sel field on the line where the desired session appears.

A

Activates the session.

D

Deletes the session.

H

Displays the meaning of the VTAM return code that appears in the VTAM RTNCD field on the panel.

I

Inactivates the session.

R

Restart the local and all defined remote systems.

S

Causes an MSF System Status Panel describing the remote system to appear. For details about the panel, see The Multi-System Facility System Status Panel in this chapter.

Point-and-shoot is enabled to obtain status information for a remote system. To obtain status information for a remote system using the point-and-shoot method, place the cursor in the SEL column for the remote system and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

The Multi-System Facility System Status Panel

If you enter the S line command from the Multi-System Facility panel, you can view status information about a remote system. Here is a sample panel:

```
Multi-System Facility --- MS11 --- O P S V I E W ----- Subsystem OPSS  
Command ==>
```

System Status Panel for OPS44A

```
Applid Name      : A44IOPSA      Logmode Name   : LU62  
Network Transport: APPC          Product Name   : OPS/MSF  
Session Status  : ACTIVE        Release Code   : 11.00.00  
Security Status : SECURE        Network Delay  : 1  
Retry Time      :                Maximum Retry  :  
Current Retries :                VTAM Return Code : X'00'  
VTAM Return Code : X'00'        VTAM Feedback2: X'01'
```



```
Alias Name 1: ALIAS44          Alias Name 5:  
Alias Name 2:                 Alias Name 6:  
Alias Name 3:                 Alias Name 7:  
Alias Name 4:                 Alias Name 8:
```



```
System Information:           Sysplex Name: PLEXT1  
SYSNAME      : MSISYS44      SMF ID       : SY44  
OPS/MVS Subsystem: OPSA
```



```
SSM2 SSMGA Information:      Group      SSMplex Name: NONE  
Global Priority: 4           Master      : N
```

```
Enter END command to return to MSF Control Panel.
```

Fields on the Multi-System Facility System Status Panel

The following fields appear on the Multi-System Facility System Status Panel:

Applid Name

Indicates the application ID of the remote system.

Logmode Name

When the value of the Network Transport field is APPC, this field indicates the name of the VTAM LOGMODE table entry used to establish the APPC session.

Network Transport

Indicates the communications protocol used for communication between systems. Valid protocols are APPC and CCI (CAICCI), and AP.

Product Name

OPS/MSF (the default), CONSERVE, or CA Automation Point

Session Status

The status of the remote system. Values are:

ACTIVE - The session is active and operational.

FAILED - The session either failed to activate or failed after it was activated, and WAIT mode was specified.

INACTIVE - Either the session was never established, or an MSF DEACTIVATE command processed successfully.

RETRYING - The session either failed to activate or failed after it was activated, and RETRY mode was specified.

WAITING - The remote system has not established a session yet, because WAIT mode was specified.

Release Code

The release of the copy of CA OPS/MVS that is running on the remote system.

Security status

The security status of the remote system. If the value is SECURE, any command received from the remote system is processed by the local system. A value of NOSECURE indicates that the remote system is not secure (that is, it is a test system). The value of NOSECURE only processes display commands received from the remote system. Commands that could harm the production system are ignored (such as an ENABLE command).

Network Delay

Network delay time between the local MSF system and the remote system

Retry Time

The amount of time, in seconds, MSF waits between retry attempts

Maximum Retry

Maximum number of times MSF is allowed to retry activating the remote session if it fails

Current Retries

Number of times MSF has attempted to retry activating the remote system

VTAM Return Code

VTAM return code if activation failed

VTAM Feedback2

VTAM feedback code if activation failed

Alias Name n

These fields indicate from one to eight alias names for the system.

Sysplex Name

The name of the sysplex in which the remote system is a member.

SYSNAME

The SYSNAME as defined in the active IEASYSxx member of the Logical Parmlib Concatenation on the remote system.

SMF ID

The SMF identifier as defined on the SID keyword in the SMFPRMxx member of the Logical Parmlib Concatenation on the remote system.

OPS/MVS Subsystem

The CA OPS/MVS subsystem identifier of the remote CA OPS/MVS system.

SSMplex name

The name of the SSM Global Application Manager (SSMGA) SSMplex to which the remote CA OPS/MVS system belongs, or the value NONE.

Global Priority

The SSMGA global system priority of the remote CA OPS/MVS system.

Master

Whether the remote CA OPS/MVS system is an SSMGA master system (Y or N).

Note: The Session Status value displays in reverse video when the status is anything other than ACTIVE.

How to Use OPSVIEW Option 4.2 to Define an MSF System

To define a new MSF system, you need to access the MSF Remote System Definition Panel. You can do so directly from the Multi-System Facility panel.

Access the MSF Remote System Definition Panel

Take these steps to access the Remote System Definition panel:

1. In the System Name field on the bottom line of the Multi-System Facility panel (where you see the word DEFINE in the Status field), type the ID of the remote system you want to define.
2. In the APPLID field on the same line, type the application ID of the session.
3. Press Enter.

As a result, you see a display similar to the following one. From this panel you can correct any errors made on the previous panel, complete the definition of the remote system, or cancel the definition of the remote system.

```

Multi-System Facility --- MSI1 --- O P S V I E W ----- Subsystem OPSS

                                MSF Remote System Definition Panel
REQUIRED FIELDS:
System Name      ==> SYS44A                      Applid ==> APPL44A
Network Transport ==> APPC (APPC, CCI, AP)       Secure ==> Y (Y/N)

OPTIONAL FIELDS:
Logmode         ==> _____ (APPC only)
Delay Value     ==> _____ (0 -60)
Retry Time      ==> _____ (30-86400)       Product Name ==> _____
                                                    Retry Count  ==> _____

Alias Names:
==> _____ ==> _____ ==> _____ ==> _____
==> _____ ==> _____ ==> _____ ==> _____

Press ENTER or END to complete MSF System Definition.
Enter CANCEL to terminate this definition.
    
```

Fields on the MSF Remote System Definition Panel

The following fields appear on the MSF Remote System Definition Panel:

System Name

A required field that indicates the name of the remote system you are defining. You entered this name in the System Name field on the Multi-System Facility panel.

Applid

A required field that indicates the application ID of the remote system (APPC) or the system name of the CAICCI for that system (CCI).

Network Transport

A required field that indicates the protocol the remote system uses for communication. Valid protocols are APPC, CCI (CAICCI), and AP.

Secure

A required field that indicates the security status of the remote system. Specify Y to indicate that the remote system is secure, and thus any commands received from that system could be processed by the local system. Specify N to indicate that the remote system is not secure (that is, it is a test system). When the local system receives a command from a non-secure system, it processes the command only if it is a display command. Any commands that could do harm to the production system (such as an ENABLE command) are ignored.

Logmode

If the new system is an APPC system, you must specify a log mode name here. If you do not specify a value, CA OPS/MVS uses the VTAM log mode name you specified on the MSFLOGMODE parameter. If the new system is not an APPC system, you must leave this field blank.

Delay Value

An optional field you may use to indicate the network delay time (0 to 60 seconds) between the local MSF system and the remote system you are defining.

Product Name

OPS/MSF (the default), CONSERVE, or Automation Point

Retry Time

An optional field that indicates the number of seconds that you want the MSF to wait between attempts to establish an MSF session to the system you are defining. You can specify an integer from 30 to 86400. The default is no retry.

Retry Count

An optional field that indicates the number of times that you want the MSF to try to establish an MSF session when either the session fails after being established or fails to be established at all. You can specify an integer from 0 to 65535. The default is no retry.

Note: A value of 0 indicates that the MSF should make only one attempt to establish the session. If the first attempt fails, the MSF sets the retry mode of the system to NORETRY.

Alias Names

In these optional fields, you may specify up to eight alias names for the system you are defining.

Complete the System Definition

After you fill in the necessary fields on the MSF Remote System Definition Panel, press Enter or End, and the Multi-System Facility panel reappears. The panel reflects the addition of the new system.

Cancel the System Definition

To cancel the remote system definition, enter the CANCEL command, and the Multi-System Facility panel reappears. The panel does not include the information about the cancelled system definition.

How to View Operator Server Facility Status Information (Option 4.3)

Use OPSVIEW option 4.3 to view information about the server address spaces that the Operator Server Facility, or OSF, is using. You can also cancel server address spaces from option 4.3.

What Is the Operator Server Facility

The Operator Server Facility (OSF) enables you to schedule asynchronous TSO commands, TSO/E REXX programs or CLISTs, and OPS/REXX programs that the server address spaces of the OSF will execute later.

Access Option 4.3

To access OPSVIEW option 4.3, you can either:

- Enter 3 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.3 into any valid field in OPSVIEW.

The Operator Server Facility Panel

When you access option 4.3, you see a display similar to the following one:

```
Operator Server Facility --- MSI1 --- OPSVIEW ----- ROW 1 OF 1
COMMAND ==>                                SCROLL ==> CSR
Number of commands on the OSF Execute Queue: 0      SYSTEM ==> *
Maximum OSF Execute Queue Depth      : 1          WAIT  ==> 10
Average OSF Execute Queue Time (in seconds): 0.046090 CLASS ==> TSO
ASID Taskname Status   J Trans Elapsed CPU Time   Lines Curr/Last Command
-----
0046 OPSOSF   IDLE      N   436 00100.00 617.117S   3488 0I ASOSMAPI RESET
***** BOTTOM OF DATA *****
```

Fields on the Operator Server Facility Panel

The top part of the panel provides information about one of the OSF Execute Queues, including:

- The number of commands currently on the queue.
- The maximum number of commands that have been on the queue at one time (since CA OPS/MVS was last started).
- The average length of time that a command remains on the queue before the OSF dispatches it to a server. If the length of time is long, there may be an insufficient number of OSF server address spaces. Use OPSVIEW option 4.1.1 to change the values of the OSF-related parameters that control this number. For information about option 4.1.1, see *How to View and Modify Parameter Settings (Option 4.1.1)* in this chapter. For detailed descriptions of OSF-related parameters, see the *Parameter Reference*.

In addition, you can use the System, Wait, and Class fields if it is your intention to gather server information about a remote copy of CA OPS/MVS or a different class of OSF server:

- In the System field, specify the system name of the remote copy of CA OPS/MVS. The remote copy must have an active MSF connection to the local copy.
- If you want information about the local copy, specify an asterisk (*) instead of a system name.
- If you do not know which systems are available, you can enter a question mark (?) in the System field to select a name from a table of defined cross-system connections.
- In the Wait field, specify the maximum number of seconds to wait for cross-system command response.
- In the Class field, specify the OSF server class of the servers you want to display; possible class values are TSO (the default), TSL, TSP, and USS.

The remainder of the Operator Server Facility panel contains fields that describe each OSF server address space in detail.

ASID

The address space ID of the server (in hexadecimal format).

Taskname

The started task name of this server.

Status

The status of the server. Values are INIT (initializing), IDLE (waiting for work), ACTIVE (running a transaction), and TERM (terminating). The status of a server address space is INIT until the initial server command, which is %OSFSTART, completes and the server is ready to receive input.

J

A value indicating whether a JES JOBID was obtained for the server.

Trans

The number of transactions the server processed since it started.

Elapsed

If the value of the Status field is ACTIVE, this is the length of time that has passed since the server began processing this transaction. If the value of the Status field is not ACTIVE, the value in the Elapsed field is the elapsed time since the server started.

Note: The format of the Elapsed field depends upon its content:

- If the value is less than 1000 seconds, the format is sss.tttS, where sss is seconds and ttt is tenths of a second.
- If the value is less than 100 hours but greater than or equal to 1000 seconds, the format is hh.mm.ss, where hh is hours, mm is minutes, and ss is seconds.
- If the value is greater than or equal to 100 hours, the format is hhhhh.mm, where hhhhh is hours and mm is minutes.

CPU Time

If the value of the Status field is ACTIVE, this is the amount of CPU time the server has used so far to process this transaction. If the Status field contains any other value, the value in the CPU Time field is cumulative for all transactions the server has processed.

The format of the CPU Time field depends upon its content. For details, see the note in the description of the Elapsed field.

Lines

If the value of the Status field is ACTIVE, this is the number of lines of output produced so far by the processing of this transaction. If the Status field contains another value, the value in the Lines field is cumulative for all transactions the server has processed.

Curr/Last Command

If the value of the Status field is ACTIVE, the first 19 characters of the command that is executing appear in this field. If the Status field contains a different value, the first 19 characters of the last command that the server executed appear here.

How to Cancel a Server Address Space

To cancel a server address space, you use the C line command. Simply type C in the prefix area where the server is listed, and press Enter.

How to Stop a Selected Server

Enter a T in the prefix area where the server is listed to stop the server as soon as any currently active command completes processing.

How to Display ADDRESS OSF LIST Information

To display all information from the ADDRESS OSF LIST command for a particular server, enter a D in the prefix area. In response, a panel similar to the following one appears. This panel includes special information used by CA customer support.

```
Operator Server Facility - MSI1 --- OPSVIEW ---- Subsystem OPSS
Command ==>
      OSF TSO Server Detail Display - System *local*
ASID           : 0046
Jobname        : OPSOSF
Status         : IDLE
JOBID obtained : N
Transaction Count : 436
Elapsed Time   : 00100.00
CPU Time       : 617.117S
Output Lines   : 3488
Debug data     : 0000C400000000C000A0
Subsystem name : OPSS
Command        : OI ASOSMAPI RESET

Enter END command to return to OSF Display Panel.
```

Point-and-shoot is enabled to issue the D line command for a server. To issue the D line command for a server using the point-and-shoot method, place the cursor to the left of the desired server and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Use Option 4.3 to View Detailed Execution Statistics

You can enter the STATS primary command on the Operator Server Facility panel to display this information:

- The status and history of the OSF server queue. This is the output from the ADDRESS OPSCTL OSF QUEUES host command.
- Performance information for the OSF server component. This is the output from the ADDRESS OPSCTL OSF EXECSTATS host command. Use this output to tune the CA OPS/MVS OSF-related parameters to meet the performance objectives of your installation.

Obtaining OSF Execute Queue Statistics

Enter the STATS primary command in the Command field. In response, the following OSF Server Queue Statistics panel appears:

```
Operator Server Facility --- MSI1 --- OPSVIEW ----- Subsystem OPSS
Command ==>                                SCROLL ==> CSR
                OSF TSO Server Queue Statistics For System *local*
Current depth: 0          Average queue time: 0.046090
Maximum depth: 1        Maximum queue time: 11.207636
Queue size   : 1024     Minimum queue time: 0.000360
                Total transactions queued: 436
                Queue Depth Distribution
                Depth  Count    Depth  Count    Depth  Count
                -----
                0    436       7    0        14    0
                1    0         8    0        15    0
                2    0         9    0        16    0
                3    0        10    0        17    0
                4    0        11    0        18    0
                5    0        12    0        19    0
                6    0        13    0        >19   0
```


Fields on the OSF Server Queue Statistics Panel

The following fields appear on the OSF Server Queue Statistics panel:

Current Depth

The number of commands currently on the queue.

Maximum Depth

The maximum number of commands that have been queued at one time (since CA OPS/MVS was last started).

Queue Size

The maximum size of the queue.

Average Queue Time

The average elapsed time, in seconds, that a command remains on the queue before being dispatched to a server.

Maximum Queue Time

The maximum elapsed time, in seconds, that a command remained on the queue before being dispatched to a server.

Minimum Queue Time

The minimum elapsed time, in seconds, that a command remained on the queue before being dispatched to a server.

Total Transactions Queued

The total number of transactions added to the queue.

Queue Depth Distribution

These fields illustrate the frequency distribution of observed queue depths. A total of 21 transaction counters appear—one for each time the OSF execute queue was empty, had one transaction waiting, had two transactions waiting, and so on up to 19 transactions waiting. The last counter is reserved for each time the queue had 20 or more pending transactions.

The queue depth is sampled each time a command is removed from the top of the queue for execution by a server.

Obtaining OSF Transaction Statistics

From the OSF Server Queue Statistics panel, press Enter to view the OSF Server Transaction Statistics panel. Following is a sample panel:

```
Operator Server Facility MSI1 - O P S V I E W --Subsystem OPSS
Command ==>

      OSF TSO Server Transaction Statistics For System *local*

      Completed transactions: 9269
      Average execution time: 3.543490
      Maximum execution time: 235.608722
      Minimum execution time: 0.058302

OSF Parameters:                Total server start count : 5
OSFMIN      : 5                Server start reason counts:
OSFMAX      : 10               Server count < MIN      : 5
OSFQADD     : 2                Queue depth >= QADD    : 0
OSFDORM     : 60               Restart failed server   : 0
OSFRECYCLE  : 0                OSFRECYCLE Terminations : 0
                                      Highest number of servers: 5

Press ENTER for SERVER QUEUE statistics or END to exit.
```

Fields on the OSF Server Transaction Statistics Panel

The following fields appear on the OSF Server Transaction Statistics panel:

Completed Transactions

The number of OSF commands that were executed

Average Execution Time

The average elapsed time, in seconds, that each OSF command took to complete

Maximum Execution Time

The maximum elapsed time, in seconds, that an OSF command took to complete

Minimum Execution Time

The minimum elapsed time, in seconds, that an OSF command took to complete

xxxMIN

The value of the xxxMIN parameter

xxxMAX

The value of the xxxMAX parameter

xxxQADD

The value of the xxxQADD parameter

xxxDORM

The value of the xxxDORM parameter

OSFRECYCLE

The value of the OSFRECYCLE parameters

Total Server Start Count

The total number of times a server was started

Server Count < MIN

The number of times a server was started in order to maintain the number of servers specified by the xxxMIN parameter

Queue Depth >= QADD

The number of times a server was started because the OSF execution queue depth was greater than or equal to the value of the xxxQADD parameter

Restart Failed Server

The number of times a server was started because an earlier server start command failed to complete successfully; the OSFALLOWRESTART parameter controls server restarts

OSFRECYCLE Terminations

The number of times an OSF server was terminated because the number of completed transactions in that server was greater than or equal to the value of the OSFRECYCLE parameter

Highest Number of Servers

The highest number of non-terminating OSFs that have been in service since starting CA OPS/MVS.

Note: In the previous table, xxx represents one of the following strings where appropriate:

OSF

- OSFTSL
- OSFTSP
- USS

How to View Enhanced Console Facility Status Information (Option 4.4)

Use OPSVIEW option 4.4 to view information about active Enhanced Console Facility (ECF) address spaces.

What Is the Enhanced Console Facility (ECF)?

The Enhanced Console Facility is intended for use when TSO (and therefore OPSVIEW) is down. It enables you to log on to a z/OS or JES console to conduct a line-mode interactive TSO session. From this session, you may issue TSO commands or invoke TSO CLISTs or OPS/REXX programs, including those that issue prompts for additional input.

As with TSO, each ECF user has an address space. However, these address spaces function even when TSO, VTAM, and JES (if CA OPS/MVS is running under the master subsystem) are down. Option 4.4 lists information about each ECF address space.

Access Option 4.4

To access OPSVIEW option 4.4, you can either:

- Enter 4 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.4 into any valid field in OPSVIEW.

The Enhanced Console Facility Panel

When you access option 4.4, you see a display similar to the following one:

```
Enhanced Console Facility - MSI1 - O P S V I E W --- OPSS ----- Row 1 of 1
Command ==>                                     Scroll ==> CSR

      ASID  Taskname  Console  Trans  Elapsed  CPU time  Lines  ConsName
      ----  -
      0036  OPSECF    OPSS0921    2  01.04.41  000.0415    7  XE03921
***** Bottom of data *****
```

Fields on the Enhanced Console Facility Panel

The following fields appear on the Enhanced Console Facility panel:

Asid

The ID of the address space (in hexadecimal format).

Taskname

The started task name for the address space.

Console

The four-character CA OPS/MVS subsystem ID, followed by the ID of the z/OS or JES console at which the ECF logon occurred.

Trans

The number of transactions the address space processed since it was started.

Elapsed

The length of time that has passed since the address space began processing the current transaction.

Note: The format of the Elapsed field depends upon its content:

- If the value is less than 1000 seconds, the format is sss.tttS, where sss is seconds and ttt is tenths of a second.
- If the value is less than 100 hours but greater than or equal to 1000 seconds, the format is hh.mm.ss, where hh is hours, mm is minutes, and ss is seconds.
- If the value is greater than or equal to 100 hours, the format is hhhhh.mm, where hhhhh is hours and mm is minutes.

CPU Time

The amount of CPU time the address space has used so far to process the current transaction.

The format of the CPU Time field depends upon its content. For details, see the note in the description of the Elapsed field.

Lines

The number of lines of output produced so far by the processing of the current transaction.

How to Control the Automated Operations Facility (Option 4.5)

With OPSVIEW option 4.5, you control the Automated Operations Facility, or AOF, that is running either on the system to which you are logged on, or on the remote system of your choice. When you work in option 4.5, you work with the rule sets that contain the AOF rules that are currently in production on the selected system. If you want to work with test rule sets, use OPSVIEW option 2.1 instead. For details, see Overview of the OPSVIEW AOF Edit Option (Option 2.1) in the chapter “Using the OPSVIEW Editors Option.”

You can also use option 4.5 to access the AOF compiled rules library. This library provides you with a way to manage the executable versions of your production rules and rule sets.

Important! Although the AOF enables you to control (that is, enable, disable, auto-enable, remove auto-enable) rules on remote systems, you should edit rules on the local system only. Regardless of where (local or remote system) you attempt to edit, the AOF will always edit the data sets that are cataloged on the local system.

What Is the AOF

The AOF lets you program a response to system events (such as messages) by using AOF rules. AOF rules are special OPS/REXX programs that support automated operations by taking advantage of extensions made to the OPS/REXX programming language.

AOF rules are stored in rule sets. A rule set is implemented as a partitioned data set (PDS). Each member of the PDS contains one rule. Using option 4.5, you can act on an entire rule set, or on an individual rule in a rule set.

Accessing Option 4.5

To access OPSVIEW option 4.5, you can either:

- Enter 5 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.5 into any valid field in OPSVIEW.

The Rules Panel

When you access option 4.5, the following panel appears:

```
OPS/MVS Rules----- MSI1 -- O P S V I E W --- Subsystem OPSS
Option ==>

0 AOF System      Select Target MSF System ( *local* )
1 AOF Control     Control AOF Rules
2 AOF Compile     Maintain the AOF Compiled Rules library
3 AOF Enabled     Control Enabled (in storage) AOF Rules

Press END to return
```

The OPS/MVS Rules panel offers these options:

0

Accesses the Remote System List window, from which you can select a remote system.

1

Accesses the AOF CTRL Entry panel. From this panel, you choose to view a specific rule set or a list of all rule sets.

2

Accesses the AOF compiled rules library, where you can store rules in their compiled versions.

3

Accesses the in-storage, enabled AOF rules.

How to Select the AOF Running on a Remote System (Option 4.5.0)

Use option 4.5.0 to select the AOF that is running on a remote system. Once you make your selection, you can then use options 4.5.1 and 4.5.2 to control the rules on that system and maintain the compiled rules library of the remote system.

Initially, the default is the local system. Once you have selected another system, your system selection remains in effect until you make a new selection.

The Remote System List

When you select option 0 from the OPS/MVS Rules panel, the following Remote System List window appears:

```
OPS/MVS Rules----- S034 -- O P S V I E W ----- Subsystem OPSS
OPTION ==>
0 AOF System - Select Target MSF System ( *local* )
+-----+-----+-----+-----+-----+-----+
| S034 --- Remote System List --- ROW 1 OF 7 | brary
| COMMAND ==> SCROLL ==> PAGE
| Use S in the SEL column to select a system
| or enter END command to return.
|
| Sel Ident Name Status Action
| Local MSIX ACTIVE
| Remote C4S FAILED
| Remote C4W ACTIVE
| Remote MSIA ACTIVE
| Remote MSIF FAILED
| Remote MSIK FAILED
| Remote MSIR FAILED
+-----+-----+-----+-----+-----+-----+-----+
```

The Remote System List window lists all remote systems that have been defined to the Multi-System Facility. For each system, the window shows a system name, status, and action (if any). The Ident field indicates the type of the system (local, meaning the named system is the one to which you are logged on; or remote, meaning a cross-system connection exists).

If any MSF systems were defined with aliases, the Remote System List window will contain one or two Alias fields, depending on the following:

- If no system has more than one alias defined, one Alias field will be displayed.
- If any system has two or more aliases defined, two Alias fields will be displayed. At most, the first two aliases will be displayed for any system.

The following example panel shows a system where each MSF node has no or one alias defined:


```

OPS/MVS Rules----- S034 -- O P S V I E W ----- Subsystem OPSS
OPTION ==> 0

0 AOF System - Select Target MSF System ( *local* )

-----
S034 --- Remote System List --- OPSS --- Row 1 to 9 of 9
COMMAND ==> SCROLL ==>
Use S in the SEL column to select a system
or enter the END command to return.
-----
Sel  Ident      Name      Alias      Status      Action
-----
Local  OPS44A      ASHER44    ACTIVE
Remote OPS03A      ASHER03    ACTIVE
Remote OPS03Q      QA03       FAILED
Remote OPS44C      MEL44      FAILED
Remote OPS44Q      QA44       ACTIVE
Remote OPS44R      REZAR44    FAILED
Remote OPS44S      PROD44     ACTIVE
Remote OPS44X      GLENN44    FAILED
Remote OPS44Y      FAILED
-----
***** Bottom of data *****
-----

```

You can define and activate MSF systems in either of these ways:

- Use OPSVIEW option 4.2. See How to Control the Multi-System Facility (Option 4.2) in this chapter.
- Use the ADDRESS OPSCTL MSF host command environment. For details, see the *Command and Function Reference*.

How to Control the Production AOF (Option 4.5.1)

Use option 4.5.1 to control your production rules and rule sets. You must indicate whether you want to view a specific rule set or a list of rule sets, and whether those rule sets exist on the local system or on another MSF-connected system.

The AOF CTRL Entry Panel

When you select option 1 from the CA OPS/MVS Rules panel, you see the following panel:

```
AOF CTRL - Entry panel -- MS11 --- O P S V I E W ----- Subsystem OPSS
Command ==>
Rule Data Sets of the form OPS.*.RULES:
  Rule Set ==>          ( * or blank for all rule sets )
    Either specify a specific rule set or request a list of all rule sets.
  Stats    ==>          ( Y to list statistics or N to suppress them )
    When listing all rule sets, you can request suppression of cumulative
    statistics and experience faster response by specifying 'N' above.
  System   ==> *LOCAL*      WAIT ==> 10
    Either specify the name of an MSF connected system or * for the local
    system. Enter ? for a list of MSF connected systems.

Enter END command to return to Primary Option.
```

Fields on the AOF CTRL Entry Panel

The following fields appear on the AOF CTRL Entry panel:

Rule Set

Specify the name of an individual rule set, or either specify an asterisk (*) or leave the field blank to view a list of rule sets.

For a description of the series of panels you see if you request a list of rule sets and explains how to use them, as well as instructions on working with an individual rule set, see How to Use the AOF CTRL Rule List Panel in this chapter.

Note: The partitioned data sets that contain AOF rules have this form: ruleprefix.rulesetname.rulesuffix. You use the RULEPREFIX and RULESUFFIX parameters to specify values for ruleprefix and rulesuffix. The only way to modify these values is to use the OPSPARM command at CA OPS/MVS initialization. CA OPS/MVS searches the z/OS catalog and finds all of the data sets whose names begin with ruleprefix and end with rulesuffix. The rules in these data sets are the ones the AOF uses. In the panel shown above, the rule prefix is OPS and the rule suffix is RULES.

Stats

Use this field to indicate whether you want CA OPS/MVS to suppress cumulative statistics about the rule set or rule sets. Specify Y to include statistics in the rule set list, specify N to suppress them. Specifying N results in faster display of the rule set list.

System

Use the System field to indicate whether you want to access rule sets on the local system or on a remote system. To access rule sets on a remote system, specify the name of a remote, MSF-defined system in the System field. If you do not know the names of the MSF-defined systems, you can enter a question mark (?) to display a list of them. Specify an asterisk (*) when you want to access rule sets on the local system.

Wait

The maximum amount of time, in seconds, to wait for a response from another system (when a remote system is specified)

How to Use the AOF CTRL Rule Set List Panel

The AOF CTRL Rule Set List panel appears when you request a list of rule sets on the AOF CTRL Entry panel. Following is a sample AOF CTRL Rule Set List panel. When requesting this rule set list, the user placed a Y in the Stats field so that statistics would appear on the panel.

```

AOF CTRL - Rule Set List ----- MSI1 --- OPS.*.RULES ----- Row 1 to 3 of 3
Command ==>                                     Scroll ==> PAGE
Line Commands: S Select   E Enable   D Disable   U Utilities
A Set Auto-Enable   Z Reset Auto-Enable   C Compile   X Delete Compile
System: *LOCAL*
RuleSet  Status  AE CNT  W.MM Created  Changed      Size Init  Mod  ID
ACTION   ENABLED  N 2    01.00 03/12/20 03/12/20 13:17 101 101  0 OPSLCD
CICS     ENABLED  Y 2    01.00 03/12/12 03/12/12 15:59  15  20  1 OPSKED
DB2      ENABLED  Y 25   01.00 03/12/18 03/12/18 08:42 237 237  1 OPSRF
    
```

The AOF CTRL Rule Set List panel contains more columns of information than can be viewed at one time. To see the rest of the information, use the LEFT and RIGHT PF keys to scroll. Following is another view of the AOF CTRL Rule Set List panel. Descriptions of the fields on the panel are presented next.

```

AOF CTRL - Rule Set List ----- MSI1 --- OPS.*.RULES ----- Row 1 to 3 of 3
Command ==>                                     Scroll ==> PAGE
Line Commands: S Select   E Enable   D Disable   U Utilities
A Set Auto-Enable   Z Reset Auto-Enable   C Compile   X Delete Compile
System: *LOCAL*
RuleSet  Status  AE CNT  Log  Last Fired Time  Next Fire Time  Count
ACTION   ENABLED  N 2    Y 2003/12/21 13:00:00 2003/12/21 13:30:00  4
CICS     ENABLED  Y 2    Y 2003/12/21 13:26:01 2003/12/21 13:30:00  1
DB2      ENABLED  Y 25   N 2003/12/21 13:25:55      NONE      NONE      26
    
```

Fields on the AOF CTRL Rule Set List Panel - Left View

The fields of data appear on the left side of the AOF CTRL Rule Set List panel. The fields appear when you enter the rule set list and press the LEFT PF key.

System

Indicates if this list of rule sets is for a remote system or the local system.

RuleSet

The name of the rule set.

Status

The rule set status. Statuses are ENABLED and DISABLED. If at least one rule in the rule set is enabled, the value is ENABLED. If the value is DISABLED, it means that a disable command was addressed to the rule set, the rule set was never enabled, or all of the rules were disabled individually.

AE

The settings of the auto-enable flags in the directory entry for the rule set. If at least one of the rules in the set has its auto-enable flag set to Y, the value of the AE field is Y. Otherwise, the value of the AE field is N.

CNT

The number of rules in the rule set.

VV.MM

The lowest version number and modification number of the rules in the set.

Created

The rule set creation date. The value in this field is the earliest creation data that CA OPS/MVS finds for a rule in the rule set.

Changed

The date and time of the last modification made to a rule in the rule set.

Size

The current total number of lines in all the rules in the rule set.

Init

The total number of lines in all the rules in the rule set when the set was first created.

Mod

The total number of modified lines in all of the rules in the rule set.

ID

The TSO user ID of the last user who modified a rule in the set.

Fields on the AOF CTRL Rule Set List Panel-Right View

The following fields of data appear on the right side of the AOF CTRL Rule Set List panel. You see these fields when you press the RIGHT PF key.

Log

A Y/N value indicating whether the NOOPSLOG option is assigned to any enabled MSG rule in the set.

Last Fired Time

The most recent date and time that a rule executed in the rule set. If no rules are enabled, an asterisk (*) appears. If the rule set is enabled but none of the rules have executed yet, the value NONE appears.

Next Fire Time

The date and time the next time-of-day (TOD) rule is scheduled to execute in the rule set. If no rules are enabled, an asterisk (*) appears. If the rule set is enabled but none of the rules have executed yet, the value NONE appears.

Count

The total number of times rules in the set have executed.

Primary Commands for the AOF CTRL Rule Set List Panel

Use the following primary commands on the Rule Set List panel. Issue primary commands from the Command field.

COMPILE

Invokes the AOF test compiled rules library.

Locate Rule Set

Scrolls the panel so that the line referring to Rule Set is the top line on the panel.

OpsBrw

Invokes the OPSLOG Browse Test Data panel. This panel is a full-screen display of current rule test data.

Select Rule Set

Selects Rule Set for editing.

SORT [col1 [A|D] [col2 [A|D]...[coln [A|D] ...]]

Sorts the specified columns in the specified order, A for Ascending or D for Descending. If not specified, the default column is Rule Set. If not specified, the default sort order is Descending, except for columns Rule Set and ID, which sort Ascending by default. For example, you can specify this command to perform a sort by descending dates and times when the rule sets were last changed within ascending dates on which the rule sets were created:

```
SORT CREATED A CHANGED
```

Point-and-shoot is enabled to SORT the AOF Rule Set List using any displayed column. To SORT the AOF Rule Set List using the point-and-shoot method, place the cursor on a displayed column heading and press the ENTER key. Point-and-shoot is enabled only if no primary commands have been entered.

Line Commands for the AOF CTRL Rule Set List Panel

Line commands are single letter commands that must be entered on the left side of the interactive list. Line commands affect the rule set named on the line on which they are entered.

Important! The setting of the Action Verification field on the OPSVIEW General Settings panel (Option 0.1) affects the outcome of the A, C, D, E, X, and Z line commands shown in the following table. If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before taking the action indicated by the command. If the field is set to N, CA OPS/MVS takes the action without requesting confirmation.

Remember that when you work in option 4.5, the actions you take affect your production rules and rule sets. To avoid mistakes, it is safest to set the Action Verification field to Y. For more information about the OPSVIEW General Settings panel and its Action Verification field, see The OPSVIEW General Settings Panel in the chapter "Using the OPSVIEW Parameters Option."

Use the following line commands on the AOF CTRL Rule Set List panel.

A

Sets the auto-enable flag for each rule in the rule set to Y. When the rule set is enabled, all the rules in it are automatically enabled.

C

Compiles all the rules in the set into the compiled rule data set.

D

Disables all of the rules in the rule set that were previously enabled.

E

Enables all of the rules in the rule set that have values of Y in their AE fields.

S

Selects the rule set to be displayed. When you enter the S command, the Rule List panel appears. The Rule List panel lists all of the rules in the rule set you selected. For details, see How to Use the AOF CTRL Rule List Panel in this chapter.

U

Accesses the PDS member list display for the rule set. This display is identical to the member list display you see when you choose ISPF/PDF option 3.1 (Library Utility). From here, you can delete, rename, or print listings of the rules in the set.

X

Deletes all of the rules in the set from the compiled rule data set.

Z

For all rules in the rule set, resets the value of the AE field to N. This means that all rules in the rule set are ineligible to be enabled.

Point-and-shoot is enabled to issue the S line command for any displayed Rule Set. To issue the S line command for a displayed Rule Set using the point-and-shoot method, place the cursor to the left of the Rule Set and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Use the AOF CTRL Rule List Panel

The AOF CTRL Rule List panel appears when you request to see a specific rule set on the AOF CTRL Entry panel. Following is a sample AOF CTRL Rule List panel. When requesting to view this rule set, the user placed a Y in the Stats field so that statistics would appear on the panel.

```

AOF CTRL - Rule List ----- MSI1 -- OPS.MY.RULES ----- Row 1 to 2 of 2
Command ==>                               Scroll ==> PAGE
  Line Commands: R EasyRule  S ISPF Edit  C Compile  X Delete Compile
  V View    E Enable    D Disable  A Set Auto-Enable  Z Reset Auto-Enable
                    System: *LOCAL*
RuleName Status AE TYP VV.MM Created Changed      Size Init  Mod  ID
DFS994I  ENABLED N MSG 01.03 03/12/20 03/12/20 13:17 29 13 1 OPSLCD
IMSCTRL  DISABLED N *** 01.00 03/12/20 03/12/20 15:59 5 5 0 OPSKED

```

The AOF CTRL Rule List panel contains more columns of information than you can view at one time. To see the rest of the information, use your LEFT and RIGHT PF keys to scroll.

Following is another view of the AOF CTRL Rule List panel. Descriptions of the fields on the panel are presented next.

```

AOF CTRL - Rule List ----- MSI1 -- OPS.MY.RULES ----- Row 1 to 2 of 2
Command ==>                               Scroll ==> PAGE
  Line Commands: R EasyRule  S ISPF Edit  C Compile  X Delete Compile
  V View    E Enable    D Disable  A Set Auto-Enable  Z Reset Auto-Enable
                    System: *LOCAL*
RuleName Status AE TYP Log      Last Fired Time      Next Fire Time      Count
DFS994I  ENABLED Y MSG  Y 2003/12/21 10:00:00  NONE      NONE      4
IMSCTRL  DISABLED N ***  * 2003/12/21 13:00:00  NONE      NONE      26

```

Fields on the AOF CTRL Rule List Panel-Left View

The following table describes the fields of data that appear on the left side of the AOF CTRL Rule List panel. You see these fields when you first enter the rule list and when you press the LEFT PF key.

Note: If the last editor used to modify a particular rule was not PDF-compatible, values for these fields will not appear for that rule: VV.MM, Created, Changed, Size, Init, Mod, and ID.

System

Indicates whether this list of rules is on the local or remote system.

RuleName

The name of the rule.

Status

The status of the rule. Statuses are ENABLED and DISABLED.

AE

The setting of the auto-enable flag for this rule. If there are no PDF statistics for the rule, the value of its auto-enable flag is N.

TYP

The type of the rule. If the value of the Status field is DISABLED, the value of the TYP field is ***. If the value of the Status field is ENABLED, the value of the TYP field can be any of these values:

ARM-Automatic Restart Management rule

CMD-Command rule

DOM-Delete-operator-message rule

EOJ-End-of-job rule

EOM-End-of-memory rule

EOS-End-of-step rule

GLV-Global variable rule

MSG-Message rule

OMG-OMEGAMON rule

REQ-Request rule

SCR-Screen rule

SEC-Security rule

TLM-Time limit rule

TOD-Time-of-day rule

USS-UNIX System Services rule

VV.MM

The version number and modification number of the rule. Each time a user uses the PDF editor to modify the rule, the PDF editor updates this value.

Created

The creation date of the rule.

Changed

The date and time of the last modification made to the rule.

Size

The current number of lines in the rule.

Init

The number of lines in the rule when it was first created.

Mod

The number of lines in the rule that have been modified.

ID

The TSO user ID of the last user who modified the rule.

Fields on the AOF CTRL Rule List Panel-Right View

The following fields of data appear on the right side of the AOF CTRL Rule List panel. You see these fields when you press the RIGHT PF key:

Log

If the rule is an MSG rule, a Y/N value indicating whether the NOOPSLOG option is assigned to it.

Last Fired Time

The date and time of day that the rule last executed.

Next Fire Time

The date and time of day that the rule is next scheduled to execute. This field applies only to time of day rules.

Count

The total number of times the rule has been executed.

Primary Commands for the AOF CTRL Rule List Panel

Use the following primary commands on the AOF CTRL Rule List panel. Issue primary commands from the Command field.

COMPILE

Invokes the AOF test compiled rules library.

EASYRULE

Enter R or any part of EASYRULE (for example, E, EASY, and so on) to be transferred to the EasyRule Name Specification panel.

Locate rule

Scrolls the panel so that the line referring to rule is at the top of the panel.

Rules

Accesses ISPF/PDF option 3.1 (Library Utility), where you can delete, rename, or print listings of the rule.

S rule

Transfers you to ISPF edit, where you can create the new rule.

`SORT [col1 [A|D] [col2 [A|D]...[coln [A|D] ...]]`

Sorts the specified column(s) in the specified order, A for Ascending or D for Descending. Each column name may be abbreviated. If not specified, the default column is RuleName. If not specified, the default sort order is Descending, except for columns RuleName (which may also be abbreviated as Name), TYP, and ID, which sort Ascending by default. For example, you can issue this command to sort the rules by descending last time fired within ascending type of rule:

```
SORT TYP LAST
```

Utility

Accesses ISPF/PDF option 3.1 (Library Utility), where you can delete, rename, or print listings of the rule.

Point-and-shoot is enabled to SORT the AOF Rule List using any displayed column. To SORT the AOF Rule List using the point-and-shoot method, place the cursor on a displayed column heading and press the ENTER key. Point-and-shoot is enabled only if no primary commands have been entered.

Line Commands for the AOF CTRL Rule List Panel

Issue line commands from the prefix area of the line that names the desired rule.

You can use the following line commands on the AOF CTRL Rule List panel:

A

Sets the auto-enable flag for the rule to Y.

C

Compiles the rule into the compiled rule data set.

D

Disables a previously enabled rule.

E

Enables a rule.

R

Selects an EasyRule-created rule for modification using EasyRule.

S

Selects a rule for modification using the ISPF editor.

V

Selects a rule for viewing instead of using the ISPF viewer.

X

Deletes the rule from the compiled rule data set.

Z

Resets the value of the AE field of the rule to N.

Point-and-shoot is enabled to issue the S line command for any displayed Rule. To issue the S line command for a displayed Rule using the point-and-shoot method, place the cursor to the left of the Rule Name and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

Note: When a rule is selected for EDIT, through either the S primary command or the S line command, and the rule is in EasyRule format, the following warning message is issued:

```
***** W A R N I N G *****
* You are about to edit an AOF rule that is in EasyRule format. *
* You may only add user-written REXX code to an EasyRule format *
* rule between the special EasyRule generated comments.      *
* If you change the member in any other way, you will not be  *
* able to use EasyRule to edit it in the future.              *
***** W A R N I N G *****
```

How to Maintain the AOF Production Compiled Rules Library (Option 4.5.2)

Use the AOF production compiled rules library to store compiled versions of your production rules. With OPSVIEW option 4.5.2, you can list and manipulate the rules in this library.

Note: Before you can access the AOF Compiled Rule Set List panel, you must allocate a data set for your compiled rules output. Allocate the data sets by setting the AOFPRECOMPILED and AOFPRECOMPILEDSDSN parameters.

The data set must be a partitioned data set with these attributes:

Attribute	Value
RECFM	Fixed block (mandatory)
LRECL	4096 (mandatory)
BLKSIZE	4096 or greater (must be a multiple of 4096)
DIRECTORY BLOCKS	User-defined (dependent on number of rules)
SPACE	User-defined (dependent on number of rules)

The AOF Compiled Rule Set List Panel

When you select option 2 from the CA OPS/MVS Rules panel, the AOF Compiled Rule Set List panel appears. Following is a sample:

```
AOF ----- Compiled Rule Set List ----- ROW 1 OF 2
Command ==>                                SCROLL ==> PAGE
      Line Commands: S Select  C Compile  D Delete  R Recompile
RULE SET  OLDEST  COMPILER  NEWEST  COMPILER  RULES
          DATE    TIME      DATE    TIME      COUNT
VTAMR    03/04/07  17:22   03/04/23  11:29     30
IMSR     02/01/11  13:56   03/02/14  17:09     23
**END**
```

Fields on the AOF Compiled Rule Set List Panel

The following fields appear on the AOF Compiled Rule Set List panel:

Rule Set

The name of the rule set.

Oldest Date

The least recent date on which any rule in the rule set was compiled.

Compile Time

The time at which the least recently compiled rule in the rule set was compiled.

Newest Date

The most recent date on which any rule in the rule set was compiled.

Compile Time

The time at which the most recently compiled rule in the rule set was compiled.

Rules Count

The number of rules in the set.

Primary Commands for the AOF Compiled Rule Set List Panel

You can use the following primary commands on the AOF Compiled Rule Set List panel. Issue primary commands from the Command field.

COMPILE ruleset

Compiles all of the rules in the named rule set.

DELETE ruleset

Deletes any compiled rule in the set from the compiled rules library.

LOCATE ruleset

Scrolls the display so that ruleset is positioned at the top.

RECOMPILE

Recompiles all of the previously compiled rules in all of the rule sets appearing on the display.

SELECT ruleset

Lists all of the compiled rules in the named rule set.

Line Commands for the AOF Compiled Rule Set List Panel

You can use the following line commands on the AOF Compiled Rule Set List panel. Enter the command in the prefix area of the line that names the desired rule set.

C

Compiles all of the rules in the rule set.

D

Deletes any compiled rule in the set from the compiled rules library.

R

Recompiles all of the previously compiled rules in the rule set.

S

Selects the rule set for display on the AOF Compiled Rules List panel (see below).

Point-and-shoot is enabled to issue the S line command for a Rule Set. To issue the S line command for a Rule Set using the point-and-shoot method, place the cursor to the left of the desired Rule Set and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

The AOF Compiled Rules List Panel

The AOF Compiled Rules List panel appears when you issue either the SELECT ruleset primary command or the S line command on the AOF Compiled Rule Set List panel. Following is a sample:

```
AOF -- MSI1 -- Compiled Rules List -- VTAMR ----- ROW 1 OF 4
Command ==>                                     Scroll ==> PAGE
      Line Commands: C Compile   D Delete   I Source Stats Inquiry
                   S or E Edit   B Browse
RULES      COMPILER      COMPILER
            DATE          TIME
CMDRUL     03/04/07       17:22
DOMRUL     03/02/27       13:08
EOMRUL     02/12/05       09:22
GLVRUL     03/04/15       12:53
**END**
```

For descriptions of commands you use to manipulate the rules that appear on the AOF Compiled Rules List panel, see Primary Commands for the AOF Compiled Rules List Panel and Line Commands for the AOF Compiled Rules List Panel in this chapter.

Fields on the AOF Compiled Rules List Panel

The following fields appear on the AOF Compiled Rules List panel:

Rules

The name of the rule.

Compile Date

The date on which the rule was last compiled.

Compile Time

The time at which the rule was last compiled.

Primary Commands for the AOF Compiled Rules List Panel

You can use the following primary commands on the AOF Compiled Rules List panel. Issue primary commands from the Command field.

COMPILE rule

Compiles the rule.

DELETE rule

Deletes the rule from the compiled rules library.

EDIT rule

Edit the source member (same as SELECT).

LOCATE rule

Scrolls the display so that rule is positioned at the top.

RECOMPILE

Recompiles all of the compiled rules appearing on the display.

SELECT rule

Edit the source member (same as EDIT).

Line Commands for the AOF Compiled Rules List Panel

You can use the following line commands on the AOF Compiled Rules List panel. Enter the command in the prefix area of the line that names the rule you want the command to act upon.

B

Browse the source text of the rule.

C

Recompile the rule.

D

Delete the rule from the compiled rules library.

E

Edit the data set member of the rule (same as S).

I

List current statistics for the source data set member of the rule.

S

Edit the source data set member of the rule (same as E).

Point-and-shoot is enabled to issue the S line command for a Rule. To issue the S line command for a Rule using the point-and-shoot method, place the cursor to the left of the desired Rule and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to View and Control Enabled (In Storage) Rules (Option 4.5.3)

Use this option to create a partial or complete interactive list of enabled rules. From the interactive list, you can choose to display the source code associated with each rule or you can disable the rule so it will not execute again.

The InStore Entry Panel

When you select option 3 from the CA OPS/MVS Rules panel, the InStore Entry panel appears:

```
InStore - Entry panel -- MSII -- O P S V I E W - Subsystem OPSS
Command ==>

Select which In Storage rules to display

RULE SET ==> *
    Specify any rule set, or '?' for list of sets, or '*' for all sets.

RULE TYPE ==> *          (MSG, TOD, CMD, etc.)
    You may specify a rule type, or use '*' for all rule type

SYSTEM   ==> *LOCAL*      WAIT ==> 10
    Either specify the name of an MSF connected system or * for the local
    system. Enter ? for a list of MSF connected systems.

Enter END command to return to primary options.
```

Information you enter on this panel is used to select the rules to be displayed on your interactive list. By default, all rules on the local system are selected, but you can limit the selection by specifying the rule set, rule type, or both and you can select an MSF-connected system from which the rules are listed.

When you press Enter on the InStore Entry panel, the interactive InStore Rules Panel displays:

```
InStore Rules -- MSII -- System: *LOCAL* -- OPSS ----- Row 1 to 6 of 6
Command ==>                               Scroll ==>
Use D to disable a rule, L to list the source code
Sel RuleSet RuleName Type Last Fired Time          Count  EDQ Max Note
0          ADAQTST  CMD  2006/05/24 13:14:36          3       42
0          INITEDQ  MSG  NONE          NONE          0       711
0          OPA34870 MSG  2006/05/22 21:12:20          1       12
0          TODC1   TOD  2006/05/23 14:15:00          2        2
SSM        SSMBEGIN REQ  2006/05/22 21:11:47          1        1
SSM        SSMGEVNT REQ  2006/05/22 21:12:58          1        1
```

Primary Commands for the InStore Rules Panel

Issue primary commands at the command line. The primary commands you can use on the InStore Rules panel are:

UP/DOWN/LEFT2/RIGHT2

The interactive rules list contains more information per line than can be displayed in 80 columns. Use commands LEFT2 and RIGHT2 (PF10 and PF11, respectively) to switch between the left side and right side of the list. UP/DOWN commands (PF7 and PF8, respectively) position the list vertically.

SORT

The list is initially sorted by rule set and rule name in the rule set, but you can sort the list by any column or group of columns in either ascending or descending order. Use SORT <column names> to reorder the list. Any of the following column names are valid:

- RULE SET or SET
- RULENAME or NAME
- RULETYPE or TYPE
- LAST
- LASTDATE
- LASTTIME
- NEXT
- NEXTDATE
- NEXTTIME
- ENABLED
- ENABDATE
- ENABTIME
- COUNT
- EDQMAX or EDQ

LAST, NEXT, and ENABLED are compound columns that sort by both date and time.

By default, column names are sorted in ascending order, but a minus sign can be used to sort them in descending order. For example, SORT TYPE -COUNT sorts column names in ascending order by type and descending order by count.

SORT, when issued with no column names, results in a default sort equivalent to SORT SET NAME.

FIND

Use the FIND command to position a line containing specific information to the top row. For example, FIND EOMDEQ, if used in the previous example, would position the third row to the top of the screen. On this screen, FIND works only in a forward direction and treats everything entered after the FIND command to be part of the string to be found. For example, FIND 1ST LAST would look for 1ST LAST rather than the last instance of 1ST.

Point-and-shoot is enabled to SORT the rule list using any valid column, including the combined columns of LASTFIRE, NEXTFIRE and ENABLED. Point-and-shoot uses descending SORT order for the COUNT, LASTFIRE and ENABLED columns, and ascending SORT order for all other columns. To SORT the rule list using the point-and-shoot method, place the cursor on a column heading and press Enter.

Line Commands for the InStore Rules Panel

Line commands are single letter commands that you must enter on the left side of the interactive list. Two commands, D and L, are supported. Line commands affect the rule named on the line on which they are entered.

You can use the following line commands on the InStore Rules panel:

D

Disables the rule and deletes the rule source from main storage. No additional screens are displayed when the D line command is used.

L

Lists the source code in a format similar to browse. L invokes the InStore Rule Source Display panel, provided that the rule source is available in main storage. The AOF SOURCETEXT parameter, which is in effect when the rule is enabled, controls whether source is available in main storage. A sample of the InStore Rule Source Display panel is shown below.

Point-and-shoot is enabled to List the Memory-resident source code of a rule. To List the Memory-resident source code of a rule using the point-and-shoot method, place the cursor in the left hand Sel column of the desired rule description and press Enter. Point-and-shoot is enabled only if no line commands have been entered.

Following is a sample of the InStore Rule Source Display panel:

```
- MSI1 - Source: SSMWIZ.SWZ403I   Col 1-72   - OPSS ----- Row 1 to 18 of 92
Command ==>                               Scroll ==> CSR
000001 )MSG IEF403I
000002 )INIT
000003 swzvpfx='GLVTEMP0.SSMWIZARD.'
000004 )PROC
000005 /*****
000006 SWZ403I:
000007   If OPSINFO('EXITTYPE') ^= 'MVS' Then
000008     Return 'NORMAL'
000009 /*-----*/
000010 /* Find the resource in the current SSM resource tables          */
000011 /*--+---1---+---2---+---3---+---4---+---5---+---6---+---*/
000012   jobname = msg.jobname
000013   jobnum = msg.jobnm
000014   class = ''
000015   If Length(jobnum) = 8 & ,
000016     Datatype(Right(jobnum,5),'W') & ,
000017     Wordpos(Left(jobnum,3),'STC JOB TSU') > 0 Then
000018     class = Left(jobnum,3)
```

Primary Commands for the Source Display

Issue primary commands at the command line. You can use the following primary commands on the source display:

UP/DOWN/LEFT2/RIGHT2

Positions the source display up, down, left, or right by using the PF7, PF8, PF9, and PF10 keys respectively.

SAVE

Sends the displayed source code to a PDS member. If you issue a SAVE command, the Save to PDS panel appears and you can fill in the blanks to specify what data set name and member name should be used.

Following is a sample Save to PDS panel:

```
- MSI1 - Save to PDS   - OPSS -----
Command ==>                               Scroll ==> CSR

Data set:
Member:
```

Data set and member can be entered together, as in MYDATA.SET(MEMNAME), or they can be entered using the two lines provided. A member name provided on the member line overrides a member name provided on the data set line. You can enclose the data set name in single quotes to designate a fully qualified data set name. The member must not exist in the target data set. Issuing the SAVE command does not overwrite an existing member.

How to Start a Copy of the Product (Option 4.6)

Use OPSVIEW option 4.6 to start a copy of CA OPS/MVS.

Accessing Option 4.6

To access OPSVIEW option 4.6, you can either:

- Enter 6 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.6 into any valid field in OPSVIEW.

The Start Panel

When you access option 4.6, you see a display similar to the following one. CA OPS/MVS uses the information you enter on this panel to build and issue a z/OS START command (as long as the user exit of your installation permits the command).

```

Start CA OPS/MVS ----- MSI1 --- O P S V I E W -----
COMMAND ==>
PROCNAME   ==> OPSMAIN
SUBSYSTEM ID ==>
LOADLIB    ==>
SUB=MSTR   ==> Y   (Y or N)
Reusable   ==> Y   (Y or N)
MEMBER     ==>
MAINPRM    ==>
Press ENTER to start CA OPS/MVS
Enter END command to return

```

Note: If no copy of CA OPS/MVS is up (in other words, you are attempting to start the first version), the OPSCMD TSO command processor must be APF-authorized before you use option 4.6. However, if the production version of CA OPS/MVS is already running and you want to start a test copy, the OPSCMD TSO command processor does not have to be APF-authorized.

Fields on the Start Panel

The fields on the Start CA OPS/MVS panel are:

Procname

The name of the member in SYS1.PROCLIB that contains the JCL for starting CA OPS/MVS. This field is required.

Subsystem ID

A z/OS subsystem ID (SSID) for the copy of CA OPS/MVS to use. The default value is OPSS. This field is optional.

Note: The character string OPS is not coded as the CA OPS/MVS message ID. Instead, CA OPS/MVS dynamically forms the message ID from the first, second, and last characters of the SSID for that copy of the product. If you are starting a test version of CA OPS/MVS, CA recommends that you specify OPST as the value for the Subsystem ID field. If you do so, the message ID of the messages the test version issues will be OPT, because O, P, and T are the first, second, and last characters of the SSID.

Loadlib

The name of the load module library containing the CA OPS/MVS programs.

SUB=MSTR

A value indicating whether you want to start CA OPS/MVS under the master subsystem. If yes, type Y. If no, type N. If you type N, CA OPS/MVS starts under the primary job entry subsystem (JES). This field is required.

Reusable

A value indicating whether you want to start CA OPS/MVS as a reusable address space. If yes, type Y. If no, type N. Your system must be at z/OS Version 1 Release 9 or higher and you must have specified REUSASID(YES) in the active DIAGxx logical PARMLIB member to allow reusable ASIDs.

MEMBER

(Optional) The two-character suffix that is to be appended to the OPSxPA string to form the name of the CA OPS/MVS initial CLIST or REXX EXEC.

MAINPRM

(Optional) The character string that is passed to CA OPS/MVS as part of the z/OS PARM string and is available for use through the OPSINFO("MAINPRM") function. You may use it in any way you want to pass user-defined values to the product.

How to Stop a Copy of the Product (Option 4.7)

Use OPSVIEW option 4.7 to stop the copy of CA OPS/MVS that is running on the z/OS system to which you are logged on.

Access Option 4.7

To access OPSVIEW Option 4.7, you can either:

- Enter 7 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.7 into any valid field in OPSVIEW.

The Stop Panel

When you access option 4.7, you see a display similar to the following one. CA OPS/MVS uses the information you enter on this panel to build and issue a z/OS STOP command (as long as the user exit of your installation permits the command).

```
Stop CA OPS/MVS ----- MSI1 --- O P S V I E W -----  
COMMAND ==>  
SUBSYSTEM ID ==> OPSS  
Press ENTER to stop CA OPS/MVS.
```

The Subsystem ID Field

The only field on the Stop CA OPS/MVS panel is the Subsystem ID field. Use this field to specify the z/OS subsystem ID (SSID) associated with the copy of CA OPS/MVS you want to bring down.

The default value for the Subsystem ID field is OPSS. Therefore, you need to fill in this field only if you run more than one copy of CA OPS/MVS at a time, or the single copy you run has an SSID other than OPSS.

How to Control Global Variables (Option 4.8)

A global variable is a special compound symbol that is shared by TSO address spaces, servers, batch jobs, and OPS/REXX programs (including AOF rules). CA OPS/MVS supports two types of global variables—standard and temporary.

A standard global variable has these characteristics:

- It is nonvolatile, which means that it is saved across system IPLs and CA OPS/MVS restarts.
- It is implemented as a REXX compound symbol. You can distinguish it from other compound symbols by its stem; the stem will be either GLOBAL or GLOBALx, where x is an alphanumeric character (A-Z, 0-9).

A temporary global variable has these characteristics:

- It is volatile, which means that it is not saved across system IPLs and CA OPS/MVS restarts. When CA OPS/MVS is started, the pool of temporary global variables is always empty.
- It is implemented as a REXX compound symbol. You can distinguish it from other compound symbols by its stem. The stem will be either GLVTEMPx, where x is an alphanumeric character (A-Z, 0-9), GLVEVENT, or GLVJOBID.

Note: A global variable name can be up to 84 bytes long.

Tasks You Perform with Option 4.8

With the OPSVIEW option 4.8, you can:

- Browse the value of a global variable, in both its hexadecimal and character formats.
- Create a subnode.
- Reset a subnode to its default value.
- Delete a node and its subnodes.
- Modify the value of a global variable.
- Delete a variable but not its subnodes.
- Display variables that have not been accessed since a particular date.

Schedule a Global Variable Backup and Restore

CA OPS/MVS provides the capability to schedule a backup and restore of your global variable database. For details, see the *Administration Guide*.

Access Option 4.8

To access OPSVIEW option 4.8, you can either:

- Enter 8 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.8 into any valid field in OPSVIEW.

The Display Global Variables Panel

When you select option 4.8, you see a display similar to the following one:

```

AOF CTRL - Display Global Variables ----- CA31 ----- Row 1 of 4
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse
                D Remove Node   P Drop Node  O Delete One Z Hex Edit
System ==> *LOCAL*  Wait ==>                                     Access Date <
Global Prefix: GLOBAL
Subnode Name  Nodes  Subnode Value
CTC12B        0  Online
JES2          4  Up
TEST          0  AVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVer
VTAM          3  Up
**END**

```

The Display Global Variables panel contains more columns of information than you can view at one time. To see the rest of the information, use the LEFT and RIGHT PF keys to scroll. Following is another view of the Display Global Variables panel. Descriptions of the fields on the panel are presented next.

```

AOF CTRL - Display Global Variables ----- CA31 ----- Row 1 of 4
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse
                D Remove Node   P Drop Node  O Delete One Z Hex Edit
System ==> *LOCAL*  Wait ==>                                     Access Date <
Global Prefix: GLOBAL
Subnode Name  Created  Last Change Time  Rule/Program Name  Jobname  Updates
CTC12B        2008/12/15  08/12/15 14:55:32  PANEL          LUTDA15    1
JES2          2008/12/15  08/12/15 14:57:58  PANEL          LUTDA15    2
TEST          2008/12/15  08/12/15 14:51:54  PANEL          LUTDA15   10
VTAM          2008/12/15  08/12/15 14:55:58  PANEL          LUTDA15    3
**END**

```

Fields on the Display Global Variables Panel - Left View

You see the following fields when you first enter option 4.8 and when you press the LEFT PF key. The fields of data that appear on the left side of the Display Global Variables are:

System

Specifies the name of another MSF-defined system you want to display the global variables for.

Wait

The number of seconds to wait for a response from a remote system.

Access Date

To display a list of variables that have not been accessed since a particular date, specify the date (in the form YYYY/MM/DD) in this field. Only those variables whose last date of access is less than the date you specify will be displayed. This feature can help you determine which variables are obsolete.

Global Prefix

The high-level node name of the selected subnode.

Subnode Name

The last segment in the name of the variable.

Nodes

The number of subnodes for the node.

Subnode Value

The data for the variable.

If the length of the variable is more than 56 bytes, you must issue a command to see the additional data. The Display Global Variables panel does not indicate the length of a variable; therefore, if you suspect there is more data for a variable, issue the B, M, or X line commands. For details, see Line Commands for the Display Global Variables Panel in this chapter.

Important! If the variable has been dropped, the value of this field is reset to the variable name itself. However, if this particular variable does not exist, the text string NO VALUE ASSIGNED AT THIS LEVEL appears in this field.

For example, suppose that a line of code assigns a value of 6 to GLOBAL.A.B. Unless another line of code explicitly assigns a value to GLOBAL.A, the string NO VALUE ASSIGNED AT THIS LEVEL appears as the value of GLOBAL.A.

Taking this example one step further, if you used the OPSVALUE() function with the E option to see if GLOBAL.A exists, OPSVALUE would return a value of N, meaning that the variable does not exist (no storage exists for it).

Now suppose that GLOBAL.A is assigned a value. Even though GLOBAL.A.B is a subnode of GLOBAL.A, they are two totally different variables. It is not necessary for GLOBAL.A to exist for GLOBAL.A.B to exist.

Fields on the Display Global Variables Panel - Right View

The following fields of data appear on the right side of the Display Global Variables panel. You see these fields when you press the RIGHT PF key.

Subnode Name

The last segment in the name of the variable.

Created

The date the variable was created.

Last Change

The date on which the variable was last modified.

Time

The time at which the variable was last modified.

Rule/Program Name

The name of the rule or program that last updated the variable. If the last update to the variable was made through the Display Global Variables panel, this value will be OPSVIEW 4.8.

Jobname

The name of the job that last updated the variable.

Updates

The total number of updates that have been made to this variable.

Primary Commands for the Display Global Variables Panel

There are various primary commands you can issue from the Display Global Variables panel. Enter primary commands in the Command field.

END

Exits you from option 4.8.

L or LOCATE name

If CA OPS/MVS finds a subnode named name, the display scrolls so that the name subnode appears in the top row of the Display Global Variables panel.

For example, to cause the subnode named VTAM to appear at the top of the panel, issue this command:

```
L VTAM
```

OC or /

Use either OC or / to prefix a console command, such as D TS. Both of these examples result in the same action:

```
OC D TS
```

```
/D TS
```

RES or RESET

Cancels line commands.

SAVE

Saves the data in the table to the ISPF LIST data set. If you specify a date in the Access Date field, you can use this command to print a report of potentially obsolete variables.

Scrolling Commands (LEFT, RIGHT, DOWN, and UP)

Scroll the display in the desired direction. Typically, the LEFT and RIGHT commands are assigned to PF keys PF10/22 and PF11/23, and the UP and DOWN commands are assigned to PF7/19 and PF8/20.

S or SELECT name value

Creates a new subnode and optionally assigns a value to it. For details, see How to Create a Subnode in this chapter.

Line Commands for the Display Global Variables Panel

There are various line commands you can issue from the Display Global Variables panel. Enter the command in the prefix area of the line that names the desired subnode. You can type in more than one line command before pressing Enter. If you type in more than one S line command, CA OPS/MVS executes only the last one.

B

Displays a panel that lists all the detail data for a node. For details, see [How to Browse a Node](#) in this chapter.

D

Deletes a node and all of its subnodes. For details, see [How to Delete a Node and its Subnodes](#) in this chapter.

M

Displays a panel on which you can modify a variable. For details, see [How to Modify the Value of a Subnode](#) in this chapter.

O

Deletes a single variable without deleting its subnodes. For details, see [How to Delete a Single Global Variable](#) in this chapter.

P

Drops a node by resetting the variable to its default value. For details, see [How to Drop a Node](#) in this chapter.

S

Displays a panel of information about the subnodes of this subnode. For details, see [How to Show the Subnodes of a Node](#) in this chapter.

X

Displays a panel providing both the character and the hexadecimal values of a subnode. For details, see [How to Browse the Hexadecimal Value of a Node](#) in this chapter.

Z

Displays a panel on which you can modify the hexadecimal values of a variable. This panel provides both the character and the hexadecimal values of a subnode. For details, see [How to Browse the Hexadecimal Value of a Node](#) in this chapter.

Point-and-shoot is enabled to issue the S line command for a subnode. To issue the S line command for a subnode using the point-and-shoot method, place the cursor to the left of the desired Subnode Name field and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Create a Subnode

The following section discusses how to create a subnode.

SELECT Primary Command on Display Global Variables Panel

Use the SELECT command on the Display Global Variables panel to create a subnode and (optionally) assign a value to it. Enter the command in the Command field.

This command has the following format:

```
Select subnode  
      [value]
```

subnode

Specify a name for the subnode you want to create.

value

(Optional) Specify the value you want to assign to the node.

Example: Create a Subnode and Assign It a Value

Suppose you issue the SELECT command as it appears in the Command field in the following sample:

```
AOF CTRL - Display Global Variables ---- CA31 ----- Row 1 of 4  
COMMAND ==> S NEWNODE NEWVALUE                      SCROLL ==> PAGE  
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse  
                D Remove Node   P Drop Node  0 Delete One Z Hex Edit  
System ==> *LOCAL*  Wait ==>                      Access Date <  
Global Prefix: GLOBAL  
Subnode Name  Nodes  Subnode Value  
CTC12B        0  Online  
JES2          4  Up  
TEST          0  AVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVer  
VTAM          3  Up  
**END**
```


When you press Enter, the following Display Global Variables - SELECT Command Results panel appears. Notice that the new node has been added.

```

AOF CTRL - Display Global Variables ----- CA31 ----- Row 1 of 5
COMMAND ==>                                     SCROLL ==> PAGE
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse
                D Remove Node   P Drop Node  O Delete One Z Hex Edit
System ==> *LOCAL*  Wait ==>                                     Access Date <
Global Prefix: GLOBAL
Subnode Name  Nodes  Subnode Value
CTC12B        0  Online
JES2          4  Up
NEWNODE       0  NEWVALUE
TEST          0  AVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVeryVery
VTAM          3  Up
**END**

```

How to Browse a Node

The following section discusses how to browse a node.

The B Line Command

Issue the B line command in the prefix area on the Display Global Variables panel to browse all the detail data for a node (for example, date and time of creation), as well as the character value of a node.

The Display Global Variables-Browse Panel

When you enter the B line command from the Display Global Variables panel, the Display Global Variables-Browse panel appears. Following is a sample panel:

```

AOF CTRL - Display Global Variables ----- MS11 ----- Row 1 of 2
COMMAND ==>                                     SCROLL ==> PAGE
Global variable: GLOBAL.NEWNODE
Subnodes: 0
      Date      Time  Jobname  Rule/Program Name  Updates
Created : 2008/12/15 08:59:47 SEECU02  OPAODIGL
Changed : 2008/12/15 09:08:35 SEECU02  OPSVIEW 4.8          2
Accessed: 2008/12/15
Value of global variable:                                     Length: 8
-----1-----2-----3-----4-----5-----6-----7-----+
NEWVALUE
**END**

```

How to Delete a Node and Its Subnodes

This section discusses how to delete a node and its subnodes.

The D Line Command

Issue the D line command in the prefix area on the Display Global Variables panel to delete a node and its subnodes.

The Effect of the Action Verification Setting

The setting of the Action Verification field on the OPSVIEW General Settings panel (option 0.1) affects the outcome of the D line command:

- If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before it deletes the node and its subnodes. For details, see *Confirming the Deletion* in this chapter.
- If the Action Verification field is set to N, CA OPS/MVS deletes the node without requesting confirmation. For details, see *Deleting a Node and Its Subnodes Without Confirmation* in this chapter.

For details about the OPSVIEW General Settings panel and the Action Verification field, see *How to Modify OPSVIEW Options (Option 0.1)* in the chapter “Using the OPSVIEW Parameters Option.”

Confirm the Deletion

When you enter the D command and the Action Verification field is set to Y, a confirmation panel appears to enable you to cancel the deletion. A sample panel follows:

```
AOF CTRL - Display Global Variables ----- MSII ----- Subsystem OPSS
COMMAND ==>
NOTE: You are about to remove a node and all of its subnodes.
      If you press ENTER the data will be removed from the Global Variable
      database.
      The name of the node to be removed is:
          GLOBAL.JES2.PRT4
      Enter END command to cancel the deletion.
```

From this panel you can either:

- Enter the END command to cancel the deletion.
- Press Enter to confirm the deletion.

Delete a Node and Its Subnodes Without Confirmation

When you enter the D command and the Action Verification field is set to N, CA OPS/MVS performs the delete without asking you to confirm the request.

How to Modify the Value of a Subnode

This section describes how to modify the value of a subnode.

From the Display Global Variables panel, you can modify the value of subnode using the following methods:

- If the current value of the subnode is short enough to fit in the Subnode Value field on the Display Global Variables panel, and the new value you want to assign to the subnode is also short enough to fit in the field:

Then type the new value directly over the current value. When you press Enter, the change takes effect.

- If the current value of the subnode is too long to completely fit in the Subnode Value field on the Display Global Variables panel, and you try to enter the new value directly over the current value:

Then the system displays the Display Global Variables-Modify Value panel. For details, see The Display Global Variables-Modify Value Panel in this chapter.

- If you enter the M command on the line that names the subnode whose value you want to modify:

Then the system displays the Display Global Variables-Modify Value Using the Line Command panel. For details, see The Display Global Variables-Modify Value Using Line Command Panel in this chapter.

Display Global Variables-Modify Value Panel

When the current value of a subnode is too long to completely fit in the Subnode Value field on the Display Global Variables panel, and you try to enter the new value directly over the current value, the system displays the Display Global Variables-Modify Value panel. Following is a sample panel:

```
AOF CTRL - Display Global Variables ----- MSII ----- Subsystem OPSS
COMMAND ==>
NOTE: You have modified a variable that contains more data than was
visible on the screen and will cause the value to be truncated.
Length of old value: 1000      The old value was:
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567
56789012345678901234567890123456789012345678901234567890123456789012345678901234567
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567
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123456789012345678901234567890123456789012345678901234567890123456789012345678901234567
56789012345678901234567890123456789012345678901234567890123456789012345678901234567
Length of new value: 56      The new value will be:
x23456789012345678901234567890123456789012345678901234567890123456789012345678901234567
Enter END command to cancel the change.
```

From this panel you can either:

- Enter the END command to cancel the modification.
- Press Enter to confirm the modification.

Display Global Variables-Modify Value Using the Line Command Panel

If you enter the M line command on the Display Global Variables panel, the system displays the Display Global Variables-Modify Value Through Line Command panel. You can modify the entire variable value from this panel. Following is a sample panel:

```
AOF CTRL - Display Global Variables ----- MSII ----- Subsystem OPSS
COMMAND ==>                                     SCROLL ==> PAGE
Global variable: GLOBAL.NEWNODE
Modify the Global Variable by typing over the data below (length: 1000 )
-----1-----2-----3-----4-----5-----6-----7-----
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
12345678901234567890123456789012345678901234567890123456789012345678
1234567890123456789012345678901
```

From the previous panel you can either:

- Enter the CANCEL command to cancel the modification.
- Type the desired variable value over the value that appears on the panel. Then enter the END command to put the change into effect.

Drop a Node

Dropping a node means resetting the node to its default value, which is the variable name itself.

To drop a node, issue the P line command in the prefix area on the Display Global Variables panel.

The Effect of the Action Verification Setting

The setting of the Action Verification field on the OPSVIEW General Settings panel (option 0.1) affects the outcome of the P line command:

- If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before it drops the node. For details, see *Confirming the Drop* in this chapter.
- If the Action Verification field is set to N, CA OPS/MVS drops the node without requesting confirmation. For details, see *Dropping a Node Without Confirmation* in this chapter.

For details about the OPSVIEW General Settings panel and the Action Verification field, see *How to Modify OPSVIEW Options (Option 0.1) and Fields on the OPSVIEW General Settings Panel* in the chapter “Using the OPSVIEW Editors Option.”

Confirm the Drop

When you enter the P command and the Action Verification field is set to Y, a confirmation panel appears to enable you to cancel the drop operation. Following is a sample panel:

```
AOF CTRL - Display Global Variables ----- MSII ----- Subsystem OPSS
COMMAND ==>
NOTE: You are about to drop a node. If you press ENTER the node will
be reset back to its default value (i.e. the variable name itself).
The name of the node to be dropped is:
GLOBAL.JES2.PRT4
Enter END command to cancel the drop operation.
```

From this panel you can either:

- Enter the END command to cancel the drop operation.
- Press Enter to confirm the drop operation.

Drop a Node Without Confirmation

When you enter the P command and the Action Verification field is set to N, CA OPS/MVS resets the node to its default value without asking you to confirm the drop operation.

Show the Subnodes of a Node

To request a listing of the subnodes of a node, issue the S line command in the prefix area on the Display Global Variables panel.

Display Global Variables - Show Subnodes Panel

Enter the S line command from the Display Global Variables panel to display the Display Global Variables - Show Subnodes panel. The following sample panel shows the subnodes of the JES2 node. The subnodes are PRT1, PRT2, PRT3, and PRT4.

```

AOF CTRL - Display Global Variables ----- MSII ----- Row 1 of 5
COMMAND ==> SCROLL ==> PAGE
Line Commands: S Show Subnodes M Modify X Hex Browse B Browse
                D Remove Node P Drop Node O Delete One
System ==> Wait ==> Access Date <
Global Prefix: GLOBAL.JES2
Subnode Name Nodes Subnode Value
PRT1          0 Online
PRT2          0 Online
PRT3          0 Offline
PRT4          0 Online
**END**

```

Browse the Hexadecimal Value of a Node

To browse both the character and the hexadecimal values of a node, issue the X line command in the prefix area on the Display Global Variables panel.

Display Global Variables - Hexadecimal Browse Panel

Enter the X line command from the Display Global Variables panel to display the Display Global Variables - Hexadecimal Browse panel.

Following is a sample panel:

```

AOF CTRL - Display Global Variables ----- MSII ----- Row 1 of 4
COMMAND ==> SCROLL ==> PAGE
Global variable: GLOBAL.NEWNODE
Subnodes: 0
      Date      Time  Jobname Rule/Program Name Updates
Created : 2003/12/15 08:59:47 SEECU02 OPAODIGL
Changed : 2003/12/15 09:08:35 SEECU02 OPSVIEW 4.8      8
Accessed: 2003/12/15
Value of global variable: Length: 4
-----1-----2-----3-----4-----5-----6-----7-----
NEWVALUE
DCEECDEC
55651345
**END**

```

Edit Hexadecimal Values of a Node

Global variables may contain hexadecimal data that need modified. The Hex Edit Global Variables display panel lets you modify the hexadecimal values of a variable.

To edit hexadecimal values

1. Enter the Z line command from the Display Global Variables panel.
The Hex Edit Global Variables panel displays.
2. Edit the global variables by typing over the data and then press enter.

The following shows the Hex Edit Global Variables display:

```
A0F CTRL - Hex Edit Global Variables ----- CA31 ----- Subsystem OPSV
Command ==>                               Scroll ==> PAGE

Global variable: GLOBAL.NEWNODE
      Subnodes: 0
Press END to save, or CAnCel to exit without saving.
Modify the Global Variable by typing over the data below (length: 8      )
---*---*---*---1---*---*---*---2---*---*---*---3---*---*---*---4---*---*---*---
NEWVALUE
DCEECDEC
55651345
-5---*---*---*---6---*---*---*---7---*---*---*---8---*---*---*---9---*---*---*
---A---*---*---*---B---*---*---*---C---*---*---*---D---*---*---*---E---*---*---
---*---F---*---*---*---100---*---*---*---110---*---*---*---120---*---*---*---130---*---*
```

Delete a Single Global Variable

You can remove obsolete variables with active subnodes without affecting the current subnode variables.

To delete a single variable without deleting its subnodes, issue the O line command in the prefix area on the Display Global Variables panel.

The Effect of the Action Verification Setting

The setting of the Action Verification field on the OPSVIEW General Settings panel (option 0.1) affects the outcome of the O line command:

- If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before it deletes the variable. For details, see *Confirming the Deletion* in this chapter.
- If the Action Verification field is set to N, CA OPS/MVS deletes the variable without requesting confirmation. For details, see *Deleting a Variable Without Confirmation* in this chapter.

For details about the OPSVIEW General Settings panel and the Action Verification field, see *How to Modify OPSVIEW Options (Option 0.1)* in the chapter “Using the OPSVIEW Editors Option.”

Confirm the Deletion

When you enter the O command and the Action Verification field is set to Y, a confirmation panel appears to enable you to cancel the deletion. Following is a sample panel:

```
AOF CTRL - Display Global Variables --- MSI1 - Subsystem OPSS
COMMAND ==>
NOTE: You are about to delete a single global variable.
If you press ENTER the data will be removed from the Global Variable
database.
The name of the node to be removed is:
GLOBAL.newnode
Enter END command to cancel the deletion.
```

From this panel you can either:

- Enter the END command to cancel the deletion.
- Press Enter to confirm the deletion.

Delete a Variable Without Confirmation

When you enter the O command and the Action Verification field is set to N, CA OPS/MVS performs the delete without asking you to confirm the request.

Delete an Obsolete Variable

You can display variables that may be obsolete by specifying the following on the Display Global Variables panel:

- A global prefix in the Global Prefix field.
- Any date in the past (in the form YYYY/MM/DD) in the Access Date field.

When you press Enter, the Display Global Variables-Access Date panel appears.

Display Global Variables-Access Date Panel

The Display Global Variables-Access Date panel lists all the variables whose last date of access is less than the date you specified in the Access Date field. Following is a sample:

```

AOF CTRL - Display Global Variables ----- MSII ----- Row 1 of 5
COMMAND ==>                                SCROLL ==> PAGE
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse
                D Remove Node   P Drop Node  O Delete One
System ==> *          Wait ==>                Access Date < 2007/12/21
Global Prefix: GLOBAL
Subnode Name           Accessed   Created   Changed   Updates
HASP.COUNTER.ABEJUA1   2007/12/20 2007/12/20 2007/12/20 2
HASP.COUNTER.ABEJU01   2007/12/20 2007/12/08 2007/12/20 11
HASP.COUNTER.ACKKE02   2007/12/20 2007/12/08 2007/12/20 10
HASP.COUNTER.ACKKE02A 2007/12/20 2007/12/20 2007/12/20 11
**END**

```

The panel contains more columns of information than you can view at one time. To see the rest of the information, use the LEFT and RIGHT PF keys to scroll.

Another view of the panel follows:

```

AOF CTRL - Display Global Variables ----- MSII ----- Row 1 of 5
COMMAND ==>                                SCROLL ==> PAGE
Line Commands: S Show Subnodes  M Modify      X Hex Browse B Browse
                D Remove Node   P Drop Node  O Delete One
System ==> *          Wait ==>                Access Date < 2005/12/21
Global Prefix: GLOBAL
Subnode Name           Change Rule/Pgm  Jobname  Subnode Value
HASP.COUNTER.ABEJUA1   QATEST.OPSVLU#1  ABEJUA1  10
HASP.COUNTER.ABEJU01   QATEST.OPSVLU#1  ABEJU01  9
HASP.COUNTER.ACKKE02   QATEST.OPSVLU#1  ACKKE02  10
HASP.COUNTER.ACKKE02A  QATEST.OPSVLU#1  ACKKE02A 15
**END**

```

Delete an Obsolete Variable

Use the O line command to delete an obsolete variable without affecting its current subnodes.

Available Primary and Line Commands

You may use all of the primary commands and line commands that you issue on the Display Global Variables panel on the Display Global Variables-Access Date panel.

Note: To generate a report containing the information that appears on the Display Global Variables-Access the Date panel to the ISPF LIST data set using the SAVE primary command.

Control the External Product Interface Virtual Terminals (Option 4.10)

Use OPSVIEW option 4.10 to control the virtual terminals that are defined to the CA OPS/MVS External Product Interface (EPI).

What Is the External Product Interface

The EPI permits CA OPS/MVS systems that are running under VTAM to communicate with any VTAM application that supports IBM 3270 (SLU2) type virtual terminals. The EPI appears to VTAM as a real 3270 terminal that can emulate any number of 3270 type virtual terminals that are connected to any number of VTAM applications.

Note: The EPI supports IBM model 2, 3, and 4 virtual terminals only. The EPI does not support extended attributes and programmed symbols.

Access Option 4.10

To access OPSVIEW option 4.10, you can either:

- Enter 10 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.10 into any valid field in OPSVIEW.

The EPI Virtual Terminals List Panel

When you access option 4.10, you see a display similar to the following one. On this panel, you can scroll through the list of virtual terminals or use a line command to take some action on a particular terminal.

```

EPI ----- Virtual Terminals List ----- ROW 1 OF 5
COMMAND ==>
Line cmds: E Enable      F Force  L Logon  S Select  T Trace  X Examine
            D Disable    H Help   O Logoff  Z Delete  U Untrace R Record & Playback
                   VTAM  VTAM      == RETRY ==      VTAM
SEL  TERMINAL  USERNAME  STATUS   APPLNAME  LOGMODE  SECS  MAX  NOW  RTNCD  FDBK2
-----
      OMTERM1      ACTIVE    OMTAM    T3278M2   30   30   0  X'00' X'00'
      OMTERM2      ENABLED   OMCICS   T3278M3   30   30   0  X'10' X'01'
      CA7TERM      RETRYING  CA7      T3278M4   30    4   2  X'10' X'00'
      OPS00001     ACTIVE    TSOTULD  T3278M3   NO  RETRY      X'00' X'00'
      OPS00002     ACTIVE    TS0IPD0  T3278M2   NO  RETRY      X'00' X'00'
    
```

Fields on the EPI Virtual Terminals List Panel

If you are unsure of the meaning of any of the fields on the EPI Virtual Terminals List panel, see the chapter “External Product Interface” in the *User Guide*.

Primary Commands for the EPI Virtual Terminals List Panel

CA OPS/MVS provides the following primary commands. Enter a primary command on the command line.

Locate termname

Attempts to locate virtual terminal termname in the list and scrolls the display so that virtual terminal termname (or if not found, the next virtual terminal in the list) is positioned in the top row of the virtual terminal list display.

Select termname

Selects the virtual terminal for display on a more detailed panel. For details, see How to View Detailed Information About a Virtual Terminal in this chapter.

SORT field order

Sorts the virtual terminal list according to the value of the specified field. You may specify more than one field. If not specified, the default value for field is Terminal. The value for order can be A (Ascending) or D (Descending), and may be specified for each field specified. The default value for order varies by field name.

Point-and-shoot is enabled to SORT the Virtual Terminal list using any displayed column. To SORT the Virtual Terminal list using the point-and-shoot method, place the cursor on a displayed column heading and press the ENTER key.

Line Commands for the EPI Virtual Terminals List Panel

CA OPS/MVS provides the following line commands. Enter line commands in the Sel field preceding the name of the desired virtual terminal.

D

Disables the virtual terminal.

E

Enables the virtual terminal.

F

Forces a DEQ of the current owner. For more information, see the description of the ADDRESS EPI host command environment in the *Command and Function Reference*.

H

Accesses online help information for the last error code that VTAM issued for the virtual terminal.

L

Logs the virtual terminal on to the external product.

O

Logs the virtual terminal off of the external product.

R

Displays the EPI Recording Primary Menu. For details, see the chapter “Using the EPI Recording and Playback Options.”

S

Selects the virtual terminal for display on a more detailed panel. For details, see How to View Detailed Information About a Virtual Terminal in this chapter.

T

Initiates tracing of the virtual terminal. All buffers and associated VTAM RPLs are written to the OPSLOG.

U

When tracing of the terminal was previously initiated by a T command, the U command stops the tracing process.

X

Accesses a panel where you can examine the current screen image of the virtual terminal. For details, see [How to Examine the Screen Image of a Virtual Terminal](#) in this chapter.

Z

Deletes the definition of the virtual terminal.

Point-and-shoot is enabled to issue the S line command for any displayed Virtual Terminal. To issue the S line command for a displayed Virtual Terminal using the point-and-shoot method, place the cursor to the left of the Virtual Terminal and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Add a Virtual Terminal to the EPI List

This section discusses how to add a virtual terminal to the EPI list.

SELECT Primary Command on EPI List Panel

Use the SELECT command on the EPI Virtual Terminals List panel to define a virtual terminal and add it to the EPI list of virtual terminals. Enter the command directly in the Command field.

This command has the following format:

Select *termname*

termname

Specify a name for the virtual terminal you want to define.

Define a Virtual Terminal

To define a virtual terminal, issue the SELECT command as it appears in the Command field shown in the following panel:

```

EPI ----- Virtual Terminals List ----- ROW 1 OF 5
COMMAND ==> s testterm                               SCROLL ==> PAGE
Line cmds: E Enable      F Force  L Logon   S Select  T Trace   X Examine
             D Disable   H Help    O Logoff  Z Delete  U Untrace  R Record & Playback
                   VTAM   VTAM     == RETRY ==      VTAM
SEL  TERMINAL  USERNAME  STATUS   APPLNAME LOGMODE  SECS  MAX  NOW RTNCD FDBK2
-----
      OMTERM1      ACTIVE    OMTAM   T3278M2   30   30   0  X'00' X'00'
      OMTERM2      ENABLED   OMCICS  T3278M3   30   30   0  X'10' X'01'
      CA7TERM      RETRYING CA7      T3278M4   30    4   2  X'10' X'00'
      OPS00001     ACTIVE    TSOTULD T3278M3   NO  RETRY      X'00' X'00'
      OPS00002     ACTIVE    TSOIPD0 T3278M2   NO  RETRY      X'00' X'00'

```

When you press Enter, the following Terminal Details panel appears. Use this panel to complete the definition of the new virtual terminal. If you are unsure of the meanings of any of the fields on this panel, see the chapter “External Product Interface” in the *User Guide*.

```

TESTTERM Terminal Details -----
COMMAND ==>
                   VTAM   VTAM     == RETRY ==      VTAM
TERMINAL USERNAME  STATUS  APPLNAME LOGMODE  SECS  MAX  NOW RTNCD FDBK2
-----
TESTTERM           DISABLED
PASSWORD ==>
LOGON PARM ==>
ACQUIRE ==> ACCEPT (ACCEPT OR REJECT)
TERMINAL IS NOT BEING TRACED
SCREEN FORMAT IS 24 ROWS BY 80 COLUMNS
MAX SEND RU SIZE: 0
MAX RCVE RU SIZE: 0
ENQS -----
**END**

```

View Detailed Virtual Terminal Information

This section discusses how to view detailed information about a virtual terminal.

To view detailed information about a virtual terminal

1. Issue the S line command in the prefix area on the EPI Virtual Terminal List panel.
The Terminal Details panel appears, which displays detailed information about the terminal.
2. Review the terminal details in the fields of the display.

The following is a sample panel:

```
OMTERM1 Terminal Details -----
COMMAND ==>
                                     SCROLL ==> PAGE
      VTAM   VTAM   == RETRY ==   VTAM
  TERMINAL USERNAME STATUS APPLNAME LOGMODE SECS  MAX  NOW RTNCD FDBK2
-----
OMTERM1           ACTIVE  OMVTAM   T3278M2   30   30   0 X'00' X'00'
  PASSWORD ==>
LOGON PARM ==> TSUSER1
  ACQUIRE ==> ACCEPT (ACCEPT OR REJECT)
  TERMINAL IS NOT BEING TRACED
  SCREEN FORMAT IS 24 ROWS BY 80 COLUMNS
  MAX SEND RU SIZE: 0
  MAX RCVE RU SIZE: 0
  ENQS -----
      TSUSER1
      TSUSER2
      TSUSER3
**END**
```

How to Examine the Screen Image of a Virtual Terminal

This section discusses how to examine the screen image of a virtual terminal.

The X Line Command

Issue the X line command in the prefix area on the EPI Virtual Terminals List panel to cause CA OPS/MVS to access a panel where you can view the current screen image of the virtual terminal.

The Virtual Terminal Screen Panel

When you enter the X line command from the EPI Virtual Terminals List panel, the Virtual Terminal Screen panel appears. A sample panel follows:

```

TESTNAME Terminal Screen --- MSI1 ----- LINE 1 21- COL 1 0080-
COMMAND ==>                                SCROLL ==> PAGE
                ZOPS   VTM     OM/DEX  V695./C S000 04/27/07 16:11:36
>Help PF1      Back PF3      Up PF7      Down PF8      Zoom PF11
=====
>
SCPU05 ...CPU Utilization... 0..10..20..30..40..50..60..70..80..90..100
+   HSM          6.64  |-> . . . . . . . . . . |
+   AI06MP       8.91  |-->. . . . . . . . . . |
+   Total       27.55  |--10--20-->. . . . . . . . . . |
=====
BATX  XPTRMAIN BI20JB16
step  MAINCPU  APPLY
elap  3:55 HR 22:18 MN
=====
>   TSO users
#TS0J      14
=====
> For more information, place the cursor on the exception name and press PF11.
LXGRPHD  OMEGAMON/MVS Group Exception Analysis
LXGRPOP  OMEGAMON/MVS Group Exception Analysis
+ XECS  ++++++
+   +   Warning: Allocated ECSA = 90% (9360K out of 10368K)   +
+   ++++++
+ WAIT STC OPSOSF | Wait: 18:56 MN
*****
***** BOTTOM OF SCREEN *****

```

Virtual Terminal Screen Panel Information

The External Product Interface generates the top two lines of the Virtual Terminal Screen panel. The remaining lines are an image of the virtual terminal screen you are examining.

Use Scroll Commands on the Virtual Terminal Screen Panel

If the virtual screen is larger than the real screen of the terminal you are using, you can scroll the real screen by using the standard ISPF UP, DOWN, LEFT, and RIGHT commands and PF keys.

Enter Data Into a Virtual Screen

Enter data into a virtual screen the same way that you enter data into a real screen; that is, tab or cursor to an input field and type the data.

Use Attention Keys on a Virtual Screen

You cannot use attention keys directly on a virtual screen because ISPF controls the use of these keys. Attention keys include Enter, CLEAR, ATTN, PA1, PA2, PA3, and all PF keys.

To use one of these keys, issue the TYPE command from the Command field at the top left corner of the panel. Use the following syntax:

```
Type  
{*|termname}  
{keyname}
```

Following is a description of the required keywords:

*

Type the current terminal ID defined with the SETTERM command.

termname

Specifies the virtual terminal for which you want to type.

keyname

Specifies the name of the attention key you want to use. Values are Enter, CLEAR, ATTN, PA1, PA2, PA3, and PF1 through PF24.

Note: You can use the ISPF KEYS command to assign TYPE commands to real PF keys. For details, see Using the ISPF Command KEYS on the Virtual Terminal Screen Panel in this chapter.

Issue the TYPE Command

Instead of pressing the CLEAR key directly on the Virtual Terminal Screen panel, issue this command:

```
TYPE *!CLEAR
```

Instead of pressing the PF8 key, issue this command:

```
TYPE *!PF8
```

ISPF KEYS Command on Virtual Terminal Screen Panel

When using the Virtual Terminal Screen panel, you can issue the ISPF KEYS command to view or redefine your PF key settings. The definitions that you set while using the Virtual Terminal Screen panel are separate from the definitions used elsewhere in ISPF. This means that even if you redefine your PF keys while using the Virtual Terminal Screen panel, the keys will return to their previous definitions as soon as you exit the Virtual Terminal Screen panel.

By default, keys PF1 through PF12 are set to TYPE * !PF1 through TYPE * !PF12 in the Virtual Terminal Screen panel. CA OPS/MVS passes these PF keys to the external product as virtual PF key presses.

Keys PF13 through PF24 keep their original settings, with these exceptions:

Key	Exception
PF17	If PF17 was originally set to RFIND, CA OPS/MVS redefines it as TYPE * !PA1.
PF18	If PF18 was originally set to RFIND, CA OPS/MVS redefines it as TYPE * !PA2.
PF24	If PF24 was originally set to RETRIEVE, CA OPS/MVS redefines it as TYPE * !ENTER.

These exceptions effectively turn PF17/PF18 into virtual PA1/PA2 keys and PF24 into a virtual Enter key.

Note: If the Command field on the Virtual Terminal Screen panel is empty, press Enter to execute the TYPE * !ENTER command. This turns the real Enter key into a virtual Enter key.

Using the Virtual Terminal Screen Panel

Keep these guidelines in mind when you are using the Virtual Terminal Screen panel:

- Issue the END command to leave the Virtual Terminal Screen panel and return to the Virtual Terminals List panel.
- You cannot use the real Enter key when you are entering data into the virtual screen and the data begins with an equal sign (=). If you do, ISPF interprets the equal sign as a request to jump to another screen. To avoid this situation, assign the TYPE * !ENTER key to a PF key other than the real Enter key and press that PF key instead.
- If you use the ISPF END command, ISPF RETURN command, or ISPF jump function before you press any other attention key, CA OPS/MVS ignores the updates you make to the Virtual Terminal Screen panel.
- Sometimes the external product takes longer than expected to update the Virtual Terminal Screen panel. This often happens during long LOGON sequences. If you see a blank or partial virtual screen when you try to access this panel, press Enter or issue a virtual PA2 key command.
- Your real terminal may unlock before the virtual terminal. If this happens, press Enter to see any remaining virtual screen updates.
- If the keyboard of the virtual terminal locks, the message KEYBOARD LOCKED appears in the upper right corner of the Virtual Terminal Screen panel. To unlock the keyboard, issue the TYPE * !RESET command.

How to Issue EPI Commands from OPSVIEW Option 4.10 Panels

CA OPS/MVS provides a set of commands to control the EPI. If you are not familiar with the available EPI commands, see the chapter “External Product Interface” in the *User Guide*.

The Command Response Display Panel

Issue an EPI command from the Command field of either the Virtual Terminals List panel or the Virtual Terminal Screen panel to display the Command Response Display panel. From this panel, you can view the responses to the EPI command or issue additional EPI commands. Following is a sample:

```
EPI - Command Response Display --- MSI1 ----- ROW 1 OF 3
COMMAND ==>                                SCROLL ==> PAGE
Last command: TYPE X !RESET
-----
TERMINAL X NOT TYPED, TERMINAL IS NOT DEFINED
----- Return code 4 from EPI cmd TYPE X !RESET -----
**END**
```

The EPI Command Prefix

Some EPI commands have the same names as ISPF commands. For example, both the EPI and ISPF have a HELP command and a LIST command.

By default, ISPF interprets these commands and does not pass them to the EPI. To force ISPF to pass such commands to the EPI, use the EPI command prefix.

Some examples follow:

```
EPI HELP
```

```
EPI LIST *
```

How to Use the System State Manager Control Option (Option 4.11)

The System State Manager (SSM) facility simplifies and automates the management of system resources such as software subsystems, JES initiators, and databases. System State Manager monitors the status of system resources and can call an AOF request rule or automation procedure to act when the state of a resource changes.

For details about the System State Manager, see the *User Guide*. If you are unfamiliar with the CA OPS/MVS relational tables, see the chapter “Relational Data Framework Reference” in the *Command and Function Reference*.

Tasks You Perform with Option 4.11

Use OPSVIEW option 4.11 to do the following:

- Set System State Manager options and view System State Manager tables.
- Set and view the states of individual System State Manager resources.
- Create or modify a relational table that stores status information about started tasks (STCs) running on your system
- Maintain schedules for System State Manager resources.
- Create and manage groups of System State Manager resources.
- Manage the desired states of your System State Manager resources using the System State Manager Wizard.
- Create, modify, view, delete, and copy SSM action tables and individual actions. Use the special action editor to simplify editing.
- Set and view the status of individual SSM resources using the global resource information created by the System State Manager Global Application (SSMGA).
- Create, modify, view, delete, and copy SSM resource tables and individual resources. Use the copy function's variety of copy control options to copy a resource to multiple systems.

Accessing Option 4.11

To access OPSVIEW option 4.11, you can either:

- Enter 11 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.11 into any valid field in OPSVIEW.

The System State Manager Menu Panel

When you access option 4.11, you see a display similar to the following one:

```

System State Manager----- CA31 -- O P S V I E W ----- Subsystem OPSX
Option ==>
Date/Time: 2006/05/23 10:48

  1 Control      - Set/Display SSM parameters and resource tables
  2 Status      - Set/Display states of SSM controlled local resources
  3 Snapshot    - Create/Modify a local SSM started task resource table
  4 Scheduler   - Set/Display schedules for SSM controlled resources
  5 Group Manager - Create/Manage groups of SSM resources
  A Action Editor - Create and maintain SSM action tables
  G Global Status - Set/Display states of SSM controlled global resources
  R Resource Edit - Create and maintain SSM resource tables

Press END to return

```

From this menu, use the Option field to specify the option you want to use:

Option	What It Does
1	Accesses the SSM Control panel, through which you perform various administration tasks and view a list of System State Manager resource tables and their modes.
2	Accesses the SSM Resource Control panel, through which you view information about monitored resources.
3	Accesses the System State Manager Snapshot Facility panel, through which you instruct CA OPS/MVS to build a resource information table by taking a snapshot of the started tasks running on your system.
4	Accesses the Schedule Manager Primary panel, through which you maintain schedules for System State Manager resources.
5	Accesses the Group Manager Main Menu, from which you can group system resources under the control of System State Manager and monitor the status of resource groups.
A	Accesses the System State Manager action table editor through which you may create, modify, view, delete, and copy SSM action tables and individual actions.
G	Accesses the SSMGA resource control panel through which you can display, modify, and move SSM resources within an SSMGA SSMplex.
R	Accesses the System State Manager resource editor through which you may create, modify, view, delete, and copy SSM resource tables and individual resources.

The following sections discuss these options in detail.

How to Control System State Manager (Option 4.11.1)

Use option 4.11.1 to perform these tasks:

- Activate or deactivate the System State Manager or operate it in PASSIVE mode.
- Specify a new System State Manager directory table.
Note: The directory table contains the names of the resource information tables that the System State Manager is monitoring.
- Add a resource information table to the directory table of the System State Manager.
- Associate an action table with a resource information table.
- Activate or deactivate monitoring for a resource information table or place the table in PASSIVE mode.
- Specify a system name and cross-system wait time to control System State Manager on a remote system.

Access the SSM Control Panel

To perform tasks with the SSM Control panel, you can either:

- Select option 1 from the System State Manager Menu panel.
- Use the ISPF jump function by entering =4.11.1 into any valid field in OPSVIEW.

As a result, you see a display similar to the following:

```
SSM Control----- XE44 -- O P S V I E W ----- Row 1 to 2 of 2
Command ==>                                         Scroll ==> CSR
Date/Time: 2003/07/16 16:39                          Wait ==> 10
System ==> *
Parameters: Stateman ==> ACTIVE                    (Active/Passive/Inactive/Noprreq)
             Statetbl ==> SSM_MANAGED_TBLS
             Version ==> 2

Cmd  Managed Table  Mode  Action Table  Up  Down  Unknown  TNG
-----
ADD  ZSMQAT1          A     ZSMQAT_ACT   UP  DOWN  UNKNOWN  N
     ZSMQAT2          A     ZSMQAT_ACT   UP  DOWN  UNKNOWN  Y
     ZSMQAT2          A     ZSMQAT_ACT   ONLINE OFFLINE UNKNOWN  N
***** Bottom of data *****
```


Fields on the SSM Table Edit Panel

The following describes the fields on the SSM Table Edit primary panel:

Wait

The number of seconds to wait for a response from a remote system.

System

The name of the remote system, or an asterisk (*) to indicate the local system. To select a system name from a list of systems, enter a question mark (?) in this field.

SSM Table

The name of resource directory table of the System State Manager, which contains the names of the resource tables that System State Manager is currently monitoring. The value in this field is the same as the value of the STATETBL parameter.

SSM Mode

The global processing mode of the System State Manager for all monitored resources and tables. Values are ACTIVE, INACTIVE, and PASSIVE. The value in this field is the same as the value of the STATEMAN parameter.

SSM Version

The version of System State Manager that is currently assigned to the SSMVERSION parameter. Currently, 2 is the only support version of SSM.

RES Table

The name of the resource table that contains the resource names you want to edit. To display the Table Name Selection panel, enter a question mark (?) in this field.

RES Mode

If System State Manager is using the resource table, its mode is displayed.

RES TNG

If System State Manager is using the resource table and the TNGELIGIBLE column exists in the resource directory table, the value YES or NO is displayed.

Name

The name of the resource. Enter a question mark (?) to display the Resource Name Selection panel, from which you can select a resource. Use the ADD primary command to insert a new resource with the specified column data.

Mode

The processing mode of the resource. Values are ACTIVE, INACTIVE, NOPREREQ, and PASSIVE. If you are unfamiliar with these processing modes, see their descriptions in the *User Guide*.

Type

The TYPE column value.

Jobname

The JOBNAME column value.

TNG

The TNGNOTIFY column value (ALWAYS or NEVER).

Actmode

The processing mode of the resource or any value used for selecting alternate actions. The action mode is used as both a second resource-processing mode or as a user-designated mode value that can be used to select alternate System State Manager actions for the same state combinations, such as a hot or cold start for JES2.

Current

The CURRENT_STATE column value.

Desired

The DESIRED_STATE column value.

Chkpoint

The CHKPOINT_STATE column value.

IPL

The IPL_STATE column value.

Previous

The PREV_STATE column value. System State Manager uses this column to save the last mismatched state that was considered for action processing. This field cannot be modified.

Counter

The RESACT_COUNT column value. The SSMRETRY rule uses this value to record the number of times that the action process has been performed.

Process

The RESACT_DESC column value. The SSMRETRY rule uses this value to record the name of the action-limited process.

Timestamp

The RESACT_TIME column value. The SSMRETRY rule uses this value to record the date and time of the last action limit process event.

Edit Other

A point-and-shoot command field for issuing the EDCOL primary command to permit editing of resource columns not included on the primary edit panel.

Premode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite mode controls whether System State Manager performs full, partial, or no prerequisite checking for this resource.

Refmode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite reference mode controls whether this resource can be used as a prerequisite by other resources. Full, partial, or no prerequisite referencing can be specified. If you specify no prerequisite referencing, then System State Manager ignores the reference.

Prereq

The PREREQ column value in the form of resource names separated by commas.

Edit

A point-and-shoot command field that invokes the ISPF editor for editing the prereq column value. This is equivalent to issuing the EDPRE primary command.

Missing

The MISSING_PREREQ column value. System State Manager uses this value to record the prerequisites that are not in the proper state to enable action processing. This field cannot be modified.

Resource Text

This column is usually defined when the CA Network and Systems Management System Status Manager CA OPS/MVS Option product is installed and is part of the data displayed on the CA NSM workstation. This column usually contains a message that was inserted by a rule that tracks the state of resources.

Note: The fields of optional columns that do not exist in the table contain the value N/A and cannot be modified.

Line Commands for the SSM Control Panel

CA OPS/MVS provides the command options described in the following table for you to use on the SSM Control panel. Enter one of the following commands in the field next to the name of the table:

?

Displays a panel of line commands from which you can choose.

A

Invokes the relational table editor to edit the action table associated with this resource table.

B

Invokes the relational table editor to browse the action table associated with this resource table.

D

Deletes this table from the System State Manager list of monitored tables.

The D command does not delete the table from the Relational Data Framework; it only removes it from the System State Manager list of monitored tables.

To delete a table from the Relational Data Framework, use the table editor (described in the User Guide).

E

Enables you to edit the monitored resource table using the SSM table editor.

L

Invokes the relational table editor to browse the monitored resource table.

M

Enables you to edit the monitored resource table using the RDF table editor.

T

Causes a panel that shows the defined columns, or structure, of this resource table to appear.

How to Change Values on the SSM Control Panel

With the exception of the Managed Table Name field, you can change any of the values on the panel by typing over them and pressing Enter. All values in the ADD line are ignored until a managed table name is provided. If you accidentally type over a value or change your mind about updating a table, then clear the field and press Enter. The old value is restored.

How to View Monitored Resource Information (Option 4.11.2)

Use option 4.11.2 to view the following information about SSM monitored resources:

- The names of monitored resources and their operating modes
- The current and desired states of these resources
- The list of unsatisfied prerequisites (if any) for these resources

You can also use option 4.11.2 to change the operating mode of an individual resource.

Access the SSM Resource Status Panel

To view information about individual resources or change the operating mode of a resource, access the SSM Resource Status panel. To do so, either:

- Select option 2 from the System State Manager Menu panel.
- Use the ISPF jump function by entering =4.11.2 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```

SSM Resource Status----- XX11 -- O P S V I E W ----- Exceptions exist
Command ==> _____ Scroll ==> CSR
Date/Time: 2011/03/189 13:42          Filtered: N   View ==> ALL
System: *          SSM Mode: ACTIVE   Version: 2       Wait ==> 10
Disp: B (B/V/E)          States          Modes
Cm Sta Resource Name      Current  Desired  Res Pre Ref Tng Action  Message
-----
---      ZSSMQA1            DOWN    DOWN    A  A  A  A  ACTIVE
---      ZSSMQA2            DOWN    DOWN    A  A  A  A  ACTIVE
--- E    ZSSMQA3            DOWN    UP      A  A  A  A  ACTIVE  Mprereq
---      ZSSMQA4            DOWN    DOWN    A  A  A  A  ACTIVE
---      ZSSMQA5            UP      UP      A  A  A  A  ACTIVE
---      ZSSMQA7            OFFLINE OFFLINE  A  A  A  A  ACTIVE
***** Bottom of data *****

```

When the display is scrolled to the right, additional resource data is displayed:

```

SSM Resource Status----- XX11 -- O P S V I E W ----- Exceptions exist
Command ==> Scroll ==> CSR
Date/Time: 2011/03/09 13:50 Filtered: N View ==> ALL
System: * SSM Mode: ACTIVE Version: 2 Wait ==> 10
Disp: B (B/V/E) Modes
Cm Sta Resource Name Resource Type Table Name Tbl Tng
-----
___ ZSSMQA1 QAFIX ZSMQAT1 A N
___ ZSSMQA2 QAFIX ZSMQAT1 A N
___ E ZSSMQA3 QAMOVE ZSMQAT1 A N
___ ZSSMQA4 QAMOVE ZSMQAT1 A N
___ ZSSMQA5 QAMOVE ZSMQAT1 A N
___ ZSSMQA7 QAFIX ZSMQAT2 A Y
***** Bottom of data *****
    
```

How to Enter Filter Criteria on the SSM Resource Status Panel

Using the SSM Resource Status panel, you can view all resources that System State Manager is monitoring. Because the number of resources can be large, you can specify criteria to filter out some of them. This enables you to create a more manageable subset of resources that includes only the type of resources you want to see.

To set the filter criteria for the resource display, enter the FILTER primary command on the command line or place your cursor under the Filtered field and press Enter. The SSM Resource Filters entry panel is displayed and it contains the current filter criteria entered or retrieved from your ISPF profile.

The filter criteria that you specify can relate to any of the fields that appear on the SSM Resource Status panel. For example, if you want to view only those resources with values of UP in their Current State fields, specify UP in the Current State field. For non-fixed value fields, you can specify any character string as a filter and use the wildcard characters ? and * for wildcard matches. For example, to list all resources whose names are four-characters long and begin with the prefix STC, specify STC? as your filter. To list all resources whose names begin with the prefix STC, specify STC* as your filter.

For non-fixed value filters, you can enter multiple values in the input field if space permits.

The following operators may also be used:

- = Equal, or in a list
- \= Not equal, or not in a list
- < Less than
- <= Less than or equal
- > Greater than
- >= Greater than or equal
- @ Within a string
- \@ Not within a string

For example, use \=ACTIVE to select resources where the value of the specified field is not equal to ACTIVE. You may specify a list of values for an IN or NOT IN select clause. Enclose the list inside of parentheses () with an = or \= operator in front of the list. For example, use =(PASSIVE NOPREREQ) to select resources where the value of the specified field is equal to PASSIVE or NOPREREQ.

All of the criteria including the View mode must be true for a particular resource for that resource to appear on the display.

The following is a sample SSM Resource Filters panel:

```
SSM Resource Filters
Command ==> _____

-----Names-----
Table   : _____
Resource : _____
Type    : _____
-----States-----
View    : ALL      (Exc/All)
Current : _____
Desired : _____
-----Modes-----
Table   : _____
Resource : _____
Prereq  : _____
Reference: _____
Action  : _____
Schedule : _____
Movmode : _____
-----TNG Display-----
Table   : ____ (Yes/No)
Resource : _____ (A/N)
```

Fields on the SSM Resource Status Panel

The following describes the fields on the SSM Resource Status panel:

System

For cross-system SQL functions, the name of the remote system, or an asterisk (*) to denote the local system. To select a system from a list of remote systems, enter a question mark (?) in the System field.

SSM Mode

The global processing mode of System State Manager for all monitored resources. The value in this field is the same as the value of the STATEMAN parameter.

Version

The version of System State Manager that is currently defined in the SSMVERSION parameter. Currently, 2 is the only supported version of SSM.

Filtered

Either YES or NO indicating whether filter criteria other than view mode are being used to reduce the number of resources displayed. Filtered is also an ISPF point and shoot field that can be used to issue the FILTER primary command to change the filter criteria.

View

Either ALL or EXCEPTION. The ALL mode causes all resources in a table to be displayed and the EXCEPTION mode causes only those resources whose current and desired states do not match to be displayed. Using EXCEPTION mode results in better performance, because less data displays.

Wait

The number of seconds to wait for remote SQL responses.

Disp

The resource data display mode protects or allows the type over of resource data. The default value is E unless OPSView 0.1 is used to change the default.

B

Browse prohibits all type over changes

V

View allows type over changes with verification

E

Unrestricted type over changes.

Status

A red E or a yellow W when various conditions such as missing prerequisites are detected for a resource. The condition detected is noted in the message field.

Resource Name

The name of the resource.

Current State

The current state of the resource.

Desired State

The desired state of the resource.

Res Mode

The processing mode of the resource. Valid values are ACTIVE, INACTIVE, PASSIVE, and NOPREREQ. If you are unfamiliar with these processing modes, see their description in the *User Guide*.

Pre Mode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite mode controls whether System State Manager performs full, partial, or no prerequisite checking for this resource.

Ref Mode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite reference mode controls whether this resource can be used as a prerequisite by other resources. Full, partial, or no prerequisite referencing can be specified. If you specify no prerequisite referencing, then System State Manager ignores the reference.

Tng Mode

Either ALWAYS or NEVER. This optional mode controls whether the resource may be displayed on a CA NSM workstation that is running the CA Network and Systems Management System Status Manager CA OPS/MVS Option product.

Action Mode

Any value used for selecting alternate actions. The action mode is a user-designated mode value that can be used to select alternate System State Manager actions for the same state combinations, such as a hot or cold start for JES2.

Message

A value indicating that a warning situation exists for the resource. Values are:

- S=mode-The System State Manager mode is INACTIVE or PASSIVE
- T=mode-The table mode of the resource is INACTIVE or PASSIVE
- R=mode-The resource mode is INACTIVE or PASSIVE
- MPREREQ-The resource has missing prerequisites. Use the P line command to display the status of the missing prerequisites.
- R=MONITOR-Stop or start is being attempted for a resource where the action mode is MONITOR.
- Action Req-The resource is waiting for an action to be taken before starting or stopping
- Transition-The resource is in the process of stopping or starting
- Exception-The current and desired states of the resource do not match
- SSMGA CNTL-The resource's action mode is INACTIVE because it is a movable resource not currently on this system

If multiple warnings exist for a resource, the highest-level warning appears in the Message field.

Resource Type

The type of the resource. A value of UNKNOWN means that System State Manager could not identify the product or subsystem type of the resource, meaning that you probably need to create a rules packet for the subsystem.

Table Name

The name of the resource table to which this resource belongs.

Tbl Mode

The processing mode of the resource table. Valid values are ACTIVE, INACTIVE, NOPREREQ, and PASSIVE. The most restrictive processing mode of System State Manager, resource table, and resource mode is the effective mode of the resource.

Line Commands for the SSM Resource Status Panel

To use a line command, enter it in the prefix area of the line where the resource appears. Use the following line commands to control SSM resources:

?

Displays a panel of line commands from which you can choose.

B

Invokes the relational table editor to browse this resource table.

C

Changes the value in the Desired State field of the resource to CANCEL. For this state value to have an effect on the resource, a corresponding action in the associated Action table must exist. For example:

```
Current=UP Desired=CANCEL Action_text=MVSCMD('Cancel &JOBNAME')
```

D

Removes a resource from the control of the System State Manager.

In response, CA OPS/MVS prompts you to confirm your delete request.

The D command physically removes the record representing the resource from the resource table. If you delete a resource, the only way to put it back into the resource table is to re-add it with the table editor (described in the User Guide).

E

Invokes the SSM table editor to edit this resource table.

M

Invokes the RDF table editor to edit this resource table.

OB

Invokes the OPSLOG browse with the jobname profile.

P

Issue this command for a resource with a value of Mprereq in its Message field to display a list of missing prerequisite resources and their statuses. If this command is issued for a resource with no missing prerequisites, then the list of all defined prerequisites is displayed.

Q

Changes the value of the Desired State field to the name of the UP state for the selected resource and all of its dependent resources (opposite of W).

R

Changes the value in the Desired State field to the name of the UP state for the selected resource and all of its prerequisite resources.

S

Changes the value in the Desired State field of the resource to the name of the UP state (opposite of Z).

T

Displays a panel that shows the defined columns, or structure, of this resource table.

U

Changes the value in the Current State field of the resource to the name of the UNKNOWN state.

W

Changes the value in the Desired State field to the name of the DOWN state for the selected resource and all of its dependent resources (opposite of Q).

Z

Changes the value in the Desired State field of the resource to the name of the DOWN state (opposite of S).

Primary Commands for the SSM Resource Status Panel

Enter primary commands in the Command field. You can issue the following primary commands from the SSM Resource Status panel:

AUTO nn

Places the panel in automatic refresh mode. The value of nn indicates how many seconds CA OPS/MVS waits before refreshing the panel. The minimum value of nn is 5; the maximum is 600. The default is 60 seconds.

Typically, you should place the panel in automatic refresh mode only if you set the View field to EXC. For more information, see *How to Change the View Mode of the SSM Resource Panel* in this chapter.

To exit from automatic refresh mode, press the ATTENTION key.

CANcel

Ignores any updates or line commands entered on the panel and reconstructs the display with the current resource data.

FILter

Displays the SSM Resource Filters panel to change the filter values that limit which resources are displayed. You can also invoke this command by placing the cursor under the Filtered field near the top of the panel and pressing Enter.

TLeft

Shifts the type and table data display back to the main resource data display. You can also invoke this command by pressing the PF10 key.

TRight

Shifts the main panel to the right to display the Resource Type Table Name, Table Mode, and Tng Mode fields. You can also invoke this command by pressing the PF11 key.

How to Change the Modes of a Resource

To change the processing mode of a resource, enter A (ACTIVE), I (INACTIVE), N (NOPREREQ), or P (PASSIVE) into the Res Mode field and press Enter.

To change whether a resource may be displayed on a CA NSM workstation that is running the CA Network and Systems Management System State Manager CA OPS/MVS Option product, enter A (ALWAYS) or N (NEVER) into the Tng Mode field and press Enter.

To change the Pre Mode and Ref Mode fields, enter A (ACTIVE), I (INACTIVE), P (PREREQ), or S (SUBREQ) into the Pre Mode or Ref Mode fields.

How to Change the Current or Desired State of a Resource

Enter the new value over the appropriate Current State or Desired State field and press Enter.

If you change the value in a state field, make sure that the new value you are specifying is valid. For example, if a resource is up and you set the Desired State field to down, an action for UP_DOWN must be defined in the action table for that resource. Otherwise, the System State Manager will not be able to find the proper action routine that is needed to change state of the resource, and the resource will hang.

Note: For descriptions of the S, U, and Z line commands, see Line Commands for the SSM Resource Control Panel in this chapter.

Change the View Mode of the SSM Resource Control Panel

Two view modes are available for the SSM Resource Control panel:

ALL

All resources in the table appear on the SSM Resource Control panel.

EXC

Only those resources whose current and desired states do not match appear on the SSM Resource Control panel.

To change the view mode, type the desired mode over the value in the View field. The View field appears in the top right corner of the display. The view mode may also be set on the SSM Resource Filters panel that is invoked by the FILTER command.

Invoke the SSM Table Editor

The SSM table editor lets you display and modify the standard columns of System State Manager resource tables. You can use it as an alternative to the RDF table editor.

The standard columns are displayed on a single panel. From this panel, you can do the following:

- Modify values
- Add new resources
- Delete resources

To invoke the SSM table editor

From the SSM Control panel (option 4.11.1) or the SSM Resource Control panel (option 4.11.2), enter the E line command next to a table name or resource name. Once a resource table is entered, it can be edited.

The SSM Table Edit Panel

Upon entering the SSM table editor, the SSM Table Edit primary panel displays:

```

SSM Table Edit----- XX11 -- O P S V I E W ----- Subsystem OPSL

Command ==>
Scroll ==> CSR
Wait ==> 10
System: *      SSM Table: SSM_MANAGED_TBLS  Mode: ACTIVE  Version: 2
                RES Table: JOESTC          Mode: ACTIVE  TNG: NO

----Properties-----      -----States-----      -----Action Limit Data-----
Name  : JOESSM4           Current : UP           Counter  : N/A
Mode  : ACTIVE            Desired : UP           Process  : N/A
Type  : MOVEABLE         Chkpoint: UP          Timestamp: N/A
Jobname: JOESSM4         IPL      : UP
TNG   : N/A              Previous:
Actmode: INACTIVE
Movmode: AUTO           Systems: ---Primary---  ---Current---  ---Desired---
Schmode: ACTIVE         CA31.OPSL             CA31.OPSL      CA31.OPSL

--- Edit Other Columns Not Displayed -----

----Prerequisites-----
Premode: ACTIVE  Refmode: ACTIVE  (Active/Inactive/Prereq/Subreq)
Prereqs:
>
Edit >
>
>
Missing:
>
>
>
>

----SSMGA Alternate System and Group Lists-----
Systems: CA11.OPSL
Edit >
Groups : TESTGRP
Edit >

----Resource Text-----
: 20120117 09:25:10 OPSJL SSMGASYS - System CA31.OPSL status changed fro
> m COMFAIL to RECOVER

Hit Enter to update or PF3 to end.   PF10=PREV  PF11=NEXT

```

Fields on the SSM Table Edit Panel

The following describes the fields on the SSM Table Edit primary panel:

Wait

The number of seconds to wait for a response from a remote system.

System

The name of the remote system, or an asterisk (*) to indicate the local system. To select a system name from a list of systems, enter a question mark (?) in this field.

SSM Table

The name of resource directory table of the System State Manager, which contains the names of the resource tables that System State Manager is currently monitoring. The value in this field is the same as the value of the STATETBL parameter.

SSM Mode

The global processing mode of the System State Manager for all monitored resources and tables. Values are ACTIVE, INACTIVE, and PASSIVE. The value in this field is the same as the value of the STATEMAN parameter.

SSM Version

The version of System State Manager that is currently assigned to the SSMVERSION parameter. Currently, 2 is the only support version of SSM.

RES Table

The name of the resource table that contains the resource names you want to edit. To display the Table Name Selection panel, enter a question mark (?) in this field.

RES Mode

If System State Manager is using the resource table, its mode is displayed.

RES TNG

If System State Manager is using the resource table and the TNGELIGIBLE column exists in the resource directory table, the value YES or NO is displayed.

Name

The name of the resource. Enter a question mark (?) to display the Resource Name Selection panel, from which you can select a resource. Use the ADD primary command to insert a new resource with the specified column data.

Mode

The processing mode of the resource. Values are ACTIVE, INACTIVE, NOPREREQ, and PASSIVE. If you are unfamiliar with these processing modes, see their descriptions in the *User Guide*.

Type

The TYPE column value.

Jobname

The JOBNAME column value.

TNG

The TNGNOTIFY column value (ALWAYS or NEVER).

Actmode

The processing mode of the resource or any value used for selecting alternate actions. The action mode is used as both a second resource-processing mode or as a user-designated mode value that can be used to select alternate System State Manager actions for the same state combinations, such as a hot or cold start for JES2.

Movmode

The SSM#MOVMOD column value. (Available only when SSMGA columns are present).

Schmode

The SCHEDMODE column value. (Available only when SSMGA columns are present).

Systems

Contains resource definition of SSMGA-related system values. (Available only when SSMGA columns are present).

Current

The CURRENT_STATE column value.

Desired

The DESIRED_STATE column value.

Checkpoint

The CHECKPOINT_STATE column value.

IPL

The IPL_STATE column value.

Previous

The PREV_STATE column value. System State Manager uses this column to save the last mismatched state that was considered for action processing. This field cannot be modified.

Counter

The RESACT_COUNT column value. The SSMRETRY rule uses this value to record the number of times that the action process has been performed.

Process

The RESACT_DESC column value. The SSMRETRY rule uses this value to record the name of the action-limited process.

Timestamp

The RESACT_TIME column value. The SSMRETRY rule uses this value to record the date and time of the last action limit process event.

Edit Other

A point-and-shoot command field for issuing the EDCOL primary command to permit editing of resource columns not included on the primary edit panel.

Premode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite mode controls whether System State Manager performs full, partial, or no prerequisite checking for this resource.

Refmode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite reference mode controls whether this resource can be used as a prerequisite by other resources. Full, partial, or no prerequisite referencing can be specified. If you specify no prerequisite referencing, then System State Manager ignores the reference.

Prereq

The PREREQ column value in the form of resource names separated by commas.

Edit

A point-and-shoot command field that invokes the ISPF editor for editing the prereq column value. This is equivalent to issuing the EDPRE primary command.

Missing

The MISSING_PREREQ column value. System State Manager uses this value to record the prerequisites that are not in the proper state to enable action processing. This field cannot be modified.

SSMGA Alternate System and Group Lists

Contains editable fields representing current content of the Alternate System and Group list SSMGA columns. Use the SYSLST and SYSGRP line fields to update the alternate system list and group list.

Resource Text

This column is usually defined when the CA Network and Systems Management System Status Manager CA OPS/MVS Option product is installed and is part of the data displayed on the CA NSM workstation. This column usually contains a message that was inserted by a rule that tracks the state of resources.

Note: The fields of optional columns that do not exist in the table contain the value N/A and cannot be modified.

Primary Commands for the SSM Table Edit Panel

Enter primary commands in the Command field. You can issue the following primary commands from the SSM Table Edit primary panel.

ADD

Adds a resource name to the current resource table and sets the value of the associated columns to the non-blank data values in the panel fields. A verification message displays before the resource name is added.

DELETE

Deletes a resource name from the current resource table. A verification message displays before the resource name is deleted.

DEFAULTS

Sets the column-related fields on the panel to the relational table default values that were defined for the resource table.

EDCOL

Invokes the SSM table editor display for editing columns not displayed on the primary editor display panel.

EDPRE

Invokes the ISPF editor for editing the prerequisite column value. If ISPF edit changes the value, the resource's PREREQ column is updated and the new value is displayed on the primary SSM editor panel.

EDSYS

Invokes ISPF Edit for editing an alternate system list that can be awkward to edit using the resource panel display. (Available only when SSMGA columns are present).

EDGRP

Invokes ISPF Edit for editing a group list that can be awkward to edit using the resource panel display. (Available only when SSMGA columns are present).

FIND

Locates and displays the resource name specified in the command operand. If the name is followed by a trailing asterisk (*), the next highest resource name is displayed if the exact resource name cannot be found. If a higher resource name is not found, the first resource name is displayed.

NAMES

Displays the Resource Name Selection panel, from which you can select a resource name to edit.

NEXT

Displays the next highest resource name in the table. If a higher resource name is not found, the first resource name is displayed. This command can also be invoked by pressing the PF11 key.

PREREQ

Displays the status of any missing prerequisites for the resource. If issued for a resource with no missing prerequisites, then the list of all defined prerequisites is displayed.

PREVIOUS

Displays the previous resource name in the table. If the current resource is the first resource in the table, the last resource in the table is displayed. This command can also be invoked by pressing the PF10 key.

RESET

Clears all column data fields on the panel except the resource Name field.

STRUCTURE

Displays the RDF column definition structure of the resource table.

TABLES

Displays the Table Name Selection panel, from which you can select a resource table to edit.

All commands may have an optional operand with the value `table.name` or `name`. If specified, the operand values will replace the resource table name of the current panel, resource name, or both.

A resource is updated when a column of the currently displayed resource is changed; a command does not have to be entered. Since there is no table resource locking mechanism, the same table and resource can be updated concurrently. Column values are refreshed each time Enter is pressed.

The Resource Name Selection Panel

The Resource Name Selection panel, accessed using the NAMES primary command, is a tabular display of all resource names in a resource table. An example follows:

```
SSM Table Edit----- MSI1 -- O P S V I E W ----- Row 1 to 22 of 22
COMMAND ==>                                     SCROLL ==> CSR
                                                WAIT ==> 10
System: *          SSM Table: SSM_MANAGED_TBLS  Mode: INACTIVE
                  RES Table: DGTBL1           Mode: ACTIVE   TNG:
SEL Resource Name   Current Desired   Mode  Missing Prerequisites
-----
-   DG1             UNKNOWN UNKNOWN ACTIVE
-   DG100          UNKNOWN UNKNOWN ACTIVE
-   DG11           UNKNOWN UNKNOWN ACTIVE
-   DG12           UNKNOWN UNKNOWN ACTIVE
-   DG13           UNKNOWN UNKNOWN ACTIVE
-   DG14           UNKNOWN UNKNOWN ACTIVE
-   DG15           UNKNOWN UNKNOWN ACTIVE
-   DG16           UNKNOWN UNKNOWN ACTIVE
-   DG17           UNKNOWN UNKNOWN ACTIVE
-   DG18           UNKNOWN UNKNOWN ACTIVE
-   DG19           UNKNOWN UNKNOWN ACTIVE
-   DG2            UNKNOWN UNKNOWN ACTIVE
-   DG20           UNKNOWN UNKNOWN ACTIVE
-   DG22           UNKNOWN UNKNOWN ACTIVE
-   DG23           UNKNOWN UNKNOWN ACTIVE
-   DG24           UNKNOWN UNKNOWN ACTIVE
-   DG25           UNKNOWN UNKNOWN ACTIVE
-   DG26           UNKNOWN UNKNOWN ACTIVE
-   DG27           UNKNOWN UNKNOWN ACTIVE
-   DG28           UNKNOWN UNKNOWN ACTIVE
-   DG29           UNKNOWN UNKNOWN ACTIVE
-   DG3            UNKNOWN UNKNOWN ACTIVE
***** Bottom of data *****
```

To select a resource for display on the SSM Table Edit primary panel, type an S next to the desired resource name, and then press Enter.

Fields on the Resource Name Selection Panel

The fields on the Resource Name Selection panel are the same as those on the SSM Table Edit primary panel. For descriptions of the fields, see Fields on the SSM Table Edit Panel in this chapter.

Primary Commands for the Resource Name Selection Panel

Either of the following primary commands can be entered on the Resource Name Selection panel:

FIND name

Locates and displays the specified name or the next highest name.

LOCATE name

Locates and displays the specified name or the next highest name.

The Table Name Selection Panel

The Table Name Selection panel, accessed using the TABLES primary command, is a tabular display of all resource tables that meet the resource table column requirements specified by the value of the View field.

An example of the Table Name Selection panel appears next:

```

SSM Table Edit----- MSI1 -- O P S V I E W ----- Row 1 to 14 of 14
COMMAND ==>                                     SCROLL ==> CSR
                                                VIEW ==> ALL
System: *          SSM Table: SSM_MANAGED_TBLS  Mode: INACTIVE  WAIT ==> 10

SEL  Table Name      Type Status Cols Rows Mode Action Table      TNG
-----
-   ATMTETEDSIGM11   RES  IDLE  12   5
-   DASH_SEC_TST     RES  IDLE  12   0
-   DASH_SEC1_TST    RES  IDLE  12   1
-   DGTBL1           RES  INUSE  16  22  A  DGTBL_ACT
-   DGTBL2           RES  INUSE  10  25  A  DGTBL_ACT
-   DGTBL3           RES  INUSE  10  24  A  DGTBL_ACT
-   DGTBL4           RES  IDLE  10  24
-   DGTBL5           RES  IDLE  10   0
-   GRG_STCTBL      RES  IDLE  12  10
-   PLANETS         RES  IDLE  10   8
-   SAVE_XYZ        RES  IDLE  12  13
-   STCTBL          RES  IDLE  12 101
-   TESTZZ          RES  IDLE  19   4
-   XTABLE          RES  IDLE  13  96
***** Bottom of data *****

```

Fields on the Table Name Selection Panel

The fields on the Table Name Selection panel are primarily the same as those on the SSM Table Edit primary panel. For descriptions of the fields, see Fields on the SSM Table Edit Panel in this chapter.

The following describes the unique fields on the Table Name Selection panel:

View

Determines the type of information that is displayed. Values are:

- SSM-Display resource tables that are currently being logged by System State Manager.
- IDLE-Display resource tables that are not being managed by System State Manager.
- ALL-Display all resource tables.

Table Name

The resource table name.

Type

The value RES is always displayed for a resource table.

Status

The status of the table. Values are:

- INUSE-System State Manager is managing the table.
- IDLE-The table is not being managed by System State Manager.

Cols

The number of columns defined in the table.

Rows

The number of resources currently in the table.

Mode

For a table managed by System State Manager, the mode is displayed.

Action Table

For a table managed by System State Manager, the associated action table name is displayed.

TNG

For a table managed by System State Manager, the value of the TNGELIGIBLE column (Y or N) is displayed, if it exists.

To select a table for display on the SSM Table Edit primary panel, type an S next to the desired table name, and then press Enter.

Primary Commands for the Table Name Selection Panel

Either of the following primary commands can be entered on the Table Name Selection panel:

FIND table

Locates and displays the specified table name or the next highest table name.

LOCATE table

Locates and displays the specified table or the next highest table.

How to Generate a Relational Table of Started Tasks (Option 4.11.3)

To implement basic automation, OPSVIEW provides option 4.11.3, which is the CA OPS/MVS Snapshot utility. Use this option to create a table to store status information about started tasks (STCs) running on your system.

The Snapshot utility surveys your system and determines which started tasks are currently active, started at IPL, or both. It then creates a relational table that contains the control data for the started tasks. For details about relational tables and the Relational Data Framework, see the *Command and Function Reference*.

Access the System State Manager Snapshot Facility Panel

To run the Snapshot utility, you must access the System State Manager Snapshot Facility panel. To do so, you can either:

- Select option 3 from the System State Manager Menu panel
- Use the ISPF jump function by entering =4.11.3 into any valid field in OPSVIEW

As a result, you see a display similar to the following one:

```
SSM Snapshot----- XE44 -- O P S V I E W ----- Subsystem OPSX
COMMAND ==>
The Snapshot facility scans the current system for active started tasks and
creates a System State Manager table for them. This process may take several
minutes to complete. After the Snapshot table is built, the SQL table editor
will be invoked to allow you to view and customize the resulting table.

SNAPSHOT RULES DATASET:
Rules DSN ==> 'OPSDEV.0.CCLXRULM'                               (Required)

SNAPSHOT INPUT FROM PARMLIB MEMBER LOAD
SYSPARM ==> 00

STC IDENTIFICATION DATASET(S):
User DSN ==>                                                    (Opt)
CA DSN ==> 'OPSDEV.0.CCLXCNTL(SNAPDATA)'                       (Req)

SNAPSHOT OUTPUT:
Mode ==> A ( Add/Refresh/Update ) SSM0 Cols ==> N (Y/N)
Table Name ==> STCTBL SSM version ==> (Currently 2 only)
Enter SNAPSTART to BEGIN Snapshot, Press PF3 to EXIT without taking Snapshot
```

Fields on the System State Manager Snapshot Facility Panel

The fields on the System State Manager Snapshot Facility panel are as follows:

Rules DSN

The full name of the data set containing the SNAPRUL1 and SNAPRUL2 rules. The data set does not have to be a valid rules data set for the active CA OPS/MVS on the system. The rules are read from the specified PDS and installed using the *DYNAMIC rule set.

The SNAPRUL1 and SNAPRUL2 rules are provided in the OPS.CCLXRULM data set.

SYSPARM

The suffix list of IEASYSxx members of the system parmlib used to IPL the system. The IEASYSxx members locate other members that are relevant to system task initialization.

Use the OPSIPL REXX function to obtain the suffix, which is not modifiable.

User DSN

The full name of the data set that contains user-supplied started task data. Snapshot uses the data to determine the type of a started task to specify start and stop commands, and to override some Snapshot actions.

This field is optional. If you specify the name of a data set in this field, entries (identified by the TYPE parameter) in this data set override matching entries in the data set supplied by CA. See CA DSN below.

CA DSN

The full name of the data set that contains started task data supplied by CA. Snapshot uses the data to determine the type of a started task to specify start and stop commands, and to override some Snapshot actions.

The OPS.CCLXCNTL(SNAPDATA) member is on the CA OPS/MVS distribution media.

This field is required. Since the data in the OPS.CCLXCNTL(SNAPDATA) member is maintained by CA, do not modify it. Instead, you may copy any entries you want to modify into the User DSN (described above) and make the modifications there.

Mode

The mode in which you want Snapshot to execute. Values are:

- ADD-Adds started task data to an existing relational table without modifying any entries in the table.
- If the table you specify in the Table Name field does not exist, the Snapshot utility creates a new table and places all of the started task data it finds into the new table.
- REFRESH-Clears and rebuilds an existing relational table. (This is the same process that occurs when you specify a value of ADD, and the table in the Table Name field does not exist.)

- UPDATE-Modifies existing data in the table but does not add any new started tasks to the table.

SSM version

Specifies the SSM version to define required columns to. Currently, 2 is the only supported SSM version.

Table Name

The name of the relational table that is to contain the started task control data.

SSMO Cols

Specifies whether the required columns for the CA Network and Systems Management System Status Manager CA OPS/MVS Option product should be included when a new SSM resource table is created.

Start the Snapshot Process

Once all entries in all required fields have been made, enter the word SNAPSTART on the Command line to begin the Snapshot process. If you change your mind about taking a Snapshot, you can either press PF3 or enter the word CANCEL on the Command line to exit the Snapshot utility. However, once the Snapshot process has begun, you cannot cancel it. When you enter the SNAPSTART command, the Snapshot utility begins surveying the system. It may take several minutes for the Snapshot utility to finish creating the started task relational table.

When the process is complete, the Snapshot utility invokes the relational table editor so that you can view the table. Use the editor to make sure the data in your Snapshot table accurately represents the configuration of your system before turning over control of the table to System State Manager.

For information about accessing the relational table editor, see How to Access the CA OPS/MVS Relational Table Editor (Option 2.6) in the chapter “Using the OPSVIEW Control Option.” To learn how to place a table under the control of the System State Manager, see Fields on the SSM Control Panel in this chapter.

How to Manage Schedules of Resources (Option 4.11.4)

Use OPSVIEW option 4.11.4 to access the CA OPS/MVS Schedule Manager. The Schedule Manager enables you to schedule times when the System State Manager feature changes the states of system resources.

Access the Schedule Manager

To access the Schedule Manager, you can either:

- Select option 4 from the System State Manager Menu panel.
- Use the ISPF jump function by entering =4.11.4 into any valid field in OPSVIEW.

For a detailed chapter describing the Schedule Manager, see the *User Guide*.

How to Manage Groups of System State Manager Resources (Option 4.11.5)

Use OPSVIEW option 4.11.5 to access the CA OPS/MVS System State Manager Group Manager. The Group Manager lets you assign particular System State Manager resources to resource groups. The System State Manager maintains an overall status of a group through status definitions and priorities. The Group Manager selectively displays group statuses for monitored resources across multiple systems using color screen attributes and highlighting. An automatic monitoring mode is also provided.

Access the Group Manager

To access the Group Manager, you can either:

- Select option 5 from the System State Manager Menu panel.
- Use the ISPF jump function by entering =4.11.5 into any valid field in OPSVIEW.

For a detailed chapter describing the Group Manager, see the *User Guide*.

How to Use the Action Table Editor to Create and Maintain SSM Action Tables (Option 4.11.A)

The SSM action table editor is an alternative facility to the general-purpose RDF table editor for creating, modifying, viewing, deleting and copying SSM action tables as well as individual SSM actions.

This facility provides the following:

- A special editor for editing SSM action commands with panels for selecting action command keywords and SSM action variables
- The ability to check basic action command syntax to minimize potential syntax errors
- An enhanced cross-system copy facility for replicating action tables or individual actions on multiple systems

You can invoke the SSM action table editor from the SSM Menu Panel (Option 4.11), the SSM Control Panel (Option 4.11.1) using the AC line command, or by using the ISPF jump function by entering =4.11.2 into any valid field in OPSVIEW.

The SSM Action Table Panel

Upon entering the SSM action table editor using Option 4.11.A, the SSM action table panel displays. This panel displays information for all RDF tables whose column structure meets the requirements for an SSM action table.

```
SSM Actions -- CA11 ----- O P S V I E W ----- Subs Row 1 to 1 of 1
Command ==>                               Scroll ==> CSR

          VIEW Action Tables on System: *          Wait: 10  SSM Mode: ACTIVE

Sel Action Table Name  Ver Rows Stat Related SSM Resource Table List
-----
I=
-----
          SSMGAQA_ACT          2 0015 A  SSMGAQA1(A)
***** Bottom of data *****
```

Fields on the SSM Action Tables Panel

The fields on the SSM Action Tables panel are as follows:

VIEW

Displays the Action Editor command name that invoked this panel.

System

Displays the MSF ID of the system on which all action tables are being displayed. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

SSM mode

Displays the current global System State Manager mode.

I=

Includes action table filter criteria for the table fields displayed. The action table name may be a specific table name or a wildcard name using the characters '?' and '*' as single and multiple character wildcards respectively. The SSM version must be 2. Rows is the minimum number of rows in the table. Status must be I or A. The default filter value on entry to the display is STAT=A.

Table Name

Displays the RDF table name of the action table.

Ver

Displays the highest version of SSM met by the table's column structure.

Rows

Displays the number of rows in the action table

Stat

Displays the SSM status of the action table. Active (A) means the table is currently in use by System State Manager. Take extra caution when modifying an active table. Inactive (I) means action table is currently not in use by SSM.

Related SSM Resource Table List

For an active action table, displays the names and modes of the SSM resource tables that are using the action table. Obtain this information from the current SSM directory table.

You can sort the table in ascending sequence by any of the point-and-shoot enabled column titles or by the ISPF SORT command.

Line Commands for the SSM Action Tables Panel

To use a line command, enter it in the SEL column next to the action table name. The following line commands perform operations on SSM action tables.

?

Displays the line command selection panel. This panel lists all valid line commands and they are point-and-shoot enabled.

D

Deletes an action table. This command cannot delete active action tables until they are removed from active SSM use. Use OPSVIEW option 4.11.1 to remove the action table from active SSM status. A table delete confirmation panel is displayed to prevent inadvertent deletion of tables.

I

Inserts a new action table. The existing action table name on the row where the command is entered will be used as the column structure model for a new action table. A new panel displays to enter the new table name and options for the action text column. The options are preset and locked to the values of the model table. To change the options, erase the model table name.

S

Selects an action table in select mode. When another ISPF dialogue requires that an action table be selected, the panel title will say SELECT instead of VIEW and a message that indicates one or more action table names should be selected is displayed. Enter 'S' in the SEL column for each selected action table name. Hit PF3 when selection is complete. When not in select mode, the S command is the same as the V command.

V

Views the rows in the action table. A new panel, which displays the action selection keys and action text, displays in a tabular format. From this panel, enter line commands that act on an individual action row.

AI

Inserts a new action into the action table. The action text editor panel displays for insertion of the new action without any model action data.

AS

Simulates action selection for a resource. The action selection simulation panel provides the ability to validate which actions will be selected for a resource for any combination of process event, states, and action mode. Intermediate panels will request the selection of the resource table and resource name to simulate.

CO

Copies an action table to one or more systems. This command provides the ability to copy or merge an action table with an existing or new action table on multiple systems connected by MSF. Specification of the target table name, systems, and options is done on a pop-up panel.

OC

Adds the optional description and last update columns to the action table. A description and last update column are not part of the standard SSM action table structure but may be added for use by the action table editor in order to document and audit changes to the action table. SSM action processing ignores these columns.

TB

Browses an action table using the RDF table editor.

TC

Copies an action table using the RDF table editor. An additional panel displays in order to specify the target table name and system.

TE

Edits an action table using the RDF table editor.

TI

Inserts an action table using the RDF table editor. An additional panel displays for specifying the new table name and system. The current table name is set as the model table name for the new table.

TT

Transfers the rows of an action table using the RDF table editor. An additional panel displays in order to specify the target table name and system.

The SSM Actions Panel

Invoke this panel from the SSM Action Tables panel using the S or V line commands to display all of the action table rows in a tabular format. Line commands are provided to accommodate a variety of operations such as browsing, creating, copying, deleting, and editing individual action rows.

```
SSM Actions -- CA31 ----- O P S V I E W ----- Row 1 to 5 of 15
Command ==>                                     Scroll ==> CSR

          VIEW Actions on System: *           Wait: 10
          Action Table: SSMGAQA_ACT           Ver: 2 Len: 450 UC

Sel Process  Current  Desired  Actmode  Resource Table  Resource Name/Type
-----
I=
-----
ACTION  DOWN  UP
MVSCMD("START OPSMISC8, JOBNAME=&JOBNAME")
-----
ACTION  DOWN  UP      MONITOR
MVSCMD("D A, &JOBNAME")
-----
ACTION  UNKNOWN
RULE("SSMGASTA &SSM!RESNAME JOBNAME(&JOBNAME) TYPE(&TYPE) DESIRED(&DESIRED_
STATE)")
-----
ACTION  UP      DOWN
MVSCMD("STOP &JOBNAME")
-----
ACTION  UP      DOWN  MONITOR
MVSCMD("D A, &JOBNAME")
-----
```

Fields on the SSM Actions Panel

The fields on the SSM Actions panel are as follows:

VIEW

Displays the Action Editor command name that invoked this panel.

System

Displays the MSF ID of the system on which the action table resides. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

Action Table

Displays the name of the action table that is being displayed. Select a new action table by typing in the name or entering a '?' to select a new action table from the Action Tables display.

Ver

Displays the highest version of SSM met by the table's column structure.

Len

Displays the maximum length of any action text that may entered for this table. If the characters UC appear after the length, then all action text will be in upper case.

I=

Includes the display filter criteria for the key fields of the action table rows displayed. Since all the action table keys are character strings, any filter value may be a specific or a wildcard value using the characters '?' and '*' as single and multiple character wildcards respectively. The SSM process event name and the action mode are only significant for SSM versions greater than 1.

The first line of each table entry shows the values of the action table primary key columns. The second and third lines contain the action text up to the limits of the display width. Use the line commands to view the complete action text.

Line Commands for the SSM Actions Panel

To use a line command, enter it in the SEL column next to the action process name. The following line commands perform operations on SSM actions.

? -

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

D

Deletes an action with confirmation. A delete confirmation panel is displayed. If PF3 is entered, the action delete is cancelled. Hitting ENTER deletes the action.

I

Inserts a new action using the action text editor. The existing action on the row where the command is entered will be used as model for the new action. The action text editor panel displays for modifying the action keys and text.

S

Selects an action in select mode. When another ISPF dialogue requires that an action be selected, the panel title will say SELECT instead of VIEW and a message that indicates one or more actions should be selected will be displayed. Enter 'S' in the SEL column for each selected action. Hit PF3 when selection is complete. When not in select mode, the S command is the same as the V command.

V

Views the action in the action text editor. A new panel displays showing the action selection keys and action text. You cannot modify the action keys. The action text may be modified as desired. Changing the action keys of an existing action must be done by inserting a new action using the current action as model followed by a delete of the replaced action. When an action is updated in VIEW mode, an update confirmation panel is displayed.

B

Browses the action in the action text editor. A new panel, which displays the action selection keys and action text, is displayed. No modifications may be made. The full text of a long action will be visible.

E

Edits the action in the action text editor. The edit command has the same functionality as View but bypasses the update confirmation.

BI

Browses the action text using the ISPF browse facility. No changes may be made to the action text.

EI

Edits the action text using the ISPF edit facility. If the action text changes, the action is updated.

AI

Inserts a new action into the action table. The action text editor panel will be displayed for insertion of the new action without any model action data.

CO

Copies an action to one or more systems. This command provides the ability to copy or merge an action with an existing or new action table on multiple systems connected by MSF. Specification of the target table, systems, and options is done on a pop-up panel.

The table may sorted in ascending sequence by any of the point-and-shoot enabled column titles or by the ISPF SORT command.

The SSM Action Text Panel

Invoke this panel from the SSM Actions panel. Use the S, V, B, E, I, or AI line commands to display, create, or modify a specific action. The action text column is parsed and each individual action command keyword is separately displayed in a table area. Line commands are provided to provide a variety of operations such as editing, browsing, deleting, inserting, and re-sequencing the action text commands.

```

SSM Actions --- CA31 ----- O P S V I E W ----- Row 1 to 2 of 2
Command ==>                               Scroll ==> CSR

          VIEW Action Text on System: *          Wait: 10
          Action Table: SSMGAQA_ACT             Ver: 2 Len: 450 UC

Process  Current  Desired  Actmode  Resource Table      Resource Name/Type
-----
MATCH   DOWN     DOWN     CYCLE

Description: N/A
Last Update: N/A
----- Action Commands -----
Sel  Command  Command Parameter List
-----
      SETCOL  "ACTMODE,ACTIVE"

-----
      SETCOL  "DESIRED_STATE,&UP_STATE"
-----
    
```

Fields on the SSM Action Text Panel

The SSM Action Text panel contains the following fields:

VIEW

Displays the action editor command name that invoked this panel.

System

Displays the MSF ID of the system on which the action table resides. '*' means the local system. The system name may not be changed on this panel.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

Action Table

Displays the name of the action table that contains the action being displayed. The action table may not be changed from this panel.

Ver

Displays the highest version of SSM met by the table's column structure.

Len

Displays the maximum length of any action text that may entered for this table. If the characters UC appear after the length, then all action text will be in upper case.

Process

Displays the SSM process event name that invokes this action. The most common value is ACTION. An explanation of process event names is available by placing the cursor on the word PROCESS and hitting PF1. This field and all other action key columns may not be modified except during an INSERT command. In INSERT mode, a process event name may be selected from a list by entering a '?' in this field.

Current

Displays the required current state value for this action.

Desired

Displays the required desired state value for this action.

Actmode

Displays the required action mode value for this action.

Resource Table

Displays the required SSM resource table name for this action.

Resource Name/Type

The required resource name or optional type column value for this action.

Description

Displays the description of the purpose of the action. N/A is displayed if the description column does not exist in this action table.

Last Update

Displays the date, time and user information of the last update to this action using the action editor. N/A displays if the last update column does not exist in this table.

The first line of each table entry contains the action command keyword followed by the keyword operand text. The parentheses that normally enclose the operand text are omitted. The subsequent lines contain the remainder of the operand text. The text may be overtyped as required and new text may be added on any empty line. A basic matching quotes and parentheses check is performed before the text is updated.

A '?' may be entered in the action command field to select a new action command keyword from a descriptive list.

You can use the CANCEL primary command to exit this panel without any changes to the action text. Otherwise, the END command updates the action if any changes were made.

Line Commands for the SSM Action Text Panel

To use a line command, enter it in the SEL column next to the action command keyword. The following line commands perform operations on the SSM action text.

?

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

D

Deletes an action command. No confirmation is requested.

I

Inserts a new action command after the current command.

IB

Inserts the new action command before the current action command.

R

Repeats the current action command as a new action command that follows the current action command.

SW

Swaps the contents of the current action command with the contents of the next action command. Nothing is swapped if the last action command is the current entry.

S

Selects an action command in select mode. When another ISPF dialogue requires that an action command be selected, the panel title will say SELECT instead of VIEW and a message that indicates one or more actions should be selected will be displayed. Enter 'S' in the SEL column for each selected action. Hit PF3 when selection is complete. When not in select mode, the S command is the same as the E command.

B

Browses the action command in the action command editor. No modifications to the action command may be made. The full text of a very long action will be visible.

E

Edits the action command in the action command editor. The action command editor offers additional text editing commands and assistance with SSM variable insertion.

BI

Browses the action command using the ISPF browse facility. No changes may be made to the action command.

EI

Edits an action command using the ISPF edit facility. If the action command is changed, the action command editor panel is updated with the new command text.

The SSM Action Command Editor Panel

Invoke this panel from the SSM Action Text panel using the B or E line command for the purpose of displaying, creating, or modifying a specific action command. The action command keyword operand text is parsed into REXX words and each word is displayed on a separate text line. The reconstructed view of the action command text continuously displays. The spacious tabular layout of the text makes it easy to modify the command text units as required. Line commands are provided to provide a variety of text operations such as deleting and inserting text, splitting and joining text lines, and inserting valid SSM built-in and resource table column variables. The altered action command text is returned to the action text panel on exit.

```

SSM Actions -- CA31 ----- O P S V I E W ----- Row 1 to 5 of 5
Command ==>

          EDIT Action Command on System: *          Wait: 10
          Action Table : SSMGAQA_ACT              Ver: 2 Len: 450 UC
-----
Process  Current  Desired  Actmode  Resource Table  Resource Name/Type
-----
ACTION   UNKNOWN
----- Action Command -----
RULE     "SSMGASTA &SSM!RESNAME JOBNAME(&JOBNAME) TYPE(&TYPE) DESIRED(&DESIRED
_STATE)"

Sel Text Unit ----- Cont
"SSMGASTA
&SSM!RESNAME
JOBNAME(&JOBNAME)
TYPE(&TYPE)
DESIRED(&DESIRED_STATE)"
***** Bottom of data *****
    
```

Fields on the SSM Action Command Editor Panel

The SSM Action Command Editor panel contains the following fields:

EDIT

Displays the action command editor command name that invoked this panel.

System

Displays the MSF ID of the system on which the action table resides. '*' means the local system. The system name may not be changed on this panel.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

Action Table

Displays the name of the action table that contains the action being displayed. The action table may not be changed from this panel.

Ver

Displays the highest version of SSM met by the table's column structure.

Len

Displays the maximum length of any action text entered for this table. If the characters UC appear after the length, then all action text is in upper case.

Process

Displays the SSM process event name that invokes this action.

Current

Displays the required current state value for this action to be selected.

Desired

Displays the required desired state value for this action to be selected.

Actmode

Displays the required action mode value for this action to be selected.

Resource Table

Displays the required SSM resource table name for this action to be selected.

Resource Name/Type

Displays the required resource name or optional type column value for this action to be selected.

Action Command

Displays the action command keyword followed by the reconstructed action keyword operand text that has been reconstructed from the text units displayed in table portion of the panel.

The text unit portion of the display is initially populated by parsing the text into REXX words. Thereafter, formatting is controlled by line commands and data entry. The CONT (continue) column may be a blank or '+' sign. The '+' indicates that the text is continued on the next text line without an intervening blank. Otherwise, the text is reconstructed by appending each text unit line to the previous line separated by a single blank. Trailing blanks are removed from each line and blank lines are ignored.

You can use the CANCEL primary command to exit this panel without any changes to the action command text. Otherwise, the END command will return the modified action command to the action text panel.

Line Commands for the SSM Action Command Editor Panel

To use a line command, enter it in the SEL column next to the action command keyword. The following line commands perform operations on the SSM action text units.

?

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

D

Deletes an action text unit command. No confirmation is requested.

I

Inserts a new action text unit blank line after the current line.

IB

Inserts the new action text unit line before the current line.

IV

Inserts an SSM built-in variable name or resource table column name at the point in the text unit line where the cursor is positioned. A popup panel is displayed for selection of a valid variable or column name that is appropriate for the SSM process event name of the action. The resource table name used for column names may also be selected on this panel.

R

Repeats the current action text unit as a new line after the current line.

SP

Changes multiple blanks between text to a single blank. This command provides the correction for data entry of new text anywhere on the line.

TS

Splits the line of text at the cursor position onto a new line.

TJ

Joins the text of the current and following line.

LC

Converts the text of the line to lower case from the current cursor position to the end of the line. This command is ignored if the action text column is defined as upper case only.

UC

Converts the text of the line to upper case from the current cursor position to the end of the line.

The SSM Resource Action Selection Panel

Invoked this panel from the Action Tables panel or from the OPSVIEW 4.11.2 Resource Status Monitor using the AS line command. The purpose of this panel is to simulate the action selection process of the SSM engine for a specific resource. You can vary the process name, current and desired state, and action mode of the resource to insure that the correct action will execute for each resource state combination. This panel never updates the resource table. The provided Line commands set the resource process name and states to the most common values such as starting and stopping the resource. In addition, invoke the action text editor to view or edit the selected action or to insert a new action.

```
SSM Resources -- CA31 ----- O P S V I E W ----- Row 1 to 1 of 1
Command ==>                               Scroll ==> CSR

      VIEW Resource Action Selection on System: *      Wait: 10
      Resource Table: SSMGAQA1          Ver: 2
      Action Table : SSMGAQA_ACT       Ver: 2
      State Names Up: UP              Down: DOWN      Unknown: UNKNOWN
      Resource Name : CICSTOR          Type: QAMOVE

Sel Process  Current  Desired  Actmode  Resource Table  Resource Name/Type
-----
ACTION      DOWN     UP       CYCLE    SSMGAQA1        CICSTOR
-----
ACTION      DOWN     UP
=> MVSCMD("START OPSMISC8, JOBNAME=&JOBNAME")

-----
***** Bottom of data *****
```

Fields on the SSM Resource Action Selection Panel

The fields of the SSM Resource Action Selection panel are as follows:

View

Displays the resource action selection command name that invoked this panel.

System

Displays the MSF ID of the system on which the resource and action tables reside. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

Resource Table

Displays the name of the SSM resource table that contains the resource name that is being used for the simulation. Enter a '?' in this field to select a new resource table or type in a resource table name.

Ver

Displays the highest version of SSM met by the resource table's column structure.

Action Table

Displays the name of the action table used to simulate action selection for the resource. Enter a '?' in this field to select a new action table or type in an action table name.

Ver

Displays the highest version of SSM met by the action table's column structure.

State Names

Displays the names of the up, down, and unknown states of the associated resource table when it is active in SSM. If the table is already active, these values are set to the SSM directory table values. Otherwise they default to UP, DOWN, and UNKNOWN. Change the values at anytime by typing in new values.

Resource Name

Displays the name of the SSM resource that exists in the resource table specified. Enter a '?' in this field to select a new resource or type in a resource name.

Type

Displays the value of the optional SSM type column for the resource, if it exists. Enter a new value by overtyping this field.

Process

Displays the SSM process event name to simulate or blank. When blank, any process name that could be selected if a valid process name was supplied is displayed but no action selection arrow is displayed.

Current

Displays the current state value of the resource or blank.

Desired

Displays the desired state value of the resource or blank.

Actmode

Displays the action mode value of the resource or blank.

Resource Table

Displays the required SSM resource table name for the specific action you can select. When blank, this value is always set to the resource table name. This insures that any table name specific action is always selected over a more generic action with no table name affinity. Start and stop commands are the most common table name specific actions.

Resource Name/Type

Displays the SSM resource name or optional type column value for the most specific action to be selected. When blank, this value is always set to the resource name. This insures that any resource name or type specific action will always be selected over a more generic action with no resource or type name affinity. Start and stop commands are the most common resource name and type specific actions.

The tabular portion of the display shows all actions that were considered for selection based on the values entered for the process name and resource states. The action table key values and action text are displayed for each action that was considered for selection. If the resource data was sufficiently complete to select a specific action for execution, a highlighted arrow, '==>', appears next to action text of the selected action. A specific selected action must always match on process name. If the process name is ACTION, the current state must also match the resource value.

Line Commands for the SSM Resource Action Selection Panel

Line commands for this panel have two categories, action text line commands and resource data commands.

- Action text line commands

Enter the action text line commands next to the action text in the table portion of the display. The valid commands are:

?

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

V

Views the action using the action text editor.

S

Same as the V command.

E

Edits the action using the action text editor.

I

Inserts a new action using the action text editor with the current action as a model for the new action.

IA

Inserts a new action using the action text editor without a model action.

B

Browses the action using the action text editor

- Resource data line commands

Enter in the SEL field of the resource data line just under the column name headings. The valid commands are:

?

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

ACT

Sets the process name to ACTION.

ALL

Shows all possible actions for this resource. The process name, states, and action mode are set to blank. Only actions with specific table names or resource names that do not match the current resource values are excluded.

CLE

Clears the current state, desired state, and action mode resource data fields.

CUR

Sets the process name to ACTION and set the states and action mode to the current resource values.

MAT

Sets process name to MATCH and the current state equal to the desired state. If the desired state is blank, set the desired state to the current state.

SEL

Sets the process name to SELECT.

STA

Sets the process name and states to the resource START action. Process name is set to ACTION, the current state to the down state, and the desired state to the up state.

STO

Sets the process name and states to the resource STOP action. Process name is set to ACTION, the current state to the up state, and the desired state to the down state.

UNK

Sets the process name and states to the resource UNKNOWN action. Process name is set to ACTION and the current state to the unknown state.

XPR

Sets the process name to XPREREQ, the current state to the down state, and the desired state to the up state.

XSU

Sets the process name to XSUBREQ, the current state to the up state, and the desired state to the down state.

MPR

Sets the process name to MPREREQ, the current state to the down state, and the desired state to the up state.

MSU

Sets the process name to MSUBREQ, the current state to the up state, and the desired state to the down state.

UU

Sets the current state and desired state to the up state.

DD

Sets the current state and desired state to the down state.

UD

Sets the current state to the up state and the desired state to the down state.

DU

Sets the current state to the down state and the desired state to the up state.

How to View SSMGA Resources Information (Option 4.11.G)

OPSVIEW option 4.11.G lets you view resource information contained in the global status table for an SSMplex managed by the SSM Global Application (SSMGA). Like option 4.11.2, this option displays resource information in a tabular format and provides a timed automatic monitoring mode.

Using this option, you can do the following:

- Limit the display through filtering criteria
- Modify the basic resource columns
- Use the provided line commands to start, stop, and move resources

The advantage of this application is that you can simultaneously display all resources from all systems in the SSMplex using a single source of information.

Invoke the SSMGA resource status display from the System State Manager Menu Panel (option 4.11) by selecting option G or by using the ISPF jump function by entering =4.11.G into any valid field in OPSVIEW.

Important: Resources defined to Schedule Manager cannot be defined as movable resources to SSMGA.

The SSMGA Resource Status Panels

Upon entering the SSMGA Resource Status application using option 4.11.G, the primary resource status panel displays. The SSMplex name will default to the SSMplex name of the current system if one exists. Otherwise, the SSMplex name must be entered manually or a '?' command in the SSMplex name field must be used to select a valid SSMplex name.

```

SSMGA Resource Status 1 -- XX11 -- O P S V I E W ----- Row 1 to 12 of 15
Command ==>
Date/Time: 2011/03/18 16:21                               Filtered: N   View ==> ALL
SSMplex: TESTGM   System: CA11.X   Sysplex: PLEXC1   Wait ==> 30
Disp: B (B/V/E)   SSM              States/Systems   Resource Modes
Cm Resource Name  System    Current    Desired    Res Pre Ref Sch Action
-----
CICSAOR          XX11.X   DOWN      DOWN      A  A  A  A  ACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
CICSTOR          XX11.X   DOWN      DOWN      A  A  A  A  ACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
DB2              XX11.X   DOWN      DOWN      A  A  A  A  ACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
JES2             XX11.X   DOWN      DOWN      A  A  A  I  ACTIVE
TCPIP            XX11.X   DOWN      DOWN      A  A  A  I  ACTIVE
VTAM             XX11.X   DOWN      DOWN      A  A  A  I  ACTIVE
WEBCLIENT       XX11.X   DOWN      DOWN      A  A  A  I  ACTIVE
CICSAOR          XX22.X   DOWN      DOWN      A  A  A  A  INACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
CICSTOR          XX22.X   DOWN      DOWN      A  A  A  A  INACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
DB2              XX22.X   DOWN      DOWN      A  A  A  A  INACTIVE
Movable          XX11.X   XX11.X    XX11.X    Eff A Mov AUTO
JES2             XX22.X   DOWN      DOWN      A  A  A  I  ACTIVE
TCPIP            XX22.X   DOWN      DOWN      A  A  A  I  ACTIVE
Movable          XX22.X   XX22.X    XX22.X    Eff A Mov INACTIVE
    
```

The PF10 and PF11 keys scroll the display left and right to display additional resource information. Pressing the PF11 key the first time displays this panel:

```

SSMGA Resource Status 2 -- XX11 -- O P S V I E W ----- Data unchanged
Command ==>
Date/Time: 2011/03/18 16:21                               Filtered: N   Scroll ==> CSR
SSMplex: TESTGM System: XX11.X Sysplex: PLEXC1           View ==> ALL
Disp: B (B/V/E) SSM Primary                               Wait ==> 30
Cm Resource Name System System Table Name Resource Type
-----
CICSAOR XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
CICSTOR XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
DB2 XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
JES2 XX11.X XX11.X SSMGAQA1 QAFIX
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
TCP/IP XX11.X CA31.X SSMGAQA1 QAFIX
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
VTAM XX11.X XX11.X SSMGAQA1 QAFIX
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
WEBCLIENT XX11.X XX11.X SSMGAQA1 QAFIX
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
WEBSERVER XX11.X XX11.X SSMGAQA2 QASERVER
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
CICSAOR XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
CICSTOR XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
DB2 XX11.X XX11.X SSMGAQA1 QAMOVE
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
JES2 XX11.X XX11.X SSMGAQA1 QAFIX
SSMGAR21 STOPPED 14:07:00 0.SSMGARES XX11
    
```

Press the PF11 key the second time to display this third and final panel:

```
SSMGA Resource Status 3 -- XX11 -- O P S V I E W ----- Data unchanged
Command ==>
Date/Time: 2011/03/18 16:21                               Filtered: N   Scroll ==> CSR
SSMplex: TESTGM   System: XX11.X   Sysplex: PLEXC1   View ==> ALL
Disp: B (B/V/E)   SSM               Wait ==> 30
Cm Resource Name   System   Group names (two lines)
-----
CICSAOR           XX11.X   CICSPROD
CICSTOR           XX11.X   CICSPROD
DB2               XX11.X   CICSPROD DB2
JES2              XX11.X   SYSTEM
TCP/IP            XX11.X   SYSTEM COMM
VTAM              XX11.X   SYSTEM COMM
WEBCLIENT         XX11.X   WEB
WEBSERVER         XX11.X   WEB
CICSAOR           XX11.X   CICSPROD
CICSTOR           XX11.X   CICSPROD
DB2               XX11.X   CICSPROD DB2
JES2              XX11.X   SYSTEM
```

Pressing PF11 again displays the first resource information panel again. The PF10 key operates in the same cyclical manner in the reverse direction.

How to Enter Filter Criteria on the SSM Resource Status Panel

The SSMGA Resource Status panel lets you view all resources monitored by the SSMGA global system. You can manage a large number of resources using filters to create a subset of resources, which include only the type of resources that you want to see.

To set the filter criteria for the resource display, enter the FILTER primary command on the command line or place your cursor under the Filtered field and press Enter. The SSMGA Resource Filters entry panel displays and it contains the current filter criteria entered or retrieved from your ISPF profile.

The filter criteria that you specify can relate to any of the fields that appear on the SSMGA Resource Status panel. For example, if you want to view only those resources with values of UP in their Current State fields, specify UP in the Current State field.

For non-fixed value fields, you can specify any character string as a filter and use the wildcard characters ? and * for wildcard matches. For example, to list all resources whose names are four characters long and begin with the prefix STC, specify STC? as your filter. To list all resources whose names begin with the prefix STC, specify STC* as your filter.

For non-fixed value filters, you may enter multiple values in the input field if space permits. The following operators may also be used:

- = Equal, or in a list
- \= Not equal, or not in a list
- < Less than
- <= Less than or equal
- > Greater than
- >= Greater than or equal
- @ Within a string
- \@ Not within a string

For example, use \=ACTIVE to select resources where the value of the specified field is not equal to ACTIVE. You may specify a list of values for an IN or NOT IN select clause. Enclose the list inside of parentheses () with an = or \= operator in front of the list. For example, use =(PASSIVE NOPREREQ) to select resources where the value of the specified field is equal to PASSIVE or NOPREREQ.

All of the criteria including the View mode must be true for a particular resource for that resource to appear on the display. Following is a sample SSMGA Resource Filters panel:

```

Command ==>
SSMGA Resource Filters
----- Systems ----- States -----
System name format is: sysname.subsys | View : ALL (Exc/All)
SSM : | Current :
Primary : | Desired :
Current : |
Desired : |
----- Names ----- Modes -----
Table : | Resource :
Resource: | Prereq :
Type : | Reference:
Group : | Action : ACTIVE
| Move :
| Schedule :
----- Conditions -----
Current sys <> Desired sys: (Y/N) Movable and Active: (Y/N)

```

Fields on the SSM Resource Status Panel

The following describes the fields on the SSM Resource Status panel:

System

For cross-system SQL functions, the name of the remote system, or an asterisk (*) to denote the local system. To select a system from a list of remote systems, enter a question mark (?) in the System field.

SSM Mode

The global processing mode of System State Manager for all monitored resources. The value in this field is the same as the value of the STATEMAN parameter.

Version

The version of System State Manager that is currently defined in the SSMVERSION parameter. Currently, 2 is the only supported version of SSM.

Filtered

Either YES or NO indicating whether filter criteria other than view mode are being used to reduce the number of resources displayed. Filtered is also an ISPF point and shoot field that can be used to issue the FILTER primary command to change the filter criteria.

View

Either ALL or EXCEPTION. The ALL mode causes all resources in a table to be displayed and the EXCEPTION mode causes only those resources whose current and desired states do not match to be displayed. Using EXCEPTION mode results in better performance, because less data displays.

Wait

The number of seconds to wait for remote SQL responses.

Disp

The resource data display mode protects or allows the type over of resource data. The default value is E unless OPSView 0.1 is used to change the default.

B

Browse prohibits all type over changes

V

View allows type over changes with verification

E

Unrestricted type over changes.

Status

A red E or a yellow W when various conditions such as missing prerequisites are detected for a resource. The condition detected is noted in the message field.

Resource Name

The name of the resource.

Current State

The current state of the resource.

Desired State

The desired state of the resource.

Res Mode

The processing mode of the resource. Valid values are ACTIVE, INACTIVE, PASSIVE, and NOPREREQ. If you are unfamiliar with these processing modes, see their description in the *User Guide*.

Pre Mode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite mode controls whether System State Manager performs full, partial, or no prerequisite checking for this resource.

Ref Mode

The processing mode of the resource. Valid values are ACTIVE, PREREQ, SUBREQ, and INACTIVE. The prerequisite reference mode controls whether this resource can be used as a prerequisite by other resources. Full, partial, or no prerequisite referencing can be specified. If you specify no prerequisite referencing, then System State Manager ignores the reference.

Tng Mode

Either ALWAYS or NEVER. This optional mode controls whether the resource may be displayed on a CA NSM workstation that is running the CA Network and Systems Management System Status Manager CA OPS/MVS Option product.

Action Mode

Any value used for selecting alternate actions. The action mode is a user-designated mode value that can be used to select alternate System State Manager actions for the same state combinations, such as a hot or cold start for JES2.

Message

A value indicating that a warning situation exists for the resource. Values are:

- S=mode-The System State Manager mode is INACTIVE or PASSIVE
- T=mode-The table mode of the resource is INACTIVE or PASSIVE
- R=mode-The resource mode is INACTIVE or PASSIVE
- MPREREQ-The resource has missing prerequisites. Use the P line command to display the status of the missing prerequisites.
- R=MONITOR-Stop or start is being attempted for a resource where the action mode is MONITOR.
- Action Req-The resource is waiting for an action to be taken before starting or stopping
- Transition-The resource is in the process of stopping or starting
- Exception-The current and desired states of the resource do not match
- SSMGA CNTL-The resource's action mode is INACTIVE because it is a movable resource not currently on this system

If multiple warnings exist for a resource, the highest-level warning appears in the Message field.

Resource Type

The type of the resource. A value of UNKNOWN means that System State Manager could not identify the product or subsystem type of the resource, meaning that you probably need to create a rules packet for the subsystem.

Table Name

The name of the resource table to which this resource belongs.

Tbl Mode

The processing mode of the resource table. Valid values are ACTIVE, INACTIVE, NOPREREQ, and PASSIVE. The most restrictive processing mode of System State Manager, resource table, and resource mode is the effective mode of the resource.

Line Commands for the SSMGA Resource Status Panels

Use the following line commands to perform operations on SSMGA resources. To use a line command, enter it in the 'Cm' column next to the resource name.

?

Displays the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

MG

Moves a named group of resources to an eligible system within the SSMplex. This line command may only be issued for movable resources with a group name. If the resource belongs to more than one group, you are asked to choose one, and only one, group name from a list. This command operates asynchronously, and does not respond to the user's screen. The response from MG can be found in the OPSLOG, message ID SSMGA200.

MO

Moves a movable resource to an eligible system in the SSMplex. You can only issue this line command for movable resources with one or more alternate systems. A new panel with the eligible system names displays. If a new system is selected, the resource's desired system is changed to the selected system. If required, the resource is stopped on the current system and restarted on the desired system.

P

Displays the missing or defined prerequisite resources for the selected resource. When no missing prerequisites exist, all the defined prerequisites are displayed.

S

Starts the selected resource by changing its desired state to the UP state.

U

Sets the current state to the UNKNOWN state in order to determine the correct current state of the resource.

Z

Stops the selected resource by changing its desired state to the DOWN state.

In addition to the resource line commands, the following commands may be entered in the SSMplex name field for selecting an SSMplex connected to the system running the resource status display.

?

Displays the SSMplex global systems that are connected to this system and selects an SSMplex name for resource status display.

??

Displays all of the SSMGA systems that are connected to this system and selects an SSMplex name for the resource status display.

Primary Commands for the SSMGA Resource Status Panel

There are a few primary commands you can issue from the SSMGA Resource Status panel. Enter primary commands in the Command field.

AUTO *nn*

Places the panel in automatic refresh mode. The value of *nn* indicates how many seconds CA OPS/MVS waits before refreshing the panel. The minimum value of *nn* is 5; the maximum is 600.

Default: 60 seconds

Typically, you should place the panel in automatic refresh mode only if you set the View field to EXC. To exit from automatic refresh mode, press the ATTENTION key.

CANcel

Ignores any updates or line commands entered on the panel and reconstructs the display with the current resource data.

FILter

Displays the SSMGA Resource Filters panel to change the filter values that limit which resources are displayed. You can also invoke this command by placing the cursor under the Filtered field near the top of the panel and pressing Enter.

VERGBL

Validates resource synchronization of the GST with the LST on each system in the SSMGA complex. Also validates the SSMGA resource content of each LST. VERGBL can be run on any system. However, if not run on the SSMGA GLOBAL system, it can only validate systems connected to the current system.

VERMOV

Diagnoses any problems with movable resources. Also identifies any outstanding SSMGA WTORS that should be responded to. VERMOV can be run on any system. However, for faster performance it should be run on the SSMGA global system.

VERSYS *sysname.subsys*

Validates the SSMGA setup. The *sysname.subsys* value indicates the SSMGA system on which to run the validation. A value of * in the first position indicates local/current system. A value of * in the second position indicates local/current subsystem.

Default: *.*

How to Use the Resource Editor to Create and Maintain SSM Resource Tables (Option 4.11.R)

Use OPSVIEW option 4.11.R to access the CA OPS/MVS System State Manager Resource Editor. The SSM resource editor provides an alternative facility to the general-purpose RDF table editor for creating, modifying, viewing, deleting and copying SSM resource tables well as individual SSM resources. You can edit resources with either the SSM table editor or a simple resource column editor. The SSM resource editor also provides an enhanced cross-system copy facility for replicating resource tables or individual resources on multiple systems.

You can invoke the SSM resource editor from the System State Manager Menu Panel (Option 4.11) or by using the ISPF jump function by entering =4.11.R into any valid field in OPSVIEW.

The Resource Tables Panel

Upon entering the resource editor using Option 4.11.R, the resource tables panel displays. This panel displays information for all RDF tables whose column structure meets the requirements for an SSM resource table. The filter value is initially set to display only active SSM resource tables.

```

SSM Resources -- CA31 ----- O P S V I E W ----- Row 1 to 2 of 2
Command ==>                               Scroll ==> CSR

          VIEW Resource Tables on System: *          Wait: 10 SSM Mode: ACTIVE

Sel Resource Table      Ver Stat Mode Rows Cols Action Table      SSMO Type
-----
I=                      A
-----
SSMGAQA1                2  A  A  0007 025 SSMGAQA_ACT              Y  Y
SSMGAQA2                2  A  A  0001 025 SSMGAQA_ACT              Y  Y
***** Bottom of data *****
    
```

Fields on the Resource Tables Panel

The following fields appear on the Resource Tables panel:

VIEW

The Resource Editor command name that invoked this panel.

System

The MSF ID of the system on which all resource tables are being displayed. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Wait

The maximum number of seconds to wait for a cross-system response (1-300).

SSM mode

The current global System State Manager mode.

I=

The 'include' line is used to enter resource table filter criteria for the table fields displayed. The resource table name may be a specific table name or a wildcard name using the characters '?' and '*' as single and multiple character wildcards respectively. The SSM version must be 2. Rows is the minimum number of rows in the table. Status must be I or A. The default filter value on entry to the display is STAT=A.

Table Name

The RDF table name of the action table.

Ver

The highest version of SSM met by the table's column structure.

Stat

The SSM status of the resource. Active (A) means the table is currently in use by System State Manager. Extra caution should be taken when modifying an active table. Inactive (I) means the resource table is currently not in use by SSM.

Mode

The SSM table mode of an active resource table. The table mode is defined in the SSM directory table and is one of following values:

A(ctive), I(nactive), P(assive), or N(oprereq).

Inactive status resource tables have no SSM table mode value.

Rows

The number of rows in the resource table.

Cols

The number of columns in the resource table.

Action Table

The associated action table name. An active SSM resource table will normally have an associated SSM action table that is defined in the SSM directory table. An inactive resource table does not have an action table association.

SSMO

A Y(es) or N(o) indicator of whether the SSM columns required for the optional SSMO product feature exist in the resource table.

TYPE

A Y(es) or N(o) indicator of whether the SSM optional TYPE column exists in the table.

The table may be sorted in ascending sequence by any of the point-and-shoot enabled column titles or by the ISPF SORT command.

Line Commands for the Resource Tables Panel

You can use the following line commands to perform operations on SSM resource tables. To use a line command, enter it in the SEL column next to the resource table name.

?

Display the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

D

Delete a resource table. Active resource tables cannot be deleted with this command until they are removed from active SSM use. Use OPSVIEW option 4.11.1 to remove the resource table from active SSM status. A table delete confirmation panel is displayed to prevent inadvertent deletion of tables.

S

Select a resource table in select mode. When another ISPF dialogue requires that a resource table be selected, the panel title will say SELECT instead of VIEW and a message that indicates one or more resource table names should be selected will be displayed. Enter 'S' in the SEL column for each selected resource table name. Hit PF3 when selection is complete. When not in select mode, the S command is the same as the V command.

V

View the rows in the resource table. A new panel which displays the resource name, states, and modes is displayed in a tabular format. Line commands that act on an individual resource row may be entered from this panel.

AS

Simulate action selection for a resource. The action selection simulation panel provides the ability to validate which actions will be selected for a resource for any combination of process event, states, and action mode. Intermediate panels will request the selection of the action table and resource name to simulate.

CL

Display the column structure of the resource table. The column name, data type and length, special column attributes, and the default value displays for each column in the table.

CO

Copy a resource table to one or more systems. This command provides the ability to copy or merge a resource table with an existing or new resource table on multiple systems connected by MSF. Specification of the target table name, systems, and options is done on a pop-up panel.

TB

Browse a resource table using the RDF table editor.

TC

Copy a resource table using the RDF table editor. An additional panel is displayed in order to specify the target table name and system.

TE

Edit a resource table using the RDF table editor.

TI

Insert a resource table using the RDF table editor. An additional panel is displayed for specifying the new table name and system. The current table name is set as the model table name for the new table. When the insert is executed, the RDF table structure editor is entered and column changes or additions may be made.

TT

Transfer the rows of a resource table using the RDF table editor. An additional panel is displayed in order to specify the target table name and system.

The Resources Panel

This panel is invoked from the Resource Tables panel using the S or V line commands. It displays all of the resource table rows in a tabular format. Line commands are provided to provide a variety of operations such as copying, deleting, and editing individual resource rows.

```
SSM Resources -- CA31 ----- O P S V I E W ----- Row 1 to 7 of 7
Command ==>                                     Scroll ==> CSR

          VIEW Resources on System: *           Wait: 10
          Resource Table: SSMGAQA1             Ver: 2

Sel Resource Name      Current  Desired  Mode Actmode  Type
-----
I=
-----
CICSAOR                DOWN    DOWN     A   ACTIVE    QAMOVE
CICSTOR                DOWN    DOWN     A   ACTIVE    QAMOVE
DB2                    DOWN    DOWN     A   ACTIVE    QAMOVE
JES2                   DOWN    DOWN     A   ACTIVE    QAFIX
TCPIP                  DOWN    DOWN     A   ACTIVE    QAFIX
VTAM                   DOWN    DOWN     A   ACTIVE    QAFIX
WEBCLIENT              DOWN    DOWN     A   ACTIVE    QAFIX
***** Bottom of data *****
```

Fields on the Resources Panel

The following fields appear on the Resources panel:

VIEW

Displays the Resources command name that invoked this panel.

System

Displays the MSF ID of the system on which the resource table resides. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

Resource Table

Displays the name of the resource table that is being displayed. A new resource table may be selected by typing in the name or entering a '?' to select a new resource table from the Resource Tables display.

Ver

Displays the highest version of SSM met by the table's column structure.

I=

The 'include' line is used to enter resource filter criteria for the table fields displayed. Since all the fields except mode are character strings, any filter value may be a specific or a wildcard value using the characters '?' and '*' as single and multiple character wildcards respectively. The mode filter values are the first letter of the fixed set of mode values: Active, Inactive, Passive, and Noprereq.

Each table entry is the name of a resource, its current and desired state, resource and action mode, and type. Type will be empty when the resource table does not contain the optional TYPE column.

The resource table may be sorted in ascending sequence by any of the point-and-shoot enabled column titles or by the ISPF SORT command.

Line Commands for the Resources Panel

Use the following line commands to perform operations on SSM resources. To use a line command, enter it in the SEL column next to the resource name.

?

Display the line command selection panel. All valid line commands are listed in the panel and are point-and-shoot enabled.

D

Delete a resource with confirmation. A delete confirmation panel displays. If PF3 is entered, the resource delete is canceled. Hitting ENTER deletes the resource.

S

Select a resource in select mode. When another ISPF dialogue requires that a resource be selected, the panel title will say SELECT instead of VIEW and a message that indicates one or more resources should be selected will be displayed. Enter 'S' in the SEL column for each selected resource. Hit PF3 when selection is complete. When not in select mode, the S command is the same as the E command.

E

Edit the resource using the SSM Table editor. The SSM Table Editor provides a formatted column display of the required SSM resource table columns and the most common optional columns. Other unrecognized columns can be edited with the resource column editor. The SSM table editor is also the mechanism for adding a new resource to an existing resource table using the ADD primary command.

RE

Edit the resource using the resource column editor. The column editor displays all the resource columns and their values in a tabular format. Values may be changed by overtyping the current values. Primary key columns may not be changed. Long text string values may be edited or browsed with ISPF browse or edit. Only basic column type validation is performed on column value changes.

CO

Copy a resource to one or more systems. This command provides the ability to copy or merge a resource into an existing or new resource table on multiple systems connected by MSF. Specification of the target table, systems, and options is done in a pop-up panel. The copy options on this panel provide a high level of control over how the copy is performed and what columns are actually copied.

AS

Simulate action selection for a resource. The action selection simulation panel provides the ability to validate which actions will be selected for a resource for any combination of process event, states, and action mode. Intermediate panels will request the selection of the action table to simulate.

The Resource Copy Panel

Invoke this panel from the Resource Table and the Resources panel when the copy (CO) line command is entered. The copy FROM table name and system are set to the current resource table. The copy TO table name and systems, the copy options, copy columns, and resources to be copied must be completed or defaulted. Once the specifications for the copy operation are completed, pressing the PF3 key will start the copy operation. Unlike the RDF table editor, which can only copy a complete table, the resource copy function uses OPS/REXX SQL commands to individually update or insert selected rows without deleting and recreating the copy TO table.

```
SSM Resources -- CA31 ----- O P S V I E W ----- Subsystem OPSX
Command ==>

      COPY SSM table rows using OPS/REXX SQL      Wait: 10

      FROM table name: SSMGAQA1          Ver: 2 System: *
      TO table name:                   Ver: 2 System: *

Additional TO systems:

Options for TO table:
  Y Update existing rows          Y Create table if not found
  Y Insert new rows               N Delete table for recreate
  N Delete all rows first

      Column names:

      FROM row select: NAME='CICSAOR'

Hit PF3 to execute command or enter CANCEL command to quit
```

Fields on the Resource Copy Panel

The following fields appear on the Resource Copy panel:

COPY

Displays the command name that invoked this panel.

Wait

Displays the maximum number of seconds to wait for a cross-system response (1-300).

FROM table

Displays the name of the copy FROM resource table. A new resource table may be selected by typing in the name or entering a '?' to select a new resource table from the Resource Tables display.

TO table

Displays the name of the copy TO resource table. An existing resource table may be selected by typing in the name or entering a '?' to select a new resource table from the Resource Tables display. If the TO table does not exist on the indicated system, the table name will be rejected unless the CREATE table copy option is set to 'Y'.

Ver

Displays the highest version of SSM met by the table's column structure.

System

Displays the MSF ID's of the system on which the copy FROM and TO resource tables reside. '*' means the local system. Enter a '?' in this field to select a new system name or type in the MSF ID of a new system.

Additional TO systems

Displays a comma delimited list of additional active MSF IDs or system.subsys names for the copy TO table. Another alternative is to enter a global variable name of at least 11 characters in length. The GLV value should be a system list that will be substituted for the global variable name. All systems entered are validated and converted to MSF IDs. Inactive MSF connections are discarded. Enter a '?' in this field to select additional systems from a list of active MSF connections to other systems.

TO table options

Controls how the copy operation is performed. The Update and Insert option control whether an existing row in the TO table should be updated and whether a new row should be added when the row does not exist in TO table. Deleting all the rows before copying starts, insures that only the copied rows exist in the TO table without actually deleting the TO table. The recreate option deletes the TO table before the copy operation starts. If the TO table does not exist, the create option will create the TO table using the column structure of the FROM table.

Column names option

Provides for the entry of a comma-delimited list of column names to be excluded or included in a copy update or insert operation, or dropped from a table create operation. The option value is E/I/D respectively. Primary key columns are always implicitly included in the update and insert operations. A '?' may be entered in this field in order to select a list of column names from the resource table column structure panel.

FROM row select

Provides for the entry of an SQL WHERE clause value that is appended to the SQL statement that selects the rows to copy from the FROM table. For a complete table copy, no SQL WHERE clause is required. For a single resource copy, the value should be set to NAME='resname'. Other more complex statements such as "NAME LIKE 'CICS%' AND CURRENT_STATE <> 'UP'" may also be entered and may result in multiple rows being selected. A '?' may be entered in this field in order to select a specific set of resources from the resources panel. The SQL WHERE clause will be dynamically constructed from the resources selected.

Primary Commands for the Resource Copy Panel

You can enter the following two commands on the resource copy panel command line:

END(PF3)

Executes the copy function if all the required fields are completed. A message panel displays with the results of the copy operations.

CANCEL

Exits the copy panel without doing the copy operation.

How to View Outstanding SSMGA WTORS (Option 4.11.W)

OPSVIEW option 4.11.W gives you a quick way of determining if there are any SSMGA-related WTORS that require a response from you in order to ensure the smooth operation of SSMGA.

You can reply to these WTORS using the following methods:

- Enter the REPLY primary command directly from the panel.
- Enter Y and N responses directly as line commands next to the appropriate outstanding WTOR.

The panel will be empty in the event that there are no SSMGA related WTORS for your chosen SSMplex.

```

SSMGA Outstanding WTORS -- XE49 -- O P S V I E W ----- Row 1 to 1 of 1
Command ==>                                         Scroll ==> CSR
Date/Time: 19Feb2010 09:47:14                       Wait ==> 30
SSMplex: TESTPLEX                                   Sysplex: MINIPLEX

Cm System ID      Message
-----
__ XE49  0113  SSMGA030 TESTPLEX: GLOBAL SYSTEM XE23.OPSP STATUS IS
                COMFAIL. SHOULD XE49.OPSP BECOME THE NEW GLOBAL SYSTEM? (Y/N)
***** Bottom of data *****

```

You can also use the panel to view and respond to SSMGA WTORS on a remote SSMplex. To do this, the system you are on must have an active MSF connection to a system in that SSMplex. By entering ?? in the SSMplex field, you will be presented with a pop-up window allowing you to select from a list of all accessible SSMplexes.

There are three possible WTORS that a system within your SSMplex can generate:

- SSMGA010 [*ssmplex*]
Stop duplicate resource [*sysname.tbl.name*] on [*sysname*] in [*current state*] state? (Y/N)
- SSMGA020 [*ssmplex*]:[*sysname*] Status=SYSFAIL
Recover movable resources on alternate systems? (Y/N)
- SSMGA030 [*ssmplex*]
Global system [*sysname*] status is COMFAIL. Should system [*sysname*] become the new global system? (Y/N)

These are explained in more detail within Chapter 8 “Using SSM Global Application” of the CA OPS/MVS *User Guide* in the section Messages for Special Events.

Important: Pay careful attention to the consequences of answering these messages incorrectly.

How to Perform CICS Operations Facility Maintenance (Option 4.12)

If you have installed the CICS Operations Facility (COF) interface that was provided with CA OPS/MVS, you can use OPSVIEW option 4.12 to define and maintain CICS connections to CA OPS/MVS.

What Is the CICS Operations Facility Interface (COF)

The COF is an optional interface between CA OPS/MVS and CICS that extends the CA OPS/MVS facilities to CICS. For example, the COF enables you to write AOF rules that process CICS messages, and you can use OPSVIEW to operate CICS.

The version of the COF that is provided with CA OPS/MVS uses the CICS global exit (the XTDOU exit) to intercept all transient data write requests without modifying the CICS Transient Data Control Table (DCT).

Where to Look for Related Information

For information about installing the COF interface, see the *Administration Guide*.

For information about CICS-related parameters, see the *Parameter Reference*.

For detailed information about the CA OPS/MVS COF and the syntax of all ADDRESS OPSTCL COF commands, see the *Command and Function Reference*.

Accessing Option 4.12

To access OPSVIEW option 4.12, you can either:

- Enter 12 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.12 into any valid field in OPSVIEW.

The COF CICS Connection Display Panel

When you access option 4.12, you see a display similar to the following one. The panel lists all of the currently defined CA OPS/MVS connections to CICS regions and the total number of messages that each region sent to the AOF for rule processing. On this panel, you can scroll through the list of CICS connections or use a line command to take some action on a particular CICS connection.

```

CICS Operations Facility --- S034 --- O P S V I E W ----- ROW 1 TO 3 OF 3
COMMAND ==>
                                COF CICS Connection Display      Active Connections: 1
SYSTEM ==> *                   WAIT ==> 10    CICS AOF ==> YES
Jobname  Stepname Req  Status  Origin  Applid  Sysid ASID  Destids  Msg Count
-----
DEFAULT          N  INACTIVE  DEFINED                4         0
CICSTEST         N  INACTIVE  DEFINED                6         0
CICSOMVS CICSOMVS Y   ACTIVE   DEFINED CICSOMVS CICS 0030  4         2

```

Fields on the COF CICS Connection Display Panel

The COF CICS Connection Display panel has the following fields:

Active Connections

Indicates the total number of currently active CICS connections.

System

Specifies the name of the remote system on which you want to display or modify the connections that exist between a remote copy of CA OPS/MVS and CICS. The remote system must be active and defined to the MSF. An asterisk (*) stands for the local system; this is the default.

Wait

Specifies the maximum time to wait for a response from a remote system. You can specify a range from 1 to 300 seconds.

Default: The value of the MSFSYSWAIT parameter

CICSAOF

Indicates the current value of the CICSAOF parameter, which controls CICS message traffic to the AOF. You can update the value of the CICSAOF parameter directly on the COF CICS Connection Display panel. If the value of CICSAOF is NO, no CICS transient data messages are sent to the AOF for processing.

Jobname

Indicates the one- to eight-character job name of the CICS region.

Stepname (optional)

Indicates the one- to eight-character step name of the CICS region (or task ID for a started task). If the connection is active, the step name or task ID of the CICS region always appears here, even if the original connection definition did not include a step name.

Req

Contains a flag indicating whether a match on Stepname is required:

- Y-When the list of transient data queue names was defined, a step name was included in its definition. To use the list, the step name of the CICS region (which appears in the Stepname field), must match the value that was specified when the list was defined.
- N-The step name is informational only; no match is required.

Status

Indicates the status of the CICS connection. If the value is ACTIVE, the CICS region is using the connection; if the value is INACTIVE, the connection is not in use.

Origin

Indicates the origin of the list. A value of DEFINED indicates that the list was generated through an ADDRESS OPSTCL COF DEFINE command. A value of DEFAULT indicates that a CICS region built this destination name list by copying the DEFAULT list.

Applid

Displays the VTAM application ID if the value of the Status field is ACTIVE.

Sysid

Displays the CICS system name if the value of the Status field is ACTIVE.

Asid

Displays the CICS address space ID if the value of the Status field is ACTIVE.

Destids

Indicates the total number of transient data queue names in the intercept list.

Msg Count

Indicates the total number of messages this CICS region intercepted for AOF processing.

Primary Commands for the COF CICS Connection Display Panel

CA OPS/MVS provides the primary command described in the following table. Enter the primary command on the command line.

***SORT* field order**

Sorts the CICS connection list according to the value of the specified field. You may specify more than one field. If not specified, the default value for field is Jobname. The value for order can be A (Ascending) or D (Descending), and may be specified for each field specified. The default value for order is A for all field names except Msg (or Count).

Point-and-shoot is enabled to SORT the list of COF connections using any displayed column. To SORT the list of COF connections using the point-and-shoot method, place the cursor on a displayed column heading and press the ENTER key.

Line Commands for the COF CICS Connection Display Panel

CA OPS/MVS provides the following command options. Enter command options in the field preceding the name of the desired CICS connection.

C

Copies an existing CICS connection definition and uses it as the basis for a new definition. For details, see [How to Copy an Existing CICS Connection](#) in this chapter.

D

Deletes a CICS connection. For details, see [How to Delete a CICS Connection](#) in this chapter.

I

Inserts a new CICS connection definition. For details, see [How to Insert a New CICS Connection](#) in this chapter.

S

Selects a CICS connection and accesses the CICS Connection Destination List panel that corresponds to it. This panel displays the transient data queue destination names that are associated with the selected CICS connection. You can add or delete destination names from this panel. For details, see [How to Activate and Deactivate IDs Associated With a CICS Connection](#) in this chapter.

Point-and-shoot is enabled to issue the S line command for any displayed CICS connection. To issue the S line command for a displayed CICS connection using the point-and-shoot method, place the cursor to the left of the CICS connection and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

How to Activate and Deactivate Destination IDs Associated with a CICS Connection

This section discusses how to activate and deactivate destination IDs associated with a CICS connection.

The S Line Command

To select a CICS connection and view a list of all of the transient data queue names that are associated with it, use the S command on the COF CICS Connection Display panel. As a result of the S command, the following CICS Connection Destination List panel appears. From this panel, you can dynamically alter the list of destination names that are sent to the AOF for processing without having to redefine the CICS connection.

```

CICS Operations Facility --- S034 --- O P S V I E W ----- ROW 1 OF 25
COMMAND ==>                                     SCROLL ==> CSR
System: *          COF Connection Destination List      Exit Area: 005C004
Jobname  Stepname Req  Status  Origin  Applid  Sysid ASID Destids Msg Count
-----
CICSOMVS CICSOMVS Y   ACTIVE  DEFINED CICSOMVS CICS 0030      4      2
          Include Indirect Destids: N
Dest  Msg Count  Dest  Msg Count  Dest  Msg Count  Dest  Msg Count
-----
CADL      0  CSMT      3  CSSL      0  CSSN      0
          ..
          ..
          ..
    
```

Activate and Deactivate Destinations

Use these line commands to activate and deactivate destinations on the COF Connection Destination List panel:

A

Activate (add) the specified destination name. You can specify %%% as a destination name to refer to the DEFAULT destination name list.

D

Deactivate (delete) the selected destination name.

Include Indirect Destinations

This option specifies that all indirect transient data queue names are implicitly defined in the destination list. Message counts are reflected in the defined destination queue name. Individual indirect queue names can alternatively be defined in the destination list in order to see specific message counts.

Y

Implicitly include all indirect transient data queue names that point to a defined queue name in the destination list.

N

Do not implicitly include indirect transient data queue names.

How to Delete a CICS Connection

This section discusses how to delete a CICS connection.

The D Line Command

Use the D command on the COF CICS Connection Display panel to delete a CICS connection.

The setting of the Action Verification field on the OPSVIEW General Settings panel determines the outcome of the D line command:

- If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before it deletes the CICS connection. Press Enter to confirm the request or enter the END command to cancel the request. A panel similar to the following one appears.
- If you proceed with the deletion, the next message from the CICS region causes a new connection to be built using the DEFAULT connection destination name list.
- If the field is set to N, CA OPS/MVS deletes the CICS connection without requesting your confirmation.

```
CICS Operations Facility --- S034 --- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
                COF CICS Connection Delete Confirmation
NOTE: You are about to delete a COF CICS connection on system *
      The CICS jobname is CICSTEST and it is currently INACTIVE
      If you press ENTER the requested action will be taken.
Enter END command to cancel the operation.
Press ENTER to confirm the operation.
```

How to Insert a New CICS Connection

This section discusses how to insert a new CICS connection.

The I Line Command

Use the I command on the COF CICS Connection Display panel to cause CA OPS/MVS to insert a new CICS connection through an ADDRESS OPSCTL COF DEFINE command. As a result of the I line command, the following panel appears:

```

CICS Operations Facility --- S034 --- O P S V I E W ----- ROW 1 OF 10
COMMAND ==>                                     SCROLL ==> CSR
                Define a new CICS connection on system *
CICS Jobname ==>          Stepname ==>
CICS Transient Data Queue names to be sent to rule processing ==>
-----
-----
-----
-----
-----
-----
***** BOTTOM OF DATA *****

```

Define a New CICS Connection

Follow these steps to define one or more CICS connections:

1. In the CICS Jobname field, specify a job name to identify the CICS connection.
The DEFAULT job name is reserved to define the DEFAULT destination name list. This list is used when CICS regions that are not predefined to the COF connect to CA OPS/MVS for the first time.
2. If multiple CICS regions have the same job name, specify a step name in the Stepname field to distinguish this CICS connection from other CICS connections. In such cases, the value of the Stepname field should be the task ID (for example, S CICS MVS.TOR). Each CICS connection must have a unique jobname or jobname.stepname. No duplicates are allowed.
3. In the fields on the remainder of the panel, specify up to 100 CICS transient data queue names for CA OPS/MVS to intercept and send to the AOF for processing.
Transient data queue destination names are not required, but an empty list results in no messages being processed by the AOF. You can use the special destination name, which is %%%, to refer to the list of destination names in the DEFAULT connection definition (if the DEFAULT connection definition exists).
4. Press Enter to define the definition.
5. Repeat steps 1 through 4 for each CICS connection you want to define.
6. When finished, press End.

Your CICS connection definition session is terminated and you are returned to the COF CICS Connection Display panel.

How to Copy an Existing CICS Connection

This section describes how to copy an existing CICS connection.

The C Line Command

Use the C command on the COF CICS Connection Display panel to cause CA OPS/MVS to copy the definition of the selected CICS connection and use it as the basis for a new CICS connection you want to define. You can then alter the new definition as desired. As a result of the C line command, the following panel appears:

```

CICS Operations Facility --- S034 --- O P S V I E W ----- ROW 1 OF 10
COMMAND ==>                                           SCROLL ==> CSR
                                Define a new CICS connection on system *
CICS Jobname ==> CICSOMVS  Stepname ==> CICSOMVS
CICS Transient Data Queue names to be sent to rule processing ==>
  CADL  CSMT  CSSL  CSSN  -----
  -----
  -----
  -----
  -----
  -----
  -----
  -----
***** BOTTOM OF DATA *****

```

Define a New CICS Connection

Follow these steps to define one or more CICS connections:

1. In the CICS Jobname field, modify the job name as required.
2. If multiple CICS regions have the same job name, specify a step name in the Stepname field to distinguish this CICS connection from other CICS connections. In such cases, the value of the Stepname field should be the task ID (for example, S CICSOMVS.TOR). Each CICS connection must have a unique jobname or jobname.stepname. No duplicates are allowed. In the fields on the remainder of the panel, add or modify up to 100 CICS transient data queue names for CA OPS/MVS to intercept and send to the AOF for processing.

Note: Transient data queue destination names are not required, but an empty list results in no messages being processed by the AOF. You can use the special destination name, which is %%%, to refer to the list of destination names in the DEFAULT connection definition (if the DEFAULT connection definition exists).

3. Press Enter to define the definition.
4. When finished, press End.

Your CICS connection definition session is terminated and you are returned to the COF CICS Connection Display panel.

Access OPSLOG Definitions (Option 4.13)

The OPSLOG definition panel displays information about the defined OPSLOGs. Use this panel to define new OPSLOGs and to change the status of previously defined OPSLOGs.

To access OPSVIEW option 4.13, you can either:

- Enter 13 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.13 into any valid field in OPSVIEW.

A panel similar to the following one displays:

```

OPSLOG Definitions - - - O P S V I E W - Subsystem OPS --- Row 1 to 1 of 1
System ==> *          Wait ==> 10          Active OPSLOGs: 1
-----
Logname              Status  R L A D BrowseMax Data set name (truncated)
-----
_ INSTAUTODEFINED   Active  W N A S 10000  IN-STORAGEAUTO
_ OPSLOG             Active  W L D D 120000 MFNSMQA.OPS.AC31.OPSLOG
_ OPSLOG2            Defined W N D D 80000  MFNSMQA.OPS.BOGUS2.OPSLOG2
_ OPSLOG2            Active  W N D D 120000 MFNSMQA.OPS.AC11.OPSLOG2
_ OPSLOG3            Active  W N D D 80000  MFNSMQA.OPS.AC11.OPSLOG3
_ READ_ONLY          Defined R N D D 22222  BOGUS.DATA.SET.NAME.READONLY
_ READ_WRITE         Defined W N D D 11111  BOGUS.DATA.SET.NAME
_ TESTSWCA11_1      Active  W N D S 400000 IN-STORAGE0001

```

Fields on the OPSLOG Definitions Panel

The OPSLOG Definitions panel has the following fields:

System

Specifies the name of the remote system. The remote system must be active and defined to the MSF.

- Asterisk (*) indicates the local system.
- ? provides an MSF list of selectable systems.

Wait

Specifies the cross-system MSF wait time. You can specify a range from 1 to 300 seconds.

Default: The value of the MSFSYSWAIT parameter.

Active OPSLOGs

Indicates the number of active OPSLOGs.

Logname

Indicates the 1- to 16-character name of the OPSLOG. This name uniquely identifies an OPSLOG.

Status

Indicates the status of the OPSLOG definition.

R (R/W)

Indicates whether this is a read-only OPSLOG (R) or a read/write OPSLOG (W).

L (Live)

Indicates whether this is the live OPSLOG or any other OPSLOG.

Note: Only one OPSLOG can be live at any given instant.

A (Auto)

Indicates whether this OPSLOG was explicitly defined using ADDRESS OPSCTL OPSLOG, or was automatically defined during product startup. The entries defined from this application use ADDRESS OPSCTL OPSLOG.

An OPSLOG allocated using an OPSLOG DD statement during product initialization or using JCL is the most common.

D (DIV)

Indicates whether this OPSLOG is backed by a DIV data set, which is indicated by a value of D, or is an in-storage OPSLOG, which is indicated by a value of S.

BrowseMax

Indicates the maximum number of log entries in this OPSLOG BrowseMax window.

Data set name

Indicates the true data set name for a DIV-backed OPSLOG or a pseudo-data set name starting with the string IN-STORAGE for an in-storage OPSLOG. The data set name may be truncated.

Primary Commands

Use the following primary commands to define new OPSLOGs and change the status of previously defined OPSLOGs:

NEW

Defines a new OPSLOG definition.

SORT ColumnName

Sorts the column headings in ascending, which is the default, or descending order.

Default column name for sorting: Logname

Note: Logname automatically appends as a secondary SORT column if you do not specify it on the SORT command.

Line Commands

The following are valid line commands:

?

Provides a pop-up panel of all available line commands.

A

Activates a defined OPSLOG.

C

Creates and allocates a defined but non-existent OPSLOG.

D

Deletes a defined OPSLOG.

I

Inactivates a currently active OPSLOG.

L

Makes a currently active OPSLOG the live OPSLOG.

N

Creates a new OPSLOG definition.

R

Resets an active OPSLOG.

S

Selects an OPSLOG definition for detail display.

An OPSLOG status can change while the asynchronous Activate, Inactivate and Reset commands execute. During execution, the Status column will indicate one of the following values:

PendAct

An OPSLOG activation is pending.

PendInAct

An OPSLOG inactivation is pending.

PendRest

An OPSLOG reset is pending.

Access WebCenter Control Panel (Option 4.14)

The CA OPS/MVS WebCenter Control Administration panel allows you to access facilities that control the functionality of Alert Monitor and Resource Monitor.

The WebCenter facility allows you to:

- Define the monitors for Alerts and Resources, such as those in the SSM tables.
- View Alert History and Resource Status.
- Modify or delete alerts and modify the SSM tables, which can affect the behavior of your system.

The WebCenter URL is displayed on the menu to allow easy access to WebCenter. URL is also made available in an CA OPS/MVS Global Variable named GLOBALW.OPS#.WEBCENTERURL.

To access OPSVIEW option 4.14, you can either:

- Enter 14 on the OPSVIEW Control Menu.
- Use the ISPF jump function by entering =4.14 into any valid field in OPSVIEW.

A panel similar to the following displays:

```

QANM7831----- Administration : Primary Menu -----$NM071
Select Option ==>

A - Alert Monitor Administration           ALADMIN  Userid BOYTH02
S - SSM Resource Monitor Administration    SSADMIN  LU      NMTS0001
M - Multi-System Support Administration    MADMIN   Time   17.10.11
C - Customizer                            CUSTOM   WED 28-AUG-2013
X - Exit

WebCenter URL: http://url.ip.addr:portaddr

```

Fields on the WebCenter Control Panel

The Webcenter Control panel has the following fields:

Select Option

Specifies the primary command line for entering selection options.

Userid

Specifies the TSO userid of the person accessing the admin panel.

LU

Specifies the APPLID accessing the application panel.

Time

Enter to refresh specifies the Current Time and Date.

Available Primary Commands

A

Alert Monitor Administration

S

SSM Resource Monitor Administration

M

Multi-System Support Administration

C

Customizer

X

Exit

WebCenter URL: <http://url.ip.addr:port>

Primary Commands

To take specific actions for the WebCenter Control Administration panel use these primary commands:

A - Alert Monitor Administration

- Define and update a custom trouble ticket interface between your region and the alert monitor
- Specify the parameters for logging alert history details
- Define filters and list formats

S - SSM Resource Monitor Administration

- View/Maintain the user profiles
- View/maintain the resource monitor filters
- View/maintain the resource monitor formats

M - Multi-System Support Administration

- View/maintain your multi-system setup.
- Connect and disconnect regions
- View the status of administration tasks that are performed on the knowledge base.

C - Customizer

- Maintain customization parameters
- Generate INI procedures
- View the initialization log

X - Exit

- Exit back to Opsview

The WebCenter URL is displayed on the menu to allow easy access to WebCenter. URI is also made available in an CA OPS/MVS Global Variable named GLOBALW.OPS#.WEBCENTERURL.

To access the Alert Monitor Administrative Menu option:

- Enter A on the WebCenter Control Menu.

Fields on the Alert Monitor Administrative Menu Panel

The Alert Monitor Administrative Menu panel has the following fields:

Select Option

Specifies the primary command line for entering selection options.

Primary Commands

To take specific actions for the Alert Monitor Administrative Menu panel Use these primary commands:

I - Define Trouble Ticket Interface

Displays the Alert Monitor Interface Definition panel, which enables you to specify the type of interface that you want to define.

D - Define Trouble Ticket Data Entry

Displays the Alert Monitor Trouble Ticket Data Entry Definition panel, which enables you to define details of the data to be contained in a trouble ticket.

F - Define Filters

Displays the Alert Monitor Filter Definition List panel, which enables you to view and maintain alert monitor filter definitions.

L - Define List Formats

Displays the Alert Monitor List Definition List panel. To view and maintain the alert monitor, format definitions use the panel.

ST - Run Alert Monitor Self Test

Displays the Self-Test results. A series of status checks are performed. To help diagnose problems with the Alert Monitor, use this information.

X - Exit

Exit back to WebCenter Control Panel

To access the SSM Resource Monitor Administration Panel option:

Enter S on the WebCenter Control Menu.

Fields on the SSM Resource Monitor Administration Panel

The SSM Resource Monitor Administration panel has the following fields:

Select Option

Specifies the primary command line for entering selection options.

Primary Commands

To take specific actions for the SSM Resource Monitor Administration panel use these primary commands:

UP - User Profiles

- Adds a user to the region or to customize user profiles.
- You can reset the password of a user from the User Description panel of the profile.

F - Status Monitor Filters

- Displays the Monitor Filters List panel that enables you to work with filters. Filters are used to limit the resources that are displayed on the status monitor.

L - Status Monitor List Formats

- Displays the List Definition List panel for status monitor list formats. From the panel, you can define and maintain the formats.

X - Exit

- Exit back to WebCenter Control Panel

To access the Multi-System Support Administration Panel option:

- Enter M on the WebCenter Control Menu.

Fields on the Multi-System Support Administration Panel

The Multi-System Support Administration panel has the following fields:

Select Option

Specifies the primary command line for entering selection options.

Primary Commands

To take specific actions for the Multi-System Support Administration panel, use these primary commands:

LC - List Connected Regions

- List all regions that were connected by the Connect Region option. The displayed list lets you update link descriptions.

C - Connect Region

- Connect the region to another region. You can perform this function from a standalone region only, that is, one not already connected to others.

D - Disconnect Region region-name

- Disconnect the current region from a multisystem environment.

X - Exit

- Exit back to WebCenter Control Panel

To access the Customizer Panel option:

- Enter C on the WebCenter Control Menu.

Fields on the Customizer Panel

The Customizer panel has the following fields:

Select Option

Specifies the primary command line for entering selection options.

Primary Commands

To take specific actions for the Customizer panel, use these primary commands:

P - Parameter Groups

- Accesses the options that enable you to review and customize region parameter groups.

G - Generate INI Procedure

Generates an initialization INI procedure that can be used instead of the VFS file during region startup. This process converts parameter group records into NCL code and exports them to a nominated partitioned data set. Regions that use the same initialization setup can then use copies of the same INI procedure, saving you the time on customizing each region. You can edit the INI procedure.

Follow these steps:

1. Put the procedure member in the COMMANDS library.
2. In the RUNSYSIN member, point the INIFILE parameter to the INI procedure.

L - Initialization Log

- View messages that are issued during a region initialization or after customization.

X - Exit

- Exit back to WebCenter Control Panel

Chapter 8: OPSVIEW Command Option

This section contains the following topics:

- [Overview of the OPSVIEW Command Processor](#) (see page 403)
- [How to Use the Previous Commands Window](#) (see page 407)
- [How to Use the Stored Commands Window](#) (see page 408)
- [Modify the Stored Command List from Option 6](#) (see page 409)
- [Use the Output of a Command to Build Another Command](#) (see page 410)

Overview of the OPSVIEW Command Processor

With this option, you can enter system console commands from in OPSVIEW and receive their output in scrollable form.

Use the MVS/JES command processor to enter system console commands from in OPSVIEW and receive their output in scrollable form. If the IMS Operations Facility is installed at your site, you can also use the MVS/JES command processor to execute IMS commands.

In addition to entering system console commands and viewing their output, you can:

- Use the output of a command to build another command.
- Re-issue a previously issued command without retyping it.
- Issue a command that was stored using option 0.2.
- Modify the stored command list.

To use option 6, you must be familiar with system commands. For background information about z/OS and JES commands, see your systems programming library.

Access the MVS/JES Command Processor Panel

To access the MVS/JES Command Processor panel, enter 6 on the OPSVIEW Primary Options Menu. You see a display similar to the one shown here:

```
----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID ==>          IMSID ==>          WAIT ==>          MFORM =>          SCROLL ==> CSR
-----
*END OF OUTPUT*
```

Fields on the MVS/JES Command Processor Panel

The following fields appear on the MVS/JES Command Processor panel:

SYSID

If your site uses the Multi-System Facility (MSF) and you want the system command to execute on another system, you can use this field to specify the ID of that system. You can specify IDs of only those systems with which the copy of CA OPS/MVS running on your system has active MSF sessions. If you do not specify a value for the Sysid field, the command you enter is executed on the system to which you are logged on.

IMSID

If your site uses the IMS Operations Facility (IOF) and you want to issue an IMS command, use this field to specify the ID of the IMS control region to which you are sending the command.

WAIT

Specify the number of seconds CA OPS/MVS should wait for command output messages to appear. Typically, you need to specify a value for this field only if you have specified a value for the Sysid field.

MFORM

Specify a value to indicate the format in which you want your command output to be returned. Although you may specify a value in this field with any command, it affects only those commands that display information about jobs in multiple lines (one line for each job), such as the JES2 \$DI and \$DA commands. Values are:

- J-Command output lines will be stamped with the name and number of the job to which they apply.
- M-The default. Command output lines will not be stamped with the name and number of the job to which they apply.

SCROLL

Modify the scrolling action of the panels in the MVS/JES command processor. This Scroll field works the same as any other Scroll field in OPSVIEW or ISPF. For details, see Command Keywords That Modify Scrolling Action in the chapter “OPSVIEW Basics.”

Using the MVS/JES Command Processor

Remember these points when you are using the MVS/JES command processor:

- Enter commands in the Command field in the top left corner of the panel. The command output appears in the bottom section of the panel. For a sample MVS/JES Command Processor panel that contains command output, see *How to Use the Output of a Command to Build Another Command* in this chapter.
- Although you can enter any z/OS or JES command from the command processor, some of them may not produce output.
- The number of command output lines that CA OPS/MVS collects and returns to the command processor is limited by the value of the OCMAXMSG parameter. The default value of this parameter is 2000, the minimum value is 100, and the maximum value is 10,000. If you issue a command with output that exceeds the limit set by the OCMAXMSG parameter, the last line of output you receive tells you that some command response lines were lost. To see the additional lines, use the OPSVIEW OPSLOG Browse option. For details about OPSLOG, see *Overview of the OPSVIEW OPSLOG Option (Option 1)* in the chapter “Using the OPSVIEW OPSLOG Option.”
- When you issue an IMS command from the MVS/JES command processor, you must precede the command with a command character to indicate to CA OPS/MVS that the command is intended for IMS. If your site uses a single IMS control region, use a slash (/) for your command character. If you run more than one IMS control region or you have another reason for not using a slash, you must use the IMSnCHAR parameter to associate control characters to the IMSIDs that you run. For additional details, see the description of the IMSnCHAR parameter in the *Parameter Reference* and also see the *Administration Guide*.
- If your z/OS system runs under VM, use #CP to issue your VM CP commands.

Primary Commands for the MVS/JES Command Processor Panel

In addition to entering system commands on the MVS/JES Command Processor panel, you can enter various primary commands to control the MVS/JES command processor itself. Enter primary commands in the Command field, which is at the top left corner of the panel.

Note: We recommend that you issue the ISPF KEYS command from within option 6 to assign some of the commands shown in the following table to PF keys. The recommended settings are shown in the following table. In addition to these settings, we recommend that you assign any z/OS or JES command that you use frequently (such as D TS,L) to PF04/PF16. These settings apply only to option 6; they do not affect the PF key settings you use in ISPF or other OPSVIEW options.

The following primary commands control the MVS/JES command processor:

CMDLIST *oper*

Displays the Stored Commands window or the Previous Commands window. From here you can select the command you want to enter. The window that appears depends on the value of *oper*. Values of *oper* are:

OFF

Exits you from the window. CA recommends that you assign this command to PF06/PF18.

PAST

Displays the Previous Commands window. CA recommends that you assign this command to PF05/PF17. For details, see How to Use the Previous Commands Window in this chapter.

STORED

Displays the Stored Commands window. You create the commands that appear in this window by using OPSVIEW option 0.2.

For details about storing commands, see the following description of SEDIT and How to Store a Command List (Option 0.2) in the chapter "Using the OPSVIEW Parameters Option." For details about the Stored Commands window, see How to Use the Stored Commands Window in this chapter.

DOWN2

Scrolls the Stored Commands or Previous Commands window downward. CA recommends that you assign this command to PF11/PF23.

LASTCMD

Displays previously issued commands on the command line (moving backward through the stored list). When you see the command you want, you may re-execute it with or without modifying it first.

LONGCMD

Causes the command input area to extend to two lines, which can handle a command up to 126 characters in length. Contrast with SHORTCMD.

NEXTCMD

Displays previously issued commands on the command line (moving forward through the stored list). When you see the command you want, you can re-execute it with or without modifying it first.

SEdit

Edits the stored command list created with OPSVIEW option 0.2, without having to exit the MVS/JES command processor. For details, see How to Modify the Stored Command List from Option 6 in this chapter.

SHORTCMD

Limits the command input area to one line. This is the default. Contrast with LONGCMD.

UP2

Scrolls the Stored Commands or Previous Commands window upward. CA recommends that you assign this command to PF10/PF22.

WSIZE *nn*

Sets the size of the Stored Commands and Previous Commands windows. The value of *nn* is the number of commands that will appear in the windows. The default value is 3, the minimum value is 1, and the maximum value is the number that results when you subtract 6 from the physical size of your screen.

How to Use the Previous Commands Window

The Previous Commands Window appears when you enter the CMDLIST PAST command from the MVS/JES Command Processor panel. Following is a sample panel:

```

----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID =>          IMSID =>          WAIT =>          MFORM =>  SCROLL =>  CSR
----- PREVIOUS COMMANDS -----ROW 1 OF 2
  D TS,lberry
  d ts,l
  *END OF COMMANDS*
----- COMMAND OUTPUT AT 13:45:08 ON 10/19/03 -----ROW 1 OF 7
D TS,LBERRY
IEE105I 13.45.00 93.069 ACTIVITY 196
  JOBS      M/S      TS USERS  SYSAS      INITS      ACTIVE/MAX VTAM
00000      00056      00006      00013      00010      00006/00150
LBERRY  NSW  A=0053  PER=NO  SMC=000  PGN=008  DMN=003  AFF=NONE
          CT=002.3945  ET=00.32.52
          ADDR SPACE ASTE=02C324C0
  *END OF OUTPUT*

```

Using the Previous Commands Window

Keep these points in mind when you use the Previous Commands window:

- To issue one of the commands in the window, place your cursor next to the command and press Enter: you can modify the command first.
- To view the output that one of the commands in the window generated when it was first executed, type B next to the command and press Enter.
- You can use the UP2, DOWN2, and WSIZE commands to control certain aspects of the Previous Commands window.

How to Use the Stored Commands Window

The Stored Commands Window appears when you enter the CMDLIST STORED command from the MVS/JES Command Processor panel. Following is a sample panel:

```
----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID ==>          IMSID ==>          WAIT ==>          MFORM =>          SCROLL ==> CSR
----- STORED COMMANDS -----ROW 1 OF 2
  D TS,lberry          /* DISPLAY TSO USER LBERRY
  d ts                 /* DISPLAY NUMBER OF TSO USERS
*END OF COMMANDS*
----- COMMAND OUTPUT AT 13:45:08 ON 10/19/03 -----ROW 1 OF 7
D TS,LBERRY
IEE105I 13.45.00 93.069 ACTIVITY 196
JOBS      M/S      TS USERS      SYSAS      INITS      ACTIVE/MAX VTAM
00000     00056     00006     00013     00010     00006/00150
LBERRY   NSW      A=0053  PER=NO   SMC=000  PGN=008  DMN=003  AFF=NONE
          CT=002.3945  ET=00.32.52
          ADDR SPACE ASTE=02C324C0
*END OF OUTPUT*
```

Keep these points in mind when you use the Stored Commands window:

- To issue one of the commands in the window, place your cursor next to the command and press Enter. You can modify the command first.
- The commands that appear in the Stored Commands window are those you entered by using OPSVIEW option 0.2. If you want to modify the list of commands that appears in the window, use either option 0.2 or the SEDIT command.

For details about the SEDIT command, see How to Modify the Stored Command List from Option 6 in this chapter. For details about option 0.2, see How to Store a Command List (Option 0.2) in the chapter “Using the OPSVIEW Parameters Option.”

- You may use the UP2, DOWN2, and WSIZE commands to control certain aspects of the Stored Commands window.

Modify the Stored Command List from Option 6

Use the Stored Command List Editor panel to modify the commands that appear in the Stored Commands window. The Stored Command List Editor panel appears when you issue the SEDIT command from the MVS/JES Command Processor panel. Following is a sample panel:

```

Stored Command List Editor --- MSI1 ----- COLUMNS 001 072
COMMAND ==>                                SCROLL ==> PAGE
Use the Edit Window below to enter in any MVS or JES command. Only one
command may be entered per line. Commands may be documented with
comments following the /* delimiter.
Example:
      000100 D TS,ALL                          /* list TSO users
      000200 D TS,USERA                        /* list TSO user USERA
***** ***** TOP OF DATA *****
==MSG> -WARNING- THE UNDO COMMAND IS NOT AVAILABLE UNTIL YOU CHANGE
==MSG>          YOUR EDIT PROFILE USING THE COMMAND "RECOVERY ON".
000100 D TS                                  /* NUMBER OF USERS
***** ***** BOTTOM OF DATA *****

```

Use the Stored Command List Editor Panel

To modify a command, simply type your modification directly over the old text of the command and press PF3 to return to the Stored Commands window. Any changes you make to your stored commands are reflected in the newly accessed Stored Commands window.

Use the Output of a Command to Build Another Command

If the command you issue from the MVS/JES command processor generates output, the output appears in the bottom section of the panel. The following sample MVS/JES Command Processor panel shows the results that occurred when a user issued the z/OS D TS,L command:

```
----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID =>          IMSID =>          WAIT =>          MFORM =>          SCROLL => CSR
----- COMMAND OUTPUT AT 13:40:52 ON 10/19/95 -----ROW 1 OF 6
D TS,L
IEE104I 13.40.40 93.069 ACTIVITY 193
  JOBS      M/S      TS USERS      SYSAS      INITS      ACTIVE/MAX VTAM
00000      00056      00006      00013      00010      00006/00150
TGRANT OWT  BBRADLE OWT  OPSADA OWT  SPATTER OWT  LBERRY NSW
DSILD53 OWT
*END OF OUTPUT*
```

You can use the output from one command to build another command.

To use the output from one command to build another command

1. Position the cursor on the line of output that you want to use.
2. Modify the output line.
3. Press Enter.

In the following sample, the user modified the first line of output that appeared in the panel above by changing D TS,L to D TS,LBERRY:

```
----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID =>          IMSID =>          WAIT =>          MFORM =>          SCROLL => CSR
----- COMMAND OUTPUT AT 13:40:52 ON 10/19/03 -----ROW 1 OF 6
D TS,LBERRY
IEE104I 13.40.40 93.069 ACTIVITY 193
  JOBS      M/S      TS USERS      SYSAS      INITS      ACTIVE/MAX VTAM
00000      00056      00006      00013      00010      00006/00150
TGRANT OWT  BBRADLE OWT  OPSADA OWT  SPATTER OWT  LBERRY NSW
DSILD53 OWT
*END OF OUTPUT*
```

When the user presses Enter, a panel similar to the following one appears:

```
----- MSI1 ----- MVS/JES Command Processor -----ENTER A COMMAND
=>
SYSID =>          IMSID =>          WAIT =>          MFORM =>          SCROLL => CSR
----- COMMAND OUTPUT AT 13:45:08 ON 10/19/03 -----ROW 1 OF 7
D TS, LBERRY
IEE105I 13.45.00 93.069 ACTIVITY 196
  JOBS      M/S      TS USERS      SYSAS      INITS      ACTIVE/MAX VTAM
00000      00056      00006      00013      00010      00006/00150
LBERRY NSW  A=0053  PER=NO  SMC=000  PGN=008  DMN=003  AFF=NONE
              CT=002.394S  ET=00.32.52
              ADDR SPACE ASTE=02C324C0
*END OF OUTPUT*
```


Chapter 9: OPSVIEW Utilities Option

This section contains the following topics:

[Overview of the OPSVIEW Utilities Option \(Option 7\)](#) (see page 413)

[Access the OPSLOG Utilities Option \(Option 7.1\)](#) (see page 414)

[How to Browse a Copied or Restored OPSLOG \(Option 7.1.1\)](#) (see page 415)

[How to Archive an OPSLOG \(Option 7.1.2\)](#) (see page 416)

[How to Restore an Archived OPSLOG \(Option 7.1.3\)](#) (see page 423)

[How to Manage the OPSLOG Archive Tracking System \(Option 7.1.4\)](#) (see page 429)

[How to Use the Automation Analyzer \(Option 7.2\)](#) (see page 434)

[How to Generate AOF Suppression Rules From an MPF Suppression List \(Option 7.3\)](#) (see page 442)

[How to Create Parameter Statements for the IMS Operation Facility \(Option 7.4\)](#) (see page 443)

[How to Create a Backup Copy of Your Global Variables \(Option 7.5\)](#) (see page 446)

[How to Restore Global Variables and RDF Tables \(Option 7.6\)](#) (see page 449)

Overview of the OPSVIEW Utilities Option (Option 7)

You can perform these tasks with the OPSVIEW utilities option:

- Archive an OPSLOG, restore an archived OPSLOG, browse a copied or restored OPSLOG, or manage the OPSLOG archive tracking system.
- Analyze the message events that appear in OPSLOG.
- Generate AOF suppression rules from an MPF suppression list.
- Create CA OPS/MVS parameter statements for the IMS Operations Facility (IOF).
- Create a backup copy of your global variables.

Access the OPSVIEW Utilities Option

To access the OPSVIEW Utilities Menu, enter 7 on the OPSVIEW Primary Options Menu. You see a display similar to the one shown here:

```
Utilities ----- MSI1 --- O P S V I E W -----Subsystem OPSS
OPTION ==>
 1 OPSLOG Utilities      - Browse or restore archived OPSLOGs
 2 Automation Analyzer  - Analyze the messages in OPSLOG
 3 MPF Conversion       - Convert MPF lists to AOF rules
 4 Identify IMS         - Identify IMS version for CA OPS/MVS
 5 Global Variable Backup - Generate global variable backup
 6 SYSCHK1 Restore     - Global Variable and RDF Restore

Enter END command to return to Primary Options
```

Access the OPSLOG Utilities Option (Option 7.1)

Use OPSVIEW option 7.1 to perform these tasks:

- Browse an OPSLOG that you have copied or restored from an archive data set.
- Copy the active OPSLOG into an archive data set.
- Restore an OPSLOG from an archive data set.
- Manage the OPSLOG archive tracking system.

To access OPSVIEW option 7.1

1. Enter 1 on the OPSVIEW Utilities Menu or use the ISPF jump function by entering =7.1 into any valid field in OPSVIEW.

The OPSLOG Utilities panel displays. The following is a sample:

```
OPSLOG Utilities ----- MSI1 --- O P S V I E W ----- Subsystem OPSS

OPTION ==>
 1 Browse   - Browse a copied/restored OPSLOG
 2 Archive  - Copy an OPSLOG to a sequential archive data set
 3 Restore  - Restore an OPSLOG from an archive data set
 4 Tracking - OPSLOG archive tracking system

Enter END command to return to Utility Options menu
```

2. From the OPSLOG Utilities panel, use the Option field to specify the option you want to use.

How to Browse a Copied or Restored OPSLOG (Option 7.1.1)

Use OPSVIEW option 7.1.1 to browse an OPSLOG that has been copied or restored from an archive data set:

- To restore an OPSLOG, use OPSVIEW option 7.1.3. For details, see How to Restore an Archived OPSLOG (Option 7.1.3) in this chapter.
- To copy an OPSLOG, use one of these methods:
 - Use IDCAMS REPRO to copy an OPSLOG VSAM linear (DIV) data set to another DIV data set.
 - Use IDCAMS EXPORT/IMPORT to copy an OPSLOG DIV data set to/from a sequential data set.

Access the Copied OPSLOG Panel

To browse a copied or restored OPSLOG, access the Copied OPSLOG panel. To do so, you can either:

- Select option 1 from the OPSLOG Utilities panel.
- Use the ISPF jump function by entering =7.1.1 into any valid field in OPSVIEW.

As a result, you see a display similar to the one shown here:

```
Copied OPSLOG ----- MSI1 ----- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
Please enter the copied OPSLOG data set name:
  DATA SET NAME ==>

Enter END command to return to OPSLOG Utilities Options Menu
```

Specifying the Name of an OPSLOG Data Set

On the Copied OPSLOG panel, specify the name of the data set that contains the copied or restored OPSLOG you want to browse. Follow these guidelines:

- If you enter a fully qualified data set name, enclose it in single quotes. If you omit the single quotes, CA OPS/MVS uses your TSO user ID as a prefix for the data set name.
- The data set that contains the OPSLOG you want to browse must be a VSAM linear (DIV) data set.

Browse the Restored OPSLOG

After you specify the data set name, a panel similar to the following appears:

```
OPSLOG Browse ----- XE44 --- OPSVIEW --- 07:48:10 24JUN2003 COLS 001 070
COMMAND ==>                                     SCROLL ==> PAGE

Dataset being used: SYS1.OPSLOG

Time      ----+----1----+----2----+----3----+----4----+----5----+----6----+----7
07:48:10 CAJR251I STEP          B314NTA 0000    $ .15    23 00:00:26.55 00
07:48:10 CAJR251I STEP          B312NTL 0000    $ .23    14 00:00:18.81 00
07:48:10 QA90MUF1:212:A:DB00102I - ENDED  JOB-C311EXEC NUMBER-23499
07:48:10 CAJR251I STEP          B311NTD 0000    $ .19    25 00:00:18.11 00
07:48:11 DB00101I - STARTED JOB-G315EXEC NUMBER-23504 CXX=QAMUF1  SUBID=A SVC=
07:48:11 PGM START=074811
07:48:11 DB00101I - STARTED JOB-MC1CEXEC NUMBER-23505 CXX=QAMUF1  SUBID=A SVC=
07:48:11 PGM START=074811
07:48:11 QA90MUF1:212:A:DB00102I - ENDED  JOB-PC3AEXEC NUMBER-23494
07:48:12 CAJR251I STEP          BC3ASQR 0000    $ .10    15 00:00:30.92 00
07:48:12 DB00101I - STARTED JOB-F314EXEC NUMBER-23506 CXX=QAMUF1  SUBID=A SVC=
07:48:16 CAS9855I Task 7D7C58 connecting to peer 141.202.18.203:7011.
07:48:16 CAS9899W - USWSU22 (141.202.18.203:7011) not available...waiting.
07:48:16 DB00101I - STARTED JOB-C311EXEC NUMBER-23507 CXX=QAMUF1  SUBID=A SVC=
07:48:16 PGM START=074814
***** ***** BOTTOM OF MESSAGES *****
```

From the OPSLOG Browse panel, you can use all of the standard OPSLOG Browse functions. For details, see the chapter “Using the OPSVIEW OPSLOG Option.”

Exit the Browse Function

When you have finished viewing the restored OPSLOG, press END to exit. CA OPS/MVS returns you to the Copied OPSLOG panel, where you can specify another data set name to browse or press END to exit.

How to Archive an OPSLOG (Option 7.1.2)

Use OPSVIEW option 7.1.2 to copy all or part of the active OPSLOG to a sequential data set, where you can keep it for future reference.

Although option 7.1.2 permits you to manually archive an OPSLOG, the archiving of an OPSLOG is typically performed automatically. For details about automatic archiving of the OPSLOG, see the *Administration Guide*.

Access the Archive OPSLOG Panel

To archive the OPSLOG, you must access the Archive OPSLOG panel. To do so, you can either:

- Select option 2 from the OPSLOG Utilities Menu.
- Use the ISPF jump function by entering =7.1.2 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```
Archive OPSLOG ----- MSI1 ----- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
Please enter the archive data set information:
  DATA SET NAME   ==>
  REUSE DATASET?  ==> N           (Y/N)
The following fields are optional:
  RELATIVE GDG NUM ==>
  VOLUME SERIAL   ==>
  GENERIC UNIT    ==>           (default unit used if blank)
  STORAGE CLASS   ==> 3390      (default storage class)
  SPACE UNITS     ==>           (BLOCKS, TRACKS, or CYLINDERS)
  PRIMARY QTY     ==>           (In above units)
  SECONDARY QTY   ==>           (In above units)
  BLOCK SIZE      ==>           (best fit determined if blank)

Enter END command to return to OPSLOG Utilities Options Menu
```

Specifying the Name of an OPSLOG Data Set

On the Archive OPSLOG panel, identify the data set to which you want to copy the active OPSLOG. Follow these guidelines:

- Use either of these methods to name the data set:
 - Enter the name of the OPSLOG data set in the Data Set Name field, but do not specify any data set allocation information. The archive creation program uses appropriate defaults.
 - Enter the name of the OPSLOG data set in the Data Set Name field, and specify any desired allocation information in the fields on the lower part of the panel. For descriptions of the fields, see *Fields on the Archive OPSLOG Panel* in this chapter.
- If you enter a fully qualified data set name, enclose it in single quotes. If you omit the single quotes, CA OPS/MVS uses your TSO user ID as a prefix for the data set name.
- If you are specifying an existing data set that you want to reuse, enter Y in the Reuse Data set field.
- Your archived OPSLOG data sets should reside on permanently resident DASD devices.

After you make entries into all of the desired fields, press Enter and the Archive OPSLOG Filter panel appears. For details, see *The Archive OPSLOG Filter Panel* in this chapter.

Fields on the Archive OPSLOG Panel

The following fields appear on the Archive OPSLOG panel:

Data Set Name

The name of the data set to which you want to copy the active OPSLOG.

Reuse Data set

A value indicating whether the data set you are specifying in the Data Set Name field already exists and that you want to reuse it.

Relative GDG Num

If the data set is part of a generation data group (GDG), a value indicating its relative generation number.

Volume Serial

The volume serial number of the device on which the data set will reside.

Generic Unit

The generic unit name of the device on which the data set will reside.

Storage Class

SMS storage class

Space Units

If the data set resides on DASD, a value indicating its space allocation unit (blocks, tracks, or cylinders).

Primary QTY

Primary DASD space allocation (in blocks, tracks, or cylinders).

Secondary QTY

Secondary DASD space allocation (in blocks, tracks, or cylinders).

Block Size

Block size of the data set. Leave this field blank to let the system determine the best block size.

The Archive OPSLOG Filter Panel

The Archive OPSLOG Filter panel appears after you specify the name of the data set to which you want to archive the active OPSLOG. Following is a sample Archive OPSLOG Filter panel:

```
Archive OPSLOG ----- MSII ---- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
blank - Create Archive Online (will delay TSO session until complete)
B      - Submit Batch Job to Create Archive
E      - Edit OPSLOG Archive Creation Control Statements
CANCEL - Cancel Archive Creation

CA OPS/MVS Load Library ==>

Start and end date/time to archive or leave blank to archive entire OPSLOG.

                YYYY/MM/DD    HH:MM
Start ==>
End   ==>

JOB STATEMENT INFORMATION:
==> //NALD5M JOB (ACCOUNT), 'NALD5'
==> //*
==> //*
==> //*
Enter END command to return to OPSLOG Utilities Options Menu
```

From the Archive OPSLOG Filter panel you can:

- Indicate whether you want some or all of the events from the active OPSLOG to be archived. For details, see [How to Specify Date and Time Ranges for the Archive](#) in this chapter.
- Choose to submit the archive creation program as a batch job or to run it online. For details, see [How to Start the Archive Creation Process](#) in this chapter.
- Access the archive request control statements so that you can edit them before submitting the program or running it online. For details, see [How to Edit the Archive Request Control Statements](#) in this chapter.
- Cancel the archive creation process by entering CANCEL in the Command field.

How to Specify Date and Time Ranges for the Archive

If you want only a portion of the events from the active OPSLOG to be archived, indicate the desired filter dates and times on the Archive OPSLOG Filter panel. All automation events that occur after the start time and before the end time will be archived.

If you want all of the events to be archived, leave the Start and End fields on the panel blank.

If you place an asterisk (*) in any of the Start or End fields, CA OPS/MVS uses the current date or time for that field.

Start the Archive Creation Process

There are two methods for starting the archive creation process.

To submit it as a batch job

1. In the job statement section at the bottom of the Archive OPSLOG Filter panel, specify up to four default job statements to be used when building the archive creation JCL.
2. To start the archive creation process, enter B in the Command field at the top of the panel.

The second method is to run it online by pressing Enter, and the archive creation process starts immediately. Running the process online delays your TSO session until the archive creation is complete. When the process is complete, a list of archive creation messages appears on the panel.

Edit the Archive Request Control Statements

To edit the archive request control statements

1. Before you start the archive creation process, enter E in the Command field at the top of the Archive OPSLOG Filter panel.

The Archive Creation Control Statement panel appears. This panel displays the set of control statements that was built from the values you specified earlier.

2. Edit the set by adding other statements to it or deleting statements from it.

Following is a sample panel:

```
OPSLOG Archive ---- MSI1 ----- Archive Creation ----- ROW 1 OF 42
COMMAND ==>
Line Commands: R Repeat, D Delete, I Insert
                OPSLOG Archive Control Statement
''      ARCHIVE DSNAME(NALD5.LCD.ARCH) SUBSYS(OPSS) REUSE(NO)
''      START(2007/07/17 08:00) END(2007/07/18 10:00)
''
''
''
''
```

3. When you finish using the Archive Creation Control Statement panel, press PF3.

The following OPSLOG Archive Creation panel appears:

```
OPSLOG Archive ----- MSI1 -- Archive Creation ----- Subsystem OPSS
COMMAND ==>
SUBMIT or ENTER - submit the OPSLOG archive creation job
CANCEL or END   - cancel the OPSLOG archive creation
ONLINE          - create OPSLOG archive online (will delay the TSO session).
JOB STATEMENT INFORMATION:
==> //NALD5M JOB (ACCOUNT), 'NALD5'
==> /*
==> /*
```

4. Use this panel to do the following tasks:
 - Complete the job statement information at the bottom of the panel. Then enter SUBMIT in the Command field (or just press Enter) to submit the program as a batch job.
 - Enter ONLINE in the Command field to run the archive creation program online. Running the process online delays your TSO session until the archive creation is complete.
 - Cancel the archive creation process by entering CANCEL or END in the Command field.

How to Restore an Archived OPSLOG (Option 7.1.3)

Use OPSVIEW option 7.1.3 to restore all or part of an archived OPSLOG to an OPSLOG VSAM linear (DIV) data set.

Access the Restore From Archive Panel

To restore an archived OPSLOG, use the Restore from Archive panel. To access the panel, you can either:

- Select option 3 from the OPSLOG Utilities Menu.
- Use the ISPF jump function by entering =7.1.3 into any valid field in OPSVIEW.

As a result, you see a display similar to the one shown here:

```
Restore from Archive ---- MSI1 ---- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
Please enter the source Archived OPSLOG data set name:
  Data Set Name      ==>
Please enter the target OPSLOG data set name:
  Data Set Name      ==>
Please specify the restore method:
  Execution Mode     ==>  1. Foreground
                       2. Started Task
  Started Task Name  ==>

Enter END command to return to OPSLOG Utilities Options Menu
```

Specifying Source and Target OPSLOG Data Sets

On the Restore from Archive panel, you must specify the names of two data sets:

- The name of the data set that contains the archived OPSLOG. This data set is the source data set for the restoration process. This is the same data set name that you specified when you archived the OPSLOG. For details, see [How to Archive an OPSLOG \(Option 7.1.2\)](#) in this chapter.
- The name of the data set that is to contain the restored OPSLOG. This data set is the target data set for the restoration process. The target data set must be a VSAM linear (DIV) data set.
 - If the data set that you specify for the target does not exist, a panel appears to prompt you for data set allocation information. For details, see [How to Allocate a Data Set for the Restored OPSLOG](#) in this chapter.
 - If the data set that you specify for the target exists, a panel appears to prompt you for the filter criteria that you want to set for the archived OPSLOG. For details, see [How to Specify Filter Criteria for the Restored OPSLOG](#) in this chapter.

Specifying the Restoration Method

The Restore from Archive panel asks you to specify the Execution Mode (either Foreground or Started Task). If you specify Started Task, you must enter the name of the started task in the Started Task Name field. (The name must represent a valid started task procedure in a valid procedure library.)

Notes:

- Before attempting to use the started task mode of OPSLOG Restore, you must modify this procedure to your installation standards. A sample procedure is provided in the RESTJOB member of the OPS.CCLXCNTL data set.
- If you select the Foreground mode, a large virtual storage region may be necessary, depending on the size of the archived OPSLOG. However, there are no special virtual storage requirements in Started Task mode.

Both the TSO user and the Started Task require read and update access to the global variable GLOBAL0.OPSLOG.RESTORE. Therefore, you must enable a security (SEC) rule before you specify the Started Task mode. This rule must also be tailored to your installation needs. For a sample of such a SEC rule, see the RESTSECG member in the OPS.CCLXRULB data set.

How to Allocate a Data Set for the Restored OPSLOG

If the target data set that you specify on the Restore from Archive panel does not exist, the Allocate New OPSLOG panel appears. Use this panel to indicate information about the target data set. Following is a sample:

```
Allocate new OPSLOG ---- MSI1 ---- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
DATA SET NAME:
  Volume Serial      ==>                (Specify either Volser
  Storage Class      ==>                or Storage Class)
  Primary quantity   ==> 1              (In records)
  Secondary quantity ==> 1              (In records)
  Average recordsize: 436
Press ENTER to allocate above OPSLOG data set
Enter END command to return to Restore from Archive panel
```

On the Allocate New OPSLOG panel, specify either the volume serial or the SMS storage class where you want to allocate the new OPSLOG data set.

By default, the number of records in the source (archived) data set appears when you access this panel. If you leave the default as it is, the target (OPSLOG) data set will be able to hold all of the events from the source data set. If you specify a smaller size for the OPSLOG data set, it may not be large enough to hold all of the events that you select for restoration.

The target (OPSLOG) data set must be a VSAM linear (DIV) data set.

After you have allocated the target data set, proceed to the next section, How to Specify Filter Criteria for the Restored OPSLOG.

How to Specify Filter Criteria for the Restored OPSLOG

The Restore from Archive Filter panel appears when either of these events occurs:

- The target data set that you specify on the Restore from Archive panel already exists.
- The target data set that you specify on the Restore from Archive panel does not exist, but you successfully allocate an OPSLOG data set on the Allocate New OPSLOG panel.

Restore from Archive Filter Panel

Use the Restore from Archive Filter panel to indicate the selection criteria for the events that you want to be restored. Following is a sample Restore from Archive Filter panel:

```

Restore from Archive --- MSII ---- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
-----
                YYYY/MM/DD  HH:MM
1.   Start ==>                                     (leave blank to restore entire archive)
     End   ==>                                     (leave blank to restore entire archive)
-----
2.   Jobname ==>          ==>          ==>          ==>
     or  MsgID ==>        ==>          ==>          ==>
     or  RuIeset ==>      Rule name ==>
     or  Color ==>        ==>          ==>          ==>
                                (Green,Blue,Red,White,Pink,Yellow,Turq or None)
     or  System ==>
     or  UserFld ==>      ==>          ==>          ==>
-----
3.   Events: MSG:  CMD:  DIS:  DOM:  ENA:  EOM:  (Y or N)
                GLV:  OMG:  REQ:  SEC:  SCR:  TOD:
                TRC:  ARM:  EOJ:  EOS:  TLM:  USS:
                API:
Enter Archive restore filter requirements and press ENTER key, or
Enter END command to return to OPSLOG Utilities Options Menu
    
```

The Restore from Archive Filter panel is divided into three sections. Each section pertains to a type of criteria that you can specify to determine which events will appear in the restored OPSLOG. The three types of criteria are:

- Date and time range criteria
- Non-event-related criteria
- Event-related criteria

For an automation event to appear in the restored OPSLOG, these statements must be true:

- The event must have occurred in the date and time range that you indicate in section 1 of the panel.
- The event must meet at least one of the non-event-related criteria that you indicate in section 2 (if any).
- The event must be one of the event types that you indicate in section 3 (if any).

If any of the three sections on the panel are left blank (or in the case of section 3, are filled with only N values), CA OPS/MVS does not consider that section when it selects events to be restored. For example, if you specify values in sections 1 and 3, but specify no values for section 2, the events that will be restored will be those that meet the criteria in sections 1 and 3.

The following fields appear on the Restore from archive Filter panel:

Start

To restore only a portion of the events in the archive, specify the desired starting date and time. All events that occurred after the start time are restored.

To specify the current date and time, type an asterisk (*) into the field or fields.

If you leave the fields blank, events are restored regardless of the date and time at which they occurred.

End

To restore only a portion of the events in the archive, specify the desired ending date and time. All events that occurred before the end time are restored.

To specify the current date and time, type an asterisk (*) into the field or fields.

If you leave the fields blank, events are restored regardless of the date and time at which they occurred.

Jobname

Specify a job name to limit restored events to those that were produced by a particular job. Specify up to four values.

MsgID

Specify a message ID to limit restored events to those with a particular message ID. You may specify up to four values.

Ruleset/Rule name

Specify the name of a rule set, a rule, or both, to limit restored events to those that were processed by a particular rule set or rule.

Color

Specify a color to limit restored events to those that appear in a particular color in the OPSLOG. Specify up to four values.

The color filter works only on those events that CA OPS/MVS has specifically tagged with a color. Although most events appear in default colors of green, white, or red, many of them have a color value of NONE (unless your site assigns color values in either a rule or an exit routine).

System

Specify an SMF ID to limit restored events to those that were produced on a particular system.

UserFld

Specify a user ID to limit restored events to those that are associated with a particular user field value. Specify up to four values.

MSG

Specify Y to limit restored events to AOF message events. Or, specify N.

CMD

Specify Y to limit restored events to AOF command events. Or, specify N.

DIS

Specify Y to limit restored events to AOF rule disabling events. Or, specify N.

DOM

Specify Y to limit restored events to AOF delete-operator-message events. Or, specify N.

ENA

Specify Y to limit restored events to AOF rule enabling events. Or, specify N.

EOM

Specify Y to limit restored events to AOF end-of-memory events. Or, specify N.

GLV

Specify Y to limit restored events to AOF global variable events. Or, specify N.

OMG

Specify Y to limit restored events to AOF OMEGAMON events. Or, specify N.

REQ

Specify Y to limit restored events to AOF request events. Or, specify N.

SEC

Specify Y to limit restored events to AOF security events. Or, specify N.

SCR

Specify Y to limit restored events to AOF screen events. Or, specify N.

TOD

Specify Y to limit restored events to AOF time-of-day events. Or, specify N.

TRC

Specify Y to limit restored events to rule trace events that pertain to any AOF event type. Or, specify N.

ARM

Specify Y to limit restored events to AOF automatic restart manager events. Or, specify N.

EOJ

Specify Y to limit restored events to AOF end-of-job events. Or, specify N.

EOS

Specify Y to limit restored events to AOF end-of-step events. Or, specify N.

TLM

Specify Y to limit restored events to AOF time limit events. Or, specify N.

USS

Specify Y to limit restored events to AOF UNIX System Services events. Or, specify N.

API

Specify Y to limit restored events to AOF API events. Or, specify N.

Note: For the Jobname, MsgID, Ruleset, Rule Name, System, and UserFld fields, you can use an asterisk to indicate a wildcard match. For example, if you specify IEF* in one of the MsgID fields, all events whose message IDs begin with the letters IEF are restored.

Restore the Filtered OPSLOG

Put the filter criteria into effect by pressing Enter. CA OPS/MVS restores the OPSLOG to the target data set in Foreground mode or issues a z/OS START command for the started task name specified on the Restore from Archive panel. The started task does not send any messages back to the TSO user who started it. Therefore, you should check the output of the started task to ensure that the task completed successfully and to determine the number of records that were restored.

Otherwise, press END. CA OPS/MVS returns you to the OPSLOG Utilities Menu panel.

How to Manage the OPSLOG Archive Tracking System (Option 7.1.4)

Use OPSVIEW option 7.1.4 to manage the OPSLOG archive tracking system. With this option, you can:

- View information about all tracked OPSLOG archives.
- Merge two or more archives into one new archive.
- Delete archives from the tracking system.
- Access OPSVIEW option 7.1.3 to restore an archive; for details, see How to Restore an Archived OPSLOG (Option 7.1.3) in this chapter.

For complete information about enabling the OPSLOG archive tracking system, see the *Administration Guide*.

Access the Archive Tracking Entries Panel

Manage the archive tracking system by accessing the Archive Tracking Entries panel. To do so, you can either:

- Select option 4 from the OPSLOG Utilities Menu.
- Use the ISPF jump function by entering =7.1.4 into any valid field in OPSVIEW.

As a result, you see a display similar to the following one:

```

OPSLOG Archive ---- MS11 ----- Archive Tracking Entries ----- ROW 1 OF 100
COMMAND ==>                                     SCROLL ==> CSR
Line Commands: D Delete entry  R Restore entry
Primary Commands: SORT display, MERGE entries, REFRESH display
First Record          Last Record          Sub      SMF          Record
Date      Time        Date      Time        Sys      Id            Count
2008/05/04 01:18:00 2008/05/04 04:46:34  OPSM    C4            4999
2008/05/04 04:47:00 2008/05/04 09:13:59  OPSM    C4            5159
2008/05/04 09:14:00 2008/05/04 10:18:56  OPSM    C4            4985
2008/05/04 10:19:00 2008/05/04 13:05:33  OPSM    C4            4994
2008/05/04 13:06:01 2008/05/04 15:39:53  OPSM    C4            4996
2008/05/04 15:40:00 2008/05/04 17:51:22  OPSM    C4            4989
2008/05/04 17:52:00 2008/05/04 20:50:58  OPSM    C4            5015
2008/05/04 20:51:01 2008/05/04 23:31:58  OPSM    C4            5015
2008/05/04 23:32:00 2008/05/05 03:24:58  OPSM    C4            4949
2008/05/05 03:25:01 2008/05/05 06:42:41  OPSM    C4            4991
2008/05/05 06:43:00 2008/05/05 11:00:47  OPSM    C4            5027
2008/05/05 11:01:00 2008/05/05 14:51:17  OPSM    C4            4996
2008/05/05 14:52:01 2008/05/05 16:31:59  OPSM    C4            4996
2008/05/05 16:32:00 2008/05/05 17:51:14  OPSM    C4            3340
2008/05/05 17:52:00 2008/05/05 18:48:57  OPSM    C4            3585
2008/05/05 18:49:00 2008/05/05 23:22:52  OPSM    C4            5017
2008/05/05 23:23:00 2008/05/08 06:28:43  OPSM    C4            4995
2008/05/08 06:29:00 2008/05/08 12:11:59  OPSM    C4            4994
2008/05/08 12:12:00 2008/05/08 12:11:59  OPSM    C4            4993
2008/05/08 15:42:00 2008/05/08 18:08:50  OPSM    C4            4919
2008/05/08 18:09:01 2008/05/08 20:14:57  OPSM    C4            4983
2008/05/08 20:15:00 2008/05/08 23:34:59  OPSM    C4            5008
2008/05/08 23:35:00 2008/05/09 06:49:58  OPSM    C4            5019
2008/05/09 06:50:00 2008/05/09 11:23:46  OPSM    C4            4990
    
```

You may receive a Tracking entries removed message upon entry to the OPSLOG archive tracking system. This message indicates that entries referencing uncataloged data sets were removed from the tracking system.

The Archive Tracking Entries panel contains more columns of information than you can view at one time. To see the rest of the information, use your LEFT and RIGHT PF keys to scroll. Another view of the following Archive Tracking Entries panel appears:

```

OPSLOG Archive ---- MS11 ----- Archive Tracking Entries ----- ROW 1 OF 100
COMMAND ==>                               SCROLL ==> CSR
Line Commands: D Delete entry  R Restore entry
Primary Commands: SORT display, MERGE entries, REFRESH display
Archive Creation Information
  Date      Time      Jobname  Dataset Name
2008/05/04 08:47:51  NALDCTK  NALDC.TRACKGDG.G0098V00
2008/05/04 13:14:08  NALDCTK  NALDC.TRACKGDG.G0099V00
2008/05/04 14:19:30  NALDCTK  NALDC.TRACKGDG.G0100V00
2008/05/04 17:06:22  NALDCTK  NALDC.TRACKGDG.G0101V00
2008/05/04 19:40:35  NALDCTK  NALDC.TRACKGDG.G0102V00
2008/05/04 21:52:25  NALDCTK  NALDC.TRACKGDG.G0103V00
2008/05/05 00:51:16  NALDCTK  NALDC.TRACKGDG.G0104V00
2008/05/05 03:32:13  NALDCTK  NALDC.TRACKGDG.G0105V00
2008/05/05 07:25:35  NALDCTK  NALDC.TRACKGDG.G0106V00
2008/05/05 10:44:01  NALDCTK  NALDC.TRACKGDG.G0107V00
2008/05/05 15:01:05  NALDCTK  NALDC.TRACKGDG.G0108V00
2008/05/05 18:52:44  NALDCTK  NALDC.TRACKGDG.G0109V00
2008/05/05 20:32:50  NALDCTK  NALDC.TRACKGDG.G0110V00
2008/05/05 21:52:44  NALDCTK  NALDC.TRACKGDG.G0111V00
2008/05/05 22:49:24  NALDCTK  NALDC.TRACKGDG.G0112V00
2008/05/08 03:23:02  NALDCTK  NALDC.TRACKGDG.G0113V00
2008/05/08 10:29:34  NALDCTK  NALDC.TRACKGDG.G0114V00
2008/05/09 15:24:51  NALDCTK  NALDC.TRACKGDG.G0121V00

```

Fields on the Archive Tracking Entries Panel - Left View

The following fields appear on the left side of the Archive Tracking Entries panel. You see these fields when you first access the panel and when you press the LEFT PF key.

First Record Date/Time

The date and time that the earliest event in the archive occurred.

Last Record Date/Time

The date and time that the latest event in the archive occurred.

Sub Sys

The name of the CA OPS/MVS subsystem from which the archive was taken.

SMF ID

The SMF ID of the z/OS system from which the archive was taken.

Record Count

The total number of events that the archive contains.

Fields on the Archive Tracking Entries Panel - Right View

The following fields appear on the right side of the Archive Tracking Entries panel. These fields contain information about the creation of the archive. You see these fields when you press the RIGHT PF key.

Date

The date on which the archive was created.

Time

The time at which the archive was created.

Jobname

The job name of the job that created the archive.

Dataset Name

The name of the data set that contains the archive. If the archive data set is part of a generation data group (GDG), this field contains the fully qualified data set name, rather than the relative generation number.

Line Commands for the Archive Tracking Entries Panel

The following line commands can be used on the Archive Tracking Entries panel. Issue line commands in the prefix area of the line naming the archive.

D

Deletes an entry from the archive tracking system. The setting of the Action Verification field on the OPSVIEW General Settings panel affects the outcome of the D line command:

- If the Action Verification field is set to Y, CA OPS/MVS requests confirmation before it deletes the entry. Press Enter to confirm the request or enter the CANCEL or END command to cancel the request.
- If the field is set to N, CA OPS/MVS deletes the entry without requesting your confirmation.

For details about the OPSVIEW General Settings panel and the Action Verification field, see the chapter “Using the OPSVIEW Parameters Option.”

R

Accesses option 7.1.3, where you can restore the archived OPSLOG. For information, see How to Restore an Archived OPSLOG (Option 7.1.3) in this chapter.

Point-and-shoot is enabled to issue the R line command for an OPSLOG archive. To issue the R line command for an OPSLOG archive using the point-and-shoot method, place the cursor to the left of the desired OPSLOG archive and press Enter. Point-and-shoot is enabled only if no primary or line commands have been entered.

Primary Commands for the Archive Tracking Entries Panel

The following primary commands may be used on the Archive Tracking Entries panel. Enter primary commands in the Command field.

MERGE

Merges two or more existing archives into one new archive.

The MERGE command lists all available archive entries. Select up to 255 entries for merging by placing an S in the prefix area next to each entry. After selecting the entries, press PF3 to continue with the request or enter the CANCEL command to cancel it.

If you press PF3, the Merge Archive Submit panel appears. Use this panel to complete the request. The panel prompts you for this information about the merged archive:

- Data set name
- Volume serial number
- Unit type
- Up to four default job statements for the merge job. The statements are kept from session to session.

Press PF3 to submit the merge job or enter the CANCEL command to cancel it.

REFRESH

Refreshes the entries on the panel so that you can view any new archives that were created since the session began. When you issue the REFRESH command, the entries return to their default sort order.

`SORT colname`

Sorts the entries according to the value of colname. Values for colname are:

- FIRST
- LAST
- SUBSYS
- SMFID
- RECORDS (or COUNT)
- DEFAULT
- CREATION
- JOBNAME
- DATASET (or DSN)

You must specify at least one column name. You can specify more than one value at a time. For example, suppose you specify this command:

```
SORT SUBSYS FIRST
```

As a result, CA OPS/MVS sorts the entries first by the name of the CA OPS/MVS subsystem from which the archives were taken, and then by the dates and times of the first events in the archive data sets.

Point-and-shoot is enabled to SORT the archive tracking table using any column heading. To SORT the archive tracking table using the point-and-shoot method, place the cursor on the bottom line of a column heading and press Enter.

How to Use the Automation Analyzer (Option 7.2)

The Automation Analyzer (option 7.2) assists you in automating your site. With the information the Automation Analyzer provides, you are in a better position to decide whether automation of a message is desirable.

With option 7.2, you can:

- Examine message events that originated in the subsystem interface and that appear in OPSLOG.
- Review a statistical analysis of OPSLOG message events.
- Access an interface to the Chicago-Soft MVS/QuickRef product, through which you can view message descriptions.
- Immediately generate rules that delete or suppress selected messages, or access EasyRule to create or modify rules that take other actions.

Access Option 7.2

To access OPSVIEW option 7.2, you can either:

- Enter 2 on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =7.2 into any valid field in OPSVIEW.

The Automation Analyzer Specification Panel

When you select option 7.2, the Automation Analyzer Specification panel appears. Use this panel to indicate whether the Automation Analyzer should limit the message events that it will include in its analysis. The Automation Analyzer excludes from its analysis any message that does not meet the criteria you specify.

How to Select Messages for Analysis

The fields on the Automation Analyzer Specification panel provide options for limiting the message analysis. You can limit the analysis in these ways:

- Specify a time and date range so that only those message events that occurred in the range are analyzed.
- Restrict the analysis to only WTORS, or to only WTORS and WTOR replies.
- Indicate whether you want the analysis to include echoes of commands that were issued by z/OS or other subsystems.
- Indicate whether you want the analysis to include messages that MPF is suppressing.
- Indicate whether you want the analysis to include “command response” messages.
- Indicate whether you want the analysis to include “hardcopy only” messages.
- Specify the data set name of a particular OPSLOG for analysis.

If you make no entries on the Automation Analyzer Specification panel, the analysis starts from the beginning of the currently active OPSLOG and continues to the current time.

The fields appear on the Automation Analyzer Specification panel:

Start

To analyze only a portion of the message events, specify the desired starting date and time. All message events that occurred after the start date and time are analyzed.

To specify the current date and time, type an asterisk (*) into the fields.

If you leave the fields blank, the start date defaults to the current date and the start time defaults to 00:00.

End

To analyze only a portion of the message events, specify the desired ending date and time. All message events that occurred before the end date and time are analyzed.

To specify the current date and time, type an asterisk (*) into the fields.

If you leave the fields blank, the end date defaults to the current date and the end time defaults to 23:59.

Analyze WTORS Only

Specify Y to restrict the analysis to only WTORS. Or, specify N.

Replies

Specify Y if you want the analysis to include replies issued to WTORs. Or, specify N.

Note: If you specify Y in this field, you must also specify Y in the Analyze WTORs Only field.

Command Echo

Specify N if you want the analysis to include echoes of commands. Or, specify Y.

MPF Suppressed

Specify N if you want the analysis to include messages that MPF is suppressing. Or, specify Y.

Command Response

Specify N if you want the analysis to exclude command response messages. Or, specify Y.

Hardcopy Only

Specify N if you want the analysis to exclude hardcopy only messages. Or, specify Y.

Use OPSLOG Data From

Specify the OPSLOG that you want the Automation Analyzer to analyze.

If you enter a fully qualified data set name, enclose it in single quotes. If you omit the single quotes, CA OPS/MVS uses your TSO user ID as a prefix for the data set name.

Specify an asterisk (*) if you want the Automation Analyzer to use the OPSLOG from the currently active subsystem.

Log name

Specify the OPSLOG log name that you want the Automation Analyzer to analyze.

Specify either a one- to sixteen-character log name, if you know it, or a question mark (?) to be presented with a list of the active log names for the currently active subsystem. The list is similar to the one presented to a user of OPSLOG Browse when the LOGNAME primary command is used.

Specify an asterisk (*) if you want the Automation Analyzer to use the current live OPSLOG from the currently active subsystem.

After you have indicated which messages you want to be analyzed, press Enter. A message appears to indicate that the analysis has begun. When the analysis is complete, the Automation Analyzer Results panel appears. The next section discusses how to use this panel.

How to Use the Automation Analyzer Results Panel

After the Automation Analyzer completes its analysis of the selected messages, a panel of results appears. Following is a sample panel:

```
Automation Analyzer --- MS11 --- O P S V I E W ----- ROW 1 OF 100
COMMAND ==>                                     SCROLL ==> PAGE
Sel options: E - Easy Rule S - Suppress Message D - Delete Message
              Q - Quick-Ref X - Extract Replies
Analysis done from 2008/07/13 00:00 to 2008/07/13 23:59
Total messages found      :      6607
Total messages suppressed:      0 (   0.00% )

Sel  Message      Action  # of  Percent  IBM  OPS  Ruleset  Rule
     Identifier    Taken  Occr  of Total Supp Supp.? Name   Name
-----
IST663I          859    13.00%
IEF196I          815    12.33%  C
IST530I          393     5.94%  C
IST314I          329     4.97%
IST664I          329     4.97%
IST889I          329     4.97%
OPS1000I         312     4.72%
OPC44030         196     2.96%
READY            170     2.57%
OPS4320H         148     2.24%
OPS3724H         121     1.83%
OPSWT0           116     1.75%
OPU1370H         116     1.75%
OPS1181H         102     1.54%
$HASP373          99     1.49%  C
IEA989I          92     1.39%  C
OPF1290H         86     1.30%
OPF39000         76     1.15%
```

When a log name (other than the current live OPSLOG) is specified, the resulting panel indicates the log name analyzed:

```
Analysis done on entire OPSLOG
Total messages found      :      11897   Log name: BABYLOG
Total messages suppressed:      42 (   0.35% )
```

Summary Statistics on the Automation Analyzer Results Panel

The summary statistics for the analysis appear in the top half of the panel. They include this information:

- The portion of the OPSLOG that was analyzed.
- The total number of unique message IDs that the Automation Analyzer found.
- The total number of messages in the analysis that were suppressed.
- The percentage of the messages in the analysis that were suppressed.

Fields on the Automation Analyzer Results Panel

The following fields appear on the Automation Analyzer Results panel:

Sel

Specify the action to take for a message. Values are D, E, Q, S, and X. For details about these options, see Line Commands for the Automation Analyzer Results Panel in this chapter.

Message Identifier

The message ID.

Action Taken

The outcome of a previously entered Sel option.

of Occr

The number of times the message ID appeared in the analyzed OPSLOG.

Percent of Total

The frequency with which the message ID appeared.

IBM Supp

A value indicating whether the message appears on the IBM conservative (C) list for message suppression, aggressive (A) list, or neither (blank). For more information about the list, see the IBM documentation).

OPS Supp.?

The percentage of times that the message was suppressed by CA OPS/MVS.

Ruleset Name/Rule Name

The name of at least one rule that processes the message, and the name of the rule set to which the rule belongs.

Primary Commands for the Automation Analyzer Results Panel

You may use the following primary commands on the Automation Analyzer Results panel. Issue primary commands from the Command field.

Locate msgid

Scrolls the panel so that the line referring to msgid is the top line on the panel. You can specify a partial ID. For example, issue this command to locate the first message ID that begins with the characters IST:

```
L IST
```

REPORT

Sends a report to your ISPF LIST data set. With the exception of the information that appears in the Action Taken field, the report includes all of the information that the Automation Analyzer Results panel provides.

SORT columnname

Sorts the list of messages according to the specified column. Values for columnname are: msg, msgid, and message (to sort by Message Identifier field); cnt, count, num, number, occ, and occurrence (to sort by # of Occr field); and sup, supp, and suppressed (to sort by OPS Supp.? field).

Specify up to three values for columnname. For example, issue this command to sort the messages first by CA OPS/MVS suppression and then by message ID:

```
SORT SUPP MSGID
```

Point-and-shoot is enabled to SORT the data on the Automation Analyzer Results panel using any valid column. To SORT the data on the Automation Analyzer Results panel using the point-and-shoot method, place the cursor on a valid column heading and press Enter.

STATS

Displays the Automation Analyzer summary statistics.

The following is a sample of the ISPF panel that appears when the STATS command is issued:

```
Automation Analyzer --- MSII --- O P S V I E W ----- Subsystem OPSS
Command ==>                                         Scroll ==> CSR

Automation Analyzer Summary Statistics

Total messages read from OPSLOG      : 142161
Total messages analyzed              : 60085
Total messages ignored               : 82076
Messages suppressed by AOF rules    : 0      ( 0.00% )
Messages suppressed by MPF          : 967

MPF Suppressed messages ignored      : 967
Non-SSI messages ignored             : 4821
Secondary MLWTO messages ignored     : 48254
Command Echoes ignored              : 1831
Command Response messages ignored    : 17200
Hardcopy only messages ignored       : 9003
Table full messages ignored          : 0

Number of message table entries      : 15000

Press END to return to Automation Analyzer main panel.
```

Line Commands for the Automation Analyzer Results Panel

Use the following line commands on the Automation Analyzer Results panel. Issue line commands from the prefix area preceding the desired message.

D

Immediately generates a rule that suppresses and deletes the message from SYSLOG.

Note: Occurrences of a message that has been deleted will still be recorded in the OPSLOG.

E

Invokes EasyRule so you can create or edit a rule for the message. Use this command if you want to create a rule that does something other than message suppression or deletion. For details about using the EasyRule feature, see the *User Guide*.

Q

Lets you view the MVS/QuickRef description of the message. For help with MVS/QuickRef error messages, see the online help for OPSVIEW option 7.2.

S

Immediately generates a rule that suppresses the message.

X

Extracts the replies issued to a WTOR message for automation.

Where to Find a Batch Job Version of OPSVIEW Option 7.2

The Automation Analyzer can be run in batch. Member OPS.CCLXCNTL(BATCHAA) on the distribution media contains a sample JCL for running the Automation Analyzer in batch. You need to customize the JCL to reflect the data sets that are in use at your site.

To specify the parameters for the analysis, you need to modify the OPAAISPF REXX program, which is in the distribution REXX library. This simple program invokes the Automation Analyzer batch program (OPAABTCH) in an ISPF environment, passing up to 13 positional values:

1. CA OPS/MVS subsystem name (for example, OPSS)
2. Start date in the form yyyy/mm/dd
3. Start time in the form hh:mm
4. End date in the form yyyy/mm/dd
5. End time in the form hh:mm
6. Name of the OPSLOG data set or * to analyze the “live” OPSLOG or the log name specified on positional parameter 13 below for the subsystem specified in argument 1 above
7. Analyze WTORs only (Y or N)
8. Reply processing (Y or N)
9. Ignore command echoes (Y or N)
10. Ignore suppressed messages (Y or N)
11. Ignore commands (Y or N)
12. Ignore hardcopy messages (Y or N)
13. OPSLOG log name

The 13 arguments above correspond to the entry fields on the OPSVIEW 7.2 panel. The Automation Analyzer Batch Interface supports all of the parameters available on the OPSVIEW 7.2 panel. You must set these arguments in your copy of OPAAISPF each time you run the Automation Analyzer in batch.

If the analysis executes successfully, a report is created in the ISPF list data set. Be sure to check the output of the batch job for the name of this report data set. The high-level qualifier given to the data set depends on the userid value that you specified in OPAAISPF.

How to Generate AOF Suppression Rules From an MPF Suppression List (Option 7.3)

Use OPSVIEW option 7.3 to automatically generate AOF message suppression rules from entries in an MPF suppression list. The only entries that CA OPS/MVS converts to rules are those that are simple message suppression entries. CA OPS/MVS does not convert entries in which the USEREXIT parameter has been coded.

Conversion of an MPF Entry to an AOF Rule: An Example

Suppose that the MPF suppression list contains this entry:

```
IEC507D
```

When the conversion is complete, this rule appears in the data set you specified:

```
)MSG IEC507D
)PROC
  RETURN 'SUPPRESS'
```

Access Option 7.3

To access OPSVIEW option 7.3, you can either:

- Enter 3 on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =7.3 into any valid field in OPSVIEW.

The MPF Conversion Panel

When you select option 7.3, the MPF Conversion panel appears. Following is a sample panel:

```
MPF Conversion ----- MS11 ----- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
Specify data sets below, then press ENTER key
Logical parmlib MPF list member:
  Member name ==>
AOF rule data set (Do not specify a member name):
  DATA SET NAME ==>

Enter END command to return to Utility Options Menu
```

Fields on the MPF Conversion Panel

The following fields appear on the MPF Conversion panel:

Member

Specify the name of the member of the Logical Parmlib Concatenation that contains the MPF list you want to convert.

Data Set Name

Specify the name of the PDS in which you want the generated AOF suppression rules to reside. Allocate this data set before you use the MPF conversion utility. The data set must have these attributes:

- RECFM-FB
- LRECL-80
- DSORG-PO

Important! If the MPF list contains message suppression entries with the same names as existing members in the data set, those members will be overwritten during the conversion.

How to Run the Conversion

After you specify values for the Member and Data Set Name fields, press Enter to begin the conversion.

Related Documentation

If you want more information about MPF lists, see the IBM documentation.

How to Create Parameter Statements for the IMS Operation Facility (Option 7.4)

Use OPSVIEW option 7.4 to create parameter statements for the IMS Operation Facility (IOF). These statements identify the version of IMS that you are using, and are necessary for the operation of the IOF.

What Is the IMS Operation Facility (IOF)

The IOF is an optional interface between CA OPS/MVS and IMS that extends the CA OPS/MVS facilities to IMS. For example, you can write AOF rules that process IMS messages, and you can use OPSVIEW to operate IMS.

A single copy of CA OPS/MVS can handle up to 32 copies of IMS. If you run multiple copies of IMS under the control of one copy of CA OPS/MVS, the copies of IMS may be any combination of IMS levels that CA OPS/MVS supports.

Access Option 7.4

To access OPSVIEW option 7.4, you can either:

- Enter 4 on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =7.4 into any valid field in OPSVIEW.

The Run AMBLIST Panel

When you select option 7.4, the Run AMBLIST panel appears. CA OPS/MVS uses the information on this panel to create the IMSCMD1OFFSET and IMSAOI1OFFSET parameter statements and place them in a data set that you specify.

Following is a sample panel:

```
Run AMBLIST ----- MSII ----- O P S V I E W ----- Subsystem OPSS
COMMAND ==>
IMS LOAD LIBRARY DATA SET      ==> 'IMSVS.RESLIB'
(This library must contain DFSVNUCx)
IMS NUCLEUS NAME                ==> DFSVNUC0
AMBLIST PROGRAM LOCATION        ==> 'SYS1.LINKLIB(AMBLIST)'
(Specify the library and member name containing the AMBLIST program)
OUTPUT PARAMETER DATA SET      ==> 'SYS1.OPS.CCLXCNTL(IMSPARMS)'
(Specify sequential dataset or PDS member to hold IMS parameters.)
(This dataset should be merged into the product parmLib dataset.)

Enter END command to return to UTILITY Options Menu
```

Fields on the Run AMBLIST Panel

The following fields appear on the Run AMBLIST panel:

IMS Load Library Data Set

Specify the name of the data set that contains the IMS nucleus. This data set must contain the member that you specify in the IMS Nucleus Name field.

Default: IMSVS.RESLIB.

IMS Nucleus Name

Specify the name of the member that contains the IMS nucleus.

Default: DFSVNUC0.

AMBLIST Program Location

Specify the name of the data set and member in which the IBM service aid program (AMBLIST) resides. The AMBLIST program generates a cross-reference listing of the IMS/VS nucleus. CA OPS/MVS scans the listing to find the information it needs to create the parameter statements.

Default: SYS1.LINKLIB(AMBLIST).

Output Parameter Data Set

Specify the name of either a sequential data set or a partitioned data set and member into which CA OPS/MVS should insert the parameter statements.

Default: SYS1.OPS.CCLXCNTL(IMSPARMS).

How to Run the AMBLIST Program

After you specify values for the fields on the Run AMBLIST panel, press Enter. CA OPS/MVS creates the parameter statements and places them in the data set you specified in the Output Parameter Data Set field.

Copy the Statements Into the Start Up Parameter Member

The parameter statements in the output data set look similar to the following:

```
OPSPARM SET(IMSCMD1OFFSET) VALUE(X'2F14')
OPSPARM SET(IMSAOI1OFFSET) VALUE(X'0E60')
```

Copy the parameter statements from the output data set into your CA OPS/MVS start up parameter member. Typically, this is the appropriate OPSSPA00 member of the Logical Parmlib Concatenation.

Note: If you are running multiple versions of IMS and you have already used values of IMSCMD1OFFSET and IMSAOI1OFFSET, use the next highest unused values (for example, IMSCMD2OFFSET and IMSAOI2OFFSET).

Where to Find a Batch Job Version of OPSVIEW Option 7.4

The OPS.CCLXSAMP(BATCHPRM) member on the CA OPS/MVS distribution media contains a batch job version of this utility.

How to Create a Backup Copy of Your Global Variables (Option 7.5)

Use OPSVIEW option 7.5 to create a backup copy of your global variables. When you use this option, CA OPS/MVS generates an output data set containing REXX assignment statements for your existing global variables.

Important! This option is not intended to be the primary mechanism for backing up global variables, nor is it capable of backing up RDF tables. Use option 7.5:

- To perform ad hoc and partial backups
- To transfer global variables from one stem to another by editing the resulting OPS/REXX program

For details about the recommended global variable backup and restore facility that includes RDF tables, see the *Administration Guide*.

Access Option 7.5

To access OPSVIEW option 7.5, you can either:

- Enter 5 on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =7.5 into any valid field in OPSVIEW.

The Backup Globals Panel

The Backup Globals panel appears when you select option 7.5. Following is a sample panel:

```
Backup GLOBALS ----- XAE1 --- O P S V I E W ----- Subsystem OPSS
Command ==>

Please enter the target Backup data set name:
  Data set name ==>

If a backup of a specific global variable stem is desired, enter:
  Global variable stem ==>

Note: This utility is not intended as the primary mechanism for backing up
Global Variables, nor is it capable of backing up RDF tables.
It is intended for ad hoc and partial backups or to transfer Global
Variables from one stem to another by editing the resulting OPS/REXX
program. For more information about the Backup and Restore facility,
see the CA OPS/MVS Administration Guide.

Enter END command to return to OPS/MVS Utilities Options Menu
```

Fields on the Backup Globals Panel

The following fields appear on the Backup Globals panel:

Data Set Name

Specify the name of the data set that is the target for the backup copy. If you enter a fully qualified data set name, enclose it in single quotes. If you omit the quotes, CA OPS/MVS uses your TSO user ID as a prefix for the data set name. The target for the backup copy can be either a sequential data set or the member of a PDS.

Note: If the target is the member of a PDS, the member name will be the name of the stem that you specify in the Global Variable Stem field. If you do not specify a value for the Global Variable Stem field, the member name will be GLVBKUP.

Global Variable Stem

If you want to create a backup copy of only those global variables with a particular stem, specify the name of the stem. Otherwise, leave this field blank.

How to Begin the Backup Process

After you specify values for the fields on the Backup Globals panel, press Enter. If the data set you specified in the Data set name field already exists, CA OPS/MVS generates the backup copy. If the data set does not exist, the Allocate new backup panel appears to prompt you for data set information. After you enter the required information, CA OPS/MVS generates the backup copy. Following is a sample Allocate new backup panel:

```
Allocate new backup --- MS11 --- O P S V I E W ----- Subsystem OPSS
Command ==>

Data set name: 'SAMPLE.BACKUP'

Storage class      ==>          (SMS Storage class)
Volume serial      ==>          (Blank for authorized default volume) *
Generic unit       ==>          (Generic group name or unit address) *
Space units        ==> TRKS    (BLKS, TRKS, or CYLS)
Primary quantity   ==> 10      (In above units)
Secondary quantity ==> 10      (In above units)
Record format      ==> FB      (FB or VB)
Record length      ==> 80
Block size         ==> 6160
DSORG              ==> PS      (P0 or PS)
Directory blocks   ==>          (For use with DSORG P0 only)

( * Only one of these fields may be specified)

Press ENTER to allocate Global Variable backup data set as specified above
Enter END command to return to OPSLOG Utilities Options Menu
```


Use an Alternate Method of Creating a Global Variable Backup

OPSVIEW option 7.5 invokes the OPGVBK OPS/REXX program to create the global variable backup copy. You can also call this program from outside of OPSVIEW.

The OPGVBK OPS/REXX program accepts the following positional parameters in the order listed:

- The name of the pre-existing target data set for the backup copy (required)
- An optional CA OPS/MVS subsystem name (the default is OPSS)
- An optional global variable stem name (the default is all global variables)

The following example calls the OPGVBK OPS/REXX program to backup to existing data set MYUID.GV.BACKUP all global variables in subsystem OPSX with a stem name of GLOBAL2:

```
CALL OPGVBK MYUID.GV.BACKUP,OPSX,GLOBAL2
```

Note: The OPGVBK OPS/REXX program calls ISPF services. If ISPF is not available in the environment in which you want to call OPGVBK, you may queue a request to have OPGVBK execute in an OSF TSO class server, provided that the OSF TSO class servers are running ISPF. Except for REQ (request) rules, ISPF is not available in an AOF rule environment.

The following example queues a request to have the OPGVBK OPS/REXX program execute in an OSF TSO class server and backup to existing data set MYUID.GLOBAL.BACKUP all global variables in subsystem OPSS:

```
ADDRESS OSF "OI OPGVBK MYUID.GLOBAL.BACKUP"
```

Scheduling a Global Variable Backup

CA OPS/MVS contains a built-in facility to internally schedule periodic backups of your global variable database that include RDF tables. For details about this recommended facility, see the *Administration Guide*.

How to Restore Global Variables and RDF Tables (Option 7.6)

Use OPSVIEW option 7.6 to allocate a backup DIV (data in virtual) SYSCHK1 dataset and restore global variables and/or RDF tables.

Important! This option requires backup of the SYSCHK1 DIV dataset to be done regularly to be useful. Since in-use SYSCHK1 DIV datasets cannot be accessed, do backups every time CA OPS/MVS is shut down.

Access Option 7.6

To access OPSVIEW option 7.6, you can either:

- Enter 6 on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =7.6 into any valid field in OPSVIEW.
- The following screen is a sample 7.6 panel:

```
SYSCHK1 Restore ----- CA11 --- O P S V I E W ----- Subsystem OPSV
Option ==>

1 Allocate a SYSCHK1          Allocate a backup SYSCHK1 to your tso
2 Restore Global Variables    Browse and or restore global variables
3 Restore RDF Tables          Restore RDF Tables

Enter END command to return to the Utilities Menu
```

The Allocate A Syschk1 Panel

When you select option 7.6.1, the Allocate local SYSCHK1 panel appears. Enter a valid dataset name for a backup SYSCHK1 Data In Virtual dataset.

The following screen is a sample panel:

```
Allocate local SYSCHK1--    --- O P S V I E W ----- Subsystem OPSS
Command ==>

Data set name:_____
Enter a dataset name (no quotes) of an existing SYSCHK1 backup.

The backup cannot be in use by any OPSMVS address spaces.
This will allocate the dataset to your TSO session.

Press ENTER to allocate above SYSCHK1 data set
Enter END command to return to the SYSCHK1 restore Options Menu
```

Display Backup Global Variables Panel

When you select option 7.6.2, the Display Backup Global Variables Panel appears. Enter the letter R before a Variable name to Restore that global variable to production. Other options are B for Browse and S to show subnodes.

The following screen is a sample panel:

```
Display Backup Global Variables--- OPSVIEW ----- OPSV
-----
Command ==>
Line Commands: B Browse          R Restore          S Show Subnodes
Global Prefix: GLOBAL
Subnode Name  Nodes Subnode Value
- VAR1        0 16:18:22 E0J
- VAR2        1 GLOBAL.VAR2
- VAR3        0 $HASP395 12:22:68 .....
- VAR4        0 ABC
```

Restore RDF TABLES

When you select option 7.6.3, the Restore RDF Tables Panel appears. Enter the letter R before an RDF TABLE name to restore that table into production. You can enter a name to restore and optionally a new name, so that the table is copied to production with the new name. You can also hit ENTER to display a list of tables eligible for restore.

The following screen is a sample panel:

```
RDF Table Restore----- OPSVIEW  SUBSYS(OPSV)
Option ==>

      R - Reload table
          blank - Display table list

Specify Relational Table:
Name ==>_____ (Required)
New Name ==>_____ (Optional)

Enter END command to return to SYSCHK1 Restore Menu
```

The following screen is a sample panel when you hit enter on the 7.6.3 panel:

```
Backup RDF TABLES----- RDF Table List for dataset xyz.yyy
Command ==>_____
OPTIONS: R - Reload table
Sel Table          Restored name
--- @JEST1          _____
--- @JEST2          _____
--- @JEST3          _____
```

You can enter R to restore the selected table. You can enter a new table name under the RESTORED NAME column to restore the table to a new name. If the table name exists in the production, you are prompted with a panel. This panel asks, if you wish to continue or to cancel the operation.

Copy any tables under SSM control or in use by automation to a NEW name that is not in use. Once the contents are verified, manually delete, or rename the target table, then rename the restored table to the target name. If an SSM table it is necessary remove it from SSM control before restoring to the original table name.

Chapter 10: Other OPSVIEW Options

This section contains the following topics:

- [Overview of the OPSVIEW Support Option \(Option 5\)](#) (see page 453)
- [Selections on the OPSVIEW Support Menu](#) (see page 454)
- [Message Information \(Option 5.5\)](#) (see page 455)
- [Access the AutoMate Rules Translator \(Option A\)](#) (see page 455)
- [Overview of the OPSVIEW ISPF Option \(Option I\)](#) (see page 456)
- [Overview of the CA SYSVIEW Option \(Option S\)](#) (see page 456)
- [Overview of the OPSVIEW Tutorial Option \(Option T\)](#) (see page 456)
- [Overview of the OPSVIEW User Option \(Option U\)](#) (see page 457)

Overview of the OPSVIEW Support Option (Option 5)

Use OPSVIEW option 5 as a source of information when you have a question about CA OPS/MVS or want more information.

Enter 5 on the OPSVIEW Primary Options Menu to access the OPSVIEW Support Menu panel:

```
Support ----- CA31 --- O P S V I E W ----- Subsystem OP5A
                                     More:      +

CA OPS/MVS is supported 24 hours a day, seven days a week.
The following panels contain the information you need to contact
CA personnel in the event of a problem, or to access the CA internet
support option, SupportConnect.

1 Support Procedures
2 Support Contact Information
3 Escalation Procedure
4 CA Addresses
5 CA OPS/MVS Message ID Lookup
6 Display Product Versions/Releases

Option ==>
F1=HELP      F2=SPLIT    F3=END      F4=RETURN   F5=RFIND    F6=RCHANGE
F7=UP        F8=DOWN     F9=SWAP     F10=LEFT    F11=RIGHT   F12=RETRIEVE
```

Selections on the OPSVIEW Support Menu

For the most part, the selections for option 5 are self-explanatory. However, brief descriptions follow:

1-Support Procedures

Steps you must take to report a problem with CA OPS/MVS

2-Support Contact Information

CA OPS/MVS customer support phone, FAX, and SupportConnect information

3-Escalation Procedure

Procedures to follow if you cannot reach a technical support analyst

4-CA Addresses

Address of the CA OPS/MVS customer support group

5-CA OPS/MVS Message ID Lookup

Find information about CA OPS/MVS messages using the numeric portion of the message ID.

6-Display Product Versions/Releases

Display the version and release numbers of your copy of CA OPS/MVS and any of the following products with which it shares an interface: z/OS, DFP, DFSMS, JES2 or JES3, ISPF, RACF or CA ACF2, TSO, and VTAM

Message Information (Option 5.5)

Use OPSVIEW option 5.5 to find information about CA OPS/MVS messages using only the numeric portion of the message ID. The actual message IDs vary by subsystem name. The message severity, which is the last character of the ID, can be customized by using the OPSPARM command processor or the OPSPRM OPS/REXX function. This means that each installation may see slightly different message IDs. This application allows you to find information about any message using the invariant numeric portion of the message ID.

Display the message information using either ISPF Browse or View.

Note: For this application to function correctly, you must have the CA OPS/MVS HELP file allocated to the SYSHELP DD.

The following is a sample OPSVIEW option 5.5 screen:

```
Support ----- XE61 --- O P S V I E W ----- Subsystem OPSS
Command ==>

Please enter the numeric portion of any CA OPS/MVS message ID:

    Message number ==>

    Display mode  ==> B (B - Browse, V - View)

You must have the CA OPS/MVS HELP file allocated to the
SYSHELP DD for this application to function correctly.

Enter END command to return
```

Access the AutoMate Rules Translator (Option A)

Use OPSVIEW option A to convert rules that were created using Automate to a format that is compatible with CA OPS/MVS. Only former Automate users need to use this option.

To access this application, you can either

- Enter A on the OPSVIEW Utilities Menu.
- Use the ISPF jump function by entering =A into any valid field in OPSVIEW.

Overview of the OPSVIEW ISPF Option (Option I)

OPSVIEW option I enables you to access and use ISPF/PDF services.

Enter I on the OPSVIEW Primary Options Menu to access ISPF from in OPSVIEW. CA OPS/MVS takes you to the ISPF Primary Options Menu.

For information about ISPF/PDF, consult your ISPF/PDF manual set.

Overview of the CA SYSVIEW Option (Option S)

OPSVIEW option S enables you to access the CA SYSVIEW product.

Enter S on the OPSVIEW Primary Options Menu to access the CA SYSVIEW product.

For information about the CA SYSVIEW product, see your CA SYSVIEW documentation.

Overview of the OPSVIEW Tutorial Option (Option T)

Use OPSVIEW option T to access the OPSVIEW online tutorial. The tutorial is a combination of all of the help panels for all of the individual OPSVIEW applications.

Enter T on the OPSVIEW Primary Options Menu to access the OPSVIEW tutorial:

```
Tutorial ----- O P S V I E W -----  
OPTION ==>  
Welcome to OPSVIEW, the interactive component of CA OPS/MVS.  
The following topics are presented in sequence, or may be selected  
by number.  
G General      - General information about OPSVIEW  
0 ParmS       - Set OPSVIEW and ISPF default values  
1 OPSLOG      - Browse OPSLOG  
2 Editors     - AOF Rules, REXX programs, SQL Tables  
3 Sys Cntl    - Display/Modify System Resources  
4 Control     - Control CA OPS/MVS  
6 Command     - Enter JES/MVS commands directly  
7 Utilities   - Run CA OPS/MVS Utilities  
U User        - User-defined applications
```

Selections on the OPSVIEW Tutorial Menu

The selections on the Tutorial Menu panel correspond to many of the selections you find on the OPSVIEW Primary Options Menu panel. If you are not sure what is covered under each of these selections, for descriptions, see Options on the OPSVIEW Primary Options Menu in the chapter “OPSVIEW Basics.”

Navigate Through the OPSVIEW Tutorial

Use these commands to move through the tutorial:

BACK

Show the previous page.

SKIP

Skip to the next topic.

TOP

Return to the primary OPSVIEW Tutorial Menu panel.

UP

Show a list of the next highest level of tutorial topics.

Overview of the OPSVIEW User Option (Option U)

Use OPSVIEW option U to invoke your user-defined applications.

To access the OPSVIEW User Applications panel, enter U on the OPSVIEW Primary Options Menu. The User Applications panel is a dummy menu that you can modify to list your user-defined applications. CA OPS/MVS also provides a dummy tutorial panel that you can modify to create online help for your applications.

For more information about how to set up user-defined applications, see the ISPF/Dialog Management Services manual. It provides general information about the ISPF Dialog Manager and can help you to create custom tutorials.

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