IBM Operations Manager for z/VM

Operations Manager Administration Guide

Version 1 Release 4

SC18-9347-16

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SC18-9347-16

Note:

Before using this information and the products that it supports, read the information in "Notices" on page 181.

This edition applies to Version 1 Release 4 of IBM Operations Manager for z/VM (5697-J10) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces SC18-9347-15.

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About this information

This book provides instructions for installing, configuring, and using IBM Operations Manager for z/VM.

This book is designed to help administrators and operators perform these tasks:

- Plan for and install Operations Manager
- Configure Operations Manager
- Use Operations Manager to monitor and manage z/VM virtual machines.

Who should read this book

This book is intended for those persons responsible for installing and using Operations Manager, and assumes a working knowledge of:

- z/OS® operating system
- operations management issues

Service updates and support information

To find service updates and support information, including software fix packs, PTFs, Frequently Asked Question (FAQs), technical notes, troubleshooting information, and downloads, refer to the following Web page:

http://www.ibm.com/support/entry/portal/Overview/Software/Information_Management/DB2_Tools_for_z~OS

How to read syntax diagrams

The following rules apply to the syntax diagrams that are used in this information:

- Read the syntax diagrams from left to right, from top to bottom, following the path of the line. The following conventions are used:
  - The >>--- symbol indicates the beginning of a syntax diagram.
  - The ---> symbol indicates that the syntax diagram is continued on the next line.
  - The >--- symbol indicates that a syntax diagram is continued from the previous line.
  - The --->< symbol indicates the end of a syntax diagram.
- Required items appear on the horizontal line (the main path).

```
►►──required_item──────────────────────────────────────────────────►◄
```

- Optional items appear below the main path.

```
►►──required_item──┬───────────────┬───────────────────────────────►◄
                   └─optional_item─┘
```

  If an optional item appears above the main path, that item has no effect on the execution of the syntax element and is used only for readability.

```
                         ┌─optional_item─┐
►►─required_item─────────┴───────────────┴──────────────────────────────►◄
```

- If you can choose from two or more items, they appear vertically, in a stack.

  If you *must* choose one of the items, one item of the stack appears on the main path.

```
►►─required_item──┬─required_choice1─┬──────────────────────────────────►◄
                  └─required_choice2─┘
```

  If choosing one of the items is optional, the entire stack appears below the main path.

```
►►─required_item──┬──────────────────┬──────────────────────────────────►◄
                  ├─optional_choice1─┤
                  └─optional_choice2─┘
```

  If one of the items is the default, it appears above the main path, and the remaining choices are shown below.

```
                  ┌─default_choice──┐
►►─required_item──┼─────────────────┼───────────────────────────────────►◄
                  ├─optional_choice─┤
                  └─optional_choice─┘
```

- An arrow returning to the left, above the main line, indicates an item that can be repeated.

```
                  ┌─────────────────┐
                  ▼                 │
►►─required_item────repeatable_item─┴───────────────────────────────────►◄
```

  If the repeat arrow contains a comma, you must separate repeated items with a comma.

```
                  ┌─,───────────────┐
                  ▼                 │
►►─required_item────repeatable_item─┴───────────────────────────────────►◄
```

  A repeat arrow above a stack indicates that you can repeat the items in the stack.

- Keywords, and their minimum abbreviations if applicable, appear in uppercase. They must be spelled exactly as shown. Variables appear in all lowercase italic letters (for example, *column-name*). They represent user-supplied names or values.
- Separate keywords and parameters by at least one space if no intervening punctuation is shown in the diagram.
- Enter punctuation marks, parentheses, arithmetic operators, and other symbols, exactly as shown in the diagram.
- Footnotes are shown by a number in parentheses, for example (1).

How to look up message explanations

You can use any of the following methods to search for messages and codes:

Searching an information center

In the search box that is located in the top left toolbar of any Eclipse help system, such as the IBM® Information Management Software for z/OS Solutions Information Center, enter the number of the message that you want to locate. For example, you can enter DFS1065A in the search field.

Use the following tips to help you improve your message searches:

- You can search for information on codes by entering the code; for example, enter -327.
- Enter the complete or partial message number. You can use the asterisk wildcard character (*) to represent multiple characters, and you can use the question mark wildcard character (?) to represent a single character.

The information center contains the latest message information for all of the information management products that are included in the information center.

Searching for messages on the web

You can use any of the popular search engines that are available on the web to search for message explanations. When you type the specific message number or code into the search engine, you will be presented with links to the message information in IBM information centers.

Using LookAt

LookAt is an online facility that you can use to look up explanations for most of the IBM messages you encounter, as well as for some system abends and codes. Using LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can use LookAt from the following locations to find IBM message explanations for z/OS elements and features, z/VM®, VSE/ESA, and Clusters for AIX® and Linux:

- The Internet. You can access IBM message explanations directly from the LookAt website at http://www.ibm.com/eserver/zseries/zos/bkserv/lookat/.
- Your z/OS TSO/E host system. You can install code on your z/OS or z/OS.e systems to access IBM message explanations, using LookAt from a TSO/E command line (for example, a TSO/E prompt, ISPF, or z/OS UNIX System Services running OMVS).
- Your Microsoft Windows workstation. You can install code to access IBM message explanations on the z/OS Collection (SK3T-4269) using LookAt from a Microsoft Windows command prompt (also known as the DOS command line).
- Your wireless handheld device. You can use the LookAt Mobile Edition with a handheld device that has wireless access and an Internet browser (for example, Internet Explorer for Pocket PCs, Blazer, or Eudora for Palm OS, or Opera for Linux handheld devices). Link to the LookAt Mobile Edition from the LookAt website.

You can obtain code to install LookAt on your host system or Microsoft Windows workstation from a disk on your z/OS Collection (SK3T-4269) or from the LookAt website (click **Download** and select the platform, release, collection, and location that suit your needs). More information is available in the LOOKAT.ME files available during the download process.

Where to find information

The Operations Manager for z/VM Library Web page provides current product documentation that you can view, print, and download. To locate publications with the most up-to-date information, refer to the following Web page: http://www.ibm.com/software/sysmgmt/zvm/operations/

How to send your comments

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other Operations Manager documentation, use either of the following options:

- Use the online reader comment form, which is located at:

  www.ibm.com/software/data/rcf/
- Send your comments by email to comments@us.ibm.com. Be sure to include the name of the book, the part number of the book, the version of Operations Manager for z/VM, and, if applicable, the specific location of the text you are commenting on (for example, a page number or table number).

Summary of changes

Version 1.4

This section summarizes the significant improvements or enhancements for IBM Operations Manager for z/VM V1.4 and refers you to relevant sections of this book for more information. Minor modifications to the text are not listed.

SC18-9347-16 June 2013

- Step-by-step instructions are included to explain how to update PROFILE EXEC for different processes. Refer to “Updates to PROFILE EXEC” on page 5 for information on creating a PROFILE EXEC for running GOMMAIN. Refer to “Updates to PROFILE EXEC” on page 6 for information on creating a PROFILE EXEC for running GOMSVM to process actions.
- The ALTRCON command has a new operand, USERS. This operand allows you to specify up to 16 user IDs to modify consoles. Refer to “Operands” on page 116 for more information.
- The LIMIT operand contains an *interval* variable. You can now specify an interval value in several ways, such as seconds, minutes, hours, and days. This change affects the LIMIT operand used by DEFEMON, DEFIMON, DEFMMON, DEFPMON, DEFSMON, DEFRULE, and DEFSCHD. Refer to the "Operand" section for each command to see more information on the LIMIT operand.
- A few messages have been added or changed: GOM0306E, GOM0359E, GOM2930I, GOM2931I, GOM2943I, GOM2985I. Refer to Appendix G, “Messages and Codes,” on page 155 for more information on these messages.

SC18-9347-15 February 2013

- DEFIMON is a new command that defines an idle monitor. Refer to “DEFIMON” on page 78 for more information.
- DELIMON is a new command that deletes an idle monitor. Refer to “DELIMON” on page 101 for more information.
- If you use an external security manager and command-level authorization, Operations Manager checks the following new profiles:
  - *ESMPREF*.COMMAND.CONFIG.IDLE
  - *ESMPREF*.COMMAND.DEFIMON
  - *ESMPREF*.COMMAND.DELIMON
  - *ESMPREF*.COMMAND.STATUS.IDLE

  Refer to “Command-level profiles” on page 12 for more information.
- You can resume or suspend an idle monitor. Refer to “RESUME” on page 106 and “SUSPEND” on page 112 for more information.
- You can specify an idle monitor resource in the CONFIG and STATUS commands. Refer to “CONFIG” on page 38 and “STATUS” on page 56 for more information.
- You can use `&SYSNAME` to replace the `FN` or `FT` operands in the GOMMAIN and CONFIG commands. Refer to GOMMAIN usage notes and CONFIG usage notes for more information.
- You can use the `&S` substitution variable in the DEFACTN command. Refer to DEFACTN usage notes for more information.

- The VIEWSPL spool file list contains new indicators. These indicators specify if a file is local, non-local, viewable, and non-viewable. Refer to VIEWSPL usage notes for more information.
- The accounting and monitoring record formats have been updated to include the number of idle monitors that are triggered. Refer to "Accounting record format" on page 135 and "Monitoring record format" on page 136 for more information.
- Action routines or other commands that run on Operations Manager service virtual machines should not modify the CPCONIO, VMCONIO, MSG, IMSG, WNG, EMSG, or SMSG settings. Refer to Appendix E, "Application interference," on page 149 for more information.
- The following messages are new:
  - GOM0254L
  - GOM0255L
  - GOM0358W
  - GOM0461I
  - GOM0462E
  - GOM0911I
  - GOM0951I
  - GOM2932I

  Refer to Appendix G, "Messages and Codes," on page 155 for more information.

SC18-9347-14 August 2012

- If you use an external security manager and command-level authorization, Operations Manager checks the following new profiles:
  - *ESMPREF*.COMMAND.CONFIG.PAGE
  - *ESMPREF*.COMMAND.DEFPMON
  - *ESMPREF*.COMMAND.DELPMON
  - *ESMPREF*.COMMAND.RUN
  - *ESMPREF*.COMMAND.STATUS.PAGE

  Refer to "Command-level profiles" on page 12 for more information.
- DEFPMON is a new command that defines a page space monitor. Refer to "DEFPMON" on page 85 for more information.
- DELPMON is a new command that deletes a page space monitor. Refer to "DELPMON" on page 102 for more information.
- RUN is a new command that runs a command or action. Refer to "RUN" on page 108for more information.
- In the `CLEAR` operand in the CONFIG command, you can clear a `PAGE` resource. Refer to CONFIG operands for more information.
- In the `DETAIL` operand in the STATUS command, you can request additional information for a `PAGE` resource. Refer to STATUS operands for more information.
- An operand has been added and an operand has been updated in the DEFEMON command:
  - The `CLASS` operand has been added. This operand specifies the classes of events to monitor.
  - In the `TYPE` operand, you can now specify multiple types of events to monitor. The default is to monitor all types of events.

  Refer to DEFEMON operands for more information.

- A new usage note has been added to the DEFSMON and VIEWSPL commands. Refer to DEFSMON operands and VIEWSPL operands
- The PAGE operand has been added to the SUSPEND and RESUME commands. This operand specifies the page space monitor in the DEFPMON command to suspend or resume. Refer to "SUSPEND" on page 112 and "RESUME" on page 106 for more information.
- The following messages are new:
  - GOM0235L
  - GOM0236L
  - GOM0451I
  - GOM0452I
  - GOM0453I
  - GOM0454E
  - GOM0455I
  - GOM0910I
  - GOM0950I
  - GOM2933I
  - GOM2934I

  Refer to Appendix G, "Messages and Codes," on page 155 for more information.

SC18-9347-13 April 2012

- The SUPNEXT operand has been added to the DEFRULE command. This operand suppresses the number of output lines specified from each user's console affected by the rule. Refer to the following topics for more information:
  - "Operands" on page 88
  - "Usage notes" on page 90
- A new usage note has been added to the DEFMMON command. The message field passed to the action contains new fields. Refer to "Usage notes" on page 84 for more information.
- There are new usage notes for the VIEWCON command:
  - If an external security manager is being used, the user must have READ access to the profile ESMPREF.ALTRCON.*userid* for authorization to use the HOLD/UNHOLD toggle function.
  - The ALTRON command and the VIEWCON HOLD/UNHOLD toggle perform the same function.
  - You can issue a command from the VIEWCON PROFILE file that controls the display of the PF key information lines.
  - You can issue a CMS command by using the EXCMD function.

  Refer to "Usage notes" on page 120 for more information.
- There are new usage notes for the VIEWLOG command:
  - You can issue a CMS command by using the EXCMD function.
  - You can issue a command from the VIEWLOG PROFILE file that controls the display of the PF key information lines.

  Refer to "Usage notes" on page 61 for more information.
- An operand has been updated and a new usage notes added for the VIEWSPL command:
  - The SFID operand has been updated.

  - You can issue a command that controls the display of the PF key information lines.
  - You can issue a CMS command by using the EXCMD function.

  Refer to “Operands” on page 128 and “Usage notes” on page 128 for more information.
- "Verifying the console data is being sent to Operations Manager" is a new topic. Refer to “Verifying the console data is being sent to Operations Manager” on page 9 for more information.
- The following messages are new:
  - GOM0010E
  - GOM0011E
  - GOM2935I
  - GOM2936I
  - GOM2937I
  - GOM2938I

  Refer to Appendix G, “Messages and Codes,” on page 155 for more information.

SC18-9347-12 August 2011

- There are now three commands to show/hide the PF key assignments in the VIEWCON, VIEWLOG, and VIEWSPL PROFILES. Refer to VIEWCON usage notes, VIEWLOG usage notes, or VIEWSPL usage notes for more information.
- "GOMGLBL facility" is a new appendix. Refer to Appendix F, “GOMGLBL facility,” on page 151 for more information.

SC18-9347-11 September 2010

- "Set the ESMPREF() option" is a new topic. Refer to “Set the ESMPREF() option” on page 10 for more information.
- An operand has been added and updated for the DEFOPTN command:
  - The SYMBOL operand contains a new character option.
  - ESMPREF(prefix) is a new operand.

  Refer to “Operands” on page 42 for more information.
- There are two new operands for the DEFSCHD command:
  - WHEN(EM-hh:mm)
  - WHEN(CNTDOW-hh:mm)

  Refer to “Operands” on page 92 for more information.
- New and updated operands have been added or modified for the DEFTCPA command:
  - TCPSCOPE(scope) is a new operand for the DEFTCPA command.
  - The format used to define TCPADDR(addr) has changed.
  - TCPADDR(addr) and TCPPORT(port) no longer require leading zeros.

  Refer to “Operands” on page 47 for more information.
- New operands and usage notes have been added to the VIEWCON command:
  - MODE(SCROLL), MODE(NOSCROLL), MODE(RDR), and CLASS(cls) are new operands.
  - PF23 is a new default PF key assignment for autoscrolling.
  - SHOWPF=Y|N is a new command to display the PF key assignments.
  - The equal sign (=) can be used in the command field to repeat the previous command.

Refer to “Operands” on page 119 and “Usage notes” on page 120 for more information.

- New operands and usage notes have been added to the `VIEWLOG` command:
  - `MODE(SCROLL)`, `MODE(NOSCROLL)`, and `MODE(RDR)` are new operands.
  - PF23 is a new default PF key assignment for autoscrolling.
  - `SHOWPF=Y|N` is a new command to display the PF key assignments.
  - The equal sign (=) can be used in the command field to repeat the previous command.

  Refer to “Operands” on page 61 and “Usage notes” on page 61 for more information.
- New operands and usage notes have been added to the `VIEWSPL` command:
  - `SFID(userid,fileid)`, `MODE(RDR)`, and `CLASS(cls)` are new operands.
  - `SHOWPF=Y|N` is a new command to display the PF key assignments.
  - The equal sign (=) can be used in the command field to repeat the previous command.

  Refer to “Operands” on page 128 and “Usage notes” on page 128 for more information.
- The following messages have been updated:
  - GOM0962I
  - GOM0966I
  - GOM2948I

  Refer to Appendix G, “Messages and Codes,” on page 155 for more information.
- The following messages are new:
  - GOM0234I
  - GOM0356E
  - GOM0967I
  - GOM0968I
  - GOM2939I

  Refer to Appendix G, “Messages and Codes,” on page 155 for more information.

Chapter 1. Introduction to Operations Manager

This chapter introduces you to the functionality of Operations Manager, including its major components and some key benefits of using it.

Related concepts:

"What does Operations Manager do?"

"Benefits of using Operations Manager"

Related reference:

"Operations Manager components" on page 2

"Prerequisites" on page 3

What does Operations Manager do?

Operations Manager is designed to improve the monitoring and management of z/VM virtual machines. This is accomplished by automating routine maintenance tasks and automatically responding to situations requiring intervention.

Operations Manager provides a set of commands that allow you to define automation tasks, define events that require automated responses, monitor users' consoles, and automate console or terminal sessions.

Operations Manager provides these functions:

- *Automating Tasks*. Commands are provided to define schedules and actions. *Schedules* define when to issue an *action* containing routine commands. An action can be issued once, on a specific hour or hourly, on a specific day or daily, on a holiday, monthly, or yearly.
- *Automating Responses*. Commands are provided to define rules and actions. *Rules* identify which messages should be acted upon and define a pattern to match against the messages. When a pattern match is detected, an action is scheduled to issue the appropriate commands.
- *Monitoring*. Commands are provided to monitor a user's console, spool usage, events, and the logs created by Operations Manager. Multiple administrators may interact with a user's console simultaneously as if they were logged onto the user's account.
- *Automating sessions*. Commands are provided to control sessions that will perform tasks at specific times or off-shift without manual intervention. For example, Operations Manager can automatically log on to a user ID, perform a set of routine tasks, log off, and then terminate the session.

Benefits of using Operations Manager

Operations Manager provides several benefits to z/VM operators and administrators:

- *Improved operations accuracy*. By automating routine tasks, Operations Manager removes the responsibility for administrators to issue routine commands repetitively, correctly, and at the appropriate time.
- *Reduced operations requirements*. By automating the response to situations that require intervention, Operations Manager eliminates the requirement for operators to correctly interpret messages, determine corrective actions, and correctly respond to situations.

- *Improved administrative notification*. When a situation occurs that requires intervention, Operations Manager can interact with a variety of external methods to notify key personnel about an event. This allows real-time notification about situations occurring in critical services (such as networking) or critical components (such as a spool) that require expert attention.

Operations Manager components

Operations manager consists of four separate components. These components work together to do all of Operations Manager message and action processing. Each of these components are described below.

Related reference:

Appendix E, "Application interference," on page 149

Message processing component

The GOMMAIN module, which runs on the OPMGRM1 user ID, acts as a central message processing service. It activates the framework required to receive console messages, process rules and messages, run schedules, and run the actions associated with them.

In order to start the GOMMAIN module, you must issue the `GOMMAIN` command from the command line or an EXEC on the OPMGRM1 user ID. The `GOMMAIN` command references a start up configuration file containing various commands Operation Manager will use for its message processing. Operations Manager provides the sample configuration file `OPMGRM1 SAMPCONF`.

Related reference:

"GOMMAIN" on page 27

Action processing component

The GOMSVM module, which runs on action processing servers (OPMGRS1, OPMGRS2, etc.), processes the actions you defined with various Operations Manager commands.

Related reference:

"GOMSVM" on page 30

User interaction component

The GOMCMD module provides a way for users to interact with Operations Manager without starting or stopping it. Users use the `GOMCMD` command to dynamically issue any Operations Manager control or configuration commands from a user's console.

Related reference:

"GOMCMD" on page 28

Automated session component

The GOMTDM module provides a way to automatically activate a session in response to a situation (message). For example, administrators can have Operations Manager log on to a user ID, perform a set of routine tasks, log off, and then disconnect.

Related reference:

“GOMTDM” on page 31

Component interaction

The components of Operations Manager communicate with each other using Inter-User Communications Vehicle (IUCV). The following diagram shows their relationship and interaction:

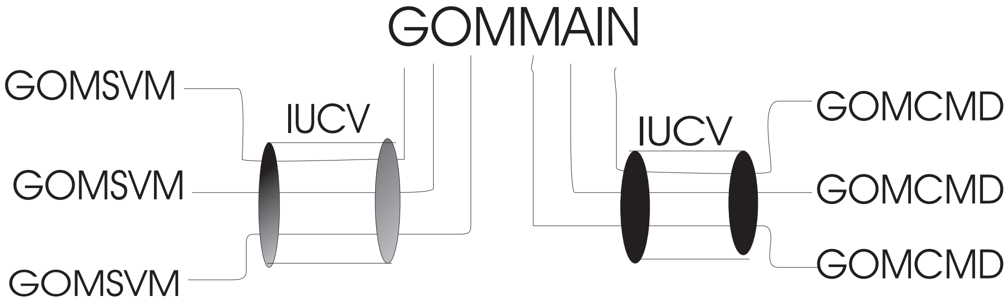


Figure 1. Operations Manager component interaction

Prerequisites

Hardware requirements

Operations Manager runs on any hardware that supports the required version of z/VM.

Software requirements

Operations Manager runs on all currently supported versions of z/VM.

Chapter 2. Configuring Operations Manager

To install Operations Manager, follow the installation instructions provided in the *Operations Manager for z/VM Program Directory (GI10-8664)* that is included with Operations Manager. After you install Operations Manager, perform the steps described in this chapter to configure Operations Manager for your environment.

Related tasks:

“Step 1. Update OPMGRM1”

“Step 2. Update Action Processing Servers” on page 6

“Step 3. Update End User and Administrator IDs” on page 8

“Step 4. Update IDs monitored by Operations Manager” on page 8

“Step 5. (Optional) Configure an external security mechanism” on page 9

Step 1. Update OPMGRM1

Updates to PROFILE EXEC

You must create a PROFILE EXEC for any user ID that will be running GOMMAIN. The default user ID is OPMGRM1.

To create the PROFILE EXEC on a system with Operations Manager installed on minidisks, follow these steps:

1. Logon to MAINT or MAINT620.
2. LINK `5697J10D 2C2 334 MR`
3. ACC 334 E
4. LINK `OPMGRM1 191 333 MR`
5. ACC 333 F
6. COPYFILE `PROFM1 SAMPEXEC E PROFILE EXEC F`

To create the PROFILE EXEC on a system with Operations Manager installed in SFS directories, replace steps 2, 3, 4, and 5 with the appropriate ACCESS commands for the SFS directories.

The PROFILE EXEC for OPMGRM1 and any other user ID that will be running GOMMAIN should include the following statements:

```
/* Sample lines to include in OPMGRM1 PROFILE EXEC */
'CP SET RUN ON'
'ACCESS 194 D'
'ACCESS 198 E'
'ACCESS 400 G'
'SET LANGUAGE ( ADD GOM USER )'
/* Replace filename, filetype, fm with startup configuration file */
'GOMMAIN filename filetype fm'
'CP LOGOFF'
EXIT
```

For the GOMMAIN statement, replace *filename filetype fm* with the file name, file type, and file mode of the startup configuration file. We recommend using `OPMGRM1 CONFIG E`.

These sample statements can be found in the file PROFM1 SAMPEXEC provided on the Operations Manager samples disk 5697J10D 2C2, or the associated SFS directory.

Related reference:

"GOMMAIN" on page 27

Chapter 3, "Creating a startup configuration file," on page 19

Updates to CP directory

OPMGRM1, and any other user ID running GOMMAIN, require the following CP directory statements. These sample statements are located in the file OPMGRM1 SAMPDIR provided on the Operations Manager samples disk 5697J10D 2C2 or associated SFS directory.

```
USER OPMGRM1 logpass 64M 1024M ABCDG
* 5697-J10 Operations Manager for z/VM - Monitoring Machine
ACCOUNT 5697-J10 GOM
MACHINE XC
XCONFIG ACCESSLIST ALSIZE 1022
XCONFIG ADDRSPACE MAXNUMBER 1022 TOTSIZE 4G SHARE
IUCV ALLOW MSGLIMIT 65535
IUCV ANY MSGLIMIT 65535
IUCV *MSG MSGLIMIT 65535
IUCV *SPL MSGLIMIT 65535
IUCV *VMEVENT MSGLIMIT 65535
OPTION ACCT APPLMON
IPL CMS
CONSOLE 009 3215
SPOOL 00C 2540 READER *
SPOOL 00D 2540 PUNCH A
SPOOL 00E 1403 A
LINK MAINT    190 190 RR
LINK MAINT    19E 19E RR
LINK MAINT    19D 19D RR
LINK 5697J10D 400 400 RR
* 191 - Run-time components for Monitoring Machine
MDISK 191  3390  start  005   volser MR rpass wpass mpass
* 194 - Log file for Monitoring Machine
MDISK 194  3390  start  050   volser MR rpass wpass mpass
* 198 - Configuration Files for Monitoring Machine
MDISK 198  3390  start  005   volser RR rpass wpass mpass
```

The CP directory for the user ID OPMGRM1, and any other user ID running GOMMAIN, requires OPTION ACCT to allow it to use DIAG x'4C' and generate accounting records. This statement is only required if you want accounting records to be created.

The CP directory for the user ID OPMGRM1, and any other user ID running GOMMAIN, requires OPTION APPLMON to allow it to use DIAG x'DC' and generate monitor records. This statement is only required if you want monitoring records to be created.

Related reference:

Appendix A, "Accounting and Monitoring Information," on page 135

Step 2. Update Action Processing Servers

Updates to PROFILE EXEC

You must create a PROFILE EXEC for any user ID that will be running GOMSVM to process actions. The default user IDs are OPMGRS1 through OPMGRS4.

To create the PROFILE EXEC on a system with Operations Manager installed on minidisks, follow these steps:

1. Logon to MAINT or MAINT620.
2. LINK `5697J10D 2C2 334 MR`
3. ACC 334 E
4. LINK `OPMGRS1 191 333 MR`
5. ACC 333 F
6. COPYFILE `PROFS1 SAMPEXEC E PROFILE EXEC F`
7. Repeat these steps for each action processing server.

To create the PROFILE EXEC on a system with Operations Manager installed in SFS directories, replace steps 2, 3, 4, and 5 with the appropriate ACCESS commands for the SFS directories.

The PROFILE EXEC for OPMGRS1 and any other user ID that will be running GOMSVM should include the following statements:

```
/* Sample lines to include in OPMGRS1-4 PROFILE EXEC */

'CP SET RUN ON'
'ACCESS 198 E'
'ACCESS 400 G'
'SET LANGUAGE ( ADD GOM USER )'
'GOMSVM OPMGRM1'
'CP LOGOFF'
EXIT
```

These sample statements can be found in the file `PROFS1 SAMPEXEC` provided on the Operations Manager samples disk `5697J10D 2C2`, or the associated SFS directory.

Note: When OPMGRM1 (or any server running GOMMAIN) is stopped, any action processing servers connected to it are also stopped. If the PROFILE EXEC on each action processing server contains 'CP LOGOFF', as shown above, the action processing servers are automatically logged off when OPMGRM1 is stopped.

Updates to CP directory

User IDs OPMGRS1–4 require the following CP directory statements. These sample statements are located in the file `OPMGRS1 SAMPDIR` provided on the Operations Manager samples disk `5697J10D 2C2` or associated SFS directory.

```
USER OPMGRS1 logpass 32M 1024M BCDG
* 5697-J10 Operations Manager for z/VM - Service Machine
ACCOUNT 5697-J10 GOM
MACHINE XC
XCONFIG ACCESSLIST ALSIZE 126
XCONFIG ADDRSPACE MAXNUMBER 126 TOTSIZE 512M SHARE
IUCV ALLOW MSGLIMIT 65535
IUCV ANY MSGLIMIT 65535
IUCV *MSG MSGLIMIT 65535
IPL CMS
CONSOLE 009 3215
SPOOL 00C 2540 READER *
SPOOL 00D 2540 PUNCH A
SPOOL 00E 1403 A
LINK MAINT    190 190 RR
LINK MAINT    19E 19E RR
LINK MAINT    19D 19D RR
LINK OPMGRM1  198 198 RR
LINK 5697J10D 400 400 RR
* 191 - Run-time components for Service Machine
MDISK 191  3390  start  005   volser MR rpass wpass mpass
```

Step 3. Update End User and Administrator IDs

Note: If the USER components of Operations Manager were copied to MAINT 19D/19E during product installation, you can omit the LINK and ACCESS statements from the sample below. However, you must include the SET LANGUAGE statement. For more information on the USER components and MAINT 19D/19E, see "Copy Operations Manager Files Into Production," in the *Operations Manager for z/VM Program Directory (GI10-8664)*.

You must update the PROFILE EXEC for any user ID that will be using GOMCMD to issue commands or GOMTDM to automate console or terminal sessions. The PROFILE EXEC for these user IDs should include the following statements:

```
/* Sample lines to include in user's PROFILE EXEC to use GOMCMD */
/* Sample lines to include in user's PROFILE EXEC to use GOMTDM */
'CP LINK 5697J10D 410 410 RR'
'ACCESS 410 G'
'SET LANGUAGE ( ADD GOM USER )'
```

These sample statements can be found in the file `PROFUSR SAMPEXEC` supplied with Operations Manager.

Step 4. Update IDs monitored by Operations Manager

Each user ID console that you want Operations Manager to monitor must be updated. Set the SECUSER or OBSERVER user ID to OPMGRM1, or the name of the user ID running GOMMAIN. You must update either the CP directory or the PROFILE EXEC of each monitored user ID.

Note:

- If you use OBSERVER for monitoring users, message HCP150A is not generated. If you use SECUSER, message HCP150A is generated.
- If you use SECUSER, console messages are not sent to the target user ID unless the source user ID is running disconnected. If you use OBSERVER, console messages are sent to the target user ID when both the source user ID is running disconnected and when it is logged onto a console.
- If you use SECUSER, Operations Manager can send commands to the source user ID (through Operations Manager actions) without the need for an additional privilege class. If you use OBSERVER, Operations Manager servers must be able to issue the `CP SEND` command. By default this requires privilege class C.
- If you use OBSERVER, actions that result in a message being sent to an observed console may not appear in the console output viewable via the Operations Manager `VIEWCON` command.

Updating the CP directory

To update the CP DIRECTORY of the monitored user ID, you might use one of the following commands:

```
CONSOLE 700 3215 T OPMGRM1
```

or

```
CONSOLE 700 3215 T OPMGRM1 OBSERVER
```

For more information, see the CONSOLE statement in *z/VM CP Planning and Administration (SC24–60431)*.

Updating the PROFILE EXEC

To update the PROFILE EXEC of the monitored user ID, you might use one of the following commands:

```
CP SET SECUSER OPMGRM1
```

or

```
CP SET OBSERVER OPMGRM1
```

For more information, see the SET SECUSER command in the *z/VM CP Command and Utility Reference (SC24–6008)*.

Verifying the console data is being sent to Operations Manager

To verify that the console data for a monitored user ID is being sent to Operations Manager, follow the steps below.

If you update the CP directory for this user ID to have the console data monitored by Operations Manager, it does not go into effect until the user ID logs off and logs on again (or re-IPLs). The SET SECUSER command causes the user ID to immediately start sending console data to Operations Manager. The next time that the user ID is restarted, the updated directory entry takes effect.

1. Log on to an authorized user ID. This user ID must be authorized to issue the CP QUERY SECUSER and CP SET SECUSER commands.
2. Select a user ID that you configured to have its console monitored by Operations Manager. Refer to “Step 4. Update IDs monitored by Operations Manager” on page 8 for more information.
3. Issue the following command to check if the user ID is being monitored by Operations Manager:

   ```
   CP QUERY SECUSER userid
   ```
4. Follow the appropriate condition:
   - If the user ID is already being monitored by Operations Manager, no action is needed.
   - If the user ID is not being monitored by Operations Manager, issue the following command:

     ```
     CP SET SECUSER userid OPMGRM1
     ```

Step 5. (Optional) Configure an external security mechanism

If you use an ESM (external security manager) that supports the RACROUTE macro and the FACILITY class, you can configure Operations Manager to use the ESM as its authorization mechanism instead of using its own internal authorization mechanism. You can control which users have authority to issue which commands through the ESM, as well as which users can view the consoles and spool files of specific or all users.

Setup example for IBM Resource Access Control Facility (RACF)

OPMGRM1, and any other user ID running GOMMAIN, must have authority to issue checks for access to a resource on behalf of another user. An example on how to do this for IBM Resource Access Control Facility (RACF) is provided, however, refer to the latest documentation for your particular release of ESM for details.

To use RACF as the authorization mechanism, perform the following steps:

1. Authorize communication with the RACF/VM server through IUVC.
2. Authorize third-party authorization checks.
3. Identify the RACF/VM server to which RACROUTE will be sent.
4. Set ESM(Y) on the DEFOPTN command.

Each of these steps are described below.

Authorize communication with RACF/VM

Servers communicate with RACF through IUCV. There are two options for authorizing this communication. You should consider which option is appropriate for your system's security administration policies.

- The more general option is to have the RACF/VM server (usually called RACFVM) include an `IUCV ALLOW` statement in its directory entry. This will permit any user in the system to establish communication with the RACF server.
- The more restricted option is to have Operations Manager include an `IUCV` statement for the RACF/VM server (for example, `IUCV RACFVM PRIORITY MSGLIMIT 255`) in its directory entry. This will permit only the users with this statement in their directory entry to establish communication with the RACF server.

Authorize third-party checks

Authority to issue third-party authorization checks is controlled by the ICHCONN profile in the FACILITY class in RACF/VM. You must create this profile if it does not exist and give the Operations Manager server UPDATE access to it.

Identify the RACF/VM server

The RACROUTE interface must be able to identify the RACF/VM server. This is done with the RACF SERVMACH file, which is normally loaded to the CMS Y-disk during RACF installation. If you want to use a different RACF server, or your installation has removed the RACF SERVMACH file from general access, you should provide a tailored RACF SERVMACH file to Operations Manager's main server OPMGRM1.

Set the ESM(Y) option

To activate the use of an external security manager, you must set the `ESM` operand value to `Y` on the `DEFOPTN` command in the Operations Manager startup configuration file.

```
DEFOPTN ESM(Y)
```

Refer to DEFOPTN Operands for more information.

Set the ESMPREF() option

If you set `DEFOPTN ESM(Y)`, you can use the `ESMPREF` operand to configure the prefix Operations Manager adds to the RACF profiles. All Operations Manager RACF profiles are in the FACILITY class.

If you set `DEFOPTN ESM(Y)` and do not configure the `ESMPREF` operand, the default prefix is `RKT.OPM`.

Refer to DEFOPTN Operands for more information on using the `ESMPREF` operand.

FACILITY class profiles

All of the resources Operations Manager uses are profiles in the FACILITY class. These profiles determine users' level of authorization. Operations Manager can be configured to check profiles at a general level or by specific commands. The following sections describe the available profiles for each option.

General profiles

If `DEFOPTN ESM(Y),AUTHCMD(N)` is set, Operations Manager checks these profiles:

Table 1. General FACILITY class profiles

Profile	**Authorization**
ESMPREF.CONTROL	Users who have READ access to this profile have authority to issue control and configuration commands.
ESMPREF.CONFIG	Users who have READ access to this profile have authority to issue configuration commands.
ESMPREF.ALTRCON.*userid* Refer to the note below for the valid replacements of *userid*.	Users who have READ access to this profile have authority to alter the display attributes of a line in a user's console when it is displayed using VIEWCON.
ESMPREF.VIEWCON.*userid* Refer to the note below for the valid replacements of *userid*.	Users who have READ access to this profile have authority to view consoles.
	Users who have UPDATE access to this profile have authority to view consoles and issue commands.
ESMPREF.VIEWSPL.*userid* Refer to the note below for the valid replacements of *userid*.	Users who have READ access to this profile have authority to view spool files.
	Users who have UPDATE access to this profile have authority to view spool files and alter a spool file's external attributes.

Note: The *userid* value in the *ESMPREF*.ALTRCON.*userid*, *ESMPREF*.VIEWCON.*userid*, and *ESMPREF*.VIEWSPL.*userid* profiles can be replaced with a wildcard pattern or one of the following options:

- Any individual user ID. For example, READ access to profile *ESMPREF*.VIEWCON.JONES allows the user to view the console of the user ID JONES.
- Any combined view defined by the DEFVIEW command. For example, READ access to profile *ESMPREF*.VIEWCON.VIEW3 allows the user to view the combined view named VIEW3, which contains USER1, USER2, and USER3.
- A generic matching pattern. For example, READ access to profile *ESMPREF*.VIEWCON.* allows the user to view the console of any user monitored by Operations Manager. Before defining any generic profiles in

the FACILITY class, ensure that the FACILITY class can contain generic profiles. Refer to *RACF Security Server Security Administrator's Guide (SC24–6142)*.

Command-level profiles

The `DEFOPTN ESM(Y),AUTHCMD(Y)` command provides the ability to authorize by specific commands. If `DEFOPTN ESM(Y),AUTHCMD(Y)` is set, Operations Manager checks these profiles:

Table 2. Command-level FACILITY class profiles

Profile	**Authority**
ESMPREF.VIEWCON.*userid* Refer to the note above for the valid replacements of *userid*.	Users who have READ access to this profile have authority to view consoles.
	Users who have UPDATE access to this profile have authority to view consoles and issue commands.
ESMPREF.ALTRCON.*userid* Refer to the note above for the valid replacements of *userid*.	Users who have READ access to this profile have authority to alter the display attributes of a line in a user's console when it is displayed using VIEWCON.
ESMPREF.VIEWSPL.*userid* Refer to the note above for the valid replacements of *userid*.	Users who have READ access to this profile have authority to view spool files.
	Users who have UPDATE access to this profile have authority to view spool files and alter a spool file's external attributes.
ESMPREF.COMMAND.AUTH	Users who have READ access to this profile have authority for the AUTH command.
ESMPREF.COMMAND.CMS	Users who have READ access to this profile have authority for the CMS command.
ESMPREF.COMMAND.CONFIG	Users who have READ access to this profile have authority for the CONFIG command.
ESMPREF.COMMAND.CONFIG.ACTION	Users who have READ access to this profile have authority for the CONFIG CLEAR(ACTION) command.
ESMPREF.COMMAND.CONFIG.DATE	Users who have READ access to this profile have authority for the CONFIG CLEAR(DATE) command.
ESMPREF.COMMAND.CONFIG.EVENT	Users who have READ access to this profile have authority for the CONFIG CLEAR(EVENT) command.
ESMPREF.COMMAND.CONFIG.IDLE	Users who have READ access to this profile have authority for the CONFIG CLEAR(IDLE) command.
ESMPREF.COMMAND.CONFIG.GROUP	Users who have READ access to this profile have authority for the CONFIG CLEAR(GROUP) command.
ESMPREF.COMMAND.CONFIG.MACHINE	Users who have READ access to this profile have authority for the CONFIG CLEAR(MACHINE) command.

Table 2. Command-level FACILITY class profiles (continued)

Profile	**Authority**
ESMPREF.COMMAND.CONFIG.PAGE	Users who have READ access to this profile have authority for the CONFIG CLEAR(PAGE) command.
ESMPREF.COMMAND.CONFIG.RULE	Users who have READ access to this profile have authority for the CONFIG CLEAR(RULE) command.
ESMPREF.COMMAND.CONFIG.SCHEDULE	Users who have READ access to this profile have authority for the CONFIG CLEAR(SCHEDULE) command.
ESMPREF.COMMAND.CONFIG.SPOOL	Users who have READ access to this profile have authority for the CONFIG CLEAR(SPOOL) command.
ESMPREF.COMMAND.CP	Users who have READ access to this profile have authority for the CP command.
ESMPREF.COMMAND.DEFACTN	Users who have READ access to this profile have authority for the DEFACTN command.
ESMPREF.COMMAND.DEFDATE	Users who have READ access to this profile have authority for the DEFDATE command.
ESMPREF.COMMAND.DEFDSPS	Users who have READ access to this profile have authority for the DEFDSPS command.
ESMPREF.COMMAND.DEFEMON	Users who have READ access to this profile have authority for the DEFEMON command.
ESMPREF.COMMAND.DEFGROUP	Users who have READ access to this profile have authority for the DEFGROUP command.
ESMPREF.COMMAND.DEFIMON	Users who have READ access to this profile have authority for the DEFIMON command.
ESMPREF.COMMAND.DEFMMON	Users who have READ access to this profile have authority for the DEFMMON command.
ESMPREF.COMMAND.DEFOPTN	Users who have READ access to this profile have authority for the DEFOPTN command.
ESMPREF.COMMAND.DEFPMON	Users who have READ access to this profile have authority for the DEFPMON command.
ESMPREF.COMMAND.DEFRULE	Users who have READ access to this profile have authority for the DEFRULE command.
ESMPREF.COMMAND.DEFSCHD	Users who have READ access to this profile have authority for the DEFSCHD command.

Table 2. Command-level FACILITY class profiles (continued)

Profile	Authority
ESMPREF.COMMAND.DEFSMON	Users who have READ access to this profile have authority for the DEFSMON command.
ESMPREF.COMMAND.DEFSRVM	Users who have READ access to this profile have authority for the DEFSRVM command.
ESMPREF.COMMAND.DEFTCPA	Users who have READ access to this profile have authority for the DEFTCPA command.
ESMPREF.COMMAND.DEFVIEW	Users who have READ access to this profile have authority for the DEFVIEW command.
ESMPREF.COMMAND.DELACTN	Users who have READ access to this profile have authority for the DELACTN command.
ESMPREF.COMMAND.DELDATE	Users who have READ access to this profile have authority for the DELDATE command.
ESMPREF.COMMAND.DELDSPS	Users who have READ access to this profile have authority for the DELDSPS command.
ESMPREF.COMMAND.DELEMON	Users who have READ access to this profile have authority for the DELEMON command.
ESMPREF.COMMAND.DELGROUP	Users who have READ access to this profile have authority for the DELGROUP command.
ESMPREF.COMMAND.DELIMON	Users who have READ access to this profile have authority for the DELIMON command.
ESMPREF.COMMAND.DELMMON	Users who have READ access to this profile have authority for the DELMMON command.
ESMPREF.COMMAND.DELPMON	Users who have READ access to this profile have authority for the DELPMON command.
ESMPREF.COMMAND.DELRULE	Users who have READ access to this profile have authority for the DELRULE command.
ESMPREF.COMMAND.DELSCHD	Users who have READ access to this profile have authority for the DELSCHD command.
ESMPREF.COMMAND.DELSMON	Users who have READ access to this profile have authority for the DELSMON command.
ESMPREF.COMMAND.DELSRVM	Users who have READ access to this profile have authority for the DELSRVM command.

Table 2. Command-level FACILITY class profiles (continued)

Profile	Authority
ESMPREF.COMMAND.DELTCPA	Users who have READ access to this profile have authority for the DELTCPA command.
ESMPREF.COMMAND.DELVIEW	Users who have READ access to this profile have authority for the DELVIEW command.
ESMPREF.COMMAND.LOGTEXT	Users who have READ access to this profile have authority for the LOGTEXT command.
ESMPREF.COMMAND.QUIT	Users who have READ access to this profile have authority for the QUIT command.
ESMPREF.COMMAND.RESUME	Users who have READ access to this profile have authority for the RESUME command.
ESMPREF.COMMAND.REVOKE	Users who have READ access to this profile have authority for the REVOKE command.
ESMPREF.COMMAND.RUN	Users who have READ access to this profile have authority for the RUN command.
ESMPREF.COMMAND.SHUTDOWN	Users who have READ access to this profile have authority for the SHUTDOWN command.
ESMPREF.COMMAND.STATUS	Users who have READ access to this profile have authority for the STATUS command.
ESMPREF.COMMAND.STATUS.ACTION	Users who have READ access to this profile have authority for the STATUS DETAIL(ACTION) command.
ESMPREF.COMMAND.STATUS.ACTIONQ	Users who have READ access to this profile have authority for the STATUS DETAIL(ACTIONQ) command.
ESMPREF.COMMAND.STATUS.AUTH	Users who have READ access to this profile have authority for the STATUS DETAIL(AUTH) command.
ESMPREF.COMMAND.STATUS.CONSOLE	Users who have READ access to this profile have authority for the STATUS DETAIL(CONSOLE) command.
ESMPREF.COMMAND.STATUS.DATASP	Users who have READ access to this profile have authority for the STATUS DETAIL(DATASP) command.
ESMPREF.COMMAND.STATUS.DATE	Users who have READ access to this profile have authority for the STATUS DETAIL(DATE) command.
ESMPREF.COMMAND.STATUS.EVENT	Users who have READ access to this profile have authority for the STATUS DETAIL(EVENT) command.

Table 2. Command-level FACILITY class profiles (continued)

Profile	**Authority**
ESMPREF.COMMAND.STATUS.GROUP	Users who have READ access to this profile have authority for the STATUS DETAIL(GROUP) command.
ESMPREF.COMMAND.STATUS.IDLE	Users who have READ access to this profile have authority for the STATUS DETAIL(IDLE) command.
ESMPREF.COMMAND.STATUS.IUCV	Users who have READ access to this profile have authority for the STATUS DETAIL(IUCV) command.
ESMPREF.COMMAND.STATUS.MACHINE	Users who have READ access to this profile have authority for the STATUS DETAIL(MACHINE) command.
ESMPREF.COMMAND.STATUS.OPTION	Users who have READ access to this profile have authority for the STATUS DETAIL(OPTION) command.
ESMPREF.COMMAND.STATUS.PAGE	Users who have READ access to this profile have authority for the STATUS DETAIL(PAGE) command.
ESMPREF.COMMAND.STATUS.RULE	Users who have READ access to this profile have authority for the STATUS DETAIL(RULE) command.
ESMPREF.COMMAND.STATUS.SCHEDULE	Users who have READ access to this profile have authority for the STATUS DETAIL(SCHEDULE) command.
ESMPREF.COMMAND.STATUS.SERVICE	Users who have READ access to this profile have authority for the STATUS DETAIL(SERVICE) command.
ESMPREF.COMMAND.STATUS.SPOOL	Users who have READ access to this profile have authority for the STATUS DETAIL(SPOOL) command.
ESMPREF.COMMAND.STATUS.SPOOLUSR	Users who have READ access to this profile have authority for the STATUS DETAIL(SPOOLUSR) command.
ESMPREF.COMMAND.STATUS.TCPAPPL	Users who have READ access to this profile have authority for the STATUS DETAIL(TCPAPPL) command.
ESMPREF.COMMAND.STATUS.VIEW	Users who have READ access to this profile have authority for the STATUS DETAIL(VIEW) command.
ESMPREF.COMMAND.STOP	Users who have READ access to this profile have authority for the STOP command.
ESMPREF.COMMAND.SUSPEND	Users who have READ access to this profile have authority for the SUSPEND command.
ESMPREF.COMMAND.VIEWLOG	Users who have READ access to this profile have authority for the VIEWLOG command.

Notes:

1. If `DEFOPTN ESM(Y),AUTHCMD(Y)` is set, Operations Manager does *not* check these profiles:
   - *ESMPREF*.CONTROL
   - *ESMPREF*.CONFIG
2. Generic profiles can also be used based on your External Security Manager. For example, READ access to profile *ESMPREF*.COMMAND.* gives a user the authority for all Operations Manager control and configuration commands. Before defining any generic profiles in the FACILITY class, ensure that the FACILITY class can contain generic profiles. Refer to *RACF Security Server Security Administrator's Guide (SC24–6142)*.

Related reference:

Chapter 5, "Syntax for Control Commands," on page 35

Chapter 6, "Syntax for Configuration Commands," on page 65

"DEFOPTN" on page 41

"DEFVIEW" on page 48

"VIEWCON" on page 119

Chapter 3. Creating a startup configuration file

This chapter describes how to create a startup configuration file using the sample startup configuration file supplied with Operations Manager as a guide.

Related concepts:

"Entering commands"

Related tasks:

"Copying the sample configuration file" on page 21

"Adding comments" on page 22

"Defining action processing servers" on page 23

"Modifying the GOMMAIN command" on page 24

Related reference:

"Using the sample configuration file" on page 21

"Assigning authority" on page 22

"Verify the installation and configuration" on page 25

Entering commands

Operations Manager requires specific rules when entering commands. Commands consist of a single command and optionally one or more operands and their values. Below is a basic example of a command input format:

```
COMMAND OPERAND1(operand value),OPERAND2(operand value),OPERAND3(operand
(value)),OPERAND4('operand ( value')
```

Command rules

The following rules must be applied when entering commands to properly configure Operations Manager:

- The command must start with a `COMMAND`. Below is an example of a command with no operands:

  ```
  STATUS
  ```
- If operands are required, one or more spaces must separate the `COMMAND` from the first operand.
- The operand value follows the operand and is enclosed in parentheses. No spaces are allowed between:
  - the operand and the left parenthesis.
  - the end of the operand value and the right parenthesis.

  Below is an example of a command with one operand:

  ```
  STATUS DETAIL(RULE)
  ```
- The minimum operand value length is one character and the maximum operand value length is determined by the command.
- If multiple operands are required, a comma must follow the right parenthesis. Below is an example of a command with multiple operands:

  ```
  DEFRULE NAME(RULE01),MATCH(*HCPMID6001I*),ACTION(MIDNITE)
  ```
- Spaces are allowed in between operands. The spaces must follow the comma of the previous operand. The following examples are equivalent:

```
DEFRULE NAME(ARULE),MATCH(*HENRY*),ACTION(HR1),PARM(ARULE)
```

```
DEFRULE NAME(ARULE),   MATCH(*HENRY*),   ACTION(HR1),   PARM(ARULE)
```

- An operand may be entered only once for a command.
- If an operand value contains parenthesis, the parenthesis must be balanced or single quotes must be used. Below is an example of balanced parentheses in the COMMAND operand:

  ```
  DEFACTN NAME(ACTN01),COMMAND(PRINT A FILE ( NOCC )),ENV(GOM)
  ```
- Any operand value may be entered in single quotes ('). Quoting an operand value allows the operand value to bypass the balanced parentheses rule. The rules to quoting are:
  - – the beginning quote must follow the left parenthesis with no spaces.
  - – the operand value begins in the position after the beginning single quote and the operand value ends in the position before the ending quote.
  - – the ending quote must be followed by the right parenthesis with no spaces.
  - – if a single quote is required in a quoted operand value, use two single quotes to produce a single quote in the operand value.

  Below is an example of a quoted operand value in the COMMAND operand:

  ```
  DEFACTN NAME(ACTN01),COMMAND('PRINT A FILE ( NOCC'),ENV(LVM)
  ```
- Operands may be entered in any order. For example, the following commands are equivalent:

  ```
  DEFRULE NAME(RULE01), MATCH(*HCPMID6001I*), ACTION(MIDNITE)
  DEFRULE MATCH(*HCPMID6001I*),NAME(RULE01),ACTION(MIDNITE)
  DEFRULE NAME(RULE01), ACTION(MIDNITE), MATCH(*HCPMID6001I*)
  ```

Where to enter commands

Commands may be entered through any of the following commands or files:

- The console of OPMGRM1, or any other user ID running the GOMMAIN command.

  You must be logged onto the virtual machine running the GOMMAIN command.
- The GOMCMD command.
- The command line in VIEWLOG.
- An Operations Manager configuration file.

  An Operations Manager configuration file can be specified and processed using:
  - – the GOMMAIN command. This file is commonly called the startup configuration file.
  - – the CONFIG command.

Notes:

1. The CMS file containing Operations Manager commands can have fixed or variable length records and a maximum record length of 255.
2. Any line beginning with an asterisk (*) is considered a comment and is not parsed by Operations Manager.
3. For improved readability, the Operations manager commands in a CMS file may be broken into multiple lines joined by a continuation indicator: the plus sign (+). Below is an example of a CMS file containing an Operations Manager command broken into multiple lines:

```
*
*DEFINE A SCHEDULE TO CHECK PRIMARY SPACE ALLOCATION HOURLY
*
DEFSCHD NAME(SCHD01),EVERY(01:00),+
HOURS(01,02,03,04,05,06,07,18,19,20,21,22,23),DAYS(MTWTF***),+
CONFLICT(SCHD02,SCHD03),MAXDEFER(20),+
ACTION(CHECKSP),PARM(PRIMARY)
```

Related reference:

"GOMCMD" on page 28

"VIEWLOG" on page 60

"GOMMAIN" on page 27

"CONFIG" on page 38

Using the sample configuration file

You can configure Operations Manager by issuing commands directly on the console of the server running GOMMAIN, by issuing commands to the server using the GOMCMD command, or by using a startup configuration file.

Operations Manager provides a sample startup configuration file named `OPMGRM1 CONFSAMP`. This file includes commands that prepare your Operations Manager environment and define rules, schedules, monitors, and their associated actions. You can use the file `OPMGRM1 CONFSAMP` as a general guide to compose your own startup configuration file. After you create your own startup configuration file, specify this file name on the GOMMAIN command in the PROFILE EXEC of OPMGRM1. GOMMAIN starts the Operations Manager message processing component.

The sections that follow describe the possible components of a startup configuration file and shows examples from the startup configuration file `OPMGRM1 CONFSAMP`.

Related reference:

Chapter 5, "Syntax for Control Commands," on page 35

Chapter 6, "Syntax for Configuration Commands," on page 65

"GOMMAIN" on page 27

Copying the sample configuration file

You must copy the sample startup configuration file to the OPMGRM1 198 disk before modifying it. The following steps provide a guideline to copy the sample configuration file:

1. Log on to the VM account your installation will use to modify Operations Manager configuration files. Do *not* use OPMGRM1 or OPMGRS1–4.
2. Link to the minidisk that contains the samples:
   ```
   CP LINK 5697J10D 2C2 2C2 RR
   ```
3. Access the sample minidisk:
   ```
   ACCESS 2C2 I
   ```
4. Link to the minidisk that contains the configuration files:
   ```
   CP LINK OPMGRM1 198 198 MR
   ```
5. Access the configuration minidisk:
   ```
   ACCESS 198 E
   ```
6. Copy the sample file:

```
COPYFILE OPMGRM1 CONFSAMP I OPMGRM1 CONFIG E
```

7. Modify the startup configuration file:

```
XEDIT OPMGRM1 CONFIG E
```

The following sections describe the possible areas of the configuration file you can modify.

Related tasks:

"Adding comments"

"Defining action processing servers" on page 23

"Defining system options" on page 23

Related reference:

"Assigning authority"

"Modifying the startup configuration file" on page 24

Adding comments

Operations Manager provides a way to add comments in the startup configuration file. You might do this when describing the purpose of a specific command sequence. To add a comment, place an asterisk (*) before the comment. For example, if you want to assign authority to a user ID, you might add a comment like this before the AUTH command that assigns the authority:

```
* Define users with control authority to Operations Manager

AUTH USER(user1),CONTROL(Y)
AUTH USER(user2),CONTROL(Y)
```

Assigning authority

Operations Manager provides the AUTH command to assign different types of authority to specific user IDs. These commands are only required if an External Security Manager is *not* in use.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Related reference:

"AUTH" on page 35

Control authority

To define a specific user ID so that it has authority to use Operations Manager control commands, issue the commands shown below. In this example, user1 and user2 are granted control authority.

```
* Define users with control authority to Operations Manager

AUTH USER(user1),CONTROL(Y)
AUTH USER(user2),CONTROL(Y)
```

Related reference:

Chapter 5, "Syntax for Control Commands," on page 35

Configuration authority

To give a specific user ID authority to use Operations Manager configuration commands, issue the command shown below. In this example, user3 is granted configuration authority.

```
* Define users with config authority to Operations Manager.
```

```
AUTH USER(user3),CONFIG(Y)
```

Related reference:

Chapter 6, “Syntax for Configuration Commands,” on page 65

Console access

To give a specific user ID authority to access specific consoles, issue the commands shown below. In this example, user1 is granted authority to access the consoles of the user IDs SFS and RSCS and user2 is granted authority to access any console that Operations Manager is monitoring.

```
*Define users and the consoles they can access to Operations Manager

AUTH USER(user1),CONSOLE(SFS)
AUTH USER(user1),CONSOLE(RSCS)
AUTH USER(user2),CONSOLE(*)
```

Note: This gives users the ability to view a console and issue commands to that console. For view only authorization an ESM is required.

Related tasks:

“Step 5. (Optional) Configure an external security mechanism” on page 9

Spool access

To give a specific user ID authority to access specific spool files, issue the commands shown below. In this example, user1 is granted authority to access the spools of the user IDs SFS and RSCS and user2 is granted authority to access all spool files.

```
*Define users and the spool files they can access to Operations Manager

AUTH USER(user1),SPOOL(SFS)
AUTH USER(user1),SPOOL(RSCS)
AUTH USER(user2),SPOOL(*)
```

Defining action processing servers

To define service machines to act as action processing servers, issue the commands shown below. In this example, the names of the service machines are OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4.

```
* Define service machines to Operations Manager

DEFSRVM USER(OPMGRS1),XAUTOLOG(Y)
DEFSRVM USER(OPMGRS2),XAUTOLOG(Y)
DEFSRVM USER(OPMGRS3),XAUTOLOG(Y)
DEFSRVM USER(OPMGRS4),XAUTOLOG(Y)
```

Related reference:

“DEFSRVM” on page 45

Defining system options

After you authorize users and define action processing servers, you want to define the active options of the Operations Manager system. In this example, the options instruct Operations Manager to treat mixed case input as case sensitive and to adjust schedules according to daylight savings time.

```
*Define options to Operations Manager

DEFOPTN MIXCASE(Y),DSTADJ(Y)
```

You may also define other options that effect various components of Operations Manager. These options include:

- activate or deactivate ESM.
- specify attributes to apply to held lines in a user's console.
- specify the symbols used in Operations Manager components.
- specify if command level authorization is used.

Related reference:

"DEFOPTN" on page 41

Modifying the startup configuration file

After you authorize users, define action processing servers, and define system options, you can include commands in the startup configuration file to create your automated operations environment. The following areas may be defined:

- rules for console message matching
- schedules
- monitors for machines, spool files, and events
- actions to correspond to the above rules, schedules, and monitors
- holidays
- groups

Chapter 6, "Syntax for Configuration Commands," on page 65 provides a complete list of the configuration commands. Sample commands are also provided in the sample startup configuration file.

Modifying the GOMMAIN command

After you modify the startup configuration file, you must modify the GOMMAIN command in the PROFILE EXEC of OPMGRM1 to specify the startup file, and then restart the virtual machine. The following steps provide a guideline to modify the GOMMAIN command:

1. Modify the PROFILE EXEC of OPMGRM1, or the user ID running GOMMAIN:

   ```
   XEDIT PROFILE EXEC
   ```

   The following example details how to modify the PROFILE EXEC:

   ```
   /* Sample lines to include in OPMGRM1 PROFILE EXEC */

   'CP SET RUN ON'
   'ACCESS 194 D'
   'ACCESS 198 E'
   'ACCESS 400 G'
   'SET LANGUAGE ( ADD GOM USER )'
   /* Replace filename, filetype, fm with startup configuration file */
   'GOMMAIN filename filetype fm'
   'CP LOGOFF'
   EXIT
   ```

   Note: Replace the *filename*, *filetype*, and *fm* with your startup configuration file. It is recommended to use `OPMGRM1 CONFIG E`.
2. Restart the virtual machine:

   ```
   #CP IPL CMS
   ```
3. When `VM READ` appears, press ENTER.
4. Disconnect from the account running the GOMMAIN command:

   ```
   #CP DISC
   ```

Verify the installation and configuration

To test your Operations Manager installation and configuration, follow the instructions in Appendix D, "Testing Operations Manager installation and configuration," on page 145.

Managing the configuration file

There are many ways to manage your Operations Manager configuration information once Operations Manager is up and running. IBM suggests the following:

1. From an authorized user, access the disk containing the configuration file(s) using one of the following two methods:
   a. If your configuration data is on minidisk, link and access the OPMGRM1 198 disk in read/write mode. For example:
      ```
      LINK OPMGRM1 198 198 MR
      ACC 198 H
      ```
   b. If your configuration data is in SFS, access the directory. For example:
      ```
      ACC VMSYS:OPMGRM1.CONFIGURATION H (FORCERW
      ```
2. Make and save your changes to the configuration file (`OPMGRM1 CONFIG`, by default) or any embedded configuration file. Use the CONFIG statement to embed a configuration file within another configuration file.
3. If your configuration file is on minidisk, issue the following command to have OPMGRM1 reaccess the disk and see the changed file:
   ```
   GOMCMD OPMGRM1 CMS CMD(ACC 198 E)
   ```

   Note: The above step is not required if your configuration file(s) are in SFS.
4. Reload the configuration file. For example:
   ```
   GOMCMD OPMGRM1 CONFIG FN(OPMGRM1),FT(CONFIG),FM(E),CLEAR(ALL)
   ```

Related reference:

"CONFIG" on page 38

"CMS" on page 37

Chapter 4. Syntax for System Management Commands

This chapter describes the Operations Manager system management commands and their syntax.

Purpose of system management commands

Operations Manager provides system management commands that provide control of the Operations Manager environment.

GOMMAIN

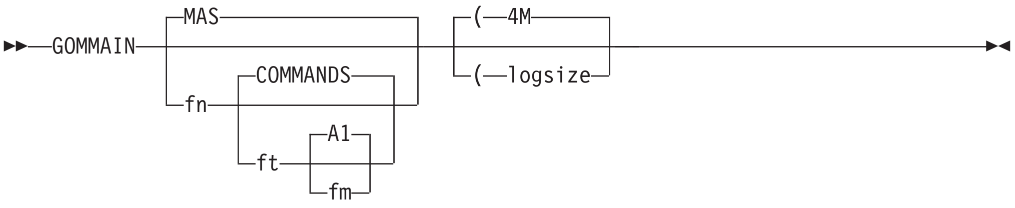


Figure 2. GOMMAIN command syntax

Authorization

No specific authority is required for this command.

Purpose

Issue the GOMMAIN command on the main Operations Manager service machine (OPMGRM1) to activate the framework required to process messages. The GOMMAIN module acts as a central message processing service.

Related reference:

"Using the sample configuration file" on page 21

Operands

fn
Specifies the one- to eight-character name of the file to be processed. The default is MAS.

ft
Specifies the one- to eight-character type of the file to be processed. The default is COMMANDS. In order to specify a file type, the file name operand must also be specified.

fm
Specifies the one- to two-character mode of the file to be processed. The default is A1. In order to specify a file mode, the file type operand must also be specified.

logsize
Specifies the amount of storage used for the log data space storage. The format is *n*M where *n* is between 1 and 2048. The default is 4M.

Usage notes

1. PRIV class A, B, C, D, and G are recommended for the user ID running GOMMAIN.
2. If no file is specified on the GOMMAIN command and the default file `MAS COMMAND A1` does not exist, an error will not occur. Operations Manager runs the command without a file to process.
3. GOMMAIN checks the version, release, and service level of GOMMAIN, GOMSVM, and GOMCMD to ensure compatibility. All of these components must be at the same version, release, and service level to correctly operate.
4. The value `&SYSNAME` can be used for the `fn` or `ft` operand. `&SYSNAME` is replaced with the system name.

Return codes

Table 3 lists the return codes for the GOMMAIN command.

Table 3. GOMMAIN return codes

Return code	Description
0	Finished correctly
-100	Error
-101	An ANCHOR is already active during startup. An attempt was made to run a GOM component in a machine that is already running another GOM component. Re-IPL the virtual machine that received the error. If the problem persists, contact IBM Support.
-102	Unable to establish ANCHOR during startup. Contact IBM Support.
-200	Abend
Other	Return code from a failed z/VM command issued by GOMMAIN. Refer to the error messages for information on the failed command

GOMCMD

```
►►──GOMCMD──userid──command────────────────────────────────────────────────►◄
```

Figure 3. GOMCMD command syntax

Authorization

No specific authority is required for this command.

The user issuing the GOMCMD command must have the authority to issue the specified command. This is accomplished through the Operations Manager AUTH command or through an External Security Manager. If the user is not authorized to issue the specified command, the user receives an error message. It is suggested that the appropriate users be authorized using an ESM or in the configuration file specified at Operations Manager startup.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Related reference:

"AUTH" on page 35

Purpose

Issue the GOMCMD command to control and monitor Operations Manager. Any valid Operations Manager control or configuration command can be specified.

Operands

userid Specifies the user ID of the Operations Manager server that is running GOMMAIN. In a default installation this is OPMGRM1.

command
Specifies any valid Operations Manager control or configuration command.

Usage notes

1. GOMCMD checks the version, release, and service level of GOMMAIN, GOMSVM, and GOMCMD to ensure compatibility. All of these components must be at the same version, release, and service level to correctly operate.
2. GOMCMD can be run from an EXEC started by an Operations Manager action.
3. The return code from GOMCMD is set to the return code of the command that is running.

Examples

This section contains two examples on how to issue the GOMCMD command. One example shows how to determine the current status of Operations Manager. The second example shows how to determine the current CMSLEVEL.

Example 1: Status of Operations Manager

If the VM user ID OPMGRM1 is running GOMMAIN, the following command would be issued to determine the current status of Operations Manager:

```
GOMCMD OPMGRM1 STATUS
```

The output from the command is displayed on your screen.

Example 2: Current CMSLEVEL

If the VM user ID OPMGRM2 is running GOMMAIN, the following command would be issued to determine the current CMSLEVEL on OPMGRM2:

```
GOMCMD OPMGRM2 CMS CMD(QUERY CMSLEVEL)
```

The output from the command is displayed on your screen.

Return codes

Table 4 lists the return codes for the GOMCMD command.

Table 4. GOMCMD return codes

Return code	Description
0	Finished correctly
-100	Error

Table 4. GOMCMD return codes (continued)

Return code	Description
-101	An ANCHOR is already active during startup. An attempt was made to run a GOM component in a machine that is already running another GOM component. Re-IPL the virtual machine that received the error. If the problem persists, contact IBM Technical Support.
-102	Unable to establish ANCHOR during startup. Contact IBM Technical Support.
-200	Abend
Other	Return code from the command that was passed through GOMCMD.

GOMSVM

```
►►──GOMSVM──userid──────────────────────────────────────────────────►◄
```

Figure 4. GOMSVM command syntax

Authorization

No specific authority is required for this command.

Purpose

Issue the GOMSVM command on the Operations Manager action processing servers to activate the framework required to process actions.

Operands

userid Specifies the user ID of the Operations Manager server that is running GOMMAIN. In a default installation this is OPMGRM1.

Usage notes

1. GOMSVM checks the version, release, and service level of GOMMAIN, GOMSVM, and GOMCMD to ensure compatibility. All of these components must be at the same version, release, and service level to correctly operate.

Return codes

Table 5 lists the return codes for the GOMSVM command.

Table 5. GOMSVM return codes

Return code	Description
0	Finished correctly
-100	Error
-101	An ANCHOR is already active during startup. An attempt was made to run a GOM component in a machine that is already running another GOM component. Re-IPL the virtual machine that received the error. If the problem persists, contact IBM Technical Support.
-102	Unable to establish ANCHOR during startup. Contact IBM Technical Support.

Table 5. GOMSVM return codes (continued)

Return code	Description
-200	Abend
Other	Return code from a failed z/VM command issued by GOMSVM. Refer to the error messages for information on the failed command

GOMTDM

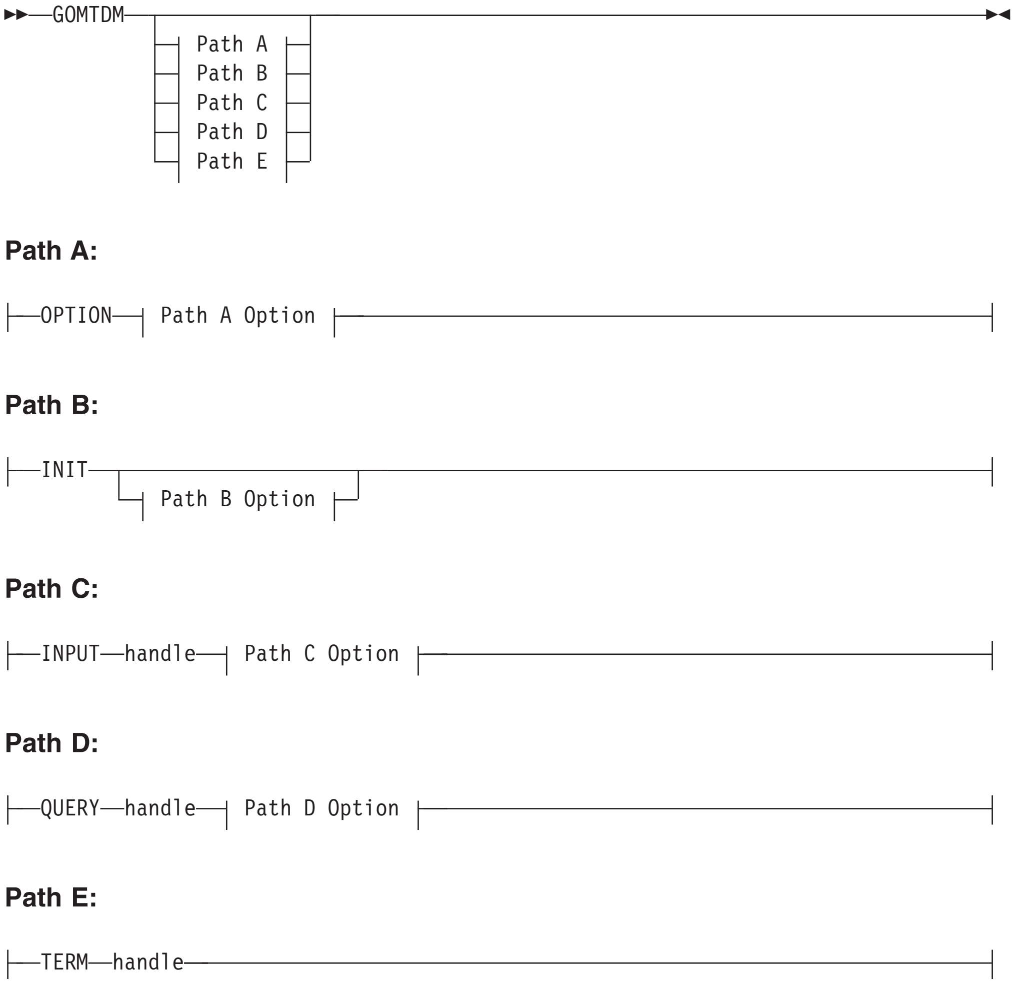


Figure 5. GOMTDM command syntax

Authorization

No specific authority is required for this command.

Purpose

Issue the GOMTDM command to interact with the terminal device automation infrastructure. The available paths are:

GOMTDM OPTION
sets options for all sessions. When an option is changed it effects all sessions. The default options are MSG, TDELAY 0, QDELAY 0, STKFIFO, CCSID 0, NOTRACE, NOWAIT.

GOMTDM INIT
starts a new session. The handle to the session is returned on the program stack in the order requested.

GOMTDM INPUT
simulates keyboard input to the session. The handle is the handle returned when the session was started.

GOMTDM QUERY
allows the program to examine information about the session. The handle is the handle returned when the session was started.

GOMTDM TERM
terminates a session. The handle is the handle returned when the session was started.

Operands

handle Specifies the handle returned when the session was started.

Path A options

MSG|NOMSG
Controls the error message output. MSG turns on error output to the screen. NOMSG turns off error message output to the screen and suppresses all error messages.

TDELAY n
Sets the time delay for session output tracing to the screen. After the session input or output data is placed on the screen, the tracing is delayed for *n* seconds.

QDELAY n
Sets the maximum delay time when querying the session virtual console for a string.

STKLIFO|STKFIFO
Controls the stacking order for values returned on the CMS stack.

CCSID n
Sets the coded character set identification. This option should be set before the first session is INITed.

TRACE|NOTRACE
Controls the session tracing setting. This option allows all 3270 data streams to be traced to a disk file named LDA TRACE A1.

WAIT|NOWAIT
Controls the behavior of INPUT operations. WAIT causes the command to delay until the keyboard input inhibited and keyboard locked are inactive. NOWAIT skips the inhibited and locked checks.

Path B options

TRACE Causes all input and output data to be traced to the screen. If you specify this option your screen size must be defined as a model 4 with 45 lines and 80 columns.

Path C options

DATA 'value'
Inputs a data string. The string must be enclosed in single quotes.

CURSOR row col
Simulates moving the cursor to the row and column.

KEY keyname
Simulates a keyboard key. Valid keys are:

- ENTER
- CLEAR
- PA01-PA03
- PF01-PF24
- FT (forward tab)
- BT (backward tab)
- UP (cursor up)
- DOWN (cursor down)
- LEFT (cursor left)
- RIGHT (cursor right)
- NEWLINE
- HOME
- ERASEEOF

Path D options

CURSOR Returns the row and column of the current cursor position on the stack.

VALUE 'string'
Returns the row and column of the string on the screen on the stack. Return code 0 indicates the string was located and the row and column are on the stack. Return code 4 indicates the string was not found and no value was placed on the stack.

IMAGEFIL fn
Places a copy of the session screen in the CMS file `fn SCREEN A1`.

VERSION
Returns the build date and time on the stack in the form `CCYY/MM/DD hh:mm`.

Usage notes

1. Only one path may be specified on a GOMTDM command.
2. Only one option may be specified on a GOMTDM command.

Restrictions

1. A maximum of eight (8) simultaneous sessions are allowed from a virtual machine.

Return codes

Table 6 lists the return codes for the GOMTDM command.

Table 6. GOMTDM return codes

Return code	Description
0	Finished correctly
4	QUERY function did not find the string
8	Syntax or parameter error
12	Abend
32	Could not set ANCHOR value. Contact IBM Support.
Other	Return code from a failed z/VM command issued by GOMTDM. Refer to the error messages for information on the failed command.

Chapter 5. Syntax for Control Commands

This chapter describes the Operations Manager control commands and their syntax.

Purpose of control commands

Control commands allow you to control processes relating to Operations Manager. With a control command, you can perform various tasks such as check the status of a system, assign and revoke authorities, and define and delete service machines from Operations Manager's use.

You can type a control command at the console and it runs immediately or you can put control commands into a file so that each time you start Operations Manager, the same checks, authorities, and service machines are in effect and you do not have to reenter them.

Some of these control commands are also valid as configuration commands.

Related reference:

Chapter 3, "Creating a startup configuration file," on page 19

Chapter 6, "Syntax for Configuration Commands," on page 65

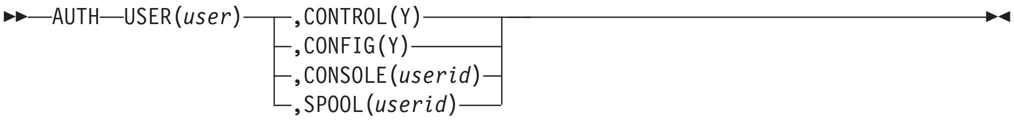
Authorization for control commands

You must use an ESM or the AUTH command to give a specific user the authority to issue control commands. To give users access to specific control commands, an ESM is required.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

AUTH



```
►►─AUTH─USER(user)──┬─,CONTROL(Y)──────┬──────────────────────────────────►◄
                    ├─,CONFIG(Y)───────┤
                    ├─,CONSOLE(userid)─┤
                    └─,SPOOL(userid)───┘
```

Figure 6. AUTH command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the AUTH command to authorize a VM user to issue certain Operations Manager commands, view the consoles, and view spooled output of certain users. If you are using an ESM, do not issue the AUTH command.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Operands

USER(user)
Identifies the user being authorized for functions.

CONTROL(Y)
Specifies that the user is authorized to use Operations Manager control commands.

CONFIG(Y)
Specifies that the user is authorized to use Operations Manager configuration commands.

CONSOLE(userid)
Specifies that the user is authorized to view and interact with the console belonging to `userid` or a combined view named `userid`. `Userid` may be a wildcard pattern. The wildcard rules are explained in the DEFRULE command.

SPOOL(userid)
Specifies that the user is authorized to view spooled output belonging to `userid`. `Userid` may be a wildcard pattern. The wildcard rules are explained in the DEFRULE command.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 7 lists the operand value lengths for the AUTH command.

Table 7. AUTH operand value lengths

Operand	Length
USER	1-8
CONTROL	1
CONFIG	1
CONSOLE	1-8
SPOOL	1-8

Usage notes

1. Each AUTH command may have only one operand (`CONFIG`, `CONTROL`, `CONSOLE`, or `SPOOL`). Issue multiple AUTH commands to give a user additional access.
2. When a user is authorized for `CONTROL`, they are also authorized for `CONFIG` when one of the following is also true:
   a. `ESM` is set to `N` on the DEFOPTN command, or
   b. `ESM` is set to `Y` and `AUTHCMD` is set to `N` on the DEFOPTN command.
3. A user authorized for `CONTROL` is *not* authorized for `CONFIG` if `ESM` is set to `Y` and `AUTHCMD` is set to `Y` on the DEFOPTN command.

Related reference:

"DEFOPTN" on page 41

Return codes

Table 8 lists the return codes for the AUTH command.

Table 8. AUTH return codes

Return code	Description
0	Finished correctly
-100	Error

CMS

```
►►──CMS──CMD(command)──────────────────────────────────────────────►◄
```

Figure 7. CMS command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the CMS command to present a command to CMS for execution on the main Operations Manager server (OPMGRM1) and display the results.

Operands

`CMD(command)`
Specifies the CMS command to execute. `command` may be any CMS command or EXEC.

Operand value lengths

Table 9 lists the operand value lengths for the CMS command.

Table 9. CMS operand value lengths

Operand	Length
`CMD`	1-120

Usage notes

None.

Return codes

Table 10 lists the return codes for the CMS command.

Table 10. CMS return codes

Return code	Description
0	Finished correctly

Table 10. CMS return codes (continued)

Return code	Description
-100	Error
Other	Error code from a called interface, command, or service

CONFIG

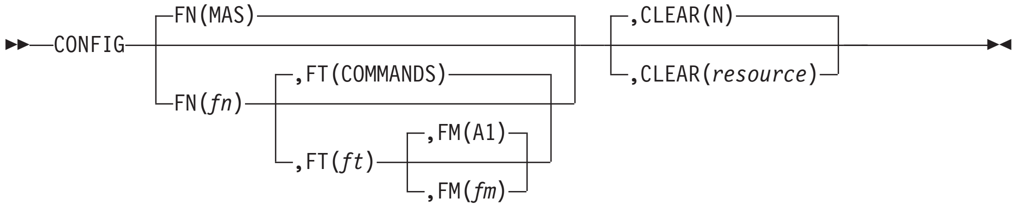


Figure 8. CONFIG command syntax

Authorization

The user issuing this command must be authorized for configuration or control commands.

Purpose

Issue the CONFIG command to process the contents of a file containing Operations Manager commands.

Operands

FN(fn) Specifies the file name of the file to be processed. The default is MAS.

FT(ft) Specifies the file type of the file to be processed. The default is COMMANDS.

FM(fm) Specifies the file mode of the file to be processed. The default is A1. This is the file mode on OPMGRM1.

CLEAR(resource)
Specifies that all existing instances for the specified resource type are removed before processing the specified file. The default is to not remove any resource. Multiple resources may be specified in a comma separated list.

The valid resources are:

- ALL (clears the following resources)
- RULE
- MACHINE
- SCHEDULE
- ACTION
- GROUP
- DATE
- SPOOL
- EVENT

- PAGE
- IDLE

Operand value lengths

Table 11 lists the operand value lengths for the CONFIG command.

Table 11. CONFIG operand value lengths

Operand	Length
FN	1-8
FT	1-8
FM	1-2
CLEAR	1-120

Usage notes

1. The CONFIG command can be used within a configuration file containing Operations Manager commands, allowing you to embed other configuration files. You can nest the CONFIG command within included files. There is no restriction on the depth of nested files. You can use this feature in the startup configuration file for the GOMMAIN command to organize your configuration data into multiple files.
2. If the FT(ft) operand is entered, the FN operand must be entered.
3. If the FM(fm) operand is entered, the FT operand must be entered.
4. The value &SYSNAME can be used for the FN or FT operand. &SYSNAME is replaced with the system name.

Return codes

Table 12 lists the return codes for the CONFIG command.

Table 12. CONFIG return codes

Return code	Description
0	Finished correctly
-100	Error

CP

```
►►──CP──CMD(command)──────────────────────────────────────────────►◄
```

Figure 9. CP command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the CP command to present a command to CP for execution on OPMGRM1 and display the results.

Operands

CMD(command)
Specifies the CP command to execute.

Operand value lengths

Table 13 lists the operand value lengths for the CP command.

Table 13. CP operand value lengths

Operand	Length
CMD	1-120

Usage notes

None.

Return codes

Table 14 lists the return codes for the CP command.

Table 14. CP return codes

Return code	Description
0	Finished correctly
-100	Error
Other	Error code from a called interface, command, or service

DEFDSPS

```
►►──DEFDSPS──USER(user)──,SIZE(size)─────────────────────────────────────►◄
```

Figure 10. DEFDSPS command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DEFDSPS command to define the amount of storage used to capture the data for a monitored user's console or combined view.

Operands

USER(user)
Specifies a name or a wildcard pattern to match against a user's name or a view name. The wildcard rules are explained in the DEFRULE command.

SIZE(size)
Specifies the size used to create the data space that is used to contain monitored users output. The size may be specified in bytes or megabytes.

If bytes are used, the valid range is 1-1073741824. The input is rounded up to the nearest 1048576 and the startup default is 1048576.

If megabytes are used, the size must be suffixed by `M`. The startup default is 1M.

Related reference:

"DEFRULE" on page 87

"DEFVIEW" on page 48

Operand value lengths

Table 15 lists the operand value lengths for the DEFDSPS command.

Table 15. DEFDSPS operand value lengths

Operand	Length
USER	1-8
SIZE	1-10

Usage notes

1. If you have multiple DEFDSPS commands, the order of the commands is important; each occurrence does not override the previous command. In the following example, the second command does not override the first command:

   ```
   DEFDSPS USER(USER1),SIZE(2M)
   DEFDSPS USER(USER*),SIZE(3M)
   DEFDSPS USER(*),SIZE(1M)
   ```

   In this example, USER1's console has a 2M data space, the consoles of all other user IDs starting with USER have a 3M data space, and all other consoles have a 1M data space.

Return codes

Table 16 lists the return codes for the DEFDSPS command.

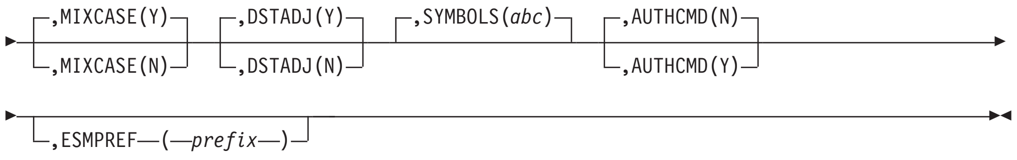
Table 16. DEFDSPS return codes

Return code	Description
0	Finished correctly
-100	Error

DEFOPTN

```
              ┌─ESM(N)─┐
►►──DEFOPTN───┤        ├──────────────────────────────────────────────────►
              └─ESM(Y)─┘

►──┬─────────────────────────────────────────────────────────────────────────┬──►
   │                                                          (1)            │
   └─,HLDATTR──(───tttt───,──┬─Y─┬──,──┬─Y─┬──,──┬─AAI─┬──,──┬─CAI─┬─────────)─┘
                             └─N─┘     └─N─┘     ├─ABL─┤     ├─CBL─┤
                                                 ├─ARV─┤     ├─CRE─┤
                                                 └─AUL─┘     ├─CPI─┤
                                                             ├─CGR─┤
                                                             ├─CCY─┤
                                                             └─CYE─┘
```



Notes:

1 You must specify all five values for HLDATTR with a comma separating each value.

Figure 11. DEFOPTN command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DEFOPTN command to change the active options.

Operands

ESM(Y|N)
Activates or deactivates the usage of an External Security Manager to check for authorization. The startup default is N.

HLDATTR(tttt,a,h,xat,clr)
Specifies a time and a set of attributes to apply to held lines in a user's console. The startup default is 0060,N,Y,AAI,CAI.

- tttt. Specifies a number of seconds. Must be a four digit number. If a "held" line in a user's console has not been responded to within the number of seconds specified, the following attributes are applied to the line:
  - a. Specifies if the audible alarm is sounded. Values are Y or N.
  - h. Specifies if the line is highlighted. Values are Y or N.
  - xat. Specifies the extended attributes applied to the line. Valid values are:
    - AAI. Leave as is.
    - ABL. Blinking.
    - ARV. Reverse video.
    - AUL. Underline.
  - clr. Specifies the color applied to the line. Valid values are:
    - CAI. Leave as is.
    - CBL. Blue.
    - CRE. Red.
    - CPI. Pink.
    - CGR. Green.
    - CCY. Cyan.
    - CYE. Yellow.
    - CWH. White.

MIXCASE(Y|N)

Specifies if mixed case data is treated as case sensitive. This option effects command input and user console input handling. The default is Y. This operand applies to:

- text matching for rules
- input commands from the OPMGRM1 console or using the GOMCMD command interface
- input commands in a file, such as the startup configuration file or specified on the CONFIG command
- text search operations executed while viewing the results from the VIEWLOG, VIEWCON, or VIEWSPL commands.

DSTADJ(Y|N)

Specifies how schedule execution time is handled when a change in time zone offset (such as daylight savings time) is detected. The default is Y.

- DSTADJ(Y) causes Operations Manager to trigger schedules (defined with DEFSCHD) strictly by wall clock time.

  When a time zone change causes the local time to move forward, schedules, which would have occurred within the period of time represented by the time zone change, are not executed during the time change. They are executed at their next scheduled execution time.

  When a time zone change causes the local time to move backward, schedules, which should occur within the period of time represented by the time zone change, are executed twice since the specified time occurs twice.
- DSTADJ(N) causes Operations Manager to trigger schedules (defined with DEFSCHD) based on the time zone change.

  When a time zone change causes the local time to move forward, schedules, which would have been eligible for execution within the period of time represented by the time zone change, are immediately scheduled for execution at the start of the time change.

  When a time zone change causes the local time to move backward, schedules, which are eligible for execution within the period of time represented by the time zone change, are executed only once. They are not repeated.

SYMBOLS(abc)

Specifies the symbols to use in various components. Each symbol is one character and is positional in the list. If you do not wish to change a symbol, you must input a space. The symbols in the list and the defaults are:

- a — Forward search command character in VIEWCON, VIEWLOG, and VIEWSPL. The default is forward slash (/).
- b — Backward search command character in VIEWCON, VIEWLOG, and VIEWSPL. The default is backward slash (\).
- c — Repeat command character. The default is the equal sign (=).

AUTHCMD(Y|N)

Specifies command level authorization should be used instead of the CONTROL and CONFIG level authorization. If command level authorization is used, ESM authorization checking must be active. If AUTHCMD(Y) is specified without also specifying ESM(Y), it has no effect. The startup default is N.

ESMPREF(prefix)

Specifies the prefix for the external security manager profiles for this instance of Operations Manager. The prefix entered is preceded by GOM.. The startup default is RKT.OPM without GOM. preceding the prefix.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Operand value lengths

Table 17 lists the operand value lengths for the DEFOPTN command.

Table 17. DEFOPTN operand value lengths

Operand	Length
ESM	1
HLDATTR	16
MIXCASE	1
DSTADJ	1
SYMBOLS	1-16
AUTHCMD	1
ESMPREF	1-48

Usage notes

1. Options not specified are not changed.
2. To hold lines on a user's console, you must specify the HLD value on the INPUT operand of the DEFACTN command.
3. If MIXCASE(Y) is set, many commands and operands automatically convert to uppercase for processing. For example, if the following command is input:

   ```
   defsmon name(s1),action(s1act),usage(081-100)
   ```

   It is converted to the following for processing:

   ```
   DEFSMON NAME(S1),ACTION(S1ACT),USAGE(081-100)
   ```

   The following command-operand combinations do *not* automatically convert:

   - ALTRCON EXCLUDE
   - ALTRCON MATCH
   - DEFACTN COMMAND
   - DEFEMON PARM
   - DEFMMON PARM
   - DEFOPTN SYMBOLS
   - DEFRULE EXCLUDE
   - DEFRULE MATCH
   - DEFRULE PARM
   - DEFSCHD PARM
   - DEFSMON PARM
   - LOGTEXT TEXT

Related reference:
"DEFACTN" on page 67

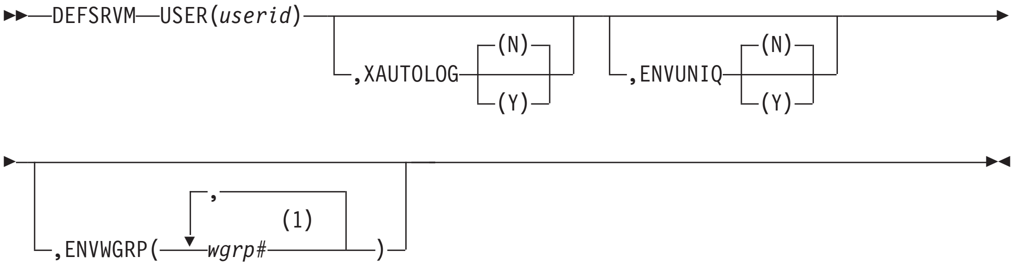
Return codes

Table 18 lists the return codes for the DEFOPTN command.

Table 18. DEFOPTN return codes

Return code	Description
0	Finished correctly
-100	Error

DEFSRVM



Notes:

1 Specify up to 8 values with each value separated by a comma.

Figure 12. DEFSRVM command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DEFSRVM command to define an action processing service machine. The service machine is available to execute actions assigned to it by OPMGRM1, or the server running GOMMAIN.

Operands

USER(userid)
Specifies the VM user ID that is setup to act as an action processing server running GOMSVM.

XAUTOLOG(Y|N)
Specifies if at startup OPMGRM1 is to issue the `CP XAUTOLOG` command to auto-log the action processing server. This operand is optional, but highly recommended. The default is `XAUTOLOG(N)`.

ENVUNIQ(Y|N)
Specifies if the service machine only executes an action (specified by DEFACTN) where the `ENV()` operand value matches the `userid` of the

service machine. `ENVUNIQ(Y)` prevents the service machine from executing an action where `ENV(SVM)` is specified. The default is `ENVUNIQ(N)`.

`ENVWGRP(wgrp1,wgrp2,..,wgrp8)`
Specifies the service machine only executes an action where the `ENV()` operand value matches one of the work groups. A service machine may participate in up to eight (8) work groups. This prevents the service machine from executing an action where `ENV(SVM)` is specified.

Related reference:

"DEFACTN" on page 67

Operand value lengths

Table 19 lists the operand value lengths for the DEFSRVM command.

Table 19. DEFSRVM operand value lengths

Operand	Length
USER	1-8
XAUTOLOG	1
ENVUNIQ	1
ENVWGRP	1-72

Usage notes

1. If `XAUTOLOG(Y)` is specified, the VM user ID running GOMMAIN must have PRIV A or B to operate correctly.
2. `ENVUNIQ` and `ENVWRGP` are mutually exclusive.

Return codes

Table 20 lists the return codes for the DEFSRVM command.

Table 20. DEFSRVM return codes

Return code	Description
0	Finished correctly
-100	Error

DEFTCPA

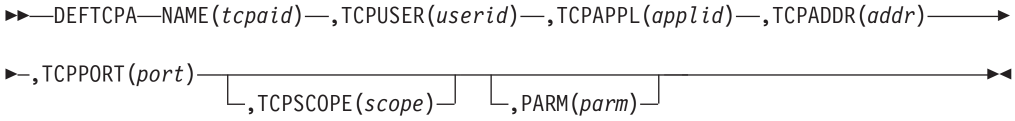


Figure 13. DEFTCPA command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DEFTCPA command to establish a TCP/IP application and connection information. This connection may be used to send data from remote systems to Operations Manager. The data is processed as if it were a console; rules are processed and any actions matching the criteria are issued. The data is viewable by issuing the VIEWCON and VIEWLOG commands.

Related reference:

Appendix C, "Operations Manager and TCP/IP interaction," on page 139

Operands

NAME(tcpaid)
Specifies the name of this TCP/IP connection definition.

TCPUSER(userid)
Specifies the name of the VM userid providing the TCP/IP communications support.

TCPAPPL(applid)
Specifies the name of the Operations Manager processing program. See "Usage notes" on page 48 for the available processing applications.

TCPADDR(addr)
Specifies the TCP/IP address for the application.

For IPV4 addresses, the format is in dotted decimal notation: (n.n.n.n).

For IPV6 addresses, the format is in hex notation: (hhhh:hhhh:...:hhhh).

TCPPORT(port)
Specifies the TCP/IP port on which Operations Manager listens for remote input. Leading zeros are not required. The format can range from n to nnnnn.

If you are using DEFTCPA to receive syslog data from Linux, you will typically specify port number 514, since this is often the default port that Linux routes syslog data.

If you are using DEFTCPA to receive data from z/VM systems, specify any available port. This must match the port number specified on the GOMRSIF command.

TCPSCOPE(scope)
Specifies the TCP/IP address scope for certain IPV6 networks.

PARM(parm)
Specifies the parameter passed to the processing program.

Operand value lengths

Table 21 lists the operand value lengths for the DEFTCPA command.

Table 21. DEFTCPA operand value lengths

Operand	Length
NAME	1-8
TCPUSER	1-8
TCPADDR	2-37
TCPPORT	1-5
TCPAPPL	1-8

Table 21. DEFTCPA operand value lengths (continued)

Operand	Length
PARM	1-120
TCPSCOPE	1-10

Usage notes

1. The available processing applications and the supported PARM values are:

   GOMRSIF
   Provides support to process a file sent from a local or remote z/VM system and filters against the file contents against rules. No PARM is used. The data can be sent using the GOMRSIF EXEC.

   GOMRSYL
   Provides support to process input from a remote syslog and filter against rules. PARM describes the following fields:

   - Position 01-08 — USER to be passed for rule processing. If you specify blanks, the internal program name is used.
   - Position 09-16 — File name of the ACSII to EBCDIC translation table. The file type is TABLE. This file may be located on any accessed disk. If you specify blanks, the internal ACSII to EBCDIC table is used.
   - Position 17-20 — Character encoding scheme (ISO8 or UTF8). If you specify blanks, ISO8 is used.
2. Depending on your TCP/IP configuration, you may need to authorize OPMGRM1 (and any other user ID running GOMMAIN) to use the ports specified in your DEFTCPA statements. Refer to the PORT or OBEY statements in *z/VM TCP/IP Planning and Customization (SC24–6125)* for information on enabling an application to use specific ports.

Related reference:

“GOMRSIF” on page 142

Return codes

Table 22 lists the return codes for the DEFTCPA command.

Table 22. DEFTCPA return codes

Return code	Description
0	Finished correctly
-100	Error

DEFVIEW

```
►►──DEFVIEW──NAME(viewid)──,USER(user)─────────────────────────────────►◄
```

Figure 14. DEFVIEW command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DEFVIEW command to define a combined view of multiple users' consoles. This command adds users to a combined view. Issue the VIEWCON command to view the output.

Related reference:

"VIEWCON" on page 119

Operands

`NAME(viewid)`
Specifies a name for the view.

`USER(user)`
Specifies a user ID or a wildcard pattern to match against a user's ID. Output from user IDs matching the pattern is added to the view. The wildcard rules are explained in the DEFRULE command.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 23 lists the operand value lengths for the DEFVIEW command.

Table 23. DEFVIEW operand value lengths

Operand	Length
NAME	1-8
USER	1-8

Usage notes

1. If you want to add multiple user IDs or a wildcard pattern to a combined view, you must specify one DEFVIEW command for each user ID. For example, to add users USER1, USER2, and USER3 into the combined view named MYVIEW, specify three DEFVIEW commands.
   ```
   DEFVIEW NAME(MYVIEW),USER(USER1)
   DEFVIEW NAME(MYVIEW),USER(USER2)
   DEFVIEW NAME(MYVIEW),USER(USER3)
   ```
2. The output from a user's console may be added to multiple combined views. The output from a combined view cannot be included in other combined views.
3. Issue the VIEWCON command to view the output from a combined view. To issue a command to a user's console defined in the combined view, you must put the target ID in front of the command. For example, `USER1` *`command`*.

Related reference:

"VIEWCON" on page 119

Return codes

Table 24 lists the return codes for the DEFVIEW command.

Table 24. DEFVIEW return codes

Return code	Description
0	Finished correctly

Table 24. DEFVIEW return codes (continued)

Return code	Description
-100	Error

DELDSPS

```
►►──DELDSPS──USER(user)──────────────────────────────────────────────►◄
```

Figure 15. DELDSPS command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DELDSPS command to delete the size definition for a previously defined data space. The default size is used instead. This command does not delete any previously defined data spaces.

Related reference:

"DEFDSPS" on page 40

Operands

USER(user)
Specifies a user name or a wildcard pattern to delete.

Operand value lengths

Table 25 lists the operand value lengths for the DELDSPS command.

Table 25. DELDSPS operand value lengths

Operand	Length
USER	1-8

Usage notes

1. The value of the USER operand must completely match a previously defined value.

Return codes

Table 26 lists the return codes for the DELDSPS command.

Table 26. DELDSPS return codes

Return code	Description
0	Finished correctly
-100	Error

DELSRVM

```
►►──DELSRVM──USER(userid)──┬──────────────────┬─────────────────────────►◄
                           │          ┌─(N)─┐ │
                           └─,FORCE───┤     ├─┘
                                      └─(Y)─┘
```

Figure 16. DELSRVM command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DELSRVM command to delete an action processing service machine from the current Operations Manager configuration.

Related reference:

“DEFSRVM” on page 45

Operands

`USER(userid)`
Specifies the user ID of the action processing server running GOMSVM that you want to delete.

`FORCE(Y|N)`
Specifies if the deletion of the service machine is forced to ensure that the deletion occurs. Forced deletion also issues a `CP FORCE` command to log off the user ID. The default is `FORCE(N)`.

Operand value lengths

Table 27 lists the operand value lengths for the DELSRVM command.

Table 27. DELSRVM operand value lengths

Operand	Length
`USER`	1-8
`FORCE`	1

Usage notes

1. If `FORCE(Y)` is specified, the VM user ID running GOMMAIN must have PRIV A to operate correctly.
2. If the action processing server is busy, the definition is not deleted unless the `FORCE(Y)` operand is specified.
3. If `FORCE(N)` is specified and the action processing server is busy, a message is issued and the command is ignored. The action processing server is not deleted even when it becomes idle.

Return codes

Table 28 lists the return codes for the DELSRVM command.

Table 28. DELSRVM return codes

Return code	Description
0	Finished correctly
-100	Error

DELTCPA

```
►►──DELTCPA──NAME(tcpaid)──────────────────────────────────────────►◄
```

Figure 17. DELTCPA command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DELTCPA command to terminate a TCP/IP application defined to Operations Manager.

Related reference:

"DEFTCPA" on page 46

Operands

`NAME(tcpaid)`
Specifies the name of the TCP/IP application to terminate.

Operand value lengths

Table 29 lists the operand value lengths for the DELTCPA command.

Table 29. DELTCPA operand value lengths

Operand	Length
`NAME`	1-8

Usage notes

None.

Return codes

Table 30 lists the return codes for the DELTCPA command.

Table 30. DELTCPA return codes

Return code	Description
0	Finished correctly
-100	Error

DELVIEW

```
►►──DELVIEW──NAME(viewid)──,USER(user)─────────────────────────────────►◄
```

Figure 18. DELVIEW command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the DELVIEW command to delete users from a combined view.

Related reference:

"DEFVIEW" on page 48

Operands

`NAME(viewid)`
Specifies the view name.

`USER(user)`
Specifies a user name or a wildcard pattern to delete.

Operand value lengths

Table 31 lists the operand value lengths for the DELVIEW command.

Table 31. DELVIEW operand value lengths

Operand	Length
NAME	1-8
USER	1-8

Usage notes

1. The value of the NAME and USER operand must completely match a previously defined value.
2. Only the unique combination of NAME and USER are removed. Other NAME and USER combinations are not removed.

Return codes

Table 32 lists the return codes for the DELVIEW command.

Table 32. DELVIEW return codes

Return code	Description
0	Finished correctly
-100	Error

QUIT

```
►►──QUIT──────────────────────────────────────────────────────────►◄
```

Figure 19. QUIT command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the QUIT command to stop GOMMAIN execution. There are no operands and none are allowed.

Usage notes

1. QUIT, STOP, and SHUTDOWN are equivalent commands. Issue any of these commands to stop GOMMAIN execution.

Return codes

Table 33 lists the return codes for the QUIT command.

Table 33. QUIT return codes

Return code	Description
0	Finished correctly
-100	Error

REVOKE

```
►►──REVOKE──USER(user)──┬─,CONTROL(Y)──────┬──────────────────────►◄
                        ├─,CONFIG(Y)───────┤
                        ├─,CONSOLE(userid)─┤
                        └─,SPOOL(userid)───┘
```

Figure 20. REVOKE command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the REVOKE command to remove authorization from a VM user to issue certain commands, view the consoles or view spooled output of certain users. If you are using an ESM, do not issue the REVOKE command.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Operands

`USER(user)`
Identifies the user whose authority is being revoked.

`CONTROL(Y)`
Specifies that the user's authority to use Operations Manager control commands is being revoked.

`CONFIG(Y)`
Specifies that the user's authority to use Operations Manager configuration commands is being revoked.

`CONSOLE(userid)`
Specifies that the user's authority to view and interact with the console belonging to `userid` is being revoked.

`SPOOL(userid)`
Specifies that the user's authority to view the spooled output belonging to `userid` is being revoked.

Operand value lengths

Table 34 lists the operand value lengths for the REVOKE command.

Table 34. REVOKE operand value lengths

Operand	Length
`USER`	1-8
`CONTROL`	1
`CONFIG`	1
`CONSOLE`	1-8
`SPOOL`	1-8

Usage notes

1. Each REVOKE command may have only one operand (`CONFIG`, `CONTROL`, `CONSOLE`, or `SPOOL`).
2. The `userid` value of the `CONSOLE` operand must match the value specified in the AUTH command.
3. The `userid` value of the `SPOOL` operand must match the value specified in the AUTH command.

Related reference:

"AUTH" on page 35

Return codes

Table 35 lists the return codes for the REVOKE command.

Table 35. REVOKE return codes

Return code	Description
0	Finished correctly
-100	Error

SHUTDOWN

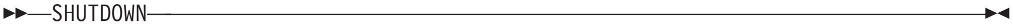


Figure 21. SHUTDOWN command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the SHUTDOWN command to stop GOMMAIN execution. There are no operands and none are allowed.

Usage notes

1. QUIT, STOP, and SHUTDOWN are equivalent commands. Issue any of these commands to stop GOMMAIN execution.

Return codes

Table 36 lists the return codes for the SHUTDOWN command.

Table 36. SHUTDOWN return codes

Return code	Description
0	Finished correctly
-100	Error

STATUS

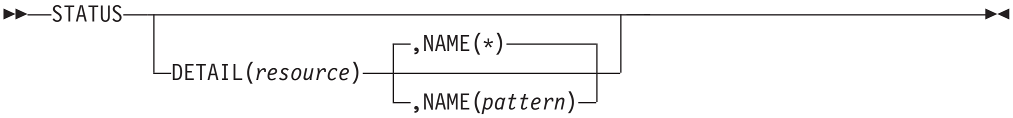


Figure 22. STATUS command syntax

Authorization

The user issuing this command must be authorized for configuration or control commands.

Purpose

Issue the STATUS command to show the current status of GOMMAIN execution. If the `DETAIL` operand is not present a summary is outputted. If the `DETAIL` operand is present additional information about each specified resource is outputted.

Operands

DETAIL(resource)

Requests additional information for the specified resource definitions.

The valid resources are:

- RULE — Displays the status of the defined rules.
- MACHINE — Displays the status of the monitored virtual machines.
- SCHEDULE — Displays the status of the defined schedules.
- ACTION — Displays the status of the defined actions.
- ACTIONQ — Displays the actions queued for execution.
- GROUP — Displays the status of the defined groups.
- DATE — Displays the status of the defined holidays.
- SERVICE — Displays the status of the defined action processing servers.
- SPOOL — Displays the status of the defined spool usage monitors and how many times they were executed.
- SPOOLUSR — Displays the top ten largest spool files and the top ten users with the most spool files.
- AUTH — Displays the status of authorized users.
- IUCV — Displays the status of the active IUCV connections.
- DATASP — Displays the status of the defined data space size creation templates.
- VIEW — Displays the status of the combined views.
- CONSOLE — Displays the status of the recording consoles.
- TCPAPPL — Displays the status of the TCP/IP applications.
- OPTION — Displays the status of the current options settings.
- EVENT — Displays the status of the defined event monitors.
- PAGE — Displays the status of the defined page space monitors.
- IDLE — Displays the status of the defined idle monitors.

NAME(pattern)

Lists information for resources names which match the pattern. Wildcard patterns are allowed. The wildcard pattern rules are explained in the DEFULE command.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 37 lists the operand value lengths for the STATUS command.

Table 37. STATUS operand value lengths

Operand	Length
DETAIL	1-8
NAME	1-8

Examples

Figure 23 on page 58 shows summary output from the STATUS command.

```
STATUS
04/07/2008 14:58:05 GOMCMD0899I  OPERATIONS MANAGER V1R4 BUILT 08/17/12 13.39
04/07/2008 14:58:05 GOMCMD0900I  10 RULE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0902I  4 MACHINE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0903I  120 SCHEDULE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0904I  35 ACTION(S) DEFINED
04/07/2008 14:58:05 GOMCMD0905I  0 ACTION(S) SCHEDULED FOR EXECUTION
04/07/2008 14:58:05 GOMCMD0906I  2 GROUP(S) DEFINED
04/07/2008 14:58:05 GOMCMD0907I  2 DATES(S) DEFINED
04/07/2008 14:58:05 GOMCMD0908I  104 SPOOL MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0909I  7 EVENT MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0910I  0 PAGE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0911I  0 IDLE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0920I  4 SERVICE MACHINE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0921I  3 USER(S) AUTHORIZED
04/07/2008 14:58:05 GOMCMD0922I  3 IUCV CONNECTION(S)
04/07/2008 14:58:05 GOMCMD0923I  6 DATA SPACE SIZE DEFINITION(S)
04/07/2008 14:58:05 GOMCMD0924I  3 COMBINED VIEW(S)
04/07/2008 14:58:05 GOMCMD0925I  7 USER CONSOLE(S) RECORDING
04/07/2008 14:58:05 GOMCMD0926I  3 TCP/IP APPLICATION(S) DEFINED
```

Figure 23. Summary output from STATUS command

Figure 24 shows details about all monitored virtual machines.

```
STATUS DETAIL(MACHINE)
04/07/2008 15:13:17 GOMCMD0942I  MACHINE MONITOR MON1     TRIGGERED 0 TIME(S)
04/07/2008 15:13:17 GOMCMD2977I  ACTION MACHAC
04/07/2008 15:13:17 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:13:17 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:13:17 GOMCMD2973I  USER RSCS     (RSCS     - DSC)
04/07/2008 15:13:17 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:13:17 GOMCMD2971I  DELAY 0 MINUTE(S)
04/07/2008 15:13:17 GOMCMD2970I  RETRY INTERVAL 1 MINUTE(S) RETRY COUNT 0
04/07/2008 15:13:17 GOMCMD2968I  NEXT CHECK 2008/04/07 15:13
04/07/2008 15:13:17 GOMCMD2999I  STATUS DETAIL COMPLETE
```

Figure 24. Details about all monitored virtual machines

Figure 25 shows details about all spool usage monitors and how many times they were executed.

```
STATUS DETAIL(SPOOL)
04/07/2008 15:11:30 GOMCMD0948I  SPOOL MONITOR WARN     TRIGGERED 0 TIME(S)
04/07/2008 15:11:30 GOMCMD2977I  ACTION ACTNSP
04/07/2008 15:11:30 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:11:30 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:11:30 GOMCMD2967I  USAGE LOW 80 HIGH 89
04/07/2008 15:11:30 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:11:30 GOMCMD2968I  NEXT CHECK 2008/04/07 15:11
04/07/2008 15:11:30 GOMCMD0948I  SPOOL MONITOR CRIT     TRIGGERED 0 TIME(S)
04/07/2008 15:11:30 GOMCMD2977I  ACTION ACTNSP
04/07/2008 15:11:30 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:11:30 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:11:30 GOMCMD2967I  USAGE LOW 90 HIGH 100
04/07/2008 15:11:30 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:11:30 GOMCMD2968I  NEXT CHECK 2008/04/07 15:11
04/07/2008 15:11:30 GOMCMD2999I  STATUS DETAIL COMPLETE
```

Figure 25. Details about all spool usage monitors

Figure 26 on page 59 shows the top ten largest spool files and the top ten users with the most spool files.

```
status detail(spoolusr)
04/07/2008 13:33:15 GOMCMD0970I  USER TMRMM    SPOOL FILE ID 0643 IS USING 4850 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER R54TUX04 SPOOL FILE ID 0139 IS USING 4158 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER RMSMASTR SPOOL FILE ID 0129 IS USING 4008 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER TMTMM    SPOOL FILE ID 6402 IS USING 3697 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0757 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0767 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0760 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER TMRMM    SPOOL FILE ID 0675 IS USING 3016 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER R54TUX01 SPOOL FILE ID 0022 IS USING 2723 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SUSESAM  SPOOL FILE ID 0003 IS USING 2723 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER CSHOWA   HAS 268 SPOOL FILES USING 6435 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMDMM    HAS 236 SPOOL FILES USING 834 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMCMM    HAS 230 SPOOL FILES USING 286 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMLM1    HAS 229 SPOOL FILES USING 343 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMADMN   HAS 226 SPOOL FILES USING 230 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMADMN   HAS 186 SPOOL FILES USING 998 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMCMM    HAS 169 SPOOL FILES USING 291 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMTMM    HAS 149 SPOOL FILES USING 9374 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMDMM    HAS 136 SPOOL FILES USING 1815 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMLM1    HAS 135 SPOOL FILES USING 176 SPOOL BLOCKS
```

Figure 26. Details about users' spool files

Usage notes

None.

Return codes

Table 38 lists the return codes for the STATUS command.

Table 38. STATUS return codes

Return code	Description
0	Finished correctly
-100	Error

STOP

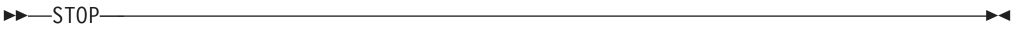


Figure 27. STOP command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the STOP command to stop GOMMAIN execution. There are no operands and none are allowed.

Usage notes

1. QUIT, STOP, and SHUTDOWN are equivalent commands. Issue any of these commands to stop GOMMAIN execution.

Return codes

Table 39 lists the return codes for the STOP command.

Table 39. STOP return codes

Return code	Description
0	Finished correctly
-100	Error

VIEWLOG

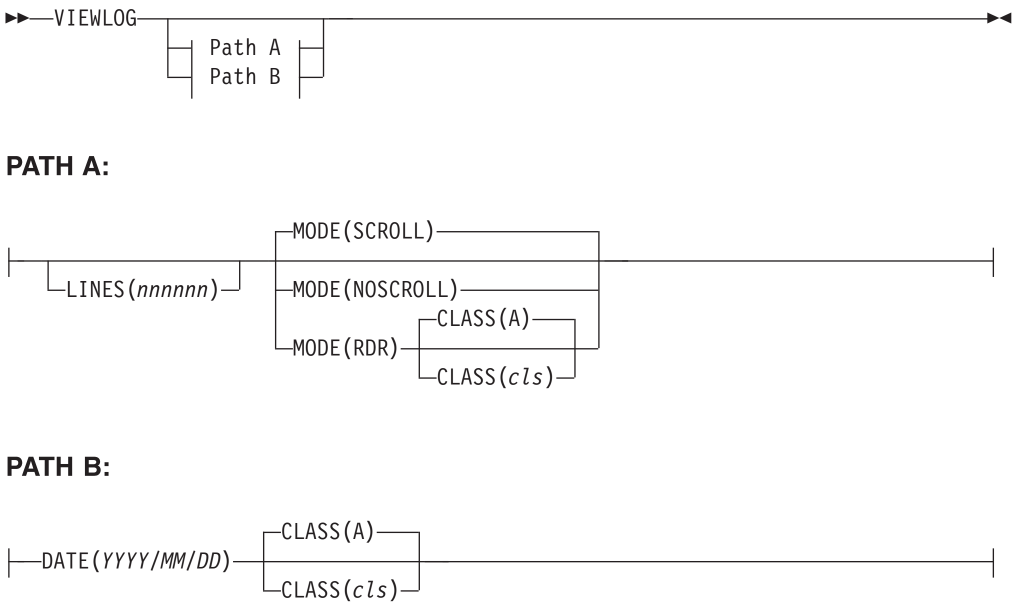


Figure 28. VIEWLOG command syntax

Authorization

The user issuing this command must be authorized for control commands.

The VIEWLOG command is also a valid log access command.

Related reference:

Chapter 7, “Syntax for Console, Log, and Spool Access Commands,” on page 115

Purpose

Issue the VIEWLOG command to display the current Operations Manager log in full-screen mode and to issue Operations Manager commands or place a copy of the log in your virtual reader.

You can also issue the VIEWLOG command to obtain a DISK DUMP of the log for a specific day.

Operands

LINES(nnnnnn)
Specifies the number of lines you wish to view. The last *nnnnnn* lines are displayed. The default is to view all lines.

MODE(SCROLL)
Specifies the initial view is autoscrolling. SCROLL is the default.

MODE(NOSCROLL)
Specifies the initial view is not autoscrolling.

MODE(RDR)
Specifies that a copy of the active VIEWLOG log is to be placed in your virtual reader.

DATE(YYYY/MM/DD)
Specifies that a copy of the log for an entire day is to be placed in your virtual reader. Use the format YYYY/MM/DD, where:

- YYYY. The year, which must be specified with four digits.
- MM. The month (01-12).
- DD. The day of the month (01-31).

CLASS(cls)
Specifies the reader file class. Class A is the default.

Operand value lengths

Table 40 lists the operand value lengths for the VIEWLOG command.

Table 40. VIEWLOG operand value lengths

Operand	Length
DATE	10
CLASS	1
LINES	1-6
MODE	3-8

Usage notes

1. You can use the following PF keys to move through the log display:
   - PF01 — Show the help screen
   - PF03 — End the VIEWLOG session
   - PF05 — Toggle the acknowledgment for a line in the log
   - PF07 — Scroll up
   - PF08 — Scroll down
   - PF10 — Scroll left
   - PF11 — Scroll right
   - PF12 — Retrieve previous command
   - PF19 — Scroll to the top
   - PF20 — Scroll to the bottom
   - PF22 — Display the users viewing the log
   - PF23 — Toggle autoscrolling
   - PF24 — Display the PF key assignments

- PA02 — Toggle autoscrolling
- ENTER — Process the command on the command line

Note: For the scrolling PF keys, you can enter a scrolling amount on the command line. If no amount is specified, the scroll amount is equal to the size of the viewing area.

2. The amount of data displayed or sent to your virtual reader from the log is limited to the size of the logging data space. The `logsize` parameter on `GOMMAIN` determines this limit. If you want to view the entire log use the `DATE` operand to obtain a log of the entire day.
3. To search through the display, use the forward slash (/) to search forward and the back slash (\) to search backward. Use the equal sign (=) to repeat the previous command. Issue the `DEFOPTN` command to change these characters.
4. The actions for PF01 - PF24 and initial value for the PF key display are configurable through the `VIEWLOG PROFILE` file.
   a. Issue the following command in the `VIEWLOG PROFILE` file to set the PF key assignments:

      `PF`*`nn`*`=`*`action`*

      Where *nn* is 01 through 24 and *action* is a valid PF key action.

      The valid PF key actions are:
      - HELP — Show the help screen
      - END — End the VIEWLOG session
      - HOLD — Toggle the acknowledgment for a line in the log
      - UP — Scroll up
      - DOWN — Scroll down
      - LEFT — Scroll left
      - RIGHT — Scroll right
      - RECALL — Retrieve previous command
      - TOP — Scroll to top
      - BOT — Scroll to bottom
      - USERS — Display the users viewing the log
      - SCROLL — Toggle autoscrolling
      - VIEWPF — Display the PF key assignments
      - EXCMD — Execute a z/VM or Operations Manager command

        Refer to usage note 5 for more information.

   b. Issue the following command in the `VIEWLOG PROFILE` file to control the display of the PF key information lines:

      `SHOWPF=`*`c`*`[,`*`h`*`,`*`xat`*`,`*`clr`*`]`

      Where *`c`* is one of the following options:
      - `N` — Do not display the PF key assignments on the screen.
      - `Y` — Display PF01–PF12 assignments on the screen.
      - `A` — Display PF01–PF24 assignments on the screen.

      The values for *h,xat,clr* are optional. If one of the values is specified, they must all be specified.
      - `h` — Specifies if the line is highlighted. Values are `Y` or `N`.
      - `xat` — Specifies the extended attributes applied to the line. Values are:
        - `AAI` — Leave as is
        - `ABL` — Blinking

  - ARV — Reverse video
  - AUL — Underline
- clr — Specifies the color applied to the line. Values are:
  - CAI — Leave as is
  - CBL — Blue
  - CRE — Red
  - CPI — Pink
  - CGR — Green
  - CCY — Cyan
  - CYE — Yellow
  - CWH — White

The following shows an example of what might be in a VIEWLOG PROFILE file after customizing a PF key assignment and the display of the PF keys:

```
PF13=HELP
SHOWPF=Y,Y,AAI,CAI
```

5. While using VIEWLOG, you can also execute a z/VM or Operations Manager command by using EXCMD. Execute the EXCMD command with one of the following methods:
   - Press a function key that is assigned to EXCMD without any command on the command line. This invokes CMS SUBSET. To return to VIEWLOG, use the CMS command return.
   - Press a function key that is assigned to EXCMD with a CMS command on the command line.

     When the command completes, if the command on the command line is not an Operations Manager command, you return to the originating VIEWLOG command.

     When the command completes, if the command on the command line is an Operations Manager command, you return to the point that originated the VIEWLOG command.
   - Assign EXCMD with a z/VM or Operations Manager command to a PF key in VIEWLOG PROFILE. For example, PF19=EXCMD LISTFILE * * A or PF20=EXCMD GOMCMD OPMGRM1 VIEWSPL.

     When the command completes, if the command assigned to the PF key is not an Operations Manager command, you return to the originating VIEWLOG command.

     When the command completes, if the command assigned to the PF key is an Operations Manager command, you return to the point that originated the VIEWLOG command.

Related reference:

“DEFOPTN” on page 41

“GOMMAIN” on page 27

Return codes

Table 41 lists the return codes for the VIEWLOG command.

Table 41. VIEWLOG return codes

Return code	Description
0	Finished correctly
-100	Error

Chapter 6. Syntax for Configuration Commands

This chapter describes the Operations Manager configuration commands and their syntax.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Purpose of configuration commands

Configuration commands allow you to define specific conditions you want Operations Manager to process and what action is taken when that condition occurs. These conditions include:

- rules
- schedules
- machine monitors
- spool monitors
- event monitors

You can type a configuration command on the Operations Manager console or issue it using the GOMCMD command interface. Both methods execute the command immediately. You can also put configuration commands into a file so that each time you start Operations Manager, the same rules, schedules, monitors, and actions are in effect and you do not have to re-enter them.

Some of these configuration commands are also valid as control commands.

Related reference:

Chapter 3, "Creating a startup configuration file," on page 19

Chapter 5, "Syntax for Control Commands," on page 35

Authorization for configuration commands

You must use an ESM or the AUTH command to give a specific user the authority to issue configuration commands. To give users access to specific configuration commands, an ESM is required.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Related reference:

"AUTH" on page 35

CONFIG

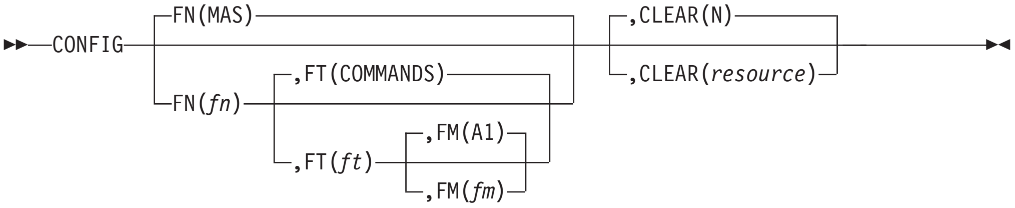


Figure 29. CONFIG command syntax

Authorization

The user issuing this command must be authorized for configuration or control commands.

Purpose

Issue the CONFIG command to process the contents of a file containing Operations Manager commands.

Operands

FN(fn) Specifies the file name of the file to be processed. The default is MAS.

FT(ft) Specifies the file type of the file to be processed. The default is COMMANDS.

FM(fm) Specifies the file mode of the file to be processed. The default is A1. This is the file mode on OPMGRM1.

CLEAR(resource)
Specifies that all existing instances for the specified resource type are removed before processing the specified file. The default is to not remove any resource. Multiple resources may be specified in a comma separated list.

The valid resources are:

- ALL (clears the following resources)
- RULE
- MACHINE
- SCHEDULE
- ACTION
- GROUP
- DATE
- SPOOL
- EVENT
- PAGE
- IDLE

Operand value lengths

Table 42 lists the operand value lengths for the CONFIG command.

Table 42. CONFIG operand value lengths

Operand	Length
FN	1-8
FT	1-8
FM	1-2
CLEAR	1-120

Usage notes

1. The CONFIG command can be used within a configuration file containing Operations Manager commands, allowing you to embed other configuration files. You can nest the CONFIG command within included files. There is no restriction on the depth of nested files. You can use this feature in the startup configuration file for the GOMMAIN command to organize your configuration data into multiple files.
2. If the `FT(ft)` operand is entered, the `FN` operand must be entered.
3. If the `FM(fm)` operand is entered, the `FT` operand must be entered.
4. The value `&SYSNAME` can be used for the `FN` or `FT` operand. `&SYSNAME` is replaced with the system name.

Return codes

Table 43 lists the return codes for the CONFIG command.

Table 43. CONFIG return codes

Return code	Description
0	Finished correctly
-100	Error

DEFACTN

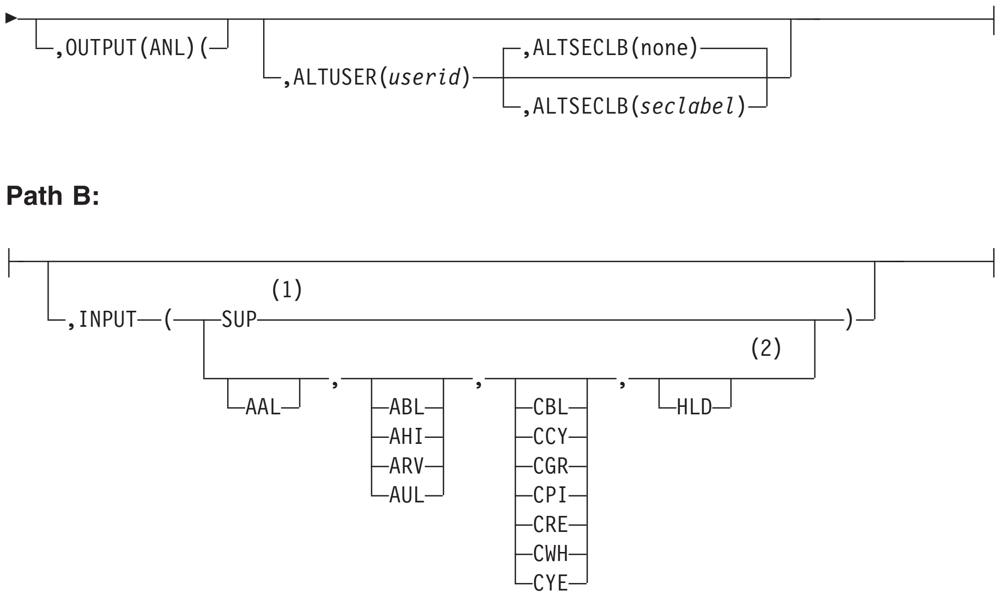
```
►►──DEFACTN──NAME(actnid)──┬──┤ Path A ├──┬─────────────────────────────────►
                           └──┤ Path B ├──┘

►──┬──────────────────────────────────────────────────────┬──────────────►◄
   │                        ┌─,NEXTDELY(00:00)─┐          │
   └─,NEXTACTN(actnid)──────┴─,NEXTDELY(mm:ss)─┴──────────┘
```

Path A:

```
├──,COMMAND(command)──,ENV(env[,ovr])────────────────────────────────────────►

►──┬───────────────────────────────────────────────────────────────────┬─────►
   │                 (1)                                               │
   └─,INPUT──(───┬─SUP─────────────────────────────────────────────┬─)─┘
                 │                                             (2) │
                 └─┬─────┬─,─┬─────┬─,─┬─────┬─,─┬─────┬───────────┘
                   └─AAL─┘   ├─ABL─┤   ├─CBL─┤   └─HLD─┘
                             ├─AHI─┤   ├─CCY─┤
                             ├─ARV─┤   ├─CGR─┤
                             └─AUL─┘   ├─CPI─┤
                                       ├─CRE─┤
                                       ├─CWH─┤
                                       └─CYE─┘
```



Notes:

1 If the SUP option is specified, no other options are allowed.

2 Separate multiple options with a comma.

Figure 30. DEFACTN command syntax

Related reference:

Appendix E, “Application interference,” on page 149

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFACTN command to define an action to execute as the result of a rule, schedule, or monitor.

Operands

NAME(actnid)
Specifies a name for the action.

COMMAND(command)
Identifies the command to execute. This may be any CMS, CP, or Operations Manager command. Operations Manager builds the command allowing variable substitution.

ENV(env[,ovr])
Specifies the environment where the command is executed and if the execution environment can be overridden by a rule, schedule, or monitor which causes the action's execution.

The valid values for env are:

GOM Specifies that this is an Operations Manager command and it is executed by the internal Operations Manager command processor.

LVM Specifies that the command is executed by the local virtual machine (OPMGRM1). Use caution when specifying `LVM`. Any command or module that executes in the `LVM` preempts execution of Operations Manager message processing and can possibly affect performance and reliability of Operations Manager. It is recommended to use `ENV(SVM)` for most actions.

SVM Specifies that the command is executed by any available action processing server.

userid Specifies that the command is executed by only the action processing server indicated.

wgrpid Specifies that the command is executed by only action processing servers participating in the work group.

The valid values for `ovr` are:

N Specifies the command execution environment cannot be overridden by a rule, schedule, or monitor. This is the default.

Y Specifies the command execution environment can be overridden by a rule, schedule, or monitor.

INPUT(inpwka)
Specifies the well-known action(s) Operations manager takes upon the message input. This is the message that triggered the rule leading to this action.

OUTPUT(outwka)
Specifies the action Operations Manager takes upon the message output of the command specified in the COMMAND operand. This only includes synchronous output. The only available action is `ANL`, which causes Operations Manager to process the synchronous output of the COMMAND operand through Operations Manager rules.

NEXTACTN(actnid)
Specifies the name of an action to execute upon completion of this action.

NEXTDELY(mm:ss)
Specifies an amount of time to delay execution of `NEXTACTN`. The format is in minutes and seconds.

ALTUSER(userid)
Specifies the alternate user ID to be set for the action processing server when executing the action. This operand is *not* valid for `GOM` or `LVM` environments. The alternate user ID is set using CP Diagnose '0xD4'. Refer to *z/VM CP Programming Services (SC24–6084)* for more information.

ALTSECLB(seclabel)
Specifies the `SECLABEL` for the service machine when executing the action. This operand is valid *only* if `ALTUSER` is specified.

Related reference:

"DEFSRVM" on page 45

"ALTRCON" on page 116

Operand value lengths

Table 44 lists the operand value lengths for the DEFACTN command.

Table 44. DEFACTN operand value lengths

Operand	Length
NAME	1-8
INPUT	3-15
COMMAND	1-90
OUTPUT	3
ENV	1-8
NEXTACTN	1-8
NEXTDELY	5
ALTUSER	1-8
ALTSECLB	1-8

Usage notes

1. If the SUP option is specified, no other options are allowed.
2. Separate multiple options with a comma.
3. If OUTPUT is specified, COMMAND must be specified.
4. If COMMAND is specified, ENV must be specified.
5. If ENV is specified, COMMAND must be specified.
6. The following substitution variables are available for all rules, schedules, and monitors in DEFACTN. These substitution variables are always available in DEFACTN.

Table 45. DEFACTN substitution variables

Variable	Value
&P	Substitutes the value passed by the PARM operand of a rule, schedule, or monitor.
&R	Substitutes the ID of the rule, schedule, or monitor that caused the action to be executed.
&S	Substitutes the system name.

The following tables list the substitution variables available when an action is triggered specifically by a rule, schedule, and monitor. These substitution variables are available only when the action is triggered by the specified rule, schedule, or monitor statement.

- DEFEMON allows the following substitution variables:

Table 46. DEFEMON substitution variables

Variable	Value
&C	0
&T	The concatenation of &0 through &n

Table 46. DEFEMON substitution variables (continued)

Variable	Value
&U	The constant _GOMEMON
&0-&99	&0 - Constant EVENT &1 - The name of the event monitor &2 - The name of the event monitor's action &3 - The user ID which caused the event &4 - The event type &5–&n - Any additional information passed from the *VMEVENT system service for a particular event type

- DEFIMON allows the following substitution variables:

Table 47. DEFIMON substitution variables

Variable	Value
&0	Constant "IDLE"
&1	The name of the idle monitor
&2	The name of the idle monitor's action
&3	The type of the resource that is monitored: RULE, MACHINE, SCHEDULE, SPOOL, EVENT, PAGE, or IDLE
&4	The name of the monitored resource
&5	The number of times the monitored resource was triggered within the interval specified on the OCCUR operand

- DEFMMON allows the following substitution variables:

Table 48. DEFMMON substitution variables

Variable	Value
&0	Constant "MACHINE"
&1	The name of the machine monitor
&2	The name of the machine monitor's action
&3	The user ID that caused the action

- DEFPMON allows the following substitution variables:

Table 49. DEFPMON substitution variables

Variable	Value
&C	0
&T	The concatenation of &0 &1 &2 &3 &4 &5
&U	The constant _GOMPMON

Table 49. DEFPMON substitution variables (continued)

Variable	**Value**
&0-&99	&0 - Constant "PAGE" &1 - The name of the page space monitor &2 - The name of the page space monitor's action &3 - The condition field that is passed to the action (USAGE or INCREASE) &4 - The page usage percent &5 - The page usage percent increase for this monitor

- DEFRULE allows the following substitution variables:

Table 50. DEFRULE substitution variables

Variable	**Value**
&C	1 - text came from CP MSG or CP MSGNOH 2 - text came from CP WARNING 3 - text came from CP console output (includes OBSERVER messages 4 - text came from CP SMSG 5 - text came from VM console output 6 - text came from CP error message 7 - text came from CP informational message 8 - text came from CP single console image facility (includes SECUSER messages) 22 - text came from Operations Manager TCP/IP Remote Source Input Filter. Refer to GOMRSIF in “Usage notes” on page 48 for more information. 23 - text came from Operations Manager TCP/IP Remote Syslogd Filter. Refer to GOMRSYL in “Usage notes” on page 48 for more information.
&T	Full message text
&U	User ID of the message text originator
&0-&99	Words of the text

- DEFSCHD and RUN allow the following substitution variables:

Table 51. DEFSCHD and RUN substitution variables

Variable	**Value**
&C	0
&T	Null
&U	The constant _GOMSCHD
&0-&99	Null

- DEFSMON allows the following substitution variables:

Table 52. DEFSMON substitution variables

Variable	Value
&C	0
&T	The concatenation of &0 &1 &2 &3 &4 &5 &6 &7
&U	The constant _GOMSMON
&0-&99	&0 - Constant SPOOL &1 - The name of the spool monitor &2 - The name of the spool monitor's action &3 - The condition field passed to the action (USAGE or INCREASE) &4 - The spool usage percent &5 - The spool usage percent increase for this monitor &6 - The spool file usage percent &7 - The spool file usage percent increase for this monitor

7. The well-known input actions are:
   - AAL. Activates an audible alarm when the message is displayed.
   - ABL. Sets the extended display attribute to blink.
   - AHI. Sets the display attribute to high intensity.
   - ARV. Sets the extended display attribute to reverse video.
   - AUL. Sets the extended display attribute to underline.
   - CBL. Sets the extended display color to blue.
   - CCY. Sets the extended display color to cyan.
   - CGR. Sets the extended display color to green.
   - CPI. Sets the extended display color to pink.
   - CRE. Sets the extended display color to red.
   - CWH. Sets the extended display color to white.
   - CYE. Sets the extended display color to yellow.
   - HLD. Holds the message on the user's console until it is removed. The HLDATTR operand on DEFOPTN, the ALTRCON command, and the PF05 key in VIEWCON provide additional options for held lines.
   - SUP. Suppresses the message from the user's console.
     a. If the SUP option is specified on the INPUT operand, no other options are allowed.
     b. Only one extended display color is allowed.
     c. Only one extended attribute is allowed.
8. The only available output action is ANL, which causes Operations Manager to process the synchronous output of the COMMAND operand through Operations Manager rules. If an action is defined with OUTPUT(ANL) the output from the command is captured in the console data space named _GOMACTN.
9. Valid well-known output actions from previous releases of Operations Manager are accepted for compatibility, but have no effect on the output.

10. If ALTUSER is specified, the user ID OPMGRM1, or any user ID running GOMMAIN, must have PRIV B to operate correctly.
11. To clear the HLD option, you must press the HOLD function key (PF05 by default) in VIEWCON or issue the ALTRCON command.

Related reference:

"DEFOPTN" on page 41

"ALTRCON" on page 116

"VIEWCON" on page 119

Return codes

Table 53 lists the return codes for the DEFACTN command.

Table 53. DEFACTN return codes

Return code	Description
0	Finished correctly
-100	Error

DEFDATE

```
►►──DEFDATE──NAME(dateid)──,HOLIDAY(YYYY/MM/DD-hh:mm YYYY/MM/DD-hh:mm)──────────►◄
```

Figure 31. DEFDATE command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFDATE command to define a date as a holiday. These dates may then be included or excluded from schedules and monitors.

Operands

NAME(dateid)
: Specifies the name of the holiday.

HOLIDAY(YYYY/MM/DD-hh:mm YYYY/MM/DD-hh:mm)
: Defines the begin and end date/time of the holiday.

Related reference:
"DEFEMON"
"DEFMMON" on page 82
"DEFSCHD" on page 91
"DEFSMON" on page 95

Operand value lengths

Table 54 lists the operand value lengths for the DEFDATE command.

Table 54. DEFDATE operand value lengths

Operand	Length
NAME	1-8
HOLIDAY	33

Usage notes

None.

Return codes

Table 55 lists the return codes for the DEFDATE command.

Table 55. DEFDATE return codes

Return code	Description
0	Finished correctly
-100	Error

DEFEMON

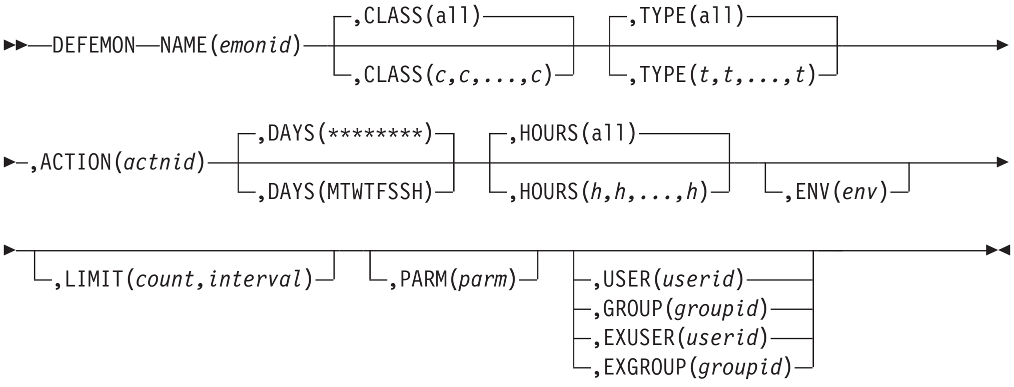


Figure 32. DEFEMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFEMON command to define an event monitor. Events from the CP system service *VMEVENT are captured and compared against defined event monitors. If conditions for the event monitor are met, the associated action is scheduled for execution.

Operands

`NAME(emonid)`

Specifies the name of the event monitor.

`CLASS(c,c,..,c)`

Specifies the classes of events to monitor. The values for `CLASS` are listed in the *CP Programming Services* documentation. The default value is all classes.

`TYPE(t,t,..,t)`

Specifies the types of events to monitor. The values for `TYPE` are listed in the *CP Programming Services* documentation. The default value is all types.

`ACTION(actnid)`

Specifies the name of the associated action.

`DAYS(MTWTFSSH)`

Specifies the days of the week (Monday-Sunday) and if the event is active on holidays. For the event to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

`HOURS(h,h,...,h)`

Specifies the hours of the day the event is active. Any values from `0` to `23` may appear in the comma-separated list. Up to 24 values may be present. The default is all hours.

`ENV(env)`

Specifies that the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

`LIMIT(count,interval)`

Specifies that the execution of the event's action is limited to *count* times within *interval*.

- The value for *count* must be from `1` to `999999`.
- The value for *interval* can either be from `1` to `999999` seconds, or in the format of `DDD-HH:MM:SS` which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The values must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either `LIMIT(4,10)` or `LIMIT(4,000-00:00:10)`.

`PARM(parm)`

Specifies the parameter that is passed to the action when it is scheduled to run. The DEFACTN command can use the parameter through the `&p` substitution variable. The parameter is also available to any chained action routine that is defined in the `NEXTACTN` operand on DEFACTN.

`USER(userid)`

Specifies this event is only applicable for events generated for `userid`.

GROUP(groupid)
Specifies this event is only applicable for events generated for users in the group named groupid.

EXUSER(userid)
Specifies this event is only applicable for events not generated for userid.

EXGROUP(groupid)
Specifies this event is only applicable for events not generated for users in the group named groupid.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

"DEFGROUP" on page 81

Operand value lengths

Table 56 lists the operand value lengths for the DEFEMON command.

Table 56. DEFEMON operand value lengths

Operand	Length
NAME	1-8
CLASS	1-120
TYPE	1-120
ACTION	1-8
PARM	1-120
DAYS	8
HOURS	1-72
USER	1-8
GROUP	1-8
EXUSER	1-8
EXGROUP	1-8
LIMIT	3-19
ENV	1-8

Usage notes

1. USER, GROUP, EXUSER, and EXGROUP are mutually exclusive.
2. The message field passed to the action contains the following fields:
   - &0 — Constant "EVENT"
   - &1 — The name of the event monitor
   - &2 — The name of the event monitor's action
   - &3 — The userid that caused the event
   - &4 — The event type
   - &5-&n — Any additional information passed for a particular event class/type

Return codes

Table 57 lists the return codes for the DEFEMON command.

Table 57. DEFEMON return codes

Return code	Description
0	Finished correctly
-100	Error

DEFIMON

```
►►──DEFIMON──NAME(imonid)──,ACTION(actnid)──,OCCUR(count,interval)──────────►

                                              ┌─,DAYS(********)─┐
►──┬─────────────────────┬──┬──────────────┬──┼─────────────────┼────────────►
   ├─,RULE(ruleid)───────┤  └─,PARM(parm)──┘  └─,DAYS(MTWTFSSH)─┘
   ├─,MACHINE(mmonid)────┤
   ├─,SCHEDULE(schdid)───┤
   ├─,SPOOL(smonid)──────┤
   ├─,EVENT(emonid)──────┤
   ├─,PAGE(pmonid)───────┤
   └─,IDLE(imonid)───────┘

   ┌─,HOURS(ALL)─────────┐
►──┼─────────────────────┼──┬─────────────┬──┬─────────────────────────┬─────►◄
   └─,HOURS(h,h,...,h)───┘  └─,ENV(env)───┘  └─,LIMIT(count,interval)─┘
```

Figure 33. DEFIMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Use the DEFIMON command to define an idle monitor. A check is performed to determine if the RULE, MACHINE, SCHEDULE, SPOOL, EVENT, PAGE, or IDLE resource is triggered a specified number of times within a specified time frame. If a resource is not triggered, the action associated with the idle monitor is scheduled to run.

Operands

NAME(imonid)
Specifies the name of the idle monitor.

ACTION(actnid)
Specifies the name of the action to execute when a resource is not triggered.

OCCUR(count,interval)
: Specifies the execution of the monitored resource that should happen *count* times, within *interval* minutes. The values for *count* and *interval* must be from 1 to 999999.

RULE(ruleid)
: Specifies to monitor the rule *ruleid*.

MACHINE(mmonid)
: Specifies to monitor the machine monitor *mmonid*.

SCHEDULE(schdid)
: Specifies to monitor the schedule *schdid*.

SPOOL(smonid)
: Specifies to monitor the spool monitor *smonid*.

EVENT(emonid)
: Specifies to monitor the event monitor *emonid*.

PAGE(pmonid)
: Specifies to monitor the page space monitor *pmonid*.

IDLE(imonid)
: Specifies to monitor the idle monitor *imonid*.

PARM(parm)
: Specifies the parameter that is passed to the action when it is scheduled to run.

DAYS(MTWTFSSH)
: Specifies the days of the week (Monday-Sunday) and if the monitor is checked on holidays. For the monitor to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

HOURS(h,h,...,h)
: Specifies the hours of the day the monitor is checked. Any value from `0` to `23` can be used in a comma-separated list. Up to 24 values can be present. The default is all hours.

ENV(env)
: Specifies the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

LIMIT(count,interval)
: Specifies that the execution of the monitor's action is limited to *count* times within *interval*.

- The value for *count* must be from 1 to 999999.
- The value for *interval* can either be from 1 to 999999 seconds, or in the format of `DDD-HH:MM:SS` which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either `LIMIT(4,10)` or `LIMIT(4,000-00:00:10)`.

Operand value lengths

Table 58 lists the operand value lengths for the DEFIMON command.

Table 58. DEFIMON operand value lengths

Operand	Length
NAME	1-8
ACTION	1-8
OCCUR(m,n)	1-6, 1-6
RULE	1-8
MACHINE	1-8
SCHEDULE	1-8
SPOOL	1-8
EVENT	1-8
PAGE	1-8
IDLE	1-8
PARM	1-120
DAYS	8
HOURS	1-72
ENV	1-8
LIMIT	3-19

Usage notes

1. Only one of the operands `RULE`, `MACHINE`, `SCHEDULE`, `SPOOL`, `EVENT`, `PAGE`, or `IDLE` must be specified.
2. The message field that is passed to the action contains the following fields:
   - `&0` - Constant "IDLE".
   - `&1` - The name of the idle monitor.
   - `&2` - The name of the idle monitor's action.
   - `&3` - The type of the resource that is monitored: `RULE`, `MACHINE`, `SCHEDULE`, `SPOOL`, `EVENT`, `PAGE`, or `IDLE`
   - `&4` - The name of the monitored resource.
   - `&5` - The number of times the monitored resource was triggered within the interval specified on the `OCCUR` operand.

Return codes

Table 59 lists the return codes for the DEFIMON command.

Table 59. DEFIMON return codes

Return code	Description
0	Finished correctly
-100	Error

DEFGROUP

```
►►──DEFGROUP──NAME(groupid)──,USER(user)──────────────────────────────────►◄
```

Figure 34. DEFGROUP command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFGROUP command to define a group of users to which rules and event monitors can apply. This command adds users to a group.

Operands

NAME(groupid)
Specifies a name for the group

USER(user)
Specifies a user ID or wildcard pattern to match against a user ID. The wildcard rules are explained in the DEFRULE command.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 60 lists the operand value lengths for the DEFGROUP command.

Table 60. DEFGROUP operand value lengths

Operand	Length
NAME	1-8
USER	1-8

Usage notes

1. If you want to add multiple user IDs or a wildcard pattern to a group, you must specify one DEFGROUP command for each user ID. For example, to add USER1, USER2, and USER3 into the group GROUP1, specify three DEFGROUP commands.

   ```
   DEFGROUP NAME(GROUP1),USER(USER1)
   DEFGROUP NAME(GROUP1),USER(USER2)
   DEFGROUP NAME(GROUP1),USER(USER3)
   ```

Return codes

Table 61 lists the return codes for the DEFGROUP command.

Table 61. DEFGROUP return codes

Return code	Description
0	Finished correctly
-100	Error

DEFMMON

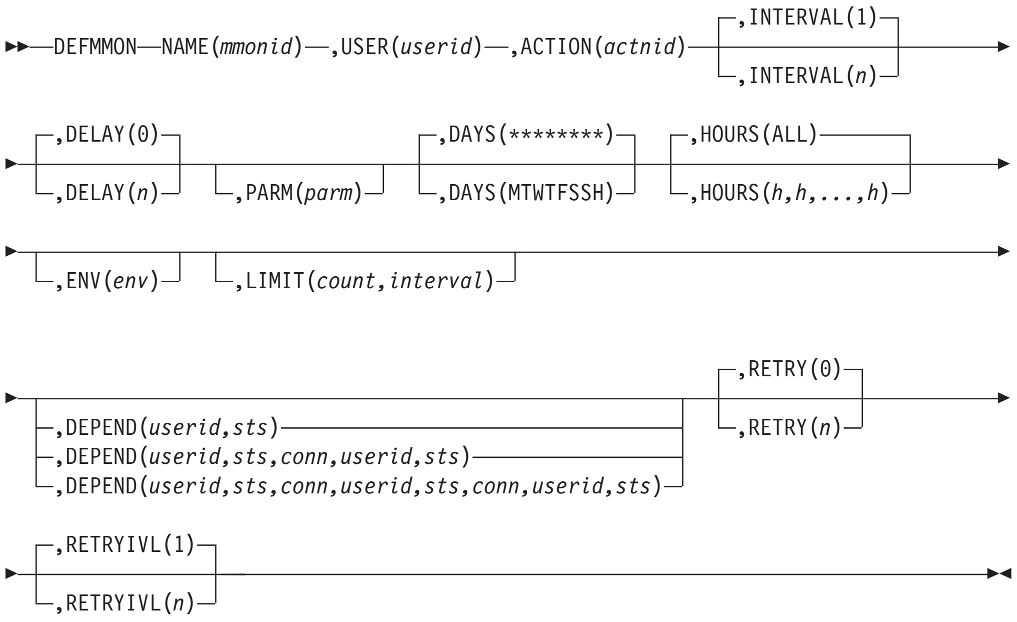


Figure 35. DEFMMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFMMON command to define a virtual machine to monitor. A check is performed to determine if the virtual machine is logged off. If it is, the specified action is scheduled for immediate execution. The action typically issues a command to bring the virtual machine to a logged on status.

Operands

NAME(mmonid)
Specifies the name of the machine monitor.

USER(userid)
Specifies the user ID of the virtual machine to monitor.

ACTION(actnid)
Specifies the name of the action to execute. This action must be previously defined using the DEFACTN command.

INTERVAL(n)
Specifies how often, in minutes, to check the virtual machine status. The default is 1.

DELAY(n)
Specifies how long to wait, in minutes, after the monitor is defined to check the virtual machine status. The default is 0 (check immediately).

PARM(parms)
Specifies the parameter that is passed to the action when it is scheduled to

run. The DEFACTN command can use the parameter through the `&p` substitution variable. The parameter is also available to any chained action routine that is defined in the `NEXTACTN` operand on DEFACTN.

`DAYS(MTWTFSSH)`

Specifies the days of the week (Monday-Sunday) and if the monitor is checked on holidays. For the monitor to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

`ENV(env)`

Specifies that the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

`LIMIT(count,interval)`

Specifies that the execution of the monitor's action is limited to *count* times within *interval*.

- The value for *count* must be from `1` to `999999`.
- The value for *interval* can either be from `1` to `999999` seconds, or in the format of `DDD-HH:MM:SS` which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either `LIMIT(4,10)` or `LIMIT(4,000-00:00:10)`.

`HOURS(h,h,...,h)`

Specifies the hours of the day the monitor is checked. Any value `0` to `23` may appear in the comma-separated list. Up to 24 values may be present. The default is all hours.

`DEPEND(userid,sts)`
`DEPEND(userid,sts,conn,userid,sts)`
`DEPEND(userid,sts,conn,userid,sts,conn,userid,sts)`

Specifies up to three virtual machines and their status before the monitor is checked.

- `userid` — Specifies the user ID of the virtual machine to check.
- `sts` — Specifies the desired status of the virtual machine:
  - `A` — active
  - `I` — inactive
- `conn` — Specifies the logical connector:
  - `|` (vertical bar) — or/exclude
  - `&` (ampersand) — and/include

  The logical connectors are evaluated left to right and have no hierarchy. The default is no dependencies.

`RETRY(n)`

Specifies the number of times to retry the action if the monitored virtual machine is not brought to a logged on status. Each `INTERVAL` that does not bring the virtual machine to a logged on status is considered a retry. When the number of retries is exceeded, the monitor checking interval is advanced by the number of minutes in the `RETRYIVL` operand. This is useful if virtual machine does not attain or remain in the logged on status. It can reduce the resource consumption used by a continuously failing virtual machine. The default is 0.

RETRYIVL(n)
Specifies the number of minutes to elapse before the monitor is checked if the retry is exceeded. If specified, it must be greater than or equal to INTERVAL. The default is the value of INTERVAL.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

Operand value lengths

Table 62 lists the operand value lengths for the DEFMMON command.

Table 62. DEFMMON operand value lengths

Operand	Length
NAME	1-8
USER	1-8
ACTION	1-8
PARM	1-120
INTERVAL	1-6
DELAY	1-6
RETRY	1-6
RETRYIVL	1-6
DAYS	8
HOURS	1-72
DEPEND	3-36
ENV	1-8
LIMIT	3-19

Usage notes

The message field passed to the action contains the following fields:

&0 - Constant "MACHINE"

&1 - The name of the machine monitor

&2 - The name of the machine monitor's action

&3 - The user ID that caused the action

Return codes

Table 63 lists the return codes for the DEFMMON command.

Table 63. DEFMMON return codes

Return code	Description
0	Finished correctly
-100	Error

DEFPMON

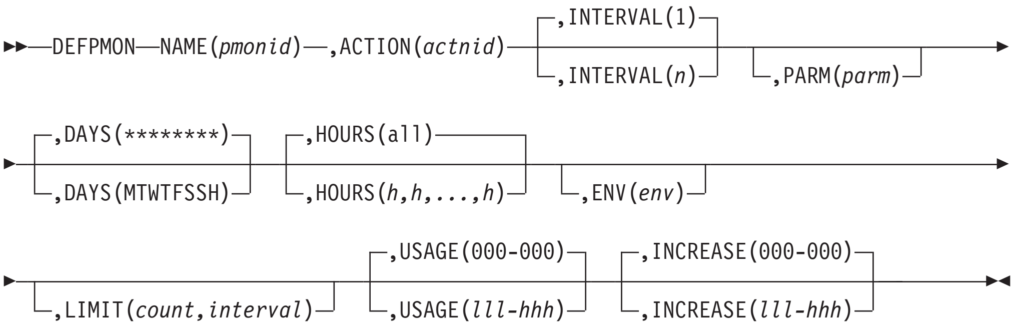


Figure 36. DEFPMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFPMON command to define a page space monitor. A check is performed to determine if the page usage percent or page usage percent increase is within the low and high bounds that are set by the `USAGE` or `INCREASE` operand. If so, the action is scheduled for execution. See the usage notes for more information on the substitution variables that are available to the action.

Operands

NAME(pmonid)
Specifies the name of the page space monitor.

ACTION(actnid)
Specifies the name of the action to execute when the page usage falls within the bounds for the `USAGE` or `INCREASE` operand.

INTERVAL(n)
Specifies how often to check the page usage for this monitor in minutes. The default is 1.

PARM(parm)
Specifies the parameter that is passed to the action when it is scheduled to run. The DEFACTN command can use the parameter through the `&p` substitution variable. The parameter is also available to any chained action routine that is defined in the `NEXTACTN` operand on DEFACTN.

DAYS(MTWTFSSH)
Specifies the days of the week (Monday-Sunday) and if the monitor is checked on holidays. For the monitor to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

HOURS(h,h,...,h)
Specifies the hours of the day the monitor will be checked. Any of the

values `0` to `23` may appear in the comma-separated list. Up to 24 values may be present. The default is all hours.

`ENV(env)`

Specifies that the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

`LIMIT(count,interval)`

Specifies that the execution of the monitor's action is limited to *count* times within *interval*.

- The value for *count* must be from `1` to `999999`.
- The value for *interval* can either be from `1` to `999999` seconds, or in the format of `DDD-HH:MM:SS` which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either `LIMIT(4,10)` or `LIMIT(4,000-00:00:10)`.

`USAGE(lll-hhh)`

Specifies the low and high usage percent (000-100) bounds to execute the action. If USAGE is not specified, no usage percent check is performed. Both low and high bounds must be three digits. The low and high bounds are percentages of the total available page space.

`INCREASE(lll-hhh)`

Specifies the low and high usage percent increase (000-100) bounds to execute the action. If `INCREASE` is not specified, no usage percent increase check is performed. The usage percent increase is computed by subtracting the previous page usage from the current page usage. The low and high bounds must be three digits. The low and high bounds are percentages of the total available page space.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

Operand value lengths

Table 64 lists the operand value lengths for the DEFPMON command.

Table 64. DEFPMON operand value lengths

Operand	Length
`NAME`	1-8
`ACTION`	1-8
`INTERVAL`	1-6
`PARM`	1-120
`DAYS`	8
`HOURS`	1-72
`ENV`	1-8
`LIMIT`	3-19
`USAGE`	7

Table 64. DEFPMON operand value lengths (continued)

Operand	**Length**
INCREASE	7

Usage notes

1. The VM user ID that is running GOMMAIN (OPMGRM1 by default), must have PRIV D to operate correctly.
2. Either USAGE or INCREASE must be specified.
3. The low and high bound checks are inclusive.
4. Monitor checking is performed in the following order:
   a. USAGE is checked first. If usage falls within the low and high bounds, the ACTION is scheduled for USAGE condition and no further checks are made.
   b. INCREASE is checked second. If usage increase occurs within the low and high bounds, the ACTION is scheduled for INCREASE condition.
5. The message field that is passed to the action contains the following fields:
   - &0 - Constant "PAGE"
   - &1 - The name of the page space monitor
   - &2 - The name of the page space monitor's action
   - &3 - The condition field that is passed to the action (USAGE or INCREASE)
   - &4 - The page usage percent
   - &5 - The page usage percent increase for this monitor
6. The value for space utilization percentage is obtained by rounding downward. This value may differ from the space utilization percentage computed from other sources.

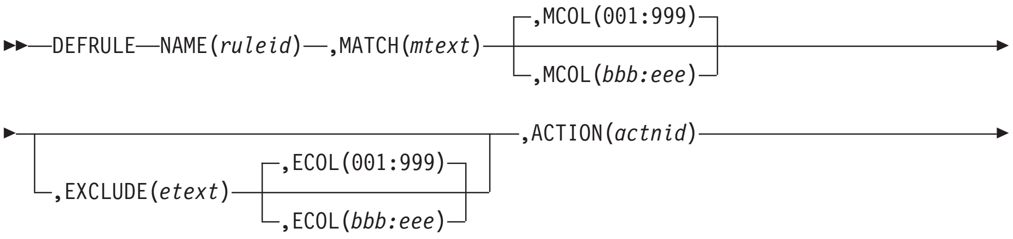
Return codes

Table 65 lists the return codes for the DEFPMON command.

Table 65. DEFPMON return codes

Return code	**Description**
0	Finished correctly
-100	Error

DEFRULE



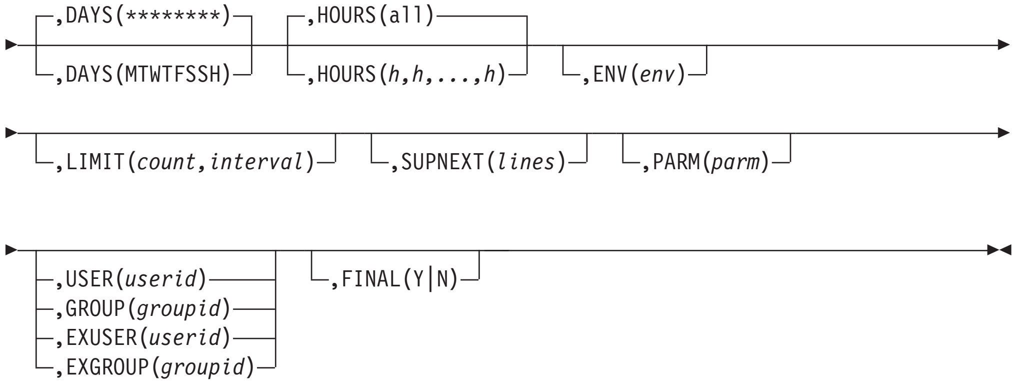


Figure 37. DEFRULE command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFRULE command to setup a rule that defines a pattern that is used for comparing messages against and determining if there is a match. The DEFRULE command also defines an action that is associated with the rule. If conditions for the RULE are met, the associated action is scheduled for execution.

Operands

`NAME(ruleid)`
Specifies the name of the rule.

`MATCH(mtext)`
Specifies the pattern used to compare against a message to determine if there is a match. Wildcard pattern matching is allowed. If a match is found, the associated action is scheduled for execution.

`MCOL(bbb:eee)`
Specifies the beginning and ending columns to search for the match pattern (inclusive). The valid format is `bbb:eee`, where `bbb` is the beginning column and `eee` is the ending column. The default is `001:999`.

`EXCLUDE(etext)`
Specifies the pattern used to compare against a message to determine if there is an exclusion. Wildcard matching is allowed. If an exclusion is found, the associated action is *not* scheduled for execution.

`ECOL(bbb:eee)`
Specifies the beginning and ending columns to search for the exclude pattern (inclusive). The valid format is `bbb:eee`, where `bbb` is the beginning column and `eee` is the ending column. The default is `001:999`.

Note: The `ECOL` operand may be specified only if the `EXCLUDE` operand is specified.

`ACTION(actnid)`
Specifies the name of the associated action.

DAYS(MTWTFSSH)

Specifies the days of the week (Monday-Sunday) and if the rule is active on holidays. For the rule to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

HOURS(h,h,...,h)

Specifies the hours of the day the rule is active. Any of the values from `0` to `23` may appear in the comma-separated list. Up to 24 values may be present. The default is all hours.

ENV(env)

Specifies the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

LIMIT(count,interval)

Specifies that the execution of the rule's action is limited to *count* times within *interval*.

- The value for *count* must be from `1` to `999999`.
- The value for *interval* can either be from `1` to `999999` seconds, or in the format of `DDD-HH:MM:SS` which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either `LIMIT(4,10)` or `LIMIT(4,000-00:00:10)`.

SUPNEXT(lines)

Suppresses the number of output lines specified from each user's console affected by this rule. The suppressed lines begin with the line following the line that triggered this rule. The value for lines can be from `0` to `999999`. If lines are already suppressed for the affected user's console, the number of remaining suppressed lines will be changed to *lines*. If `SUPNEXT` is not specified on a triggered rule, the default is not to change the line suppression count for the affected user's console.

PARM(parm)

Specifies the parameter that is passed to the action when it is scheduled to run. The DEFACTN command can use the parameter through the `&p` substitution variable. The parameter is also available to any chained action routine that is defined in the `NEXTACTN` operand on DEFACTN.

USER(userid)

Specifies this rule is only applicable for messages from the specified `userid`.

GROUP(groupid)

Specifies this rule is only applicable for messages from users in the group named `groupid`.

EXUSER(userid)

Specifies this rule is only applicable for messages not from `userid`.

EXGROUP(groupid)

Specifies this rule is only applicable for messages not from users in the group named `groupid`.

FINAL(Y|N)

Specifies if this is the final rule to process for the current message if the action was scheduled. The default value is FINAL(N), which specifies rule processing continues for this message. FINAL(Y) specifies no further rule processing for this message.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

"DEFGROUP" on page 81

Operand value lengths

Table 66 lists the operand value lengths for the DEFRULE command.

Table 66. DEFULE operand value lengths

Operand	Length
NAME	1-8
MATCH	1-60
MCOL	7
EXCLUDE	1-60
ECOL	7
ACTION	1-8
SUPNEXT	1-6
PARM	1-120
USER	1-8
GROUP	1-8
FINAL	1
DAYS	8
HOURS	1-72
EXUSER	1-8
EXGROUP	1-8
LIMIT	3-19
ENV	1-8

Usage notes

1. Wildcard matching is performed using the following:
   - An asterisk (*) means zero (0) or more characters of any kind.
   - A percent sign (%) means one (1) required character of any kind.
   - A pound sign (#) means one (1) required numeric character (0-9).
   - An ampersand (&) means one (1) required alphabetic character (A-Z, a-z).
   - An at sign (@) means one (1) required hexadecimal character (A-F, a-f, 0-9).
   - A quote mark (") is the escape character for matching any of the above characters.

   Wildcard patterns can be used in any combination.
2. USER, GROUP, EXUSER, and EXGROUP are mutually exclusive.
3. The text specified on the MATCH and EXCLUDE operands must exactly match the full text found in the columns specified in MCOL and ECOL respectively.
4. Use wildcard patterns to look for a substring anywhere in the message.

The following example triggers the action TESTACTN if the text "Testing error" appears anywhere in a message:

```
DEFRULE NAME(TEST),MATCH(*Testing error*),ACTION(TESTACTN)
```

If you do not specify an asterisk at the end of the MATCH operand value, the matching text must end in the column specified in the MCOL operand. Similarly, if you do not specify an asterisk at the beginning of the MATCH operand value, the matching text must begin in the column specified in the MCOL operand.

The example below triggers the action TESTACTN if the text "Testing error" appears in columns 28 through 40 of a message. The matching text must end in column 40 because there is no asterisk at the end of the matching text. Since the matching text is 13 characters, the beginning column must be 28 even though the MCOL beginning column is defined as 001.

```
DEFRULE NAME(TEST),MATCH(*Testing error),MCOL(001:040),ACTION(TESTACTN)
```

5. Notes about the SUPNEXT operand:
   a. SUPNEXT on a DEFRULE command and INPUT(SUP) on a DEFACTN command are independent. SUPNEXT suppresses the number of lines specified, starting with the line following the line that triggered the rule. INPUT(SUP) suppresses the current line triggered by the rule.
   b. All suppressed lines continue through rule processing.
   c. Separate values are maintained for SUPNEXT for each console. For example, a rule containing SUPNEXT(10) can affect 3 consoles. For one of those consoles, the third suppressed line can trigger a different rule that uses SUPNEXT(0) to cancel line suppression for that console. The remaining two consoles still suppress the remaining 7 lines.

Return Codes

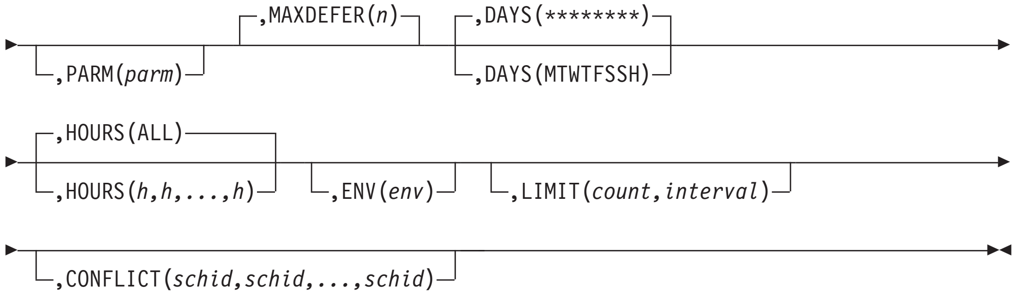
Table 67 lists the return codes for the DEFRULE command.

Table 67. DEFRULE return codes

Return code	Description
0	Finished correctly
-100	Error

DEFSCHD

```
►►──DEFSCHD──NAME(schdid)──,ACTION(actnid)──┬─,WHEN(mm)─────────────────┬──────────►
                                            ├─,WHEN(hh:mm)──────────────┤
                                            ├─,EVERY(hh:mm)─────────────┤
                                            ├─,WHEN(DOW-hh:mm)──────────┤
                                            │                   (1)     │
                                            ├─,WHEN(DD-hh:mm)───────────┤
                                            ├─,WHEN(EM-hh:mm)───────────┤
                                            ├─,WHEN(CNTDOW-hh:mm)───────┤
                                            │                      (1)  │
                                            ├─,WHEN(MM/DD-hh:mm)────────┤
                                            ├─,WHEN(NOW+hh:mm)──────────┤
                                            └─,WHEN(YYYY/MM/DD-hh:mm)───┘
```



Notes:

1 If the specified value does not occur within a month or year, the execution time is postponed until the value is reached. For example: WHEN(31-00:00) causes the execution to occur only in months with 31 days. WHEN(02/29-00:00) causes the execution to occur only in leap years.

Figure 38. DEFSCHD command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFSCHD command to define a schedule and associate an action with the schedule. The schedule indicates whether the action executes once, hourly or on a specific hour, daily or on a specific day, on a holiday, monthly, or yearly. It also indicates which days, hours, and holidays are used for execution.

Operands

NAME(schdid)
Specifies the name of the schedule.

ACTION(actnid)
Specifies the name of the action to associate with the schedule.

WHEN(mm)
Specifies the execution time is hourly. The action is scheduled at mm minutes of the hour.

WHEN(hh:mm)
Specifies the execution time is daily. The action is scheduled at hh:mm of the day. For example, 01:30 refers to 1:30 A.M., and 13:30 refers to 1:30 P.M.

EVERY(hh:mm)
Specifies the execution time is based on an interval. The interval is every hh:mm of the day starting with Operations Manager startup.

WHEN(DOW-hh:mm)
Specifies the execution time is weekly. The action is scheduled on MON, TUE, WED, THU, FRI, SAT, or SUN of the week at hh:mm of the day.

WHEN(DD-hh:mm)
Specifies the execution time is monthly. The action is scheduled on DD day of the month at hh:mm of the day.

WHEN(EM-hh:mm)
Specifies the execution time is monthly. The action is scheduled on the last day of the month at hh:mm of the day.

WHEN(CNTDOW-hh:mm)
Specifies the execution time is monthly. The action is scheduled on the specified day at hh:mm of the day. CNT can be 1ST, 2ND, 3RD, 4TH, 5TH, or LST occurrence of the month. DOW can be MON, TUES, WED, THU, FRI, SAT, SUN, WKD (week day), or WKE (weekend day).

WHEN(MM/DD-hh:mm)
Specifies the execution time is yearly. The action is scheduled on MM/DD of the year at hh:mm of the day.

WHEN(NOW+hh:mm)
Specifies the execution time to be once, after a delay of hh:mm from now. hh:mm may range from +00:00 to +23:59. If omitted, the default is +00:00.

WHEN(YYYY/MM/DD-hh:mm)
Specifies the execution time to be once on the specified date and time. The action is not scheduled if the date entered has already occurred.

PARM(parm)
Specifies the parameter that is passed to the action when it is scheduled to run. The DEFACTN command can use the parameter through the &p substitution variable. The parameter is also available to any chained action routine that is defined in the NEXTACTN operand on DEFACTN.

DAYS(MTWTFSSH)
Specifies the days of the week (Monday-Sunday) and if the schedule is active on holidays. For the schedule to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

HOURS(h,h,...,h)
Specifies the hours of the day the schedule is active. Any value from 0 to 23 may appear in the comma separated list. Up to 24 values may be present. The default is all hours.

ENV(env)
Specifies the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

LIMIT(count,interval)
Specifies that the execution of the schedule's action is limited to *count* times within *interval*.

- The value for *count* must be from 1 to 999999.
- The value for *interval* can either be from 1 to 999999 seconds, or in the format of DDD-HH:MM:SS which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

For example, a LIMIT of 4 times in 10 seconds could be specified as either LIMIT(4,10) or LIMIT(4,000-00:00:10).

MAXDEFER(n)
Specifies the number of minutes the schedule may be delayed from

beginning execution due to CONFLICT. If a schedule is not able to begin before the MAXDEFER value is reached, the schedule is advanced to the next execution time. The default is 0.

CONFLICT(schid,schid,...,schid)
Specifies up to sixteen (16) conflicting schedules. If any of the specified schedules are executing, this schedule is deferred from execution. The schedule is then checked every minute until MAXDEFER is reached.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

Operand value lengths

Table 68 lists the operand value lengths for the DEFSCHD command.

Table 68. DEFSCHD operand value lengths

Operand	Length
NAME	1-8
WHEN	2-16
EVERY	5
ACTION	1-8
PARM	1-120
MAXDEFER	1-6
DAYS	8
HOURS	1-72
CONFLICT	1-120
ENV	1-8
LIMIT	3-19

Usage notes

1. Any changes made to the hardware TOD clock do not automatically adjust existing schedules. Stop Operations Manager before making changes to the TOD clock.
2. CONFLICT describes a one way conflict. If schedules and A and B should not execute at the same time, schedule A must name schedule B as a conflict *and* schedule B must name schedule A as a conflict.
3. The execution time for WHEN(NOW+00:00) is not immediate. The execution begins within thirty seconds of the time the schedule is defined.

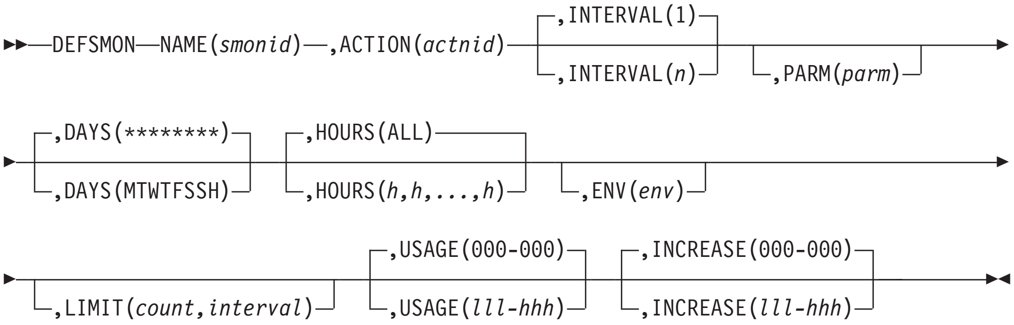
Return codes

Table 69 lists the return codes for the DEFSCHD command.

Table 69. DEFSCHD return codes

Return code	Description
0	Finished correctly
-100	Error

DEFSMON



```
                                          ┌─,INTERVAL(1)─┐
►►──DEFSMON──NAME(smonid)──,ACTION(actnid)─┼──────────────┼──┬──────────────┬──►
                                          └─,INTERVAL(n)─┘  └─,PARM(parm)─┘

  ┌─,DAYS(********)─┐  ┌─,HOURS(ALL)──────┐
►─┼─────────────────┼──┼──────────────────┼──┬────────────┬──────────────────►
  └─,DAYS(MTWTFSSH)─┘  └─,HOURS(h,h,...,h)┘  └─,ENV(env)─┘

                                 ┌─,USAGE(000-000)─┐  ┌─,INCREASE(000-000)─┐
►─┬──────────────────────────┬──┼─────────────────┼──┼────────────────────┼──►◄
  └─,LIMIT(count,interval)──┘  └─,USAGE(lll-hhh)─┘  └─,INCREASE(lll-hhh)─┘
```

Figure 39. DEFSMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DEFSMON command to define a spool monitor. A check is performed to determine if the spool usage percent or spool usage percent increase is within the low and high bounds set by USAGE or INCREASE. If so, the specified action is scheduled for execution. See "Usage notes" on page 97 for details of the message passed to the action.

Operands

NAME(smonid)
Specifies the name of the spool monitor.

ACTION(actnid)
Specifies the name of the action to execute when spool usage falls within the bounds for USAGE or INCREASE.

INTERVAL(n)
Specifies how often, in minutes, to check the spool usage for this monitor. The default is 1.

PARM(parm)
Specifies the parameter that is passed to the action when it is scheduled to run. The DEFACTN command can use the parameter through the &p substitution variable. The parameter is also available to any chained action routine that is defined in the NEXTACTN operand on DEFACTN.

DAYS(MTWTFSSH)
Specifies the days of the week (Monday-Sunday) and if the monitor is checked on holidays. For the monitor to be active on a day of the week and holiday, the corresponding location must contain the asterisk (*) symbol. Issue the DEFDATE command to define holidays. The default is all days and holidays (********).

HOURS(h,h,...,h)

Specifies the hours of the day the monitor is checked. Any of the values from 0 to 23 can be used in a comma-separated list. Up to 24 values can be present. The default is all hours.

ENV(env)

Specifies the execution environment of the action is overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

| **LIMIT(count,interval)**

| Specifies that the execution of the monitor's action is limited to *count* times within *interval*.

- The value for *count* must be from 1 to 999999.
- The value for *interval* can either be from 1 to 999999 seconds, or in the format of DDD-HH:MM:SS which specifies the interval value in days (DDD), hours (HH), minutes (MM), and seconds (SS). The value must be between 000-00:00:01 and 999-23:59:59.

| For example, a LIMIT of 4 times in 10 seconds could be specified as either LIMIT(4,10) or LIMIT(4,000-00:00:10).

USAGE(lll-hhh)

Specifies the low and high usage percent (000-100) bounds to execute the ACTION. If USAGE is not specified, no usage percent check is performed. Both low and high bounds must be three digits. The low and high bounds are percentages of the total available spool space.

INCREASE(lll-hhh)

Specifies the low and high usage percent increase (000-100) bounds to execute the ACTION. If INCREASE is not specified, no usage percent increase check is performed. The usage percent increase is computed by subtracting the spool usage percent at the previous interval from the current spool usage percent. The low and high bounds must be three digits. The low and high bounds are percentages of the total available spooling space.

Related reference:

"DEFACTN" on page 67

"DEFDATE" on page 74

Operand value lengths

Table 70 lists the operand value lengths for the DEFSMON command.

Table 70. DEFSMON operand value lengths

Operand	Length
NAME	1-8
ACTION	1-8
PARM	1-120
INTERVAL	1-6
DAYS	8
HOURS	1-72
USAGE	7
INCREASE	7
ENV	1-8

Table 70. DEFSMON operand value lengths (continued)

Operand	**Length**
LIMIT	3-19

Usage notes

1. The VM user ID running GOMMAIN must have PRIV D to operate correctly.
2. Either USAGE or INCREASE must be specified.
3. The low and high bound checks are inclusive.
4. Monitor checking is performed in the following order:
   a. USAGE is checked first. If usage falls within the low and high bounds, the ACTION is scheduled for USAGE condition and no further checks are made.
   b. INCREASE is checked second. If usage increase occurs within the low and high bounds, the ACTION is scheduled for INCREASE condition.
5. The message field passed to the action contains the following fields:
   - &0 — Constant "SPOOL".
   - &1 — The name of the spool monitor.
   - &2 — The name of the spool monitor's action.
   - &3 — The condition field passed to the action. The valid conditions are USAGE or INCREASE.
   - &4 — The spool usage percentage.
   - &5 — The spool usage percent increase for this monitor.
   - &6 — The spool file usage percentage.
   - &7 — The spool file usage percentage increase for this monitor.
6. The value for space utilization percentage is obtained by rounding downward. This value may differ from the space utilization percentage computed from other sources.

Return codes

Table 71 lists the return codes for the DEFSMON command.

Table 71. DEFSMON return codes

Return code	**Description**
0	Finished correctly
-100	Error

DELACTN

```
►►──DELACTN──NAME(actnid)──────────────────────────────────────────►◄
```

Figure 40. DELACTN command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELACTN command to delete an action.

Related reference:

“DEFACTN” on page 67

Operands

`NAME(actnid)`
Specifies the name of the action to delete.

Operand value lengths

Table 72 lists the operand value lengths for the DELACTN command.

Table 72. DELACTN operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return codes

Table 73 lists the return codes for the DELACTN command.

Table 73. DELACTN return codes

Return code	Description
0	Finished correctly
-100	Error

DELDATE

```
►►──DELDATE──NAME(dateid)──────────────────────────────────────────►◄
```

Figure 41. DELDATE command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELDATE command to delete a holiday.

Related reference:

“DEFDATE” on page 74

Operands

`NAME(dateid)`
Specifies the name of the holiday to delete.

Operand value lengths

Table 74 lists the operand value lengths for the DELDATE command.

Table 74. DELDATE operand value lengths

Operand	Length
`NAME`	1-8

Usage notes

None.

Return codes

Table 75 lists the return codes for the DELDATE command.

Table 75. DELDATE return codes

Return code	Description
0	Finished correctly
-100	Error

DELEMON

```
►►──DELEMON──NAME(emonid)──────────────────────────────────────────────►◄
```

Figure 42. DELEMON command syntax

Related reference:
"DEFEMON" on page 75

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELEMON command to delete an event monitor.

Operands

`NAME(emonid)`
Specifies the name of the event monitor to delete.

Operand value lengths

Table 76 lists the operand value lengths for the DELEMON command.

Table 76. DELEMON operand value lengths

Operand	Length
`NAME`	1-8

Usage notes

None.

Return codes

Table 77 lists the return codes for the DELEMON command.

Table 77. DELEMON return codes

Return code	Description
0	Finished correctly
-100	Error

DELGROUP

```
►►──DELGROUP──NAME(groupid)──,USER(user)──────────────────────────►◄
```

Figure 43. DELGROUP command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELGROUP command to delete users from a group.

Related reference:

“DEFGROUP” on page 81

Operands

NAME(groupid)
Specifies the group name.

USER(user)
Specifies a user ID or a wildcard pattern to delete from the group.

Operand value lengths

Table 78 lists the operand value lengths for the DELGROUP command.

Table 78. DELGROUP operand value lengths

Operand	Length
NAME	1-8
USER	1-8

Usage notes

1. The value of the NAME and USER operands must completely match a previously defined value.
2. Only the unique combination of NAME and USER are removed. Other NAME and USER combinations are not removed.

Return codes

Table 79 lists the return codes for the DELGROUP command.

Table 79. DELGROUP return codes

Return code	Description
0	Finished correctly
-100	Error

DELIMON

```
►►──DELIMON──NAME(imonid)──────────────────────────────────────────────►◄
```

Figure 44. DELIMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELIMON command to delete an idle monitor.

Operands

NAME(imonid)
Specifies the name of the idle monitor.

Operand value lengths

Table 80 lists the operand value lengths for the DELIMON command.

Table 80. DELIMON operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return codes

Table 81 lists the return codes for the DELIMON command.

Table 81. DELIMON return codes

Return code	Description
0	Finished correctly
-100	Error

DELMMON

```
►►──DELMMON──NAME(mmonid)──────────────────────────────────────────────►◄
```

Figure 45. DELMMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELMMON command to delete a virtual machine monitor.

Related reference:

"DEFMMON" on page 82

Operands

NAME(mmonid)
Specifies the name of the machine monitor to delete.

Operand value lengths

Table 82 lists the operand value lengths for the DELMMON command.

Table 82. DELMMON operand value lengths

Operand	Length
NAME	1-8

Usage notes

1. The status of the monitored virtual machine is not changed.

Return codes

Table 83 lists the return codes for the DELMMON command.

Table 83. DELMMON return codes

Return code	Description
0	Finished correctly
-100	Error

DELPMON

```
►►──DELPMON──NAME(pmonid)──────────────────────────────────────────────►◄
```

Figure 46. DELPMON command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELPMON command to delete a page space monitor.

Operands

NAME(pmonid)
Specifies the name of the page space monitor to delete.

Operand value lengths

Table 84 lists the operand value lengths for the DELPMON command.

Table 84. DELPMON operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return codes

Table 85 lists the return codes for the DELPMON command.

Table 85. DELPMON return codes

Return code	Description
0	Finished correctly
-100	Error

DELRULE

```
►►──DELRULE──NAME(ruleid)──────────────────────────────────────────►◄
```

Figure 47. DELRULE command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELRULE command to delete a rule.

Related reference:

“DEFRULE” on page 87

Operands

`NAME(ruleid)`
Specifies the name of the rule to delete.

Operand value lengths

Table 86 lists the operand value lengths for the DELRULE command.

Table 86. DELRULE operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return Codes

Table 87 lists the return codes for the DELRULE command.

Table 87. DELRULE return codes

Return code	Description
0	Finished correctly
-100	Error

DELSCHD

```
►►—DELSCHD—NAME(schdid)———————————————————————————————————————►◄
```

Figure 48. DELSCHD command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELSCHD command to delete a schedule.

Related reference:

“DEFSCHD” on page 91

Operands

`NAME(schdid)`
Specifies the name of the schedule to delete.

Operand value lengths

Table 88 lists the operand value lengths for the DELSCHD command.

Table 88. DELSCHD operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return codes

Table 89 lists the return codes for the DELSCHD command.

Table 89. DELSCHD return codes

Return code	Description
0	Finished correctly
-100	Error

DELSMON

```
►►──DELSMON──NAME(smonid)──────────────────────────────────────────────────►◄
```

Figure 49. DELSMON command syntax

Related reference:
"DEFSMON" on page 95

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the DELSMON command to delete a spool usage monitor.

Operands

NAME(smonid)
Specifies the name of the spool usage monitor to delete.

Operand value lengths

Table 90 lists the operand value lengths for the DELSMON command.

Table 90. DELSMON operand value lengths

Operand	Length
NAME	1-8

Usage notes

None.

Return codes

Table 91 lists the return codes for the DELSMON command.

Table 91. DELSMON return codes

Return code	Description
0	Finished correctly
-100	Error

RESUME

```
►►──RESUME──┬─RULE(ruleid)───────┬──────────────────────────────────────────────►◄
            ├─SCHEDULE(schdid)───┤
            ├─MACHINE(mmonid)────┤
            ├─SPOOL(smonid)──────┤
            ├─EVENT(emonid)──────┤
            ├─PAGE(pmonid)───────┤
            └─IDLE(imonid)───────┘
```

Figure 50. RESUME command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the RESUME command to return a resource from the suspended state.

The valid resources are:

- `RULE`
- `SCHEDULE`
- `MACHINE`
- `SPOOL`
- `EVENT`
- `PAGE`
- `IDLE`

Related reference:

"SUSPEND" on page 112

Operands

RULE Specifies the `ruleid` from DEFRULE.

SCHEDULE
Specifies the `schdid` from DEFSCHD.

MACHINE
Specifies the `mmonid` from DEFMMON.

SPOOL Specifies the smonid from DEFSMON.

EVENT Specifies the emonid from DEFEMON.

PAGE Specifies the pmonid from DEFPMON.

IDLE Specifies the imonid from DEFIMON.

Related reference:

"DEFRULE" on page 87

"DEFSCHD" on page 91

"DEFMMON" on page 82

"DEFSMON" on page 95

"DEFEMON" on page 75

"DEFPMON" on page 85

"DEFIMON" on page 78

Operand value lengths

Table 92 lists the operand value lengths for the RESUME command.

Table 92. RESUME operand value lengths

Operand	Length
RULE	1-8
SCHEDULE	1-8
MACHINE	1-8
SPOOL	1-8
EVENT	1-8
PAGE	1-8
IDLE	1-8

Usage notes

1. One of the resources must be specified.
2. Use ALL in place of ruleid, mmonid, schdid, smonid, emonid, pmonid, or imonid to resume all definitions for the specified resource type. For example, the following command resumes all rules that are in the suspended state:

```
RESUME RULE(ALL)
```

Return codes

Table 93 lists the return codes for the RESUME command.

Table 93. RESUME return codes

Return Code	Description
0	Finished correctly
-100	Error

RUN

```
►►──RUN──┬─┤ Path A ├─┬──────────────────────────────────────────────────►◄
         └─┤ Path B ├─┘
```

Path A:

```
├──COMMAND(command)──,ENV(env)──────────────────────────────────────────────┤
```

Path B:

```
├──ACTION(actnid)──┬───────────┬──┬─────────────┬───────────────────────────┤
                   └─,ENV(env)─┘  └─,PARM(parm)─┘
```

Figure 51. RUN command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the RUN command to run a command or action.

Operands

Path A options

COMMAND(command)
Specifies the command to be executed. This can be any CMS or CP command.

ENV(env)
Specifies the environment where the command or actions must execute. The valid values for *env* are:

LVM Specifies that the command must be executed by the local virtual machine. Use caution when specifying LVM. Any command or module that executes in the LVM preempts the execution of Operations manager message processing and can possibly affect performance and reliability of Operations Manager.

SVM Specifies that the command must be executed by any available action processing server.

userid Specifies that the command must be executed by only the indicated action processing server.

wgrpid Specifies that the command must be executed by only the action processing servers participating in the work group.

Path B options

ACTION(actnid)
Specifies the action to be executed.

ENV(env)
Specifies the execution environment of the action must be overridden with the *env* supplied. The DEFACTN command provides additional information on overriding the execution environment and valid values for *env*.

Related reference:

"DEFACTN" on page 67

Operand value lengths

Table 94 lists the operand value lengths for the RUN command.

Table 94. RUN operand value lengths

Operand	Length
COMMAND	1-90
ENV	1-8
ACTION	1-8
PARM	1-120

Usage notes

None.

Return codes

Table 95 lists the return codes for the RUN command.

Table 95. RUN return codes

Return code	Description
0	Finished correctly
-100	Error

STATUS

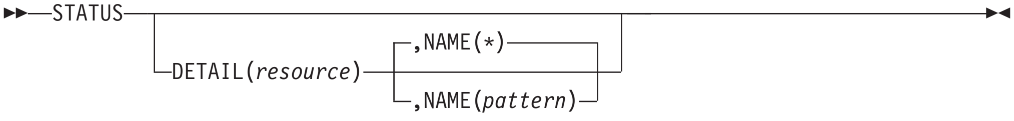


Figure 52. STATUS command syntax

Authorization

The user issuing this command must be authorized for configuration or control commands.

Purpose

Issue the STATUS command to show the current status of GOMMAIN execution. If the `DETAIL` operand is not present a summary is outputted. If the `DETAIL` operand is present additional information about each specified resource is outputted.

Operands

`DETAIL(resource)`

Requests additional information for the specified resource definitions.

The valid resources are:

- `RULE` — Displays the status of the defined rules.
- `MACHINE` — Displays the status of the monitored virtual machines.
- `SCHEDULE` — Displays the status of the defined schedules.
- `ACTION` — Displays the status of the defined actions.
- `ACTIONQ` — Displays the actions queued for execution.
- `GROUP` — Displays the status of the defined groups.
- `DATE` — Displays the status of the defined holidays.
- `SERVICE` — Displays the status of the defined action processing servers.
- `SPOOL` — Displays the status of the defined spool usage monitors and how many times they were executed.
- `SPOOLUSR` — Displays the top ten largest spool files and the top ten users with the most spool files.
- `AUTH` — Displays the status of authorized users.
- `IUCV` — Displays the status of the active IUCV connections.
- `DATASP` — Displays the status of the defined data space size creation templates.
- `VIEW` — Displays the status of the combined views.
- `CONSOLE` — Displays the status of the recording consoles.
- `TCPAPPL` — Displays the status of the TCP/IP applications.
- `OPTION` — Displays the status of the current options settings.
- `EVENT` — Displays the status of the defined event monitors.
- `PAGE` — Displays the status of the defined page space monitors.
- `IDLE` — Displays the status of the defined idle monitors.

`NAME(pattern)`

Lists information for resources names which match the pattern. Wildcard patterns are allowed. The wildcard pattern rules are explained in the DEFULE command.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 96 lists the operand value lengths for the STATUS command.

Table 96. STATUS operand value lengths

Operand	Length
DETAIL	1-8
NAME	1-8

Examples

Figure 53 shows summary output from the STATUS command.

```
STATUS
04/07/2008 14:58:05 GOMCMD0899I  OPERATIONS MANAGER V1R4 BUILT 08/17/12 13.39
04/07/2008 14:58:05 GOMCMD0900I  10 RULE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0902I  4 MACHINE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0903I  120 SCHEDULE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0904I  35 ACTION(S) DEFINED
04/07/2008 14:58:05 GOMCMD0905I  0 ACTION(S) SCHEDULED FOR EXECUTION
04/07/2008 14:58:05 GOMCMD0906I  2 GROUP(S) DEFINED
04/07/2008 14:58:05 GOMCMD0907I  2 DATES(S) DEFINED
04/07/2008 14:58:05 GOMCMD0908I  104 SPOOL MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0909I  7 EVENT MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0910I  0 PAGE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0911I  0 IDLE MONITOR(S) DEFINED
04/07/2008 14:58:05 GOMCMD0920I  4 SERVICE MACHINE(S) DEFINED
04/07/2008 14:58:05 GOMCMD0921I  3 USER(S) AUTHORIZED
04/07/2008 14:58:05 GOMCMD0922I  3 IUCV CONNECTION(S)
04/07/2008 14:58:05 GOMCMD0923I  6 DATA SPACE SIZE DEFINITION(S)
04/07/2008 14:58:05 GOMCMD0924I  3 COMBINED VIEW(S)
04/07/2008 14:58:05 GOMCMD0925I  7 USER CONSOLE(S) RECORDING
04/07/2008 14:58:05 GOMCMD0926I  3 TCP/IP APPLICATION(S) DEFINED
```

Figure 53. Summary output from STATUS command

Figure 54 shows details about all monitored virtual machines.

```
STATUS DETAIL(MACHINE)
04/07/2008 15:13:17 GOMCMD0942I  MACHINE MONITOR MON1     TRIGGERED 0 TIME(S)
04/07/2008 15:13:17 GOMCMD2977I  ACTION MACHAC
04/07/2008 15:13:17 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:13:17 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:13:17 GOMCMD2973I  USER RSCS     (RSCS     - DSC)
04/07/2008 15:13:17 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:13:17 GOMCMD2971I  DELAY 0 MINUTE(S)
04/07/2008 15:13:17 GOMCMD2970I  RETRY INTERVAL 1 MINUTE(S) RETRY COUNT 0
04/07/2008 15:13:17 GOMCMD2968I  NEXT CHECK 2008/04/07 15:13
04/07/2008 15:13:17 GOMCMD2999I  STATUS DETAIL COMPLETE
```

Figure 54. Details about all monitored virtual machines

Figure 55 on page 112 shows details about all spool usage monitors and how many times they were executed.

```
STATUS DETAIL(SPOOL)
04/07/2008 15:11:30 GOMCMD0948I  SPOOL MONITOR WARN     TRIGGERED 0 TIME(S)
04/07/2008 15:11:30 GOMCMD2977I  ACTION ACTNSP
04/07/2008 15:11:30 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:11:30 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:11:30 GOMCMD2967I  USAGE LOW 80 HIGH 89
04/07/2008 15:11:30 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:11:30 GOMCMD2968I  NEXT CHECK 2008/04/07 15:11
04/07/2008 15:11:30 GOMCMD0948I  SPOOL MONITOR CRIT     TRIGGERED 0 TIME(S)
04/07/2008 15:11:30 GOMCMD2977I  ACTION ACTNSP
04/07/2008 15:11:30 GOMCMD2976I  DAYS (ALL)
04/07/2008 15:11:30 GOMCMD2975I  HOURS (ALL)
04/07/2008 15:11:30 GOMCMD2967I  USAGE LOW 90 HIGH 100
04/07/2008 15:11:30 GOMCMD2972I  INTERVAL 1 MINUTE(S)
04/07/2008 15:11:30 GOMCMD2968I  NEXT CHECK 2008/04/07 15:11
04/07/2008 15:11:30 GOMCMD2999I  STATUS DETAIL COMPLETE
```

Figure 55. Details about all spool usage monitors

Figure 56 shows the top ten largest spool files and the top ten users with the most spool files.

```
status detail(spoolusr)
04/07/2008 13:33:15 GOMCMD0970I  USER TMRMM    SPOOL FILE ID 0643 IS USING 4850 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER R54TUX04 SPOOL FILE ID 0139 IS USING 4158 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER RMSMASTR SPOOL FILE ID 0129 IS USING 4008 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER TMTMM    SPOOL FILE ID 6402 IS USING 3697 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0757 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0767 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SAMARAK  SPOOL FILE ID 0760 IS USING 3381 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER TMRMM    SPOOL FILE ID 0675 IS USING 3016 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER R54TUX01 SPOOL FILE ID 0022 IS USING 2723 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0970I  USER SUSESAM  SPOOL FILE ID 0003 IS USING 2723 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER CSHOWA   HAS 268 SPOOL FILES USING 6435 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMDMM    HAS 236 SPOOL FILES USING 834 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMCMM    HAS 230 SPOOL FILES USING 286 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMLM1    HAS 229 SPOOL FILES USING 343 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMADMN   HAS 226 SPOOL FILES USING 230 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMADMN   HAS 186 SPOOL FILES USING 998 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMCMM    HAS 169 SPOOL FILES USING 291 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER TMTMM    HAS 149 SPOOL FILES USING 9374 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMDMM    HAS 136 SPOOL FILES USING 1815 SPOOL BLOCKS
04/07/2008 13:33:15 GOMCMD0971I  USER ZMLM1    HAS 135 SPOOL FILES USING 176 SPOOL BLOCKS
```

Figure 56. Details about users' spool files

Usage notes

None.

Return codes

Table 97 lists the return codes for the STATUS command.

Table 97. STATUS return codes

Return code	Description
0	Finished correctly
-100	Error

SUSPEND

```
►►──SUSPEND──┬─RULE(ruleid)─────┬──────────────────────────────────────────────►◄
             ├─SCHEDULE(schdid)─┤
             ├─MACHINE(mmonid)──┤
             ├─SPOOL(smonid)────┤
             ├─EVENT(emonid)────┤
             ├─PAGE(pmonid)─────┤
             └─IDLE(imonid)─────┘
```

Figure 57. SUSPEND command syntax

Authorization

The user issuing this command must be authorized for configuration commands.

Purpose

Issue the SUSPEND command to place a resource in the suspended state. A resource in the suspended state is ignored for processing.

The valid resources are:

- `RULE`
- `SCHEDULE`
- `MACHINE`
- `SPOOL`
- `EVENT`
- `PAGE`
- `IDLE`

Related reference:

"RESUME" on page 106

Operands

`RULE` Specifies the `ruleid` from DEFRULE.

`SCHEDULE`
Specifies the `schdid` from DEFSCHD.

`MACHINE`
Specifies the `mmonid` from DEFMMON.

`SPOOL` Specifies the `smonid` from DEFSMON.

`EVENT` Specifies the `emonid` from DEFEMON.

`PAGE` Specifies the `pmonid` from DEFPMON.

`IDLE` Specifies the `imonid` from DEFIMON.

Related reference:

"DEFRULE" on page 87

"DEFSCHD" on page 91

"DEFMMON" on page 82

"DEFSMON" on page 95

"DEFEMON" on page 75

"DEFPMON" on page 85

"DEFIMON" on page 78

Operand value lengths

Table 98 lists the operand value lengths for the SUSPEND command.

Table 98. SUSPEND operand value lengths

Operand	Length
`RULE`	1-8
`SCHEDULE`	1-8
`MACHINE`	1-8
`SPOOL`	1-8
`EVENT`	1-8
`PAGE`	1-8
`IDLE`	1-8

Usage notes

1. One of the resources must be specified.
2. Use `ALL` in place of `ruleid`, `mmonid`, `schdid`, `smonid`, `emonid`, `pmonid`, or `imonid` to suspend all definitions for the specified resource type. For example, the following command suspends all defined rules:

   ```
   SUSPEND RULE(ALL)
   ```

Return codes

Table 99 lists the return codes for the RESUME command.

Table 99. SUSPEND return codes

Return Code	Description
0	Finished correctly
-100	Error

Chapter 7. Syntax for Console, Log, and Spool Access Commands

This chapter describes the Operations Manager console, log, and spool access commands and their syntax.

Purpose of console, log, and spool access commands

Console, log, and spool access commands allow you to view and modify a user’s console display, Operations Manager log, and a user's spool files. With a console, log, or spool access command, you can perform various tasks such as issue commands on a user’s console, display the console or log in full-screen mode, modify the attributes in a console, add comments in a log, and view a spool list. You can also create a combined view.

Use GOMCMD to issue console, log, and spool access commands.

Related reference:

“GOMCMD” on page 28

Authorization for console, log, and spool access commands

Authorization varies for console, log and spool access commands. Refer to the specific command for the required authorization.

Console data spaces

Operations Manager uses z/VM data spaces to contain the following types of output:

- Console output from a monitored user ID (for example, output sent to Operations Manager via SECUSER or OBSERVER).
- Combined views of console output defined in the DEFVIEW command.
- The Operations Manager log.
- Output and information related to the execution of schedules, machine monitors, spool monitors, event monitors, and the output from actions.

Use the VIEWCON command to look at any of these data spaces except the logging data space. You must use the VIEWLOG command to look at the logging data space.

Table 100 lists reserved data space names and the corresponding execution type.

Table 100. Reserved data space names

Execution type	Data space name
Event monitors	_GOMEMON
Idle monitors	_GOMIMON
Logging	_GOMALOG
Machine monitors	_GOMMMON
Output from actions	_GOMACTN

Table 100. Reserved data space names (continued)

Execution type	Data space name
Page space monitors	_GOMPMON
Schedules	_GOMSCHD
Spool monitors	_GOMSMON

Related reference:

"VIEWCON" on page 119

"VIEWLOG" on page 123

ALTRCON

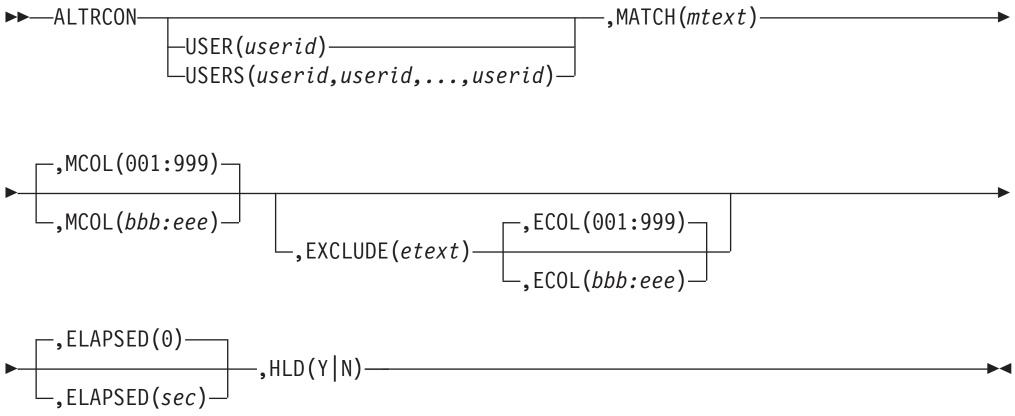


Figure 58. ALTRCON command syntax

Authority

The user issuing this command must be authorized for console access for the specified `userid` or view.

Purpose

Issue the ALTRCON command to modify the attributes of a line in a user's console when it is displayed using VIEWCON.

The ALTRCON command can also be issued to modify the attributes of a line in a combined view created with a DEFVIEW command.

Related reference:

"DEFVIEW" on page 48

"VIEWCON" on page 119

Operands

`USER(userid)`

Specifies the `userid` or view name for the console you want to modify.

USERS(userid,userid,...,userid)
Specifies up to 16 userids (consoles) to modify. The userid can be a wildcard pattern. The wildcard rules are explained in the DEFRULE command.

MATCH(mtext)
Specifies the pattern used to compare against the lines to determine if there is a match. Wildcard pattern matching is allowed. The wildcard rules are explained in the DEFRULE command.

MCOL(bbb:eee)
Specifies the beginning and ending columns to search for the match pattern (inclusive). The format is bbb:eee, where bbb is the beginning column and eee is the ending column.

EXCLUDE(etext)
Specifies the pattern used to compare against the lines to determine if there is an exclusion. Wildcard pattern matching is allowed. The wildcard rules are explained in the DEFRULE command.

ECOL(bbb:eee)
Specifies the beginning and ending columns to search for the exclude pattern (inclusive). The format is bbb:eee, where bbb is the beginning column and eee is the ending column.

ELAPSED(sec)
Specifies the minimum amount of elapsed time since a line was logged for a line to be eligible for modification. Only lines which have been in the console longer than the number of elapsed seconds are eligible for modification. The value must be between 0 and 999999.

HLD(Y|N)
Specifies the setting of the HLD attribute.

Related reference:
"DEFRULE" on page 87

Operand value lengths

Table 101 lists the operand value lengths for the ALTRCON command.

Table 101. ALTRCON operand value lengths

Operand	Length
USER	1-8
USERS	1-120
MATCH	1-60
MCOL	7
EXCLUDE	1-60
ECOL	7
ELAPSED	1-6
HLD	1

Usage notes

Either USER or USERS must be specified.

Return codes

Table 102 lists the return codes for the ALTRCON command.

Table 102. ALTRCON return codes

Return code	Description
0	Finished correctly
-100	Error

LOGTEXT

```
►►──LOGTEXT──TEXT(comment)──────────────────────────────────────────────►◄
```

Figure 59. LOGTEXT command syntax

Authorization

No specific authority is required for this command.

Purpose

Issue the LOGTEXT command to add a comment to the Operations Manager log file.

Related reference:

"VIEWLOG" on page 123

Operands

`TEXT(comment)`
Specifies the comment text that appears in the log.

Operand value lengths

Table 103 lists the operand value lengths for the LOGTEXT command.

Table 103. LOGTEXT operand value lengths

Operand	Length
`TEXT`	1-120

Usage notes

None.

Return codes

Table 104 lists the return codes for the LOGTEXT command.

Table 104. LOGTEXT return codes

Return code	Description
0	Finished correctly
-100	Error

VIEWCON

```
►►──VIEWCON──┬─USER(userid)─────────────────────┬──┬──────────────────┬──────────────►
             └─USERS(userid,userid,...,userid)──┘  └─,LINES(nnnnnn)───┘

  ┌─MODE(SCROLL)───────────────────┐
►─┼────────────────────────────────┼─────────────────────────────────────────────────►◄
  ├─MODE(NOSCROLL)─────────────────┤
  │              ┌─CLASS(A)───┐    │
  └─MODE(RDR)────┼────────────┼────┘
                 └─CLASS(cls)─┘
```

Figure 60. VIEWCON command syntax

Authorization

The user issuing this command must be authorized for console access for the specified `userid(s)` or view.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Related reference:

"AUTH" on page 35

Purpose

Issue the VIEWCON command to display the current console content for a monitored user in full-screen mode and to issue commands on that user's console or place a copy of the current console in your virtual reader.

The VIEWCON command may also be issued to display a combined view created with a DEFVIEW command. Commands may be issued to any monitored user combined into the view. The target `userid` and a space must prefix the command.

Related reference:

"DEFVIEW" on page 48

Operands

`USER(userid)`

Specifies the user ID or view name for the console you want to display.

There are five reserved console data spaces available to use with `VIEWCON USER`. Refer to "Console data spaces" on page 115 for more information on the reserved console data space names.

Note: You cannot use `VIEWCON USER` to view the logging data space. You must use the `VIEWLOG` command to view the logging console.

`USERS(userid,userid,..,userid)`

Specifies the `userids` for up to sixteen (16) consoles to view. The `userid` can be a wildcard pattern. The `userid` is not matched against views. The console information is presented by creating a combined view for the `userids`. The wildcard rules are explained in the `DEFRULE` command.

LINES(nnnnnn)
Specifies the number of lines you wish to view. The last *nnnnnn* lines are displayed. The default is to view all lines.

MODE(SCROLL)
Specifies the initial view is autoscrolling. SCROLL is the default.

MODE(NOSCROLL)
Specifies the initial view is not autoscrolling.

MODE(RDR)
Specifies that a copy of the current console is to be placed in your virtual reader.

CLASS(cls)
Specifies the reader file class. The default is class A.

Related reference:

"DEFRULE" on page 87

Operand value lengths

Table 105 lists the operand value lengths for the VIEWCON command.

Table 105. VIEWCON operand value lengths

Operand	Length
USER	1-8
USERS	1-120
LINES	1-6
MODE	3-8
CLASS	1

Usage notes

1. Either USER or USERS must be specified.
2. The name of the combined view created when using the USERS operand begins with $TMP. Issue the DEFDSPS command to control the data space size for the combined view.
3. You can use the following default PF keys to move through the console display:
   - PF01 — Show the help screen
   - PF03 — End the VIEWCON session
   - PF05 — Toggle the acknowledgment for a line in the console.

     To clear an existing hold status, press the PF05 key again.
   - PF06 — Toggle the date/time format displayed
   - PF07 — Scroll up
   - PF08 — Scroll down
   - PF10 — Scroll left
   - PF11 — Scroll right
   - PF12 — Retrieve previous command
   - PF19 — Scroll to the top
   - PF20 — Scroll to the bottom
   - PF22 — Display the users viewing the console
   - PF23 — Toggle autoscrolling

- PF24 — Display the PF key assignments
- PA02 — Toggle autoscrolling
- ENTER — Process the command on the command line

Note: For the scrolling PF keys, you can enter a scrolling amount on the command line. If no amount is specified, the scroll amount is equal to the size of the viewing area.

4. If an external security manager is being used, for example `DEFOPTN ESM(Y),AUTHCMD(N)` or `DEFOPTN ESM(Y),AUTHCMD(Y)`, the user must have READ access to the profile `ESMPREF.ALTRCON.`*`userid`* for authorization to use the HOLD/UNHOLD toggle function. Refer to “FACILITY class profiles” on page 11 for more information. If an external security manager is not being used, no authorization checking is done for the HOLD/UNHOLD toggle function.
5. The `ALTRON` command and the `VIEWCON` HOLD/UNHOLD toggle perform the same function.
6. The amount of data displayed or sent to your virtual reader is set by the user's console or view data space size.
7. To search through the display, use the forward slash (/) to search forward and the back slash (\) to search backward. Use the equal sign (=) to repeat the previous command. Issue the `DEFOPTN` command to change these characters.
8. The actions for PF01–PF24, initial value for the date/time format display, and display of the PF key information lines are configurable through the `VIEWCON PROFILE` file.
   a. Issue the following command in the `VIEWCON PROFILE` file to customize the actions for PF01-PF24:

      `PF`*`nn`*`=`*`action`*

      Where *nn* is 01 through 24 and *action* is a valid PF key action.

      The valid PF key actions are:

      - HELP — Show the help screen
      - END — End the VIEWCON session
      - HOLD — Toggle the acknowledgment for a line in the console
      - FORMAT — Toggle the date/time format displayed
      - UP — Scroll up
      - DOWN — Scroll down
      - LEFT — Scroll left
      - RIGHT — Scroll right
      - RECALL — Retrieve previous command
      - TOP — Scroll to top
      - BOT — Scroll to bottom
      - USERS — Display the users viewing the console
      - SCROLL — Toggle autoscrolling
      - VIEWPF — Display the PF key assignments
      - EXCMD — Execute a z/VM or Operations Manager command

        Refer to usage note 9 for more information.

   b. Issue one of the following commands in the `VIEWCON PROFILE` file to customize the initial date/time format display:

      - `FORMAT=0` — Displays the console data with no date and no time. This is the default.
      - `FORMAT=1` — Displays the console data with time.

- FORMAT=2 — Displays the console data with date and time.
- FORMAT=3 — Displays the console data with date, time and message class.
- FORMAT=4 — Displays the console data with time and message class.
- FORMAT=5 — Displays the console data with message class.

c. Issue the following command in the VIEWCON PROFILE file to control the display of the PF key information lines:

```
SHOWPF=c[,h,xat,clr]
```

Where *c* is one of the following options:

- N — Do not display the PF key assignments on the screen.
- Y — Display PF01–PF12 assignments on the screen.
- A — Display PF01–PF24 assignments on the screen.

The values for *h,xat,clr* are optional. If one of the values is specified, they must all be specified.

- h — Specifies if the line is highlighted. Values are Y or N.
- xat — Specifies the extended attributes applied to the line. Values are:
  - AAI — Leave as is
  - ABL — Blinking
  - ARV — Reverse video
  - AUL — Underline
- clr — Specifies the color applied to the line. Values are:
  - CAI — Leave as is
  - CBL — Blue
  - CRE — Red
  - CPI — Pink
  - CGR — Green
  - CCY — Cyan
  - CYE — Yellow
  - CWH — White

The following shows an example of what might be in a VIEWCON PROFILE file after customizing a PF key assignment, the initial date/time format, and the display of the PF keys:

```
PF13=HELP
FORMAT=1
SHOWPF=Y,Y,AAI,CAI
```

9. While using VIEWCON, you can also execute a z/VM or Operations Manager command by using EXCMD. Execute the EXCMD command with one of the following methods:
   - Press a function key that is assigned to EXCMD without any command on the command line. This invokes CMS SUBSET. To return to VIEWCON, use the CMS command return.
   - Press a function key that is assigned to EXCMD with a CMS command on the command line.

     When the command completes, if the command on the command line is not an Operations Manager command, you return to the originating VIEWCON command.

     When the command completes, if the command on the command line is an Operations Manager command, you return to the point that originated the VIEWCON command.

- Assign `EXCMD` with a z/VM or Operations Manager command to a PF key in `VIEWCON PROFILE`. For example, `PF19=EXCMD LISTFILE * * A` or `PF20=EXCMD GOMCMD OPMGRM1 VIEWLOG`.

  When the command completes, if the command assigned to the PF key is not an Operations Manager command, you return to the originating `VIEWCON` command.

  When the command completes, if the command assigned to the PF key is an Operations Manager command, you return to the point that originated the `VIEWCON` command.

Related reference:

"DEFDSPS" on page 40

"DEFOPTN" on page 41

Return codes

Table 106 lists the return codes for the VIEWCON command.

Table 106. VIEWCON return codes

Return code	Description
0	Finished correctly
-100	Error

VIEWLOG

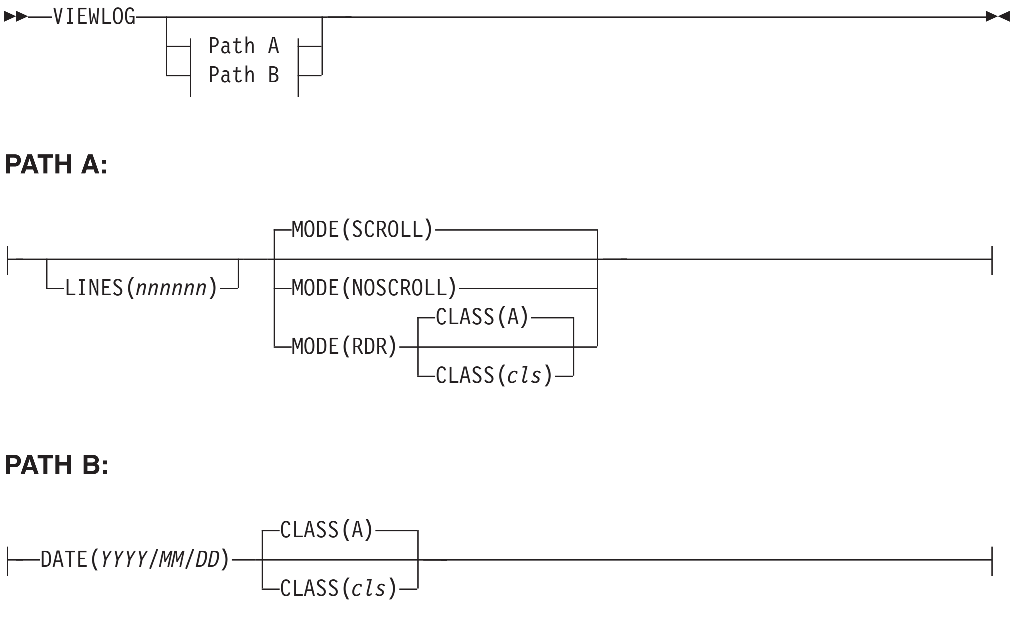


Figure 61. VIEWLOG command syntax

Authorization

The user issuing this command must be authorized for control commands.

Purpose

Issue the VIEWLOG command to display the current Operations Manager log in full-screen mode and to issue Operations Manager commands or place a copy of the log in your virtual reader.

You can also issue the VIEWLOG command to obtain a DISK DUMP of the log for a specific day.

Operands

LINES(nnnnnn)
Specifies the number of lines you wish to view. The last *nnnnnn* lines are displayed. The default is to view all lines.

MODE(SCROLL)
Specifies the initial view is autoscrolling. SCROLL is the default.

MODE(NOSCROLL)
Specifies the initial view is not autoscrolling.

MODE(RDR)
Specifies that a copy of the active VIEWLOG log is to be placed in your virtual reader.

DATE(YYYY/MM/DD)
Specifies that a copy of the log for an entire day is to be placed in your virtual reader. Use the format YYYY/MM/DD, where:

- YYYY. The year, which must be specified with four digits.
- MM. The month (01-12).
- DD. The day of the month (01-31).

CLASS(cls)
Specifies the reader file class. Class A is the default.

Operand value lengths

Table 107 lists the operand value lengths for the VIEWLOG command.

Table 107. VIEWLOG operand value lengths

Operand	Length
DATE	10
CLASS	1
LINES	1-6
MODE	3-8

Usage notes

1. You can use the following PF keys to move through the log display:
   - PF01 — Show the help screen
   - PF03 — End the VIEWLOG session
   - PF05 — Toggle the acknowledgment for a line in the log
   - PF07 — Scroll up
   - PF08 — Scroll down
   - PF10 — Scroll left

- PF11 — Scroll right
- PF12 — Retrieve previous command
- PF19 — Scroll to the top
- PF20 — Scroll to the bottom
- PF22 — Display the users viewing the log
- PF23 — Toggle autoscrolling
- PF24 — Display the PF key assignments
- PA02 — Toggle autoscrolling
- ENTER — Process the command on the command line

Note: For the scrolling PF keys, you can enter a scrolling amount on the command line. If no amount is specified, the scroll amount is equal to the size of the viewing area.

2. The amount of data displayed or sent to your virtual reader from the log is limited to the size of the logging data space. The `logsize` parameter on `GOMMAIN` determines this limit. If you want to view the entire log use the `DATE` operand to obtain a log of the entire day.
3. To search through the display, use the forward slash (/) to search forward and the back slash (\) to search backward. Use the equal sign (=) to repeat the previous command. Issue the `DEFOPTN` command to change these characters.
4. The actions for PF01 - PF24 and initial value for the PF key display are configurable through the `VIEWLOG PROFILE` file.
   a. Issue the following command in the `VIEWLOG PROFILE` file to set the PF key assignments:

      `PF`*`nn`*`=`*`action`*

      Where *nn* is 01 through 24 and *action* is a valid PF key action.

      The valid PF key actions are:
      - HELP — Show the help screen
      - END — End the VIEWLOG session
      - HOLD — Toggle the acknowledgment for a line in the log
      - UP — Scroll up
      - DOWN — Scroll down
      - LEFT — Scroll left
      - RIGHT — Scroll right
      - RECALL — Retrieve previous command
      - TOP — Scroll to top
      - BOT — Scroll to bottom
      - USERS — Display the users viewing the log
      - SCROLL — Toggle autoscrolling
      - VIEWPF — Display the PF key assignments
      - EXCMD — Execute a z/VM or Operations Manager command

        Refer to usage note 5 for more information.

   b. Issue the following command in the `VIEWLOG PROFILE` file to control the display of the PF key information lines:

      `SHOWPF=`*`c`*`[,`*`h`*`,`*`xat`*`,`*`clr`*`]`

      Where *`c`* is one of the following options:
      - `N` — Do not display the PF key assignments on the screen.

- Y — Display PF01–PF12 assignments on the screen.
- A — Display PF01–PF24 assignments on the screen.

The values for *h,xat,clr* are optional. If one of the values is specified, they must all be specified.

- h — Specifies if the line is highlighted. Values are Y or N.
- xat — Specifies the extended attributes applied to the line. Values are:
  - AAI — Leave as is
  - ABL — Blinking
  - ARV — Reverse video
  - AUL — Underline
- clr — Specifies the color applied to the line. Values are:
  - CAI — Leave as is
  - CBL — Blue
  - CRE — Red
  - CPI — Pink
  - CGR — Green
  - CCY — Cyan
  - CYE — Yellow
  - CWH — White

The following shows an example of what might be in a VIEWLOG PROFILE file after customizing a PF key assignment and the display of the PF keys:

```
PF13=HELP
SHOWPF=Y,Y,AAI,CAI
```

5. While using VIEWLOG, you can also execute a z/VM or Operations Manager command by using EXCMD. Execute the EXCMD command with one of the following methods:
   - Press a function key that is assigned to EXCMD without any command on the command line. This invokes CMS SUBSET. To return to VIEWLOG, use the CMS command return.
   - Press a function key that is assigned to EXCMD with a CMS command on the command line.

     When the command completes, if the command on the command line is not an Operations Manager command, you return to the originating VIEWLOG command.

     When the command completes, if the command on the command line is an Operations Manager command, you return to the point that originated the VIEWLOG command.
   - Assign EXCMD with a z/VM or Operations Manager command to a PF key in VIEWLOG PROFILE. For example, PF19=EXCMD LISTFILE * * A or PF20=EXCMD GOMCMD OPMGRM1 VIEWSPL.

     When the command completes, if the command assigned to the PF key is not an Operations Manager command, you return to the originating VIEWLOG command.

     When the command completes, if the command assigned to the PF key is an Operations Manager command, you return to the point that originated the VIEWLOG command.

Related reference:

"DEFOPTN" on page 41

"GOMMAIN" on page 27

Return codes

Table 108 lists the return codes for the VIEWLOG command.

Table 108. VIEWLOG return codes

Return code	Description
0	Finished correctly
-100	Error

VIEWSPL

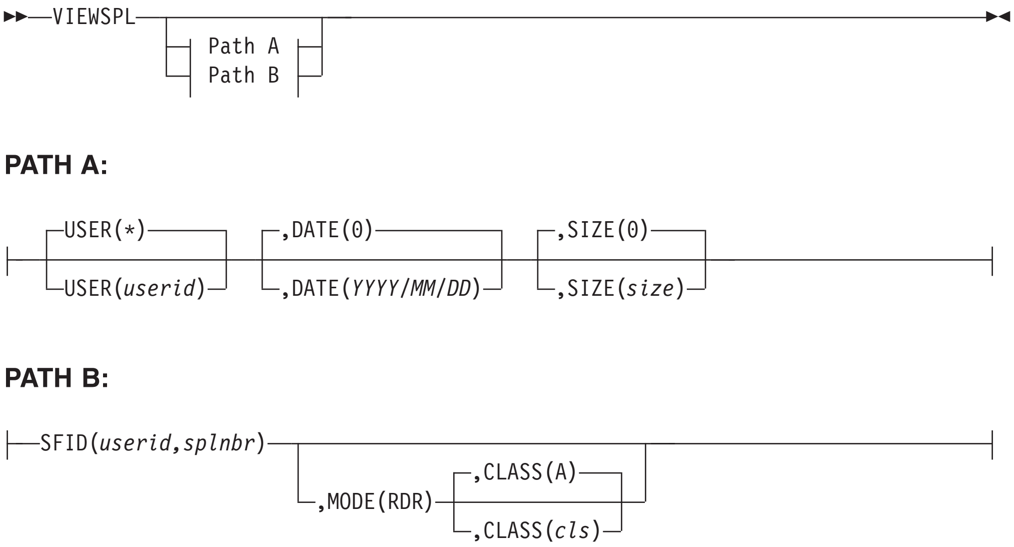


Figure 62. VIEWSPL command syntax

Authorization

The user issuing this command must have authorization to access the spool of the specified `userid`.

Related tasks:

"Step 5. (Optional) Configure an external security mechanism" on page 9

Related reference:

"AUTH" on page 35

Purpose

Issue the VIEWSPL command to display a list of spool files, view the contents of a spool file in full-screen mode, or place a copy of the contents of a spool file in your virtual reader. .

Operands

USER(userid)
Specifies the userid whose spool files you want to display. The userid can be a wildcard pattern. The wildcard pattern rules are explained in the DEFRULE command.

DATE(YYYY/MM/DD)
Specifies the earliest creation date of the spool files you want to display. Use the format YYYY/MM/DD, where:

- YYYY. The year, which must be specified with four digits.
- MM. The month (01-12).
- DD. The day of the month (01-31).

SIZE(size)
Specifies the minimum size of the spool files to display. The size must be a number in bytes or suffixed with K for kilobytes, M for megabytes, or G for gigabytes.

SFID(userid,splnbr)
Specifies that you want to view the spool file contents in full-screen mode and skip viewing the list of spool files. If SFID is used with the MODE(RDR) operand, a copy of the spool file contents are placed in your virtual reader. The userid cannot contain wildcards. The splnbr is the 4-digit spool file number. If the spool file number contains leading zeros, you can abbreviate the number. For example, if the spool file number is 0003, you can specify 3.

MODE(RDR)
Specifies that a copy of the current spool file is to be placed on your virtual reader.

CLASS(cls)
Specifies the reader file class. The default is class A.

Related reference:
"DEFRULE" on page 87

Operand value lengths

Table 109 lists the operand value lengths for the VIEWSPL command.

Table 109. VIEWSPL operand value lengths

Operand	Length
USER	1-8
DATE	10
SIZE	1-10
SFID	3-13
MODE	3-8
CLASS	1

Usage notes

1. You can use the following default PF keys to move through the displayed spool file list:
   - PF01 — Show the help screen

- PF02 — View the spool file contents
- PF03 — End the VIEWSPL session
- PF05 — Sort the files in ascending order
- PF06 — Sort the files in descending order
- PF07 — Scroll up
- PF08 — Scroll down
- PF10 — Scroll left
- PF11 — Scroll right
- PF19 — Scroll to top
- PF20 — Scroll to bottom
- PF24 — Display the PF key assignments
- ENTER — Process the command in the command field

2. The list of spool files includes:
   - files allowed by the *SPL GENERIC interface
   - PRT files
   - RDR files
   - PUN files
   - DMP files
   - HELD files (USER or SYS HOLD)
   - OPEN files
3. The list of spool files does not include:
   - HELP files
   - SYS files (DMP, NSS, NLS, and so on)
4. Available CP commands in the spool file list:
   a. Issue the `PURGE`, `CHANGE`, and `TRANSFER` commands to manipulate the spool files. Enter these commands followed by a forward slash (/) and the command operands. Refer to the *CP Commands and Utilities Reference (SC24–6081)* for more information and the valid abbreviations for these commands.
   b. To repeat the previous command, type the equal sign (=) in the command field.
   c. To sort a column, place the cursor on the column heading and use the PF05 or PF06 key.
   d. The number of spool files selected is limited to 25,000 files.
5. When viewing a spool file, you can search through the display. Use the forward slash (/) to search forward and the back slash (\) to search backward. Use the equal sign (=) to repeat the previous command. Issue the `DEFOPTN` command to change these characters. These characters are only valid while viewing the contents of a file. They are not valid and will not work while viewing a list of spool files.
6. The spool file list can contain the following indicators before the spool file number:

Table 110. Spool file list indicators

Indicator	Description
' ' (no indicator)	Local file that can be viewed
' *'	Local file that cannot be viewed using the PF02 key, or whichever key is assigned the VIEW command from the VIEWSPL PROFILE

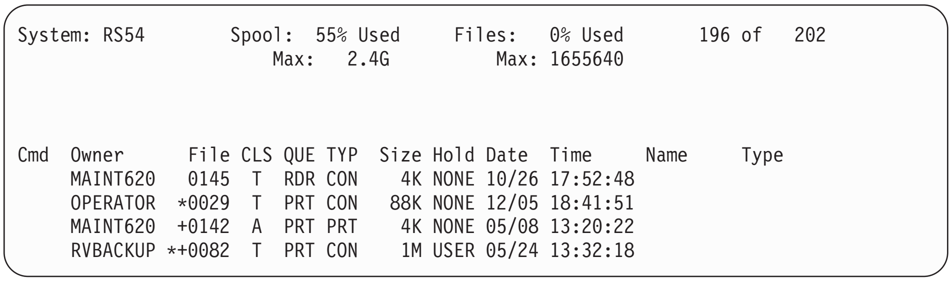
Table 110. Spool file list indicators (continued)

Indicator	Description
' +'	Non-local file that can be viewed
'*+'	Non local file that cannot be viewed using the PF02 key, or whichever key is assigned the VIEW command from the VIEWSPL PROFILE

A file cannot be viewed for one of the following reasons:

- the file is HELD (SYS and/or USER)
- the file was created by CP (DMP, and so on)
- the file is currently open and in use

The following screen is an example of a spool file list, where file 0145 is local and viewable, file 0029 is local and non-viewable, file 0142 is non-local and viewable, and file 0082 is non-local and non-viewable:



```
System: RS54        Spool:  55% Used     Files:   0% Used       196 of   202
                        Max:   2.4G          Max: 1655640



Cmd  Owner      File CLS QUE TYP  Size Hold Date  Time     Name     Type
     MAINT620   0145  T  RDR CON    4K NONE 10/26 17:52:48
     OPERATOR  *0029  T  PRT CON   88K NONE 12/05 18:41:51
     MAINT620  +0142  A  PRT PRT    4K NONE 05/08 13:20:22
     RVBACKUP *+0082  T  PRT CON    1M USER 05/24 13:32:18
```

7. You can use the following default PF keys to move through the displayed spool file contents:
   - PF01 — Show the help screen
   - PF03 — Return to the spool file list
   - PF07 — Scroll up
   - PF08 — Scroll down
   - PF10 — Scroll left
   - PF11 — Scroll right
   - PF19 — Scroll to top
   - PF20 — Scroll to bottom
   - PF24 — Display the PF key assignments
   - ENTER — Process the command in the command field
8. The actions for PF01-PF24, initial value for the sort order, and display of the PF key information lines are configurable through the `VIEWSPL PROFILE` file.
   a. Issue the following command in the `VIEWSPL PROFILE` file to customize the actions for PF01 - PF24:

      `PF`*`nn=action`*

      Where *nn* is 01 through 24 and *action* is a valid PF key action.

      The valid PF key actions while viewing the spool file list are:
      - HELP — Show the help screen
      - VIEW — View the spool file contents
      - END — End the VIEWSPL session
      - SORTA — Sort the files in ascending order
      - SORTD — Sort the files in descending order
      - UP — Scroll up
      - DOWN — Scroll down

- LEFT — Scroll left
- RIGHT — Scroll right
- TOP — Scroll to top
- BOT — Scroll to bottom
- VIEWPF — Display the PF key assignments
- EXCMD — Execute a z/VM or Operations Manager command

  Refer to usage note 10 for more information.

The valid PF key actions while viewing the spool file content are:

- HELP — Show the help screen
- END — Return to the spool file list
- UP — Scroll up
- DOWN — Scroll down
- LEFT — Scroll left
- RIGHT — Scroll right
- TOP — Scroll to top
- BOT — Scroll to bottom
- VIEWPF — Display the PF key assignments
- EXCMD — Execute a z/VM or Operations Manager command

  Refer to usage note 10 for more information.

b. Issue the `SORT` command in the `VIEWSPL PROFILE` file to customize the initial sort order of the spool files. Only one column can be specified. You can sort a column in ascending (`A`) or descending (`D`) order. If no sort order is provided, the default is ascending (`A`). Use the following format:

   `SORT=`*`column`*`[,A|D]`

   The columns you can sort are:

   - OWNER
   - FILE
   - CLS
   - QUE
   - TYP
   - SIZE
   - HOLD
   - DATE
   - NAME
   - TYPE
   - DIST
   - DEST
   - COPY
   - KEEP
   - MSG
   - USERFORM
   - OPERFORM
   - FCB

c. Issue the following command in the `VIEWSPL PROFILE` file to control the display of the PF key information lines:

   `SHOWPF=`*`c`*`[,`*`h`*`,`*`xat`*`,`*`clr`*`]`

Where `c` is one of the following options:

- `N` — Do not display the PF key assignments on the screen.
- `Y` — Display PF01–PF12 assignments on the screen.
- `A` — Display PF01–PF24 assignments on the screen.

The values for *h*,*xat*,*clr* are optional. If one of the values is specified, they must all be specified.

- `h` — Specifies if the line is highlighted. Values are `Y` or `N`.
- `xat` — Specifies the extended attributes applied to the line. Values are:
  - `AAI` — Leave as is
  - `ABL` — Blinking
  - `ARV` — Reverse video
  - `AUL` — Underline
- `clr` — Specifies the color applied to the line. Values are:
  - `CAI` — Leave as is
  - `CBL` — Blue
  - `CRE` — Red
  - `CPI` — Pink
  - `CGR` — Green
  - `CCY` — Cyan
  - `CYE` — Yellow
  - `CWH` — White

The following shows an example of what might be in a `VIEWSPL PROFILE` file after customizing the initial sort order of the spool files and the display of the PF keys:

```
PF13=HELP
SORT=OWNER,A
SHOWPF=Y,Y,AAI,CAI
```

9. When viewing the contents of a spool file, the VIEW, SORTA, and SORTD action keys have no effect. They are considered null PF keys.
10. While using `VIEWSPL`, you can also execute a z/VM or Operations Manager command by using `EXCMD`. Execute the `EXCMD` command with one of the following methods:
    - Press a function key that is assigned to `EXCMD` without any command on the command line. This invokes CMS SUBSET. To return to `VIEWSPL`, use the CMS command `return`.
    - Press a function key that is assigned to `EXCMD` with a CMS command on the command line.

      When the command completes, if the command on the command line is not an Operations Manager command, you return to the originating `VIEWSPL` command.

      When the command completes, if the command on the command line is an Operations Manager command, you return to the point that originated the `VIEWSPL` command.
    - Assign `EXCMD` with a z/VM or Operations Manager command to a PF key in `VIEWSPL PROFILE`. For example, `PF19=EXCMD LISTFILE * * A` or `PF20=EXCMD GOMCMD OPMGRM1 VIEWCON USER(OPERATOR)`.

      When the command completes, if the command assigned to the PF key is not an Operations Manager command, you return to the originating `VIEWSPL` command.

When the command completes, if the command assigned to the PF key is an Operations Manager command, you return to the point that originated the `VIEWSPL` command.

11. The value for space utilization percentage is obtained by rounding downward. This value may differ from the space utilization percentage computed from other sources.

Return codes

Table 111 lists the return codes for the VIEWSPL command.

Table 111. VIEWSPL return codes

Return code	Description
0	Finished correctly
-100	Error

Appendix A. Accounting and Monitoring Information

This appendix describes the accounting and monitoring records generated by Operations Manager.

Accounting record format

Operations Manager optionally generates accounting records that contain useful information about its processing. An accounting record is generated every hour and when you shutdown GOMMAIN. To retrieve this information, you can write a program to read the accounting data and generate any reports you may need. See *IBM z/VM CP Programming Service (SC24-6001)* for more information.

To generate accounting records, you must update the CP directory for user ID OPMGRM1, and any other user ID running GOMMAIN.

Each accounting record consists of 80 characters. Each column or group of columns in the record contains specific information about Operations Manager. Table 112 describes the format of each accounting record.

Table 112. Accounting record format

Column	Contents
01-08	User ID. (Character)
09-12	GOM is displayed to indicate that the record is being generated by Operations Manager. (Character)
13-16	The length of the Operations Manager data. (Binary)
17-24	The beginning of the accounting interval. (Clock format)
25-32	The ending of the accounting interval. (Clock format)
33-36	The count of IUCV traffic. This includes all messages, messages between consoles, and so on. (Binary)
37-40	The number of rules triggered from pattern matches. (Binary)
41-44	The number of monitored machines triggered. (Binary)
45-48	The number of schedules triggered. (Binary)
49-52	The number of spool usage monitors triggered. (Binary)
53-56	The number of space page monitors triggered. (Binary)
57-60	The number of idle monitors triggered. (Binary)
61-64	The number of event monitors triggered. (Binary)
65-68	The number of actions executed. This includes actions waiting to be executed. (Binary)
69-76	The amount of wall clock time consumed executing actions. (Clock format)
77-78	Unused. (Blank)
79–79	Accounting record identification code (C0).
80–80	Accounting record identification code (C0).

Related reference:

"Updates to CP directory" on page 6

Monitoring record format

Operations Manager optionally generates monitoring records that contain useful information about its processing. A monitoring record is generated every hour and when you shutdown GOMMAIN. To retrieve this information, you can write a program to read the accounting data and generate any reports you may need. See *IBM z/VM CP Programming Service (SC24-6001)* for more information.

To generate monitoring records, you must update the CP directory for user ID OPMGRM1, and any other user ID running GOMMAIN.

Monitoring records do not have a size limit. Each column or group of columns in the record contains specific information about Operations Manager. Table 113 describes the format of each monitoring record.

Table 113. Monitoring record format

Column	Contents
01–08	User ID. (Character)
09–12	GOM is displayed to indicate that the record is being generated by Operations Manager. (Character)
13–16	The length of the Operations Manager data. (Binary)
17–24	The beginning of the monitor interval. (Clock format)
25–32	The ending of the monitor interval. (Clock format)
33–36	The count of IUCV traffic. This includes all messages, messages between consoles, and so on. (Binary)
37–40	The number of rules triggered from pattern matches. (Binary)
41–44	The number of monitored machines triggered. (Binary)
45–48	The number of schedules triggered. (Binary)
49–52	The number of spool usage monitors triggered. (Binary)
53–56	The number of page space monitors triggered. (Binary)
57-60	The number of idle monitors triggered. (Binary)
61-64	The number of event monitors triggered. (Binary)
65-68	The number of actions executed. This includes actions waiting to be executed. (Binary)
69-76	The amount of wall clock time consumed executing actions. (Clock format)

Related reference:

"Updates to CP directory" on page 6

Appendix B. Log File Management

Operations Manager writes all of its messages to a log. The log provides a chronological audit trail of Operations Manager processing. It records settings, inbound and outbound message traffic, messages from users who trigger rules, when schedules occur, machine monitors, any commands issued, and so on. The information in the log can help with problem identification and resolution.

A new log is created when Operations Manager is started or when a message is logged for a new date. Because a log is created for each new day, the log file name is `MASALOG` *mmddyyyy*, where *mm* is the month, *dd* is the day, and *yyyy* is the year. If a log file for a specific day already exists when the log is started, the log output will be appended to that day's log file.

Operations Manager places the log files on DASD accessed as file mode D. By default this is the OPMGRM1 194 minidisk or the VMSYS:OPMGRM1.LOGS directory in SFS. If the D disk does not exist, no log files will be created. If the D disk location changes while Operations Manager is running, any new log files are written to the current D disk.

Before a new log file is created for a new date, Operations Manager runs GOMCLG EXEC to manage the space containing the log files. Before starting a new log file, GOMCLG removes the oldest log files on the D disk until the space of the D disk is less than 50%. If the log files are in a shared file system, Operations Manager cannot manage the log files because it cannot determine the amount of space within the shared file system to be allocated for log files. In this case, you can write your own space management routines to manage the log files within the shared space.

Note: It is recommended that you retain old log files for several days. You can do this by using the DEFSCHD command to automatically archive older log files in *IBM Archive Manager for z/VM* on a regular basis.

Customize log file management

You can customize the log file management cleanup routine to suit your requirements. To customize the cleanup routine, you must copy and change the GOMCLG EXEC distributed with Operations Manager. The following steps provide a guideline to customize your cleanup routine:

1. Log on to the VM account your installation uses to modify Operations Manager configuration files. Do *not* use OPMGRM1 or GOMSVM 1–4.
2. Link to the minidisk that contains the original GOMCLG EXEC:
   ```
   CP LINK 5697J10D 400 400 RR
   ```
3. Access the original minidisk:
   ```
   ACCESS 400 I
   ```
4. Link to the minidisk containing the configuration files:
   ```
   CP LINK OPMGRM1 198 198 MR
   ```
5. Access the configuration minidisk:
   ```
   ACCESS 198 E
   ```
6. Copy the original GOMCLG EXEC file:

```
COPYFILE GOMCLG EXEC G = = E
```

7. Modify the log cleanup EXEC:

   ```
   XEDIT GOMCLG EXEC E
   ```

Appendix C. Operations Manager and TCP/IP interaction

This appendix describes how to configure Operations Manager to interact with TCP/IP using the DEFTCPA configuration statement. This may be used to process syslog data, or file input from local or remote z/VM systems.

Collection and processing of syslog data

Operations Manager may be configured to accept and process syslog data from any machine that supports forwarding syslog data. When Operations Manager receives syslog data, the data is processed in the same manner as SECUSER or OBSERVER data from a monitored user console; the data is filtered through the defined rules and triggers actions if any matching criteria is found. The collected syslog data may be viewed using the VIEWCON command.

To configure Linux, or other syslog capable machines, to forward syslog data to another system, please consult your Linux documentation. The data must be sent to the TCP/IP address of the system running Operations Manager.

To configure Operations Manager to process syslog data, issue the DEFTCPA command. The following command is an example:

```
DEFTCPA NAME(RMTSYLGD),TCPAPPL(GOMRSYL),+
TCPUSER(TCPIP),TCPADDR(000.000.000.000),TCPPORT(00514),+
PARM(SYSLOG  03330417UTF8)
```

The command above starts the syslog processing program provided by Operations Manager (`TCPAPPL(GOMRSYL)`) and instructs the program to listen on UDP port 514 (`TCPPORT(00514)`) of any available IP address (`TCPADDR(000.000.000.000)`) assigned to the TCP/IP service machine named TCPIP (`TCPUSER(TCPIP)`). The PARM field establishes the following information:

- the user ID the syslog data is collected under (`SYSLOG`)
- the ASCII to EBCDIC translation table used (`03330417`)
- the ASCII encoding scheme (`UTF8`)

Notes:

- The `PARM` value is column specific. The DEFTCPA command provides more information on the available `PARM` values.
- Depending on your TCP/IP configuration, you may need to authorize OPMGRM1 (and any user ID running GOMMAIN) to use the ports specified in your DEFTCPA statements. Refer to the PORT or OBEY statements in *z/VM TCP/IP Planning and Customization (SC24–6125)* for information on enabling an application to use specific ports.

To view the collected syslog data, issue the VIEWCON command:

```
GOMCMD OPMGRM1 VIEWCON USER(SYSLOG)
```

where `OPMGRM1` is the user ID of the Operations Manager server running GOMMAIN.

Related reference:

"DEFTCPA" on page 46

"VIEWCON" on page 119

Translation tables

The syslog data must be converted from ASCII to EBCDIC. Three sample ASCII to EBCDIC translation tables are provided on the sample installation disk and may be copied to the OPMGRM1 198 minidisk or any other disk accessed by user ID OPMGRM1, or any other user ID running GOMMAIN. Operations Manager allows the use of any input and output code page.

Table 114 lists the sample tables included in the Operations Manager samples disk `5697J10D 2C2`.

Table 114. Sample translation table files

Table file name	Description
`03330025 SAMPTABL`	Translation from ASCII code page 00819 to EBCDIC code page 00037
`03330417 SAMPTABL`	Translation from ASCII code page 00819 to EBCDIC code page 01047
`0333047C SAMPTABL`	Translation from ASCII code page 00819 to EBCDIC code page 01148

IBM also provides many translation tables at http://www.ibm.com/software/globalization/cdra/index.jsp. Refer to Appendix J for a link to downloadable translation tables. When the download is complete, the file must have fixed records and a blocksize of 256 for Operations Manager to accept the translation table.

The syslog data must be encoded in ISO8 or UTF8 format. If the syslog data is encoded in UTF8, the input is limited to plane0 and plane1 of Unicode.

Copying the sample Operations Manager tables

To copy the sample translation tables provided with Operations Manager, follow the steps below.

1. Log on to the VM account your installation uses to modify Operations Manager configuration files. Do *not* use OPMGRM1 or OPMGRS1–4.
2. Link to the minidisk that contains the samples:
   ```
   CP LINK 5697J10D 2C2 2C2 RR
   ```
3. Access the samples minidisk:
   ```
   ACCESS 2C2 I
   ```
4. Link to the minidisk that contains the configuration files:
   ```
   CP LINK OPMGRM1 198 198 MR
   ```
5. Access the configuration minidisk:
   ```
   ACCESS 198 E
   ```
6. Copy the translation tables:
   ```
   COPYFILE * SAMPTABL I = TABLE E
   ```

Collection and processing of remote file input

Operations Manager may be configured to accept and process the content of a file sent from a CMS guest on the local or a remote z/VM system. When Operations Manager receives the file content, the data is processed in the same manner as SECUSER or OBSERVER data from a monitored user console; the file content is filtered through the defined rules and triggers actions if any matching criteria is found. The collected file content may be viewed using the VIEWCON command.

To configure Operations Manager to process file content data, issue the DEFTCPA command. The following command is an example:

```
DEFTCPA NAME(RMTFILES),TCPAPPL(GOMRSIF),+
TCPUSER(TCPIP),TCPADDR(192.168.100.200),TCPPORT(63000)
```

The command above starts the file content processing program provided by Operations Manager (`TCPAPPL(GOMRSIF)`) and instructs the program to listen on TCP port 63000 (`TCPPORT(63000)`) of IP address 192.168.100.200 (`TCPADDR(192.168.100.200)`) using the TCP/IP service machine named TCPIP (`TCPUSER(TCPIP)`).

Notes:

1. The TCP/IP address specified on the `TCPADDR` operand of DEFTCPA must match the address specified on the GOMRSIF command, or the TCP/IP address specified on DEFTCPA must be `000.000.000.000`.
2. The port specified on the `TCPPORT` operand of DEFTCPA must match the port specified on the GOMRSIF command.

Related reference:

"DEFTCPA" on page 46

"VIEWCON" on page 119

Send and view file content

To send file content from a CMS guest, issue the GOMRSIF EXEC:

```
GOMRSIF TESTCONS DATA A 192.168.100.7 63000 TERRY
```

The command above transfers the content of `TESTCONS DATA A` to Operations Manager at the TCP/IP address `192.168.100.7` on port `63000` and the data is collected under user name `TERRY`.

To view the collected file content, issue the VIEWCON command:

```
GOMCMD OPMGRM1 VIEWCON USER(TERRY)
```

Where OPMGRM1 is the user ID of the Operations Manager server running GOMMAIN.

Send and view multiple files

To send multiple files to Operations Manager and view them all in one VIEWCON session, follow the steps below.

1. Issue a DEFTCPA statement in Operations Manager. For example:
   ```
   DEFTCPA NAME(RMTFILES),TCPAPPL(GOMRSIF),TCPUSER(TCPIP),+
   TCPADDR(000.000.000.000),TCPPORT(63000)
   ```
2. From a VM user ID that has access to the files, issue the necessary GOMRSIF commands. The port specified in the DEFTCPA statement must match the port specified in the GOMRSIF command. The following example sends the content

of TEST DATA A and SAMPLE DATA A to Operations Manager and specifies that the data is collected under the user name TERRY:

```
GOMRSIF TEST DATA A 192.168.100.200 63000 TERRY
GOMRSIF SAMPLE DATA A 192.168.100.200 63000 TERRY
```

3. This allows you to view all of the remote file input in one VIEWCON session. For this example, the following command is issued to display the data:

```
GOMCMD OPMGRM1 VIEWCON USER(TERRY)
```

To send multiple files to Operations Manager and view them in separate VIEWCON sessions, follow the steps below.

Note: Only one DEFTCPA statement is required.

1. Issue a DEFTCPA statement in Operations Manager. For example:

```
DEFTCPA NAME(RMTFILES),TCPAPPL(GOMRSIF),TCPUSER(TCPIP),+
TCPADDR(000.000.000.000),TCPPORT(63000)
```

2. From a VM user ID that has access to the files, issue the necessary GOMRSIF commands, specifying different user names. The following example sends the content of TEST DATA A to Operations Manager and specifies that the data is collected under the user name TERRY, then sends the content of SAMPLE DATA A and specifies that the data is collected under the user name JOE.

```
GOMRSIF TEST DATA A 192.168.100.200 63000 TERRY
GOMRSIF SAMPLE DATA A 192.168.100.200 63000 JOE
```

3. This allows you to view the remote file input in separate VIEWCON sessions. For this example, the following commands are issued to display the data:

```
GOMCMD OPMGRM1 VIEWCON USER(TERRY)
GOMCMD OPMGRM1 VIEWCON USER(JOE)
```

The following section describes the GOMRSIF EXEC in more detail.

GOMRSIF

```
►►──GOMRSIF──filename──filetype──filemode──ipaddr──ipport──username──────────────►◄
```

Figure 63. GOMRSIF command syntax

Authorization

No specific Operations Manager authority is required for the GOMRSIF command.

The GOMRSIF command may be run on any system where the EXEC is installed; Operations Manager does not need to be installed to issue this command.

Purpose

Issue the GOMRSIF command to send a file to Operations Manager and collect the data under a specified user name.

Operands

filename
specifies the file name.

filetype
specifies the file type.

filemode
specifies the file mode.

ipaddr specifies the target VM TCP/IP address to send the data. Format is `xxx.xxx.xxx.xxx`. Leading zeros are not required. This must be the TCP/IP address of the system running Operations Manager.

ipport specifies the target VM TCP/IP port to send the data. Format is `nnnnn`. Leading zeros are not required. This must match the port number specified on the corresponding DEFTCPA statement.

username
specifies the user name the data is collected under.

Usage notes

None.

Return codes

Table 115 lists the return codes for the GOMRSIF command.

Table 115. GOMRSIF return codes

Return code	Description
0	Successful
4	No data in file
8	Error reading file
12	File not found or TCP/IP error
16	Command parameter missing or parameter error

Appendix D. Testing Operations Manager installation and configuration

This appendix describes the steps required to test various components of Operations Manager's installation and configuration.

If any of the tests described in this appendix fail you must update the Operations Manager configuration file.

Related tasks:

"Managing the configuration file" on page 25

Checking the status of OPMGRM1

To verify that the Operations Manager server (OPMGRM1) has been successfully started and is able to process requests, follow the steps below.

1. Log on to an authorized user ID. This user ID must be authorized to issue the Operations Manager STATUS command. This can be done by giving the user configuration authority, control authority, or authorizing the user to the STATUS command.
2. Issue the following command to instruct Operations Manager to output status information:

   ```
   GOMCMD OPMGRM1 STATUS
   ```
3. Several messages from OPMGRM1 appear indicating the server's status.

Verifying consoles are monitored and viewable

To verify that the console of a user ID is being monitored by Operations Manager and that authorized users can view and interact with the console follow the steps below.

1. Log on to an authorized user ID. This user ID must be authorized to view a monitored console using the VIEWCON command.
2. Issue the following command to view another user's console:

   ```
   GOMCMD OPMGRM1 VIEWCON USER(userid)
   ```

   Where *userid* is a monitored console that has or is generating console messages. *userid* must have SECUSER or OBSERVER set to OPMGRM1. In addition, if you are using SECUSER, *userid* must be disconnected.
3. A full-screen view of the console of *userid* appears. Use PF07 and PF08 to scroll up and down in the console, PF10 and PF11 to scroll left and right, and PA02 to toggle autoscrolling.

   Note: Any commands entered on the VIEWCON command line are issued on *userid*.
4. Press PF03 to exit the VIEWCON session.
5. Issue the following command to view the Operations Manager log:

   ```
   GOMCMD OPMGRM1 VIEWLOG
   ```
6. A full-screen view of the console of the Operations Manager server (OPMGRM1) appears. This is also known as the Operations Manager log. The log includes all consoles being monitored by Operations Manager as well as

Operations Manager messages concerning rules, schedules, monitors, and actions. You can also use the PF keys to scroll up, down, left, right, and toggle autoscrolling.

7. Press PF03 to exit the VIEWLOG session.

Related tasks:

"Step 4. Update IDs monitored by Operations Manager" on page 8

Related reference:

"VIEWCON" on page 119

"VIEWLOG" on page 60

Creating a schedule and corresponding action

To create a schedule and corresponding action to send a message to your user ID five minutes from now, follow the steps below. In this example, you are defining the schedule and action dynamically. Typically, schedules and actions are defined in the configuration file that is loaded when Operations Manager starts.

1. Log on to an authorized user ID. This user ID must be authorized to define schedules and define actions. This can be done by giving the user ID configuration authority or authorization to the DEFSCHD and DEFACTN commands.
2. To define an action to send you a message, issue the following command:

   ```
   GOMCMD OPMGRM1 DEFACTN NAME(TSTACTN1),COMMAND(CP MSG userid Test Operations Mgr),ENV(LVM)
   ```

   Replace *userid* with your current user ID.
3. To define a schedule that triggers in five minutes from now, issue the following command :

   ```
   GOMCMD OPMGRM1 DEFSCHD NAME(TESTSCHD),ACTION(TSTACTN1),WHEN(NOW+00:05)
   ```
4. In five minutes the following message from OPMGRM1 appears:

   ```
   Test Operations Mgr
   ```

Creating a machine monitor and corresponding action

To create a machine monitor that executes an action if the monitored user ID is logged off, follow the steps below. In this example, you are defining the machine monitor and action dynamically. Typically, monitors are defined in the configuration file that is loaded when Operations Manager starts.

1. Log on to an authorized user ID. This user ID must be authorized to define machine monitors and define actions. This can be done by giving the user ID configuration authority or authorization to the DEFMMON and DEFACTN commands.
2. To define an action that sends you a message, issue the following command:

   ```
   GOMCMD OPMGRM1 DEFACTN NAME(TSTACTN2),COMMAND(CP MSG userid1 userid2 is logged off),ENV(LVM)
   ```

   Replace *userid1* with the current user ID you've used to log on.

   Replace *userid2* with any user ID on your system that is not currently logged on.

   Important: This action is for test purposes only. Typically, you would create an action that autologs *userid2*.
3. To define a machine monitor for another user ID, issue the following command:

   ```
   GOMCMD OPMGRM1 DEFMMON NAME(TESTMMON),USER(userid2),ACTION(TSTACTN2)
   ```

   Replace *userid2* with the same *userid2* used in step 2.

4. Within one minute, the following message appears from OPMGRM1:

   ```
   userid2 is logged off
   ```
5. To delete the test machine monitor and discontinue the message, issue the following command:

   ```
   GOMCMD OPMGRM1 DELMMON NAME(TESTMMON)
   ```
6. Continue with “Managing the configuration file” on page 25.

Appendix E. Application interference

Certain applications can interfere with Operations Manager. The use of any application that interferes with Operations Manager is strongly discouraged in any virtual machine while any Operations Manager component is active.

Applications that do any of the following can interfere with Operations Manager:

- Manipulate the system clock comparator directly. The applications should use STIMER or STIMERM macros to manipulate the system clock comparator and system clock comparator interrupts.
- Utilize the *MSG or *MSGALL CP IUCV system services. CP system services restrict the number of IUCV connections to these services to one connection. Operations Manager requires the connection to function correctly.
- Modify the settings for CPCONIO, VMCONIO, MSG, IMSG, WNG, EMSG, or SMSG. Operations Manager establishes the required settings at initialization, and does not expect the settings to changes.

The following program is known to violate one or more of the above rules and interfere with Operations Manager:

- WAKEUP

The following user IDs run Operations Manager components and should not run an application that will interfere with it:

- OPMGRM1 and any other user ID running GOMMAIN
- Any action processing server (OPMGRS1 through OPMGRS4) and any other user ID running GOMSVM

Appendix F. GOMGLBL facility

GOMGLBL is an optional facility intended to help share information between REXX EXECs that run as Operations Manager actions that execute on different Operations Manager servers. The servers can include the main Operations Manager server (OPMGRM1 by default) and any of the action processing servers (OPMGRSn by default).

Although GOMGLBL is intended to be used with Operations Manager, it is not required to run on or use Operations Manager and does not need to be configured unless you intend to use it. GOMGLBL is somewhat similar to the CMS GLOBALV facility, which allows you to define names, assign values to those names, and retrieve the values at a later time. Whereas CMS GLOBALV is restricted to use within a single CMS guest, GOMGLBL provides a similar function across several CMS guests.

GOMGLBL may not be suitable for every environment, or you may prefer other techniques for sharing data between Operations Manager servers (such as access to a Shared File System file).

GOMGLBL requires a writable shared segment, named GOMSEG, which all of the GOM workers sharing data must be able to access. The size of the segment depends on how much data you want to share; each megabyte in the shared segment can contain more than 2000 name/value pairs.

Similar to CMS GLOBALV, the names and the values assigned to them can be up to 255 characters in length. The names must be valid as REXX variable names (no embedded spaces, and so on), but the value can contain any character.

Preparing GOMGLBL

The GOMSEGDF EXEC is provided to help in defining the GOMSEG writable shared segment. As provided, GOMSEGDF will define a 2MB segment at location 0x6000000 (96MB), which will provide room for 4095 shared variables. The location of the shared segment must be beyond the defined storage of any Operations Manager server (or other CMS guest) that will use it.

As shipped, the GOMSEGDF EXEC defines GOMSEG as shared, writable, and restricted (RSTD), so that only guests which have a NAMESAVE statement for GOMSEG in their directory entry can use it.

1. Customize GOMSEGDF EXEC with the appropriate values for your site:

   Note: If you intend to skip a large amount between the end of the defined storage for the Operations Manager servers and the start of the shared segment, review the usage notes about the effects on real storage in the DEFSEG section in the *CP Commands and Utilities Reference* for your level of z/VM.

   If you require more than 4095 shared variables, each additional megabyte provides for 2048 more. For example, available shared variables = (shared segment size in MB*2048) –1.

   a. From user ID 5697J10D, type:

```
'ACC 400 M'
'XEDIT GOMSEGDF EXEC M'
```

b. Find the following statement:

```
Address 'COMMAND' 'CP DEFSEG GOMSEG 6000-61FF SW RSTD'
```

Change any of the following items as needed:

- Change the address range of the segment location if you want the segment larger than 2MB or located someplace other than 96MB.
- Remove the RSTD operand if you do not want the segment to be restricted.

c. File your changes.

2. Run GOMSEGDF EXEC from a user ID with the necessary privilege class to issue the CP DEFSEG command. By default, this is class E. For example, issue the following command:

```
GOMSEGDF DEFINESEG
```

3. Run the GOMSEGIN program (GOMSEGIN MODULE) to initialize the segment.
4. Ensure that all user IDs that will use GOMGLBL have the NAMESAVE GOMSEG statement in their directory entry. GOMGLBL is now ready to use.
5. Log off and restart any user IDs that were updated in step 4.

GOMGLBL

```
►►──GOMGLBL──FROM REXXvarname──┬──────────┬──INTO REXXvarname──VAR REXXvarname───►
                               └─TRUNCate─┘

►─VALUE newvalue──NAME sharedname──QUIET──────────────────────────────────────►◄
```

Figure 64. GOMGLBL command syntax

Operands

FROM *REXXvarname*
Sets the value of the shared variable to the contents of the REXX variable *REXXvarname*. REXX must be active.

TRUNCate
If the value obtained for the FROM operand exceeds 255 bytes, truncate it to 255 bytes and perform the set operation anyway.

INTO *REXvarname*
Place the value of the shared variable into the REXX variable *REXXvarname*. REXX must be active.

VAR *REXXvarname*
The name of the shared variable is to be obtained from the REXX variable *REXXvarname*. REXX must be active.

NAME *sharedvarname*
sharedvarname is the name of the shared variable whose value is to be set and/or retrieved.

QUIET Does not write error messages to the console.

Usage notes

1. Shared variable names and values are limited to 255 bytes.
2. Variables may be retrieved and set in the same operations. For example, the old value, if any, will be retrieved, and then the new value set.
3. If you attempt to retrieve a shared variable which has never been set, a null value will be returned.
4. If a REXX variable is specified on the `FROM` operand whose contents exceed 255 bytes in length, the operation will terminate with an error message unless the `TRUNCate` operand is also specified.
5. The `VALUE` operand may be used to provide data to be stored into a shared variable, but data can only be retrieved into a REXX variable. Data specified on the `VALUE` operand cannot contain embedded blanks. To store data containing embedded blanks, the `FROM` operand must be set.
6. The values of shared variables are not saved across IPLs of the z/VM system, or when all machines using the DCSS log off.
7. You must not use stem variables whose names contain lower-case characters with GOMGLBL.

Restrictions

Only user IDs permitted to access the GOMSEG DCSS will be able to use GOMGLBL.

Return codes

Table 116 lists the return codes for the GOMGLBL command.

Table 116. GOMGLBL return codes

Return code	Description
8	No parameters supplied.
12	A required operand is missing.
	A required parameter is missing.
	Conflicting options selected.
	Duplicate options entered.
	Operand exceeds maximum length.
	A specified REXX variable contains no data. The REXX variable specified for VAR is set to null.

Table 116. GOMGLBL return codes (continued)

Return code	Description
16	GOMGLBL requires the extended parameter list. GOMGLBL can only be called from environments, such as CMS or REXX, that support the CMS extended parameter list.
	CSL services are not available.
	`VARNAME`, `FROM`, and `INTO` are specified but not running under REXX. The REXX environment must be active for GOMGLBL to access REXX variables.
	GOMSEG DCSS is not initialized or is at the wrong level.
	The user is not authorized to access the GOMSEG DCSS. The GOMSEG DCSS by default is restricted; users must have a NAMESAVE GOMSEG statement in their directory entry.
	DCSS GOMSEG is not defined.
	CC=3 from diag 0x64 (FINDSEG).
	Error code <rc> (hex) from FINDSEG.
	Error code <rc> (hex) from LOADSHR.
104	Cannot retrieve value-spin. The value of the variable specified could not be retrieved, probably due to concurrent activity from other suers. GOMGLBL retries the operation several times before issuing this message, but you may also reissue the command if desired.
108	Error code <rc> (hex) from DMSCSR. The value of the variable specified was retrieved, but could not be stored into a REXX variable for the caller. However, if a new value was specified, it was successfully stored.
112	Cannot set new value-spin. The value of the variable specified could not be set, probably due to concurrent activity from other users. GOMGLBL retries the operation several times before issuing this message, but you may also reissue the command if desired.
116	Indicates that while the specified variable exists, and was retrieved, it could not be placed in a REXX variable for the caller, nor could the new value be stored. One or both of the messages associated with return codes 108 and 112 may be issued.
120	Out of room in the GOMSEG saved segment.
124	Data exceeds 255 bytes and TRUNC was not specified. The `FROM` operand was used to direct GOMGLBL to obtain the value to which to set a shared variable, but the contents of that REXX variable were more than 255 bytes in length, and the TRUNC operand was not specified. The maximum length of the value of a shared variable is 255 bytes. If you want GOMGLBL to truncate strings when necessary, use the `TRUNCate` operand.
128	`VAR` variable exceeds 255 bytes. The `VAR` operand was used to direct GOMGLBL to obtain the name of the shared variable to set and/or retrieve from a REXX variable, but the contents of that REXX variable were more than 255 bytes in length. The maximum length of a shared variable name is 255 bytes.

Appendix G. Messages and Codes

This appendix lists the messages generated by Operations Manager. A description of each message and suggestions on how you can resolve the problem are provided, where possible.

Many of the messages issued by Operations Manager include a return code. For a description of these return codes, refer to *z/VM CP Programming Services* or *z/VM CMS Macros and Functions Reference*.

All messages generated by Operations Manager have a severity code as the last character of the message ID. Severity codes are described in Table 117.

Table 117. Severity codes

Code	Description
E	Error. Some errors might be user-correctable, read the User Response text to determine the appropriate course of action.
I	Information only. No user action is required.
L	Log message.
S	Severe message.
W	Warning message. Results might not be as expected.

GOM0001I STARTED V1R4 BUILT *yy/mm/dd hh:mm*

Explanation: An Operations Manager component has started.

System action: The program continues.

User response: No action is required.

GOM0002E STIMERM SET FAILED *nn*

Explanation: A call to the STIMERM system function failed with code *nn*.

System action: Operations Manager terminates.

User response: See STIMERM in the *z/OS MVS Assm Services Reference* for a list of code descriptions.

GOM0003E REQUIRED PARAMETERS NOT PRESENT

Explanation: Required parameters for startup were not present.

System action: Operations Manager terminates.

User response: No action is required.

GOM0004I EP= *xxxxxxxx*

Explanation: Records the entry point of startup, where *xxxxxxxx* is the actual entry point.

System action: The program continues.

User response: No action is required.

GOM0005E HNDEXT SET FAILED *nn*

Explanation: A call to the HNDEXT system function failed with code *nn*.

System action: Operations Manager terminates.

User response: See HNDEXT in the *z/VM CMS Macros and Functions Reference* for a list of code descriptions.

GOM0006W ACCOUNTING INFORMATION NOT GENERATED *nn*

Explanation: An accounting information record was unable to be generated via diagnose 4C. The condition code from the operation is indicated in *nn*.

System action: The program continues.

User response: See *z/VM CP Programming Services* for an explanation for *nn*.

GOM0007W MONITOR SAMPLE INTERVAL APPLDATA NOT GENERATED *cc rc*

Explanation: An attempt was made to collect sample monitoring records.

System action: The program continues.

User response: Add OPTION APPLMON to the CP directory so Operations Manager can collect MONITOR SAMPLE INTERVAL records. See *z/VM CP Programming Services* DIAGNOSE x'DC' for an explanation for the condition code *cc* and the return code *rc*.

GOM0008E CONNECTION TO *userid* **NOT ACCEPTED**

Explanation: The VM *userid* did not accept the connection request.

System action: The Operations Manager command terminates.

User response: A connection request was not accepted due to a version/service level mismatch between the client and server. Ensure the version/service level of GOMMAIN, GOMCMD, and GOMSVM are the same.

GOM0009E SUBCOM EXECUTION LIMITED TO *userid*

Explanation: When GOMCMD is executed from an ACTION, the *userid* is restricted to the *userid* running GOMMAIN which initiated the ACTION.

System action: The program continues.

User response: Ensure that the *userid* specified on the GOMCMD command is correct.

GOM0010E GOM ENVIRONMENT ALREADY ACTIVATED

Explanation: When an Operations Manager command is started it attempts to establish a GOM environment. The Operations Manager command detected the GOM environment is currently active from another Operations Manager command.

System action: The Operations Manager command terminates.

User response: Issue the Operations Manager command on another user ID or terminate the previous Operations Manager command.

GOM0011E GOM ENVIRONMENT NOT ACTIVATED

Explanation: When an Operations Manager command is started it attempts to establish a GOM environment. The Operations Manager command was unable to establish the GOM environment.

System action: The Operations Manager command terminates.

User response: Determinate why the GOM environment cannot be activated.

GOM0099S UNRECOVERABLE ERROR ENCOUNTERED PSW=*xxxxxxxxxxxxxxxx* **EP=***xxxxxx* **MCB=***xxxxxx*

Explanation: An unrecoverable error condition was encountered.

System action: Operations Manager terminates.

User response: No action is required.

GOM0100I ENDED

Explanation: An Operations Manager component has ended.

System action: Operations Manager terminates.

User response: No action is required.

GOM0101E ABNEXIT SET FAILED, RC=*nn*

Explanation: A call to the ABNEXIT system function failed with code *nn*.

System action: Operations Manager terminates.

User response: See ABNEXIT in the z/VM documentation for a list of return code descriptions.

GOM0102E ABNEXIT CLR FAILED, RC=*nn*

Explanation: A call to the ABNEXIT system function failed with code *nn*.

System action: Operations Manager terminates.

User response: See ABNEXIT in the z/VM documentation for a list of return code descriptions.

GOM0111L COMMAND *cmd* **RC** *XXXXXXXX*

Explanation: A call to DIAGNOSE 08 with command *cmd* output could not be contained in the area listed under *xxxxxxxx*. The program continues.

System action: The program continues.

User response: No action is required.

GOM0112L COMMAND *cmd* **OUTPUT TRUNCATED**

Explanation: A call to DIAGNOSE 08 with command *cmd* output could not be contained in the area provided.

System action: The program continues.

User response: No action is required.

GOM0121I MCB IS LOCATED AT *xxxx*

Explanation: Records the address, represented by *xxxx*, of the MCB for this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0122I ASSIZE=*nn* ASIT=*xxxxxxxx*

Explanation: Records the address space size in pages, represented by *nn*, and the address space token, represented by *xxxxxxxx*, for this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0123I PRIVILEGES:

Explanation: This message displays in combination with message 0124I. The result is a message that records the CP PRIV classes available for this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0124I (list of privileges)

Explanation: This message displays in combination with 0123I. The result is a message that records the CP PRIV classes available for this execution of Operations Manager.

System action: The program continues.

User response: Verify that all installation or maintenance procedures completed successfully.

GOM0125I SETTINGS:

Explanation: This message displays in combination with message 0126I. The result is a message that records the CP SETTINGS in effect at the beginning of this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0126I (list of settings)

Explanation: This message displays in combination with 0125I. The result is a message that records the CP SETTINGS in effect at the beginning of this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0127E SET PHASE 1 FAILED: error-message

Explanation: This message displays in combination with 0128E. The required settings for CP MSG processing failed.

System action: Operations Manager terminates.

User response: No action is required.

GOM0128E SET PHASE 2 FAILED: error-message

Explanation: This message displays in combination with 0127E. The required settings for CP MSG processing failed.

System action: Operations Manager terminates.

User response: No action is required.

GOM0129I STARTUP COMMAND *cmd*

Explanation: Records the startup command and parameters entered to begin this execution of Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0161E HNDIUCV SET FAILED *nn*

Explanation: A call to HNDIUCV failed with code *nn*.

System action: Operations Manager terminates.

User response: See HNDIUCV in the z/VM documentation for a list of code descriptions.

GOM0162E HNDIUCV CLR FAILED *nn*

Explanation: A call to HNDIUCV failed with code *nn*.

System action: Operations Manager terminates.

User response: See HNDIUCV in the z/VM documentation for a list of code descriptions.

GOM0163E IUCV CONNECT *userid* FAILED *nn*

Explanation: A call to CMSIUCV to connect to *userid* failed with code *nn*.

System action: Operations Manager terminates.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0164E IUCV SEVER *userid* FAILED *nn*

Explanation: A call to CMSIUCV to sever the connection to *userid* failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0165E IUCV SEVER *userid* FAILED, NAME NOT FOUND

Explanation: An internal lookup for *userid* failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0166E EXTERNAL INTERRUPT TYPE *nn* IS NOT VALID

Explanation: An external interrupt with an incorrect type *nn* has been presented for processing.

System action: The program continues.

User response: No action is required.

GOM0167E IUCV ACCEPT *userid* FAILED *nn*

Explanation: A call to CMSIUCV to accept a connect from *userid* failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0168E CONNECTION COMPLETE FOR PATHID *pppp* FAILED, PATH NOT FOUND

Explanation: An internal lookup for IUCV PATHID, represented by *pppp*, failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0169E IUCV SEVER PATHID *pppp* FAILED *nn*

Explanation: A call to CMSIUCV to sever the path, which is represented by *pppp*, failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0170E IUCV SEVER PATHID *pppp* FAILED, PATH NOT FOUND

Explanation: An internal lookup for the IUCV PATHID, which is represented by *pppp*, failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0171E IUCV RECEIVE FOR PATHID *pppp* FAILED *nn*

Explanation: A call to IUCV to receive a message from the path represented by *pppp* failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0172E IUCV RECEIVE FOR PATHID *pppp* FAILED, PATH NOT FOUND

Explanation: An internal lookup for IUCV PATHID, which is represented by *pppp*, failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0173E IUCV REPLY FOR PATHID *pppp* FAILED *nn*

Explanation: A call to IUCV to send a reply on path *pppp* failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0174E IUCV REPLY FOR *userid* FAILED, PATH NOT FOUND

Explanation: An internal lookup for *userid* failed. This resulted in an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0175E IUCV SEND FOR PATHID *pppp* FAILED *nn*

Explanation: A call to IUCV to send a message on path *pppp* failed with code *nn*.

System action: The program continues.

User response: See CMSIUCV in z/VM documentation call for return codes.

GOM0176E IUCV SEND FOR *userid* FAILED, PATH NOT FOUND

Explanation: An internal lookup for *userid* failed. This resulted in an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0177E IUCV SEND COMPLETE FOR PATHID ***pppp*** **FAILED, PATH NOT FOUND**

Explanation: An internal lookup for the IUCV PATHID, represented by *pppp*, failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0178E IUCV SEND COMPLETE FOR PATHID ***pppp*** **MSGID** ***mmmmmmmm*** **FAILED, MSG NOT FOUND**

Explanation: An internal lookup for a message, represented by *mmmmmmmm*, failed. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0179E IUCV SEND COMPLETE FOR PATHID ***pppp*** **FAILED** ***xxxxxxxx***

Explanation: The completion of an IUCV message send command failed on the PATHID *pppp* with notification code *xxxxxxxx*.

System action: The program continues.

User response: See CMSIUCV in the z/VM documentation for a list of code descriptions.

GOM0180E IUCV CONNECT FOR ***userid*** **FAILED, ALREADY ASSIGNED PATHID** ***pppp***

Explanation: An attempt to establish multiple IUCV connections to the same machine has occurred. This resulted in an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0181E IUCV REPLY FOR ***userid*** **FAILED, NO REPLY EXPECTED**

Explanation: An attempt was made to send a reply to an IUCV message that did not expect a reply. This is an internal logic error.

System action: The program continues.

User response: Contact IBM Technical Support for assistance.

GOM0182E VERSION/SERVICE LEVEL MISMATCH ON IUCV CONNECT ATTEMPT BY ***userid***

Explanation: An attempt to connect to Operations Manager using IUCV from a previous or later version/service level was detected.

System action: The IUCV connection is terminated and the program continues.

User response: Use only GOM commands from a matching version/service level.

GOM0183E IUCV CONNECTION TO SYSTEM SERVICE ***service-name*** **SEVERED**

Explanation: An IUCV connection to a system service was severed. System services are listed in z/VM CP Programming Services.

System action: The program continues.

User response: No action is required.

GOM0201L *userid "cmd"* **VID=***vmid* **SRC=***source-id* **CLS=***c*

Explanation: The command *cmd* was issued by *userid*. VID is the *vmid* originating the command. The internal source path is identified by *source-id*. CLS is the message class.

System action: The program continues.

User response: No action is required.

GOM0202E UNKNOWN COMMAND ***cmd***

Explanation: An unknown command, represented by *cmd*, was encountered by Operations Manager.

System action: The program continues.

User response: No action is required.

GOM0203E ***userid*** **IS NOT AUTHORIZED FOR** ***cmd***

Explanation: The *userid* has not been authorized to execute the *cmd* command.

System action: The program continues.

User response: No action is required.

GOM0204I *text*

Explanation: A user has issued the LOGTEXT command to log an entry in the Operations Manager log.

System action: The program continues.

User response: No action is required.

GOM0205E COMMAND *cmd* SYNTAX NOT VALID

Explanation: An error exists in the syntax of the input command *cmd*.

System action: The program continues.

User response: No action is required.

GOM0206L *output*

Explanation: This message is used to log the output from the `CP CMD()`Operations Manager command.

System action: The program continues.

User response: No action is required.

GOM0207E MAXIMUM CONTROLED USERIDS REACHED FOR *userid*

Explanation: An attempt was made to authorize too many CONSOLES for *userid*.

System action: The program continues.

User response: No action is required.

GOM0208E SCAN FAILED *nn*

Explanation: A call to the SCAN function failed with code *nn*.

System action: The program continues.

User response: See SCAN in the z/VM documentation for a list of return codes.

GOM0209E COMMAND RC= *nn*

Explanation: CMS or CP processing of a command returned a non-zero return code.

System action: The program continues.

User response: See z/VM documentation of returns codes.

GOM0210L *output*

Explanation: This message is used to log the output from the `CMS CMD()` Operations Manager command.

System action: The program continues.

User response: No action is required.

GOM0211E command name ALREADY DEFINED

Explanation: An attempt was made to define a rule, action, schedule, machine monitor, spool monitor, group, or date that already exists. The name of the duplicate is *name*.

System action: The program continues.

User response: No action is required.

GOM0212E command name NOT FOUND

Explanation: An attempt was made to delete a rule, action, schedule, machine monitor, spool monitor, group, or date that does not exist. The name you were attempting to delete is *name*.

System action: The program continues.

User response: No action is required.

GOM0213E CONFIGURATION FILE "*filename filetype filemode*" NOT FOUND

Explanation: The CONFIG command is unable to find the file specified.

System action: The program continues.

User response: No action is required.

GOM0214E SERVICE MACHINE *svmid* IS PROCESSING

Explanation: An attempt was made to delete a busy service machine. The name of the service machine is *svmid*. If required, use FORCE(Y) to force deletion.

System action: The program continues.

User response: No action is required.

GOM0215E EXECUTION RESPONSE TO *userid* FAILED

Explanation: An attempt was made to send the output of a remotely executed command to GOMMAIN, but it failed. The service machine will be marked busy until DELSRVM with FORCE is processed.

System action: The program continues.

User response: No action is required.

GOM0216L *userid "msg"* **VID=***vmid* **SRC=***source-id* **CLS=***c*

Explanation: The message *msg* was originated from *userid* and received by Operations Manager. The message was forwarded by the CP system service or VM identified by *vmid*. The internal source path is identified by *source-id*. CLS is the message class.

System action: The program continues.

User response: No action is required.

GOM0217E COMMAND *cmd* NOT VALID FROM *src*

Explanation: An attempt was made to execute an Operations Manager command from an invalid source, represented by *src.*

System action: The program continues.

User response: No action is required.

GOM0218L USER *monitoring-user* **ISSUED COMMAND** *cmd* **TO** *monitored-user*

Explanation: The user *monitoring-user* is monitoring the console of *monitored-user* and has issued the command *cmd*.

System action: The program continues.

User response: No action is required.

GOM0219E COMBINED VIEW COMMAND FORMAT ERROR (FROM *userid***)**

Explanation: The user *userid* entered a command incorrectly from a combined view. The command syntax should be *targetuid command*.

System action: The program continues.

User response: Correct the syntax and retry the command.

GOM0220E COMBINED VIEW COMMAND TARGET *targetuid* **NOT ELIGIBLE (FROM** *userid***)**

Explanation: The user *userid* entered a command from a combined view for *targetuid* which is not in the combined view.

System action: The program continues.

User response: Specify a *targetuid* that is in the combined view.

GOM0221E COMBINED VIEW COMMAND TARGET *targetuid* **NOT MONITORED (FROM** *userid***)**

Explanation: The user *userid* entered a command from a combined view for *targetuid* which is not monitored by Operations Manager.

System action: The program continues.

User response: Setup *targetuid* as an Operations Manager monitored user using the SET SECUSER or SET OBSERVER command.

GOM0222E ESM CALL RETURNED SAF=*xx* **RACF=***xxxxxx*

Explanation: A call failed or ESM (External Security Manager) could not determine if the requesting user has authority to execute an Operations Manager command. The SAF return code *xx* and the RACF three-digit (hex) return code and three-digit (hex) reason code can be found in the *RACF External Security Interface (RACROUTE) Macro Reference*.

System action: The request to execute the Operations Manager command is denied.

User response: Resolve the SAF and RACF return codes.

GOM0224L *userid* **EVENT TYPE** *nn* **VID=***vmid* **SRC=***source-id* **CLS=***c*

Explanation: An event for *userid* of type *nn* has occurred. The event notification was forwarded by the CP system service or VM identified by *vmid*. The internal source path is identified by *source-id*. CLS is the message class.

System action: The program continues.

User response: No action is required.

GOM0225E Operand *operand* **SYNTAX NOT VALID**

Explanation: The operand listed could not be parsed.

System action: The program continues.

User response: No action is required.

GOM0226E OPERAND *operand* **IS NOT VALID FOR COMMAND** *command*

Explanation: The operand listed is not valid for the command entered.

System action: The program continues.

User response: No action is required.

GOM0227E OPERAND *operand* **SPECIFIED MULTIPLE TIMES**

Explanation: The operand listed was entered multiple times.

System action: The program continues.

User response: No action is required.

GOM0228I RULE *ruleid* **EXECUTION LIMIT EXCEEDED**

Explanation: The rule *ruleid* was defined with a `LIMIT` operand. The start of the rule's `ACTION` operand is being suppressed because the rule's `LIMIT` operand count per interval is exceeded. The rule's `ACTION` operand will start when the `LIMIT` operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0229I EVENT *emonid* **EXECUTION LIMIT EXCEEDED**

Explanation: The event *emonid* was defined with a `LIMIT` operand. The start of the event's `ACTION` operand is being suppressed because the event's `LIMIT` operand count per interval is exceeded. The event's `ACTION` operand will start when the LIMIT operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0230E OPERAND VALUE FOR OPERAND *operand* SYNTAX NOT VALID

Explanation: The operand value entered could not be processed. Possible reasons are the operand value is too long or short, the value is out of range, or improperly formatted.

System action: The program continues.

User response: No action is required.

GOM0231E REQUIRED OPERAND *operand* OMITTED

Explanation: The operand indicated is required to process the command.

System action: The program continues.

User response: No action is required.

GOM0232E OPERAND *operand* MUTUALLY EXCLUSIVE WITH ANOTHER OPERAND

Explanation: An operand entered is mutually exclusive with another operand entered for the command.

System action: The program continues.

User response: No action is required.

GOM0233E AN OPTIONAL OPERAND IS REQUIRED

Explanation: One of the optional operands for the command is required.

System action: The program continues.

User response: No action is required.

GOM0234E LOG FILE FOR DATE *yyyy/mm/dd* NOT FOUND

Explanation: The log file for the requested date was not found.

System action: The program continues.

User response: No action is required.

GOM0235L *userid data* VID=*vmid* SRC=*source-id* CLS=*cc* TYP=*tt*

Explanation: An event for *userid* of the class *cc* and type *tt* has occurred.

System action: The event notification was forwarded by the CP system service or VM identified by *vmid*. The internal source path is identified by *source-id*. The data shown was provided in the event notification.

User response: No action is required.

GOM0236L *userid data* VID=*vmid* SRC=*source-id* CLS=*cc* TYP=*tt*

Explanation: An event for *userid* of the class *cc* and type *tt* has occurred.

System action: The event notification was forwarded by the CP system service or VM identified by *vmid*. The internal source path is identified by *source-id*. The data shown was provided in the event notification.

User response: No action is required.

GOM0251E CONFIGURATION FILE "*filename filetype filemode*" OPEN FAILED *rc*

Explanation: The CONFIG command is unable to open the specified file, resulting in a return code of *rc*.

System action: The program continues.

User response: See FSOPEN in the z/VM documentation for a list of return code descriptions.

GOM0252E CONFIGURATION FILE "*filename filetype filemode*" READ FAILED *rc*

Explanation: The CONFIG command is unable to read the specified file, resulting in a return code of *rc*.

System action: The program continues.

User response: See FSREAD in the z/VM documentation for a list of return code descriptions.

GOM0253E CONFIGURATION FILE "*filename filetype filemode*" CLOSE FAILED *nn*

Explanation: The CONFIG command is unable to close the specified file, resulting in a return code of *nn*.

System action: The program continues.

User response: See FSCLOSE in the z/VM documentation for a list of return code descriptions.

GOM0254L BEGIN FILE *fn ft fm* LAST UPDATE *date*

Explanation: This message is issued before the contents of a file that contains Operations Manager commands is processed. The file name, file type, and file mode are listed.

System action: The program continues.

User response: No action is required.

GOM0255L END FILE *fn ft fm*

Explanation: This message is issued after the contents of a file that contains Operations Manager commands is processed. The file name, file type, and file mode are listed.

System action: The program continues.

User response: No action is required.

GOM0260I type *name* **ACTION** *actnid* **TRIGGERED BY** *userid*

Explanation: An action is triggered by a RULE, SCHEDULE, or MONITOR. *name* is the name of the RULE, SCHEDULE, or MONITOR triggering the action. *actnid* is the name of the action triggered. *userid* is the name of the console recording the triggering.

System action: The program continues.

User response: No action is required.

GOM0261E ACTION *actnid* **NOT FOUND FOR RULE | SCHEDULE | MONITOR**

Explanation: An attempt to locate the action *actnid* that was specified for the rule *ruleid*, schedule *schdid*, machine monitor *mmonid*, spool monitor *smonid*, or event monitor *emonid* was not successful.

System action: The program continues.

User response: No action is required.

GOM0262I ACTION *action-name* **BEGIN FOR** *userid* **SERVER** *service-machine*

Explanation: The action, listed as *action-name*, is beginning execution on *server-machine*

System action: The program continues.

User response: No action is required.

GOM0265E UNABLE TO SEND WORK UNIT TO SERVER *service-machine*

Explanation: An attempt was made to send a request to execute a command on a service machine. However, this attempt failed.

System action: The program continues.

User response: No action is required.

GOM0266E SERVICE MACHINE *userid* **NOT LOCATED**

Explanation: The user specified by *userid* attempted to execute a GOMSVM command without the corresponding DEFSRVM configuration command.

System action: The program continues.

User response: No action is required.

GOM0267I ACTION *action-name* **END RC=***nn* **SERVER** *service-machine*

Explanation: The *action-name* ended with return code *nn* on *service-machine*.

System action: The program continues.

User response: No action is required.

GOM0268E COMMAND BUILD EXCEEDED AVAILABLE SPACE

Explanation: While dynamically building a command for execution, all of the available build space was exhausted.

System action: The program continues.

User response: No action is required.

GOM0269L COMMAND *cmd*

Explanation: This message is used to log the dynamically constructed command.

System action: The program continues.

User response: No action is required.

GOM0270L *output-text*

Explanation: This message is used to log the command output.

System action: The program continues.

User response: No action is required.

GOM0271E SET ALTUSER FOR *userid alternate-userid* **FAILED** *rc*

Explanation: A diagnose D4 to set the SECUSER to *alternate-userid* for *userid* failed *rc*.

System action: The program continues.

User response: Determine the reason the diagnose D4 failed and correct the error.

GOM0281I SECUSER OR OBSERVER NOT SET FOR *userid*

Explanation: A VIEWCON command requested data for a user that is not being monitored.

System action: The program continues.

User response: No action is required.

GOM0282I MAXIMUM OBSERVERS FOR *userid* **IN USE**

Explanation: A VIEWCON command requested data for a user that is being monitored by the maximum number of observers (other users).

System action: The program continues.

User response: No action is required.

GOM0283I UNABLE TO DELIVER DATA TO *userid*

Explanation: An attempt to send data to a user executing the VIEWLOG or VIEWCON command failed.

System action: The program continues.

User response: No action is required.

GOM0284E ADDRESS SPACE CREATE FOR *data-space* **FAILED** *rc*

Explanation: An attempt to create a data space with the name *data-space* failed *rc*.

System action: The program continues.

User response: Determine the reason the data space create failed and correct the error.

GOM0301E CONSOLE OPEN FAILED *rc*

Explanation: An attempt was made to open a console, however, this attempt failed with return code *rc*.

System action: Operation Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0302E CONSOLE QUERY FAILED *rc*

Explanation: An attempt was made to query a console, however, this attempt failed with return code *rc*.

System action: Operation Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0303E CONSOLE DEVICE NOT SUPPORTED (*hex-data***)**

Explanation: The device being used when executing VIEWCON or VIEWLOG is not supported. The hex-data describes the console attributes.

System action: Operation Manager terminates.

User response: No action is required.

GOM0304E CONSOLE WRITE FAILED *rc*

Explanation: An attempt was made to write to a console, however, this attempt failed with return code *rc*

System action: Operation Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of code descriptions.

GOM0305E CONSOLE READ FAILED *rc*

Explanation: An attempt was made to read a console, however, this attempt failed with return code *rc*.

System action: Operation Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0306E RETURN CODE *rc* **FROM** *cmd*

Explanation: The command *cmd* returned a non-zero return code *rc*.

System action: Processing continues.

User response: No action is required.

GOM0351E CONSOLE OPEN FAILED *rc*

Explanation: An attempt was made to open a console, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0352E CONSOLE QUERY FAILED *rc*

Explanation: An attempt was made to query a console, however, this attempt failed with return code *rc*.

System action: Operation Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0353E CONSOLE DEVICE NOT SUPPORTED ***hex-data***

Explanation: The device being used when executing VIEWSPL is not supported. The hex-data describes the console attributes.

System action: Operations Manager terminates.

User response: No action is required.

GOM0354E CONSOLE WRITE FAILED ***rc***

Explanation: An attempt was made to write to a console, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0355E CONSOLE READ FAILED ***rc***

Explanation: An attempt was made to read a console, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM0356E SPOOL FILE NOT FOUND OR NOT VIEWABLE FOR USER ***userid*** **FILE** ***fileid***

Explanation: The spool file requested was not found or is not a format viewable by VIEWSPL.

System action: The program continues.

User response: No action is required.

GOM0358W SPOOL ACCESS FOR ***data-1*** **CLASS** ***data-2*** **FAILED** ***data-3***

Explanation: An attempt to access spool data failed. The data items list the error information.

System action: The program continues.

User response: No action is required.

| **GOM0359E RETURN CODE** ***rc*** **FROM** ***cmd***

| **Explanation:** The command *cmd* returned a non-zero
| return code *rc*.

| **System action:** Processing continues.

| **User response:** None required.

GOM0401I SPOOL USE: MONITOR ***smonid*** **SPACE** ***nn*** **PERCENT, FILES** ***nn*** **PERCENT**

Explanation: A USAGE or INCREASE condition was encountered and the specified percentage of data space and file count was reached.

System action: The program continues.

User response: No action is required.

GOM0402I SPOOL CHG: MONITOR ***smonid*** **SPACE** ***nn*** **PERCENT, FILES** ***nn*** **PERCENT**

Explanation: A USAGE or INCREASE condition was encountered and the specified percentage of data space and file count used has changed.

System action: The program continues.

User response: No action is required.

GOM0403I SPOOL ALERT: MONITOR ***smonid nn*** **CONDITION REACHED**

Explanation: A USAGE or INCREASE condition was encountered for the specified spool usage monitor.

System action: The program continues.

User response: No action is required.

GOM0404E UNABLE TO COMPUTE SPOOL PERCENTAGES

Explanation: An attempt was made to execute the required commands to monitor spool conditions and a failure occurred.

System action: Operations Manager cannot monitor spool usage conditions.

User response: Ensure that the CP directory for GOMMAIN has PRIV class D.

GOM0405I SPOOL MONITOR ***smonid*** **EXECUTION LIMIT EXCEEDED**

Explanation: The spool monitor *smonid* was defined with a `LIMIT` operand. The start of the spool monitor's `ACTION` operand is being suppressed because the rule's `LIMIT` operand count per interval is exceeded. The spool monitor's `ACTION` operand will start when the `LIMIT` operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0411E TCP/IP OPERATION ***xxxxxxxx*** **TO** ***tcpvmid*** **SOCK** ***xxxx*** **FAILED AT OFFSET** ***xxxxxxxx***

Explanation: A TCP/IP operation failed to start. The operations type, the VMID of the TCPIP machine, the socket number, and offset in the module are listed.

System action: The program continues.

User response: Determine the cause of the error and correct the problem.

GOM0412E TCP/IP OPERATION *xxxxxxxx* **TO** *tcpvmid* **SOCK** *xxxx* **FAILED** *xxxxxxxx* **AT OFFSET** *xxxxxxxx*

Explanation: A TCP/IP operation did not complete correctly. The operation type, the VMID of the TCPIP machine, the socket number, the return code, and offset in the module are listed.

System action: The program continues.

User response: Determine the cause of the error and correct the problem.

GOM0413E FSOPEN FAILED *rc* **FOR TRANSLATION TABLE** *filename filetype*

Explanation: A file operation for the specified translation table occurred.

System action: The program continues.

User response: Determine the cause of the error and correct the problem.

GOM0414E FSREAD FAILED *rc* **FOR TRANSLATION TABLE** *filename filetype*

Explanation: A file operation for the specified translation table occurred.

System action: The program continues.

User response: Determine the cause of the error and correct the problem.

GOM0415E FSCLOSE FAILED *rc* **FOR TRANSLATION TABLE** *filename filetype*

Explanation: A file operation for the specified translation table occurred.

System action: The program continues.

User response: Determine the cause of the error and correct the problem.

GOM0431I MACHINE MONITOR *mmonid* **EXECUTION LIMIT EXCEEDED**

Explanation: The machine monitor *mmonid* was defined with a `LIMIT` operand. The start of the machine monitor's `ACTION` operand is being suppressed because the rule's `LIMIT` operand count per interval is exceeded. The machine monitor's `ACTION` operand will start when the `LIMIT` operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0441I SCHEDULE *schdid* **EXECUTION LIMIT EXCEEDED**

Explanation: The schedule *schdid* was defined with a `LIMIT` operand. The start of the schedule's `ACTION` operand is being suppressed because the rule's `LIMIT` operand count per interval is exceeded. The schedule's `ACTION` operand will start when the `LIMIT` operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0451I PAGE USE: MONITOR *pmonid* **SPACE** *nn* **PERCENT**

Explanation: A `USAGE` or `INCREASE` condition was encountered and the specified percentage of page space was reached.

System action: The program continues.

User response: No action is required.

GOM0452I PAGE CHG: MONITOR *pmonid* **SPACE** *nn* **PERCENT**

Explanation: A USAGE or INCREASE condition was encountered and the specified percentage of page space was reached.

System action: The program continues.

User response: No action is required.

GOM0453I PAGE ALERT: MONITOR *pmonid nn* **CONDITION REACHED**

Explanation: A USAGE or INCREASE condition was encountered for the specified page usage monitor.

System action: The program continues.

User response: No action is required.

GOM0454E UNABLE TO COMPUTE PAGE PERCENTAGES

Explanation: An attempt was made to issue the required commands to monitor page conditions and a failure occurred.

System action: Operations Manager cannot monitor page usage conditions

User response: Ensure that the CP directory for GOMMAIN has PRIV class D.

GOM0455I PAGE MONITOR *pmonid* EXECUTION LIMIT EXCEEDED

Explanation: The page space monitor *pmonid* was defined with a `LIMIT` operand. The start of the page space monitor's `ACTION` operand is being suppressed because the rule's `LIMIT` operand count per interval is exceeded. The page space monitor's `ACTION` operand will start when the `LIMIT` operand interval expires.

System action: The program continues.

User response: No action is required.

GOM0461I IDLE MONITOR *imonid* EXECUTION LIMIT EXCEEDED

Explanation: The idle monitor *imonid* was defined with a `LIMIT` operand. The start of the idle monitor's `ACTION` operand is suppressed because the idle monitor's `LIMIT` operand count per interval has exceeded. The idle monitor's `ACTION` operand will start with the `LIMIT` operand interval ends.

System action: The program continues.

User response: No action is required.

GOM0462E IDLE MONITOR *imonid resource-type resource-id* NOT FOUND

Explanation: The idle monitor *imonid* could not locate the recourse to monitor.

System action: Operations Manager cannot monitor the resource activity.

User response: Define the resource to monitor.

GOM0899I OPERATIONS MANAGER V1R4 BUILT *yy/mm/dd hh:mm*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you the date and time of the Operations Manager build you are running.

System action: The program continues.

User response: No action is required.

GOM0900I *nn* RULE(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many rules are defined.

System action: The program continues.

User response: No action is required.

GOM0902I *nn* MACHINE MONITOR(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many monitored virtual machines are defined.

System action: The program continues.

User response: No action is required.

GOM0903I *nn* SCHEDULE(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many schedules are defined.

System action: The program continues.

User response: No action is required.

GOM0904I *nn* ACTION(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many actions are defined.

System action: The program continues.

User response: No action is required.

GOM0905I *nn* ACTION(S) SCHEDULED FOR EXECUTION

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many actions are scheduled for execution.

System action: The program continues.

User response: No action is required.

GOM0906I *n* GROUP(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many groups are defined.

System action: The program continues.

User response: No action is required.

GOM0907I *nn* DATE(S) DEFINED

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many holidays are defined.

System action: The program continues.

User response: No action is required.

GOM0908I ***nn*** **SPOOL MONITOR(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many spool monitors are defined.

System action: The program continues.

User response: No action is required.

GOM0909I ***nn*** **EVENT MONITOR(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many event monitors are defined.

System action: The program continues.

User response: No action is required.

GOM0910I ***nn*** **PAGE MONITOR(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many page space monitors are defined.

System action: The program continues.

User response: No action is required.

GOM0911I **IDLE MONITOR(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many idle monitors are defined.

System action: The program continues.

User response: No action is required.

GOM0920I ***nn*** **SERVICE MACHINE(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many service machines are defined.

System action: The program continues.

User response: No action is required.

GOM0921I ***nn*** **USER(S) AUTHORIZED**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many users were granted authority.

System action: The program continues.

User response: No action is required.

GOM0922I ***nn*** **IUCV CONNECTION(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates the number of IUCV connections.

System action: The program continues.

User response: No action is required.

GOM0923I ***nn*** **DATA SPACE SIZE DEFINITION(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many data space definitions are defined.

System action: The program continues.

User response: No action is required.

GOM0924I ***nn*** **COMBINED VIEW(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many combined views are defined.

System action: The program continues.

User response: No action is required.

GOM0925I ***nn*** **USER CONSOLE(S) RECORDING**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many user consoles are recording.

System action: The program continues.

User response: No action is required.

GOM0926I ***nn*** **TCP/IP APPLICATION(S) DEFINED**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many TCP/IP applications are defined.

System action: The program continues.

User response: No action is required.

GOM0940I **RULE** ***rule-name*** **TRIGGERED** ***nn*** **TIME(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times the rule *rule-name* was triggered.

System action: The program continues.

User response: No action is required.

GOM0942I MACHINE MONITOR *mmonid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times the monitored virtual machine was triggered.

System action: The program continues.

User response: No action is required.

GOM0943I SCHEDULE *schdid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times the schedule *schdid* was triggered.

System action: The program continues.

User response: No action is required.

GOM0944I ACTION *actnid* EXECUTED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times the action *actnid* was executed.

System action: The program continues.

User response: No action is required.

GOM0945I ACTION *actnid* SCHEDULED FOR EXECUTION (RULE | SCHEDULE | MONITOR/ *userid* | *schedule-name* | *monitor name*)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you when the action is scheduled for execution and what triggered the action.

System action: The program continues.

User response: No action is required.

GOM0946I GROUP *groupid* INCLUDES USER *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you the user ID that is included in this group.

System action: The program continues.

User response: No action is required.

GOM0947I DATE *dateid* FROM *yyyy/mm/dd-hh:mm* TO *yyyy/mm/dd-hh:mm*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you the date and time range for the defined holiday.

System action: The program continues.

User response: No action is required.

GOM0948I SPOOL MONITOR *smonid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times the specified spool monitor was triggered.

System action: The program continues.

User response: No action is required.

GOM0949I EVENT MONITOR *emonid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times an event monitor was triggered.

System action: The program continues.

User response: No action is required.

GOM0950I PAGE MONITOR *pmonid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many times a page space monitor was triggered.

System action: The program continues.

User response: No action is required.

GOM0951I IDLE MONITOR *imonid* TRIGGERED *nn* TIME(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message indicates how many times an idle monitor was triggered.

System action: The program continues.

User response: No action is required.

GOM0960I SERVICE MACHINE *srvmid* **EXECUTED** *nn* **COMMAND(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many commands the specified service machine has executed.

System action: The program continues.

User response: No action is required.

GOM0961I USER *userid* **AUTHORIZED FOR:**

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by the authorization(s) for *userid*.

System action: The program continues.

User response: No action is required.

GOM0962I USER *userid alias* **PATHID** *pathid* **MSGLIMIT** *nnn* **MSGS** *nnn*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about IUCV connection information for *userid*, *alias*, *pathid*, the allowed number of outstanding messages, and the count of messages exchanged.

System action: The program continues.

User response: No action is required.

GOM0963I DATA SPACE FOR CONSOLE *pattern* **SIZE** *nn***M**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about defined data space size definitions.

System action: The program continues.

User response: No action is required.

GOM0964I COMBINED VIEW *viewid* **INCLUDES USER** *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about combined views.

System action: The program continues.

User response: No action is required.

GOM0965I CONSOLE *userid* **ASIT** *xxxxxxxxxxxxxxxx* **ALET** *xxxxxxxx* **SIZE** *nn***M MSGS** *msg-count*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about consoles being recorded.

System action: The program continues.

User response: No action is required.

GOM0966I NAME *tcpaid* **USER** *tcpip alias* **APPL** *applid* **SOCKET** *nn*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about TCP/IP connections and processing applications.

System action: The program continues.

User response: No action is required.

GOM0967I ADDR *nnn.nnn.nnn.nnn* **PORT** *nn*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about TCP/IP connections and processing applications.

System action: The program continues.

User response: No action is required.

GOM0968I ADDR *hhhh:hhhh:hhhh:hhhh:hhhh:hhhh:hhhh:hhhh* **SCOPE** *nn* **PORT** *nn*

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you about TCP/IP connections and processing applications.

System action: The program continues.

User response: No action is required.

GOM0970I USER *userid* **SPOOL FILE ID** *fileid* **IS USING** *nn* **SPOOL BLOCKS**

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you the number of spool blocks used by a file belonging to the specified user.

System action: The program continues.

User response: No action is required.

GOM0971I USER *userid* HAS *nn* SPOOL FILES USING *nn* SPOOL BLOCKS

Explanation: The STATUS command outputs various information about the current execution environment. This message tells you how many spool files and spool blocks for the specified user.

System action: The program continues.

User response: No action is required.

GOM1050E ADDRESS SPACE QUERY FAILED *rc*

Explanation: An attempt was made to query an address space, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CP ADRSPACE in the z/VM documentation for a list of return code descriptions.

GOM1051E NUCLEUS DROP FAILED *rc*

Explanation: An attempt was made to drop a nucleus extension, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS NUCEXT in the z/VM documentation for a list of return code descriptions.

GOM1052E NUCLEUS LOAD FAILED *rc*

Explanation: An attempt was made to load a module, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS NUCEXT in the z/VM documentation for a list of return codes description.

GOM1053E NUCLEUS QUERY FAILED *rc*

Explanation: A query attempt was made, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS NUCEXT in the z/VM documentation for a list of return code descriptions.

GOM1054E EXTERNAL HANDER SET FAILED *rc*

Explanation: A set attempt was made, however, this attempt failed with a return code of *rc*.

System action: Operations Manager terminates.

User response: See CMS HNDEXT in the z/VM documentation for a list of return code descriptions.

GOM1099S UNRECOVERABLE ERROR ENCOUNTERED PSW=*xxxxxxxxxxxxxxxx* EP=*xxxxxx* MCB=*xxxxxx*

Explanation: An unrecoverable error condition was encountered.

System action: Operations Manager terminates.

User response: No action is required.

GOM1101E ABNEXIT SET FAILED, RC=*rc*

Explanation: A set attempt was made, however, this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS ABNEXIT in the z/VM documentation for a list of return code descriptions.

GOM1102E ABNEXIT CLR FAILED, RC=*rc*

Explanation: A clear attempt was made, however this attempt failed with return code *rc*.

System action: Operations Manager terminates.

User response: See CMS ABNEXIT in the z/VM documentation for a list of return code descriptions.

GOM1111E LOGICAL DEVICE TABLE FULL

Explanation: Too many sessions are active. No new sessions are allowed until some sessions are ended.

System action: The program continues.

User response: End a session.

GOM1112E LOGICAL DEVICE INIT FAILED CC=*cc* RC=*rc*

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM1113E CMSSTACK FAILED *rc*

Explanation: A CMSSTACK operation was made, however, this operation failed with return code *rc*.

System action: The program continues.

User response: See CMS CMSSTACK in the z/VM documentation for a list of return code descriptions.

GOM1114E CONSOLE OPEN FAILED *rc*, TRACE IGNORED

Explanation: A CONSOLE operation failed with return code *rc*.

System action: The program continues.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM1121E HANDLE NOT FOUND

Explanation: An attempt to TERM a session failed because the specified handle was not found.

System action: The program continues.

User response: No action is required.

GOM1122E LOGICAL DEVICE TERM FAILED CC=cc RC=rc

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM1123E CONSOLE CLOSE FAILED *rc*

Explanation: An attempt was made to close the console, however, this attempt failed with return code *rc*.

System action: The program continues.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM1131E HANDLE NOT FOUND

Explanation: An attempt to QUERY a session failed because the specified handle was not found.

System action: The program continues.

User response: No action is required.

GOM1132E CMSSTACK FAILED *rc*

Explanation: A CMSSTACK operation was made, however, the operation failed with return code *rc*.

System action: The program continues.

User response: See CMS CMSSTACK in the z/VM documentation for a list of return code descriptions.

GOM1133E FSOPEN FAILED *rc*

Explanation: An FSOPEN operation failed with return code *rc*.

System action: The program continues.

User response: See CMS FSOPEN in the z/VM documentation for a list of return code descriptions.

GOM1134E FSWRITE FAILED *rc*

Explanation: An FSWRITE operation failed with a return code of *rc*.

System action: The program continues.

User response: See CMS FSWRITE in the z/VM documentation for a list of return code descriptions.

GOM1135E FSCLOSE FAILED *rc*

Explanation: An FSCLOSE operation failed with a return code of *rc*.

System action: The program continues.

User response: See CMS FSCLOSE in the z/VM documentation for a list of return code descriptions.

GOM1141E HANDLE NOT FOUND

Explanation: An attempt to INPUT a session failed because the specified handle was not found.

System action: The program continues.

User response: No action is required.

GOM1142E CONSOLE WRITE FAILED *rc*

Explanation: A CONSOLE operation failed with a return code of *rc*.

System action: The program continues.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM1151E LOGICAL DEVICE WAS TERMINATED

Explanation: The session for a logical device was terminated by CP.

System action: The program continues.

User response: No action is required.

GOM1152E LOGICAL DEVICE ACCEPT FAILED CC=*cc* RC=*rc*

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM1153E LOGICAL DEVICE STATUS FAILED CC=*cc* RC=*rc*

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM1154E WRITE CCW OPERATION CODE *xx* NOT VALID

Explanation: A CCW with operation code *xx* was received. The code *xx* was not recognized code.

System action: The program continues.

User response: No action is required.

GOM1155E CONSOLE WRITE FAILED *rc*

Explanation: A CONSOLE operation failed with return code *rc*.

System action: The program continues.

User response: See CMS CONSOLE in the z/VM documentation for a list of return code descriptions.

GOM1156E LOGICAL DEVICE PRESENT FAILED CC=*cc* RC=*rc*

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM1157E STRUCTURED FIELD ERRORS SF=*data*

Explanation: An unsupported structured field was encountered. The field in error is displayed.

System action: The program continues.

User response: No action is required.

GOM1158E DATA STREAM ERROR DATA=*data*

Explanation: An unsupported data stream was encountered. The data stream in error is displayed.

System action: The program continues.

User response: No action is required.

GOM1181E LOGICAL DEVICE PRESENT FAILED CC=*cc* RC=*rc*

Explanation: A DIAG 007C failure has occurred.

System action: The program continues.

User response: See CP Diagnose 007C in the z/VM documentation for a list of return code descriptions.

GOM2930I LAST TRIGGERED *date time*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists a rule, a schedule, or a monitor’s last trigger date and time.

System action: Processing continues.

User response: None required.

GOM2931I LAST EXECUTION COMPLETE *date time*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists an action’s last execution date and time.

System action: Processing continues.

User response: None required.

GOM2932I MONITOR *resource-type resource-id* TO OCCUR *nn* TIME(S) WITHIN *nn* MINUTE(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type, ID, and expected execution occurrences of a resource.

System action: The program continues.

User response: No action is required.

GOM2933I EVENT CLASS *classes*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type of an event monitor.

System action: The program continues.

User response: No action is required.

GOM2934I EVENT TYPE *events*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type of an event monitor.

System action: The program continues.

User response: No action is required.

GOM2935I SUBTRACT *nnn* FROM LINE SUPPRESS COUNT

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the line suppression value adjustment if the rule is triggered.

System action: The program continues.

User response: No action is required.

GOM2936I ADD *nnn* **TO LINE SUPPRESS COUNT**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the line suppression value adjustment if the rule is triggered.

System action: The program continues.

User response: No action is required.

GOM2937I SET LINE SUPPRESS COUNT TO *nnn*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the line suppression value adjustment if the rule is triggered.

System action: The program continues.

User response: No action is required.

GOM2938I SUPPRESS NEXT *nnn* **LINES**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current value of the line suppression count for a console.

System action: The program continues.

User response: No action is required.

GOM2939I ESMPREF(*esmprefix***)**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current DEFOPTN ESMPREF.

System action: The program continues.

User response: No action is required.

GOM2940I EXECUTION ENV OVERRIDE env

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type for an event monitor.

System action: The program continues.

User response: No action is required.

GOM2941I EXECUTION ENV CAN BE OVERRIDDEN

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type for an event monitor.

System action: The program continues.

User response: No action is required.

GOM2942I EXECUTION SUPPRESSED *count* **TIME(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the type for an event monitor.

System action: The program continues.

User response: No action is required.

GOM2943I EXECUTION LIMIT IS *count* **OCCURRENCE(S) WITHIN** *interval nnn*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the *count* and *interval* execution limits of a rule, schedule, or monitor. The interval amount, *nnn*, can be any of the following: .

- *nnn* DAY(S), *nn* HOUR(S), *nn* MINUTE(S), *nn* SECOND(S)
- *nn* HOUR(S), *nn* MINUTE(S), *nn* SECOND(S)
- *nn* MINUTE(S), *nn* SECOND(S)
- *nn* SECOND(S)

System action: The program continues.

User response: No action is required.

GOM2945I EXCLUDE GROUP *groupid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the excluded group for a rule.

System action: The program continues.

User response: No action is required.

GOM2946I EXCLUDE USER *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the excluded user for a rule.

System action: The program continues.

User response: No action is required.

GOM2947I AUTHCMD(Y|N)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current setting for DEFOPTN AUTHCMD.

System action: The program continues.

User response: No action is required.

GOM2948I SYMBOLS(*abc*)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current setting for DEFOPTN SYMBOLS.

System action: The program continues.

User response: No action is required.

GOM2949I DSTADJ(Y|N)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current setting for DEFOPTN DSTADJ.

System action: The program continues.

User response: No action is required.

GOM2950I MIXCASE(Y|N)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current setting for DEFOPTN MIXCASE.

System action: The program continues.

User response: No action is required.

GOM2951I HLDATTR(tttt,a,h,xat,clr)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the setting for DEFOPTN HLDATTR.

System action: The program continues.

User response: No action is required.

GOM2952I ESM(Y|N)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the current setting for DEFOPTN ESM.

System action: The program continues.

User response: No action is required.

GOM2953I ALTERNATE SECLABEL *seclabel*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the ALTSECLB for an action.

System action: The program continues.

User response: No action is required.

GOM2954I ALTERNATE USERID *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the ALTUSER for an action.

System action: The program continues.

User response: No action is required.

GOM2955I EXCLUDE "*string***" BETWEEN COLUMNS** *begcol* **AND** *endcol*

Explanation: The STAUS command outputs various information about the current execution environment. This message lists string matching exclusion information for a RULE.

System action: The program continues.

User response: No action is required.

GOM2956I MATCH "*string***" BETWEEN COLUMNS** *begcol* **AND** *endcol*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists string matching information for a RULE.

System action: The program continues.

User response: No action is required.

GOM2957I GROUP *groupid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists *groupid* information for a RULE.

System action: The program continues.

User response: No action is required.

GOM2958I USER *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists *userid* information for a RULE.

System action: The program continues.

User response: No action is required.

GOM2959I INTERVAL WHEN(*interval***)**

Explanation: The STATUS command outputs various information about the current execution environment. This message appears when using the STATUS DETAIL(SCHEDULE) command and lists interval information from the input on the DEFSCHD command.

System action: The program continues.

User response: No action is required.

GOM2960I INTERVAL EVERY(*interval*)

Explanation: The STATUS command outputs various information about the current execution environment. This message appears when using the STATUS DETAIL(SCHEDULE) command and lists interval information from the input on the DEFSCHD command.

System action: The program continues.

User response: No action is required.

GOM2961I NEXT RUN *CCYY/MM/DD hh:mm*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the next execution time information for a resource.

System action: The program continues.

User response: No action is required.

GOM2962I CURRENTLY ACTIVE

Explanation: The STATUS command outputs various information about the current execution environment. This message tells if a schedule is active.

System action: The program continues.

User response: No action is required.

GOM2963I MAXIMUM DEFERAL *nn*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the maximum deferral time information for a schedule.

System action: The program continues.

User response: No action is required.

GOM2964I *schdid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists conflicting schedules for a schedule.

System action: The program continues.

User response: No action is required.

GOM2965I CONFLICTS WITH SCHEDULE(S) :

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by the conflicts for a schedule.

System action: The program continues.

User response: No action is required.

GOM2966I INCREASE LOW *low* **HIGH** *high*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the low and high increase values for a spool monitor.

System action: The program continues.

User response: No action is required.

GOM2967I USAGE LOW *low* **HIGH** *high*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the low and high usage values for a spool monitor.

System action: The program continues.

User response: No action is required.

GOM2968I NEXT CHECK *CCYY/MM/DD hh:mm*

Explanation: The STATUS command outputs various information about the current execution environment. This message list the next execution time information for a resource.

System action: The program continues.

User response: No action is required.

GOM2969I DEPENDS ON USER *userid* **STS** *status* **(***userid status***)** **{***connector***}**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the dependency information for a machine monitor.

System action: The program continues.

User response: No action is required.

GOM2970I RETRY INTERVAL *nn* **MINUTE(S) RETRY COUNT** *nn*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the retry information for a machine monitor.

System action: The program continues.

User response: No action is required.

GOM2971I DELAY *nn* **MINUTE(S)**

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the delay information for a machine monitor.

System action: The program continues.

User response: No action is required.

GOM2972I INTERVAL *nn* MINUTE(S)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the interval information for a resource.

System action: The program continues.

User response: No action is required.

GOM2973I USER *userid* (*userid status*)

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the user information for a machine monitor.

System action: The program continues.

User response: No action is required.

GOM2974I PARM "*parm*"

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the parm information for a resource.

System action: The program continues.

User response: No action is required.

GOM2975I HOURS *hours eligible for execution*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the hours information for a resource.

System action: The program continues.

User response: No action is required.

GOM2976I DAYS *days eligible for execution*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the days information for a resource.

System action: The program continues.

User response: No action is required.

GOM2977I ACTION *actnid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the action ID information for a resource.

System action: The program continues.

User response: No action is required.

GOM2978I SUSPENDED

Explanation: The STATUS command outputs various information about the current execution environment. This message lists if a resource is suspended from execution.

System action: The program continues.

User response: No action is required.

GOM2979I NEXT ACTION *actnid* DELAY *nn* MINUTES *nn* SECONDS

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the next action information for an action.

System action: The program continues.

User response: No action is required.

GOM2980I COMMAND "*command*"

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the command information for an action.

System action: The program continues.

User response: No action is required.

GOM2981I *attribute*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the input or output actions for an action.

System action: The program continues.

User response: No action is required.

GOM2982I OUTPUT ACTIONS:

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by the output actions for an action.

System action: The program continues.

User response: No action is required.

GOM2983I INPUT ACTIONS:

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by the input actions for an action.

System action: The program continues.

User response: No action is required.

GOM2984I EXECUTION ENV *env*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the execution environment for an action command.

System action: The program continues.

User response: No action is required.

GOM2985I LAST RC=*rc* ELAPSED TIME=*time in ms*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the last action command return code and elapsed time.

System action: The program continues.

User response: No action is required.

GOM2986I *wrkgrpid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the work groups eligible to execute an action command.

System action: The program continues.

User response: No action is required.

GOM2987I PARTICIPATING IN EXECUTION ENV WORK GROUP(S):

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by the work groups eligible to execute an action command.

System action: The program continues.

User response: No action is required.

GOM2988I EXECUTION ENV UNIQUE

Explanation: The STATUS command outputs various information about the current execution environment. This message is listed if a service machine may only execute actions with an env() matching the service name.

System action: The program continues.

User response: No action is required.

GOM2989I EXECUTING ACTION *actnid*

Explanation: The STATUS command outputs various information about the current execution environment. This message is listed if a service is currently executing an action.

System action: The program continues.

User response: No action is required.

GOM2990I NOT READY

Explanation: The STATUS command outputs various information about the current execution environment. This message is listed if a service is not ready to execute actions.

System action: The program continues.

User response: Determine why the service machine is not logged on or not executing GOMSVM.

GOM2991I READY

Explanation: The STATUS command outputs various information about the current execution environment. This message is listed if a service is ready to execute actions.

System action: The program continues.

User response: No action is required.

GOM2992I SPPOL FOR *pattern*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the spool files a user is authorized to view.

System action: The program continues.

User response: No action is required.

GOM2993I CONSOLE FOR *pattern*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the consoles a user is authorized to view.

System action: The program continues.

User response: No action is required.

GOM2994I CONFIGURATION COMMANDS

Explanation: The STATUS command outputs various information about the current execution environment. This message lists if a user is authorized for configuration commands.

System action: The program continues.

User response: No action is required.

GOM2995I CONTROL COMMANDS

Explanation: The STATUS command outputs various information about the current execution environment. This message lists if a user is authorized for control commands.

System action: The program continues.

User response: No action is required.

GOM2996I EXTERNAL SECURITY MANAGER IN USE

Explanation: The STATUS command outputs various information about the current execution environment. This message lists if an External Security Manager is in use for authorizations.

System action: The program continues.

User response: No action is required.

GOM2997I *userid*

Explanation: The STATUS command outputs various information about the current execution environment. This message lists the users viewing a console.

System action: The program continues.

User response: No action is required.

GOM2998I BEING VIEWED BY:

Explanation: The STATUS command outputs various information about the current execution environment. This message is followed by a list of users viewing a console.

System action: The program continues.

User response: No action is required.

GOM2999I STATUS DETAIL COMPLETE

Explanation: The STATUS command outputs various information about the current execution environment. This message is listed when the STATUS DETAIL command output is complete.

System action: The program continues.

User response: No action is required.

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- *IBM Operations Manager for z/VM Program Directory*, GI10-8664
- *RACF V2R1.0 External Security Interface (RACROUTE) Macro Reference*, GC23-3733
- *RACF V1R10 Security Administrator's Guide*, SC28–1340
- *RACF V5R3.0 Security Server Security Administrator's Guide*, SC24–6142
- *z/VM V4R4.0 CMS User's Guide*, SC24-60091
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