

**TOPS-10  
Operator's Command  
Language Reference Manual**

AA-H599C-TB

**October 1988**

This manual describes the commands an operator needs. These include commands to the OPR program, the OPSER program, and the monitor commands that require operator privileges. It also includes the following OPR command subsets: CATALOG, CONFIG, LCP, NCP, QUOTA.

This manual supersedes the manual of the same name, order number AA-H599B-TB, published April 1986.

**Operating System:** TOPS-10 Version 7.04  
**Software:** GALAXY Version 5.1

**digital equipment corporation  
maynard, massachusetts**

**First Printing, July 1982**  
**Revised, April 1986**  
**Revised, October 1988**

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## PREFACE

The TOPS-10 Operator's Command Language Reference Manual describes the following command groups:

- o Operator command language commands (OPR)
- o Disk and tape cataloging commands (CATALOG)
- o System device configuration commands (CONFIG)
- o LAT control program commands (LCP)
- o DECnet network control program commands (NCP)
- o Disk space quota commands (QUOTA)
- o Operator privileged monitor commands
- o OPSER program commands

Chapter 1 provides an introduction to OPR, the operator command language. Each of the following chapters covers one of the above command groups. For easy reference, the commands in each chapter are arranged in alphabetical order.

This manual is for the beginning operator as well as the experienced operator. It assumes that the reader has SYSTEM, HOST, or REMOTE operator privileges and knows how to log in as an operator.

This manual assumes that you, the operator, have read all or parts of the following manuals:

Getting Started with TOPS-10

TOPS-10 Operator's Guide

TOPS-10/TOPS-20 Operator's Hardware Device and Maintenance Guide

In addition, you may need to read the following manuals to obtain additional information related to the tasks you must perform:

TOPS-10 Software Installation Guide

TOPS-10 User Utilities Manual

TOPS-10 Operating System Commands Manual

TOPS-10 DECnet and PSI System Manager's and Operator's Guide

Local Area Transport (LAT) Architecture Network Manager's Guide

TOPS-10 IBM Emulation/Termination Manual

If you find any errors in this manual, please fill out and mail the Reader's Comment Card found at the back of the manual, or use a separate sheet of paper and address it to:

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All reported errors will be corrected as soon as possible. Updates to this manual can be purchased separately and, when available, can be obtained from the Software Distribution Center.

**Conventions Used in this Manual**

<b>Symbol</b>	<b>Meaning</b>
OPR><u>HELP	What you type is <u>underscored</u> .
<RET>	Press the key labeled RETURN or CR.
<ESC>	Press the key labeled ESC, ESCape, ALT, or PRE.
<CTRL/x>	Press the CTRL and x keys simultaneously.
hh:mm:ss	Specifies a time in twenty-four hour clock format, where hh is hours, mm is minutes, and ss is seconds. For example, 15:00:00 is 1:00 p.m., and 15:15:00 is 1:15 p.m.
dd-mmm-yy	Specifies a date. dd is the day, mmm is the month, yy is the year. For example, 15-Sep-88 is September 15, 1988.

**NOTE**

Commands that specify a node-name as a keyword or argument no longer require that you include double colons after the node name.



## CHAPTER 1

### THE OPERATOR INTERFACE, OPR

#### 1.1 INTRODUCTION TO OPR

The Operator Command Language (OPR) enables you to communicate with the programs that make up the GALAXY batch and spooling system. These programs are:

- o QUASAR, the nucleus of the GALAXY and mountable device allocation systems
- o BATCON, the batch job controller
- o CATALOG, the system catalog manager
- o LPTSPL, the line printer spooler
- o CDRIVE, the card reader spooler
- o SPRINT, the reader interpreter
- o SPROUT, the card punch, paper tape punch, and plotter spooler
- o PULSAR, the label processor for tapes and structures
- o NEBULA, the output job router between DECnet nodes
- o QUEUE, the user interface to submit print and batch jobs

In addition, you use OPR to communicate with programs requesting operator action, such as the PLEASE program, or with users on the system.

The program that receives the OPR commands and communicates with all the other system programs is ORION. ORION also logs messages in the operator's log file, OPERAT.LOG.

#### 1.2 RUNNING OPR

To run OPR, you must have one of the following privileges. (See your system manager to obtain one of these privileges if you do not already have them.)

1. SYSTEM operator privileges, which enable you to control devices and tasks on the host system and on any remote nodes.
2. HOST operator privileges, which enable you to control devices and tasks at your local host system only.

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3. REMOTE operator privileges, which enable you to control devices and tasks at the remote station node where you are located.

The tasks in this chapter and in following chapters assume that you have more than one terminal available to perform them. If you have more than one terminal available to you, you may want to dedicate one terminal to running only OPR, and use another terminal for other tasks, for example, running BACKUP.

The following sections explain how to start and exit from OPR.

### 1.2.1 Starting OPR

To start OPR type the following:

```
.R OPR<RET>
```

```
OPR>
```

If your installation has more than one terminal assigned to its operators, you can run separate OPRs from different terminals. All OPRs work the same way. ORION, OPR's controlling program, can handle an unlimited number of OPRs.

### 1.2.2 Exiting from OPR

To exit from OPR, press <CTRL/Z> or type EXIT. OPR returns your job to monitor command level. The period prompt (.) indicates that you are at monitor command level. For example:

```
OPR>EXIT<RET>
```

### 1.2.3 Issuing OPR Commands to/from Remote Stations

The system operator at the host system has control of all jobs and devices at all nodes within the network system. If you are a Remote Station Operator, you can control only the devices at your remote station. In addition, you have complete control over all active jobs and jobs queued for devices at your node. All your commands default to your location or node. Some OPR commands, however, include the /NODE switch which enables you to send commands to other nodes in the network. The /NODE switch is available with many of the OPR commands described in later sections of this manual. The /NODE switch allows you to specify the logical identifier of any remote station or any node in the network system. The format of the /NODE switch is:

```
/NODE:node-id
```

where the node-id is the number or the name of the remote station.

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### 1.2.4 Multiple Operators on the System

You can have more than one OPR running on the same operating system. ORION keeps track of each OPR and sends the appropriate acknowledgement messages to the OPR who sent the command.

If you have networking software at your installation, messages sent to a node from a user (with the SEND OPR monitor command) are sent to all OPRs running on the node.

You can enable or disable messages displayed at each terminal running OPR. See Section 1.7.1 for information on controlling OPR message output.

### 1.3 OPR COMMAND FEATURES

OPR has features that enable you to:

- o List available commands
- o Use ESCape recognition
- o Obtain help text
- o Reprint faulty commands
- o Continue long command lines

The following sections describe these command features in detail.

In addition, other CTRL/character commands, such as CTRL/R, CTRL/U, and CTRL/W, function at OPR command level as they do at monitor command level.

#### NOTE

These OPR command features are not applicable when OPR is a subjob of OPSER.

#### 1.3.1 Listing Available Commands

To list all available OPR commands, type a question mark (?) to the OPR> prompt. You can type ? whenever you need help with an OPR command. For example:

- o When you type ? while entering a command, OPR lists command keywords, arguments, or switches for the OPR command and then redisplay your OPR command up to the point where you typed the ?.
- o When you type ? after the OPR> prompt, OPR lists the available commands.
- o When you type ? after an OPR command, OPR lists the keywords to that command and redisplay the command.
- o When you type ? after the keyword, OPR lists the values, arguments, and/or switches to that keyword and redisplay the command and keywords up to the point where you typed ?.

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- o When you type ? after an entire OPR command, OPR displays the message "Confirm with carriage return", redisplay your entire command, and waits for you to press the RETURN key.

### Example

After you have started OPR and the system displays the OPR> prompt, type ?.

```
.R OPR <RET>
OPR>? one of the following:
ABORT          ALIGN          BACKSPACE      CANCEL          CLOSE
CONTINUE       DEFINE          DISABLE        DISMOUNT        ENABLE
ENTER          EXIT            FORWARDSPACE  HELP            HOLD
IDENTIFY       LOCK            MODIFY         MOUNT           NEXT
PUSH           RECOGNIZE      RELEASE        REPORT          REQUEUE
RESPOND        RESTRICT       ROUTE          SEND            SET
SHOW           SHUTDOWN       START          STOP            SUPPRESS
TAKE           UNLOCK         UNRESTRICT     WAIT
```

or one of the following:

```
CATALOG        CONFIG          LCP            NCP            QUOTA
```

OPR>

### NOTE

The NCP command applies only if your installation uses DECnet software. See the TOPS-10 DECnet and PSI System Manager's and Operator's Guide for more information about NCP.

The LCP command applies only if your installation uses LAT software. See the LAT Terminal Server Network Manager's Guide for more information about LCP.

### 1.3.2 Using ESCape Recognition

ESCape recognition helps you to enter commands by:

- o Completing command keywords and switches to the point that they become ambiguous with other keywords and switches
- o Allowing you to type shortened versions of commands
- o Providing guide words that prompt you for more information

You can press the ESCape key as soon as you have typed enough characters to uniquely identify a command to OPR. The number of characters necessary for OPR to accept the command varies and requires some experimentation on your part.

### NOTE

The terminal bell rings when you press the ESCape key if you have not typed enough characters to uniquely identify a command. If this happens, type another character and press the ESCape key. Continue to do this until the characters you have typed identify a specific command.

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The following keyword table and dialog illustrate the ESCape command completion feature:

```
DEVICE-A-TABLE-OFF
DEVICE-A-TABLE-ON
DEVICE-B-TABLE-OFF
DEVICE-B-TABLE-ON
```

1. Type D<ESC>.

```
OPR>D<ESC>EVICE-
```

OPR responds by providing "EVICE-" and then beeps.

2. Type A<ESC>.

```
OPR>D<ESC>EVICE-A<ESC>-TABLE-O
```

OPR responds by providing "-TABLE-O" and then beeps.

3. Type F<ESC>.

```
OPR>D<ESC>EVICE-A<ESC>-TABLE-OF<ESC>F
```

OPR responds by providing "F" and completes the keyword, "DEVICE-A-TABLE-OFF".

The following example illustrates the ESCape recognition feature:

1. Type the ABORT command.
2. Press the ESCape key to display the ABORT guide words. (The characters <ESC> are not echoed on your terminal.)

### Example

```
OPR>ABORT<ESC>(current job on)BATCH-STREAM<ESC>(stream number) 0<RET>
10:37:21 Batch-Stream 0 -- Abort request queued --
OPR>
10:37:42 Batch-Stream 0 -- End --
      Job TBUILD Req 145 for HURLEY [33,2623]
OPR>
```

### 1.3.3 Reprinting Faulty Commands

When you issue a correct command to OPR, OPR passes the command to ORION. If the command is incorrect, OPR displays an error message. If you receive an error message, you can retype the entire OPR command, or press <CTRL/H> to reprint the command up to the point where the error occurred.

To use the <CTRL/H> feature do the following:

1. Press <CTRL/H> to redisplay the command up to the point where the error occurred. (The characters <CTRL/H> and <ESC> are not echoed on your terminal.)
2. Enter the correct information.

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### Example

```
OPR>FORWARDSPACE PRINTER<ESC>(unit number) 0 /PAGES:3 <RET>  
? Not confirmed: "3"
```

```
OPR><CTRL/H>FORWARDSPACE PRINTER 0 (unit number) /PAGES:30 <RET>
```

```
OPR>  
13:25:04          Printer 0  -- Forwardspaced 30 Pages --
```

```
OPR>
```

### 1.3.4 Getting Help

The OPR HELP command provides information about specific commands. When you type HELP, followed by an OPR command name, OPR displays the command's function and its format, keywords, arguments, and switches.

The following example illustrates the HELP feature:

If you specify HELP RELEASE, OPR displays the function, format, keywords, and arguments of the RELEASE command.

```
OPR>HELP<ESC>(with) RELEASE <RET>
```

The RELEASE command allows you to release a job request that was held with the HOLD command. The format is:

```
RELEASE keyword
```

where keyword must be one of the following:

```
BATCH-JOBS  
CARD-PUNCH-JOBS  
PAPER-TAPE-PUNCH-JOBS  
PLOTTER-JOBS  
PRINTER-JOBS
```

followed by one of these arguments:

```
<request-id-number>    (for a single job)  
[user name]            (for all jobs of a user)  
*                      (for all job requests)
```

```
OPR>
```

### 1.3.5 Line Continuation

Commands to OPR are often long and cumbersome, especially if you use ESCape recognition. The OPR program enables you to continue a command on the next line. To continue a command line, type a hyphen (-) before you press <RET>. This prevents OPR from processing the line until it reaches a <RET> that is not preceded by a hyphen. (You must include the entire command name, keyword, argument, or switch and value before you type the hyphen.)

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For example, the following command line uses line continuation:

```
OPR>SET TAPE-DRIVE MTA3: INITIALIZE /LABEL-TYPE:ANSI- <RET>
/OWNER:[31,5723]/TAPE-DISPOSITION:HOLD/VOLUME-ID:TAPE01 <RET>
OPR>
```

### 1.4 CONTROLLING SYSTEM EVENTS

OPR enables you to control certain system activities known as "events". These events are:

- o Billing file closure (BILCLS)
- o Scheduled system shutdown (KSYS)
- o ORION log file closure (OPRFIL)
- o Command file execution (TAKFIL)
- o Usage file closure (USGFIL)

You can use the following commands to control system events:

- o CLOSE
- o SET KSYS
- o SET USAGE
- o TAKE

To specify a time, day, or date argument with any of the above commands, use one of the following formats:

NOW	causes the event to occur immediately.
+hh:mm:ss	schedules the event to occur in the number of hours from the current time, as specified by hh:mm:ss. (Specifies a relative time for the event to occur.)
hh:mm:ss	schedules the event to occur at the time specified by hh:mm:ss. (Specifies an absolute time for the event to occur.)
dd-mmm-yy:hh:mm:ss	schedules the event to occur on the date and time specified by dd-mmm-yy:hh:mm:ss.
DAILY hh:mm:ss	schedules the event to occur every day at the time specified by hh:mm:ss.
EVERY "DAY" hh:mm:ss	schedules the event to occur every week on the day and time you specify. DAY specifies a particular day of the week.

Other commands that control system events are the CANCEL and SHOW QUEUES EVENTS commands.

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### 1.5 CONTROLLING FAL

FAL, the File Access Listener, provides network remote access to the TOPS-10 file system, and is an integral part of network communications. FAL makes network file transfers possible in the following ways:

- o It acts as a target for NET (Network File Transfer) programs on other DECnet and ANF-10 hosts.
- o It determines a user's access privileges to a requested file.

You can use the following OPR commands to control the network connections known as FAL-STREAMS:

- o SET
- o START
- o ABORT
- o SHOW
- o SHUTDOWN
- o STOP
- o CONTINUE
- o DEFINE

These commands function much as the commands that control batch streams. For example, to define the type of network (DECnet) with which FAL stream 2 will communicate, use the SET command as follows:

```
OPR>SET FAL-STREAM 2 NETWORK DECNET
OPR>
16:10:48      Fal-Stream 2  -- Set Accepted --
OPR>
```

### 1.6 CONTROLLING NQC STREAMS

The Network Queue Controller (NQC), using the Distributed Queue Service (DQS) protocol, allows output requests to be sent to the output queue of a remote node.

NQC streams control spooling requests for the NEBULA remote queuing software. Current versions of NEBULA run as internal ORION applications that are available with the standard monitor distribution and GALAXY CUSPs. However, in order to implement remote queuing, your system must be running DECnet-10 Version 3 and the remote queuing node must be a VAX/VMS system running DQS software Version 1.0, or later.

You can use the following OPR commands to control NQC streams:

- o ABORT                   - Terminates active NQC stream requests
- o CONTINUE               - Continues stopped NQC stream requests
- o DEFINE                 - Defines network nodes and remote queues for NQC streams.



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- o SET - Sets NQC parameters
- o START - Starts NQC streams
- o SHOW PARAMETERS - Displays NQC stream parameters
- o SHOW STATUS - Displays NQC stream status
- o SHUTDOWN - Shuts down NQC streams
- o STOP - Stops NQC streams

See the TOPS-10 Operator's Guide for more information about controlling NQC streams.

### 1.7 ORION TO OPR MESSAGES

ORION to OPR messages are one of the two types of messages displayed on your OPR terminal, the other type are OPR messages indicating errors in your commands (see Section 1.8). The types of ORION messages displayed are:

- o Error messages showing that ORION does not have the appropriate devices, streams, nodes, or jobs to process a command
- o Messages from jobs that start processing in a stream or on a device
- o Messages from jobs that end processing in a stream or on a device
- o Messages specifying actions you must take for various devices, streams, or jobs
- o Messages to which you must RESPOND
- o Results from TAKE command files

The first eight characters of the message ORION displays is the time stamp. ORION time-stamps each OPR command it accepts and executes, as well as all error messages.

In the following example, ORION displays the time (in hours, minutes, and seconds) that it accepted and executed the SET PRINTER command.

```
OPR><u>SET PRINTER 0 FORMS-TYPE NARROW <RET>
```

```
12:00:00 Printer 0 -- Set Accepted --
```

ORION displays error messages in the same format. In the following example, ORION acknowledges the SHOW MESSAGES command by displaying the information message shown below:

```
OPR><u>SHOW MESSAGES <RET>
```

```
12:00:00 -- No Outstanding Messages --
```

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When a particular job starts to process in a batch stream or on a device, ORION displays a message to notify you that the stream or device is active. For example, ORION displays the following message when a job named TEST begins to process in batch stream 0 for user ZINA:

```
hh:mm:ss          Batch-stream 0  -- Begin --  
                  Job TEST Req #274 for ZINA [27,1234]
```

OPR>

Likewise, when a particular job ends processing, ORION displays a message to notify you that the stream or device is not active and the job has completed. For example, ORION displays the following message when a job named TEST ends the process in batch stream 0 for user ZINA.

```
hh:mm:ss          Batch-stream 0  -- End --  
                  Job TEST Req #274 for ZINA [27,1234]
```

OPR>

### 1.7.1 Controlling OPR Message Output

You may want to control the types of messages displayed at your terminal. For example, if you have multiple terminals running OPR, you can set the OUTPUT-DISPLAY to suit the needs of each OPR. To control OPR message output, enter the ENABLE or DISABLE command followed by the keyword, OUTPUT-DISPLAY, and one or more of the following arguments:

```
ALL-MESSAGES (the default argument)  
BATCH-MESSAGES  
CARD-PUNCH-MESSAGES  
CARD-READER-INTERPRETER-MESSAGES  
FAL-MESSAGES  
MOUNT-MESSAGES  
PAPER-TAPE-PUNCH-MESSAGES  
PLOTTER-MESSAGES  
PRINTER-MESSAGES  
READER-MESSAGES  
USER-MESSAGES
```

The ENABLE and DISABLE commands also have the following three switches. If you do not specify one of these switches with one of the above arguments, the system assumes all three types of messages.

```
/INFORMATION-MESSAGES  
/JOB-MESSAGES  
/OPR-ACTION-MESSAGES
```

Because the default is ALL-MESSAGES, you must disable ALL-MESSAGES then enable the specific types of messages you want to see. For more information about these commands and switches see Chapter 2.

## THE OPERATOR INTERFACE, OPR

### 1.8 OPR ERROR MESSAGE DESCRIPTIONS

OPR error messages are also displayed on your terminal. All OPR error messages begin with "?" and are followed by the message explaining the error. Note that "?" does not represent a fatal error in OPR, as it does in some other system programs.

When you receive an OPR error message, you can type <CTRL/H> to retype your OPR command up to the point where you entered the incorrect keyword, switch, or value and specify the correct input to the command.

Each error message described in this section gives an explanation of the cause of the error message and the possible solution.

- ERROR:            ? **Ambiguous**
- Reason:           You issued an OPR command, but did not complete it. For example, you may have left out the necessary keyword or switch that would make the command execute properly.
- Recovery:         Type <CTRL/H>, or retype the command and then specify the necessary keyword or switch.
- 
- ERROR:            ? **Ambiguous switch or keyword**
- Reason:           Same as above.
- Recovery:         Same as above.
- 
- ERROR:            ? **CONFIRMATION Required**
- Reason:           You gave a command but the command syntax is not valid.
- Recovery:         Check the command to see if you have provided all necessary keywords, arguments, and/or switches. Check that the hardware is available or that the device is ready for use. Then give the command again. (See Chapter 2 for the command's correct keywords, arguments and switches.)
- 
- ERROR:            ? **Device Name name: Does Not Exist**
- Reason:           You specified a device name (name:) in an OPR command that is currently not recognized by the system. Such devices are tape drives or disk drives.
- Recovery:         Type <CTRL/H>, or retype the command and specify a device name that the system acknowledges. Give the SHOW STATUS command to find those devices that the system recognizes.
- 
- ERROR:            ? **Does not match switch or keyword**
- Reason:           You specified a switch or keyword for an OPR command that can not take the switch or keyword specified.
- Recovery:         Type the command again and then specify a valid switch or keyword for that command.

## THE OPERATOR INTERFACE, OPR

**ERROR: ? Filename was not specified**

**Reason:** You specified an OPR command that takes a file specification as a keyword or value to a switch, but did not specify the file name.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the file name.

**ERROR: ? File not found**

**Reason:** You specified an OPR command that takes a file specification as a keyword or value to a switch, but the file was not found.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct file specification.

**ERROR: ? First nonspace character is not a digit**

**Reason:** You specified a keyword or switch value that must be numeric, but the first character is alphabetic or is a special character.

**Recovery:** Type <CTRL/H>, or retype the command and then specify a numeric keyword or switch value with numeric characters.

**ERROR: ? Invalid device terminator**

**Reason:** You specified a device with an illegal character in its name or you did not include the colon (:) at the end of the device name.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the device name with the correct characters and include the colon (:).

**ERROR: ? Invalid HELP command specified**

**Reason:** You specified an invalid OPR command as a keyword to the HELP command.

**Recovery:** Give the HELP HELP command to get a list of valid keywords (OPR commands) to the HELP command.

**ERROR: ? Invalid guide word**

**Reason:** You specified a guide word that does not pertain to the OPR command that you specified, you misspelled the guide word, or you used <ESC> recognition and then typed <CTRL/H> before you pressed <RET>.

**Recovery:** Type <CTRL/H>, or retype the command. If you must have guide words with the OPR command, use recognition with the ESCape key.

## THE OPERATOR INTERFACE, OPR

**ERROR: ? Invalid node name**

**Reason:** You specified a node name or number to the /NODE switch for a node that has not been enabled, does not exist, or has been misspelled.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct node name or number to the /NODE switch. You might have to ENABLE the node before you reissue the command.

**ERROR: ? Invalid OPR command specified**

**Reason:** You specified an invalid command.

**Recovery:** Type a question mark to the OPR prompt to get a list of valid OPR commands.

**ERROR: ? Invalid token found**

**Reason:** You specified an OPR command, such as HOLD or RELEASE, but did not give one of the necessary arguments. The necessary arguments are the request-id-number, the project-programmer number, or an asterisk.

**Recovery:** Type <CTRL/H>, or retype the command and include one of the required arguments to the command.

**ERROR: ? Invalid wildcard designator**

**Reason:** You specified a wildcard character (\* or %) within a file specification for a keyword or switch value.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the file specification without any wildcard characters. OPR/ORION does not accept wildcard characters within a file specification.

**ERROR: ? Negative number improper**

**Reason:** You specified a negative number for a device or stream number. OPR does not accept negative numbers.

**Recovery:** Type <CTRL/H>, or retype the command and then specify a positive integer as a device or stream number.

**ERROR: ? No such filename**

**Reason:** You specified a file name as a keyword or switch value, but the file name does not exist as you specified it.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct file name as the keyword or switch value.

## THE OPERATOR INTERFACE, OPR

**ERROR: ? No such file type**

**Reason:** You specified a file extension as a keyword or switch value, but the file extension does not exist as you specified it.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct file extension as the keyword or switch value.

**ERROR: ? Not a quoted string - does not begin with double quote**

**Reason:** You specified a message text, but did not include it within double quotes ("message text").

**Recovery:** Type <CTRL/H>, or retype the command and then specify the message text within the required double quotes.

**ERROR: ? Not confirmed**

**Reason:** You specified too many keywords or switches to an OPR command. OPR expected a carriage return after one of the keywords or switches specified.

**Recovery:** Type <CTRL/H>; OPR retypes the command up to the point where carriage return is expected. Then press <RET>.

**ERROR: ? Only one file allowed**

**Reason:** You specified the BACKSPACE or FORWARDSPACE command with the /FILE switch and a numeric value greater than 1.

**Recovery:** Type <CTRL/H>; OPR retypes the command up to the point where you entered the number of files. You can then enter 1 or press <RET>. The /FILE switch defaults to 1.

**ERROR: ? Priority not in range**

**Reason:** You specified a priority number in the SET JOB-PRIORITY command that is not in the range from 1 to 63.

**Recovery:** Type <CTRL/H>, or retype the command and then specify a priority number from 1 to 63.

**ERROR: ? Too many characters in node name**

**Reason:** You specified too many characters in a name specification to the /NODE switch. The /NODE name can have only from one to six alphanumeric characters.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct node name for the /NODE switch. The name must be six characters or less.

THE OPERATOR INTERFACE, OPR

ERROR:           ? Value missing in date/time

Reason:           You specified an OPR command that requires an argument  
of date and/or time, such as the SET USAGE command.

Recovery:         Type <CTRL/H>, or retype the command and supply the  
date and/or time as an argument. To check whether the  
date and/or time is needed give the "?" command to list  
your options.





## CHAPTER 2

### OPR COMMAND DESCRIPTIONS

This chapter describes each of the OPR commands in detail. All OPR commands must end with a carriage return (that is, you must press the key labeled RETURN or CR).

There are seven possible headings in each command description. These headings are listed and explained in the following text and are omitted when not applicable to the command:

<b>Function</b>	Contains one or two sentences briefly describing what the command does.
<b>Format</b>	Describes the syntax of the command, including its command name, keywords, switches, and switch values.
<b>Keywords</b>	Describes the attributes or values that must be supplied with the command.
<b>Switches</b>	Describes the attributes that are preceded by a slash (/) and are optional to the command string. Switches that have values can also have default values (supplied by <ESC>).
<b>Arguments</b>	Describes the additional attributes and values that are optional to the command string. An argument that takes a value (or word) can also have a default value (or word) (supplied by <ESC>).
<b>Restrictions</b>	Describes the limitations and peculiarities of the command. It also explains common error messages you can receive while using the command.
<b>Examples</b>	Shows a few common ways to use the command.

## OPR COMMAND DESCRIPTIONS

### ABORT

### ABORT

#### Function

The ABORT command terminates the following types of active requests:

- o input/output device requests
- o batch stream requests
- o FAL stream requests
- o NQC stream requests

#### Format

OPR>ABORT keyword argument /switch<RET>

#### Keywords

BATCH-STREAM	aborts the specified batch stream. A batch stream is a pseudo-terminal that interacts with the system to execute a batch job.
CARD-PUNCH	aborts the specified card punch job.
FAL-STREAM	aborts the specified FAL stream.
NQC-STREAM	aborts the specified NQC stream.
PAPER-TAPE-PUNCH	aborts the specified paper-tape-punch job.
PLOTTER	aborts the specified plotter job.
PRINTER	aborts the specified line printer job.
READER	aborts the specified card reader job. Jobs read through the card reader become job requests in the batch input queue.

#### Arguments

nn	specifies the stream number of the batch, NQC, or FAL stream to be aborted, or the unit number of the input/output device that is currently processing a job. You must specify an argument.
n:m	specifies a range of stream or unit numbers.

**OPR COMMAND DESCRIPTIONS**  
**ABORT**

**Switches**

**/NODE:identifier** specifies a remote node for which the command will be effective. For example, use **/NODE:KL1026** to specify the node named KL1026. If you do not specify a node identifier, your own node is the default. Note that you cannot abort jobs at a remote host node.

**/ERROR-PROCESSING** specifies that any error recovery procedures specified by the user who submitted the batch job will not be ignored.

**/NOERROR-PROCESSING**  
specifies that any error recovery procedures provided by the user who submitted the batch job be ignored when the batch job is aborted.

**/PURGE** aborts the specified job and all output from the job. When you purge a batch-stream job, no log file is printed.

**/REASON:comment** allows you to include a comment explaining why the request has been canceled. This comment appears in the batch log file and at the user's terminal. If the comment is longer than one line, type a hyphen before you press RETURN and continue the comment on the next line. If you press RETURN immediately after the colon, OPR responds with the instruction: ENTER TEXT AND TERMINATE WITH ^Z. You can then enter as many lines of text as necessary. When your comment is complete, press <CTRL/Z>.

**Restrictions**

The only switches available to the READER keyword are the **/NODE** and **/REASON** switches, because a card reader input job does not become a request until the last card (\$EOJ card) has been read.

The only switch available to the NQC-STREAM keyword is **/NODE**.

The **/ERROR-PROCESSING** and **/NOERROR-PROCESSING** switches are valid only with the BATCH-STREAM keyword.

OPR COMMAND DESCRIPTIONS  
ABORT

**Examples**

1. Use the ABORT command to abort a batch stream job with NOERROR-PROCESSING because you were instructed to do so by the user who submitted the job.

```
OPR>ABORT BATCH-STREAM 2 /NOERROR-PROCESSING /REASON:<RET>  
Enter text and terminate with ^Z  
OPERATIONS WAS INSTRUCTED TO DO SO BY user HURLEY<RET>  
^Z
```

```
OPR>  
12:31:05      Batch-stream 2  -- ABORT command queued  --  
              Job TEST09 Req #132 for HURLEY [10,2345]  
              OPERATIONS WAS INSTRUCTED TO DO SO BY user HURLEY  
              with Noerror-processing
```

```
OPR>  
12:31:17      Batch-stream 2  -- End  --  
              Job TEST09 Req #132 for HURLEY [10,2345]  
              -- Job Aborted by Operator  --
```

OPR>

2. Use the ABORT command to abort a line printer job currently printing on printer 1.

```
OPR>ABORT PRINTER 1<RET>
```

```
OPR>  
13:24:56      Printer 1  -- Aborting  --  
              Job BATCH1 Req #37 for HOVSEPIAN [27,3113]
```

```
OPR>  
13:25:12      Printer 1  -- End  --  
              Job BATCH1 Req #37 for HOVSEPIAN [27,3113]  
              -- Job Aborted by Operator  --
```

OPR>

## OPR COMMAND DESCRIPTIONS

### ALIGN

### ALIGN

#### Function

The ALIGN command prints a "forms-alignment" file repeatedly on the line printer so that you can align the paper.

You may have to align special forms for a particular line-printer job, such as payroll checks or invoices. The ALIGN command allows you to adjust the forms and the line printer as many times as necessary to print the job correctly.

#### Format

OPR>ALIGN keyword nn /switch (or) argument<RET>

#### Keyword

PRINTER nn specifies the line printer (output device) unit number (nn) that will print the forms alignment file (for example, 0 for LPT0, 1 for LPT1, and so forth). You must specify the PRINTER keyword and the unit number.

#### Switches

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

/PAUSE:nnnn specifies the time in seconds (nnnn) that the line printer waits between repeats of the particular print job. The default of the /PAUSE switch is 10 seconds.

/REPEAT-COUNT:nnnn specifies the number of times to print the file (starting from the beginning). The default value of the /REPEAT-COUNT is 25.

/STOP specifies that normal printing be resumed and stops the alignment of forms on the line printer.

#### Argument

alignment-filespec

specifies a file to be printed for aligning the forms. The default file specification is SYS:formsname.ALP, where formsname is the name of the form to be aligned, such as NARROW.

**OPR COMMAND DESCRIPTIONS**  
**ALIGN**

This alignment file has a format of one printed page of output that can be repeated on the line printer so that you can align the paper.

**Restrictions**

If you specify the ALIGN command and the alignment file cannot be found, the following error message appears:

```
hh:mm:ss          Printer n -- Alignment Error --  
                  Cannot read ALIGN file 'filespec'
```

If you specify the ALIGN command with the /STOP switch while the print request is printing, the following error message appears:

```
hh:mm:ss          Printer n -- /STOP Illegal --  
                  Alignment not in Progress
```

If you specify the ALIGN command while an alignment is in progress, the following error message appears:

```
hh:mm:ss          Printer n -- Alignment already in Progress --
```

**Examples**

1. Specify line printer 0 in the ALIGN command to align some special forms and specify a repeat-count of 15.

```
OPR><u>ALIGN PRINTER 0 /REPEAT-COUNT:15</u><RET>  
OPR>  
10:12:07          Printer 0 -- Alignment Scheduled --  
OPR>
```

2. Specify line printer 0 in the ALIGN command for forms alignment with the use of the alignment file PAYCHK.ALP. By the default values of the /REPEAT-COUNT and the /PAUSE switches, the ALIGN command repeats the file 25 times with a pause of 10 seconds between repeats.

```
OPR><u>ALIGN PRINTER 0 PAYCHK.ALP</u><RET>  
OPR>  
09:34:12          Printer 0 -- Alignment Scheduled --  
OPR>
```

3. Specify line printer 3 in the ALIGN command for forms alignment with a pause of 30 seconds between repeats. The forms are aligned after one repeat and you stop the alignment of forms on line printer 3.

```
OPR><u>ALIGN PRINTER 3 /PAUSE:30</u><RET>  
OPR>  
10:34:03          Printer 3 -- Alignment Scheduled --  
  
OPR><u>ALIGN PRINTER 3 /STOP</u><RET>  
OPR>  
10:38:29          Printer 3 -- Alignment Discontinued --  
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**BACKSPACE**

**BACKSPACE**

**Function**

The BACKSPACE command reprints pages in the file currently being printed on the line printer.

You may have to backspace a file that is currently being printed on the line printer, if the forms become jammed in the printing mechanism. The BACKSPACE command allows you to backspace the print file so that the pages of the file that were jammed or incorrectly printed can be repeated.

**Format**

OPR>BACKSPACE keyword nn /switch<RET>

**Keywords**

PRINTER nn specifies the line printer (output device) unit number of the line printer that will backspace the file currently being printed (for example, 0 for LPT0, 1 for LPT1, and so forth). You must specify the unit number; there is no default.

**Switches**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

You must specify one of the following switches:

/COPIES:nnnn specifies the number of additional copies to be printed. The number you specify is added to the number of copies that the user queued with the PRINT command. For example, if a user issues the command:

PRINT FOO.BAR/COPIES:25

and you issue the BACKSPACE command with /COPIES:10 while FOO.BAR is being printed on the line printer, the total number of copies printed will be 35.

OPR COMMAND DESCRIPTIONS  
BACKSPACE

/FILE specifies that one file be backspaced when a multi-file PRINT request has been given by a user. For example, if a user issues the command:

```
PRINT FOO1.BAR,FOO2.BAR,FOO3.BAR
```

and you issue the BACKSPACE command with /FILE while FOO3.BAR is being printed on the line printer, FOO2.BAR will be printed again.

/PAGES:nnnn specifies the number of pages to be backspaced for the file that is currently being printed. The /PAGES switch is the default of the BACKSPACE command. If you do not specify either the /COPIES or the /FILE switch, then you must specify the /PAGES switch. The number you specify (nnnn) refers to the physical number of pages and not to the number of disk pages used for storing the file.

**Examples**

1. Specify line printer 0 in the BACKSPACE command to add an additional 15 copies to a print request of 15 copies.

```
OPR>BACKSPACE PRINTER 0 /COPIES:15<RET>  
OPR>
```

```
13:43:53          Printer 0  -- Backspaced 15 Copies --  
OPR>
```

2. Specify line printer 2 in the BACKSPACE command to backspace one file from the file currently being printed.

```
OPR>BACKSPACE PRINTER 2 /FILE<RET>  
OPR>
```

```
11:34:23          Printer 2  -- Backspaced 1 File --  
OPR>
```

3. Specify line printer 1 in the BACKSPACE command to backspace 12 pages from the page currently being printed because of a paper jam.

```
OPR>BACKSPACE PRINTER 1 /PAGE:12<RET>  
OPR>
```

```
10:23:50          Printer 1  -- Backspaced 12 Pages --  
OPR>
```



OPR COMMAND DESCRIPTIONS  
CANCEL

CANCEL

**Function**

The CANCEL command enables you to cancel the following requests:

- o active or waiting job requests
- o tape or structure mount requests
- o event requests

The system assigns request numbers to all user requests. The OPR command SHOW QUEUES displays the requests, the request numbers, and the names of the users who submitted the jobs. To cancel a specific request, supply a request number for the argument. To cancel all requests from a particular user, supply the user's PPN for the argument.

**Format**

OPR>CANCEL keyword argument<RET>

**Keywords**

BATCH-REQUEST	cancels active or waiting batch job requests.
CARD-PUNCH-REQUEST	cancels active or waiting card punch job requests.
EVENT-REQUEST	cancels any of the following active or pending events: <ul style="list-style-type: none"><li>o billing file closure (BILCLS)</li><li>o OPR log file closure (OPRFIL)</li><li>o usage file closure (USGFIL)</li><li>o scheduled system shutdown (KSYS)</li><li>o command file execution (TAKFIL)</li></ul>
MOUNT-REQUEST	cancels tape or structure mount requests. If you specify a structure name, the CANCEL command cancels all requests for that structure.
PAPER-TAPE-PUNCH-REQUEST	cancels active or waiting paper-tape-punch requests.
PLOTTER-REQUEST	cancels active or waiting plotter requests.
PRINTER-REQUEST	cancels active or waiting line printer requests.

OPR COMMAND DESCRIPTIONS  
CANCEL

**Arguments**

request-id-number    cancels a single request as specified by the appropriate keyword for a particular user. The canceled request can be active or waiting.

[PPN]                cancels all requests described by the keyword and made by the given user's project-programmer number [PPN]. This argument cannot be used with the MOUNT-REQUEST keyword.

\*                    cancels all waiting and active requests described by the keyword.

structure-name:     specifies a 1- to 4-character disk structure name that a user has requested you to mount. The name must end with a colon (:). The CANCEL MOUNT-REQUEST command for a structure name cancels all waiting requests for that structure mount. (See the SHOW QUEUES MOUNT-REQUESTS command.)

                      You must cancel dismounted structures separately, using the request-id-number for the argument.

**Switches**

/REASON:comment     allows you to include a comment explaining why the request has been canceled. This comment appears in the batch log file and at the user's terminal. If the comment is longer than one line, type a hyphen before you press RETURN and continue the comment on the next line. If you press RETURN immediately after the colon, OPR responds with the instruction: ENTER TEXT AND TERMINATE WITH ^Z. You can then enter as many lines of text as necessary. When your comment is complete, press <CTRL/Z>.

**Restriction**

You cannot cancel mount requests after the tape or structure has been mounted on the device. If you need to do this, you must ABORT the job and DISMOUNT the tape or structure.

**OPR COMMAND DESCRIPTIONS**  
**CANCEL**

**Examples**

1. Use the CANCEL MOUNT-REQUEST command to cancel all requests for mounting the structure DSKX:. All mount requests for this structure are currently waiting.

```
OPR><u>CANCEL MOUNT-REQUEST DSKX: /REASON:</u><RET>
Enter text and terminate with ^Z
CANNOT FIND STRUCTURE DSKX<RET>
THANK YOU - OPERATIONS^Z
OPR>
15:32:08          -- 3 Mount Requests Canceled --
OPR>
```

2. Use the CANCEL BATCH-REQUEST for all batch requests from user [10,4733].

```
OPR><u>CANCEL BATCH-REQUEST [10,4733]</u><RET>
OPR>
12:09:34          -- 2 Jobs Canceled --
OPR>
```

3. Use the CANCEL PAPER-TAPE-PUNCH-REQUEST to cancel all requests from all users for that device.

```
OPR><u>CANCEL PAPER-TAPE-PUNCH </u><RET>
OPR>
09:34:56          -- 7 Jobs Canceled --
OPR>
```

4. Use the CANCEL EVENT-REQUEST command to cancel a pending ORION log file closure.

```
OPR><u>SHOW QUEUES EVENTS</u><RET>
OPR>
16:06:19          -- System Queues Listing --
```

Event Queue:

Type	Req#	Expiration	Description
BILCLS	20	19-Nov-88 16:59:59	Prime time rates end
OPRFIL	282	19-Nov-88 18:00:00	ORION log file closure
USGFIL	42	19-Nov-88 23:59:30	Usage file closure
OPRFIL	34	20-Nov-88 0:00:00	ORION log file closure
BILCLS	12	20-Nov-88 7:59:59	Discount rates end
* KSYS	21	28-Nov-88 0:00:00	Debug new monitor

There are 6 events in the queue (1 in progress)

```
OPR><u>CANCEL EVENT-REQUEST 282</u>
OPR>
16:06:44          -- 1 Job Canceled --
```

## OPR COMMAND DESCRIPTIONS

### CLOSE

### CLOSE

#### Function

The CLOSE command closes the current ORION log file, renames it, and creates a new log file. The command arguments enable you to specify a date and time to close the ORION log file.

The ORION log file, OPERAT.LOG, records all OPR-to-ORION commands and transactions performed at the operator's console. When you issue the CLOSE command, OPR transfers these commands and transactions to the ORNLOG.nnn file and clears the buffer file, OPERAT.LOG. You can then print the ORNLOG.nnn file to obtain a hard-copy of all the operating processes for a given time period. OPERAT.LOG is now open for more OPR-to-ORION commands and transactions.

You may choose a name other than OPERAT.LOG for the ORION log file at GALGEN time. See the TOPS-10 Software Installation Guide for more information about GALGEN.

#### Format

OPR>CLOSE keyword argument<RET>

#### Keyword

LOG	closes the ORION log file that was created when ORION was started. You must include this keyword. You must use the ENABLE LOGGING command for the logging facility to occur. Use the DISABLE LOGGING command to stop the logging facility. For more information about enabling and disabling the logging facility, see the ENABLE and DISABLE commands.
-----	---

#### Arguments

NOW	closes the ORION log file immediately.
+hh:mm:ss	closes the ORION log file in number of hours, minutes, and seconds that you specify from the current time. The time must be at least five minutes from the current time.
hh:mm:ss	closes the ORION log file at the time you enter for hh:mm:ss.
dd-mmm-yy:hh:mm:ss	closes the ORION log file on the day, month, year, and time that you enter.
DAILY hh:mm:ss	closes the ORION log file every day at the time you enter.

OPR COMMAND DESCRIPTIONS  
CLOSE

EVERY "day" hh:mm:ss

closes the ORION log file every week on the day and time that you enter. "Day" specifies a particular day of the week.

**Example**

Use the CLOSE command to close the ORION log file and open a new log file automatically.

OPR>CLOSE LOG NOW<RET>

OPR>

15:10:33 Event OPRFIL queued, request #426

OPR>

15:10:34 Log file DSKA:OPERAT.LOG[3,3] renamed to DSKA:OPERAT.001[3,3]

OPR>

OPR COMMAND DESCRIPTIONS  
CONTINUE

CONTINUE

**Function**

The CONTINUE command continues the following requests that were stopped using the STOP command:

- o input/output device requests
- o batch stream requests
- o FAL stream requests
- o NQC stream requests

**Format**

OPR>CONTINUE keyword nn /switch<RET>

**Keywords**

BATCH-STREAM	continues the specified batch stream (or range of batch streams). A batch stream is a pseudo-terminal that interacts with the system to execute a batch job.
CARD-PUNCH	continues the specified card-punch (or range of such devices).
FAL-STREAM	continues a specified FAL stream or range of FAL streams. You may not use the /NODE switch with this keyword.
NQC-STREAM	continues a specified NQC stream or range of NQC streams.
PAPER-TAPE-PUNCH	continues the specified paper-tape-punch (or range of such devices).
PLOTTER	continues the specified plotter (or range of such devices).
PRINTER	continues the specified line-printer (or range of such devices).
READER	continues the specified card-reader (or range of such devices).

**OPR COMMAND DESCRIPTIONS**  
**CONTINUE**

**Arguments**

 	nn	specifies the stream number of the batch, NQC, or FAL stream to be continued, or the unit number of the input/output device that has been temporarily stopped. You must specify a stream/unit number.
	n:m	specifies a range of stream/unit numbers. You can specify this range instead of a single stream/unit number. The colon must separate the two numbers. The n represents the low-order number and the m represents the high-order number.

**Switch**

/NODE:identifier specifies a remote node for which the command will be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

**Examples**

1. Use the CONTINUE command to continue the card reader after it was stopped to prevent a card-reader jam.

```
OPR><CONTINUE READER 0<RET>
OPR>
09:23:19      Reader 0  -- Continued --
OPR>
```

2. Use the CONTINUE command to continue a batch stream that was previously stopped.

```
OPR><CONTINUE BATCH-STREAM 2<RET>
OPR>
12:10:12      Batch-stream 2  -- Continued --
OPR>
```

3. Use the CONTINUE command to continue all line printers after they were stopped temporarily.

```
OPR><CONTINUE PRINTER 0:1<RET>
OPR>
11:40:23      Printer 0  -- Continued --
OPR>
11:40:24      Printer 1  -- Continued --
OPR>
```

OPR COMMAND DESCRIPTIONS  
DEFINE FILE-ACCESS

DEFINE FILE-ACCESS

**Function**

The DEFINE FILE-ACCESS command allows you to define FAL accessibility. You can specify the default [PPN] for FAL connections, as well as a list of PPNs or nodes that are not allowed to establish FAL connections.

**Format**

OPR>DEFINE FILE-ACCESS argument<RET>

**Arguments**

DEFAULT-PPN [PPN]

specifies a [PPN] to be used if the user does not include one when initiating a FAL connection.

REJECTION-LIST node name [PPN]

specifies nodes or [PPN]s that may not establish FAL connections.

**Examples**

1. Use the DEFINE FILE-ACCESS command to reject all FAL connections for [1,2].

```
OPR>DEFINE FILE-ACCESS REJECTION-LIST [1,2]
OPR>
11:00:47      -- Rejection list defined for all FAL-Streams --
OPR>
```

2. Use the DEFINE FILE-ACCESS command to use [377777,377777] for FAL connections if no PPN is given.

```
OPR>DEFINE FILE-ACCESS DEFAULT-PPN [377777,377777]
OPR>
11:08:06      -- Default network PPN defined for all FAL-Streams --
OPR>
```



OPR COMMAND DESCRIPTIONS  
DEFINE NETWORK-QUEUE

DEFINE NETWORK-QUEUE

**Function**

The DEFINE NETWORK-QUEUE command allows you to define remote queue names for NQC streams.

**Format**

```
OPR>DEFINE NETWORK-QUEUE queue REMOTE node object unit<RET>
```

**Arguments**

queue	specifies the queue name you are defining.
REMOTE	specifies that the destination node is remote from your node. LOCAL is not implemented.
node	specifies the destination node to which the device is attached.
object	specifies the type of device. The object must be PRINTER or PLOTTER.
unit	specifies the device unit number or name. The default unit is the generic print or plot queue.

**Example**

Use the DEFINE NETWORK-QUEUE command to define a new remote network queue.

```
OPR>DEFINE NODE JUNIPR SERVER
```

```
OPR>
```

```
11:17:49 -- Define for node JUNIPR accepted --
```

```
OPR>
```

```
OPR>DEFINE NETWORK-QUEUE LPS40$QUEUE REMOTE JUNIPR PRINTER 0
```

```
OPR>
```

```
11:26:20 -- Define for network queue LPS40$QUEUE accepted --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**DEFINE NODE**

**DEFINE NODE**

**Function**

The DEFINE NODE command allows you to specify one of the following:

- o A destination server node for NQC streams
- o A printer on a LAT server
- o A DN60 node to perform IBM communications

**NQC Stream Format**

```
OPR>DEFINE NODE node-name SERVER<RET>
```

**NQC Stream Arguments**

node-name	specifies the name of the destination node
SERVER	specifies that the node is for NQC streams.

**LAT-SERVER Format**

```
OPR>DEFINE NODE node-name LAT-SERVER /NODE-NAME:name /switch<RET>
```

**LAT-SERVER Arguments**

node-name	specifies the destination node name of the LAT server.
LAT-SERVER	specifies that the node is a LAT server with a printer.

**LAT-SERVER Switches**

/NODE-NAME	specifies the name of the LAT-SERVER node. This switch is always necessary.
/PORT-NAME	specifies the port name on the LAT-SERVER.
/SERVICE-NAME	specifies the name of the printer service you request on the LAT-SERVER.

**IBM Communications Formats**

```
OPR>DEFINE NODE node-name station mode port line /switch<RET>
```

```
OPR>DEFINE NODE node-name station mode CPU n DL10-PORT n -<RET>  
LINE n /switch<RET>
```

```
OPR>DEFINE NODE node-name station mode CPU n DTE n LINE n -<RET>  
/switch<RET>
```

**OPR COMMAND DESCRIPTIONS**  
**DEFINE NODE**

**IBM Communications Arguments**

node-name	specifies a one- to six-character name of an IBM remote station.
station	specifies a remote station type. Valid stations are:  2780  3780  HASP  The HASP multileaving remote station is the default type.
mode	specifies a host or a remote station with which the IBM node is to communicate. Valid communication modes are:  EMULATION specifies a host.  TERMINATION specifies a remote station.  TERMINATION is the default communications mode.
port	specifies the port number from the front end to the TOPS-10 host.
line	specifies the line number from the front end to the modem communicating with the remote site.
CPU n	specifies which CPU is to communicate.
DL10-PORT n or DTE n	specifies which device is to communicate.
LINE n	specifies the line number from the front end to the modem communicating with the remote site.

After you specify a node name and type, you can use the SET NODE command to change the default parameters for the node. For more information about IBM communications software, see the TOPS-10 IBM Emulation/Termination Manual.

**IBM Communications Switches**

/SIGNON-REQUIRED specifies that the node must send a signon card when starting up or starting a job. This is the default.

/NO-SIGNON-REQUIRED specifies that the node does not have to send a signon card.

**OPR COMMAND DESCRIPTIONS**  
**DEFINE NODE**

**Restrictions**

For a KL10, the port number can be either 11 (for DTE1), 12 (for DTE2), or 13 (for DTE3). For a KS10, the port number can be either 10 (for KMC/DMC line 0) or 11 (for KMC/DMC line 1). For DL10s, the port numbers are in a range from 0 through 7. Never use port 10 on a KL10.

For a KL10, the line number must be from 0 to 5; for a KS10, the line number must be either 0 or 1.

If you specify a port number other than 11, 12, or 13, or a line number greater than 5, either of the following error messages appears:

? First nonspace character is not a digit

? Invalid character in number

**Examples**

1. Use the DEFINE NODE command to define a network server for NQC streams.

```
OPR>DEFINE NODE JUNIPR SERVER
OPR>
11:17:49      -- Define for node JUNIPR accepted --
OPR>
```

2. Use the DEFINE NODE command to define a printer on a LAT server.

```
OPR>DEFINE NODE TLN03 LAT-SERVER/NODE:L12/PORT:LN03
OPR>
11:32:31      -- Define for Node TLN03 Accepted --
OPR>
```

3. Use the DEFINE NODE command to define IBM communications node IBM2.

```
OPR>DEFINE NODE IBM2 HASP EMULATION 11 0<RET>
OPR>
09:18:34      -- Define for Node IBM2 Accepted --
OPR>
```

4. Use the DEFINE NODE command to define a remote station as an IBM 3780 termination node to communicate from the host.

```
OPR>DEFINE NODE IBM3 3780 TERMINATION 12 1<RET>
OPR>
15:32:09      -- Define for Node IBM3 Accepted --
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**DEFINE NODE**

5. Use the DEFINE NODE command to define IBM communications nodes IBM5 and IBM3 on an SMP system.

```
OPR><u>DEFINE NODE IBM5 2780 EMULATION CPU 2 DTE 1 LINE 2</u><RET>
OPR>
10:46:03          -- Define for node IBM5 accepted --
OPR><u>DEFINE NODE IBM3 2780 EMULATION CPU 1 DL10-PORT 0 -</u><RET>
<u>LINE 0</u><RET>
OPR>
10:47:23          -- Define for node IBM3 accepted --
OPR>
```

OPR COMMAND DESCRIPTIONS  
DISABLE

DISABLE

Function

The DISABLE command turns off (or stops) the features listed below.

- o Scheduling of jobs on specified CPUs.
- o The ORION logging facility for recording OPR/ORION commands and transactions.
- o Output display of messages.
- o Queue requests so that users cannot request jobs to be processed on certain types of devices.
- o Structure and volume recognition for structure and tape mounts.

Format

OPR>DISABLE keyword argument /switch<RET>

Keywords

- JOB-SCHEDULING      removes a specified CPU from the system pool of available resources. The CPU may perform I/O, but it does not schedule user jobs.
- LOGGING              disables the centralized logging facility of ORION. (This facility logs all messages passing through the operating system and stores these messages in a log file.) When this facility is disabled, there are no records kept of the messages and interactions between ORION and the system. However, the CTY shows all messages and interactions if you have not DISABLED the OUTPUT-DISPLAY of ALL-MESSAGES at the CTY. This keyword has no additional arguments or switches.
- OUTPUT-DISPLAY      disables the display of specified messages on your console. The message types are the arguments and switches to this keyword.
- QUEUES                disables all users from making queue requests for the specified devices.
- STRUCTURE-RECOGNITION
- specifies that the system should not read the home blocks of all volumes of a structure when it is mounted on a disk drive. The DISABLE STRUCTURE-RECOGNITION command affects all structures to be mounted, but it does not affect currently mounted structures.

**OPR COMMAND DESCRIPTIONS**  
**DISABLE**

**VOLUME-RECOGNITION**

disables volume recognition for labeled tapes and structures. Volume recognition allows you to mount labeled tapes and structures on tape/disk drives without having to identify the tape or structure to the system. When volume recognition is disabled for a disk drive (or all disk drives), you must use the RECOGNIZE command to force the system to recognize the mounted structure. When volume recognition is disabled for a tape drive (or all tape drives), you must use the RECOGNIZE command to force the system to recognize the mounted labeled tape. (The IDENTIFY command is for unlabeled tape mounts.) For more information, see the IDENTIFY and RECOGNIZE commands.

**JOB-SCHEDULING Arguments**

ONLY CPU<sub>n</sub>            removes the specified CPU from the system pool of available resources, and enables other currently disabled CPUs (n = CPU number).

CPU<sub>n</sub>                removes the specified CPU from the system pool of available resources, but does not affect other CPUs (n = CPU number).

**OUTPUT-DISPLAY Arguments**

ALL-MESSAGES        disables the display of all operator, system, user, and error messages on your OPR terminal. ALL-MESSAGES is enabled by default.

BATCH-MESSAGES     disables the display of messages generated during batch job processing.

CARD-PUNCH-MESSAGES

                      disables the display of messages generated by card-punch jobs.

CARD-READER-INTERPRETER-MESSAGES

                      disables the display of messages generated by card reader jobs or batch jobs submitted with the /READER switch.

CATALOG-MESSAGES    disables the display of messages generated by changes to the system tape and disk catalogs.

CONFIG-MESSAGES     disables the display of messages generated by changes to the system configuration.

EVENT-MESSAGES      disables the display of messages generated by special events such as billing file closure, ORION log file closure, scheduled system shutdown, or Usage accounting file closure. See the SHOW QUEUES EVENTS command for more information on these event types.

**OPR COMMAND DESCRIPTIONS**  
**DISABLE**

FAL-MESSAGES	disables the display of messages generated during network file access requests.
LCP-MESSAGES	disables the display of messages generated by the LAT Control Program.
MOUNT-MESSAGES	disables the display of messages generated when users request tape and structure mounts and dismounts.
NCP-MESSAGES	disables the display of messages generated by the DECnet Network Control Program (NCP).
PAPER-TAPE-PUNCH-MESSAGES	disables the display of messages generated by paper-tape-punch jobs.
PLOTTER-MESSAGES	disables the display of messages generated by plotter jobs.
PRINTER-MESSAGES	disables the display of messages generated by line printer jobs.
QUOTA MESSAGES	disables the display of messages generated by changes to the system catalogs.
READER-MESSAGES	disables the display of messages generated by card reader jobs.
USER-MESSAGES	disables the display of messages generated when users make requests to you through the PLEASE program.

**QUEUES Arguments**

ALL-INPUT-OUTPUT	disables all batch, card-punch, paper-tape-punch, plotter, and printer queue requests.
BATCH	disables all batch queue requests.
CARD-PUNCH	disables all card-punch queue requests.
PAPER-TAPE-PUNCH	disables all paper-tape-punch queue requests.
PLOTTER	disables all plotter queue requests.
PRINTER	disables all printer queue requests.

**VOLUME-RECOGNITION Arguments**

DISK-DRIVES	disables volume recognition for all disk drives.
TAPE-DRIVES	disables volume recognition for all tape drives.



**OPR COMMAND DESCRIPTIONS**  
**DISABLE**

**disk-drive-name:** disables volume recognition on the specified disk drive. You must include the colon. The name is in the format of `xxcn:`, where `xx` represents the device type (RP for RP04 or RP07, and RN for RP20); `c` represents the disk controller identification; and `n` is the disk drive number.

**tape-drive-name:** disables volume recognition on the specified tape drive. You must include the colon. The name is in the format of `MTxn:`, where `x` is the tape controller identification and `n` is the tape drive number.

**OUTPUT-DISPLAY Switches**

**/INFORMATION-MESSAGES**

disables the display of informational messages, such as errors that occur due to an application problem. Messages that require no operator response are considered informational messages.

**/JOB-MESSAGES**

disables the display of messages that notify you when a device or stream begins or ends processing a job request.

**/OPR-ACTION-MESSAGES**

disables the display of messages that notify you of action to be performed as requested by a user or a processing job. Messages that require a response, such as PLEASE messages, will be displayed.

If you do not specify one of these switches, all three types of messages are assumed by default.

**Examples**

1. You have scheduled a system shutdown in two hours and your queues have approximately two hours' worth of jobs left to be processed. You disable queue requests so that the queues can be emptied before the system shutdown.

```
OPR><u>DISABLE QUEUES</u><RET>
```

```
OPR>
```

```
16:34:03      -- System Queue's Entry Processing Disabled --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**DISABLE**

2. You have started OPR on a terminal to display only information messages. By default, when OPR is started, all messages are displayed. Therefore, you must disable all messages except information messages.

.R OPR<RET>

OPR><u>DISABLE OUTPUT-DISPLAY ALL-MESSAGES/JOB-MESSAGES</u><RET>

OPR>  
08:45:18       -- OUTPUT DISPLAY of OPR Modified --

OPR><u>DISABLE OUTPUT-DISPLAY ALL-MESSAGES/OPR-ACTION-MESSAGES</u><RET>

OPR>  
08:46:07       -- OUTPUT DISPLAY of OPR Modified --

OPR>

3. You DISABLE volume recognition on tape drive MTA2: before you mount and prepare a scratch tape to be initialized.

OPR><u>DISABLE VOLUME-RECOGNITION MTA2:</u><RET>

OPR>  
14:05:12       Device MTA2 -- Volume Recognition is Disabled --

OPR>

4. Use the DISABLE JOB-SCHEDULING command to disable job-scheduling on CPU1.

OPR><u>DISABLE JOB-SCHEDULING CPU1</u><RET>

OPR>  
16:08:02       -- Job scheduling disabled for specified CPU(s) --

OPR>

**OPR COMMAND DESCRIPTIONS**  
**DISMOUNT**

**DISMOUNT**

**Function**

The DISMOUNT command allows you to dismount (and remove) a structure currently mounted on a disk drive, or a magnetic tape currently mounted on a tape drive.

When you issue the DISMOUNT command for a structure, the structure is queued for removal. If other users have mounted the structure, a message appears listing statistics about the structure and asks you to respond with ABORT to cancel the dismount, or PROCEED to permit the dismount.

When you issue the DISMOUNT command for a tape drive, the tape rewinds itself completely from the take-up wheel, providing that no user is currently using the tape. If a user is using the tape on the specified tape drive, OPR will reject the DISMOUNT command.

**Format**

OPR>DISMOUNT keyword argument /switch<RET>

**Keywords**

STRUCTURE	specifies a disk structure currently mounted on a disk drive.
TAPE-DRIVE	specifies a tape drive that has a magnetic tape mounted and ready on it.

**Arguments**

structure-name:	specifies the logical name of the structure to be dismounted and removed. The colon must be included with the structure name specified. An example of a logical name is DSKC:.
tape-drive-name:	specifies the logical name of the tape drive which currently has the desired tape to dismount on it. The colon must be included with the tape drive name. The name is in the format of MTxn:, where x is the tape controller identification and n is the tape drive number. For example, MTA0: is a magtape device name.

**Switches**

/NOCHECK	specifies that the structure is to be dismounted without regard to the current status and/or users on the structure. With the /NOCHECK switch, the system does not check the mount count of the structure or any other warning conditions and you receive no error messages. The dismount is executed immediately.
----------	--

**OPR COMMAND DESCRIPTIONS**  
**DISMOUNT**

**/REMOVE** specifies that the structure will be removed. With the **/REMOVE** switch, the structure ceases its rotation and comes to a stop automatically, so that you can remove it from the disk drive. Without the specification of the **/REMOVE** switch, you must press the **STOP** button on the drive to stop and remove the structure.

**Restrictions**

When you issue a **DISMOUNT** command for a structure that is in the Active Swapping List, System Search List, Crash Dump List, contains the **STRLST.SYS** file, or has the [3,3] UFD directory, you receive a warning message. This message allows you to respond with either **ABORT** to cancel the dismount, or **PROCEED** to proceed with the dismount. In addition, this warning message appears if any other user has requested this structure mount (refer to Example 1).

If there are other users who have mounted the structure and you really wish to remove the structure, it is recommended that you send a message to all users of the system before you respond with **PROCEED**, to allow all users to complete their tasks on that structure.

You can use the **LOCK** command to prevent other users from accessing the structure. See the **LOCK** command description for more information.

**Examples**

1. Use the **DISMOUNT** command to dismount the structure **MISC**:

```
OPR><u>DISMOUNT</u> <u>STRUCTURE</u> <u>MISC</u>:<RET>
```

```
OPR>
16:29:30 <5> Device MISC: -- Problem removing structure --
Mount count = 1
Type 'RESPOND <number> ABORT' to not dismount structure MISC.
Type 'RESPOND <number> PROCEED' to dismount structure MISC
anyway.
```

```
OPR><u>RESPOND 5</u> <u>PROCEED</u><RET>
```

```
OPR>
16:01:18 -- Structure MISC Dismounted --
From Unit: RBA2
```

```
OPR>
```

2. Use the **DISMOUNT** command to dismount the tape volume currently mounted on tape drive **MTA0**:

```
OPR><u>DISMOUNT</u> <u>TAPE-DRIVE</u> <u>MTA0</u>:<RET>
```

```
OPR>
16:45:01 Device MTA0 -- Unloading --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**ENABLE**

**ENABLE**

**Function**

The **ENABLE** command turns on (or starts) the features listed below.

- o It enables you to turn processors on-line in a multiprocessor system.
- o It enables the **ORION** logging facility for recording **OPR/ORION** commands and transactions.
- o It enables output display of messages previously disabled with the **DISABLE** command.
- o It enables queue requests so that users can request jobs to be processed.
- o It enables structure and volume recognition for structure and tape mounts.
- o It enables timesharing.

**Format**

**OPR>ENABLE** keyword argument /switch<RET>

**Keywords**

<b>JOB-SCHEDULING</b>	adds the specified CPU to the system pool of available resources. The arguments <b>ALL</b> , <b>ONLY</b> <b>CPU</b> n and <b>CPU</b> n specify which CPUs will schedule jobs. <b>JOB-SCHEDULING</b> applies only to Symmetric Multi-Processing systems. To remove a CPU from the system pool of available resources, see the <b>DISABLE</b> <b>JOB-SCHEDULING</b> command.
<b>QUEUES</b>	enables queue requests on the specified input or output devices.
<b>LOGGING</b>	enables the <b>ORION</b> logging facility. The <b>ORION</b> logging facility logs all messages passing through the operating system and stores these messages in a log file. <b>LOGGING</b> keeps records of the messages and interactions between <b>ORION</b> and the system. This keyword has no arguments or switches.
<b>OUTPUT-DISPLAY</b>	enables the display of specified types of messages on your terminal. The message types are the arguments and switches to this keyword.

**OPR COMMAND DESCRIPTIONS**  
**ENABLE**

**QUEUE-REQUESTS** enables all users to make queue requests. With queue requests enabled, a user can submit a batch or card reader job, a card-punch, paper-tape-punch, plotter, or a printer request to the system. This keyword has no arguments or switches.

**TIMESHARING** enables timesharing after a KSYS has occurred. To cancel a pending KSYS event, use the CANCEL EVENT-REQUEST command. For information about setting the KSYS time, see the SET KSYS command.

**STRUCTURE-RECOGNITION**

automatically mounts and makes accessible to users the following structures:

- o spinning structures with volume recognition enabled
- o forcibly RECOGNIZED structures

The ENABLE STRUCTURE-RECOGNITION command affects all structures to be mounted.

**VOLUME-RECOGNITION**

enables volume recognition for tapes and disk packs. Volume recognition allows you to mount labeled tapes and structures on tape/disk drives without having to identify the tape or structure to the system with the RECOGNIZE command. (See the RECOGNIZE command.)

**JOB-SCHEDULING Arguments**

**ALL-CPUs** allows all available CPUs to schedule jobs.

**ONLY CPU<sub>n</sub>** allows only the specified CPU to schedule jobs, and disables all currently enabled CPUs. (n = CPU number)

**CPUn** allows the specified CPU to schedule jobs. (n = CPU number)

**OUTPUT-DISPLAY Arguments**

**ALL-MESSAGES** displays all operator, system, user, and error messages on your OPR terminal. ALL-MESSAGES is the default.

**BATCH-MESSAGES** displays messages generated during batch job processing.

**CARD-PUNCH-MESSAGES** displays messages generated by card-punch jobs.

**OPR COMMAND DESCRIPTIONS**  
**ENABLE**

**CARD-READER-INTERPRETER-MESSAGES**

displays messages generated by card reader jobs or batch jobs submitted with the /READER switch.

**CATALOG-MESSAGES** displays messages generated by changes to the system catalog.

**CONFIG-MESSAGES** displays messages generated by changes to the system configuration.

**EVENT-MESSAGES** displays messages generated by special events such as billing file closure, ORION log file closure, scheduled system shutdown, or Usage accounting file closure. See the SHOW QUEUES EVENTS command for more information on these event types.

**FAL-MESSAGES** displays messages generated during network file access requests.

**LCP-MESSAGES** displays messages generated by the LAT Control Program.

**MOUNT-MESSAGES** displays messages generated when users request tape and structure mounts and dismounts.

**NCP-MESSAGES** displays messages generated by the DECnet Network Control Program.

**PAPER-TAPE-PUNCH-MESSAGES**

displays messages generated by paper-tape-punch jobs.

**PLOTTER-MESSAGES** displays messages generated by plotter jobs.

**PRINTER-MESSAGES** displays messages generated by line printer jobs.

**QUOTA-MESSAGES** displays messages generated by changes to the system catalogs.

**READER-MESSAGES** displays messages generated by card reader jobs.

**USER-MESSAGES** displays messages generated when users make requests to you through the PLEASE program.

**QUEUES Arguments**

**ALL-INPUT-OUTPUT** enables all batch, card-punch, paper-tape-punch, plotter, and printer queue requests.

**BATCH** enables all batch queue requests.

**CARD-PUNCH** enables all card-punch queue requests.

**OPR COMMAND DESCRIPTIONS**  
**ENABLE**

PAPER-TAPE-PUNCH enables all paper-tape-punch queue requests.  
PLOTTER enables all plotter queue requests.  
PRINTER enables all printer queue requests.

**VOLUME-RECOGNITION Arguments**

DISK-DRIVES enables volume recognition on all disk drives.  
TAPE-DRIVES enables volume recognition on tape drives.  
disk-drive-name: enables volume recognition on the specified disk drive. Specify the disk-drive-name in the following format:  
  
          xxcn:  
  
          xx is the device type (RP for RP04 or RP07, and RN for RP20).  
  
          c is the disk controller identification.  
          n is the disk drive number.  
  
tape-drive-name: enables volume recognition for the specified tape drive. You must include the colon. Specify the name in the following format:  
  
          MTxn:  
  
          x is the tape controller identification  
  
          n is the tape drive number.

**OUTPUT-DISPLAY Switches**

**/INFORMATION-MESSAGES**

displays informational messages such as errors that occur due to an application problem. Messages that require no operator response are considered informational messages.

**/JOB-MESSAGES**

displays messages that notify you when a device or stream begins or ends processing a job request.

**/OPR-ACTION-MESSAGES**

displays messages that notify you of action to be performed as requested by a user or a processing job. Messages that require a response, such as PLEASE messages, will be displayed.

If you do not specify one of these switches, all three types of messages are assumed by default.



OPR COMMAND DESCRIPTIONS  
ENABLE

**Examples**

1. You have previously disabled queue requests to allow those requests in the queues to be processed before a shift turnover. You can now enable queue requests.

```
OPR><u>ENABLE QUEUES</u><RET>
```

```
OPR>  
16:34:03      -- System Queue's Entry Processing Enabled --
```

```
OPR>
```

2. You have started OPR on a terminal to display only mount messages. By default, when OPR is started, all messages are displayed. Therefore, you must disable all messages and then enable mount messages.

```
.R <u>OPR</u><RET>
```

```
OPR><u>DISABLE OUTPUT-DISPLAY ALL-MESSAGES</u><RET>
```

```
OPR>  
08:45:18      -- OUTPUT-DISPLAY of OPR Modified --
```

```
OPR><u>ENABLE OUTPUT-DISPLAY MOUNT-MESSAGES</u><RET>
```

```
OPR>  
08:45:47      -- OUTPUT-DISPLAY of OPR Modified --
```

```
OPR>
```

3. You ENABLE volume recognition on tape drive MTA2: after you have disabled volume recognition and initialized some scratch tapes.

```
OPR><u>ENABLE VOLUME-RECOGNITION MTA2:</u><RET>
```

```
OPR>  
15:45:12      Device MTA2 -- Volume Recognition is Enabled --
```

```
OPR>
```

4. Use the ENABLE JOB-SCHEDULING command to enable CPU1 to schedule jobs.

```
OPR><u>ENABLE JOB-SCHEDULING CPU1</u><RET>
```

```
OPR>  
15:54:23      -- Job Scheduling Enabled for Specified CPU(s) --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**ENTER**

**ENTER**

**Function**

The ENTER command allows you to work with the following command subsets:

- o CATALOG
- o CONFIG
- o LCP (LAT Control Program)
- o NCP (Network Control Program)
- o QUOTA

Each of the above has its own set of commands. For more information about these command subsets see Chapter 3. If you are unfamiliar with a command subset, do not attempt to use it until you have read the appropriate section of Chapter 3.

To exit from a command subset use either the RETURN or EXIT commands. The RETURN command returns your job to OPR command level. The EXIT command returns your job to monitor command level.

**Format**

OPR>ENTER keyword<RET>

**Keywords**

CATALOG	enters the CATALOG command subset.
CONFIG	enters the CONFIG command subset.
LCP	enters the LCP command subset.
NCP	enters the NCP command subset.
QUOTA	enters the QUOTA command subset.

**Examples**

1. Type CATALOG to enter the CATALOG command subset.

```
OPR>ENTER CATALOG<RET>
```

```
CATALOG>
```

2. Type RETURN to return to OPR command level

```
CATALOG>RETURN<RET>
```

```
OPR>
```

## OPR COMMAND DESCRIPTIONS

### EXIT

### EXIT

#### Function

The EXIT command allows you to exit OPR command level and return to monitor command level.

To return to OPR command level, you can use the monitor command, CONTINUE, provided that you do not alter memory. See the TOPS-10 Operating System Commands Manual for more information about the CONTINUE command.

#### Format

OPR>EXIT<RET>

#### Restriction

Because OPR takes time to respond to some commands, the immediate action of the EXIT command may prevent you from seeing output from previously issued commands. However, the processing of the previous commands will not be interrupted when you EXIT from OPR.

#### Examples

1. Use the EXIT command to leave OPR and return to monitor command level.

OPR>EXIT<RET>

2. After completing your task with commands that do not alter memory, use the monitor command CONTINUE to return to OPR.

.CONTINUE <RET>

OPR>

OPR COMMAND DESCRIPTIONS  
FORWARDSPACE

FORWARDSPACE

**Function**

The FORWARDSPACE command spaces the print file on the line printer in a forward direction, so that you can skip the printing of a job, file, or page(s). The FORWARDSPACE command allows you to forwardspace the print file so that you can save paper and print only what is needed as output.

You may have to forwardspace a particular file that is currently printing on the line printer if, for example, a user requires only a portion of some printed output.

**Format**

OPR>FORWARDSPACE keyword nn /switch<RET>

**Keyword**

PRINTER nn specifies the line printer (output device) and unit number to forwardspace the forms currently printing (for example, PRINTER 0 for LPT0, PRINTER 1 for LPT1, and so forth). You must specify the PRINTER keyword and unit number.

**Switches**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

You must specify one of the following switches:

/COPIES:nnnn specifies the number of copies to be skipped over printing. The number you specify is subtracted from the number that was queued with the PRINT command. For example, if a user issued the command:

```
PRINT FOO.BAR/COPIES:25
```

and you issue the FORWARDSPACE command with /COPIES:10 while FOO.BAR is printing on the line printer, the total number of copies printed will be 15.

**OPR COMMAND DESCRIPTIONS**  
**FORWARDSPACE**

**/FILE** specifies to forwardspace one file when a multifile PRINT request has been given by a user. For example, if a user issues the command:

```
PRINT FOO1.BAR,FOO2.BAR,FOO3.BAR
```

and you issue the FORWARDSPACE command with /FILE while FOO1.BAR is printing on the line printer, FOO2.BAR starts printing on the line printer. The remaining pages of FOO1.BAR are skipped.

**/PAGES:nnnn** specifies the number of pages to be forwardspaced for the file that is currently being printed. If you do not specify either the /COPIES or the /FILE switch, then you must specify the /PAGES switch. The number you specify (nnnn) refers to the physical number of pages and not to the number of disk pages used to store the file.

**Examples**

1. Specify line printer 0 for the FORWARDSPACE command to skip 15 copies of a print request of 25 copies.

```
OPR><u>FORWARDSPACE PRINTER 0 /COPIES:15<RET>
```

```
OPR>  
12:34:34      Printer 0  -- Forward Spaced 15 Copies --
```

```
OPR>
```

2. Specify line printer 2 with the FORWARDSPACE command to forwardspace one file from the file currently printing.

```
OPR><u>FORWARDSPACE PRINTER 2 /FILE<RET>
```

```
OPR>  
13:21:09      Printer 2  -- Forward Spaced 1 File --
```

```
OPR>
```

3. Use the FORWARDSPACE command to forwardspace 12 pages from the page currently printing on line printer 1 because of a user request.

```
OPR><u>FORWARDSPACE PRINTER 1 /PAGE:12<RET>
```

```
OPR>  
10:20:30      Printer 1  -- Forward Spaced 12 Pages --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**HELP**

**HELP**

**Function**

The HELP command prints a paragraph of text about the OPR command you specify as the keyword to the HELP command.

**Format**

OPR>HELP keyword<RET>

where keyword can be any available OPR command.

**Restrictions**

If you specify an invalid OPR command as a keyword with the HELP command, OPR responds with:

%No help available for "command"

You can then press <CTRL/H> or retype the HELP command and specify a correct OPR command as a keyword with HELP.

If you do not specify any OPR command as a keyword to the HELP command, OPR prints the text for the HELP command.

**Examples**

1. Use the HELP command to get more information about HELP.

OPR>HELP HELP<RET>

The HELP command allows you to display the function, format, arguments, and switches of any OPR command.

The format is:

HELP keyword

where keyword can be any valid OPR command.

A list of OPR commands may be obtained by typing "?" in response to the OPR> prompt.

OPR>? one of the following:

ABORT	ALIGN	BACKSPACE	CANCEL	CLOSE
CONTINUE	DEFINE	DISABLE	DISMOUNT	ENABLE
ENTER	EXIT	FORWARDSPACE	HELP	HOLD
IDENTIFY	LOCK	MODIFY	MOUNT	NEXT
PUSH	RECOGNIZE	RELEASE	REPORT	REQUEUE
RESPOND	RESTRICT	ROUTE	SEND	SET
SHOW	SHUTDOWN	START	STOP	SUPPRESS
TAKE	UNLOCK	UNRESTRICT	WAIT	

or one of the following:

CATALOG	CONFIG	LCP	NCP	QUOTA
---------	--------	-----	-----	-------

OPR>

OPR COMMAND DESCRIPTIONS  
HELP

2. Use the HELP command to get information about the TAKE command.

OPR><u>HELP TAKE</u><RET>

The TAKE command allows you to execute a series of OPR commands from a specified command file.

The format is:

TAKE filespec

where filespec is the name of the command file,

followed by one of these optional switches:

/DISPLAY  
/NODISPLAY

OPR>

**OPR COMMAND DESCRIPTIONS**  
**HOLD**

**HOLD**

**Function**

The HOLD command prevents specified batch or output requests from being processed.

Use the RELEASE command to reschedule jobs that have been held with the HOLD command.

To examine jobs waiting in a queue to be processed, use the SHOW QUEUES command.

**Format**

OPR>HOLD keyword argument<RET>

**Keywords**

BATCH-JOBS	holds one or more jobs in the batch input queue that are waiting to be processed.
CARD-PUNCH-JOBS	holds one or more jobs in the card punch output queue that are waiting to be processed.
PAPER-TAPE-PUNCH-JOBS	holds one or more jobs in the paper-tape-punch output queue that are waiting to be processed.
PLOTTER-JOBS	holds one or more jobs in the plotter output queue that are waiting to be processed.
PRINTER-JOBS	holds one or more jobs in the line printer output queue that are waiting to be processed.

**Arguments**

request-id-number	holds the job specified by the request-identification number.
[PPN]	holds all jobs for a particular user. The [PPN] (project-programmer number) identifies the user.
*	holds all types of jobs specified by the keyword for all users.

**Restrictions**

The HOLD command is effective only for the jobs currently waiting to be processed. Any jobs submitted after the HOLD command was issued are not held.

You cannot hold a job that is currently being processed in a batch stream or on an output device. If you need to stop the job from processing, use the STOP command. For more information, see the STOP command description.



OPR COMMAND DESCRIPTIONS  
HOLD

Examples

1. HOLD a line printer job whose request-id-number is 127. This job will be rescheduled when you issue a RELEASE command for this job.

```
OPR><u>HOLD PRINTER-JOBS 127</u><RET>
```

```
OPR>  
10:54:07          -- 1 Job Held --
```

```
OPR>
```

2. HOLD all card-punch jobs.

```
OPR><u>HOLD CARD-PUNCH-JOBS </u><RET>
```

```
OPR>  
11:34:35          -- 10 Jobs Held --
```

```
OPR>
```

3. HOLD all batch jobs for user [27,5107].

```
OPR><u>HOLD BATCH-JOBS [27,5107]</u><RET>
```

```
OPR>  
12:20:32          -- 15 Jobs Held --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**IDENTIFY**

**IDENTIFY**

**Function**

The IDENTIFY command allows you to service tape mount requests by enabling you to:

- o Satisfy a user tape mount request for an unlabeled tape.
- o Assign a volume identification (volid) for a user who is writing on an unlabeled or labeled tape.

When a user issues a mount request for an unlabeled tape, you must physically locate, mount, and prepare the requested tape on an available tape drive and then identify the tape mount request to the tape drive.

If you have volume recognition enabled and your installation uses labeled tapes, you do not need to use the IDENTIFY command after you mount and ready a tape on a tape drive.

**Format**

OPR>IDENTIFY keyword argument<RET>

**Keyword**

MTxn: specifies the physical tape drive unit, where x is the tape controller identification and n is the tape drive number. You must specify a colon at the end of the unit number.

**Arguments**

REQUEST-ID nn specifies that you are attempting to use the tape on drive MTxn: to satisfy tape-mount-request number nn.

VOLUME-ID volid specifies the volume identifier (volid) of the tape volume you have mounted on the tape drive. The volid can consist of from 1 to 6 alphanumeric characters. If the volid contains nonalphanumeric characters (characters other than A through Z, and 0 through 9), the volid must be enclosed in double quotes.

**NOTE**

If someone mounts a tape and you do not know its identity, you can use the RECOGNIZE command to display the volume identity before you issue the IDENTIFY command. For more information, see the RECOGNIZE command description.

OPR COMMAND DESCRIPTIONS  
IDENTIFY

**Example**

A user requests that you mount an unlabeled tape. After the tape mount request appears, you mount and prepare the tape and then identify the tape to the mount request.

```
OPR>
14:34:20          -- Magtape mount request #43 --
                  User: PERK [10,5211] job# 27
                  Volume-set-name: MTA-DJ7222
```

Volume-ID	Write	Labels	Track	Density
-----	-----	-----	-----	-----
M16Y73	Enabled	No	9	1600

```
OPR>
14:36:12          Device MTA2 -- Unlabeled Volume Mounted --
                  Density 1600 BPI, Write-Enabled
```

```
OPR>IDENTIFY MTA2: REQUEST-ID 43<RET>
```

```
OPR>
14:36:15          Device MTA2 -- Volume M16Y73 Reassigned --
                  User: PERK [10,5211] Job# 27
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
LOCK

LOCK

**Function**

The LOCK command prohibits users from accessing a disk file structure so that you can remove the structure from the system.

If a timesharing job is accessing the structure, the job is refused access after its current program has completed. If a batch job is accessing the structure, the LOCK command takes effect after the batch job is completed.

When the LOCK command takes effect, the structure is unloaded from the disk drive.

See the UNLOCK command for information about reversing the action of the LOCK command.

**Format**

OPR>LOCK arguments /switch<RET>

**Arguments**

structure-name: specifies a 1- to 4-character structure name that is currently known to the system. The structure must be mounted and on-line. The name must end with a colon(:).

date-and-time specifies an optional date and time when the structure will be LOCKed so that users cannot access it. The date is in the format of "mm-dd-yy," where mm is the month, dd is the day, and yy is the year, separated by hyphens. The time is in the format of "hh:mm," where hh is the hour and mm is the minutes, separated by a colon. The time is based on the 24-hour clock.

**Switch**

/NOUNLOAD specifies that the disk pack is to remain mounted and spinning on the disk drive, but the file structure is to be dismounted. This switch is useful when you must perform a task on the structure, such as refreshing it with the ONCE program, without users accessing the disk pack. If this switch is not specified, the structure is unloaded (stops spinning) from the disk drive.

OPR COMMAND DESCRIPTIONS  
LOCK

**Restrictions**

If you specify a structure name not known to the system, you get the following error message:

? No such device

If you specify a structure name that is currently LOCKed, you get the following message:

hh:mm:ss --- Structure name: already LOCKed ---

If you specify an optional date without a time, the time defaults to 00:00:00 (or the start of that date).

If you specify an optional time without a date, the date defaults to the current date. If the time has already occurred for the current date, the time applies to the next day.

**Examples**

1. Use the LOCK command to restrict all users from accessing the structure SYS1: so that you can refresh it.

```
OPR><u>LOCK SYS1: /NOUNLOAD<RET>
```

```
OPR>  
8:23:19 --- Structure SYS1 Locked ---
```

```
OPR>
```

2. Use the LOCK command to restrict all users from accessing DSKZ: after 5 o'clock. When you specify the date or time, no message appears at the OPR terminal until that date or time has occurred.

```
OPR><u>LOCK DSKZ: 3-7-88:17:00:00<RET>
```

```
OPR>  
12:32:09 -- Structure DSKZ --  
LOCK set for 7-Mar-88 17:00:00
```

```
OPR>
```

At 5 o'clock the following messages appear:

```
17:00:02 -- Structure DSKZ Locked --
```

```
OPR>
```

```
17:00:02 -- Structure DSKZ Dismounted --  
From Unit: RPB4
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
MODIFY

MODIFY

**Function**

The MODIFY command allows you to change either of the following:

- o The priority of a job request waiting in a queue for processing
- o The disk unit or structure name in one of the system lists.

When you modify the priority of a job request, you change the importance of that job request in relationship to other jobs in the queues waiting to be processed.

When a user submits a job request for processing, its priority number defaults to a value that is set at GALGEN time. The user who requests the job can set the priority value with the /PRIORITY: switch. However, the MODIFY command permits you to override the priority value for any job request.

When you change a system list, you remove or add a disk-unit name (or structure) to either the active-swapping list, crash-dump list, or system-search list.

NOTE

Consult your system manager before using the MODIFY command to change system lists. Removing or adding a structure or disk unit to any of the lists can greatly affect the performance of your system.

The system lists are determined by the disk HOME blocks when the monitor is brought up. To check the current system lists, use the SHOW SYSTEM command.

**Format**

OPR>MODIFY keyword argument PRIORITY nn<RET>

**Keywords**

ACTIVE-SWAPPING-LIST

modifies the list of disk unit names that the system uses to swap pages of memory.

BATCH-REQUEST

modifies one or more batch job requests waiting in the batch input queue to be processed.

CARD-PUNCH-REQUEST

modifies one or more card-punch job requests waiting in the card-punch output queue to be processed.

CRASH-DUMP-LIST

modifies the list of structure names that the system uses to dump (or copy) all pages of memory during a system crash.

**OPR COMMAND DESCRIPTIONS**  
**MODIFY**

**PAPER-TAPE-PUNCH-REQUEST**

modifies one or more paper-tape-punch job requests waiting in the paper-tape-punch output queue to be processed.

**PLOTTER-REQUEST**

modifies one or more plotter job requests waiting in the plotter output queue to be processed.

**PRINTER-REQUEST**

modifies one or more line-printer job requests waiting in the line-printer output queue to be processed.

**SYSTEM-SEARCH-LIST**

modifies the list of structure names that the system uses to search for file structures and file names.

**Arguments**

**request-id-number** modifies a single request from a particular user, as specified by the appropriate keyword.

**[PPN]** modifies all jobs as specified by the appropriate keyword for a particular user. The **[PPN]** (project-programmer number) identifies the user.

**\*** modifies all requests from all users as specified by the keyword.

**PRIORITY nn** modifies the priority number (nn) that the request(s) will be set to. The number can be in the range from 1 to 63. The higher the number is, the greater the importance of the request. You must specify the word "PRIORITY."

**EXCLUDE** specifies the name of a disk unit (or structure) that is to be removed from one of the above system lists.

**INCLUDE** specifies the name of a disk unit (or structure) that is to be added to one of the above system lists.

**disk-unit-name:** specifies the name of the disk unit to be excluded or included in the active-swapping list. The disk unit name can be from 1 to 4 alphanumeric characters in length, followed by a colon.

**structure:** specifies the name of the file structure to be excluded or included in either the crash-dump list or the system-search list. The structure name can be from 1 to 4 alphanumeric characters in length, followed by a colon. The structure must be mounted before you use the MODIFY command.

OPR COMMAND DESCRIPTIONS  
MODIFY

**Restriction**

You cannot MODIFY the priority of a job request once it has begun to process in a batch stream or on an output device.

If you attempt to exclude or include a disk unit (or structure) name that has not been recognized by the system, you get the following error message:

```
? Unknown device: "device"
```

If you specify a disk unit (or structure) that is already included in the system list, you get the following error message:

```
hh:mm:ss      Device "str" -- Is already in "system" list --
```

where "str" is the disk unit name (or structure name) and "system" is the name of the system list.

**Examples**

1. Modify a printer request so that its priority will be greater than the next request to be printed. Thus, if print request 13 was the next print request and you modify print request 15 to be 50, print request 15 prints before print request 13.

```
OPR>MODIFY PRINTER-REQUEST 15 PRIORITY 50<RET>  
OPR>  
13:54:19      -- 1 Job Modified --  
OPR>
```

2. Modify all card-punch requests for user [27,3223] so that these requests will be output on the card punch before any other card-punch requests.

```
OPR>MODIFY CARD-PUNCH-REQUEST [27,3223] PRIORITY 63<RET>  
OPR>  
16:13:20      -- 8 Jobs Modified --  
OPR>
```

3. You have been instructed by your system manager to remove OPR1: from the system-search list and to add OPR2: to the system-search list.

```
OPR>MODIFY SYSTEM-SEARCH-LIST EXCLUDE OPR1<RET>  
OPR>  
09:31:57      Device OPR1 -- Removed from System Search List --  
  
OPR>MODIFY SYSTEM-SEARCH-LIST INCLUDE OPR2:<RET>  
OPR>  
09:32:15      Device OPR2 -- Added to System Search List --  
  
OPR>
```



**OPR COMMAND DESCRIPTIONS**  
**MOUNT**

**MOUNT**

**Function**

The MOUNT command mounts a structure and assigns it an alias name when structure and/or volume recognition is disabled.

When both structure and volume recognition are disabled, first mount and prepare the structure. Then use the RECOGNIZE command to force MDA to read the HOME blocks of the structure and recognize the volume mounted. Finally, use the MOUNT command so that the system acknowledges the structure as mounted.

**Format**

OPR>MOUNT keyword arguments /switch<RET>

**Keyword**

STRUCTURE specifies a file structure. You must include the keyword STRUCTURE in the MOUNT command.

**Arguments**

structure-name: specifies the logical identification of the file structure you have mounted and made ready. The structure name can be from 1 to 4 alphanumeric characters in length followed with a colon. An example of a logical structure name is DSKA:.

alias-name: specifies a 1-to 4-alphanumeric character name when two file structures are of the same name. For example, if two file structures exist as DSKA:, the second structure could have an alias of ADSK:.

**Switches**

/OVERRIDE-SET-NUMBER

specifies that the structure is always mounted even if the disk set number is inappropriate for the monitor.

/WRITE-LOCKED

specifies a read-only state for the structure you have mounted.

**Restriction**

If you have not mounted and/or prepared all structures, the following error message occurs when you use the MOUNT command:

```
hh:mm:ss      Device str  -- Invalid Mount Request --  
              All Required Volumes Are Not Spinning
```

where "str" is the structure name in the MOUNT command.

OPR COMMAND DESCRIPTIONS  
MOUNT

**Examples**

1. You have structure recognition disabled and you mount and prepare DSKZ:. When the system recognizes the volume, the following message appears at your OPR terminal.

```
9:45:13 Device RPB0 --Volume DSKZ0 for structure DSKZ Mounted--
```

Now use the MOUNT command so that the system recognizes the structure DSKZ: as mounted.

```
OPR><u>MOUNT</u> <u>STRUCTURE</u> <u>DSKZ:</u><RET>
```

```
OPR> 9:45:36          -- Structure DSKZ Mounted --
```

```
OPR>
```

2. You have both structure and volume recognition disabled and you are mounting a structure of the same name as another structure on the system.

```
OPR><u>RECOGNIZE</u> <u>RPB1:</u><RET>
```

```
OPR>
```

```
10:23:12 Device RPB1 --Volume DSKX0 for Structure DSKX Mounted--
```

```
OPR><u>MOUNT</u> <u>STRUCTURE</u> <u>DSKX:</u> <u>XDSK:</u><RET>
```

```
OPR>
```

```
10:23:47          -- Structure XDSK Mounted --
```

**OPR COMMAND DESCRIPTIONS**  
**NEXT**

**NEXT**

**Function**

The NEXT command allows you to specify the request that will be serviced next in an input queue. When you use the NEXT command, the request that you specified starts immediately after the current request is finished.

**Format**

OPR>NEXT keyword nn REQUEST-ID mm /switch<RET>

**Keywords**

BATCH-STREAM nn	specifies the batch stream in which the job will run.
CARD-PUNCH nn	specifies the card punch that will punch the job.
PAPER-TAPE-PUNCH nn	specifies the paper tape punch that will punch the job.
PLOTTER nn	specifies the plotter that will plot the job.
PRINTER nn	specifies the line printer that will print the job.

**Switch**

/NODE:identifier	specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.
------------------	---

OPR COMMAND DESCRIPTIONS  
NEXT

**Example**

A user (MORRILL) requests that his print job be moved to the top of the print queue to be printed when a printer is available. You must examine the print queue to obtain the request-identification number for his print request. Then you use the NEXT command to place his request next in the queue.

OPR>>SHOW QUEUES PRINTER<RET>

OPR>

11:35:43

-- System Queues Listing --

Printer Queue:

Job Name	Req#	Limit	User
* BREAK	14	200	KOVALCIN, D [10,4635] On Unit:0
MAIL	145	35	MAROTTA, M [27,555]
SNOOPY	10	65	MORRILL [42,2520] /After:29-May-88 12:00

There are 3 jobs in the queue (1 in progress)

OPR>>NEXT PRINTER 0 REQUEST-ID 10<RET>

OPR>

11:36:17

Printer 0 -- NEXT request #10 scheduled --

OPR>

OPR COMMAND DESCRIPTIONS  
PUSH

PUSH

**Function**

The PUSH command enables you to enter monitor command level without exiting the OPR program. For example, you may want to use PUSH so that you can enter operator-privileged monitor commands. To return to OPR, use the monitor command POP.

For more information about PUSH and POP, see the CONTEXT command in the TOPS-10 Operating System Commands Manual.

**Format**

OPR>PUSH<RET>

**Examples**

1. Use the PUSH command to enter monitor command level so that you can use the SYSTAT E monitor command.

OPR>PUSH<RET>

.SYSTAT E<RET>

2. After you use the SYSTAT E command, type POP to return to OPR command level.

.POP<RET>

OPR>



OPR COMMAND DESCRIPTIONS  
RECOGNIZE

**Examples**

1. You have volume recognition disabled on tape drive 1 (MTA1:) and you mount a labeled tape on MTA1: in response to a user MOUNT request. After the tape has been brought to a "ready" state, you must use the RECOGNIZE command to have the system recognize the labeled tape on the tape drive.

```
OPR><u>RECOGNIZE MTA1:</u><RET>
```

```
OPR>
```

```
1 12:34:12      Device MTA1  -- Volume BACKUP Reassigned --  
User: BROWN,E [27,5107] Job 59
```

```
OPR>
```

2. If someone has mounted a disk pack on a disk drive that has VOLUME-RECOGNITION disabled, you can use the RECOGNIZE command to force the system to read the pack's home blocks.

```
OPR><u>RECOGNIZE RPB6:</u><RET.>
```

```
OPR>
```

```
8:16:27 Device RPB6 --Volume GAL00 for Structure GALO Mounted--
```

```
OPR>
```

```
8:16:28      -- Structure GALO Mounted --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
RELEASE

RELEASE

**Function**

The RELEASE command releases job requests that were held with the HOLD command or REQUEUE command. When you RELEASE a previously held job request, the job is rescheduled for processing.

To examine jobs waiting in the queue to be processed or any jobs being held, use the SHOW QUEUES command with the /ALL switch.

**Format**

OPR>RELEASE keyword argument<RET>

**Keywords**

BATCH-JOBS	releases one or more jobs held in the batch input queue.
CARD-PUNCH-JOBS	releases one or more jobs held in the card-punch output queue.
PAPER-TAPE-PUNCH-JOBS	releases one or more jobs held in the paper-tape-punch output queue.
PLOTTER-JOBS	releases one or more jobs held in the plotter output queue.
PRINTER-JOBS	releases one or more jobs held in the line printer output queue.

**Arguments**

request-id-number	releases a single job for a particular user as specified by the request-identification number.
[PPN]	releases all types of jobs, as specified by the appropriate keyword, for a particular user. The [PPN] (project-programmer number) identifies the user.
*	releases all jobs held for all users as specified by the keyword.



OPR COMMAND DESCRIPTIONS  
RELEASE

**Examples**

1. Use the RELEASE command to release a line-printer job request for user [10,3111].

```
OPR><u>RELEASE PRINTER-JOBS [10,3111]</u><RET>
```

```
OPR>  
14:23:45          -- 1 Job Released --
```

```
OPR>
```

2. Use the RELEASE command to release all card-punch job requests held in the queue.

```
OPR><u>RELEASE CARD-PUNCH-JOBS </u><RET>
```

```
OPR>  
15:23:01          -- 10 Jobs Released --
```

```
OPR>
```

3. Use the RELEASE command to release batch job request 117.

```
OPR><u>RELEASE BATCH-JOBS 117</u><RET>
```

```
OPR>  
17:18:20          -- 1 Job Released --  
OPR>
```

OPR COMMAND DESCRIPTIONS  
REPORT

REPORT

**Function**

The REPORT command allows you to report various comments or existing error conditions. These reports are logged into the system log file ERROR.SYS, thus creating a system log entry. To list these entries, you can run the SPEAR program. (Refer to the TOPS-10/20 SPEAR Manual for more information.)

**Format**

OPR>REPORT user-name argument text<RET>

**Arguments**

user-name	specifies the name of the user making the report to ERROR.SYS. Your project-programmer number is automatically entered into the system log entry. If you do not specify this keyword, it is not entered into the system log entry.
device	specifies one of the system devices that is the subject of the report. This keyword is only needed if the report is about a particular device.
text	After specifying the device, you can enter a single- or multiple-line response and confirm with a carriage return, or you can confirm with carriage return immediately after the user name or device. OPR responds with ENTER TEXT AND TERMINATE WITH ^Z. You then enter as many lines of text for a response as you need. When you press <CTRL/Z>, the OPR> prompt returns and your report is logged into the ERROR.SYS file.

**Examples**

1. Use the REPORT command for a previous cancellation of a job being read into the system through the card reader.

```
OPR>REPORT OPR CDR260: TOO MANY PICK CHECKS<RET>
```

```
OPR>
```

```
12:19:00      -- ERROR.SYS entry made by the REPORT command --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
REPORT

2. Use the REPORT command to describe a possible hardware problem that seems serious.

OPR>REPORT OPR<RET>

Enter text and terminate with ^Z

THERE WAS JUST A HEAD CRASH ON STRUCTURE MISC:<RET>

ALL FILES WILL BE RESTORED^Z

OPR>

15:18:01        -- ERROR.SYS entry made by the REPORT command --

OPR>

**OPR COMMAND DESCRIPTIONS**  
**REQUEUE**

**REQUEUE**

**Function**

The REQUEUE command stops a job request that is in progress, puts the job request back in the queue in the HOLD state, and cancels the in-progress job request. To reschedule the job, use the RELEASE command.

**Format**

OPR>REQUEUE keyword nn /switch argument<RET>

**Keywords**

BATCH-STREAM	requeues a particular batch stream that has a job currently active within it.
CARD-PUNCH	requeues a particular card-punch that has a job currently being output on it.
PAPER-TAPE-PUNCH	requeues a particular paper-tape-punch that has a job currently being output on it.
PLOTTER	requeues a particular plotter that has a job currently being output on it.
PRINTER	requeues a particular line-printer that has a job currently printing on it.

**Switches**

/NODE:identifier	specifies the name of a node in the network. It identifies the remote node for which the command is effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.
/REASON:comment	allows you to include a comment explaining why the job has been requeued. This comment appears in the batch log file and at the user's terminal. If the comment is longer than one line, you can end the first line with a hyphen and a carriage return and continue the comment on the next line. If you press RETURN immediately after the colon, OPR responds with the instruction: ENTER TEXT AND TERMINATE WITH ^Z. You can then enter as many lines of text as necessary. When you finish entering the text, type a <CTRL/Z> and the OPR> prompt reappears.

**OPR COMMAND DESCRIPTIONS**  
**REQUEUE**

**Arguments**

BEGINNING-OF	specifies that requeuing starts at the beginning of the COPY, FILE, or JOB. This argument is valid when you requeue a job currently processing on a device, such as the line printer. This argument is invalid with the BATCH-STREAM keyword.
COPY	specifies that requeuing starts at the beginning of the current copy being processed. (Refer to the BACKSPACE and FORWARDSPACE commands.)
FILE	specifies that requeuing starts at the beginning of the current file being processed. (Refer to the BACKSPACE and FORWARDSPACE commands.)
JOB	specifies that requeuing starts at the beginning of the current job being processed. With JOB, the entire job is requeued.
CURRENT-POSITION	specifies the current position (line number) of the job on unit number nn at the time you issue the REQUEUE command.

**Examples**

1. Use the REQUEUE command to hold and cancel a job in batch stream 5.

```
OPR><u>REQUEUE BATCH-STREAM 5 /REQUEST-ID:56<RET></u>
```

```
OPR>
10:23:56      Batch Stream 5 -- REQUEUE command queued --
              Job TEST Req #56 for BROWN [27,5107]
```

```
OPR>
10:23:57      Batch Stream 5 -- End --
              Job TEST Req #56 for BROWN [27,5107]
              -- Job Requeued by Operator --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
REQUEUE

2. Use the REQUEUE command to hold and cancel the current processing job on the card punch.

OPR><u>REQUEUE CARD-PUNCH 0 BEGINNING-OF JOB /REASON:<RET>

Enter text and terminate with ^Z

JOB REQUEUED BECAUSE OF CARD PUNCH JAM.<RET>

FIELD SERVICE CALLED.<RET>

OPERATOR-JONES.^Z

OPR>

16:09:43            Card-punch 0 -- Requeued --  
                    Job PUNCH9 Req #99 for HOVSEPIAN [12,345]

OPR>

16:09:44            Card-punch 0 -- End --  
                    Job PUNCH9 Req #99 for HOVSEPIAN [12,345]  
                    -- Job Requeued by Operator --

OPR>

3. Use the REQUEUE command to hold and cancel the current processing job on the line printer, unit number 0, at the current position.

OPR><u>REQUEUE PRINTER 0 CURRENT-POSITION<RET>

OPR>

12:34:09            Printer 0 -- Requeued --  
                    Job BATCH1 Req #177 for HURLEY [27,5467]

OPR>

12:34:10            Printer 0 -- End --  
                    Job BATCH1 Req #177 for HURLEY [27,5467]  
                    -- Job Requeued by Operator --

OPR>

**OPR COMMAND DESCRIPTIONS**  
**RESPOND**

**RESPOND**

**Function**

The RESPOND command allows you to reply to any message sent to you by means of WTOR (Write-To-Operator with Response) from a user or from a batch job.

When a user or software task sends you a message that requires a response, OPR assigns the message a number so that you can keep track of all messages sent to operations. Use the SHOW MESSAGES command, to display outstanding messages.

You must specify a message number with the RESPOND command.

**Format**

```
OPR>RESPOND nnn text<RET>
```

**Keywords**

nnn	specifies the message number of a message that was sent to you by means of WTOR (Write-To-Operator with Response).
text	specifies a single- or multiple-line response. If you press carriage return immediately after the message number, OPR responds with ENTER TEXT AND TERMINATE WITH ^Z. You can then enter as many lines of text as needed. To end the text input, press <CTRL/Z> and the OPR> prompt returns.

**Examples**

1. Use the RESPOND command to reply to message number 23, which was a Page Limit Exceeded message for printer 1.

```
12:30:00 <23> Printer 1 -- Page Limit Exceeded --  
Job OPRC Req # 147 for REILLY [30,5111]  
Type 'RESPOND <Number> ABORT' to terminate the job now  
Type 'RESPOND <Number> PROCEED' to allow the job to continue  
printing
```

```
OPR>RESPOND 23 PROCEED<RET>
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
RESPOND

2. Use the RESPOND command to reply to message number 67, which was a request to remove a structure (monitor DISMOUNT command).

```
13:57:01 <67> Device MISC: -- Problem removing structure --  
Mount count = 1  
Type 'RESPOND <number> ABORT' to not dismount Structure MISC.  
Type 'RESPOND <number> PROCEED' to dismount Structure MISC  
anyway.
```

```
OPR><u>RESPOND 67 ABORT</u><RET>
```

```
OPR>
```

```
13:58:31          -- Can't dismount structure OPR2 --
```

```
OPR>
```

3. Use the RESPOND command to reply to message number 12, which was a user's inquiry about whether timesharing is available after 18:00.

```
09:32:54 <12>          -- Message from timesharing user --  
User: PTAYLOR [27,6761] job# 27  
WILL TIMESHARING BE AVAILABLE AFTER 18:00
```

```
OPR><u>RESPOND 12</u><RET>
```

```
Enter text and terminate with ^Z
```

```
TIMESHARING IS AVAILABLE UNTIL 23:00 TONIGHT^Z
```

```
OPR>
```



**OPR COMMAND DESCRIPTIONS**  
**RESTRICT**

**RESTRICT**

**Function**

The RESTRICT command limits the use of a specified device to the operator. The RESTRICT command prevents non-privileged users from mounting or assigning the device. To remove the restriction use the UNRESTRICT command.

**Format**

OPR>RESTRICT argument<RET>

**Argument**

dev: specifies the name of the device to be restricted.

**Example**

Use the RESTRICT command to restrict device MTA3.

OPR>RESTRICT MTA3:<RET>

OPR>

16:28:52 -- Device MTA3: restricted --

**OPR COMMAND DESCRIPTIONS**  
**ROUTE**

**ROUTE**

**Function**

The ROUTE command changes the destination of output requests, so that the output intended for a specific unit(s) (the source unit[s]) will automatically be output on another unit(s) (the destination unit[s]). The source and destination units may be on the same node, or they may be on different nodes.

This function is useful when a unit malfunctions and the output from that device is necessary immediately.

If you are an operator at a central site, you can route output from one unit to another, on the same or any other node. However, output cannot be processed on another host system. If you route output to another host node, the request(s) remain in the queue indefinitely because the request cannot be processed. If you are an operator at a remote node, you can route requests from one unit to another on your node.

All device routing is entered into the system route table. You can examine the route table with the OPR command, SHOW ROUTE-TABLE.

To end routing and delete the entry from the system route table, use the ROUTE command and omit the information pertaining to the destination unit(s) and node.

Because the format and arguments used with the ROUTE command depend largely on the keyword you use, it is highly recommended that you use the recognition feature (<ESC>) until you feel comfortable with the command format.

**Format**

OPR>ROUTE keyword source-argument destination-argument<RET>

**Keywords**

ALL-DEVICES	specifies all device output (card-punch, paper-tape-punch, plotter, and printer) at the node.
CARD-PUNCH	specifies card-punch output.
PAPER-TAPE-PUNCH	specifies paper-tape-punch output.
PLOTTER	specifies plotter output.
PRINTER	specifies printer output.

**OPR COMMAND DESCRIPTIONS**  
**ROUTE**

**Arguments (for ALL-DEVICES)**

**source-information**

specifies the node(s) from which the output is to be routed. The source-information for ALL-DEVICES is specified by the node name or by the keyword ALL-NODES.

**destination-information**

specifies the node(s) to which the output will be routed. For ALL-DEVICES, the destination-information is specified by the node name. If you omit the destination-information, any existing entries in the system route table will be deleted, and the appropriate routing will be ended.

**Arguments (for keywords CARD-PUNCH  
PAPER-TAPE-PUNCH  
PLOTTER  
PRINTER)**

**source-information**

specifies the unit and node from which the output will be routed. The unit number is specified as either n (for a specific unit) or ALL-UNITS, to designate that all output for the appropriate device is to be routed. Note that if you specify a unit number, only the requests made for that specific unit (with the /UNIT switch) will be routed. The node is specified by the switch /NODE:name (described below). If you omit the node specification, the node to which you are connected is assumed.

**destination-information**

specifies the unit and node to which the output will be routed. The unit is specified by n, the unit number, or ALL-UNITS. The node is specified by the switch /NODE:name, which is described below. If you omit the /NODE switch, the node to which you are connected is assumed.

**Switch**

**/NODE:name**

specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

OPR COMMAND DESCRIPTIONS  
ROUTE

**Restrictions**

You cannot route output from ALL-UNITS to a specific unit number. If you type this command, the following error occurs:

```
OPR>ROUTE PRINTER ALL-UNITS/NODE:KL1026 0/NODE:DN200<RET>
OPR>
15:15:36          -- Cannot Route a Generic Unit --
OPR>
```

This error is produced to prevent output from being processed on a unit that does not have certain necessary characteristics. For example, if printer 0 at DN200 does not have lowercase capability, and if the requests being routed require a printer with lowercase capability, then the requests cannot be processed on printer 0 at DN200.

**Examples**

1. To route the output that is destined for printer unit 0 to printer unit 1, on the same node, use the following command:

```
OPR>ROUTE PRINTER 0 1<RET>
OPR>
15:33:12  -- Printer 0 [KL1026] Routed to Printer 1 [KL1026] --
OPR>
```

2. To end the routing for printer 0 and to delete the entry from the routing table, use the following command:

```
OPR>ROUTE PRINTER 0<RET>
OPR>
15:40:10          -- Routing for Printer 0 [KL1026] Deleted --
OPR>
```

3. To route all the output that is going to node DN200 to node KL1026, use the following command:

```
OPR>ROUTE ALL-DEVICES DN200 KL1026<RET>
OPR>
15:43:08          -- Node DN200 Routed to KL1026 --
OPR>
```

OPR COMMAND DESCRIPTIONS  
SEND

SEND

**Function**

The SEND command sends single- or multiple-line messages to a specific destination as defined by the keyword. The SEND command allows you to specify a one-line message terminated with a carriage return or a multiple-line message terminated with a <CTRL/Z>.

If you specify SEND ALL, you can send only a single-line message.

**Format**

OPR>SEND keyword nn message<RET>

**Keywords**

ALL	sends a message to all terminals on the system. If you specify the ALL keyword with the /NODE switch, all terminals for that node receive the text. You can send only single-line messages when you specify ALL.
BATCH-STREAM	sends a message to a particular batch job or over an IBM emulation node to a remote IBM host. You must specify stream number with this keyword.
JOB	sends a message to a particular job that is currently processing under timesharing or within the batch system. You must supply a job number with this keyword.
OPERATOR	sends a message to another operator at another node with the /NODE switch. If you do not specify the /NODE switch, the message is sent to all operators at all nodes.
TERMINAL	sends a message to a particular logged-in terminal. You must supply the terminal number with this keyword.

**Switch**

/NODE:identifier	specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.
------------------	---

OPR COMMAND DESCRIPTIONS  
SEND

**Examples**

1. Use the SEND command to notify all users that timesharing ends in 30 minutes.

```
OPR><u>SEND ALL TIMESHARING ENDS IN 30 MINUTES</u><RET>
```

```
OPR>  
;;SYSTEM: - TIMESHARING ENDS IN 30 MINUTES  
<RET>
```

```
OPR>
```

2. Use the SEND command to notify all operators that a new stand-alone schedule has been posted.

```
OPR><u>SEND OPERATOR NEW STAND-ALONE SCHEDULE IS POSTED</u><RET>
```

```
OPR>  
12:05:35 From Operator Terminal 1:  
=>NEW STAND-ALONE SCHEDULE IS POSTED
```

```
OPR>
```

3. Use the SEND command to notify job 32 to stop queueing print requests because of a problem with the line printer at the central site.

```
OPR><u>SEND JOB 32 DO NOT QUEUE ANY PRINT JOBS UNTIL NOTIFIED</u><RET>
```

```
OPR>  
10:39:05 -- SEND Command Completed --
```

```
OPR>
```

## OPR COMMAND DESCRIPTIONS

### SET

### SET

#### Function

The SET command sets parameters for system devices and features. The SET command is useful in the SYSTEM.CMD file for system start-up, and it can be used during normal system operation as well.

Because the SET command is complex, the arguments and switches for each keyword are described in the following sections.

#### Format

```
OPR>SET keyword arguments /switches<RET>
```

#### Keywords

BATCH-STREAM  
CARD-PUNCH  
FAL-STREAM  
JOB  
NODE  
NQC-STREAM  
PAPER-TAPE-PUNCH  
PLOTTER  
PRINTER  
SYSTEM  
TAPE-DRIVE  
TERMINAL  
USAGE

OPR COMMAND DESCRIPTIONS  
SET BATCH-STREAM

SET BATCH-STREAM

**Function**

The SET BATCH-STREAM command sets the characteristics of a particular stream or a range of streams. These characteristics remain in effect until you reissue the SET BATCH-STREAM command.

**Format**

OPR>SET BATCH-STREAM nn /switch argument<RET>

**Arguments**

- nn specifies a batch-stream number. The number is usually from 0 to 5, but can be larger if your installation uses additional batch streams.
- n:m specifies a range of batch streams. You must include a stream number or range of stream numbers with the SET BATCH-STREAM command.
- ATTRIBUTE specifies whether the batch stream operates with the BATCON or the SITGO program.
- BATCON specifies that the batch stream is to use the BATCON controller. (This is the system default batch controller.)
- SITGO specifies the SITGO batch processor, which consists of a fast FORTRAN compiler for compiling FORTRAN programs in a batch stream.
- MEMORY-LIMITS nn  
n:m specifies the maximum number of memory pages allowed for a batch stream or a range of batch streams. If you specify a range with this keyword, the range is from a minimum number of memory pages to a maximum number of memory pages.
- NOOPR-INTERVENTION specifies that a user cannot make any requests in the batch job that require you to perform an action of some kind or require you to send a message. If a batch job has NOOPR-INTERVENTION set, any messages it sends are ignored, and you are not asked to perform any action.
- For example, If the batch job requests mountable devices, and if the job must wait until the device is mounted, an error message results.



**OPR COMMAND DESCRIPTIONS**  
**SET BATCH-STREAM**

**OPR-INTERVENTION** specifies that the user can pass messages to you and that you are available to perform actions that a user or batch job requests.

**PRIORITY-LIMITS nn**  
**n:m**

specifies the priority limits of a batch stream or a range of batch streams at the central site or at a node. The numeric value associated with this argument means that only batch jobs submitted by users with the /PRIORITY: switch specifying the number (or range) you set for the batch stream can execute in that stream. The numeric value for the PRIORITY-LIMITS argument can be from 1 to 63. The higher the number, the higher the priority.

|  
|  
|  
|  
|  
|  
|  
|  
|  
|  
**SYSTEM-OPR-INTERVENTION**

specifies that batch streams assume the OPR-INTERVENTION state when SET SYSTEM SCHEDULE 400 (no operator coverage) has been specified and assume the NOOPR-INTERVENTION state when SET SYSTEM SCHEDULE is not 400.

**TIME-LIMITS nn**  
**n:m**

specifies the maximum execution time limit for a given batch stream or a range of batch streams. When a batch job enters a batch stream, it receives a default execution time, such as five minutes. If the job exceeds this time limit, and if the user who submitted the batch job set up his control file to handle time limits, the batch system gives the job an additional 10% of the allocated time. If the job exceeds this additional 10%, the job is canceled. The TIME-LIMITS argument allows you to specify that batch jobs that are set to run a certain length of time will run in the specified batch-stream number (or range). The numeric value for the TIME-LIMITS argument can be from 0 to 99999, representing minutes.

**Switch**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

OPR COMMAND DESCRIPTIONS  
SET BATCH-STREAM

**Examples**

1. Use the SET BATCH-STREAM command to set stream number 3 to have a priority limit of 63.

```
OPR><u>SET BATCH-STREAM 3 PRIORITY-LIMITS 63</u><RET>
```

```
OPR>  
13:20:54          Batch-stream 3  -- Set Accepted --
```

```
OPR>
```

2. Use the SET BATCH-STREAM command to set streams 0 through 2 for no operator intervention.

```
OPR><u>SET BATCH-STREAM 0:2 NOOPR-INTERVENTION</u><RET>
```

```
OPR>  
16:11:17          Batch-stream 0  -- Set Accepted --
```

```
OPR>  
16:11:21          Batch-stream 1  -- Set Accepted --
```

```
OPR>  
16:11:24          Batch-stream 2  -- Set Accepted --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET CARD-PUNCH**

**SET CARD-PUNCH**

**Function**

The SET CARD-PUNCH command enables you to specify the kind of jobs to schedule on this device. You can set the form type, output limits (maximum number of cards), priority limits, and the action to be taken when a job exceeds the output limit that the user specifies. This command allows you to change the parameters that are set at GALGEN time. You must supply a unit number or a range of unit numbers with this command.

The card-punch device handles standard 12-row, 80-column cards.

The defaults for the card punch are set by your system manager at software-installation time through the generation of the SYS:SPFORM.INI file.

**Format**

OPR>SET CARD-PUNCH nn /switch argument<RET>

**Arguments**

nn specifies a card-punch unit number. The number is usually from 0 to 5, but can be larger if your installation uses more card-punch devices.

n:m specifies a range of card-punch unit numbers.

FORMS-TYPE name specifies the type of card-punch forms. By setting the FORMS-TYPE, you are specifying the type of forms in the card punch.

LIMIT-EXCEEDED-ACTION word

specifies what action, if any, should be taken if a card-punch job that is currently punching exceeds the set limit of output. (The limit is set by the user with /LIMIT.) There are three possible actions associated with the LIMIT-EXCEEDED-ACTION argument. They are:

ASK specifies that you be asked what to do if the card-punch job exceeds the card limit on output. You then have the option to continue or abort the card-punch job. This is the default.

ABORT specifies that the card-punch job is automatically canceled when the limit has been exceeded.

PROCEED specifies that the card-punch job continues automatically and the limit is ignored.

**OPR COMMAND DESCRIPTIONS**  
**SET CARD-PUNCH**

**OUTPUT-LIMITS cards**

specifies the maximum card limit for punched output. This argument can also specify a range of card limits. The card limit refers to the number of output cards that are punched. This command restricts the size of jobs that can start on the card punch you specify.

**PRIORITY-LIMITS nn**

specifies the priority limits (numeric importance) of a card punch or a range of card punches at the central site or at a node. The numeric value associated with this argument means that only card-punch jobs submitted by users with the /PRIORITY switch specifying a number in the range you set for the card punch can execute on that card punch. The numeric value for the PRIORITY-LIMITS argument can be from 1 to 63. The higher the number, the higher the priority.

**Switch**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

**Examples**

1. Use the SET CARD-PUNCH command to set the forms type to 5081 for all card-punch devices at your installation.

```
OPR>SET CARD-PUNCH 0:2 FORMS-TYPE 5081<RET>
```

```
OPR>  
10:13:17      Card-Punch 0  -- Set Accepted --
```

```
OPR>  
10:13:20      Card-Punch 1  -- Set Accepted --
```

```
OPR>  
10:13:23      Card-Punch 2  -- Set Accepted --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET CARD-PUNCH**

2. Use the SET CARD-PUNCH command to set all card-punch jobs for a maximum output limit of 200 cards per job. Any jobs with limits higher than 200 cards will not be started.

OPR>SET CARD-PUNCH 0:2 OUTPUT-LIMIT 200<RET>

OPR>  
10:30:16            Card-Punch 0    -- Set Accepted --

OPR>  
10:30:19            Card-Punch 1    -- Set Accepted --

OPR>  
10:30:22            Card-Punch 2    -- Set Accepted --

OPR>

OPR COMMAND DESCRIPTIONS  
SET FAL-STREAM

SET FAL-STREAM

**Function**

The SET FAL-STREAM command specifies the network type associated with a specified FAL stream. ANF-10 is initially assumed.

**Format**

```
OPR>SET FAL-STREAM nn NETWORK argument<RET>
```

nn is a stream number or range of stream numbers

**Arguments**

ANF-10	specifies that the given FAL stream will perform input/output with ANF-10 network nodes.
DECnet	specifies that the given FAL stream will perform input/output with DECnet network nodes.

**Examples**

1. Use the SET FAL-STREAM command to set DECnet as the type of network connection accepted by FAL stream 2.

```
OPR>SET FAL-STREAM 2 NETWORK DECNET<RET>  
OPR>  
16:10:48          Fal-Stream 2 -- Set Accepted --  
OPR>
```

2. Use the SET FAL-STREAM command to set ANF-10 as the type of network connection accepted by FAL stream 0.

```
OPR>SET FAL-STREAM 0 NETWORK ANF-10<RET>  
OPR>  
16:11:22          Fal-Stream 2 -- Set Accepted --  
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET JOB**

**SET JOB**

**Function**

The SET JOB command allows you to set the characteristics for a particular batch job number. You can set the job for operator intervention allowed or for no operator intervention allowed. You must include the job number with this command.

**Format**

OPR>SET JOB nn argument<RET>

**Arguments**

nn	specifies a job number currently in the system. The numeric value can be from 0 to 99999.
NOOPR-INTERVENTION	prohibits the user associated with the job from making requests that require operator response. If the job has a NOOPR-INTERVENTION setting, the messages are ignored; you are not to be asked to perform any action.
OPR-INTERVENTION	allows the user associated with the specified job number to pass messages to you to which you must respond. This is the default.

**Examples**

1. Use the SET JOB command to allow operator intervention for job number 100.

```
OPR>SET JOB 100 OPR-INTERVENTION<RET>
```

```
OPR>  
15:55:15          Job 100  -- Modified --
```

```
OPR>
```

2. Use the SET JOB command to not allow operator intervention for job number 50.

```
OPR>SET JOB 50 NOOPR-INTERVENTION<RET>
```

```
OPR>  
16:43:34          Job 50  -- Modified --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET KSYS

SET KSYS

**Function**

The SET KSYS command sets a time for timesharing to end. You may need to stop timesharing so that maintenance or stand-alone tasks can be performed.

The SHOW QUEUES EVENTS command displays the KSYS time, as well as the reason that timesharing is scheduled to end. See the SHOW QUEUES command for information on listing the event queue.

**Format**

OPR>SET KSYS keyword /switch<RET>

**Keywords**

NOW	specifies that timesharing will end immediately.
+hh:mm:ss	specifies when timesharing will end, designated as the number of hours, minutes, and seconds from the current time. The time must be at least five minutes from the current time.
hh:mm:ss	specifies that timesharing will end at the time you enter for hh:mm:ss
dd- <del>mmm</del> -yy:hh:mm:ss	specifies that timesharing will end on the day, month, year, and time that you enter.
DAILY hh:mm:ss	specifies that timesharing will end every day at the time you enter.
EVERY "day" hh:mm:ss	specifies that timesharing will end every week on the day and time that you enter. "Day" specifies a particular day of the week.

NOTE

You can specify seconds in the SET KSYS time, but OPR ignores this value and executes the KSYS event to the nearest minute of the time you specify.



**OPR COMMAND DESCRIPTIONS**  
**SET KSYS**

**Switches**

/CM	specifies corrective maintenance as the reason that timesharing will end.
/FAILSOFT	writes the KSYS event queue entry time to disk, thus preserving the KSYS time across system reloads.
/FILE:filespec	specifies the name of a file for ORION to process when timesharing ends.
/NEW	specifies a new monitor as the reason that timesharing will end.
/PM	specifies preventative maintenance as the reason that timesharing will end.
/SA	specifies stand-alone time as the reason that timesharing will end.
/SCHED	specifies scheduled system shutdown as the reason that timesharing will end.
/REASON:comment	enables you to specify other reasons that timesharing will end.

**NOTE**

The above switches are displayed in the EVENT QUEUE and are included in the first and last KSYS warning message sent to users.

**Restriction**

To set a KSYS time that is less than one hour from the current time, you must specify the time in hours and minutes. For example, to SET KSYS for five minutes from the current time, you must use the form:

SET KSYS +0:05

SET KSYS +5 sets the KSYS time for 5 hours from the current time.

**Example**

Set the KSYS time to midnight for 21-Nov-84.

```
OPR>SET KSYS 21-NOV-88:00:00:00<RET>
```

```
OPR>
```

```
16:24:21          -- Event job KSYS queued, request 53 --
```

```
OPR>
```

Display the event queue to check the pending KSYS time.

```
OPR>SHOW QUEUES EVENTS<RET>
```

```
OPR>
```

```
16:25:37          -- System Queues Listing --
```

OPR COMMAND DESCRIPTIONS  
SET KSYS

Event Queue:

Type	Req#	Expiration	Description
BILCLS	24	19-Nov-88 16:59:59	Prime time rates end
USGFIL	44	19-Nov-88 23:59:30	Usage file closure
OPRFIL	38	20-Nov-88 0:00:00	ORION log file closure
BILCLS	15	20-Nov-88 7:59:59	Discount rates end
* KSYS	53	21-Nov-88 0:00:00	

There are 4 events in the queue (1 in progress)

**OPR COMMAND DESCRIPTIONS**  
**SET NODE**

**SET NODE**

**Function**

The SET NODE command applies only if your installation has IBM Communications software.

The SET NODE command allows you to specify the modem-related and data-transfer-related parameters for IBM Communications nodes that perform IBM communications. Before you set the parameters for a node, you must define the node name, type, and mode with the DEFINE command.

**Format**

OPR>SET NODE keyword arguments<RET>

where keyword

specifies the node name of the remote station for IBM communications. The name can be from one to six alphanumeric characters long.

**Arguments**

BYTES-PER-MESSAGE b

specifies the number of bytes per message, b, that the front end uses to communicate with the remote site.

CLEAR-SEND-DELAY d

specifies a clear-to-send delay, where d is an arbitrary number of clock ticks used by the front end. This value is not an element of a discrete set. It can be any positive integer value.

RECORDS-PER-MESSAGE r

specifies the number of records per message, where r can equal any positive integer. The defaults of r are:

0 for unlimited number of records (the default for HASP and 3780)

2 for a 2780 unit with no multirecord feature

7 for a unit like an IBM 2780 with the multirecord feature (the default for 2780)

OPR COMMAND DESCRIPTIONS  
SET NODE

TIMEOUT-CATEGORY P/S

specifies the timeout category where you specify either P or S. P represents PRIMARY and S represents SECONDARY. Timeout category is used by the BSC protocol to determine how connecting systems bid for use of the line. Two systems bidding for the use of a line may not be in the same timeout category, since this condition can result in simultaneous bids for a line, which causes a deadlock. To prevent this, one system is placed in the PRIMARY (P) category and the other in the SECONDARY (S) category. For emulation, the timeout category is normally SECONDARY. For termination, the timeout category is normally PRIMARY.

TRANSPARENCY ON/OFF

specifies a transmission mode where the recognition of most control characters is suppressed (TRANSPARENCY ON). The argument can be specified only when using HASP. The default TRANSPARENCY is OFF.

**Example**

Specify the SET NODE command to set the clear-to-send delay of 3 for node IBM1.

```
OPR><u>SET NODE IBM1 CLEAR-SEND-DELAY 3</u><RET>
```

```
OPR>
```

```
17:23:45
```

```
-- Set for Node IBM1 Accepted --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET NQC-STREAM

SET NQC-STREAM

**Function**

The SET NQC-STREAM command specifies a node or attribute associated with a specified NQC stream or range of NQC streams.

**Format**

OPR>SET NQC-STREAM nn keyword argument /switch<RET>

nn is a stream number or range of stream numbers

**Keyword**

ATTRIBUTE specifies characteristics of a given NQC stream.

**Argument**

OUTPUT-STREAM specifies that the given NQC stream will transmit output jobs to remote nodes. This is the default.

**Switch**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

**Example**

Use the SET NQC-STREAM command to specify the OUTPUT-STREAM attribute to NQC stream 0.

OPR>SET NQC-STREAM 0 ATTRIBUTE OUTPUT-STREAM<RET>

OPR>

16:10:48

NQC-Stream 0 -- Set Accepted --

OPR>

**OPR COMMAND DESCRIPTIONS**  
**SET PAPER-TAPE-PUNCH**

**SET PAPER-TAPE-PUNCH**

**Function**

The SET PAPER-TAPE-PUNCH command specifies the kind of jobs to be scheduled on this device. You can set the forms type, output limits (in number of feet of paper tape), priority limits, and the action to be taken when a job exceeds its output limit. This command allows you to change the parameters that are set at GALGEN time. You must specify a specific unit number or a range of unit numbers.

The defaults for the paper-tape punch are set by your system manager at software-installation time through the generation of the SYS:SPFORM.INI file. These defaults are usually referred to as NORMAL in most installations.

**Format**

OPR>SET PAPER-TAPE-PUNCH nn /switch argument<RET>

**Arguments**

nn specifies a paper-tape-punch unit number. The number is usually from 0 to 5, but can be larger if your installation has more paper-tape-punch devices.

n:m specifies a range of paper-tape punches.

FORMS-TYPE name specifies the name of the type of paper-tape forms. Typically, the normal paper-tape form is 1-inch wide fan-fold, and is referred to as LFFF or NORMAL. Your installation can have different form names for different types of paper tape.

LIMIT-EXCEEDED-ACTION word

specifies what action, if any, should be taken if a paper-tape job that is currently punching exceeds its limit of output. (The limit is set by the user with the /LIMIT switch.) There are three possible actions associated with the LIMIT-EXCEEDED-ACTION argument. They are:

ASK specifies that you be asked what to do if the paper-tape job exceeds the fold limit on output. You then have the option to continue or abort the paper-tape job.

ABORT specifies that the paper-tape job be automatically canceled when the limit has been exceeded.

PROCEED specifies that the paper-tape job continue automatically and the output limit be ignored.

OPR COMMAND DESCRIPTIONS  
SET PAPER-TAPE-PUNCH

OUTPUT-LIMITS feet

specifies the maximum number of feet of punched paper-tape output for jobs on the specified paper tape punch device. This command restricts the size of jobs that are sent to the specified paper-tape punch.

PRIORITY-LIMITS nn

specifies the priority limits (numeric importance) of a paper-tape punch or a range of paper-tape punches at the central site or at a node. The numeric value associated with this argument means that only paper-tape jobs submitted by users with the /PRIORITY switch specifying a number within the range you set for the paper-tape punch can be output on that paper-tape punch. The numeric value for the PRIORITY-LIMITS argument can be from 1 to 63. The higher the number, the higher the priority.

Switch

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

Examples

1. Use the SET PAPER-TAPE-PUNCH command to set the default form type to 1WFF for a paper-tape-punch device at your installation.

```
OPR><u>SET PAPER-TAPE-PUNCH 0 FORMS-TYPE 1WFF</u><RET>
```

```
OPR>
```

```
12:45:09          Papertape 0  -- Set Accepted  --
```

```
OPR>
```

2. Use the SET PAPER-TAPE-PUNCH command to set all paper-tape-punch jobs for a maximum output limit of 25 folds per job. Jobs that require more than 25 folds will not be started.

```
OPR><u>SET PAPER-TAPE-PUNCH 0:1 OUTPUT-LIMIT 25</u><RET>
```

```
OPR>
```

```
13:45:07          Papertape 0  -- Set Accepted  --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET PLOTTER

SET PLOTTER

**Function**

The SET PLOTTER command specifies the kind of jobs to be scheduled on this device. You can set the forms type, output limits (step limits), priority limits, and the action to be taken when a job exceeds its output limit. This command allows you to change the parameters that are set at GALGEN time. You must specify a unit number or a range of unit numbers.

The plotter device draws (or plots) ink plots of computer-generated data. Its movement in producing the output is measured in "steps." The steps refer to the speed per second of the plotter and the distance (or size) that the pencils move on the output paper. The paper for the plotter is either drum-fed or bed-fed.

The defaults for plotter output are set by your system manager at software-installation time through the generation of the SYS:SPFORM.INI file. At some installations, the default setting for the plotter form type is referred to as NORMAL.

**Format**

OPR>SET PLOTTER nn /switch argument<RET>

**Arguments**

nn specifies a plotter unit number. The number is usually from 0 to 5, but can be larger if your installation has more plotter devices.

n:m specifies a range of plotter unit numbers.

FORMS-TYPE name specifies the name of the type of plotter forms. Typically, the normal plotter paper form is roll-fed or bed-fed, but it can be referred to as type ROLL, DRUM, or BED. Your installation can have different form names for different plotter types.

LIMIT-EXCEEDED-ACTION word

specifies what action, if any, should be taken if a plotter job that is currently plotting on the unit number you specify exceeds the output limit. (The limit is set by the user with the /LIMIT switch.) There are three possible words associated with the LIMIT-EXCEEDED-ACTION argument. They are:

ASK specifies that you be asked what to do if the plotter job exceeds the output limit. You then have the option to continue or abort the plotter job.



**OPR COMMAND DESCRIPTIONS**  
**SET PLOTTER**

**ABORT** specifies that the plotter job be automatically canceled when the limit has been exceeded.

**PROCEED** specifies that the plotter job continue automatically and the specified output limit be ignored.

**OUTPUT-LIMIT** minutes

specifies the maximum number of plotter minutes.

**PRIORITY-LIMITS** nn specifies the priority limits (numeric importance) of a plotter or a range of plotters at the central site or at a node. The numeric value associated with this argument means that only plotter jobs submitted by users with the /PRIORITY switch specifying the number within the range you set for the plotter can be output on that plotter. The numeric value for the PRIORITY-LIMITS argument can be from 1 to 63. The higher the number, the higher the priority.

**Switch**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

**Examples**

1. Use the SET PLOTTER command to change the forms type of the plotter.

```
OPR>>SET PLOTTER 1 FORMS-TYPE ROLL<RET>
```

```
OPR>
```

```
09:34:12 Plotter 1 -- Set Accepted --
```

```
OPR>
```

2. Use the SET PLOTTER command to change the output limit. Plotter jobs requiring more than 8 minutes will not be started on Plotter 0.

```
OPR>>SET PLOTTER 0 OUTPUT-LIMIT 8<RET>
```

```
OPR>
```

```
10:11:12 Plotter 0 -- Set Accepted --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET PRINTER

SET PRINTER

**Function**

The SET PRINTER command specifies the kind of jobs to be scheduled on this device. You can set the forms type, page limits, priority limits, and the action to be taken when a job exceeds its limit. This command allows you to change the parameters that are set at GALGEN time. You must specify a specific unit number or a range of unit numbers. In addition, you can specify ranges for the page and priority limits.

The defaults for the line printers at your installation are set by your system manager at software-installation time through the generation of the SYS:n-CONFIG.COM file (where n is the TOPS-10 software generation number) and the <SYSTEM>LPFORM.INI file. These defaults are usually referred to as NORMAL in most installations.

**Format**

OPR>SET PRINTER nn /switch argument<RET>

**Arguments**

nn specifies a printer unit number. The number is usually from 0 to 5, but can be larger if your installation has more printer devices.

n:m specifies a range of printer unit numbers.

FORMS-TYPE name specifies the name of the type of printer forms. Typically, the normal paper form for the printer is referred to as 1-ply-wide or 1-ply-narrow. These can be abbreviated as 1W or 1N, or can be given some other name by your system manager. Your installation can have different names for different types of line-printer forms.

LIMIT-EXCEEDED-ACTION word

specifies what action, if any, should be taken if a printer job that is currently printing on the unit number you specify exceeds the limit of output. The limit is set by the user with /LIMIT. There are three possible actions associated with the LIMIT-EXCEEDED-ACTION argument. They are:

ASK specifies that the operator be asked what to do if the printer job exceeds the page limit on output. You then have the option to continue or abort the printer job.

ABORT specifies that the print job be automatically canceled when the limit has been exceeded.

OPR COMMAND DESCRIPTIONS  
SET PRINTER

PROCEED	specifies that the print job continue automatically and the specified output page limit be ignored.
LP20-SIMULATION	sets printer characteristics to simulate a LP20 print controller, including loading the same VFU and RAM files as LP20 printers, assuming the device driver supports LP20 characteristics. The command does not affect a printer that is started, but the command is remembered, and if the printer is SHUTDOWN and restarted, the new value takes effect. This is the default for ANF printers.
MAGTAPE	enables the print spooler to write non-system defaults for magtape.
NO LP20-SIMULATION	disables LP20 Print Controller simulation.
PAGE-LIMITS pages	specifies the maximum page limit for printed output. This argument can also specify a range of page limits. The page limit refers to the number of output pages that are printed. This command restricts the size of jobs that are sent to the printer you specify.
PRIORITY-LIMITS nn	specifies the priority limits (numeric importance) of a line printer or a range of line printers at the central site or at a node. The numeric value associated with this argument means that only printer jobs submitted by users with the /PRIORITY switch specifying the number within the range you set for the line printer can be output on that printer. The numeric value for the PRIORITY-LIMITS argument can be from 1 to 63. The higher the number, the higher the priority.
UNIT-TYPE	specifies a one to six character name of the type of printer.

**Switch**

/NODE:identifier	specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.
------------------	---

OPR COMMAND DESCRIPTIONS  
SET PRINTER

Switches for MAGTAPE only

/DENSITY:nn specifies the BPI (bits-per-inch) density of the tapes to be initialized. The number (nn) can be 200, 556, 800, 1600, 6250, or DEFAULT. If you do not specify the /DENSITY switch, the density defaults to 1600 BPI. If you specify 200, 556, or 800, you must include /TRACKS:n.

/DIRECTORY-FILE: (YES, NO, or DEFAULT)  
specifies whether to write record files to tape. The default for this switch is YES.

/LABEL-TYPE:type specifies the type of label to be written on the tape. The type can be ANSI, EBCDIC, IBM, DEFAULT, or UNLABELED.

/MULTI-REEL: (YES, NO, or DEFAULT)  
enables output to be written to more than one reel of tape. The default for this switch is YES.

/PARITY: (ODD, EVEN, or DEFAULT)  
specifies an EVEN or ODD parity for the tape. The default for this switch is ODD.

/TRACKS: (7, 9, or DEFAULT)  
sets the number of tracks for a magtape volume set to 7, 9, or DEFAULT. If the tape density you specify is 1600 or 6250 BPI, then 9 is the default number of tracks. You must specify the number of tracks when you specify any of these tape densities: 200, 556, or 800 BPI.

/VOLUME-SET:string  
specifies the name of the cataloged volume-set ("string").

Examples

1. Use the SET PRINTER command to set the default printer's forms type to 1-ply-wide for all line printers at your installation. NORMAL has been previously defined in the LPFORM.INI file as 1-ply-wide paper. Printer requests for other types of forms will not be started.

```
OPR>SET PRINTER 0:2 FORMS-TYPE NORMAL<RET>
```

```
OPR>  
13:10:10 Printer 0 -- Set Accepted --
```

```
OPR>  
13:10:11 Printer 1 -- Set Accepted --
```

```
OPR>  
13:10:12 Printer 2 -- Set Accepted --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET PRINTER**

2. Use the SET PRINTER command to set the LIMIT-EXCEEDED-ACTION to PROCEED. This means that all queued printer jobs that exceed their output page limit continue to print and are not aborted. In addition, there is no required operator action to take except loading paper in the line printer.

```
OPR><u>SET PRINTER 0:1 LIMIT-EXCEEDED-ACTION PROCEED<RET>
```

```
OPR>  
15:43:17          Printer 0  -- Set Accepted --
```

```
OPR>  
15:43:18          Printer 1  -- Set Accepted --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET SYSTEM

SET SYSTEM

Function

The SET SYSTEM command sets the following system parameters:

- o maximum number of batch jobs that can run at one time
- o minimum number of jobs reserved for batch processing
- o maximum amount of core per job
- o minimum amount of core per job
- o system date
- o system time
- o system schedule bits

Format

OPR>SET SYSTEM keyword argument<RET>

Keywords

BATMAX n	sets the maximum number of batch jobs that can run at one time, where n is a number between 0 and 14, inclusive.
BATMIN n	sets the minimum number of jobs that are reserved for batch processing, where n is a number between 0 and 14, inclusive.
CORMAX n	sets the maximum core size for a job, where n is a number from the minimum value set by MONGEN (usually 10K) up to the total user core. You can specify CORMIN in K (kilowords) or P (pages). K is the default.
CORMIN n	sets the minimum guaranteed contiguous core for a job, where n is a number from the minimum value set by MONGEN (usually 10K) up to the total user core. You can specify CORMIN in K (kilowords) or P (pages). K is the default.
DATE dd-mm-yy	sets the system date. SET SYSTEM DATE does not check the validity of the date argument, as is done at system initialization.
DAYTIME hh:mm:ss	sets the system time of day. This is a potentially dangerous command; do not use it except by express request of the system manager.
DISK-CACHE-SIZE n	sets the size of the monitor I/O cache. If you do not specify a value for n, the default is the configured size. (GALGEN)

**OPR COMMAND DESCRIPTIONS**  
**SET SYSTEM**

**LOGMAX n** sets the maximum number of logged-in jobs that can run on the system simultaneously, where n is a number from 1 through 512, inclusive.

**SCHEDULE nnnn** sets the system schedule bits to one or more of the specifications designated by the following octal numbers:

- 0 specifies regular timesharing and batch operations.
- 1 specifies that no users can log in, except on the CTY.
- 2 specifies that no users can log in from remote terminals, and data set requests will be rejected.
- 4 specifies batch operation only.
- 10 specifies stand-alone operation only.
- 100 enables unprivileged users to assign restricted devices.
- 200 allows spooling of output devices.
- 400 specifies no operator coverage.
- 1000 prevents automatic execution of NETLDR.

You may specify several uses by adding the appropriate values. For example, the number 15 specifies stand-alone operations, batch only operations, and no logins except from the CTY (a combination of 1, 4, and 10).

**Examples**

1. Use the SET SYSTEM command to set the maximum number of jobs that can log in to the system at one time to 100.

```
OPR><u>SET SYSTEM LOGMAX 100</u>
```

```
OPR>  
17:05:46          -- Set accepted, LOGMAX is now 100 --
```

```
OPR>
```

2. Use the SET SYSTEM command to set the minimum number of jobs reserved for batch processing to 5.

```
OPR><u>SET SYSTEM BATMIN 5</u><RET>
```

```
OPR>  
17:10:32          -- Set accepted, BATMIN is now 5 --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET TAPE-DRIVE

SET TAPE-DRIVE

**Function**

The SET TAPE-DRIVE command sets the availability characteristics of a particular tape-drive device. The SET TAPE-DRIVE command allows you to do the following:

- o Allow users to request that tapes be mounted
- o Disallow users' requests to mount tapes
- o Initialize tapes

You must specify the logical tape-drive name, and one of the keywords: AVAILABLE, INITIALIZE, or UNAVAILABLE.

**Format**

OPR>SET TAPE-DRIVE keyword argument /switch<RET>

**Keyword**

MTxn: specifies the tape drive name, where x is the tape-controller identification and n is the tape-drive number. You must include the colon at the end of the name. An example of a logical tape-drive name is MTA0: for Magnetic Tape Drive 0.

**Arguments**

AVAILABLE makes the specified tape drive available for user tape mount requests. This argument cancels the effect of the UNAVAILABLE argument. The tape drive remains AVAILABLE until you set it UNAVAILABLE.

INITIALIZE makes the specified tape drive unavailable for user mount requests so that you can use it to initialize tapes. A labeled tape is initialized when you write a volume identification at the beginning of the tape in the standard ANSI format. An unlabeled tape is initialized when you write a record containing 80 null characters at the beginning of the tape. When the tapes have been INITIALIZED, the tape drive automatically becomes available for user mount requests. You specify the number of tapes to be initialized with the /COUNT switch.



**OPR COMMAND DESCRIPTIONS**  
**SET TAPE-DRIVE**

**UNAVAILABLE**

makes the specified tape drive unavailable to user tape-mount requests. This argument cancels the effect of the AVAILABLE argument. If a user is currently using a tape on this tape drive, the tape drive becomes unavailable after the user completes his work. If the system crashes or is shut down, the command SET TAPE-DRIVE MTAn: UNAVAILABLE remains in effect after the system is in operation again.

**NOTE**

Drives that are set UNAVAILABLE can be ASSIGNED by user jobs. This could pose a security problem, as no label processing or verification is performed by the system on an UNAVAILABLE drive.

When you specify UNAVAILABLE, you can enter a single- or multiple-line reason and terminate it with a carriage return; or you can terminate it immediately with a carriage return after the UNAVAILABLE keyword and OPR responds with ENTER TEXT AND TERMINATE WITH ^Z. You then enter as many lines of text as you need. When you press <CTRL/Z>, the OPR> prompt returns and your report is logged into the ERROR.SYS file.

**Switches for INITIALIZE only**

/ABORT enables you to stop and cancel the initializing process.

/COUNT:nn specifies the number (nn) of tapes to be initialized. The /COUNT switch, when specified, provides a mechanism for initialization of multiple tapes with the same attributes. Each tape prompts you with a WTOR message for the volume identification. After initialization, the tape is automatically unloaded and the tape drive is ready to accept the next tape to initialize. When as many tapes as specified by the /COUNT switch have been initialized, the tape drive returns to the AVAILABLE (off-line) state.

If you use this switch, the valid you specify in the /VOLUME-ID switch must have trailing numerics which will allow the numeric value specified by the /INCREMENT switch to be added after each tape is initialized.

/DENSITY:nn specifies the BPI (bits-per-inch) density of the tapes to be initialized. The number (nn) can be 200, 556, 800, 1600, or 6250. If you do not specify the /DENSITY switch, the density defaults to 1600 BPI.

OPR COMMAND DESCRIPTIONS  
SET TAPE-DRIVE

/INCREMENT:nn specifies the numeric value (nn) by which to increment the tape volumes. This switch is valid only when specified with the /VOLUME-ID switch. If you do not include this switch, the default increment value is 1. (Refer to /COUNT.)

/LABEL-TYPE:type specifies the type of label to be written on the tape. The type can be ANSI, EBCDIC, or UNLABELED. If you specify any label type other than unlabeled, you must include the /VOLUME-ID switch.

/OVERRIDE-EXPIRATION: (YES or NO)

specifies whether to check for the expiration date of the data on the tape. If you specify NO and attempt to reinitialize a labeled tape whose first file is not expired, the system issues an error message and does not reinitialize the tape. If you specify YES, each tape is reinitialized unconditionally. If you are initializing brand new tapes, you should specify YES to prevent the tape drive from "running away" when PULSAR tries to read a label from the tape.

The default for this switch is YES.

/OWNER: [PPN]

specifies the project-programmer number of the owner of the tapes to be initialized. This switch affects only ANSI and EBCDIC labeled tapes. If you do not specify the /OWNER switch, the tape is initialized for owner [0,0].

/PROTECTION:nnn specifies a 3-digit octal number as the protection number of the tape. The number is usually from 000 (where anyone can use the tape) through 777 (where no one can use the tape). If you do not specify the /PROTECTION switch, the default is 000.

/TAPE-DISPOSITION:condition

specifies what is to be done to the tape after it is initialized. The condition can be either HOLD or UNLOAD. If you specify HOLD, the tape is initialized and is not unloaded. A user requesting the tape can use it without your having to reload it. If you specify UNLOAD, the tape is initialized and is unloaded from the tape drive. The default is UNLOAD. If a value greater than 1 is specified by the /COUNT switch, the /TAPE-DISPOSITION switch applies to the last tape initialized.

**OPR COMMAND DESCRIPTIONS**  
**SET TAPE-DRIVE**

/VOLUME-ID:"valid" specifies a volume identification for the tape. The valid must be from 1 to 6 characters. If the valid is to contain any nonalphanumeric characters, the valid must be enclosed in double quotes ("). This switch is not necessary if the tape is being initialized as an unlabeled tape.

**Restriction**

If you set a tape drive to be UNAVAILABLE before you set the tape drive to INITIALIZE, the following error message appears:

```
hh:mm:ss      Device MTxn  -- Illegal For UNAVAILABLE Device --  
  
                CAUTION
```

Setting a tape drive unavailable can produce a system deadlock if insufficient resources exist to satisfy outstanding disk and tape resource requests.

The SET TAPE-DRIVE command to INITIALIZE must be given for a tape drive that is AVAILABLE. When the initialization is complete, the tape drive is left in an AVAILABLE (off-line) state.

**Examples**

1. A user (JONES.J) has requested a tape mount of an ANSI labeled tape with a valid of FOOBAR and has requested that you initialize the tape first. The volume is initialized with ANSI labels and a valid of FOOBAR. (The system defaults to density [1600 BPI] and protection [000].) When the tape is mounted on the drive, the tape is initialized and then becomes available to the user (/TAPE-DISPOSITION:HOLD). Volume recognition takes over and satisfies the mount request for FOOBAR.

```
OPR>  
9:04:38      Device MTB3  -- Unlabeled volume mounted --  
                Density 1600 BPI, write-enabled  
  
OPR>SET TAPE-DRIVE MTA3: INITIALIZE /LABEL-TYPE:ANSI -<RET>  
/OWNER:[31,5723]/TAPE-DISPOSITION:HOLD/VOLUME-ID:FOOBAR<RET>  
  
OPR>  
9:05:12      Device MTA3  -- Volume initialized --  
                Volume Id:FOOBAR, Label type:ANSI, Density:1600  
                Owner:[31,5723], Protection:000  
  
OPR>  
9:05:14      Device MTA3  -- Volume Initialization complete --  
                Drive is available for use  
  
OPR>  
9:05:20      Device MTA3  -- Volume FOOBAR reassigned --  
                User: JONES.J [31,5723] Job# 39  
  
OPR>
```

OPR COMMAND DESCRIPTIONS  
SET TAPE-DRIVE

2. Use the SET TAPE-DRIVE command to set tape drive MTA1: to be unavailable. Any user job currently using this device is allowed to finish his work and dismount the tape before the device becomes unavailable.

```
OPR>SET TAPE-DRIVE MTA1: UNAVAILABLE<RET>
```

```
Enter text and terminate with ^Z
```

```
TAPE DRIVE IS NEEDED BY FIELD SERVICE^Z
```

```
OPR>
```

```
10:23:46 Device MTA1 -- Set Unavailable --
```

```
OPR>
```

3. Use the SET TAPE-DRIVE command to make tape drive MTA3: available for tape mounts.

```
OPR>SET TAPE-DRIVE MTA3: AVAILABLE<RET>
```

```
OPR>
```

```
12:02:2 Device MTA3 -- Set Available --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET TERMINAL TYPE**

**SET TERMINAL TYPE**

**Function**

The SET TERMINAL TYPE command sets your terminal to the model number (mode) that it should be. You must specify the keyword TYPE and the model name or number.

In addition, you can set your terminal to have OPR keypad functions. Keypad functions allow you to give an OPR command by pressing one of the PF keys to the right of the keyboard on VT52 and VT100 terminals. The functions are listed below with the KEYPAD keyword.

**Format**

OPR>SET TERMINAL TYPE argument<RET>

**Keywords**

**KEYPAD** specifies that your terminal has the additional set of keys to the right of your keyboard. These keys are numbered 0 through 9 and are referred to as PF keys. When you press any one of them, an OPR command is automatically issued to the system. The keypad function is valid for VT52 and VT100 terminals only; if you use it, you must set your terminal to VT52 or VT100 before you set the terminal to KEYPAD. The functions are as follows:

<u>Key</u>	<u>Function</u>
0	No Function
1	SHOW STATUS
2	SHOW QUEUES
3	SHOW PARAMETERS
4	SHOW MESSAGES
5	SHOW ROUTE-TABLE
6	No Function
7	Clear screen, move OPR> prompt to top of screen
8	SHOW OPERATORS
9	SHOW QUEUE MOUNT-REQUESTS

**NOKEYPAD** specifies that your terminal does not have the additional keyboard feature to issue OPR commands automatically to the system.

**TYPE** specifies the model/type name of your terminal that automatically sets various terminal parameters.

**OPR COMMAND DESCRIPTIONS**  
**SET TERMINAL TYPE**

**Arguments**

33	VT101	VT240
35	VT102	VT330
LA120	VT103	VT340
LA36	VT125	VT50
VK100	VT180	VT52
VT05	VT185	VT61
VT100	VT220	

**Examples**

1. Use the SET TERMINAL command to set your terminal to model LA36.

```
OPR><u>SET</u> <u>TERMINAL</u> <u>TYPE</u> <u>LA36</u><RET>
```

```
OPR>
```

2. Set your terminal to VT100 mode, then to KEYPAD operation.

```
OPR><u>SET</u> <u>TERMINAL</u> <u>TYPE</u> <u>VT100</u><RET>
```

```
OPR><u>SET</u> <u>TERMINAL</u> <u>KEYPAD</u><RET>
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SET USAGE**

**SET USAGE**

**Function**

The SET USAGE command allows you to control the usage accounting system during system operation. Consult your system manager before you use the SET USAGE command. Your installation may have specific usage accounting requirements for billing users accessing the system.

Normally, the SYS:SYSTEM.CMD file contains the SET USAGE command. Your system manager may have set up an accounting billing rate for prime time users (for example, from 08:00 to 18:00) and for off-prime time users (for example, from 19:00 to 07:00). There may also be another accounting billing rate for weekend users.

The usage accounting file, ACT:USAGE.OUT, can be used to collect accounting information such as CPU time, spooled output requests, and disk space used. Depending on the method you use, accounting data is collected and/or written to the ACT:USAGE.OUT file when you give the SET USAGE command.

**Format**

OPR>SET USAGE keyword argument /switch<RET>

**Keywords**

**BILLING-CLOSURE** specifies that all session entries be closed at a given time (by the argument hh:mm). This keyword can be used when you want to accumulate accounting data for users on the system between prime time and non-prime time. For example, a user is on the system between 16:00 and 19:00, and you set the billing closure at 18:00 to collect prime time usage between 16:00 and 18:00.

**FILE-CLOSURE** specifies that the current usage file be closed and renamed, and that a new usage file (USAGE.OUT) be opened. The old usage file is renamed in the format of yymmdd.hhx, where:

yy is the year.

mm is the month.

dd is the day.

hh is the hour.

x is a sequence number in the range 0 through 9.

The renamed file, like the USAGE.OUT file, is stored in the ACT:[1,7] directory.

OPR COMMAND DESCRIPTIONS  
SET USAGE

When you specify FILE-CLOSURE, a BILLING-CLOSURE operation is performed automatically. If you do not want a BILLING-CLOSURE performed, specify the /NO-SESSION-ENTRIES switch to prevent it.

**Arguments**

hh:mm specifies the time (24-hour clock time) in hours (hh) and minutes (mm) separated by a colon.

DAILY hh:mm specifies file closure on a daily basis at a particular time in hours (hh) and minutes (mm).

EVERY day hh:mm specifies file closure on a particular day at a particular time in hours (hh) and minutes (mm). The day parameter for the EVERY argument can be SUNDAY, MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, or SATURDAY.

NOW specifies file closure to occur immediately.

mm-dd-yy hh:mm specifies a date and time when the file closure will occur. The date is in the format of "mm-dd-yy," where mm is the month, dd is the day, and yy is the year separated by hyphens. (You can optionally specify the date in the format of "dd-xxx-yy," where xxx is an abbreviated month name.) The time is in the format of "hh:mm," where hh is the hour and mm is the minutes separated by a colon. The time applies to a 24-hour clock.

**Switch**

/NO-SESSION-ENTRIES  
Disables automatic BILLING-CLOSURE when you use the FILE-CLOSURE keyword. This switch is valid only with the FILE-CLOSURE keyword.

**Restrictions**

If the specified time for the execution of this command occurs when the system is down, the usage activity will not occur when the system is restarted.



OPR COMMAND DESCRIPTIONS  
SET USAGE

Examples

1. Close the billing sessions for the change between first and second shift.

```
OPR><u>SET USAGE BILLING-CLOSURE 16:30</u><RET>
```

```
13:21:27 --Will close billing sessions at 15-Jul-88 16:29:59--
```

```
OPR>
```

At 16:30 (4:30 PM), or shortly thereafter, the following message appears on the OPR terminal.

```
OPR>
```

```
16:34:22 -- Message from the Accounting System --  
          Session entries written for all jobs
```

```
OPR>
```

2. Close and rename the USAGE.OUT file. Do not attempt to do this until you check with your system manager.

```
OPR><u>SET USAGE FILE-CLOSURE NOW</u><RET>
```

```
OPR>
```

```
9:25:37 -- Message from the Accounting System --  
          ACT:USAGE.OUT closed and renamed to ACT:800715.090[1,7]
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SHOW

SHOW

**Function**

The SHOW command displays system information. The SHOW command does not alter or change any jobs, queues, or devices.

Because the SHOW command is complex, each of the following keywords is described in the following sections:

ALLOCATION  
CONTROL-FILE  
MESSAGES  
NETWORK-QUEUE-NAMES  
OPERATORS  
PARAMETERS  
QUEUES  
ROUTE-TABLE  
STATUS  
SYSTEM  
TIME

OPR COMMAND DESCRIPTIONS  
SHOW ALLOCATION

SHOW ALLOCATION

**Function**

The SHOW ALLOCATION command displays allocations for all mountable devices (disk drives and tape drives). This command displays the disk drive name, the structure name, and, for tapes, the track size and BPI density of the allocated resource. It shows the number of devices allocated and the number of devices mounted. You can display the mountable device allocations for all job requests, all batch job requests, a particular batch request, or a particular job request.

Use the SHOW ALLOCATION command when you need to know what types of disk or tape drives are allocated to a job that is waiting in the batch queue. The job could be waiting because another batch job has already allocated the needed resources. Thus, the waiting batch job allocation requests can not be answered. In addition, this command is useful when you need to know what mountable device allocations have been made by timesharing users.

**Format**

OPR>SHOW ALLOCATION argument<RET>

**Arguments**

- |                  |  |
|------------------|--|
| ALL-REQUESTS     | specifies display of the mountable device allocations for all job requests (batch and timesharing) that are currently logged-in or waiting in the batch queue to be executed.            |
| BATCH-REQUEST nn | specifies display of the allocations for the batch request with the identification number nn. If you do not specify the batch request number (nn), all batch job requests are displayed. |
| JOB nn           | specifies display of the mountable device allocation for a particular job (either batch or timesharing). You must specify the job number (nn) with this argument.                        |

OPR COMMAND DESCRIPTIONS  
SHOW ALLOCATION

**Examples**

1. Use the SHOW ALLOCATION command for all batch job requests.

OPR><u>SHOW ALLOCATION BATCH-REQUEST</u><RET>

OPR>

8:40:32

-- Mountable Device Allocations --

Allocation for batch request 3 DAN DEUFEL [30,5215]

Volume set	Resource	Type	All	Own
---	RP06	Disk unit	1	1
CBL1	CBL1	Structure	1	1

Allocation for batch request 19 DPM [50,56]

Volume set	Resource	Type	All	Own
---	---	---	---	---
DSKC	DSKC	Structure	1	1

Allocation for batch request 24 SYSV52 [1,2]

Volume set	Resource	Type	All	Own
---	9 TK 800/1600	Magtape unit	1	1
---	RP06	Disk unit	1	0
DSKB	DSKB	Structure	1	1
DSKC	DSKC	Structure	1	1
VOL-SET	VOL1	Magtape vol.	1	1

OPR>

2. Use the SHOW ALLOCATION command for timesharing job 13.

OPR><u>SHOW ALLOCATION JOB 13</u><RET>

OPR>

10:51:34

-- Mountable Device Allocations --

Allocation for job 13 OPR [1,2]

Volume set	Resource	Type	All	Own
---	---	---	---	---
DSKB	DSKB	Structure	1	1
DSKC	DSKC	Structure	1	1

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW CONTROL-FILE

SHOW CONTROL-FILE

**Function**

The SHOW CONTROL-FILE command displays the control file of a batch job that is processing in a particular batch stream. The only keyword for this command is BATCH-STREAM followed by the stream number. You must specify the BATCH-STREAM keyword.

This command enables you to display a particular stream while the job is processing, to see any possible problems that might come about due to an incorrect command, and to check whether there are any commands that require an operator action of some kind.

**Format**

OPR>SHOW CONTROL-FILE keyword nn /switch<RET>

**Keywords**

BATCH-STREAM specifies a particular batch input stream.  
nn specifies the stream number of the batch stream to be displayed by OPR. You must specify this stream number.

**Switch**

/LINES:number specifies the number of lines of the control file in the batch stream you want displayed. If you do not specify the /LINES switch, the default is ten lines.

**Examples**

1. Use the SHOW CONTROL-FILE command to display four lines of a control file in batch stream 2.

OPR>SHOW CONTROL-FILE BATCH-STREAM 2 /LINES:4<RET>

OPR>  
16:42:20 Batch-Stream 2 Job # 3 -- Show-Control-File --  
Job MYFILE Req #121 for ADLEY [27,1331]

.MOUNT TAPE REEL1:  
.COMPILE TEST2/FORTRAN  
.EXECUTE  
.DISMOUNT TAPE REEL1:

\*\*\* END OF DATA \*\*\*

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW CONTROL-FILE

2. Use the SHOW CONTROL-FILE command to display ten lines in batch stream 0.

OPR><u>SHOW CONTROL-FILE BATCH-STREAM 0</u><RET>

OPR>

13:20:30

Batch-Stream 0 Job #12 -- Show-Control-File --  
Job EDIT01 Req #211 for LATTA [27,2444]

\*F.PG[

\*M.

\*D.

\*E

.IF (ERROR) .GOTO DEL1

.SOS

\*F.PG[

\*M.

\*D.

\*E

\*\*\* END OF DATA \*\*\*

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW MESSAGES

SHOW MESSAGES

**Function**

The SHOW MESSAGES command displays any outstanding messages that require you to perform an action or reply with the RESPOND command.

With the SHOW MESSAGES command, you can specify an outstanding message number or a node. If you do not specify either a message number or a node, OPR responds with all outstanding messages that you are enabled to receive.

Use the RESPOND command to respond to any outstanding message displayed by this SHOW command.

**Format**

OPR>SHOW MESSAGES nnnn /switch<RET>

**Keyword**

nnnn specifies the outstanding message number. Valid message numbers can range from 0 to 9999. If you do not specify a message number, all outstanding messages with their sequence numbers, if any, are displayed, provided you have enabled the messages to appear at the OPR terminal.

**Switch**

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

If you do not specify the /NODE switch, all outstanding messages with their sequence numbers, if any, are displayed, provided that the messages are enabled to appear at the OPR terminal.

**Restriction**

If you have disabled the output display of ALL-MESSAGES and/or OPR-ACTION-MESSAGES, or if there are no outstanding messages, OPR responds with the message:

hh:mm:ss -- No Outstanding Messages --

where hh:mm:ss is the time (in hours, minutes, seconds) of the response.

OPR COMMAND DESCRIPTIONS  
SHOW MESSAGES

**Examples**

1. Use the SHOW MESSAGES command to display all outstanding messages with their sequence numbers. You are enabled to receive the output display of all messages.

```
OPR><u>SHOW MESSAGES</u><RET>
```

```
OPR>
```

```
10:25:12 -- System messages outstanding --
```

```
9:38:21 <2> --Message from timesharing user --  
job 48 [27,5434]MORRILL at TTY 142  
Ignore this message
```

```
9:41:07 <3> Printer 0 [NOVA(31)]  
Please load forms type 'NARROW'  
Type 'RESPOND <number> PROCEED' when ready
```

```
OPR>
```

2. Use the SHOW MESSAGES command to display an outstanding message with the message number 47.

```
OPR><u>SHOW MESSAGES 47</u><RET>
```

```
OPR>
```

```
12:45:21 -- System messages outstanding --
```

```
12:30:30 <47> Batch-Stream 0 JOB #30  
Job TEST Req #321 for DZIEDZIC[10,6016]  
Is anyone there?
```

```
OPR>
```



OPR COMMAND DESCRIPTIONS  
SHOW NETWORK-QUEUE-NAMES

SHOW NETWORK-QUEUE-NAMES

**Function**

The SHOW NETWORK-QUEUE-NAMES command displays the information specified by the DEFINE NETWORK-QUEUE-NAMES command.

**Format**

OPR>SHOW NETWORK-QUEUE-NAMES<RET>

**Example**

Use the SHOW NETWORK-QUEUE-NAMES command to display defined queue names.

OPR>SHOW NETWORK-QUEUE-NAMES<RET>

```
OPR>
11:51:55          -- Network Queue Names --
  Queue Name      Type      Object Type      Node      Unit
-----
SI$8700           Remote  Printer          JUNIPR     0
SI$87PLOT         Remote  Plotter          JUNIPR     0
SWE$LN03          Remote  Printer          GALLO     Generic
TOPS$LN03         Remote  Printer          VINO      LAT999
OPR>
```

OPR COMMAND DESCRIPTIONS  
SHOW OPERATORS

SHOW OPERATORS

Function

The SHOW OPERATORS command displays the terminal and job numbers of all users on the system who are running OPR. The display shows the node, terminal number, job number, and user's name.

In addition, you can specify the /NODE switch (network software) to display all users running OPR at a remote station. If you do not specify the /NODE switch, all operators on the system (all nodes included) are displayed.

Format

OPR>SHOW OPERATORS /switch<RET>

Switch

/NODE:identifier specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

Restriction

If there are no users running OPR at the node you specify in the SHOW OPERATORS command, OPR responds with:

hh:mm:ss -- No Operators at Node name --

where name is the node name or number.

Examples

1. Use the SHOW OPERATORS command to display all users on the system running OPR.

OPR>SHOW OPERATORS<RET>

OPR>

12:23:34

-- Operators --

Node	Type	Terminal	Job	User
KL1026(26)	System	4	1	OPR [1,2]
KL1026(26)	System	0	27	OPR [1,2]
KL1026(26)	System	1	5	SYSV52 [1,2]

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW OPERATORS

2. Use the SHOW OPERATORS command to display the operators on node CTCH22.

OPR>SHOW OPERATOR /NODE:CTCH22<RET>

OPR>

14:23:45

-- Operators --

Node	Type	Terminal	Job	User
CTCH22 (22)	System	1	13	OPR [1,2]
CTCH22 (22)	System	17	41	HARAMUNDANIS [27,4117]

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW PARAMETERS

SHOW PARAMETERS

Function

The SHOW PARAMETERS command displays the current defaults and values for a particular device or range of devices, or all devices known to the system.

You can use the SHOW PARAMETERS command to check the current values of a device before and after you change the parameters of a particular device. If you do not specify a keyword with the SHOW PARAMETERS command, the command defaults to all devices. If you do not specify an argument to the keyword, the command defaults to all devices or streams of the type you specify.

Use SET to change the parameters. Parameters are documented under SET commands.

Format

OPR>SHOW PARAMETERS keyword argument /switch<RET>

Keywords

BATCH-STREAM	displays information about the specified batch input stream or a range of batch streams.
CARD-PUNCH	displays information about the specified card-punch or a range of such devices.
FAL-STREAM	displays the network type associated with the specified FAL stream (ANF-10 or DECnet).
NETWORK-NODE	displays the IBM network parameters of nodes currently known to the system. This argument displays valid information only if your installation has IBM Communications software. The display shows the value of the arguments that can be altered with the DEFINE and SET NODE commands.
NQC-STREAM	displays information about the specified NQC stream or a range of NQC streams.
PAPER-TAPE-PUNCH	displays information about the specified paper-tape-punch or a range of such devices.
PLOTTER	displays information about the specified plotter or a range of such devices.
PRINTER	displays information about the specified line-printer or a range of such devices.

OPR COMMAND DESCRIPTIONS  
SHOW PARAMETERS

Arguments

- nn specifies a numeric value representing a batch-stream number or a device unit number. The number is usually from 0 to 5, but can be larger if your installation has acquired additional devices.
- n:m specifies a range of batch streams or unit numbers.

Switch

- /NODE:identifier specifies a remote node for which the command is effective. For example, use /NODE:KL1026 to specify the node named KL1026. If you do not specify /NODE:identifier, your own node is the default.

Examples

1. Use the SHOW PARAMETERS command to display the current parameters of all batch streams.

```
OPR>SHOW PARAMETERS BATCH-STREAMS<RET>
```

```
OPR>  
18:25:07 -- System Device Parameters --
```

Batch-Stream Parameters:

Strm	Minutes	Prio	Core limits	Opr-Intvn
0	0:3600	1:63	1:2000	Yes
1	0:10	1:19	1:2000	Yes
2	0:11000	1:19	1:2000	Yes
3	0:11000	20:63	1:2000	Yes
4	0:3600	1:63	1:512	No

```
OPR>
```

2. Use the SHOW PARAMETERS command to display the current parameters of the card punch.

```
OPR>SHOW PARAMETERS CARD-PUNCHES 0<RET>
```

```
OPR>  
19:43:30 -- System Device Parameters --
```

Card-Punch Parameters:

Unit	Card-Limits	Form	Prio	Lim-Ex	Dev-Chars
0	1:500	NORMAL	1:63	Ask	

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
SHOW PARAMETERS

3. Use the SHOW PARAMETERS command to display the current parameters of all line-printer devices.

OPR>SHOW PARAMETERS PRINTER<RET>

OPR>

16:45:10

-- System Device Parameters --

Printer Parameters:

Unit	Node	Page Limits	Form	Prio	Lim Ex	Dev-Chars
0	KL1026(26)	1:5000	NARROW	1:63	Ask	Lower
1	KL1026(26)	1:20000	NORMAL	1:63	Ask	Lower

OPR>

OPR COMMAND DESCRIPTIONS  
SHOW QUEUES

SHOW QUEUES

**Function**

The SHOW QUEUES command displays the queue, or list of jobs, for a particular device or for all batch streams. SHOW QUEUES also displays the queue for pending system events such as scheduled system shutdown and billing file closure. The SHOW QUEUES command displays the following:

- o active job requests
- o job requests waiting to be processed
- o held job requests that must be rescheduled.

You can display all jobs in all queues or only jobs in particular queues. The default for the SHOW QUEUES command is ALL-JOBS.

The asterisk (\*) before a job name in the SHOW QUEUES display designates currently active job requests.

**Format**

OPR>SHOW QUEUES keyword /switch<RET>

**Keywords**

ALL-JOBS	shows all queues for the system. ALL-JOBS is the default of the SHOW QUEUES command.
BATCH-JOBS	specifies all batch jobs
CARD-PUNCH-JOBS	specifies all card-punch jobs
EVENTS	specifies the following system events: <ul style="list-style-type: none"><li>o billing file closure (BILCLS)</li><li>o ORION log file closure (OPRFIL)</li><li>o usage file closure (USGFIL)</li><li>o scheduled system shutdown (KSYS)</li><li>o scheduled command file execution (TAKFIL).</li></ul>
MOUNT-REQUESTS	specifies requests for tape and disk structure mounts.
PAPER-TAPE-PUNCH-JOBS	specifies all paper-tape-punch jobs
PLOTTER-JOBS	specifies all plotter jobs
PRINTER-JOBS	specifies all line-printer jobs

OPR COMMAND DESCRIPTIONS  
SHOW QUEUES

Switches

- /NODE:identifier displays the given queue for the node you specify. For example, /NODE:KL1026 specifies the node named KL1026. If you do not specify a node identifier, your own node is the default.
- /ALL displays a full queue listing. A full listing includes column headers, as well as the switches (for example, /HOLD), and default parameters that apply to the jobs.
- /SHORT displays an abbreviated queue listing. A short listing displays the job name, request number, scheduled run time or expiration, and the user name of each job in the queue. A short listing does not display column headers, switches, or default parameters.
- /USER:[PPN] displays only jobs submitted by a particular user. The user is identified by his project-programmer number [PPN].

Examples

1. Use the SHOW QUEUES command to display batch jobs that are processing or waiting to be processed by the batch system.

```
OPR>SHOW QUEUES BATCH-JOBS /ALL<RET>
```

```
OPR>
```

```
14:23:14
```

```
-- System Queues Listing --
```

```
Batch Queue:
```

Job Name	Req#	Run Time	Core	User	
* GENSCH	21	00:05:00	500	FRIES [10,3711]	In Stream:0
		/Uniq:Yes /Restart:No /Seq#:713			
		Job 14 Running MACRO Runtime 0:01:41			
* DFRPM	25	00:20:00	500	GATULIS [27,3123]	In Stream:1
	Job# 17	Running LINK	Last Label: LOAD	Runtime 0:00:04	
SBUILD	29	01:00:00	500	KIRSCHEN [30,5215]	
		/After: 5-Jan-88 20:00:00 /Uniq:Yes			
		/Restart:Yes /Seq#:784			
WEEKLY	37	00:05:00	500	OPERATOR [1,2]	Hold:Yes
		/Uniq:Yes /Restart:No /Seq#:791			

```
There are 4 jobs in the Queue (2 in Progress)
```

```
OPR>
```



**OPR COMMAND DESCRIPTIONS**  
**SHOW QUEUES**

2. Use the SHOW QUEUES command to display any current MOUNT-REQUESTS that are mounted, waiting to be mounted, or are being dismounted.

OPR>>SHOW QUEUES MOUNT-REQUESTS<RET>

OPR>

19:52:21

-- System Queues Listing --

Mount Queue:

Volume	Status	Type	Write	Req#	Job#	User
GOO1	Waiting	Tape	Enabled	24	28	ENGEL [30,3456]
GOO2	Waiting	Tape	Enabled	25	28	ENGEL [30,3456]
DSKZ	Waiting	Disk		52	23	BROWN [27,5107]
TEST	Waiting	Tape	Locked	76	12	JONES [10,1310]

There are 4 Requests in the Queue

OPR>

3. Use the SHOW QUEUES command with the /SHORT switch, to display all jobs in the line-printer queue.

OPR>>SHOW QUEUES PRINTER /SHORT<RET>

OPR>

15:50:15

-- System Queues Listing --

Printer Queue:

* DBBIND	49	108	FRIES,A [10,2311]
* TRY	60	27	NICHOLS [30,1201]
TEST01	69	50	BROWN,E [27,5107]
SCHEDU	79	100	OPERATOR [1,2]

OPR>

4. Use the SHOW QUEUES command to display the items in the EVENT queue.

OPR>>SHOW QUEUES EVENTS<RET>

11:51:58

-- System Queues Listing --

Event Queue:

Type	Req#	Expiration	Description
USGFIL	14	8-Oct-88 23:59:30	Usage file closure
OPRFIL	18	9-Oct-88 0:00:00	ORION log file closure
* KSYS	15	10-Oct-88 0:00:00	Debug new monitor

There are 3 events in the queue (1 in progress)

OPR COMMAND DESCRIPTIONS  
SHOW ROUTE-TABLE

SHOW ROUTE-TABLE

**Function**

The SHOW ROUTE-TABLE command applies only if your installation has remote station communication software. The SHOW ROUTE-TABLE command displays the routing tables of the nodes whose output has been transferred by means of the ROUTE command. See the description of the ROUTE command in this chapter.

The SHOW ROUTE-TABLE command has no keywords and no switches.

**Format**

OPR>SHOW ROUTE-TABLE<RET>

**Examples**

1. Use the SHOW ROUTE-TABLE command to display the current nodes that have been routed within your network system.

OPR>SHOW ROUTE-TABLE<RET>

```
15:04:17                -- System Device Routing Table --  
Printer 0 [KL1026(26)] Routed to Printer 1 [CTCH22(22)]  
All Printers [NOVA(31)] Routed to [KL1026(26)]
```

OPR>

2. Use the SHOW ROUTE-TABLE command, when no routing has been done.

OPR>SHOW ROUTE-TABLE<RET>

```
OPR>  
16:30:23                -- No routing has been performed --
```

OPR>

**OPR COMMAND DESCRIPTIONS**  
**SHOW STATUS**

**SHOW STATUS**

**Function**

The SHOW STATUS command displays the current status of a particular device or range of devices on the system. You can display the status of batch or FAL streams, input/output units, tape-drives, network nodes, or all current devices known to the system.

The SHOW STATUS command is useful when you want to know the current status of the system. You can issue this command to check whether devices are active or idle.

If you do not specify a keyword with the SHOW STATUS command, the command defaults to batch streams, printers, and readers. In addition, if your installation has a card punch, paper-tape punch, or plotter, the SHOW STATUS command displays the status of these devices.

**Format**

OPR>SHOW STATUS keyword argument/switch<RET>

**Keywords**

BATCH-STREAM nn or n:m

displays the status of a batch input stream or range of batch streams.

CARD-PUNCH nn or n:m

displays the status of one or more card-punch devices.

DISK-DRIVE structure-name:

displays the status of all the disk drives currently known to the system. With this keyword, you can specify the /ALL, /FREE, or /MOUNTED switch. /ALL is the default.

FAL-STREAM nn or n:m

displays the status of a FAL stream or range of FAL streams.

NETWORK-NODE node-name

displays the on-line/off-line status of all nodes currently known to the system. This keyword takes a node name as an argument to show the status of a specific node.

**OPR COMMAND DESCRIPTIONS**  
**SHOW STATUS**

NQC-STREAM nn or n:m

displays the status of a NQC stream or range of NQC streams.

PAPER-TAPE-PUNCH nn or n:m

displays the status of one or more paper-tape-punch devices.

PLOTTER nn or n:m

displays the status of one or more plotter devices.

PRINTER nn or n:m

displays the status of one or more line-printer devices.

READER nn or n:m

displays the status of one or more card reader input devices.

STRUCTURE structure-name

displays the status of a file structure known to the system. If you do not specify a structure, all structures are shown. With this keyword, you can specify a structure name and/or the /USERS switch.

TAPE-DRIVE

displays the status of one or more magnetic tape-drive units known to the system. You must include the colon after the tape drive number. With this keyword, you can specify a tape-drive name (in the format of MTxn:), the /ALL switch, or the /FREE switch.

**Arguments**

nn	specifies a batch or FAL stream number, or a device unit number.
n:m	specifies a range of batch or FAL streams, or a range of unit numbers.
MTxn:	specifies a tape drive name, where x is the tape controller number identification and n is the tape drive number. You must include the colon after the tape drive name.
structure-name:	specifies the logical disk file structure name. The name can consist of 1 to 4 alphanumeric characters. You must include the colon after the structure name.

OPR COMMAND DESCRIPTIONS  
SHOW STATUS

Switches

`/NODE:identifier` displays the status of the given device for the node you specify. To specify a node name, for example KL1026, use `/NODE:KL1026`. If you do not specify a node identifier, your own node is the default.

`/SHORT` displays only the stream/unit number, the current status, the job name, the request-id number, and the user name with column headers. If you do not specify the `/SHORT` switch, additional information, such as the job number and the run time, appears in the display for each job request. This switch is not valid with the `DISK-DRIVE`, `FAL-STREAM`, `STRUCTURE`, or `TAPE-DRIVE` keywords.

DISK-DRIVE Switches

`/ALL` displays the status of both free disk drives and mounted disk drives. This switch is assumed if you do not specify a switch.

`/FREE` displays only those disk drives that are available for structure mounts.

`/MOUNTED` displays only those disk drives that are currently mounted and being accessed.

STRUCTURE Switch

`/USERS` displays all the usernames of all users currently logged in and using the specified structure. If you do not specify a structure-name, the `/USERS` switch lists all users for all structures known to the system.

TAPE-DRIVE Switches

`/ALL` displays all tape drives known to the system. The status display also provides additional information, such as the AVR status, the label type, and the density (BPI). If you do not specify the `/ALL` switch, the additional information does not appear in the status display.

`/FREE` displays all tape drives that are currently unloaded and available for mounting tape volumes. The `/FREE` switch also displays those tape drives that are loaded, but are not being accessed by any user.

OPR COMMAND DESCRIPTIONS  
SHOW STATUS

Examples

1. Use the SHOW STATUS command to display the current status of the line printers.

OPR>SHOW STATUS PRINTER<RET>

OPR>  
16:33:42                   -- System Device Status --

Printer Status:

Unit	Node	Status	Jobname	Req#	User
0	KL1042(42)	Active	R4PPR2	106	MEIDELL [10,5411]
		Started at 13:44:40, printed 142 of 1012 pages			
1	Idle				

OPR>

2. Use the SHOW STATUS command to display the current status of all the tape drives on the system.

OPR>SHOW STATUS TAPE-DRIVE /ALL<RET>

OPR>  
10:12:00                   --Tape Drive Status--

Drive	Trk	Status	AVR	Density	Write	Volume	Req#	User
MTA0	9	Free	Yes	800/1600				
MTA1	9	Online	Yes	1600	Locked	100200	64	PURRETTA [10,54]
MTA2	9	Online	Yes	1600	Enabled	TEST	58	OPERATOR [1,2]
MTA5	7	Free	Yes	200/556/800				

OPR COMMAND DESCRIPTIONS  
SHOW SYSTEM

SHOW SYSTEM

**Function**

The SHOW SYSTEM command displays system lists and the system parameters set with the SET SYSTEM command.

The SHOW SYSTEM command does not display the parameters set with the SET SYSTEM DATE or SET SYSTEM DAYTIME commands. To display the current DATE and DAYTIME parameters, use the SHOW TIME command.

See the MODIFY command in this chapter for information on altering the system lists. See the SETSRC description in the TOPS-10 User Utilities Manual for information on changing the system search list.

**Format**

OPR>SHOW SYSTEM keyword <RET>

**Keywords**

LISTS displays the following system lists:

- o Active Swapping List
- o Crash Dump List
- o System Search List

The active-swapping list displays the disk-unit names for page swapping of memory. The crash-dump list displays the structure names that the system uses to dump memory during a system crash. The system-search list displays the structure names that the system uses to search for file structures and file names.

LISTS is the default for the SHOW SYSTEM command.

PARAMETERS displays the following parameters set with the SET SYSTEM command:

- o BATMAX
- o BATMIN
- o CORMAX
- o CORMIN
- o LOGMAX
- o LOGMIN
- o SCHEDULE

OPR COMMAND DESCRIPTIONS  
SHOW SYSTEM

**Examples**

1. Use the SHOW SYSTEM LISTS command to display the current system lists.

```
OPR><u>SHOW SYSTEM LISTS</u><RET>
```

```
OPR>
09:30:21      -- System lists --
              Crash Dump List:      DSKC:, DSKB:, BLKX:, BLKY:
              Active Swapping List:  RPD4:, RPB2:, RPD0:
              System Search List:    DSKC:, DSKB:
```

```
OPR>
```

2. Use the SHOW SYSTEM PARAMETERS command to display the current system parameters.

```
OPR><u>SHOW SYSTEM PARAMETERS</u><RET>
```

```
OPR>
15:57:24      -- System Parameters --
CPU0 is running and scheduling jobs
CPU1 is running and scheduling jobs
```

```
LOGMAX: 100 jobs out of 100
```

```
SCHEDULE: 000000
          No restrictions
```

```
BATMAX: 13 jobs          CORMAX: 1024 pages
BATMIN:  0 jobs          CORMIN:  100 pages
Disk cache size: 400 blocks  Configured size: 400 blocks
OPR>
```



OPR COMMAND DESCRIPTIONS  
SHOW TIME

SHOW TIME

**Function**

The SHOW TIME command displays the current system date and time.

The date is shown in the format of dd-mmm-yy (dd=day, mmm=month, yy=year). The time is shown in the format of hh:mm:ss (hh=hour, mm=minutes, ss=seconds).

**Format**

OPR>SHOW TIME<RET>

**Example**

Use the SHOW TIME command to display the current date and time.

OPR>SHOW TIME<RET>  
25-Dec-88 11:55:34

OPR>

OPR COMMAND DESCRIPTIONS  
SHUTDOWN

SHUTDOWN

**Function**

The SHUTDOWN command terminates scheduling for the devices or streams you specify. To restart a device or stream, use the START command. The SHUTDOWN command allows the current job to complete processing, then terminates the stream or device and no further jobs are processed.

**Format**

OPR>SHUTDOWN keyword argument /switch<RET>

**Keywords**

BATCH-STREAM nn or n:m

shuts down a batch stream or a range of batch streams.

CARD-PUNCH nn or n:m

shuts down a card-punch or a range of card-punches.

FAL-STREAM nn or n:m

shuts down a FAL stream or range of FAL streams.

NODE identifier

specifies a remote node for which the command will be effective. For example, use /NODE:KL1026 to specify the node named KL1026. If you do not specify a node identifier, your own node is the default.

NQC-STREAM nn or n:m

shuts down a NQC stream or range of NQC streams.

PAPER-TAPE-PUNCH nn or n:m

shuts down a paper-tape-punch or a range of paper-tape-punches.

PLOTTER nn or n:m

shuts down a plotter or a range of plotters.

PRINTER

shuts down a line printer or a range of such devices.

READER nn or n:m

shuts down a card reader (input) or a range of card readers.

**OPR COMMAND DESCRIPTIONS**  
**SHUTDOWN**

**Arguments**

nn specifies the stream number or unit number to be shut down. You must specify a stream or unit number.

n:m specifies a range of stream/unit numbers. You can specify this range instead of a single stream/unit number. The colon must separate the two numbers. The n represents the low-order number, and the m represents the high-order number.

**Switch**

/NODE:identifier specifies a remote node for which the command will be effective. For example, use /NODE:KL1026 to specify the node named KL1026. If you do not specify a node identifier, your own node is the default.

**Examples**

1. Use the SHUTDOWN command to terminate the card punch on the host system. site.

```
OPR>SHUTDOWN CARD-PUNCH 0<RET>
```

```
OPR>  
13:23:33      Card-punch  0  -- Shutdown at EOJ Scheduled --
```

```
OPR>
```

2. Use the SHUTDOWN command to terminate all batch streams.

```
OPR>SHUTDOWN BATCH-STREAM 0:2<RET>
```

```
OPR>  
12:30:15      Batch-stream 0  -- Shutdown --
```

```
OPR>  
12:30:16      Batch-stream 1  -- Shutdown at EOJ Scheduled --
```

```
OPR>  
12:30:17      Batch-stream 2  -- Shutdown at EOJ Scheduled --
```

```
OPR>
```

3. Use the SHUTDOWN command to terminate the line printers at your site.

```
OPR>SHUTDOWN PRINTER 0:1<RET>
```

```
OPR>  
16:23:45      Printer 0  -- Shutdown at EOJ Scheduled --
```

```
OPR>  
16:23:46      Printer 1  -- Shutdown --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
START

START

**Function**

The START command starts the scheduling for the specified devices. Use the START command to restart devices that you stopped with the SHUTDOWN command.

**Format**

OPR>START keyword argument/switch<RET>

**Keywords**

BATCH-STREAM nn or n:m

starts a batch stream or a range of batch streams.

CARD-PUNCH nn or n:m

starts a card-punch or a range of card-punches.

FAL-STREAM nn or n:m

starts a FAL stream or range of FAL streams.

NODE node-name

starts an IBM Communications node.

NQC-STREAM nn or n:m

starts a NQC stream or range of NQC streams.

PAPER-TAPE-PUNCH nn or n:m

starts a paper-tape-punch or a range of paper-tape-punches.

PLOTTER nn or n:m

starts a plotter or a range of plotters.

PRINTER nn or n:m

starts a line printer or a range of such devices.

READER nn or n:m

starts a card reader or a range of card readers.

**OPR COMMAND DESCRIPTIONS**  
**START**

**Arguments**

nn specifies the stream number or unit number to be started. You must specify a stream or unit number.

n:m specifies a range of stream/unit numbers. You can specify this range instead of a single stream/unit number. The colon must separate the two numbers. The n represents the low-order number, and the m represents the high-order number.

**Switches**

/NODE:identifier specifies a remote node for which the command will be effective. For example, use /NODE:KL1026 to specify the node named KL1026. If you do not specify a node identifier, your own node is the default.

| /DEVICE:dev: specifies that printer output be written to a  
| named device. This switch is useful when you  
| must transfer printer output from one site to  
| another, or when you have printer hardware  
| problems. Before you use the START PRINTER  
| command with the /DEVICE switch, you must set  
| the device as unavailable for user requests.  
| (For additional information, see the TOPS-10  
Operator's Guide.)

**Examples**

1. Use the START command to start the line printer on the host system.

```
OPR>START PRINTER 0<RET>
```

```
OPR>  
20:31:09 Printer 0 -- Startup Scheduled --
```

```
OPR>
```

2. Use the START command to start all batch streams.

```
OPR>START BATCH-STREAM 0:3<RET>
```

```
OPR>  
12:15:32 Batch-stream 0 -- Startup Scheduled --
```

```
OPR>  
12:15:38 Batch-stream 1 -- Startup Scheduled --
```

```
OPR>  
12:15:44 Batch-stream 2 -- Startup Scheduled --
```

```
OPR>  
12:15:50 Batch-stream 3 -- Startup Scheduled --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**START**

3. Use the START command to start the card-punch devices at your site.

```
OPR><u>START CARD-PUNCH 0:1</u><RET>
```

```
OPR>  
13:17:23          Card-punch 0  -- Startup Scheduled --
```

```
OPR>  
13:17:30          Card-punch 1  -- Startup Scheduled --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
STOP

STOP

**Function**

The STOP command temporarily stops the following devices and streams:

- o Batch streams
- o Card punches
- o FAL streams
- o NQC streams
- o Paper-tape punches
- o Plotters
- o Printers
- o Card readers

You can use the STOP command to halt a device when a hardware problem occurs.

When you use the STOP command, the device remains active, and jobs requesting that device can still be scheduled. However, when you specify the argument, AFTER EVERY-REQUEST, the device stops after it completes each job request.

Use the CONTINUE command to reactivate a device or stream after a STOP command has been issued.

**Format**

OPR>STOP keyword arguments /switch<RET>

**Keywords**

BATCH-STREAM nn or n:m

stops a batch input stream or a range of batch input streams.

CARD-PUNCH nn or n:m

stops a card punch or a range of such devices.

FAL-STREAM nn or n:m

stops a FAL stream or range of FAL streams.

NQC-STREAM nn or n:m

stops a NQC stream or range of NQC streams.

**OPR COMMAND DESCRIPTIONS**  
**STOP**

PAPER-TAPE-PUNCH nn or n:m

stops a paper-tape punch or a range of such devices.

PLOTTER nn or n:m

stops a plotter or a range of such devices.

PRINTER nn or n:m

stops a line printer or a range of such devices.

READER nn or n:m

stops a card reader (input) or a range of such devices.

**Arguments**

nn specifies the stream number or unit number to be stopped.

n:m specifies a range of stream or unit numbers. You can specify this range instead of a single stream or unit number. The colon must separate the two numbers. The n represents the low-order number, and the m represents the high-order number.

AFTER CURRENT-REQUEST

stops the specified device after the current job request has completed. All other devices of the same type will continue to process job requests. Use CONTINUE to start processing other jobs in the queue.

AFTER EVERY-REQUEST

stops the specified device after each job request has completed. To start another job on the device, use the CONTINUE command. You can clear this argument from the device only by shutting down the device and then restarting it (see the SHUTDOWN and START commands).

IMMEDIATELY

stops the specified device immediately. If a job is being processed on the device, it is stopped. This argument is the default of the STOP command.

**Switch**

/NODE:identifier specifies a remote node for which the command will be effective. For example, use /NODE:KL1026 to specify the node named KL1026. If you do not specify a node identifier, your own node is the default.



OPR COMMAND DESCRIPTIONS  
STOP

**Examples**

1. Use the STOP command to stop the card reader temporarily to prevent a card-reader jam.

```
OPR><u>STOP</u> <u>READER</u> <u>0</u><RET>
```

```
OPR>  
9:20:10           Reader 0  -- Stopped --
```

```
OPR>
```

2. Use the STOP command to stop a batch stream after it completes processing the current batch job.

```
OPR><u>STOP</u> <u>BATCH-STREAM</u> <u>2</u> <u>AFTER</u> <u>CURRENT-REQUEST</u><RET>
```

```
OPR>  
18:23:55           Batch-stream 2  -- STOP command queued --
```

```
OPR>
```

3. Use the STOP command to stop a line printer that was processing a request.

```
OPR><u>STOP</u> <u>PRINTER</u> <u>1</u> <u>IMMEDIATELY</u><RET>
```

```
OPR>  
11:37:02           Printer 1  -- Stopped --
```

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**SUPPRESS**

**SUPPRESS**

**Function**

The SUPPRESS command allows you to convert all vertical form motion characters to single-space characters. All form feeds and multiple line feeds are converted to a single line feed. Thus, the paging motion in a printer-job request is ignored. However, this command does not cause printing to occur across the forms page burst (perforation).

The SUPPRESS command is useful when you want to stop a user's program that caused a print loop, for example when bad code causes too many form feeds. When this happens, you can stop the printer, issue the SUPPRESS command, and then continue the printer, thus saving paper. To continue printing normally, use this command with /STOP (SUPPRESS PRINTER n/STOP).

You must specify the PRINTER keyword and unit number.

**Format**

OPR>SUPPRESS keyword nn /switch<RET>

**Keyword**

PRINTER nn                    suppresses vertical motion on the specified line-printer. You must include the unit number. (for example, 0 for LPT0, 1 for LPT1, and so forth).

**Switches**

/NODE:identifier            specifies the name of a node in the network. It identifies a remote node for which the command should be effective. For example, to specify the node named KL1026, use /NODE:KL1026. If you do not specify a node identifier, your own node is the default.

/FILE                        specifies the file currently being printed. (Refer to the BACKSPACE and FORWARDSPACE commands.)

/JOB                         specifies the job currently being printed. With the /JOB switch, the entire job is suppressed, regardless of how many files or switches were specified when the job was originally queued to print. The /JOB switch is the default of the SUPPRESS command.

/STOP                        specifies that normal printing is to resume, and that the carriage control on the line printer is no longer to be suppressed. When you specify this switch, the job that is currently printing reverts to the print job format that was being used before the SUPPRESS command was issued.

OPR COMMAND DESCRIPTIONS  
SUPPRESS

**Examples**

1. Use the SUPPRESS command to suppress paging motion on line printer 0. The SUPPRESS command affects the entire job that is currently being printed.

```
OPR><u>SUPPRESS PRINTER 0</u><RET>
```

```
OPR>  
06:37:41          Printer 0 -- Carriage control suppressed --  
                  Job DUMP01 Req #23 for OPERATOR [1,2]
```

```
OPR>
```

2. Use the SUPPRESS command to stop the suppression of form feeds and carriage returns on line printer 0 after a runaway job has completed printing. The line printer is now free to print the next job in the queue.

```
OPR><u>SUPPRESS PRINTER 0 /STOP</u><RET>
```

```
OPR>  
07:32:12          Printer 0 -- Carriage control activated --  
                  Job DUMP01 Req #23 for OPERATOR [1,2]
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
TAKE

TAKE

**Function**

The TAKE command automatically executes the commands in a command file. A typical command file contains commands that perform a series of related tasks. For example, the SYSTEM.CMD file contains OPR commands that set and start devices and streams automatically.

**Format**

OPR>TAKE keyword argument /switch<RET>

**Keyword**

filespec specifies the input file name and file extension of the file that contains the executable OPR commands. The file name can consist of no more than 6 alphanumeric characters. The file extension can consist of no more than 3 alphanumeric characters. The standard extension for command files is CMD, but any specified extension works. The filespec can be a full file specification consisting of:

str:filnam.ext[PPN]

where str: is the file structure, filnam is the file name, .ext is the file extension, and [PPN] is the project-programmer number. If you do not specify the str:, OPR defaults to the current job's search list. If you do not specify the [PPN], OPR defaults to your disk area.

**Arguments**

NOW specifies that OPR executes the commands in the command file immediately.

+hh:mm:ss specifies the number of hours, minutes, and seconds from the current time that OPR will execute the commands in the command file.

This time must be at least five minutes from the current time.

hh:mm:ss specifies the time in hours, minutes, and seconds when OPR will execute the commands in the command file.

dd-mmm-yy:hh:mm:ss

specifies the day, month, and year, as well as the time when OPR will execute the commands in the command file.

**OPR COMMAND DESCRIPTIONS**  
**TAKE**

DAILY hh:mm:ss specifies that OPR executes the contents of the file every day at the given time.

EVERY "DAY" hh:mm:ss

specifies that OPR will execute the contents of the command file at the given time on the day you specify. "DAY" can be any day of the week.

**Switches**

/DISPLAY displays all messages from the command file, any error messages that occur, and the OPR commands after they have been executed.

/NODISPLAY does not display the OPR commands that exist in the command file after their execution. All other messages appear with the /NODISPLAY switch specified. This switch is the default of the TAKE command.

/REASON:comment allows you to specify why a particular command file is to be executed

**Examples**

1. Use the TAKE command to execute a series of OPR commands that are in OPR001.CMD, which resides in your [PPN].

```
OPR>TAKE OPR001.CMD/DISPLAY<RET>
OPR>START BATCH-STREAM 0:2
```

```
14:54:10      Batch-stream 0  -- Startup Scheduled --
```

```
14:54:12      Batch-stream 1  -- Startup Scheduled --
```

```
14:54:15      Batch-stream 2  -- Startup Scheduled --
```

```
OPR>START PRINTER 0:1
```

```
14:54:18      Printer 0    -- Startup Scheduled --
```

```
14:54:21      Printer 1    -- Startup Scheduled --
```

```
OPR>
```

2. Use the TAKE command to execute a series of OPR commands from DSKZ:OPR.CMD[10,10].

```
OPR>TAKE DSKZ:OPR.CMD[10,10] /NODISPLAY<RET>
OPR>
```

```
16:43:07      Card-punch 0  -- Shutdown Scheduled --
```

```
16:43:11      Plotter 0    -- Shutdown Scheduled --
```

```
16:43:15      Reader 0    -- Shutdown Scheduled --
```

```
16:43:18      Paper-tape-punch 0 -- Shutdown Scheduled --
```

```
OPR>
```

OPR COMMAND DESCRIPTIONS  
TAKE

3. Specify a time for the TEST.CMD file to be executed.

```
OPR>TAKE DSK:TEST.CMD 20-NOV-88:12:00:00<RET>
```

```
OPR>
```

```
16:40:56          -- Event job TAKFIL queued, request 162 --
```

```
OPR>
```

Display the event queue to check that the TAKE command was properly queued.

```
OPR>SHOW QUEUES EVENTS<RET>
```

```
OPR>
```

```
16:41:08          -- System Queues Listing --
```

Event Queue:

Type	Req#	Expiration	Description
BILCLS	24	19-Nov-88 16:59:59	Prime time rates end
USGFIL	44	19-Nov-88 23:59:30	Usage file closure
OPRFIL	38	20-Nov-88 0:00:00	ORION log file closure
BILCLS	15	20-Nov-88 7:59:59	Discount rates end
TAKFIL	162	20-Nov-88 12:00:00	Time-of-day OPR command file
* KSYS	103	21-Nov-88 0:00:00	Timesharing will end

There are 6 events in the queue (1 in progress)

```
OPR>
```

**OPR COMMAND DESCRIPTIONS**  
**UNLOCK**

**UNLOCK**

**Function**

The UNLOCK command allows you to permit timesharing users and batch jobs to access a particular structure currently LOCKed from system allocation. The UNLOCK command reverses the effect of the LOCK command.

**Format**

OPR>UNLOCK structure-name: date-and-time<RET>

**Arguments**

structure-name: specifies a 1- to 4-character structure name that is currently LOCKed from system allocation. The structure must be mounted and on-line. The name must end with a colon (:).

date-and-time specifies an optional date and time when the structure will be UNLOCKed so that users can access it. The date is in the format of "mm-dd-yy," where mm is the month, dd is the day, and yy is the year, separated by hyphens. The time is in the format of "hh:mm," where hh is the hour and mm is the minutes, separated by a colon. The time applies to a 24-hour clock.

**Restrictions**

If you specify a structure name not known to the system, you get the following error message:

? No such device

If you specify a structure name that is currently UNLOCKed, you get the following message:

hh:mm:ss -- Structure name already UNLOCKed --

If you specify an optional date without a time, the time defaults to 00:00:00 (or the start of that date).

If you specify an optional time without a date, the date defaults to the current date. If the time has already occurred for the current date, the time applies to the next day.

OPR COMMAND DESCRIPTIONS  
UNLOCK

**Example**

Use the UNLOCK command to unlock structure DSKZ:.

```
OPR>UNLOCK DSKZ: 3-7-88 17:00<RET>
```

```
OPR>
```

```
13:03:13          -- Structure DSKZ unlocked --
```

```
OPR>
```



**OPR COMMAND DESCRIPTIONS**  
**UNRESTRICT**

**UNRESTRICT**

**Function**

The UNRESTRICT command returns a restricted device to general use. See the RESTRICT command for information about limiting the use of a device.

**Format**

OPR>UNRESTRICT dev:<RET>

**Argument**

dev: specifies the name of the device to be returned to general use.

**Example**

Use the UNRESTRICT command to remove the restrictions on MTA3.

```
OPR>UNRESTRICT MTA3:<RET>
```

```
OPR>
```

```
16:29:24
```

```
-- Device MTA3: unrestricted --
```

```
OPR>
```

## OPR COMMAND DESCRIPTIONS

### WAIT

### WAIT

#### Function

The WAIT command is used with batch control files to prevent OPR from accepting a command before a previously issued command is finished being processed.

The OPR program is designed to accept and process commands immediately, and the batch system (BATCON) will send commands to OPR as soon as the previous command is accepted.

Most OPR commands require processing by other modules of the operating system. OPR can accept a command, dispatch it to the appropriate module, and accept another command from the batch file before the output from the first command returns to OPR. For example, it is possible for an EXIT command in the batch file to be processed before the response to the previously issued command is displayed. The WAIT command should be entered between the previous command and the EXIT command, to allow the first command to finish processing before the EXIT command is sent to OPR.

#### Format

```
OPR>WAIT n
```

where n is the number of seconds that OPR should wait before accepting the next command in the batch file. The value of n must be between 1 and 60.

#### Warning

Using the WAIT command does NOT guarantee that the output from the first command will be successfully displayed before the EXIT command is accepted and processed by OPR. OPR will, however, WAIT the specified number of seconds, and the output from the first command will be displayed if it is ready before the specified number of seconds is up.

#### Example

The following batch file may be submitted to the batch system:

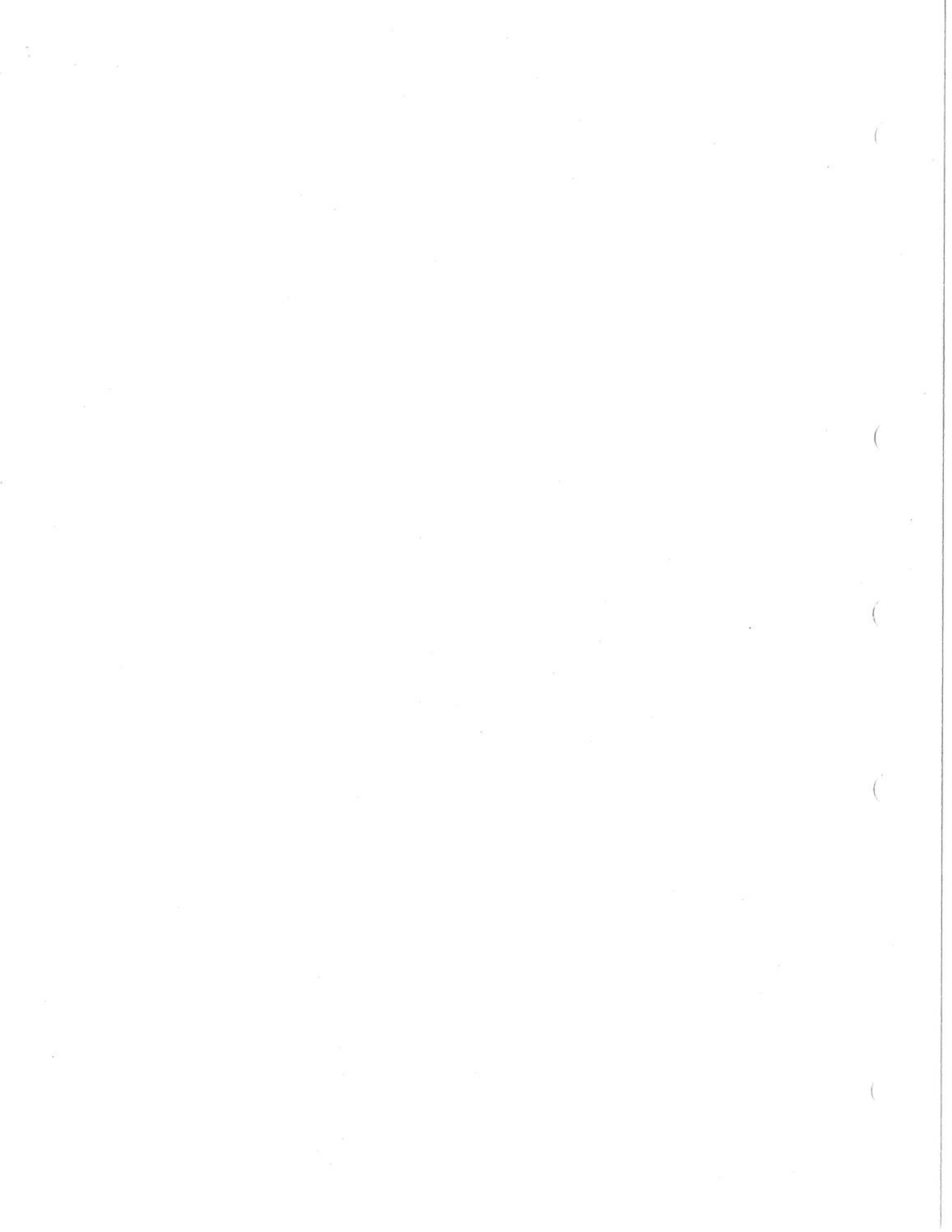
```
@ENABLE
$OPR
*SHOW STATUS TAPE-DRIVE
*EXIT
```

When this job is processed, the SHOW STATUS command is issued and accepted by OPR, passed to ORION for processing, and then the output is passed back through OPR to BATCON. However, BATCON will send the EXIT command immediately after OPR dispatches the SHOW STATUS command. When OPR receives the EXIT command, it causes the batch job to exit from OPR immediately, before the output from SHOW STATUS is received by OPR.

**OPR COMMAND DESCRIPTIONS**  
**WAIT**

The following batch file uses the WAIT command to cause OPR to WAIT for the specified number of seconds before accepting the EXIT command:

```
@ENABLE
$OPR
*SHOW STATUS TAPE-DRIVE
*WAIT 10
*EXIT
```



**CHAPTER 3**  
**OPR COMMAND SUBSETS**

This chapter describes the following OPR command subsets:

- o CATALOG
- o CONFIG
- o LCP
- o NCP
- o QUOTA

**3.1 ENTERING AND EXITING OPR COMMAND SUBSETS**

To enter an OPR command subset, use the OPR command, ENTER, as shown below.

```
OPR><u>ENTER CATALOG</u><RET>  
CATALOG>
```

To exit an OPR command subset and return to OPR command level, use the RETURN command as shown below:

```
CATALOG><u>RETURN</u><RET>  
OPR>
```

To exit an OPR command subset and return to monitor command level, use the EXIT command as shown below:

```
CATALOG><u>EXIT</u><RET>
```

## OPR COMMAND SUBSETS

### 3.2 TOP-LEVEL COMMANDS

After you enter a command subset, there are two levels of commands available to you: a limited number of OPR commands, and the subset commands themselves. All of the subsets include the following OPR commands as top-level (OPR) commands:

- o ENTER
- o EXIT
- o PUSH
- o TAKE
- o WAIT

These commands function at the subset level exactly as they do at OPR command level. See Chapter 2 for more information about these commands.

OPR COMMAND SUBSETS  
CATALOG COMMANDS

3.3 CATALOG COMMANDS

The CATALOG program maintains the system catalog files and the information about the volume-sets stored in those files. The operator interface to the CATALOG program is the CATALOG application in OPR. System Administrator privileges are required.

This section describes the CATALOG commands listed below:

- o DELETE
- o DISABLE
- o ENABLE
- o HELP
- o INSERT
- o LIST
- o MODIFY
- o SHOW

OPR COMMAND SUBSETS  
CATALOG COMMANDS

DELETE

**Function**

The DELETE command removes the entry for a specified volume-set from the system catalog.

**Format**

CATALOG>DELETE keyword argument<RET>

**Keywords**

DECTAPE	deletes the specified DEctape volume-set from the catalog.
MAGTAPE	deletes the specified magtape volume-set from the catalog.
STRUCTURE	deletes the specified structure volume-set from the catalog.

**Argument**

volume-set name	specifies the name of the volume-set for magtape or DEctape or structure-name for disk to be deleted.
-----------------	---

**Restriction**

Due to the destructive nature of the DELETE command, you must specify the entire volume-set or structure-name. Abbreviations are not allowed.

**Example**

Delete the DSKD entry from the system catalog.

```
CATALOG>DELETE STRUCTURE DSKD<RET>
CATALOG>
9:24:27          -- Structure DSKD deleted --
CATALOG>
```



OPR COMMAND SUBSETS  
CATALOG COMMANDS

**DISABLE**

**Function**

The DISABLE command turns off the automatic updating feature. The DISABLE command prevents QUASAR from automatically updating the catalog to correct discrepancies between mounted media and cataloged information.

**Format**

CATALOG>DISABLE keyword<RET>

**Keywords**

DECTAPE	disables catalog updates for DECTapes.
MAGTAPE	disables catalog updates for magtapes.
STRUCTURE	disables catalog updates for structures.

**Example**

Disable the catalog updating function for structures.

```
CATALOG>DISABLE STRUCTURE<RET>
CATALOG>
 9:24:27      -- Structure catalog updates disabled --
CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

**ENABLE**

**Function**

The ENABLE command turns on the automatic catalog update feature. When this feature is enabled, QUASAR automatically updates the catalog to correct discrepancies between mounted media and cataloged information.

**Format**

CATALOG>ENABLE keyword<RET>

**Keywords**

DECTAPE	enables automatic catalog updates for DEctapes.
MAGTAPE	enables automatic catalog updates for magtapes.
STRUCTURE	enables automatic catalog updates for structures.

**Example**

Enable the automatic catalog updating feature for structures.

```
CATALOG>ENABLE STRUCTURE<RET>
```

```
CATALOG>
```

```
9:24:27
```

```
-- Structure catalog updates enabled --
```

```
CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

HELP

Function

The HELP command displays information about CATALOG commands, including command descriptions, command syntax, and examples.

Format

CATALOG>HELP keyword <RET>

where "keyword" is any CATALOG command.

Examples

1. Type HELP to display general information about the CATALOG command, HELP.

CATALOG>HELP<RET>

The HELP command will display the description, syntax, and one or more examples of any command available for use in managing the catalog files.

Command syntax:

HELP command-name

Example:

CATALOG>HELP (with) SHOW

The SHOW command causes information about ...

2. Type HELP SHOW to find out more about the SHOW command.

CATALOG>HELP SHOW<RET>

The SHOW command causes information about a specific volume-set to be displayed on the terminal. Unique abbreviations for a volume-set name are allowed. This command takes no options. Its only arguments are the catalog type (DEctape, magtape, or structure) and the volume-set name to be displayed on the terminal.

Command syntax:

```
          -- DECTAPE --  
         /             \  
SHOW --- MAGTAPE --- volume-set  
         \             /  
          - STRUCTURE -
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

Example:

```
CATALOG>SHOW STRUCTURE DSKD<RET>
CATALOG>
9:24:27          -- Structure catalog --

Structure DSKD
Owned by [10,56] DPM
Location: DPM's office
  Unit      Type      Class
  -----
DSKD0      RP06         1
DSKD1      RP04         1
DSKD2      RP06         1
CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

INSERT

**Function**

The INSERT command creates entries for volume-sets in the system catalog. The INSERT command allows you to include owner and media storage location data, as well as volume-specific data, if applicable.

The INSERT command has optional subcommands as well as keywords and switches. Two right angle brackets following the word CATALOG indicate INSERT subcommand level. For example:

```
CATALOG>>
```

**Format**

```
CATALOG>INSERT keyword argument/switches<RET>
```

```
CATALOG>>subcommand
```

**Keywords**

DECTAPE	creates an entry for a DECTape volume-set.
MAGTAPE	creates an entry for a magtape volume-set.
STRUCTURE	creates an entry for a structure volume set.

**Argument**

volume-set name	creates a new volume-set entry with the name you specify. Note that the new volume-set name must not already exist in the specified catalog. Attempting to insert an existing volume-set causes an error.
-----------------	---

Use the following format to create a new volume-set with the same parameters as an old volume-set:

```
new-volume-set = old-volume-set
```

**Switches**

/DENSITY:argument	sets the magtape density to 200, 556, 800, 1600, or 6250. You must specify /DENSITY when creating magtape volume-sets. (MAGTAPE only)
/EXPIRATION:date	sets the expiration date. (MAGTAPE, DECTAPE, and STRUCTURE)
/LABEL-TYPE:type	specifies the type of label on the tape. Options include ANSI, BYPASS, DEFAULT, IBM, NOLABELS, USER-EOT. (MAGTAPE only)

**OPR COMMAND SUBSETS**  
**CATALOG COMMANDS**

**/LOCATION:text** specifies the volume-set storage location. The text string can be 19 characters long. Use quotes around any text string that contains characters other than A-Z, a-z, or - (hyphen). (MAGTAPE, DECTAPE, and STRUCTURE)

**/NAME:user name** specifies the user name associated with the owner of the volume-set. The name can be 39 characters long. The name need not be the same as the name associated with the PPN in ACTDAE.SYS, the system accounting file. You must use quotes around any text string that contains characters other than A-Z, a-z, or - (hyphen). (MAGTAPE, DECTAPE, and STRUCTURE)

**/REELID:id** specifies the reel identification. (DECTAPE only)

**/TRACKS:argument** sets the number of tracks. Arguments are 7 or 9. If the tape density you specify is 1600 or 6250 BPI, then 9 is the default number of tracks. The /TRACKS switch applies only to magtape volume-sets. You must specify the number of tracks when you specify any of these tape densities: 200, 556, or 800 BPI. (MAGTAPE only)

**/USER:[PPN]** sets the owner PPN of the volume-set. You can specify a wildcard for the PPN. You can specify a wildcard for the project number, the programmer number, or both. For example: [10,\*], [\*,56] and [\*,\*]. (MAGTAPE, DECTAPE, and STRUCTURE)

**Subcommands**

**ADD** appends volumes to a volume set entry.

Magtape format:  
CATALOG>>ADD reel-id

Structure format:  
CATALOG>>ADD unit-id drive-type class

**DONE** completes an INSERT session.

**QUIT** cancels the current INSERT command.

**REMOVE** deletes a volume-set entry you have just entered with the ADD command. The REMOVE command only deletes volume-set entries you have entered during the current INSERT session. You must use the DELETE command to delete previously existing volume-set entries.

OPR COMMAND SUBSETS  
CATALOG COMMANDS

**Examples**

1. The following example uses the INSERT command to create a DECTape entry.

```
CATALOG>INSERT DECTAPE TEST/NAME:DPM/USER:[10,56]<RET>
CATALOG>
9:24:27 -- DECTape TEST inserted --

CATALOG>
```

2. The following example uses the INSERT command to create a magtape entry.

```
CATALOG>INSERT MAGTAPE TEST/DENSITY:1600/TRACKS:9<RET>
CATALOG>>ADD (reel) TEST0
CATALOG>>ADD (reel) TEST1
CATALOG>>DONE
CATALOG>
9:24:27 -- Magtape TEST inserted --

CATALOG>
```

3. The following example uses the INSERT command to create a structure entry.

```
CATALOG>INSERT STRUCTURE DSKD/LOCATION:1026/NAME:DPM/USER:[10,56]<RET>
CATALOG>>ADD (unit) DSKD0 (type) RP06 (class) 1
CATALOG>>ADD (unit) DSKD1 (type) RP06 (class) 1
CATALOG>>DONE
CATALOG>
9:24:27 -- Structure DSKD inserted --

CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

LIST

**Function**

The LIST command writes the entries for all volume-sets into a catalog file. (Use SHOW to list them on your screen.)

**Format**

CATALOG>LIST keyword filespec<RET>

**Keywords**

DECTAPE            lists DECTape volume-set entries.

MAGTAPE           lists magtape volume-set entries.

STRUCTURE         lists structure volume-set entries.

filespec is in the following form:

dev:file.ext[path]

and has the following defaults:

dev:	DSK
file	catalog file name
ext	LST
path	current path

**Example**

The following example illustrates the LIST command.

CATALOG>LIST STRUCTURE<RET>

CATALOG>

9:24:27        -- Structures listed to file DSKB:STRLST.LST[1,2] --

CATALOG>



OPR COMMAND SUBSETS  
CATALOG COMMANDS

**MODIFY**

**Function**

The MODIFY command changes the volume-set attributes and volume specific information for an existing catalog entry.

The MODIFY command has optional subcommands as well as keywords and switches. Two right angle brackets represent the CATALOG subcommand prompt. For example:

CATALOG>>

**Format**

CATALOG>MODIFY keyword argument/switches optional subcommand<RET>

**Keywords**

DECTAPE	modifies a DECTape volume-set entry.
MAGTAPE	modifies a magtape volume-set entry.
STRUCTURE	modifies a disk structure volume set entry.

**Argument**

volume-set name	modifies the existing volume-set entry that you specify.
-----------------	--

**Switches**

/DENSITY:argument	sets the magtape density to 200, 556, 800, 1600, or 6250. You must specify /DENSITY when creating magtape volume-sets. (MAGTAPE only)
/EXPIRATION:date	sets the expiration date. (MAGTAPE, DECTAPE, and STRUCTURE)
/LOCATION:text	specifies the volume-set storage location. The text string can be 19 characters long. Use quotes around any text string that contains characters other than A-Z, a-z or - (hyphen). (MAGTAPE, DECTAPE, and STRUCTURE)
/NAME:user name	specifies the name associated with the owner of the volume-set. The name can be 39 characters long. The name need not be the same as the name associated with the PPN in ACTDAE.SYS, the system accounting file. You must use quotes around any text string that contains characters other than A-Z, a-z, or - (hyphen). (MAGTAPE, DECTAPE, and STRUCTURE)
/REELID:DECTape	specifies the reel identification. (DECTAPE only)

**OPR COMMAND SUBSETS**  
**CATALOG COMMANDS**

**/TRACKS:argument** sets the number of tracks for a magtape volume set to 7 or 9. If the tape density you specify is 1600 or 6250 BPI, then 9 is the default number of tracks. You must specify the number of tracks when you specify any of these tape densities: 200, 556, or 800 BPI. (MAGTAPE only)

**/USER:[PPN]** sets the owner PPN of the volume-set. You can specify a wildcard for the project number, the programmer number, or both. For example: [10,\*], [\* ,56] and [\* ,\*]. (MAGTAPE, DECTAPE, and STRUCTURE)

**Subcommands**

**ADD** appends volumes to a volume set entry.

Magtape format:  
CATALOG>>ADD reel-id

Structure format:  
CATALOG>>ADD unit-id drive-type class

**DONE** completes an insertion command.

**QUIT** cancels the current INSERT command.

**REMOVE** deletes a volume-set entry you have just entered with the ADD command. The REMOVE command deletes only volume-sets you have entered during the current insertion. Use the DELETE command to delete previously existing volume-sets.

**Restrictions**

Due to the destructive nature of the MODIFY command, you must specify the entire volume-set name. Abbreviations are not allowed.

**Examples**

1. Use the MODIFY command to change the volume-set expiration date.

```
CATALOG>MODIFY MAGTAPE TEST/EXPIRATION:15-JAN-89<RET>
CATALOG>>DONE
CATALOG>
13:21:26          -- Magtape TEST modified --
CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

2. Use the MODIFY command to add a second tape to the volume-set.

```
CATALOG>MODIFY MAGTAPE TEST<RET>
```

```
CATALOG>>ADD TEST2
```

```
CATALOG>>DONE
```

```
CATALOG>
```

```
13:23:12
```

```
-- Magtape TEST modified --
```

```
CATALOG>
```

OPR COMMAND SUBSETS  
CATALOG COMMANDS

**RETURN**

**Function**

The RETURN command exits the CATALOG command subset and returns you to OPR command level.

**Format**

CATALOG>RETURN<RET>  
OPR>

OPR COMMAND SUBSETS  
CATALOG COMMANDS

SHOW

Function

The SHOW command displays information about a specified volume-set.

Format

CATALOG>SHOW keyword argument<RET>

Keywords

DECTAPE	displays information about DECTape volume-sets.
MAGTAPE	displays information about magtape volume-sets.
STRUCTURE	displays information about structure volume-sets.

Argument

volume-set name displays information about the volume-set you specify. You can use a unique abbreviation for the volume-set name.

Examples

1. Use the SHOW command to display information about structure DSKT.

CATALOG>SHOW STRUCTURE DSKT<RET>

CATALOG>  
16:42:24

```
-- Structure catalog --  
Structure DSKT  
Location: Mounted on 1026  
Owned by [1,2] System disk  
Unit      Type      Class  
-----  
DSKT0     RA81      0  
DSKT1     RA81      0
```

CATALOG>

OPR COMMAND SUBSETS  
CATALOG COMMANDS

2. Use the SHOW command to display information about magtape volume-set TEST.

CATALOG>SHOW MAGTAPE TEST<RET>

CATALOG>

16:14:46

-- Magtape catalog --

Magtape TEST

Location: By 1026 racks

Expiration date: 15-Jan-89

Owned by [10,6016] DZIEDZIC

Label type: ANSI Tracks: 9 Density: 1600

Number Reelid

-----

1 TEST0

2 TEST1

3 TEST2

CATALOG>

OPR COMMAND SUBSETS  
CONFIG COMMANDS

### 3.4 CONFIG COMMANDS

CONFIG allows you to reconfigure system hardware without halting the system. CONFIG, formerly a separate program, is now part of OPR. This section describes the CONFIG commands listed below:

- o ADD
- o AUTO-CONFIGURE
- o HELP
- o LOAD
- o REMOVE
- o SET
- o SHOW
- o SHUTDOWN
- o SNAPSHOT
- o SUSPEND

NOTE

The keywords for the ADD, AUTO-CONFIGURE, and REMOVE commands depend on the options available on your system. If you press ? to display keywords, CONFIG displays only the keywords that apply to your system.

See the TOPS-10 Operator's Guide for more information about CONFIG.

OPR COMMAND SUBSETS  
CONFIG COMMANDS

ADD

Function

The ADD command adds the following to the system:

- o devices
- o disk controllers
- o tape controllers
- o CI (Computer Interconnect) interface
- o NI (Network Interconnect) interface
- o CPUs (see restriction)
- o memory (see restriction)

Format

CONFIG>ADD keyword argument<RET>

Keywords

ALL-CI	adds all CI interfaces.
ALL-NI	adds all NI interfaces.
CPUn	adds the specified CPU to the system. n is the CPU number.
Rxy	adds the specified disk controller to the system. x and y identify the disk controller.
MTx	adds the specified tape controller to the system. x identifies the tape controller.
CI-n	adds the specified CI interface to the system. n is the interface number. If you have more than one CI interface, the keyword list includes ALL-CI as an option.
NI-n	adds the specified NI interface to the system. n is the interface number. If you have more than one NI interface, the keyword list includes ALL-NI as an option.
device	specifies the device being added.



**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**MEMORY nn to nn** adds the specified range of memory to the total system configuration. You can specify the range as octal or decimal. To specify an octal address, include a pound sign (#) before the number.

For example,

#nn specifies an octal address  
nn specifies a decimal address

The default unit of memory is words, however, you can specify the memory unit in pages or kilowords (blocks of 1024 words). To specify pages, add the letter "P" to the number. Include the letter "K" to the number to specify kilowords.

For example,

nnP specifies pages  
nnK specifies kilowords

**Restriction**

| To add processors and memory to an SMP system you must follow, in  
| sequence, the procedural steps outlined in the TOPS-10 Operator's  
| Guide (Section 11.17, Adding Processors and Memory to SMP  
| Systems).

**Examples**

1. Use the ADD command to add CPU1 to the system.

```
CONFIG>ADD CPU1<RET>
CONFIG>
15:06:13          CONFIG  -- ADD CPU  --
CPU1 added
CONFIG>
```

2. Use the ADD command to increase total system memory from 512K to 768K.

```
CONFIG>ADD MEMORY (from) 512K (to) 768K<RET>
CONFIG>
16:18:18          CONFIG  -- ADD MEMORY  --
Memory from address 512K to 768K is now online
(Words from 2000000 to 3000000)

CONFIG>
```

OPR COMMAND SUBSETS  
CONFIG COMMANDS

3. Use the ADD command with ? to list devices you can add.

CONFIG>ADD ?<RET>one of the following:

CPU0 CPU1 CPU2

or one of the following:

RAG RAJ RPA RPB RPC RPD RPE RPF RPG

or one of the following:

MTA MTB MTC

or one of the following:

ALL-CI CI-0 CI-1 CI-2

or one of the following:

ALL-NI NI-0 NI-1 NI-2

or MEMORY

or device name

CONFIG>ADD

OPR COMMAND SUBSETS  
CONFIG COMMANDS

ALLOCATE DUMP-BUFFER

**Function**

The ALLOCATE DUMP-BUFFER command allocates memory so that the IPA20 DRAM can be dumped to the system error log file when the specified interface device reloads.

The IPA20 is the microprocessor controlling the CI20 and NIA20 interfaces.

**Format**

CONFIG>ALLOCATE DUMP-BUFFER keyword<RET>

**Keywords**

CI-n	specifies a CI20 interface. n is the interface number.
ALL-CI	specifies all CI20 interfaces.
NI-n	specifies an NIA20 interface. n is the interface number.
ALL-NI	specifies all NIA20 interfaces.

**Example**

Use the ALLOCATE command to allocate memory in the monitor for the dump from the CI20 interface for CPU1.

```
CONFIG>ALLOCATE DUMP-BUFFER CI-1<RET>
CONFIG>
10:18:45          CONFIG -- ALLOCATE DUMP-BUFFER --
Dump buffer allocated for KLP1

CONFIG>
```

OPR COMMAND SUBSETS  
CONFIG COMMANDS

**AUTO-CONFIGURE**

**Function**

The AUTO-CONFIGURE command automatically configures disks and tapes into the system. Use this command to configure devices that were powered-off when the system was first bootstrapped.

**Format**

CONFIG>AUTO-CONFIGURE keyword <RET>

**Keywords**

ALL-CPU	automatically configures disks and tapes on all available CPUs into the system.
CPU $n$	automatically configures all disks and tapes on the specified CPU into the system. $n$ is the CPU number.

**Example**

Use the AUTO-CONFIGURE command to configure all disks and tapes on CPU1 into the system.

```
CONFIG>AUTO-CONFIGURE CPU1<RET>
CONFIG>
10:45:18          CONFIG  -- AUTOCONFIGURE  --
CONFIG>
```

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**LOAD**

**Function**

The LOAD command loads microcode for the following types of devices:

- o disk controllers
- o tape controllers
- o CI (Computer Interconnect) interface
- o NI (Network Interconnect) interface

**Format**

CONFIG>LOAD keyword argument<RET>

**Keywords**

Rxy	loads microcode on the specified disk controller. x and y identify the disk controller.
MTx	loads microcode on the specified tape controller. x identifies the tape controller.
CI-n	loads microcode on the specified CI interface. n is the interface number.
NI-n	loads microcode on the specified NI interface. n is the interface number.

**Examples**

1. Use the LOAD command to load microcode on CI interface 0.

```
CONFIG>LOAD CI-0<RET>
CONFIG>
16:55:39          CONFIG -- LOAD microcode --
Microcode loaded on CPU0, device 574, unit 0

CONFIG>
```

2. USE the LOAD command to load microcode on tape controller MTA.

```
CONFIG>LOAD MTA
CONFIG>
16:56:23          CONFIG -- LOAD microcode --
Microcode loaded on CPU0, device 554, unit 0.

CONFIG>
```

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**REMOVE**

**Function**

The REMOVE command removes the following devices from the system:

- o devices
- o disk controllers
- o tape controllers
- o CI (Computer Interconnect) interface
- o NI (Network Interconnect) interface
- o CPUs
- o memory

**Format**

CONFIG>REMOVE keyword argument<RET>

**Keywords**

ALL-CI	removes all CI interfaces.
ALL-NI	removes all NI interfaces.
CPU $n$	removes the specified CPU from the system. $n$ is the CPU number.
R $xy$	removes the specified disk controller from the system. $xy$ is the disk controller identification.
MT $x$	removes the specified tape controller from the system. $x$ is the tape controller identification.
CI- $n$	removes the specified CI interface from the system. $n$ is the interface number. If you have more than one CI interface, the keyword list includes ALL-CI as an option.
NI- $n$	removes the specified NI interface from the system. $n$ is the NI interface number. If you have more than one NI interface, the keyword list includes ALL-NI as an option.
device	specifies the device being removed.

OPR COMMAND SUBSETS  
CONFIG COMMANDS

MEMORY nn to nn removes the specified range of memory from the total system configuration. You can specify the range as octal or decimal. To specify an octal address, include a pound sign (#) before the number. For example,

#nn specifies an octal address  
nn specifies a decimal address

The default unit of memory is words, however, you can specify the memory unit in pages or kilowords (blocks of 1024 words). To specify pages, add the letter "P" to the number. Include the letter "K" to the number to specify kilowords. For example,

nnP specifies pages  
nnK specifies kilowords

**Examples**

1. Use the REMOVE command to remove CPU1 from the system.

```
CONFIG>REMOVE CPU1<RET>
CONFIG>
16:56:58          CONFIG -- REMOVE CPU --
The following structures must be dismounted:
          BLKY on RPG0
CPU1 can't be removed
CONFIG>
```

Use the DISMOUNT command to dismount and remove structure BLKY and reissue the REMOVE command.

2. Use the REMOVE command to remove memory from 768K to 512K.

```
CONFIG>REMOVE MEMORY 768K 512K<RET>
CONFIG>
16:57:56          CONFIG -- REMOVE MEMORY --
Memory from address 512K to 768K is now offline
(Words from 2000000 to 3000000)

CONFIG>
```

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**RETURN**

**Function**

The RETURN command exits the CONFIG command subset and returns you to OPR command level.

**Format**

CONFIG>RETURN<RET>  
OPR>



**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**SET**

**Function**

The SET command allows you to do the following:

- o specify KLINIK parameters
- o enable and disable automatic reloading of the monitor after certain stopcodes
- o specify the BOOT-TEXT command string
- o enable and disable continuable dumps after certain stopcodes

**Format**

CONFIG>SET keyword arguments<RET>

**Keywords**

AUTO-RELOAD	automatically reloads the monitor after the monitor crashes or has been down.
BOOT-TEXT	specifies the BOOT-TEXT command string. The BOOT-TEXT command string is the command string passed to the bootstrap on an automatic monitor reload.
DUMP	causes the monitor to take continuable dumps after the specified stopcodes.
IGNORE argument	causes the monitor device service routine to ignore on-line interrupts from the specified device until you enter a SET NO IGNORE command.
KLINIK	sets KLINIK parameters for the specified CPU. If you do not specify a CPU, SET KLINIK sets the parameters for all CPUs. This keyword has a subcommand level, described below.
MICROCODE	enables automatic reload of microcode.
NO	
AUTO-RELOAD	disables automatic reload of the monitor. When NO AUTO-RELOAD is in effect, BOOT prompts you for reloading commands.
DUMP	clears the current stopcode settings for continuable dumps.
IGNORE	disables ignoring on-line interrupts.
MICROCODE	disables automatic reload of microcode.
RELOAD	disables reloading of the monitor after the specified type of stopcode.

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

| POLICY-CPU            sets the policy CPU to be CPU<sub>n</sub>.  
RELOAD                enables reloading of the monitor after the  
                      specified type of stopcode.

**BOOT-TEXT Argument**

command-string specifies the command string passed to the bootstrap on an automatic monitor reload. Because the bootstrap interprets a space as an end-of-command character, you can specify multiple commands on the same line by separating the commands with spaces. The command string starts with the first non-space, non-tab character after the keyword "BOOT-TEXT", and ends when you press <RET>.

**NOTE**

The bootstrap does not automatically dump the memory image unless you specify the /D bootstrap command as the first element of the argument.

**DUMP, NO DUMP, RELOAD, and NO RELOAD Arguments**

CPU-STOPCODES control dump-writing when CPU type stopcodes occur.

DEBUG-STOPCODES

control dump-writing when DEBUG type stopcodes occur.

JOB-STOPCODES control dump-writing when JOB type stopcodes occur.

**KLINIK Arguments**

ALL-CPU<sub>s</sub>            sets KLINIK parameters for all CPU<sub>s</sub>. This is the default.

CPU<sub>n</sub>                sets KLINIK parameters for the specified CPU.

Press RETURN to enter KLINIK subcommand level. KLINIK prompts for the mode to set the KLINIK link. For example:

OPR>SET KLINIK<RET>  
KLINIK link:

OPR COMMAND SUBSETS  
CONFIG COMMANDS

You must supply one of the following:

OFF	shuts off the KLINIK links currently open.
REMOTE	specifies the link will act as a remote system CTY.
USER	specifies the link will have ordinary timesharing user status.

If you type USER, you must specify the date and time when the link is available. For example:

```
KLINIK mode: USER<RET>  
Access window OPEN date-time: DATE:TIME  
Access window CLOSED date-time: DATE:TIME
```

CONFIG>

If you press RETURN to the OPEN prompt, the default is now. The date and time format is: DD-MMM-YY:HH:MM:SS

If you type REMOTE, you must specify a password, open and close date-times, and the console mode accessible to the user of the link. For example:

```
KLINIK mode: REMOTE<RET>  
Password: <RET>  
Access window OPEN date-time: DATE:TIME  
Access window CLOSED date-time: DATE:TIME  
Highest console mode: <RET>
```

CONFIG>

The console mode can be one of the following:

MAINTENANCE  
OPERATOR  
PROGRAMMER

If you press RETURN to the console prompt, the default is OPERATOR.

The state of the KLINIK link is reported by OPR after any changes. For more information about KLINIK links and the console modes, refer to the TOPS-10/20 RSX-20F System Reference Manual.

MICROCODE and NO MICROCODE arguments:

Rxy	controls reloading microcode on specified CPU.
MTx	controls reloading microcode on specified Magtape.
CI-n	controls reloading microcode on specified CI.
NI-n	controls reloading microcode on specified NI.

OPR COMMAND SUBSETS  
CONFIG COMMANDS

**Examples**

1. Use the SET command to specify a BOOT-TEXT command string that dumps the memory image and reloads the monitor.

```
CONFIG>SET BOOT-TEXT /D DSKA:SYSTEM.EXE[1,4]<RET>
CONFIG>
14:32:55          CONFIG  -- SET BOOTXT --
Boot-text setting accepted.  New boot string is:
                /D DSKA:SYSTEM.EXE[1,4]

CONFIG>
```

2. Use the SET NO AUTO-RELOAD command to disable automatic reload of the monitor.

```
CONFIG>SET NO AUTO-RELOAD<RET>
CONFIG>
15:16:07          CONFIG  -- SET AUTO-RELOAD --
Automatic system reload is disabled

CONFIG>
```

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

**SHOW**

**Function**

The SHOW command displays information about the current KLINIK and STOPCODE-FLAGS settings. See the SET command for more information about KLINIK and STOPCODE-FLAG settings.

**Format**

CONFIG>SHOW keyword<RET>

**Keywords**

BOOT-TEXT	displays the BOOT-TEXT command string. The BOOT-TEXT command string is the command string passed to the bootstrap on an automatic monitor reload.
HARDWARE-CONFIGURATION	displays information about currently active CPUs, and monitor memory, physical memory, and CI configurations.
KLINIK	displays information about the current KLINIK window settings.
STOPCODE-FLAGS	displays information about the current stopcode flag settings.

**Switches for HARDWARE-CONFIGURATION only**

/CI	displays information about the CI (Computer Interconnect) configuration only.
/CONTROLLER-MICROCODES	displays information about the controller microcodes only.
/CPU	displays information about CPU configuration only.
/DISK	displays information about disk configuration only.
/DTE	displays information about the DTE configuration only.
/MONITOR-MEMORY	displays information about monitor memory configuration only.
/NI	displays information about NI (Ethernet) configuration only.
/TAPE	displays information about magnetic tape configuration only.

OPR COMMAND SUBSETS  
CONFIG COMMANDS

| /UNIT-RECORD displays information about unit record device  
| (card-reader) configuration only.

**Examples**

1. Use the SHOW command to display information about the current KLINIK window settings.

```
CONFIG>SHOW KLINIK<RET>
CONFIG>
11:11:26          CONFIG  -- KLINIK Status --
                -- CPU0 KLINIK Status --
Access window open
Window opened on 07-Jan-88 at 10:50:02
Window closes on 16-Feb-89 at 23:59:58
KLINIK mode: REMOTE      Console mode: MAINTENANCE
                -- CPU1 KLINIK Status --
Access window closed
                -- CPU2 KLINIK Status --
Access window closed

CONFIG>
```

2. Use the SHOW command to display information about the current stopcode flag settings.

```
CONFIG>SHOW STOPCODE-FLAGS<RET>
CONFIG>
11:17:43          CONFIG  -- SHOW STOPCODE-FLAGS --
System will do continuable dumps on CPU, DEBUG, and JOB stopcodes
System will reload on STOP stopcodes

CONFIG>
```

OPR COMMAND SUBSETS  
CONFIG COMMANDS

SHUTDOWN

**Function**

The SHUTDOWN command takes the monitor down with a reload (RLD) stopcode, and reloads the monitor. You must supply a single-line reason for the reload when you use the SHUTDOWN command. CONFIG stores the address of the reason string in AC 0. The reason for the dump can later be determined by examining user AC 0.

NOTE

To prevent accidental use of the SHUTDOWN command, OPR does not permit you to abbreviate the command, or to press <ESC> to complete the command.

**Format**

CONFIG>SHUTDOWN reason<RET>

**Example**

Use the SHUTDOWN command to take down the monitor to clear a hung tape system.

CONFIG>SHUTDOWN CLEAR HUNG TAPE SYSTEM<RET>

OPR COMMAND SUBSETS  
CONFIG COMMANDS

SNAPSHOT

**Function**

The SNAPSHOT command executes a stopcode, dumps the system memory image, and continues the system automatically.

You must supply a single-line reason for the snapshot when you use the SNAPSHOT command. CONFIG stores the address of the reason string in AC 0. The reason for the dump can later be determined by examining user AC 0.

NOTE

To prevent accidental use of the SNAPSHOT command, OPR does not permit you to abbreviate the command, or to press <ESC> to complete the command.

**Format**

CONFIG>SNAPSHOT reason<RET>

**Example**

Use the SNAPSHOT command to obtain a dump of the system memory image.

```
CONFIG>SNAPSHOT SYSTEM HUNG<RET>
CONFIG>
17:00:33          CONFIG -- SNAPSHOT --
CONFIG>
```



OPR COMMAND SUBSETS  
CONFIG COMMANDS

SUSPEND

**Function**

The SUSPEND command suspends system operation and writes a system dump file. You can later reload the dump file with the BOOT/REBOOT switch and continue the system. You must supply a single-line reason for suspending the system when you use the SUSPEND command. CONFIG stores the address of the reason string in AC 0. The reason for the dump can later be determined by examining user AC 0. You must perform all logical software reconfiguration that is needed before a system is suspended.

To record system configuration before suspension, you can use the SHOW HARDWARE-CONFIGURATION command. Then use SUSPEND to suspend system operations.

NOTE

To prevent accidental use of the SUSPEND command, OPR does not permit you to abbreviate the command or to press <ESC> to complete the command.

See the TOPS-10 Operator's Guide for more information about SUSPEND.

**Format**

CONFIG>SUSPEND reason<RET>

You must supply a text string indicating the "reason" for the suspension.

**Examples**

Suspend system operation in order to perform corrective maintenance.

1. Display the current configuration using the SHOW HARDWARE-CONFIGURATION command.

CONFIG>SHOW HARDWARE-CONFIGURATION

CONFIG>

14:24:24

CONFIG -- SHOW HARDWARE-CONFIGURATION --

CPU Configuration

CPU0 is running and scheduling jobs

KL10 model B serial number 1026, microcode version 442

Hardware options:

MCA25 cache/pager Extended addressing Internal channels

Cache

Cache status: Enabled

Internal channels:

0: RH20    1: RH20    2: RH20    3: N/C  
4: N/C    5: NIA20    6: N/C    7: CI20

**OPR COMMAND SUBSETS**  
**CONFIG COMMANDS**

DTE configuration:

DTE0: up CFE running RSX20F version VA15-50  
 Reload enable: ON Retry enable: ON Fault-continuation: ON  
 DTE1: up DN60 running DN60  
 DTE2: up DN87S running ANF10 node NOVA(31)  
 DTE3: down

CFE UNIBUS Configuration:

CSR	Device	CSR	Associated Device
172100	MF11-UP Mem Parity		
177340	TC11 DECTape Control		
176700	RH11 Disk Control		

Monitor Memory Configuration

Monitor configured for 4096P (2048K) of physical memory

Controller Microcodes

Controller	Version
DX10/TX01	15(0)
DX20/TX02	10(74)
DX20/RP20	3(1)
CI20	1A(733)
NIA20	1(172)

CI Configuration

Node	S/W type	S/W vers	H/W type
00 (KL-1026)	T-10	0703	KL10
02 (KL-1322)	T-10	0703	KL10
06 (HSC006)	HSC	V350	HS50
09 (HSC009)	HSC	V350	HS50
11 (KL-1042)	T-10	0703	KL10
13 (KL-2476)	T-10	0703	KL10

NI Configuration

Chan/Kont	State	E-net Address
ETH-0	Online	AA-00-04-00-6E-1C
NI-0	Online	AA-00-03-03-00-13
NI-1	Online	AA-00-03-03-00-87
NI-2	Online	08-00-2B-00-13-BC

Disk Configuration

Drive	Type	Str	Volume	CPU(s)	Controller
RAJ1	RA81			012	HSC-9
RAG1	RA81				HSC-6
RPE0	RP06	1322	13220	2	RH20-0 (540)

Tape Configuration

Drive	Type	Volume	CPU(s)	Controller(s)
MTA260	TU70		0	DX10-0 (220)
MTA261	TU70		0	DX10-0 (220)
MTA262	TU70		0	DX10-0 (220)

OPR COMMAND SUBSETS  
CONFIG COMMANDS

DEctape configuration

Device	CPU
DTA260	0
DTA261	0
DTA262	0
DTA263	0

Unit Record Device Configuration

Card reader configuration:

Device	CPU
CDR260	2

Line printer configuration:

Device	CPU	Type	Status
LPT260	1	LP100	Online

2. SUSPEND the system.

CONFIG>SUSPEND FIX MEMORY<RET>

;;SYSTEM: - Expect an interruption of service

;;SYSTEM: - Suspending system operation  
[Suspending system on DSKF:CRASH.EXE[1,4]]  
[System suspended]

The system is suspended.  
All other CPUs in an SMP  
system should now be  
HALTed.

Note that SMP systems must  
be REBOOTed on the CPU  
that was the policy CPU  
when the system was  
suspended.

RSX-20F VE##-## 8:57 26-Mar-86

RSX-20F version and  
creation time and date.

[SYO: redirected to DBO:]  
[DBO: mounted]

KLI -- VERSION VA##-## RUNNING  
KLI -- KL10 S/N: 2996., MODEL B, 60 HERTZ  
KLI -- KL10 HARDWARE ENVIRONMENT  
MCA25 CACHE PAGER  
MOS MASTER OSCILLATOR  
EXTENDED ADDRESSING  
INTERNAL CHANNELS  
CACHE

DBO: is the system device  
for the RSX-20F tasks.  
KLINIT prints this and  
the following lines.

KLI -- PAGE TABLE SELECTED: BOTH  
KLI -- MICROCODE VERSION #.#[###] LOADED  
KLI -- ALL CACHES ENABLED  
KLI -- % MOS MEMORY IS ALREADY CONFIGURED

LOGICAL MEMORY CONFIGURATION

ADDRESS	SIZE	INT	TYPE	CONTROLLER
00000000	768K	4	MF20	10
03000000	768K	4	MF20	11

OPR COMMAND SUBSETS  
CONFIG COMMANDS

KLI -- CONFIGURATION FILE WRITTEN  
KLI -- BOOTSTRAP LOADED AND STARTED

BOOT V#(##)

BOOT>/REBOOT<RET>

[Reloading from DSKF:CRASH.EXE[1,4]]

Date:3-Sep-88

Time:1150

CONFIG>

;;SYSTEM: - System resumed

CONFIG>

KLINIT has loaded and started BOOT.  
BOOT version number.

Type /REBOOT and press RETURN to reload the default monitor from the file DSKF:CRASH.EXE[1,4].  
BOOT is now reloading the monitor.

Before answering the date prompt, start other SMP system CPUs using the JUMP 400 PARSER command.

OPR COMMAND SUBSETS  
LCP COMMANDS

### 3.5 LCP COMMANDS

The LAT Control Program (LCP) allows you to control and monitor LAT activity. For example, LCP commands:

- o Clear LAT parameters.
- o Set LAT parameters.
- o Show the current parameters, terminal connections, counter and server information.
- o Change various counter settings to zero.

This section describes the keywords, arguments, and switches to the LCP commands listed below.

- o CLEAR
- o SET
- o SHOW
- o START
- o STOP
- o ZERO

| See the TOPS-10 Operator's Guide for more information about  
| controlling LAT devices.

For more information about LAT architecture, and LAT Terminal Server configuration guidelines, see the Local Area Transport (LAT) Architecture Network Manager's Guide.

**OPR COMMAND SUBSETS**  
**LCP COMMANDS**

**CLEAR**

**Function**

The CLEAR command resets parameters specified with the SET command. Note that you cannot clear parameters for NODE-NAME, or host NUMBER. See the SET command for more information about these parameters.

**Format**

LCP>CLEAR keyword argument<RET>

**Keywords**

GROUPS                   clears the current GROUPS setting. You can clear the current setting for single groups or a range of groups. For example:

CLEAR GROUPS n

CLEAR GROUPS n:m

IDENTIFICATION       clears all additional host identification information.

**MAXIMUM**

**ACTIVE-CIRCUITS**

changes to 10 the maximum number of active-circuits that can exist at a node.

**SESSIONS**

resets the maximum number of active LAT terminals allowed to connect to the local host. The reset value defaults to the number of remote terminals you specify in the NETGEN section of the MONGEN dialog. See the TOPS-10 Software Installation Guide for more information about MONGEN.

**MULTICAST-TIMER**

clears the current number of seconds set for the multicast timer, and sets the new number to 30 seconds. The multicast timer specifies the interval at which a host will transmit a multicast message announcing the availability of the LAT Terminal Service.

**NUMBER**

specifies a unique host identification number.

OPR COMMAND SUBSETS  
LCP COMMANDS

RETRANSMIT

TIMER resets the retransmit timer to 1000 milliseconds. The retransmit timer specifies number of milliseconds before the host retransmits any unacknowledged messages to the server.

LIMIT resets to 60 the number of times that a LAT host retransmits any unacknowledged messages to the server. After the last message transmission, the host detaches all jobs associated with the virtual circuit.

SERVICE-NAME service-name

clears the types of services that a host offers to terminal users at a LAT server. The CLEAR SERVICE-NAME command also clears any RATING or additional identification information associated with the service name.

Arguments

nn specifies a number from 0 to 255.

n:m specifies a range of numbers from 0 to 255.

text specifies a text string.

service-name specifies a service name for CLEAR SERVICE-NAME.

Examples

1. Use the CLEAR command to clear the current GROUPS setting for all groups in the range of 30 to 40 and for group 53.

```
LCP>CLEAR GROUPS 30:40,53<RET>
LCP>
 9:24:47          LCP      -- Clear Accepted --
LCP>
```

2. Use the CLEAR command to reset the maximum number of active LAT terminals allowed to connect to the local host.

```
LCP>CLEAR MAXIMUM SESSIONS<RET>
LCP>
 9:25:15          LCP      -- Clear Accepted --
LCP>
```

OPR COMMAND SUBSETS  
LCP COMMANDS

RETURN

**Function**

The RETURN command exits the LCP command subset and returns you to OPR command level.

**Format**

LCP>RETURN<RET>  
OPR>



**OPR COMMAND SUBSETS**  
**LCP COMMANDS**

**SET**

**Function**

The SET command specifies various LCP parameters. You can clear the current settings for all of the following parameters except host NUMBER. See the CLEAR command for information about clearing current settings.

**Format**

LCP>SET keyword argument /switch<RET>

**Keywords**

GROUPS	specifies a range of group numbers, or a single group number. You can specify any combination of ranges or single numbers, separated by commas. For example:  SET GROUPS n:m, nn, n2:m2<RET>
IDENTIFICATION	specifies host identification information. The identification text may be up to 64 characters long, and may contain any printable character.
MAXIMUM	
ACTIVE-CIRCUITS	sets the maximum number of active circuits that can exist at a node at one time.
SESSIONS	sets the maximum number of active LAT terminals allowed to connect to the local host. The default value is the number of remote terminals you specify in the NE:GEN section of the MONGEN dialog. See the <u>TOPS-10 Software Installation Guide</u> for more information about MONGEN.
MULTICAST-TIMER	sets the interval at which a host will transmit to all servers a multicast message announcing the availability of the LAT terminal service. The multicast timer default is 30 seconds.
NUMBER	specifies a unique host identification number.
RETRANSMIT	
TIMER	sets the number of milliseconds before the host retransmits any unacknowledged messages to the server. The default is 1000 milliseconds.

**OPR COMMAND SUBSETS**  
**LCP COMMANDS**

**LIMIT** sets the maximum number of times that a LAT host retransmits any unacknowledged messages to the server. After the last message transmission, the host detaches all jobs associated with the virtual circuit. The default is 60 retransmissions.

**SERVICE-NAME** specifies the types of services a host offers to terminal users at a LAT server. The service name may contain the following characters: any alphanumeric characters, as well as the \$ (dollar sign), - (dash), or \_ (underscore).

**Arguments**

**nn** specifies a number from 0 to 255.

**n:m** specifies a range of numbers from 0 to 255.

**text** specifies a text string.

**Switches for SERVICE-NAME only**

**/RATING:** specifies the host's service rating. The rating may be a fixed number in the range 0-255, or it may be the word "DYNAMIC". The higher the rating, the more accessible that host is to the LAT terminal server. The DYNAMIC rating changes according to machine availability.

**/IDENTIFICATION:** specifies a service description of up to 64 characters. You must include quotes around the service description you specify. For example:

```
LCP>SET SERVICE-NAME JEEVES/IDENTIFICATION:"FOO"
```

**Examples**

1. Use the SET command to set to 200 the maximum number of active LAT terminals allowed to connect to the local host.

```
LCP>SET MAXIMUM SESSIONS 200<RET>
LCP>
9:25:33 LCP -- Set Accepted --
LCP>
```

2. Use the SET command to specify host identification information.

```
LCP>SET IDENTIFICATION "BIG SYSTEM"<RET>
LCP>
9:27:07 LCP -- Set Accepted --
LCP>
```

OPR COMMAND SUBSETS  
LCP COMMANDS

3. Use the SET command to set to 10 the maximum number of active circuits that can exist at a node.

```
LCP>>SET MAXIMUM ACTIVE-CIRCUITS 10<RET>  
LCP>  
 9:28:15          LCP      -- Set Accepted --  
  
LCP>
```

4. Use the SET command to set the host's service name, service rating, and service description.

```
LCP>>SET SERVICE-NAME MACHO/RATING:55/IDENTIFICATION:"Best"<RET>  
LCP>  
 9:31:13          LCP      -- Set Accepted --  
  
LCP>
```

OPR COMMAND SUBSETS  
LCP COMMANDS

SHOW

**Function**

The SHOW command displays the following LAT information:

- o Dynamic and permanent parameters
- o Currently active terminal connections
- o Server information
- o Counter information

**Format**

LCP>SHOW keyword /switch <RET>

**Keywords**

CHARACTERISTICS displays the dynamic parameters and many of the permanent LAT parameters.

COUNTERS displays the counter totals for all servers on the system. To display the counters for a particular server, use the /SERVER switch and supply a server name.

HOST-INITIATED-REQUESTS

displays all the currently active outgoing LAT connections.

PENDING-REQUESTS displays all the currently pending outgoing LAT connections.

SERVER server-name

displays the servers that have connected to the local LAT host. SHOW SERVER/ALL displays a summary of server information including the server name, number and Ethernet address. SHOW SERVER followed by a server name displays additional information about the specified server including the server location, type, status and timers.

SESSIONS displays information about the current LAT terminal sessions including:

- o Job
- o Line
- o Program
- o Server name
- o User

OPR COMMAND SUBSETS  
LCP COMMANDS

Switch for COUNTERS and SERVER only

/SERVER:server-name

displays counters for the specified server.

Argument

server-name specifies the server for which to display information. The server-name argument applies only to the SHOW COUNTERS and SHOW SERVER command.

Examples

1. Use the SHOW command to display the dynamic and permanent LAT parameters.

```
LCP>SHOW CHARACTERISTICS<RET>
```

```
LCP>
```

```
9:27:21          LCP    -- Host Characteristics --
```

```
LAT Access State: ON
```

```
Host Name: KL1026
```

```
Host id: RLT17QM KL1026 AP Monitor
```

```
Host Number: 0
```

```
Retransmit Limit: 60
```

```
Retransmit Timer: 1000
```

```
Multicast Timer: 30
```

```
Groups: 3:4,7,10,14,18,21
```

	Current	Maximum
	-----	-----
Allocated circuits	3	20
Active circuits	3	20
Sessions	6	200
Service name	Rating	Identification
-----	-----	-----
KL1026	1	RLT17Q KL1026 AP Monitor
TOPS10	1	TOPS-10 Development System

```
LCP>
```

2. Use the SHOW command to display the counter totals for all servers on the system.

```
LCP>SHOW COUNTERS<RET>
```

```
LCP>
```

```
9:32:38          LCP    -- Counter Totals for All Servers --
```

```
Messages received: 12664
```

```
Messages transmitted: 13659
```

```
Messages retransmitted: 31
```

```
Sequence errors received: 216
```

```
Illegal messages received: 0
```

```
Illegal slots received: 0
```

```
Resource failures: 0
```

```
LCP>
```

OPR COMMAND SUBSETS  
LCP COMMANDS

3. Use the SHOW command to display information about server LAT9.

```
LCP>SHOW SERVER LAT9<RET>
```

```
LCP>
```

```
9:33:26          LCP          -- Information About Server LAT9 --
```

```
Server Number: 98  
Server Location: MR01-2/L5  
Server Type: DECserver-100  
Ethernet Address: 08-00-2B-00-17-DF  
Server Status: Connected  
Max Slots: 48  
Data Link Size: 1518  
Circuit Timer(ms): 80  
Keep-alive Timer(s): 20
```

```
LCP>
```

4. Use the SHOW command to display information about current LAT terminal sessions.

```
LCP>SHOW SESSIONS<RET>
```

```
LCP>
```

```
9:33:57          LCP          -- Active LAT Sessions --
```

Job	Line	Program	Server Name	Port Name	User
36	75	MS	LAT93	JFRANCIS	FRANCIS [30,224]
22	76	PIP	LAT1	TZIEDZIC	ZIEDZIC [30,6601]
24	77	DIRECT	LAT1	SENDLOSK	LUS [10,4601]
27	100	QUEUE	LAT87	SPERKINS	PERK [30,2216]
29	103	STECO	LAT98	BFROEM	FROEM [30,6026]
30	104	DC	LAT94	JOANNCREEL	JCREEL [30,5653]
26	105	QUEUE	LAT1	DAVIDLUND	LUND [10,5451]

```
LCP>
```

OPR COMMAND SUBSETS  
LCP COMMANDS

**START**

**Function**

The START command notifies all servers that the host is available, and sets the LAT-ACCESS-STATE to ON. See the STOP command for information about restricting access to the local host.

**Format**

LCP>START<RET>

**Example**

Use the START command to make the host available to all terminal servers.

LCP>START<RET>

LCP>

8:33:56           LCP       -- Start Accepted --

LCP>

OPR COMMAND SUBSETS  
LCP COMMANDS

STOP

**Function**

The STOP command terminates all existing LAT terminal sessions and rejects any new connections from servers. See the START command for information on permitting access to the local host.

**Format**

LCP>STOP<RET>

**Example**

Use the STOP command to terminate all existing LAT terminal sessions.

LCP>STOP<RET>

LCP>

8:34:41           LCP       -- Stop Accepted --

LCP>



OPR COMMAND SUBSETS  
LCP COMMANDS

ZERO COUNTERS

**Function**

The ZERO COUNTERS command changes the counters for the combined LAT server totals to zero. This command does not affect the counters for the individual servers unless you use the /SERVER: switch and specify a particular server.

**Format**

LCP>ZERO COUNTERS /switch <RET>

**Switch**

/SERVER:server-name

sets the counters for a particular server to zero. This switch does not affect the counters for the combined server totals. You must specify a server name with this switch.

**Argument**

server-name specifies the server on which the counters should be set to zero.

**Examples**

1. Use the ZERO COUNTERS command to change the counters for the combined LAT server totals to zero.

```
LCP>ZERO COUNTERS<RET>
LCP>
9:35:47          LCP      -- Zero Accepted --
LCP>
```

2. Use the ZERO COUNTERS command to change the counters for server LAT9.

```
LCP>ZERO COUNTERS/SERVER:LAT9<RET>
LCP>
9:36:26          LCP      -- Zero Accepted --
LCP>
```

**OPR COMMAND SUBSETS**  
**NCP COMMANDS**

**3.6 NCP COMMANDS**

This section provides information about the Network Control Program (NCP) command subset. It is a quick reference guide for experienced NCP users. If you have never used NCP, please see the TOPS-10 DECnet and PSI System Manager's and Operator's Guide before you use any NCP commands.

NCP's two main functions are to control and monitor DECnet network activity. Some of the tasks you perform with NCP include:

- o Changing parameters
- o Monitoring local and remote DECnet nodes
- o Loading and starting adjacent nodes
- o Gathering information about the DECnet network

**WARNING**

Some NCP commands have the potential to disrupt the entire network. Several commands will, if formatted with valid but ill-chosen parameters, disrupt your own node's performance. Never enter an NCP command without a complete understanding of the probable effect of the command. Do not make changes in the permanent data base of a remote node without consulting the system manager at the remote node.

The following table briefly describes the NCP commands.

**Table 3-1: NCP Commands**

<b>Command</b>	<b>Function</b>
CANCEL	Removes a command from the request queue before processing begins.
CLEAR	Removes a value previously entered in the volatile data base.
DEFINE	Enters a value in the permanent data base.
DUMP	Stores a copy of a target node's memory image in a dump file at the host node.
HELP	Returns a function and major keywords for all NCP commands.
LIST	Displays, on the user's terminal, information from the permanent data base.

OPR COMMAND SUBSETS  
NCP COMMANDS

LOAD	Allows the executor node to load the system image file to a remote node adjacent to the executor.
LOOP	Requests a node-level loopback test.
PURGE	Removes a value or values from the permanent data base.
SET	Enters a value or values in the volatile data base.
SHOW	Displays on the user's terminal information from the volatile data base.
TELL(prefix)	Directs the command that follows to a remote node for execution.
TRIGGER	Requests the target node to send a load request.
ZERO	Logs counters and then zeros them.

---

OPR COMMAND SUBSETS  
QUOTA COMMANDS

### 3.7 QUOTA COMMANDS

The QUOTA application in OPR enables you to maintain disk space quota entries in the QUOTA.SYS file and in ACTDAE.SYS. QUOTA.SYS contains a list of users for the private structure on which the users' files reside. Creating entries in ACTDAE.SYS causes LOGIN to mount the specified structures. System Administrator privileges are required.

With QUOTA, you can do the following:

- o create a user's quota
- o delete a user's quota
- o list a user's quota
- o change a user's quota
- o display a user's quota

NOTE

You must have SYSTEM operator privileges to use the QUOTA application. SYSTEM operator privileges allow you to control devices and tasks on the host system and remote nodes.

**OPR COMMAND SUBSETS**  
**QUOTA COMMANDS**

**ADD**

**Function**

The ADD command creates entries in QUOTA.SYS or ACTDAE.SYS. If you specify the /MOUNT switch, QUOTA writes the entry in ACTDAE.SYS. If you do not specify the /MOUNT switch, QUOTA writes the entry in <STRUCTURE>:QUOTA.SYS[1,4].

**Format**

QUOTA>ADD userid structure quota-in quota-out /switches<RET>

userid specifies a user's project-programmer number, or a user name. You must include quotes around a user name if it contains non-alphabetic characters. Both the project-programmer number and the user name may include wildcards.

structure specifies a device name, which can be any structure name.

quota-in  
quota-out specifies a user's logged-in or logged-out quota in 128-word blocks. You may specify the quota as one of the following:

- o a positive decimal number
- o the word INFINITE to indicate the largest possible 36-bit integer.

**Switches**

/MOUNT creates an entry for the specified structure in ACTDAE.SYS and in the user's LOGIN search list. If you include the /MOUNT switch, the structure must be cataloged and accessible.

/NOCREATE sets the NOCREATE status bit when the user logs in. This bit prohibits the user from creating files on the structure unless the user specifies the structure name when creating a file. The /NOCREATE switch applies only if you specified the /MOUNT switch.

/NOWRITE write-locks the specified structure for the specified user's job when the user logs in. The user will not be able to create files on the structure. The /NOWRITE switch applies only if you specified the /MOUNT switch.

OPR COMMAND SUBSETS  
QUOTA COMMANDS

Examples

1. Use the ADD command to create an entry in QUOTA.SYS for a user (JSMITH) on structure RENG with quota-in and quota-out of 100 blocks.

```
QUOTA>ADD JSMITH RENG 100 100<RET>
QUOTA>
14:00:59                -- ADD command --
      1 entry added
```

```
QUOTA>
```

2. Use the ADD command to create an entry in ACTDAE.SYS in which the creation of files on the structure is prohibited unless the user (JSMITH) specifies the structure name when creating the file.

```
QUOTA>ADD JSMITH DSKC 1000 100/MOUNT/NOCREATE<RET>
QUOTA>
14:02:29                -- ADD command --
      1 entry added
```

```
QUOTA>
```

OPR COMMAND SUBSETS  
QUOTA COMMANDS

**DELETE**

**Function**

The DELETE command removes entries from QUOTA.SYS and ACTDAE.SYS.

**Format**

QUOTA>DELETE userid structure<RET>

userid specifies a user's project-programmer number, or a user name. You must include quotes around a user name if it contains non-alphabetic characters. Both the project-programmer number and the user name may include wildcards.

structure specifies a device name, which can be any structure name.

**Example**

Use the DELETE command to remove entries of user JSMITH, structure RENG, from QUOTA.SYS and ACTDAE.SYS.

```
QUOTA>DELETE JSMITH RENG<RET>
QUOTA>
14:02:48 -- DELETE command --
          1 entry deleted
```

QUOTA>

OPR COMMAND SUBSETS  
QUOTA COMMANDS

HELP

Function

The HELP command displays information about QUOTA commands.

Format

QUOTA>HELP command<RET>

where command is any QUOTA command.

Examples

1. Use the HELP command to get more information about HELP.

```
QUOTA>HELP HELP<RET>
QUOTA>
```

Obtain help for any QUOTA application command.

The format is this:

HELP command

where <command> can be any one of the following QUOTA commands:

ADD	DELETE	HELP
LIST	MODIFY	SHOW

```
QUOTA>
```

2. Use the HELP command to get information about the DELETE command.

```
QUOTA>HELP DELETE<RET>
```

Removes one or more quota entries from the system.

The format is:

DELETE user structure

The <user> specification can be any of the following:

- a. A ppn. This ppn can contain wildcards (i.e., \* and ?).
- b. A quoted username.
- c. An unquoted username. This username can contain wildcards (\* and ?).

The <structure> argument can be any valid structure name. The trailing colon is optional.

```
QUOTA>
```



OPR COMMAND SUBSETS  
QUOTA COMMANDS

LIST

Function

The LIST command writes a user or structure quota to a file. You must specify a PPN or username. To list QUOTA.SYS entries, specify a structure name. To list ACTDAE.SYS entries, specify the /MOUNT switch.

Format

QUOTA>LIST userid (structure OR /switch) file specification<RET>

userid specifies a user's project-programmer number, or a user name. You must include quotes around a user name if it contains non-alphabetic characters. Both the project-programmer number and the user name may include wildcards.

structure specifies a device name, which can be any structure name. If you specify a structure, the structure must be accessible. QUOTA lists only the QUOTA.SYS entries for that structure.

file specification specifies a file name. The default file specification is DSK:QUOTA.LST.

Switch

/MOUNT lists ACTDAE.SYS entries.

Examples

1. Use the LIST command to list QUOTA.SYS entries on structure DSKE for user JSMITH.

```
QUOTA>LIST JSMITH DSKE<RET>
QUOTA>
14:45:53 -- Listing file written to DSKC:QUOTA.LST[27,5434] --
QUOTA>
```

2. Use the LIST command to list ACTDAE.SYS entries for user JSMITH.

```
QUOTA>LIST JSMITH/MOUNT<RET>
QUOTA>
14:04:24 -- Listing file written to DSKB:QUOTA.LST[10,5676] --
QUOTA>
```

**OPR COMMAND SUBSETS**  
**QUOTA COMMANDS**

**MODIFY**

**Function**

The MODIFY command changes entries in QUOTA.SYS or ACTDAE.SYS. To change ACTDAE.SYS entries, specify the /MOUNT switch. To change QUOTA.SYS entries, specify the /NOMOUNT switch.

**Format**

QUOTA>MODIFY userid structure quota-in quota-out /switches<RET>

userid specifies a user's project-programmer number, or a user name. You must include quotes around a user name if it contains non-alphabetic characters. Both the project-programmer number and the user name may include wildcards.

structure specifies a device name, which can be any structure name. If you include the /NOMOUNT switch, the structure must be cataloged and accessible.

quota-in  
quota-out specifies a user's logged-in or logged-out quota in 128-word blocks. You may specify the quota as one of the following:

- o a positive decimal number
- o the word INFINITE to indicate the largest possible 36-bit integer.
- o the word SAME to indicate no change to the quota

**Switches**

/CREATE clears the NOCREATE status for the specified entry. The /CREATE switch applies only if you specified the /MOUNT switch.

/MOUNT modifies an entry for the specified structure in ACTDAE.SYS and in the user's LOGIN search list.

/NOMOUNT modifies an entry in the QUOTA.SYS file for the specified structure. If you create the entry with the /NOMOUNT switch, the user must specifically MOUNT the structure; LOGIN does not automatically try to mount it when the user logs in.

**OPR COMMAND SUBSETS**  
**QUOTA COMMANDS**

/NOCREATE	sets the NOCREATE status bit when the user logs in. This bit prohibits the user from creating files on the structure unless the user specifies the structure name when creating a file. The /NOCREATE switch applies only if you specified the /MOUNT switch.
/NOWRITE	write-locks the specified structure for the specified user's job when the user logs in. The /NOWRITE switch applies only if you specified the /MOUNT switch.
/WRITE	clears the write-lock status for the specified entry. The /WRITE switch applies only if you specified the /MOUNT switch.

**Examples**

1. Use the MODIFY command to change QUOTA.SYS entries on structure DSKB for user JSMITH.

```
QUOTA>MODIFY JSMITH DSKB 100 100/NOMOUNT<RET>
QUOTA>
14:06:17                -- 1 entry modified --

QUOTA>
```

2. Use the MODIFY command to change ACTDAE.SYS entries on structure DSKC for user JSMITH.

```
QUOTA>MODIFY JSMITH DSKC 1000 100/MOUNT<RET>
QUOTA>
15:04:24                -- 1 entry modified --

QUOTA>
```

**OPR COMMAND SUBSETS**  
**QUOTA COMMANDS**

**RETURN**

**Function**

The RETURN command exits the QUOTA command subset and returns you to OPR command level.

**Format**

```
QUOTA>RETURN<RET>  
OPR>
```

OPR COMMAND SUBSETS  
QUOTA COMMANDS

SHOW

Function

The SHOW command displays entries from QUOTA.SYS or ACTDAE.SYS. To display QUOTA.SYS entries, specify a structure. If you do not specify a structure, QUOTA displays ACTDAE.SYS entries.

Format

QUOTA>SHOW userid structure <RET>

userid specifies a user's project-programmer number, or a user name. You must include quotes around a user name if it contains non-alphabetic characters. Both the project-programmer number and the user name may include wildcards.

structure specifies a device name. The device name can be any structure name, and the structure must be accessible. The structure qualifier is optional. If you specify a structure, QUOTA displays only the QUOTA.SYS entries for that structure. If you do not specify a structure, QUOTA displays user entries from ACTDAE.SYS.

Examples

1. Use the SHOW command to display entries from QUOTA.SYS for user JSMITH.

```
QUOTA>SHOW JSMITH DSKB<RET>
QUOTA>
15:58:04 -- QUOTA listing --
      User: JSMITH
              10,7777      Quota In: 100      Out: 100
Reserved:      0
```

2. Use the SHOW command to display entries from ACTDAE.SYS for user JSMITH.

```
QUOTA>SHOW JSMITH<RET>
QUOTA>
14:06:06 -- QUOTA listing --
      10,7777      JSMITH
Structure  Quota in  Quota out  Reserved  Status
-----
      DSKC      80000      20000      0
      DSKZ      10000      1000      0
      DSKE      1000      100      0      /NOCREATE

QUOTA>
```



## CHAPTER 4

### TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS

The commands in this chapter change various system parameters and, therefore, are restricted to users who are logged in under [1,2], only. All commands, when executed, leave the terminal in monitor mode. Chapter 5 describes the operator-privileged commands for the OPSEK system program.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
ATTACH CPU

ATTACH CPU

**Function**

The ATTACH CPU command adds the specified CPU and all the devices on that CPU to the system.

NOTE

The CONFIG ADD command performs extensive system monitoring and is preferred for adding CPUs to a system.

**Format**

ATTACH CPU argument<RET>

**Argument**

n specifies a logical or physical CPU name.

**Example**

Use the ATTACH CPU command to add CPU1 and all devices on CPU1 to the system.

.ATTACH CPU1<RET>



**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
ATTACH device

**ATTACH device**

**Function**

The ATTACH device command returns a previously DETACHED device to your control. You can then ASSIGN the device for your own use, or you can DEASSIGN the device in order to place it in the monitor pool of available resources.

NOTE

The CONFIG ADD command performs extensive system monitoring and is preferred for returning previously detached devices to your control.

**Format**

ATTACH device

**Argument**

device specifies the device being attached.

**Restrictions**

The device must have been previously DETACHED. See the DETACH command description for more information

Associated messages are:

?No such device

The specified device does not exist at your installation.

?Wasn't detached

The specified device is not detached.

**Example**

You ATTACH tape drive MTA2 that was previously DETACHED.

.ATTACH MTA2<RET>

After you have ATTACHED a tape drive, you must then set the tape drive available with the OPR command SET TAPE-DRIVE. See the OPR command SET TAPE-DRIVE for more information.

To confirm the attachment of the device, your OPR terminal replies with:

OPR> 12:35:12 Device MTA2 -- Attached --

OPR>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
ATTACH disk-unit

ATTACH disk-unit

**Function**

The ATTACH disk-unit command designates that the specified disk unit is now up, and you can MOUNT a structure on it.

**Format**

ATTACH disk-unit/comment

**Argument**

disk-unit specifies that the disk unit you want to declare is available for structure mounts (for example, DPA2: or RPA1:).

**Switch**

/comment specifies a line of text whose first two characters go into the ERROR.SYS file along with the command as configuration changes (PM for preventive maintenance, CM for corrective maintenance).

**Restrictions**

The unit must have been DETACHED or declared DOWN at system initialization.

Associated messages are:

?No such device

The disk unit specified does not exist.

**Example**

You ATTACH disk unit RPB1 for system use after it was DETACHED at system initialization.

.ATTACH RPB1:<RET>

To confirm the attachment of the disk unit, your OPR terminal replies with:

```
OPR>
 1:20:19      Device RPB1  -- Attached --
OPR>
```

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
ATTACH job

ATTACH job

**Function**

The ATTACH job command detaches the current job, if any, and connects the terminal to the job specified as the argument.

**Format**

ATTACH n[PPN]

**Arguments**

n specifies the job number of the job to which the terminal is to be attached.

[PPN] specifies the project-programmer number of the originator of the desired job. This argument can be omitted if it is the same as the project-programmer number of the job to which the terminal is currently attached. When you are logged-in under [1,2], you can always attach to a job, provided that the proper [PPN] is specified.

Any other user, even one with operator privileges but not logged-in under [1,2], is interrogated for the appropriate password.

**Restrictions**

Associated messages are:

?Not a job

The job number specified does not exist.

?Can't attach to job

The [PPN] was not correct for the job number.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
ATTACH job

**Example**

You are requested by a user to kill his job. You ATTACH to his job, kill the job, and then ATTACH back to your job. When you attach back to job 4 as an operator, you are asked for the password because the user with job 17 does not have operator privileges and was not logged-in as [1,2].

.ATTACH 17[27,5107]<RET>  
From job 4

.KJ<RET>  
Job 17 User BROWN,E [27,5107]  
Logged-off TTY0 at 10:04:59 on 18-Mar-88  
Runtime: 0:10:02, KCS:32, Connect time: 0:49:19  
Disk Reads:495, Writes:125, Blocks saved:7040

.ATTACH 4[1,2]<RET>  
Password:<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
DETACH device

DETACH device

**Function**

The DETACH device command assigns the specified device to job 0, thus making it unavailable to any user requesting the device.

NOTE

The CONFIG ADD command performs extensive system monitoring and is preferred for making devices unavailable.

**Format**

DETACH device

**Argument**

device specifies the name of the device to be DETACHED.

**Restrictions**

DSK and TTY cannot be detached.

Associated messages are:

?Device in use

The device specified is already in use.

?Device not assignable

The device specified is currently off-line or unavailable.

?Can't detach device

You are attempting to detach a DSK or TTY device.

?No such device

The specified device does not exist.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
DETACH device

**Example**

| You DETACH tape drive MTA2 because of hardware problems.

| .DETACH MTA2<RET>

.  
To confirm that the tape drive was detached, your OPR terminal  
replies with:

| OPR>

3:45:19 Device MTA2 -- Detached --

OPR>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
DETACH disk-unit

DETACH disk-unit

**Function**

The DETACH disk-unit command designates the specified disk unit as being DOWN. This is similar to declaring it DOWN at system initialization.

**Format**

DETACH disk-unit/comment

**Argument**

disk-unit specifies the disk unit that you want to declare DOWN, for example, DPA0:, RPA4:.

**Switch**

/comment specifies a line of text whose first two characters go into the ERROR.SYS file, along with the command, as Configuration Changes. (Use PM for preventive maintenance, CM for corrective maintenance).

**Restrictions**

The disk unit cannot have a mounted file structure on it. If it has, you must DISMOUNT the structure first and then DETACH the disk unit.

Associated messages are:

?No such device

The disk unit specified does not exist.

**Example**

You DETACH disk drive RPB2: as it is inoperable due to hardware problems.

.DETACH RPB2:<RET>

To confirm the detachment of a device, your OPR terminal replies with:

```
OPR>
10:57:12          Device RPB2  -- Detached --
OPR>
```

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
INITIA

INITIA

**Function**

The operator-privileged INITIA command performs the following two functions:

- o It executes SYSJOB.INI, the system startup file that reinitializes the system.
- o It runs the TTY STOMPER program, which disconnects detached terminals that have been idle for more than two minutes.

**Format**

INITIA keyword<RET>

**Keywords**

STOMP runs the TTY STOMPER program to disconnect detached terminals.

SYSTEM executes SYSJOB.INI, the system startup file. SYSJOB.INI contains the commands necessary to start up system programs such as ACTDAE, FILDAE, QUASAR, and ORION.

**Examples**

1. Use the INITIA STOMP command to disconnect detached terminals that have been idle for more than two minutes.

```
.INITIA STOMP<RET>  
%%TTY STOMPER detaching from terminal
```

2. Use the INITIA SYSTEM command to execute the system startup file that reinitializes the system.

```
.INITIA SYSTEM<RET>  
MONITOR 11:44:06 CTY system 1026  
Connected to node CENTR(0) Line 45
```

```
.LOGIN 1,2<RET>  
.R OPR<RET>
```

```
OPR>
```



**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
**SEND**

**SEND**

**Function**

The SEND command sends messages to all terminals on your system or to all terminals at a specified (ANF-10) network node. A bell sounds at the destination terminals when your message is received.

**Format**

SEND keyword message<RET>

**Keywords**

ALL specifies that the message be sent to all terminals on the system.

NODE:identifier specifies that the message be sent to all terminals on the given node. Your host system is the default.

**Restrictions**

The destination terminal does not receive your message if:

- o The job is not at monitor command level
- o The job has the TTY GAG bit set
- o The terminal is in IMAGE mode or Packet Image Mode (PIM)

In addition, if the destination terminal is hardwired and turned off, your message is not sent. However, it appears to have been sent because the software cannot detect an OFF condition on hardwired terminals.

If you try to send a message to a terminal not at monitor command level, you receive a BUSY message, and your message is not sent.

**Examples**

1. Use the SEND ALL command to notify all users that timesharing ends in 30 minutes.

```
OPR>SEND ALL TIMESHARING ENDS IN 30 MINUTES<RET>
OPR>
;;SYSTEM: - TIMESHARING ENDS IN 30 MINUTES

OPR>
```

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SEND

2. Use the SEND NODE: command to notify users to stop queuing print requests because of a problem with the line printer at the central site.

```
OPR>SEND NODE:KL1026 DO NOT QUEUE ANY PRINT JOBS UNTIL NOTIFIED<RET>
```

```
OPR>
```

```
10:39:05          -- SEND Command Completed --
```

```
OPR>
```

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET BREAK

SET BREAK

**Function**

The SET BREAK command makes the address break facility available to users. It also prevents the address break facility from being available to users if you wish to make it available to system programmers for their exclusive use.

The address break facility of the hardware makes a powerful debugging facility available to users of the system. To make this feature available, the monitor must set the address where the user is breaking into the address switches and the break conditions into the break conditions register.

The default setting when the monitor is loaded is SET BREAK USERS.

**Format**

SET BREAK USERS

or

SET BREAK NO USERS

**Arguments**

USERS specifies that users of the system be given the address break facility. The system changes the address switches and break conditions for programs being debugged using address break.

NO USERS specifies that the message "?Not available" be printed on a user's terminal if the user attempts to use the address break facility.

**Restriction**

The SET BREAK command is not applicable on KS10 systems because the hardware is not capable of the address break facility.

Associated messages are:

?Not available

You tried to SET BREAK NO USERS, but the address break facility was already in use by one or more users.

**Example**

You give the SET BREAK USERS command to allow all users to use the address break facility.

.SET BREAK USERS<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET CORMAX

SET CORMAX

**Function**

The SET CORMAX command changes the system parameter CORMAX. The largest size that any job (sum of low and high segments) can be is CORMAX-1.

**Format**

SET CORMAX n

**Argument**

n specifies a decimal number representing nK. The minimum value of n is 10, unless this value was changed at system generation or system initialization time.

**Example**

You set the CORMAX parameter to 256K.

.SET CORMAX 256K<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET CORMIN

SET CORMIN

**Function**

The SET CORMIN command changes the system parameter CORMIN. CORMIN is the guaranteed amount of contiguous core that a single unlocked job can have. This command is used only with a monitor that has the capability of locking jobs in core (usually a real-time monitor).

**Format**

SET CORMIN n

**Argument**

n specifies a decimal number representing nK.

**Example**

You set the CORMIN parameter to 256K.

.SET CORMIN 256K<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET CPU

SET CPU

**Function**

The SET CPU command specifies which CPU in a multiprocessing system will run your job. You can specify that processing occur on the primary CPU, the secondary CPU, or on either CPU.

**Format**

SET CPU keyword argument<RET>

**Arguments**

U            designates a logical name  
L            designates a KL processor  
n            is a number from 0 to 5, depending on the number of  
             processors in the system.

**Keywords**

CPxn            adds the specified CPU to the list of CPUs  
                 your job can use.  
NO CPxn        removes the specified CPU from the list of  
                 CPUs your job can use.  
CPU ALL        adds all of the CPUs to the list of CPUs your  
                 job can use.  
ONLY CPxn      changes the CPU specification so that it  
                 includes only the specified CPU.

**Restrictions**

The SET CPU command for a particular CPU remains in effect until one of the following occurs:

- o You issue another SET CPU command specifying a different CPU.
- o You issue a KJOB command.
- o Your program overrides the SET CPU command by issuing the SETUUC monitor call with a different specification.

The SETUUC monitor call for a particular CPU remains in effect until one of the following occurs:

- o The RESET or EXIT monitor call causes the job to revert to the CPU specified in the last SET CPU command.
- o Another SETUUC monitor call specifies a different CPU.

**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
**SET CPU**

When you log in, the CPU specification is usually set to ALL. Each CPU scheduler competes for jobs with the ALL specification so that the job load is balanced between CPUs. Therefore, you do not generally need to use the SET CPU.

**Examples**

1. Your job can run only on CPU1.

```
.SET CPU ONLY CPU1<RET>
```

.

2. Your job can run on CPU1.

```
.SET CPU CPU1<RET>
```

.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET DATE

SET DATE

**Function**

The SET DATE command changes the system date. However, this command does not check the validity of the date argument, as is done at system initialization.

To display the current system date, use the monitor command DAYTIME.

**Format**

SET DATE mm-dd-yy

**Argument**

mm-dd-yy specifies the month, day, and year of the date argument. The month, day, and year are each a 2-character decimal number separated by hyphens.

**Example**

You set the date to October 15, 1988 and then display the date with the DAY command.

```
.SET DATE 10-15-88<RET>
```

```
.DAY<RET>  
15-Oct-88 11:25:45
```



TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET DAYTIME

SET DAYTIME

**Function**

The SET DAYTIME command changes the system time of day.

If you need to know the current system's time of day, give the TOPS-10 command DAYTIME.

**Format**

SET DAYTIME nnnn

**Argument**

nnnn specifies a decimal number from 0000 through 2359, representing a 24-hour time. For example, 1630 as an argument is equal to 4:30 P.M.

**Example**

You set the time of day to 1815 to correct the system's time.

.SET DAYTIME 1815<RET>

.DAY<RET>

12-Oct-88 18:15:04

.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET MEMORY

SET MEMORY

**Function**

The SET MEMORY command alters the system memory configuration dynamically without affecting system operation. This command is most useful for removing faulty memory from the system, returning repaired memory to the system, or reconfiguring memory on systems that contain multiple CPUs. If this command is successfully executed, the specified memory is set on- or off-line.

**Format**

SET MEMORY ON-LINE FROM n TO m

or

SET MEMORY OFF-LINE FROM n TO m

where FROM and TO are optional portions of the command line.

**Argument**

n,m specifies the number range (n less than or equal to m) of the physical addresses that are to be set ON-or OFF-LINE. The numbers are treated as decimal, unless preceded by a pound sign (#) implying octal. If a number is followed by the letter P or K, the range is in pages (P) or blocks (K). If neither P nor K is specified, then K is the default. Refer to the SET VMMA command for a further description of K and P.

**Restrictions**

The SET MEMORY command is operational only on systems that have the LOCK facility.

Associated messages are:

?ATTEMPT TO SET MONITOR MEMORY OFF-LINE

The range of addresses specified in a SET MEMORY OFF-LINE command overlaps the resident monitor. The memory occupied by the resident monitor cannot be set off-line.

?JOB(S) TOO BIG TO CONTINUE TO RUN  
?PROBLEM WITH JOB(S) n1[prog1],n2[prog2],...nn[progn]

If the range of addresses specified in a SET MEMORY OFF-LINE command were taken off-line, the jobs listed would be too big to continue to run. The job numbers and program names are listed so that you can ATTACH to the jobs, log them out, and type the command again if you wish the command to succeed.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET MEMORY

?ATTEMPT TO SET MEMORY CONTAINING LOCKED JOBS OFF-LINE  
?PROBLEM WITH JOB(S) n1[prog1],n2[prog2],...nn[progn]

The range of addresses specified in a SET MEMORY OFF-LINE command overlaps memory containing jobs that are locked in core. The job numbers and program names are listed so that you can ATTACH to the jobs, log them out, and type the command again, if you wish the command to succeed.

?p NXM ERRS FROM n TO m

When a SET MEMORY ON-LINE command is executed, the system references the memory in the range specified in the command to ensure that it actually exists and is on-line. Should any nonexistent memory be encountered during this procedure, the range of nonexistent locations (n,m) is reported on the OPR terminal along with the number of errors (p), and the memory in that range is treated as off-line.

**Example**

You are instructed by the systems programmer to set 512K off-line.

.SET MEMORY OFF-LINE FROM 512K TO 1024K<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET NOMESSAGE

SET NOMESSAGE

**Function**

The SET NOMESSAGE command suppresses messages from disk and tape devices, and from DL10-based PDP-11 nodes. Normally, when one of these devices goes off-line unexpectedly, a message is sent to the operator's console once-a-minute. The SET NOMESSAGE command controls those types of messages. One of the messages you might see is:

```
UNIT device-name WENT OFF-LINE  
PLEASE POWER DOWN AND TURN IT ON AGAIN
```

**Format**

To suppress tape controller messages, use the following format:

```
SET NOMESSAGE MTx
```

**Argument**

x is the name of the controller that is sending messages.

**Format**

To suppress messages from disk units, use the following format:

```
SET NOMESSAGE RPxn
```

**Argument**

RPxn is the disk unit, including controller name (x) and unit number (n).

**Format**

To suppress messages from a DL10-based PDP-11 node, use the format:

```
SET NOMESSAGE PDP-11 n
```

**Argument**

n is the number of the node that is off-line.

**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
**SET NOMESSAGE**

**Format**

The SET NOMESSAGE command also controls the messages from specific types of disk errors. RIB error messages are counted from system startup, and messages from RIB errors may be suppressed by setting the RIB error message threshold RIBERN at system generation, or with the SET NOMESSAGE command. Use the following format of SET NOMESSAGE to set the message threshold from RIB errors:

```
SET NOMESSAGE RIB n
```

**Argument**

n is the number of RIB error messages to be suppressed before beginning to print them on the CTY. The default threshold is 0 so that all RIB error messages are printed. Note that the total number of RIB error messages is reset to 0 only when the system is reloaded.

**Format**

SET NOMESSAGE suppresses messages reporting non-recoverable (hard) errors from disk units. You can use the SET NOMESSAGE command to set the threshold for hard error messages from disk units with the following command:

```
SET NOMESSAGE DSKERR n
```

**Argument**

n is the number of messages to be suppressed before printing one message. When the number of hard error messages exceeds n, a message is printed on the CTY. Note that the counter of hard error messages is reset to 0 when a message is printed on the CTY. The system default threshold for hard disk error messages is 25. Therefore, by default, every twenty-sixth message is printed on the CTY.

**Example**

You turn off the once-a-minute message for disk drive RPA2.

```
.SET NOMESSAGE RPA2<RET>
```

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET OPR

SET OPR

**Function**

The SET OPR command changes the terminal designated as the OPR terminal while the system is running.

**Format**

SET OPR TTYnn:

or

SET OPR CTY

**Arguments**

TTYnn: specifies the number of the terminal to be designated as the OPR terminal.

CTY specifies the terminal on the console front end.

**Example**

You set terminal 23 to be the OPR terminal.

.SET OPR TTY23;<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET SCHED

SET SCHED

**Function**

The SET SCHED command changes the scheduled use of the system.

**Format**

SET SCHED nnnn

**Argument**

nnnn specifies an octal number which is stored in the right half of the STATES word in COMMON. The following values for "nnnn" have independent meanings, and several can be specified concurrently by adding the values together (see example).

0	specifies regular timesharing and batch operations.
1	specifies no further LOGINS allowed except from the CTY.
2	specifies no further LOGINS from remote terminals, and do not answer data sets.
4	specifies batch operation only.
10	specifies stand-alone operation only.
200	specifies that unspooling is allowed.
400	specifies no operator coverage.
1000	specifies to inhibit automatic execution of NETLDR.

**Example**

You set the system schedule to 15. This allows you to run the system as stand-alone, batch operations only, and no LOGINS except from the CTY (a combination of 1, 4, and 10).

.SET SCHED 15<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET TTY

SET TTY

**Function**

When used with a device argument, the SET TTY command declares to the scanner service special properties of a terminal line other than the one on which the command is typed. The device argument can be used to modify the characteristics of any terminal line on the system.

**Formats**

SET TTY TTYn: argument

TTY TTYn: argument

TTYn: specifies the terminal whose line number (n) is to be controlled. This argument is optional. If omitted, the command is identical to the SET TTY command described in the TOPS-10 Operating System Commands Manual.

**Arguments**

ALTMODE converts the ALTMODE codes of 175 and 176 to the standard ASCII ESCape character 033 (initial state if, at monitor generation, the TTYALT symbol is assigned a non-zero value). NO ALTMODE restores the individual identity of the codes 175 and 176.

BLANKS restores multiple carriage return/line feeds and form feeds (initial state).

NO BLANKS suppresses blank lines (consecutive carriage return/line feeds after the first) and outputs form feeds and vertical tabs as two carriage return/line feeds. This is useful for a video display terminal in order to increase the amount of output that fits on the screen.

COPY controls output of ESCape characters to VT5x terminals only.

CRLF restores the free carriage return (initial state).

NO CRLF suppresses the free carriage return normally output at the end of a line exceeding the carriage width.

DEFER suppresses terminal echoing until the user program or monitor asks for the characters.

This means that programs that are doing cursor control or are handling their own rubouts can get the screen image correct without doing their own echoing.



**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
**SET TTY**

**NO DEFER** turns off the SET TTY TTYn: DEFER command.

**DISPLAY** notifies the system that the terminal you are using is a display terminal.

**NO DISPLAY** turns off the SET TTY TTYn: DISPLAY command.

**ECHO** restores the normal echoing of each character entered. Most terminals for TOPS-10 are used in full duplex mode which means that the terminal does not print each character as the user types it. Instead the monitor echoes each character typed so that the character is printed. If a terminal prints C when it is typed but does not print any of the noncontrol characters typed by the user, then this command can be used to establish normal echoing. (Each installation determines the initial setting when generating its monitor at system generation time.)

**NO ECHO** suppresses monitor echoing of input characters. Local copy terminals (that is, terminals which automatically print each character as the user types it) do not require monitor echoing because the echoing would cause each character typed to be printed twice. This command is used to stop double printing of each character on a local copy terminal. (The initial setting is determined by each installation when constructing its monitor at system generation time.)

**FILL n** assigns filler class n to this terminal. Many different types of terminals are supported by the TOPS-10 operating system. Some terminals require one or more filler characters to be sent following certain control characters such as line feed (LF) and horizontal tab (HT). Table 4-1 illustrates the number of fillers sent for each character and filler class. The filler characters are CR (215 octal for even parity) for carriage return characters (CR, 215 octal) and DEL (RUBOUT, 377 octal) for all other character. No fillers are supplied for image mode output. (The initial setting is determined by each installation when constructing its monitor at system generation time.)

**NO FILL** is equivalent to TTY FILL 0. (The initial setting is determined by each installation when constructing its monitor at system generation time.) Fillers for output and echoing are determined from Table 4-1.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET TTY

Table 4-1: Number of Fillers by Character and Filler Class

Character Name	Octal	Number of Fillers for Filler Class			
		0	1	2	3
BS	010	0	2	6	6
HT	011	0	1 OR 2	0	1 OR 2 (1)
LF	012	0	2	6	6
VT	013	0	2	6	6
FF	014	0	12	21	21
CR on output	015	0	1	3	3 (2)
FREE CR (3)		0	2	4	4
CR LF on output	015-012	0	3	9	9 (4)
XON	021	1	1	1	1
TAPE	022	1	1	1	1
XOFF	023	1	1	1	1
NTAP	024	1	1	1	1

- (1) 1 if 0-3 spaces to tab stop; 2 if 4-7 spaces to tab stop.  
(2) Output only; no fillers on input.  
(3) Refer to the SET TTY TTYn CR LF command.  
(4) Sum of the fillers output for a CR and LF.

Argument	Function
FORM	specifies that the terminal has hardware form (page) and VT (vertical tab) characters. (The initial setting is determined by each installation when constructing its monitor at system generation time.)
NO FORM	specifies that the monitor sends eight line feeds for a form and four line feeds for a VT. (The initial setting is determined by each installation when constructing its monitor at system generation time.)
GAG	specifies that messages transmitted by the SEND command cannot be received at this terminal unless the job is at monitor level (initial state).
NO GAG	specifies that messages transmitted by the SEND command can be received at this terminal even though the job is not at monitor level.
HOLD NO HOLD	controls use of scroll key on VT5x terminals only.
IGNORE	allows you to disable a line. The line will be ignored by the PDP-11.
NO IGNORE	turns off the SET TTY TTYn: IGNORE command.

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET TTY

LC suppresses the translation of lowercase character input to uppercase.

NO LC causes the monitor to translate lowercase characters to uppercase as they are received. Frequently, it is convenient to have a terminal with both uppercase and lowercase to simulate the behavior of one with uppercase only. This command causes the monitor to perform this simulation. The echo sent back by the monitor always matches the case of the characters after translation. By looking at the printout, the user can determine what translation was performed by the monitor (initial state).

PAGE n gives the user the ability to temporarily suspend system timeout without losing it. The XOFF key <CTRL/S> suspends the timeout, and the XON key <CTRL/Q> restores it for "n" lines. The XOFF and XON are not echoed and are not sent to the user's program. This command is useful for video display terminals so that the user can read a page of text before it disappears from the screen. Note that it preempts the user of <CTRL/S> and <CTRL/Q> for reading paper tape. (See SET TTY TAPE.)

NO PAGE disables the timeout control ability of the XOFF and XON keys. The current interpretation of these keys depends on the last SET TTY TAPE command (initial state).

RTCOMP disables the <CTRL/R> (reprint current line after making corrections) and <CTRL/T> (print job status without interrupting execution) features allowing <CTRL/R> and <CTRL/T> to be passed to the user program.

NO RTCOMP turns on the <CTRL/R> and the <CTRL/T> feature.

SLAVE specifies that the terminal becomes slaved, so that no commands can be typed on the terminal. The terminal can then be ASSIGNED by another user. You can slave any terminal including your own. (The initial setting is determined by each installation when constructing its monitor at system generation time.)

NO SLAVE specifies that the terminal becomes unslaved so that commands can now be typed on the console. If OPR is slaved, you can LOGIN under [1,2] on another terminal to unslave OPR. (The initial setting is determined by each installation when constructing its monitor at system generation time.)

SPEED n sets the speed at which the system sends and receives characters to n baud. (The user must adjust the speed at the terminal by setting a switch.)

**TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS**  
**SET TTY**

**SPEED** m,n            sets the terminal transmitting speed to m baud and the receiving speed to n baud. (This is especially useful for display terminals that allow transmitting and receiving at different speeds.)

**TAB**                    specifies that the hardware tab stops are set every eight columns. (The initial setting is determined by each installation when constructing its monitor at system generation time.)

**NO TAB**                specifies that the monitor simulates tab output from programs by sending the necessary number of space characters.

**TAPE**                  specifies that the XON key <CTRL/Q> causes the terminal to read paper tape. The XOFF key <CTRL/S> causes the terminal to stop reading paper tape. Rubouts are ignored and free CRLEs are not sent.

**NO TAPE**               specifies that the XON key <CTRL/Q> and the XOFF key <CTRL/S> have no special paper tape function. They can, however, have a page function. (See SET TTY TTYn: PAGE command.)

**TYPE** nnnn            sets the terminal hardware characteristics. nnnn is the terminal type. The monitor command "HELP \*" shows a list of the terminal types supported on your system.

**UC**                    is equivalent to SET TTY TTYn: NO LC.

**NO UC**                is equivalent to SET TTY TTYn: LC.

**WIDTH** n              specifies that the carriage width (the point at which a free carriage return is inserted) is set to n. The range of n is 17 (two tab stops) to 200 decimal. The initial state is 72.

**Restriction**

The SET TTY command requires LOGIN if you are unslaving OPR.

**Example**

You set a user's terminal for lowercase, a width of 80, and a speed of 150 input baud rate and 2400 output baud rate.

.SET TTY TTY23: LC WIDTH 80 SPEED 150 2400<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
SET VMMAX

SET VMMAX

**Function**

The SET VMMAX command specifies the maximum amount of virtual memory available to all users of the system.

After the execution of this command, the new value of VMMAX is one of the following:

1. The total amount of allocated swapping space, if n is greater than the total amount allocated.
2. The amount currently in use by all virtual memory users, if n is less than the total amount in use.
3. The value of n, if neither of the above is true.

**Format**

SET VMMAX nP

or

SET VMMAX nK

**Arguments**

nK specifies the number of words of virtual memory. 1K is equal to 1024 words. If you omit the K or the P, K is the default.

nP specifies the number of pages of virtual memory. 1P is equal to 512 words.

**Example**

You set the virtual memory to five thousand pages (equivalent to 2560 words).

.SET VMMAX 5000P<RET>

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
XCHNGE

XCHNGE

**Function**

The XCHNGE command enables a system with a bad disk unit to continue without unnecessary user disruption by logically exchanging disk drives and then having you physically exchange disk packs.

**Format**

XCHNGE diskunit1: diskunit2:

**Argument**

diskunitn: specifies the disk unit you want to exchange with another disk unit. For example, you exchange RPA0 for RPA2.

CAUTION

Careless use of this command can destroy information on disk packs because the monitor assumes that the physical disk packs have been switched by you. For that reason, both disk drives should be powered down before issuing the command. One precaution the monitor does take whenever this command is issued is to automatically place both disk drives off-line. It is up to you to then switch the disk packs before placing the units back on-line.

**Restrictions**

Diskunit1 and diskunit2 must be on the same controller, and must be of the same type.

Associated messages are:

?XCHNGE DISKUNIT1?

The disk unit specified does not exist.

?XCHNGE DISKUNIT1 DISKUNIT2?

One of the following conditions exists:

- o The two disk drives are on different controllers
- o The second disk unit specified does not exist
- o The disk unit contains non-removable media

TOPS-10 OPERATOR-PRIVILEGED MONITOR COMMANDS  
XCHNGE

**Example**

You exchange the disk pack on RPA1: with the disk pack on RPA3:.

.XCHNGE RPA1: RPA3: /CM<RET>





## CHAPTER 5

### OPSER COMMAND LANGUAGE

#### 5.1 INTRODUCTION TO OPSER

The TOPS-10 operating system considers all jobs to be timesharing jobs; thus, each job must be associated with a timesharing terminal (TTY). In some situations, however, it is inconvenient to require a timesharing terminal to be associated with every job on the system (for example, where many jobs are needed for a single application). OPSER provides a method whereby a single job running from a single timesharing terminal can control many subjobs simultaneously. To do this, OPSER implements a "device" called a pseudo-terminal (PTY). A PTY is a software simulation of a terminal. The controlling program, OPSER, can send information to a PTY and receive information from a PTY.

OPSER starts running subjobs by means of pseudo-terminals and controls each subjob by sending appropriate information (for example, the commands or data you give it) over the PTY controlling the subjob. You can run as many subjobs as there are PTYs on the system, up to a maximum of 14. Through OPSER you can control many jobs from one terminal.

#### 5.2 STARTING OPSER

OPSER normally starts when the system is brought up. At this time OPSER reads and processes the file SYS:OPR.ATO (an automatic startup file). This file contains the OPSER commands that initiate the running of system software programs such as input and output spoolers, components of the batch processing system, and device-servicing programs (such as MOUNT).

If OPSER has not been started automatically, you can start it by typing the following command:

```
.R OPSER<RET>  
*
```

When OPSER displays an asterisk (\*), type the following command:

```
*:AUTO SYS:OPR.ATO<RET>
```

When OPSER finishes processing the OPR.ATO file, it displays an asterisk or an exclamation point (!). When OPSER displays an asterisk or exclamation point, you can enter any of the OPSER commands described in this chapter.

### 5.2.1 Commands to the OPSER Program

You must precede each OPSER command by a colon (:), and you must type enough letters to make the command unique. The :WHAT command is unique at one character. Therefore, :W is interpreted as :WHAT.

OPSER prompts you with either an asterisk (\*) or an exclamation point (!) when it is ready to receive your commands. An asterisk indicates that no subjobs are active or a subjob is waiting for some action on your part. An exclamation point means that at least one subjob is currently active but you can still communicate with other subjobs.

There are four methods of specifying subjobs in an OPSER command string.

1. Type the subjob number (or numbers).
2. Type the mnemonic you assigned to the job with the :DEFINE command.
3. Use the word ALL, which indicates to OPSER that you want the command to apply to all active subjobs.
4. Leave the subjob specification out entirely, in which case OPSER assumes you intend the command to apply to the last subjob you referenced.

If the previous command referenced a list of subjobs, the last one referenced is the default for any subsequent command. For example, in the following sequence:

```
:WHAT A, B, C<RET>
:STOP<RET>
```

C is the subjob implicitly referred to in the :STOP command.

If A, B, and C were the only active subjobs, and the following commands were typed:

```
:WHAT ALL<RET>
:STOP<RET>
```

C would again be the implicit argument of the :STOP command.

### 5.2.2 Commands Directly to Subjobs

When you give commands to a subjob, you must indicate for which subjob (or subjobs) the command is intended. Do this by preceding the command with the subjob number (or the name assigned by means of the :DEFINE command) and a hyphen. If you do not specify the subjob number or name in the command, the command defaults to the last specified subjob. For example, to stop subjob 3 (defined as LP1) you could type:

```
!3-STOP ;using the subjob number
```

or

```
!LP1-STOP ;using the subjob name
```

or

```
!:STOP ;if LP1 was the last specified subjob
```

## OPSER COMMAND LANGUAGE

There is a method available in OPSER for sending the same command to all the subjobs at once. For example, if you want to know the status within each of the subjobs, instead of typing WHAT to each subjob, you can do it with a single command. You simply type:

```
:WHAT ALL<RET>
```

and OPSER sends the WHAT command to each subjob.

Whenever you enter a command to a subjob, OPSER will timestamp and identify the entry as follows:

```
!hh:mm (xxx)
```

where xxx is the subjob number or name used in the preceding command line. For example, the following is representative of your CTY output.

```
!S-R SPRINT      (operator command)
!13:20(S)        (OPSER timestamp)
/                (SPRINT prompt)
```

Sample CTY output included in this chapter usually omits timestamp entries in the interest of conserving space and reducing clutter. Actual OPSER output will be timestamped.

Consider the following sequence of commands:

STEP	EXPLANATION
<u>.R OPSER&lt;RET&gt;</u>	Run the OPSER program.
<u>*:SLOG 2,167&lt;RET&gt;</u>	Log in a subjob under [2,167].
<u>!:DEF FIL=&lt;RET&gt;</u>	Associate subjob n with the name FIL.
<u>!:WHAT FIL&lt;RET&gt;</u>	Print out the status of FIL.
<u>!FIL-R PIP&lt;RET&gt;</u>	Tell FIL to run PIP.
<u>*FILC.EXT=FILEA.EXT,FILB.EXT&lt;RET&gt;</u>	Use PIP to create one file from data in two other files.
<u>!:STOP FIL&lt;RET&gt;</u>	Return FIL to monitor mode.
<u>!:KJOB FIL&lt;RET&gt;</u>	Log out FIL.
<u>!:EXIT&lt;RET&gt;</u>	Cause OPSER to exit to the monitor.

The example above shows how to log in a subjob, give it a name, run a system program, and log out the subjob. Once the concept of subjobs is understood, it is simple to give system commands and program commands to a subjob. The entire range of monitor and program commands can be sent to a subjob as long as the command is preceded by a subjob name or number followed by a hyphen. This becomes very important in explaining the service programs which are run under OPSER.

## OPSER COMMAND LANGUAGE

To <CTRL/C> a subjob, a <CTRL/A> must be used, since a <CTRL/C> under OPSER is equivalent to :EXIT. For example, to <CTRL/C> subjob FIL which is running PIP, the command is:

```
!FIL-A<RET>  
|  
<CTRL/A>
```

Whatever was being done under PIP would be allowed to finish, and the subjob FIL would be put at monitor level.

A useful feature of OPSER is the ability to automatically execute a predefined set of commands contained in a disk file. This is known as the AUTO feature of OPSER. For example, consider the following sequence of commands:

```
:SLOG 2,167<RET>  
:DEF FIL=<RET>  
:WHAT FIL<RET>  
FIL-R PIP<RET>  
FILC.EXT=FILEA.EXT,FILEB.EXT<RET>  
:STOP FIL<RET>  
:KJOB FIL<RET>
```

If the above commands were placed in a file named FIL.ATO, you could accomplish exactly what was done manually in the example above by entering the single OPSER command:

```
:AUTO FIL<RET>
```

Commands included in a file named OPR.ATO are automatically executed whenever the system is loaded.

OPSER is used to control a large part of system operation. It is important that you become proficient in its use.

### 5.3 OPSER COMMANDS

Some OPSER commands are available to all users while others are available only to those with OPERATOR privileges.

## OPSER COMMAND LANGUAGE

### 5.3.1 OPSER Commands for the Operator

OPSER commands that are available to you at the operator's console are the following:

:JCONT n	Continues job n that was waiting for operator action.
:KSYS hh:mm :KSYS +hh:mm :KSYS	Stops timesharing at the time specified by hh:mm. This must be at least five minutes later than the current time. If +hh:mm is used, it means the number of hours and/or minutes from the current time and must be at least five minutes. All users logging in receive a message stating the time at which timesharing will end. Logged-in users receive similar messages when the :KSYS command is given, one hour before timesharing ends, then at 30, 15, 8, 4, 2, and 1 minutes before timesharing is scheduled to stop. The messages are of the form: <code>TIMESHARING ENDS IN n MIN.</code> :KSYS works only for a [1,2] job running at the OPR terminal.  Note that :KSYS without an argument undoes the effect of :KSYS hh:mm or :KSYS +hh:mm.  The colon in the time specification is optional; both hh:mm and hhmm are valid.
:RESTRICT dev:,...	restricts the specified devices to the operator's use. The operator can assign the devices to a user, but the user cannot reassign them to anyone but the operator.
:SET BATMAX n	sets the maximum number (n) of batch jobs that can run simultaneously. The range of n is 0 through 14 inclusive.
:SET BATMIN n	sets the minimum number (n) of batch jobs that can run simultaneously. The range of n is 0 through 14 inclusive.
:SET LOGMAX n	sets the maximum number (n) of jobs that can run on the system.
:SET RUN CPU n :SET RUN NO CPU n :SET RUN ONLY CPU n :SET RUN ALL	allows the operator of a multiprocessor system to turn processors on- and off-line. The n is the CPU number (0 or 1). The command :SET RUN adds the named processor to the system pool of running CPUs. The :SET RUN NO command removes the named CPU from the system pool. The :SET RUN ONLY command allows only the named CPU to run. The :SET RUN ALL command puts all the CPUs available into the system pool.
:SET argument	simulates the monitor command .SET argument, where argument is one of the following: BREAK, CORMAX, CORMIN, DATE, DAYTIME, MEMORY, NOMESSION, OPR, SCHED, TTY, or VMMAx.
:UNRESTRICT dev:	Returns to the free user resource pool a device that has been restricted. :UNRESTRICT is the complement of :RESTRICT.

## OPSER COMMAND LANGUAGE

### 5.3.2 OPSER Commands for All Users

The following OPSER commands are available to all users of the system:

:AUTO filespec processes the commands contained in the specified file immediately.

:AUTO /hhmm filespec processes the specified file at the next occurrence of hhmm today. If it is past hhmm today, the file will be processed immediately.

:AUTO /<hhmm filespec processes the specified file at the next occurrence of hhmm today. If it is past hhmm today, the file will not be processed.

:AUTO />hhmm filespec processes the specified file at the next occurrence of hhmm. If the current time is past hhmm, the file will be processed at hhmm tomorrow.

;AUTO /+ hhmm filespec processes the file hh hours and mm minutes later.

#### NOTE

In the above commands, "filespec" stands for file specification and consists of a device, file name, file extension, and a directory name in the form:

dev:file.ext [PPN]

where:

dev: is any valid input device name. The default is DSK:.

file stands for any 1- to 6-character file name. There is no default. You must supply a file name.

.ext is any 1- to 3-character file name extension. The default is .ATO.

[PPN] is the directory area that contains the file. The default is the directory indicated by the project-programmer number [PPN] you used to log in.

:CLOSE closes the disk log file without opening a new one. (The disk log file is a transaction file where OPSER logs its activities.)

## OPSER COMMAND LANGUAGE

**:CONTINUE** continues processing the AUTO file after being interrupted by a <CTRL/C>. This allows the operator to gain control of a subjob during AUTO file processing.

**:CURRENT** types the name of the current subjob if one has been defined; if a current subjob has not been defined, it types the number of the current subjob (the last one typed in).

**:DAYTIME** types the current date and time.

**:DEFINE xxx=n** gives subjob n the name xxx, which may be from one to six characters long. In general, short names are recommended. The subjob number may be omitted from the command string, in which case OPSER assumes the last subjob you referenced.

### RESTRICTIONS

The first character of the name must be alphabetic and the second through sixth (if any) must be alphanumeric. The subjob name "B" is reserved as the mnemonic for BATCON and should not be assigned to any other subjob.

**:DEVICE dev:log:n** causes OPSER to exit to the monitor, where you can ASSIGN the device (dev:) on subjob (n) and also associate a logical name (log) with that device. The logical name is optional, but if you omit it, you must tell OPSER. You do this by typing a colon (:) where the logical name would have appeared, for example, :DEVICE MTB: :4. If you issue a .REENTER command before returning to OPSER, you will abort the .ASSIGN command. When you are ready to return to OPSER, type :CONT.

**:ERROR n,m,...** silences all output except error messages from subjobs n,m, and so on. The :REVIVE command will resume reporting all messages. When OPSER is first started, :REVIVE is in effect.

**:EXIT** or <CTRL/C> exits to the monitor if no subjobs are active.

**:FREE** types the number of the first unused subjob.

**:HELP** types a text briefly explaining the commands and their formats.

**:KILL n,m,...** see :KJOB.

**:KJOB n,m,...** logs out the specified subjobs n, m, and so on, saving all their files. Also, the /Z switch is passed to the KJOB program in order to suppress the normal queuing done at log-out time.

**:LOGIN PPN** logs in a new subjob under project programmer number PPN. If PPN is not given, OPSER's project-programmer number is assumed.

## OPSER COMMAND LANGUAGE

:MONITOR exits to the monitor even if subjobs are active.

:MSGVLV n determines whether or not the job status (JOBSTS) bits appear in the response to the :WHAT command. If n equals 0, the job status bits are included in the :WHAT output. If n equals 1 (default), the :WHAT output does not include these bits. The actual letters typed out represent the following:

- L for logged in
- M for monitor mode
- I for input wait
- O for output wait
- A for JACCT

:QUEUE line initiates the first free subjob and sends the line as a QUEUE command to the monitor.

:RESOURCES lists the available system resources.

:REVIVE n,m,... clears the effects of the :SILENCE, :TSILENCE, and :ERROR commands for subjobs n, m, and so on, and causes normal echoing or output from them. When OPSER is first started, the :REVIVE command is in effect.

:SCHED types out the schedule bits as set by the operator. The bits are:

- 000000 Regular timesharing
- 000001 No further LOGINS except from CTY
- 000002 No further LOGINS from remote terminals, and no answering of data sets
- 000004 Batch jobs only
- 000200 Unspooled jobs allowed
- 000400 No operator coverage

:SEND line simulates the monitor SEND command. Refer to the TOPS-10 Operating System Commands Manual for more information.

:SILENCE n,m,... suppresses all terminal and transaction log output from subjobs n, m, and so on.

:SLOGIN p,pn same as :LOGIN, but also silences all terminal output until the job is logged in.

:STOP n,m,... puts the subjobs n, m, and so on into monitor mode.

:SYSTAT xxx runs SYSTAT with the optional arguments xxx under the first free subjob. For arguments, see the TOPS-10 Operating System Commands Manual.

:TIME n types out the total running time for job n since the last :TIME n command, followed by the integrated product of running time and core size.



## OPSER COMMAND LANGUAGE

:TLOG dev:file.ext[PPN]  
closes the current OPSER transaction log, if any, and opens a new log file. If no file is designated, the default is DSK:OPSER.LOG.

:TSILENCE n,m,... suppresses all terminal output from subjobs n, m, and so on, but continues output to the transaction log.

:TTYTST types out a test pattern consisting of the ASCII characters corresponding to octal 40 through 174 inclusive.

:WHAT n,m,... types the status of the specified subjob(s). This typeout includes a SYSTAT of each job with the current time, the time of the last input and the last output, a linear listing of the JOBSTS bits (if MSGLVL is set to 0), and the time of the next timed AUTO file.

:WHERE devn: types the physical location node/station number of the device dev in subjob n.

### 5.4 OPSER OPERATOR MESSAGES

The following messages from OPSER can appear on your operator terminal.

?OPRATE Auto file read error

OPSER encountered a read error while it was trying to process the auto file.

?OPRANI Device cannot do input

Input cannot be performed on the specified device, either because it is not a valid device name, or because it is a device that can only do output.

?OPRBFS Bad file spec

There is a syntax error in the file specification.

?OPRBTS Bad time specified

There is a syntax error in the time specification. See Section 5.2.1 for information about the format of the OPSER commands.

?OPRCKJ Cannot be KJOB'ed

OPSER is unable to log the job out. One cause of this condition is a job being over quota.

## OPSER COMMAND LANGUAGE

?OPRCMM Cannot be put in monitor mode

The operator attempted to return to the monitor (:EXIT or <CTRL/C>) but was unable to do so even after several tries. This condition indicates a system or a program problem.

?OPRCNU Command not unique

The operator has entered an abbreviation that does not specify a unique command.

?OPRCUA Cannot use all

The operator typed a command with "ALL" as the argument. Certain commands do not accept "ALL" as an argument (for example, :DEFINE). Refer to Section 5.2.1 for information about the OPSER operator commands.

?OPRDCO Device cannot do output

The device specified in the :TLOG command is not an output device.

%OPRDNR DAEMON not running

The DAEMON program has not been initialized.

?OPRDUE DAEMON UO error

An error occurred when OPSER called DAEMON to do accounting. Consult the system administrator.

%OPRFMM :KSYS has a minimum of 5 min.

The operator specified an argument that was too small for the :KSYS command. The value of the "+hh:mm" form of the command must be +00:05 or greater. The value of hh:mm form of the command must be at least five minutes later than current time. See Section 5.3.1 for details about the format of this command.

?OPRJNA No job number assigned

This message generally occurs in response to the :WHAT command. It happens in cases where the monitor does not know about the subjob specified in the command.

?OPRJRO Job(s) running on n,m,...

Type ":Kill all" to kill the subjobs

The operator tried to :EXIT or <CTRL/C> from OPSER from subjobs n,m, and so on were active. The subjobs must be killed first.

## OPSER COMMAND LANGUAGE

?OPRLEF Enter failure code on log file

An enter failure occurred when OPSER tried to open the transaction log file (:TLOG).

?OPRNAS No active subjobs

The operator issued a command to a subjob but no subjobs were running.

?OPRNFP No free PTY's

There are no more pseudo-terminals (PTYs) available under which to run subjobs.

?OPRNFS No free subjobs

This message occurs in response to either the :FREE command or a command that uses a free subjob (such as :QUEUE). It happens when there are no free subjobs available.

?OPRNSM No such mnemonic

The name specified in the command is not associated with any of the subjobs. This is either because it was typed incorrectly or because the name had not previously been associated with a subjob by means of the :DEFINE command.

[OPRPAF Processing auto command file]

OPSER is currently processing the auto file.

?OPRSJW Is stuck with JACCT on

The operator tried to return to the monitor (:EXIT or <CTRL/C>) but was unable to do so, even after several tries. This condition indicates a system or program problem.

?OPRSNA Subjob n is not active

A command was given to subjob n and that subjob is not active.

%OPRSPR superseding previous :AUTO request

The operator issued another :AUTO command. This new command supersedes the one previously issued.



**APPENDIX A**  
**OPR ERROR MESSAGES**

This appendix lists error messages you may encounter while using OPR, as well as the reason for the error and recovery procedures.

**ERROR:           ? Ambiguous**

**Reason:**        You issued an OPR command, but did not complete it. For example, you may have left out the necessary keyword or switch that would make the command execute properly.

**Recovery:**      Type <CTRL/H>, or retype the command and then specify the necessary keyword or switch.

**ERROR:           ? Ambiguous switch or keyword**

**Reason:**        Same as above.

**Recovery:**      Same as above.

**ERROR:           ? CONFIRMATION Required**

**Reason:**        You gave a command but the command syntax is not valid.

**Recovery:**      Check the command to see if you have provided all necessary keywords, arguments, and/or switches. Check that the hardware is available or that the device is ready for use. Then give the command again. (See Chapter 2 for the commands correct keywords, arguments and switches.)

**ERROR:           ? Device Name name: Does Not Exist**

**Reason:**        You specified a device name (name:) in an OPR command that is currently not recognized by the system. Such devices are tape drives or disk drives.

**Recovery:**      Type <CTRL/H>, or retype the command and specify a device name that the system acknowledges. Give the SHOW STATUS command to find those devices that the system recognizes.

## OPR ERROR MESSAGES

**ERROR: ? Does not match switch or keyword**  
Reason: You specified a switch or keyword for an OPR command that can not take the switch or keyword specified.  
Recovery: Type the command again and then specify a valid switch or keyword for that command.

**ERROR: ? Filename was not specified**  
Reason: You specified an OPR command that takes a file specification as a keyword or value to a switch, but did not specify the file name.  
Recovery: Type <CTRL/H>, or retype the command and then specify the file name.

**ERROR: ? File not found**  
Reason: You specified an OPR command that takes a file specification as a keyword or value to a switch, but the file was not found.  
Recovery: Type <CTRL/H>, or retype the command and then specify the correct file specification.

**ERROR: ? First nonspace character is not a digit**  
Reason: You specified a keyword or switch value that must be numeric, but the first character is alphabetic or is a special character.  
Recovery: Type <CTRL/H>, or retype the command and then specify a numeric keyword or switch value with any numeric characters.

**ERROR: ? Invalid device terminator**  
Reason: You specified a device with an illegal character in its name or you did not include the colon (:) at the end of the device name.  
Recovery: Type <CTRL/H>, or retype the command and then specify the device name with the correct characters and include the colon (:).

**ERROR: ? Invalid HELP command specified**  
Reason: You specified an invalid OPR command as a keyword to the HELP command.  
Recovery: Give the HELP HELP command to get a list of valid keywords (OPR commands) to the HELP command.

## OPR ERROR MESSAGES

**ERROR: ? Invalid guide word**

**Reason:** You specified a guide word that does not pertain to the OPR command that you specified, you misspelled the guide word, or you used recognition and then typed <CTRL/H> before you pressed <RET>.

**Recovery:** Type <CTRL/H>, or retype the command. If you must have guide words with the OPR command, use recognition with the ESCape key.

**ERROR: ? Invalid node name**

**Reason:** You specified a node name or number to the /NODE switch for a node that has not been enabled, does not exist, or has been misspelled.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct node name or number to the /NODE switch. You might have to ENABLE the node before you reissue the command.

**ERROR: ? Invalid Node Terminator**

**Reason:** You specified a node name or number in an OPR command, but did not specify the double colon (::) at the end of the name.

**Recovery:** Type <CTRL/H>, or retype the command and include the two colons. Some OPR commands will provide the two colons after the name or number, if you press the ESCape key after typing the node name.

**ERROR: ? Invalid OPR command specified**

**Reason:** You specified an invalid OPR command.

**Recovery:** Type a question mark to the OPR prompt to get a list of valid OPR commands.

**ERROR: ? Invalid token found**

**Reason:** You specified an OPR command, such as HOLD or RELEASE, but did not give one of the necessary arguments. The necessary arguments are the request-id-number, the project-programmer number, or an asterisk.

**Recovery:** Type <CTRL/H>, or retype the command and include one of the required arguments to the command.

## OPR ERROR MESSAGES

- ERROR:** ? Invalid wildcard designator
- Reason:** You specified a wildcard character (\* or %) within a file specification for a keyword or switch value.
- Recovery:** Type <CTRL/H>, or retype the command and then specify the file specification without any wildcard characters. OPR/ORION does not accept wildcard characters within a file specification.
- 
- ERROR:** ? Negative number improper
- Reason:** You specified a negative number for a device or stream number. OPR does not accept negative numbers.
- Recovery:** Type <CTRL/H>, or retype the command and then specify a positive integer as a device or stream number.
- 
- ERROR:** ? No such filename
- Reason:** You specified a file name as a keyword or switch value, but the file name does not exist as you specified it.
- Recovery:** Type <CTRL/H>, or retype the command and then specify the correct file name as the keyword or switch value.
- 
- ERROR:** ? No such file type
- Reason:** You specified a file type as a keyword or switch value, but the file type does not exist as you specified it.
- Recovery:** Type <CTRL/H>, or retype the command and then specify the correct file type as the keyword or switch value.
- 
- ERROR:** ? Not a quoted string - does not begin with double quote
- Reason:** You specified a message text, but did not include it within double quotes ("message text").
- Recovery:** Type <CTRL/H>, or retype the command and then specify the message text within the required double quotes.
- 
- ERROR:** ? Not confirmed
- Reason:** You specified too many keywords or switches to an OPR command. OPR expected a carriage return after one of the keywords or switches specified.
- Recovery:** Type <CTRL/H>; OPR retypes the command up to the point where carriage return is expected. Then press <RET>.



## OPR ERROR MESSAGES

**ERROR: ? Only one file allowed**

**Reason:** You specified the BACKSPACE or FORWARDSPACE command with the /FILE switch and a numeric value greater than 1.

**Recovery:** Type <CTRL/H>; OPR retypes the command up to the point where you entered the number of files. You can then enter 1 or press <RET> . The /FILE switch defaults to 1.

**ERROR: ? Priority not in range**

**Reason:** You specified a priority number in the SET JOB-PRIORITY command that is not in the range from 1 to 63.

**Recovery:** Type <CTRL/H>, or retype the command and then specify a priority number from 0 to 63.

**ERROR: ? Too many characters in node name**

**Reason:** You specified too many characters in a name specification to the /NODE switch. The /NODE name can have only from one to six alphanumeric characters.

**Recovery:** Type <CTRL/H>, or retype the command and then specify the correct node name for the /NODE switch. The name must be six characters or less.

**Recovery:** Type <CTRL/H>, or retype the command and then supply the two colons at the end of the node name/number.

**ERROR: ? Value missing in date/time**

**Reason:** You specified an OPR command that requires an argument of date and/or time, such as the SET USAGE command.

**Recovery:** Type <CTRL/H>, or retype the command and supply the date and/or time as an argument. To check whether the date and/or time is needed give the "?" command to list your options.



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