

VSI Job Management for OpenVMS Command Reference Guide

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VSI Job Management for OpenVMS Command Reference Guide



VMS Software

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Preface

1. About VSI

VMS Software, Inc. (VSI) is an independent software company licensed by Hewlett Packard Enterprise to develop and support the OpenVMS operating system.

2. Intended Audience

This guide is written for the following personnel:

- Data center operations personnel, including system managers, system operators, and schedulers
- Production application support personnel
- Application developers
- Other OpenVMS users

This guide assumes that Job Management Manager programmers are familiar with the OpenVMS operating system and with processing Digital Command Language (DCL) commands in both interactive and batch modes.

3. Document Structure

This manual is organized as follows:

- *Chapter 1, "The SCHEDULE> Prompt Commands"* outlines the DCL commands at the SCHEDULE> prompt.
- *Chapter 2, "SCHEDULE CONFIG>"* outlines the DCL commands at the SCHEDULE CONFIG> prompt.

4. Conventions

The following table describes some of the conventions used in this guide.

Convention	Meaning
UPPERCASE	Uppercase letters indicate the name of a command, a file, a parameter, a procedure, or utility. In command examples, uppercase characters represent elements of a command that you should enter exactly as shown.
user input system prompts system displays	In interactive examples, this typeface indicates input entered by the user, a system prompt, or displayed system text. For example: SCHED MODIFY job-specifier
\$	The dollar sign is used to indicate the DCL prompt. This prompt may be different on your system.

Convention	Meaning
Ctrl+X	In procedures, a sequence such as Ctrl+X indicates that you must press the key labeled Ctrl while you press the key or a pointing device button.
OpenVMS, VMS	The terms OpenVMS and VMS refer to the OpenVMS operating system.

5. Related Documentation

This guide refers to the following documentation:

- *VSI Job Management for OpenVMS Installation Guide* [<https://docs.vmssoftware.com/vsi-job-management-installation-guide-v31/>]
- *VSI Job Management for OpenVMS Release Notes* [<https://docs.vmssoftware.com/vsi-job-management-release-notes-v31/>]
- *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31/>]
- *VSI Job Management for OpenVMS Programming Guide*

6. VSI Encourages Your Comments

You may send comments or suggestions regarding this manual or any VSI document by sending electronic mail to the following Internet address: <docinfo@vmssoftware.com>. Users who have VSI OpenVMS support contracts through VSI can contact <support@vmssoftware.com> for help with this product.

7. OpenVMS Documentation

The full VSI OpenVMS documentation set can be found on the VMS Software Documentation webpage at <https://docs.vmssoftware.com>.

8. Overview

Welcome to VSI Job Management for OpenVMS. VSI Job Management includes the components Job Management Manager (the manager) and Job Management Agent (the agent). Throughout this guide, VSI uses these component names in our discussion.

This guide describes all Job Management Manager (the manager) DCL commands in alphabetical order. The commands are listed in the following two sections, based on what you enter at the DCL prompt:

- SCHEDULE>
- SCHEDULE CONFIG>

Each command description includes the following:

- A description of the command's function
- The format for entering the command
- Parameters (if applicable)

- Qualifiers (if applicable)
- Examples

Some commands are management commands, as noted. Use of a management command requires that the user have SYSPRV or OPER privilege, except where otherwise stated in the individual command description.

Note

You must use quotes to enclose commands that contain spaces, both at the DCL level and when at the **SCHEDULE>** or **SCHEDULE CONFIG>** prompt. At the DCL prompt, you must use quotes to enclose commands that contain the @ sign, but not at the **SCHEDULE>** or **SCHEDULE CONFIG>** prompt. Use quotes to enclose a case-sensitive **_COMMAND** for another operating system when using **/MODE=REMOTE**.

9. Node-Related Command Options

The manager can manage jobs on different nodes. The following command options can be used in several Job Management commands:

Option	Description
/CLUSTER_NODE	Name of a Job Management Manager node in the local cluster that you want to restrict job execution to
/NODE	Same as /CLUSTER_NODE
/REMOTE_NODE	Name of the remote Job Management Agent (the agent) node where you want to run a job. This option is only valid when the MODE of the job is REMOTE.
/SERVER	Name of the Job Management Manager node outside of the local cluster where the database for the job resides

Chapter 1. The SCHEDULE> Prompt Commands

The following commands are entered at the SCHEDULE> prompt:

ABORT

ABORT — Stops a job that is currently running.

Description

To abort a job, you must own it or have WRITE access to it. For more information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To delete a job from the jobs database, see the **SCHEDULE DELETE** command.

Format

ABORT *job_specifier* [/qualifier]

Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/GROUP	None
/SERVER	None
/TYPE	None

Parameter

Job_specifier

The name or number of the jobs you want to abort. For example:

```
SCHEDULE> ABORT MYJOB  
SCHEDULE> ABORT 123
```

The job specifier is required, unless you use the **/GROUP** or **/TYPE** qualifier. If you omit the job specifier, the manager prompts you for it. However, if you specify **/GROUP** or **/TYPE**, the manager does not prompt for the job specifier. The following example aborts all of your jobs that belong to group WEEKLY and type FISCAL:

```
SCHEDULE> ABORT /GROUP=WEEKLY/TYPE=FISCAL
```

For more information on description of job specifiers and how to use them, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

- To abort a job that belongs to another user, you must refer to the job by name and add the **=username** specifier to the name of the job. For example:

```
SCHEDULE> ABORT THISJOB=DOE
```

You must have EXECUTE access to a job to abort it.

- To abort a job on a remote node, you either add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> ABORT NODE1::MYJOB
SCHEDULE> ABORT NODE1::321
SCHEDULE> ABORT MYJOB/SERVER=NODE1
```

You can use wildcard characters to refer to a job name, username, group name, and type name. For example, the following command aborts all jobs starting with the letter B that are in any GROUP starting with W and owned by any user whose name begins with D:

```
SCHEDULE> ABORT B*=D*/GROUP=W*
```

Qualifiers

/CONFIRM

/NOCONFIRM (D)

Instructs the manager to request confirmation before aborting a job.

Note

VSI recommends that you use the **/CONFIRM** qualifier if you are aborting more than one job.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
Jobname (jobnumber) ABORT? [No]:
```

You can enter one of the following answers:

To...	Answer...
Abort the job	YES, 1, or TRUE
Retain the job	NO, 0, or FALSE
Abort all following jobs without further confirmation	ALL
Stop the command	QUIT

/GROUP=group_name

Aborts all jobs that have this group name and match the user's username. For example:

```
/GROUP=HOURLY or /GROUP=WEEKLY.
```

You can use the asterisk (*) and percent (%) wildcard characters in the group name. For example:

```
/GROUP=H* or /GROUP=W%.
```

/SERVER=remote_node

Aborts a job on the specified remote node or on the cluster that the remote node belongs to. For example: **/SERVER=NODE1**.

If you indicate the remote node in the job specification, this qualifier value is ignored.

For example:

```
SCHEDULE> ABORT NODE1::MYJOB/SERVER=NODE1
```

You must have a proxy account on the remote node or specify an account and password. For more information on accessing remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/TYPE=type_name

Aborts all jobs that have this name type and match the user's username. For example:

```
/TYPE=FISCAL.
```

You can use the asterisk (*) and percent (%) wildcard characters in the type name. For example:

```
/TYPE=F*.
```

Examples

1. This command aborts a job named JOBNAME.

```
SCHEDULE> ABORT JOBNAME
%NSCHED-I-FLAGSET, Job JOBNAME - ABORT Requested
```

2. This command aborts a job named JOBNAME owned by user DOE.

```
SCHEDULE> ABORT JOBNAME=DOE
%NSCHED-I-FLAGSET, Job JOBNAME - ABORT Requested
```

3. This command aborts a job named JOBNAME, and uses the **/CONFIRM** qualifier. The manager requests confirmation before aborting the job.

```
SCHEDULE> ABORT JOBNAME/CONFIRM
Job Jobname (jobnumber, ABORT? [No]) YES
%NSCHED-I-FLAGSET, Job Jobname - ABORT Requested
```

CHECK

CHECK — Causes the manager to do a database consistency check. This is a management command.

Description

The **CHECK** command allows a user with SYSPRV or OPER privilege to do a consistency check on a database, updating the scheduler's internal structures and counters to reflect the database and the current state of the system.

Format

```
CHECK [/qualifier]
```

Qualifiers	Defaults
/ALL_NODES	None
/CLUSTER_NODE= <i>nodename</i>	None

Qualifiers	Defaults
/SERVER= <i>nodename</i>	None

Parameters

None.

Qualifiers

/ALL_NODES

Formerly **/ALL**. Tells all schedulers in the cluster to perform a consistency check.

/CLUSTER_NODE=*nodename*

Tells the specified cluster node to perform a consistency check. This qualifier is synonymous with the **/NODE** qualifier.

/NODE=*nodename*

See **/CLUSTER_NODE** in *Section 9, "Node-Related Command Options"*.

/SERVER=*remote_node*

Tells the specified remote node to perform a consistency check.

Examples

1. This command tells all schedulers in the cluster to perform a consistency check.

```
SCHEDULE> CHECK/ALL_NODES
```

2. This command tells remote node NODE1 to perform a consistency check.

```
SCHEDULE> CHECK/SERVER=NODE1
```

CLOSE LOG_FILE

CLOSE LOG_FILE — Closes and renames the Job Management Manager event-log file while the manager is running. This is a management command.

Description

Use this command when the event-log file has grown very large. A large log file can affect system performance. VSI recommends that you create a new log file when the current file exceeds 1,000 blocks.

This command automatically renames the current event-log file to *filename.OLD*. You can delete this file if you no longer need it. The manager automatically creates a new log file.

Selecting a File Name

You can set the name of the log file by modifying a line in the system specific startup file, UJM\$MANAGER\$STARTUP_*nodename*.COM. This file is placed in the directory NSCHED\$COM when you install the manager. The default file name is NSCHED\$:VERMONT_CREAMERY.LOG

To set the event classes for your event-log file, see the **SCHEDULE SET LOGGING** command. To see what the manager is currently logging, use the **SCHEDULE SHOW LOGGING** command.

Format

CLOSE LOG_FILE [/qualifier]

Qualifiers	Defaults
/SERVER	None
/[NO]SUMMARIZE	/NOSUMMARIZE

Parameters

None.

Qualifiers

/SERVER=remote_node

Closes the log file on the specified remote node.

/SUMMARIZE

/NOSUMMARIZE (D)

Writes a summary of the job histories from the log file being closed into the new log file being opened. The new history log file has an extension size of 200 blocks.

To view the history summary, use the command **SCHEDULE SHOW HISTORY** with the new log file.

Examples

1. This command closes your current Job Management Manager event-log file and renames it to *filename.OLD*, so that you can save or delete it.

```
SCHEDULE> CLOSE LOG_FILE
```

2. This example closes the Job Management Manager event-log file on remote node **NODE1** and renames it to *filename.OLD* so that you can save or delete it.

```
SCHEDULE> CLOSE LOG_FILE/SERVER=NODE1
```

COPY

COPY — Lets you duplicate a specified job in the Job Management Manager database.

Description

To copy a job, you must own it or have **READ** access to it. For more information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v311>].

You must have CMKRNL privileges to create a job with a username other than your own.

The manager prompts you for the values of a standard subset of qualifiers, unless you specify those qualifiers on the command line.

If you include the **/PROMPT** qualifier on the command line, the manager prompts you for all qualifiers. For example:

```
SCHEDULE> COPY JOBNAME/PROMPT
```

Format

COPY *job_specifier* [/qualifier]

Qualifiers	Defaults ¹
/[NO]CLUSTER NODE	/NOCLUSTER NODE
/[NO]COMMENT	/NOCOMMENT
/CPULIMIT	0
/DAYS	/DAYS=ALL
/EXID	/NOEXID
/[NO]GROUP	/NOGROUP
/[NO]HOLD	/NOHOLD
/[NO]INTERVAL	/NOINTERVAL
/[NO]JOB_NAME	/NOJOB_NAME
/LOAD_BALANCE_GROUP	None
/MAIL_ADDRESS	None
/[NO]MAX_TIME	/NOMAX_TIME
/MODE	/DETACHED
/[NO]NAME	/NONAME
/[NO]NEXT TIME	/NONEXT_TIME
/[NO]NODE	See the text
/[NO]NOTIFY	/NOTIFY
/NOT_ON	Yes
/ONLY_ON	No
/[NO]OPCOM	/NOOPCOM
/[NO]OUTPUT	/NOOUTPUT
/[NO]POST_FUNCTION	/NOPOST_FUNCTION
/[NO]PRE_FUNCTION	/NOPRE_FUNCTION
/[NO]PROMPT	None
/QRIORITY	100
/QUEUE	/SYS\$BATCH
/[NO]RDID	/NORDID
/REMOTE_NODE	None

Qualifiers	Defaults ¹
/[NO]RESTART	/RESTART
/[NO]RETAIN	/RETAIN=ALL
/[NO]RETRY	/NORETRY
/RUN_PRIORITY	See the text
/SD_ACTION	Skip
/SD_MAIL_ON_ACTION	No
/SD_RESTRICTION	None
/[NO]SEND MAIL	/NOSEND_MAIL
/SERVER	None
/[NO]SJOB	/NOSJOB
/[NO]STALL_NOTIFY	/NOSTALL NOTIFY
/[NO]SYNCHRONIZATION	/NOSYNCHRONIZATION=(job_specifier, ...)
/[NO]TJOB	/NOTJOB
/[NO]TYPE	/NOTYPE
/[NO]USE_NEXT_TIME	/NOUSE_NEXT_TIME
/USER_NAME	None
/VMS_COMMAND	None
/WRID	/NOWRID

¹If not specified by the original job.

Parameter

job_specifier

The name or number of the job that you want to copy. For example:

```
SCHEDULE> COPY MYJOB
SCHEDULE> COPY 123
```

For more information on description of job specifiers and how to use them, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

- To copy a job that belongs to another user, you must refer to the job by name and add the **=username** specifier to the name of the job. For example:

```
SCHEDULE> COPY THISJOB=DOE
```

- To copy a job on a remote node, you either add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> COPY NODE1::THISJOB
SCHEDULE> COPY NODE1::456
SCHEDULE> COPY THIS JOB/SERVER=NODE1
```

The following example copies a job named THISJOB owned by user DOE on remote node NODE1.

```
SCHEDULE> COPY NODE1::THISJOB=DOE
```

Note

You cannot use wildcard characters in the job specifier. If you are copying a job belonging to another user, you must specify your own username unless you have the CMKRNL privilege.

Qualifiers

/CLUSTER_NODE=nodename

/NOCLUSTER_NODE (D)

Restricts a job to running only on the specified node in the OpenVMS Cluster. If the manager is not running on that node when the job starts, this command places the request in the job database and issues a warning message. This qualifier is the same as the **/NODE** qualifier. For example:

```
/CLUSTER_NODE=NODE1.
```

This qualifier is supported with this command **only for /MODE=DETACHED jobs**.

/COMMENT=string

/NOCOMMENT (D)

Specifies a text string you want to associate with the new job. You can use this string to retrieve logging information or to give more detail about the job's function. The maximum string is 80 characters. The manager truncates longer strings. To include quotation marks in the comment string, use two consecutive quotation marks. For example, to associate the comment string "This is my job" with your job, enter the following:

```
/COMMENT="""This is my job"""
```

/CPULIMIT=integer

/CPULIMIT=0 (D)

An integer that is the number of 100ms ticks of CPU time to allow for the job before the system terminates the job. The default (zero) means INFINITE. The minimum is 50. This qualifier is not copied from remote mode jobs.

This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified.

/DAYS=(day_specifier, ...)

Specifies the days of the week that you want the job to run on. You can use the following values:

- ALL
- NONE
- [NO]MONDAY
- [NO]TUESDAY
- [NO]WEDNESDAY
- [NO]THURSDAY
- [NO]FRIDAY

- [NO]SATURDAY
- [NO]SUNDAY

Note

If no days are specified, the job will not reschedule itself.

The following information lists the rules for using day specifiers:

- Use a comma to separate scheduled days. For example: `/DAYS=(MONDAY, TUESDAY)`.
- You cannot specify **both** ALL and NONE.
- A NO... value indicates that the job should not run on the specified day. For example, `/DAYS=NOSATURDAY` means do not run the job on Saturday.
- To run a job only on Saturday, use `/DAYS=(NONE, SATURDAY)`.
- You can abbreviate days, as long as they remain unique. For example, you can abbreviate Saturday to SA, and Sunday to SU.
- If you enter one day only, omit the parentheses. For example: `/DAYS=NOSATURDAY`.
- The default is `/DAYS=ALL`.

/EXID=identifier

/NOEXID (D)

Sets an identifier that allows execute access to a particular job. SYSPRV privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/GROUP=group_name

/NOGROUP (D)

Specifies a group name to associate with the new job. The group name can have up to 40 characters. If you relate a job to a group, you can apply commands like **SCHEDULE HOLD**, **SCHEDULE RELEASE**, and **SCHEDULE RUN** to the whole group. For example: `/GROUP=WEEKLY` or `/GROUP=MONTHLY`.

/HOLD

/NOHOLD (D)

Places the new job on hold when the manager copies it, regardless of the starting time or schedule interval. The manager does not prompt you for this qualifier; you must specify it on the command line.

/INTERVAL=interval_time

/NOINTERVAL (D)

Specifies a schedule interval that determines when to run a copy of the job. Modifying the interval does not change the next scheduled start time for the job. See the `/INTERVAL` qualifier under the **SCHEDULE CREATE** command for a full description of interval formats.

The `/NOINTERVAL` default is the same as `/INTERVAL=NONE`.

/JOB_NAME=job_name_string
/NOJOB_NAME (D)

Specifies a name for the new job, so you can refer to the job by name instead of by job number. Job names can have up to 40 characters. For example: **/JOB_NAME=MYJOB**.

The **/JOB_NAME** qualifier is the same as **/NAME**.

Note

You cannot duplicate the name of an existing job under your username.

/LOAD_BALANCE_GROUP

Specifies a load balance group name to associate with the (new) job. The group name can have up to 14 characters.

/MAIL_ADDRESS=mail_destination_string

Overrides the default username as the destination for mail notification when the job completes. For example:

```
/MAIL_ADDRESS=MINE
```

You can specify an address of up to 50 characters. If you specify a longer string, the manager sends a warning message.

- If the mail destination string contains a comma or any spaces, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="SYSTEM, USER1 "
```

- If the mail destination string is a mail distribution list, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="@MAIL.DIS "
```

Note

The default location of the mail distribution file is your SYS\$LOGIN directory.

/MAX_TIME=time_specifier
/NOMAX_TIME (D)

Instructs the manager to notify you by mail and terminal broadcast message if the job does not complete within a specified time interval from the start of the job. At the DCL prompt, express the time interval in the OpenVMS delta-time format (ddd-hh:mm:ss.cc); in all other interfaces (including the shell), use Job Management Manager delta time (+ddd hh:mm:ss.cc).

For example, **/MAX_TIME=3-3:10** means notify me by mail and terminal broadcast message if the job does not complete within 3 days, 3 hours, and 10 minutes from the start time.

/MODE=mode_type
/MODE=DETACHED (D)

Sets the mode. Valid values are BATCH, DETACHED, and REMOTE. This qualifier is not supported with this command when a server is specified.

/NAME=job_name_string
/NONAME

This qualifier is the same as the **/JOB_NAME** qualifier.

/NEXT_TIME=starting_time
/NONEXT_TIME (D)

Specifies the next scheduled run time for the copied job. For details on starting_time formats, see the **/START** qualifier under the **SCHEDULE CREATE** command. Specifying the next scheduled run time in this manner ignores any Special Day Restrictions that apply to the job.

Note

Modifying this field does not change the schedule interval for the copy procedure.

If the next run time is earlier than the present time, the manager schedules the job to run immediately.

/NODE=nodename
/NONODE

See **/CLUSTER_NODE** in *Section 9, "Node-Related Command Options"*.

/NOTIFY (D) /NONOTIFY

Instructs the manager to send a terminal broadcast message to you when the job completes, or when its Special Day Action is executed.

The default **/NOTIFY** instructs the manager not to send a terminal broadcast message when the job completes. If you use the default for both this qualifier and **/SEND_MAIL**, you do not receive any messages when the job completes.

/NOT_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job NOT run on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/ONLY_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job to run ONLY on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/OPCOM
/NOOPCOM (D)

Instructs the manager to send an OPCOM message when the job completes, or when its Special Day Action is executed.

/OUTPUT=file_name
/NOOUTPUT (D)

Specifies a file name to contain the job's output, such as:

- Reports
- Logs
- Processed documents

The file name can have up to 255 characters. The following is an example of a full file name:

```
/OUTPUT=MYDISK: [MYDIRECTORY] TEST.LOG
```

If you omit the device or directory, the manager puts the output in your default device and directory as specified in the authorization file for the account. If a logical is used to define the location of the file it must be a system logical; it cannot be a process logical.

If you specify **/NOOUTPUT**, the manager does not save the output.

/POST_FUNCTION=postfunction_command

/NOPOST_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes after the main job's OpenVMS command. For example:

```
/POST_FUNCTION="DIR/PRINT [MYDIRECTORY]*.TXT; *"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks. This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PRE_FUNCTION=prefunction_command

/NOPRE_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes before the main job's OpenVMS command. For example:

```
/PRE_FUNCTION="SET DEF [MYDIRECTORY]"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks. This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PROMPT

/NOPROMPT

Specifies that the manager should prompt you with the complete set of qualifiers for this command. See the first example for this command.

If you do not specify either **/PROMPT** or **/NOPROMPT**, the manager prompts you for a subset of qualifiers: OpenVMS command, job name, interval, days, start time, output, and comments.

If you specify **/NOPROMPT**, the manager does not provide any prompts for qualifiers.

/QPRIORITY=qpriority_value

Qpriority_value is an integer from 0 to 255.

This is the priority that a job is assigned when it is submitted to a BATCH queue. The default is 100. This qualifier is supported with this command only for **/MODE=BATCH** jobs.

/QUEUE=queue_name_string**/QUEUE=SYS\$BATCH (D)**

A string, up to 31 characters in length, that is the name of an existing queue on the system to which a job is submitted. This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified.

/RDID=identifier**/NORDID (D)**

Sets an identifier that allows you read access to a particular job. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/REMOTE_NODE=remote_node_value

Remote_node_value is a string that is either in the form of "user@node" or "node." Specifying only "node" will use the current username, in uppercase characters. Specifying the user further requires the at sign (@) as a separating character between the user and node. To maintain lowercase characters this string must be quoted, and it has a maximum length of 72 characters.

This qualifier is supported with this command only for **/MODE=REMOTE** jobs, and is not supported when a server is specified.

/RESTART (D)**/NORESTART**

Instructs the manager to restart the job if it is marked in the database as running, but is not really running. This can happen if the job was interrupted by a system failure. If you specify **/NORESTART**, the job is put on hold after a system failure.

If the interrupted job has no node restriction, then it restarts on the new default node; otherwise, the job must wait until its node is available.

Note

The manager restarts the job from the beginning, unless the job has a restart test value. You use the **SCHEDULE SET RESTART_VALUE** command to assign a test-value symbol to restarted jobs. You can also use the command **SCHEDULE SET JOB /RESTART_VALUE** to set the restart value when the job is not running.

/RETAIN=retain_option**/NORETAIN**

Specifies the conditions under which the manager should keep a completed job in its database. Valid qualifier values:

Value	Description
ALL (D)	Keeps a job in the database, regardless of its completion status.
ERROR	Keeps a job in the database only if the job completed with an error or warning status.
SUCCESS	Keeps a job in the Job Management Manager database only if it completed successfully.

If you specify **/NORETAIN**, the manager does not keep the job in its database after it runs.

/RETRY

/NORETRY (D)

Instructs the manager to rerun a job if it completes with an error status. This qualifier is useful when the main job must wait for dependencies to complete.

If you specify **/RETRY**, the manager reruns the main job every 15 minutes until it succeeds, for up to 100 attempts. To change the **/RETRY** frequency and the maximum number of attempts, see the **SCHEDULE SET JOB** command.

/RUN_PRIORITY=process_priority_value

Specifies the default process priority that the manager uses to run the job. This qualifier is supported with this command only for **/MODE=DETACHED** jobs. The process priority is a number between 1 and 16.

If you omit the value or use a less than or equal to 0, the manager runs the job at its default priority of 4.

If you specify a value greater than 16, the manager uses a value of 16.

The run priority should be set no higher than your system's normal interactive job priority.

To choose a priority value for a Job Management Manager job, follow these rules:

- Use a value that is less than or equal to the default Job Management Manager value.
- Use a value that is greater than the default Job Management Manager priority and less than or equal to the job owner's default priority in the UAF file.
- Use a value that is greater than the default Job Management Manager priority and greater than the job owner's default priority, if the owner has SETPRV or ALTPRI default privileges.
- Use the higher of the two values—the Job Management Manager default or the job owner's default—if the owner does not have SETPRV or ALTPRI privileges.

Note

You need SETPRV or ALTPRI privileges to run a job at a priority value greater than the default priority for the manager or the job owner (UAF file). See your system manager.

/SD_ACTION=keyword

This is the action that is to be taken if a job's next scheduled run time falls on a Special Day on which this job is restricted from running. Valid keywords:

- SKIP — Apply the interval until a valid date is found (default).
- HOLD — Put the job on hold.

/SD_ACTION applies to a job only if it has a **/NOT_ON** Special Days restriction. This qualifier is not supported with this command when a server is specified.

/SD_MAIL_ON_ACTION (D)

/NOSD_MAIL_ON_ACTION

If **/SD_MAIL_ON_ACTION** is specified, mail is sent to the MAIL_ADDRESS of the job when a job encounters a Special Day Action when its next scheduled time is calculated. This qualifier applies to a job only if it has a **/NOT_ON** Special Days restriction. This qualifier is not supported with this command when a server is specified.

/SD_RESTRICTION=(classname, ...)

Specifies a list of Special Day Class names to which this job is restricted. The class names must currently exist in the Special Day Class database. This qualifier is not supported with this command when a server is specified.

/SEND_MAIL=value

/NOSEND_MAIL (D)

Specifies the conditions under which the manager sends a mail message when the job completes. By default, no mail notification is sent.

Valid qualifier values:

Value	Description
ALL	Sends a mail message in all cases, when the job completes with or without errors.
SUCCESS	Sends mail only if the job completes successfully.
ERROR	Sends mail only if the job completes with an error or warning status.

See **/NOTIFY** for information on receiving terminal broadcast messages.

/SERVER=remote_node

Copies this job from the specified remote node to the local node. For more information on accessing remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Note

The manager does not copy remote job dependencies and remote cluster node restrictions.

/SJOB=job_name

/NOSJOB (D)

Sets the name or job number of the job to run when a job has not started within the STALL_NOTIFY interval of its scheduled time. If this job stalls, then the manager runs the specified job. This qualifier is not supported with this command when a server is specified.

Note

The stall job (SJOB) must exist in the same database as the job that calls it.

/STALL_NOTIFY=stall_time
/NOSTALL_NOTIFY (D)

Instructs the manager to send a warning message and mail message if a job does not start within the specified OpenVMS delta time from its scheduled starting time. For example, **/STALL_NOTIFY=3-3:00** means send a message if the job has not started within 3 days and 3 hours of its scheduled starting time.

At the DCL prompt, express the time interval in the OpenVMS delta-time format (dddd-hh:mm:ss.cc); in all other interfaces (including the shell), use Job Management Manager delta time (+dddd hh:mm:ss.cc).

The manager sends the warning message to the job's owner or to the specified mail address. See the **/MAIL_ADDRESS** qualifier.

This feature is useful in a wide area network when job dependencies are on remote nodes experiencing network reliability problems.

/SYNCHRONIZATION=(job_specifier, ...)
/NOSYNCHRONIZATION (D)

Specifies a list of up to 16 jobs that must complete successfully before this job can run. When you specify more than one job, separate each job with a comma and enclose the list in parentheses. For example:

```
/SYNCHRONIZATION=(MYJOB, YOURJOB, OURJOB)
```

You can specify the name or number of any existing job in the Job Management Manager database. For more information on description of job dependencies, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To refer to a job belonging to another user, add the **=username** specifier to the job specifier. For example, the following command qualifier refers to a job named *BACKUP* owned by the user *SYSTEM*:

```
/SYNCHRONIZATION=(BACKUP=SYSTEM)
```

Removing Jobs from the Dependency List

You can also specify jobs with the **/NOSYNCHRONIZATION** qualifier. The manager removes the specified jobs from the dependency list. For example, to remove two jobs named *MYJOB* and *THISJOB* from the dependency list, you could specify **/NOSYNCHRONIZATION=(MYJOB, THISJOB)**.

If you use **/NOSYNCHRONIZATION** without specifying a job list, the manager removes all dependencies.

/TJOB=job_name
/NOTJOB (D)

Sets the name or job number of the job to run when the present job has exceeded its maximum run time. If this job's run time exceeds its **MAX_TIME** qualifier, then the specified job will be run.

This qualifier is not supported with this command when a server is specified.

Note

The `max_time` job (TJOB) must exist in the same database as the job that calls it.

/TYPE=type_name **/NOTYPE (D)**

Specifies a job category. The name can have up to 40 characters. If you specify a job type, the manager can apply commands such as hold, release, and run to the entire category at one time. For example: **/TYPE=BACKUP**.

You cannot use wildcard characters with **/TYPE**.

/USE_NEXT_TIME **/NOUSE_NEXT_TIME (D)**

Instructs the manager to calculate the next run time for the new job by adding the schedule interval to the new job's next *scheduled* run time.

By default (**/NOUSE_NEXT**), the manager calculates the next run time by adding the schedule interval to the job's *actual* starting time.

This qualifier is useful if your new job has the following characteristics:

- Dependencies on other jobs
- A daily interval
- Occasionally waits until the next day to start running

/USER_NAME=user_name

Specifies the OpenVMS username under which to run the new job. This value overrides the username of the person creating the job. For example, if the default username is MYJOB and you want the job to run under username YOURJOB, specify **/USER_NAME=YOURJOB**.

Note

You need CMKRNL privilege to use a username other than your own. You cannot use the **/GROUP** or **/TYPE** qualifiers at the same time as the **/USER_NAME** qualifier. This is designed to avoid the potential for error.

/VMS_COMMAND=vms_command

Specifies the OpenVMS command to perform when the manager runs the job. You can specify a single command (such as **SHOW TIME**) or a command file (such as **@RENAME.COM**). The maximum command length is 1024 characters.

If you do not specify the OpenVMS command with the **SCHEDULE COPY** command, you must specify it as a qualifier when the manager prompts you for it.

In the case of remote mode jobs, this is the command to be executed on the remote node and operating system, and must follow the correct syntax for the operating system used. Use quotes to enclose a case-sensitive command.

If a command string contains spaces or begins with the **at** sign (@), you must enclose the string in quotation marks. For example:

```
$ SCHEDULE COPY JOBX/VMS_COMMAND="@RENAME.COM"
$ SCHEDULE COPY JOBX/VMS_COMMAND="COPY FILENAME.EXT A.A"
```

To include quotation marks within the command, specify two consecutive quotation marks. For example:

```
SCHEDULE> COPY JOBX/VMS_COMMAND="WRITE SYS$OUTPUT ""Hello"""
```

/WRID=identifier

/NOWRID (D)

Sets an identifier that allows write access to a particular job. CMKRNL privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

Examples

1. In this example, the user specifies the **/PROMPT** qualifier on the command line, so the manager prompts for all the qualifiers.

```
SCHEDULE> COPY/PROMPT
_Job name or number: WEEKLY-RENAME
_VMS Command [@SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY_COPY.COM] :
_Job Name [WEEKLY-RENAME] : weekly-rename1
_Group [WEEKLY] :
_Type [PROJECT-COSTS] :
_Schedule Interval [F W6 18:00:00] : d 4:15
_Days [(FRI):] ALL
_Special Day Restrictions [None]:
_Next Run Time [15-APR-1997 04:15:00.00] :
_Stall Notify [None] :
_Stall Time Job [None] :
_Output file [SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY-RENAME.REP] :
SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY-RENAME1.REP
_Mode (Detached, Batch, Remote [DETACHED]:)
_Cluster Node [Default] :
_Retain (Success, Error, None or All [ALL]:)
_Restart (Yes, No [Yes]:)
_Retry (Yes, No [Yes]:)
_Notify (Yes, No [No]:)
_Send_Mail (All, Error, Success or None [ALL]:) none
_Send MAIL on Special Day Action (Yes, No [No]:)
_Use_next_time (Yes, No [Yes]:)
_OPCOM (Yes, No [No]:)
_Mail_Address [EXAMPLE] :
_Username [EXAMPLE] :
_Run Priority [Default] :
_Pre Function [DIR/PRINT [EXAMPLE.PROJECT-C]*.REP] :
_Post Function [DIR/PRINT [EXAMPLE.PROJECT-C]*.REP] :
```

```
_Maximum Time Warning [None] :
_Maximum Time Job [None] :
_Synchronization [None] :
_Comment [Check for weekly rep's/copy to subdirectory and
rename/check new rep files] :
%NSCHED-I-RQSTSUCCSS, Job 10522 - Created
```

The user copies an existing job called WEEKLY-RENAME to create a new job called WEEKLY-RENAME1. The following qualifier values of WEEKLY-RENAME are modified:

- Job name
- Schedule interval
- Days
- Output file
- Send mail

Note

You cannot duplicate the name of an existing job under that username.

WEEKLY-RENAME1 will start running tomorrow at midnight, then will run daily at 4:15 A.M. The user will receive a terminal broadcast message when the job completes, and the job's output will be placed in WEEK-RENAME1.REP.

2. This command specifies **/NOPROMPT**, so the manager does not display prompts. **WKLY-RNM1** will run on a cluster node called NDNM.

```
SCHEDULE> COPY WKLY-RNM/NOPROMPT/JOB=WKLY-RNM1 /CLUSTER_NODE=NDNM
%NSCHED-I-RQSTSUCCSS, Job 296 - Created
```

CREATE

CREATE — Creates a new job in the Job Management Manager database, or creates a Special Day Class.

Description

When used with the **/SD_CLASS** qualifier, a Special Day Class is created. For more information on creating Special Day Classes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

When the **/SD_CLASS** qualifier is not used a job is created.

The created job consists of a system-level command to process, plus information describing when and how the job should run.

The manager assigns a unique number to each created job. You can assign the following job specifiers to refer to the job:

- Job name

- Job group
- Job type

For more information about job specifiers, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

By default, the **SCHEDULE CREATE** command prompts you to enter settings for a standard subset of its command qualifiers. If you use the **/PROMPT** qualifier with **SCHEDULE CREATE**, the command prompts you to enter settings for all qualifiers. The first example shows the default qualifiers, and the second example shows the additional qualifiers associated with the **/PROMPT** qualifier.

You must have CMKRNL privilege to create a job in another user's account.

Format

CREATE *vms_command* [*/qualifier*]

Qualifiers	Defaults
/[NO]CLUSTER NODE	/NOCLUSTER NODE
/[NO]COMMENT	/NOCOMMENT
/CPULIMIT	0
/DATES	None
/DAYS	/DAYS=ALL
/EXID	/NOEXID
/[NO]GROUP	/NOGROUP
/[NO]HOLD	/NOHOLD
/[NO]INTERVAL	/NOINTERVAL
/[NO]JOB_NAME	/NOJOB_NAME
/LOAD_BALANCE_GROUP	None
/MAIL_ADDRESS	None
/[NO]MAX_TIME	/NOMAX_TIME
/MODE	/DETACHED
/[NO]NAME	/NONAME
/[NO]NEXT TIME	/NONEXT_TIME
/[NO]NODE	See the text
/[NO]NOTIFY	/NOTIFY
/NOT_ON	Yes
/ONLY_ON	No
/[NO]OPCOM	/NOOPCOM
/[NO]OUTPUT	/NOOUTPUT
/[NO]POST_FUNCTION	/NOPOST_FUNCTION
/[NO]PRE_FUNCTION	/NOPRE_FUNCTION
/[NO]PROMPT	None

Qualifiers	Defaults
/QRIORITY	100
/QUEUE	/SYS\$BATCH
/[NO]RDID	/NORDID
/REMOTE_NODE	None
/[NO]RESTART	/RESTART
/[NO]RETAIN	/RETAIN=ALL
/[NO]RETRY	/NORETRY
/RUN_PRIORITY	See the text
/SD_ACTION	Skip
/SD_MAIL_ON_ACTION	No
/SD_RESTRICTION	None
/[NO]SEND MAIL	/NOSEND_MAIL
/SERVER	None
/SJOB	/NOSJOB
/[NO]STALL_NOTIFY	/NOSTALL NOTIFY
/START_TIME	None
/SYMBOL	None
/[NO]SYNCHRONIZATION	/NOSYNCHRONIZATION=(job_specifier, ...)
/[NO]TJOB	/NOTJOB
/[NO]TYPE	/NOTYPE
/[NO]USE_NEXT_TIME	/NOUSE_NEXT_TIME
/USER_NAME	Current user
/[NO]WRID	/NOWRID

Parameter

vms_command

Specifies the system-level command to perform when the manager runs the job. You can use a single command (such as **SHOW TIME**) or a command file containing multiple commands (such as @RENAME.COM). The maximum command length is 1024 characters. The OpenVMS command is required. If you omit a command, the manager prompts you to enter one.

In the case of remote mode jobs, this is the command to be executed on the remote node and operating system, and must follow the correct syntax for the operating system used. Use quotes to enclose a case-sensitive command.

If the command contains the at character (@) or contains spaces, you must enclose it in quotation marks. For example:

```
$ SCHEDULE CREATE "@RENAME.COM"$ SCHEDULE CREATE "COPY FILENAME.EXT"
```

To include quotation marks within the command, specify two consecutive quotation marks. For example:

```
SCHEDULE> CREATE "WRITE SYS$OUTPUT ""Hello"""
```

Qualifiers

/CLUSTER_NODE=nodename
/NOCLUSTER_NODE (D)

Restricts a job to running only on the specified node in the OpenVMS Cluster. If the manager is not running on that node when the job starts, this command places the request in the job database and issues a warning message. This qualifier is the same as **/NODE**. For example:
/CLUSTER_NODE=NODE1.

This qualifier is supported with this command **only for /MODE=DETACHED** jobs.

/COMMENT=string
/NOCOMMENT (D)

Specifies a text string you want to associate with the new job. You can use this string to retrieve logging information or to give more detail about the job's function. The maximum string is 80 characters. The manager truncates longer strings. To include quotation marks in the comment string, use two consecutive quotation marks. For example, to associate the comment string "This is my job" with your job, enter the following:

```
/COMMENT=""This is my job""
```

/CPULIMIT=integer
/CPULIMIT=0 (D)

This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified. It is an integer that is the number of 100ms ticks of CPU time to allow for the job before the system terminates the job. The default (zero) means INFINITE.

/DATES=(date_spec, ...)

Date_spec is any valid OpenVMS date-time expression. Only the date portion of the specifications will be used.

This qualifier is used in conjunction with the **/SD_CLASS** qualifier to create a Special Day Class containing the specified dates. Dates can be added or removed from the class by using the **MODIFY/SD_CLASS** command. This qualifier requires the **/SD_CLASS** qualifier. This qualifier is not supported with this command when a server is specified.

/DAYS=(day_specifier, ...)

Specifies the days of the week on which you want the job to run. You can use the following values:

- ALL
- NONE
- [NO]MONDAY
- [NO]TUESDAY
- [NO]WEDNESDAY
- [NO]THURSDAY
- [NO]FRIDAY

- [NO]SATURDAY
- [NO]SUNDAY

The following information lists the rules for using day specifiers:

- Use a comma to separate scheduled days. For example: **/DAYS=(MONDAY, TUESDAY)**.
- Do not specify both ALL and NONE.
- A NO... value indicates that the job should not run on the specified day. For example, **/DAYS=NOSATURDAY** means do not run the job on Saturday.
- To run a job on Saturday only, use: **/DAYS=(NONE, SATURDAY)**.
- You can abbreviate days, as long as they remain unique. For example, you can abbreviate Saturday to SA, and Sunday to SU.
- If you enter one day only, omit the parentheses. For example: **/DAYS=NOSATURDAY**.
- The default is **/DAYS=ALL**.

Note

If no days are specified, the job will not reschedule itself.

/EXID

/NOEXID (D)

Sets an identifier that allows execute access to a particular job. SYSPRV privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/GROUP=group_name

/NOGROUP (D)

Specifies a group name to associate with the new job. The group name can have up to 40 characters. If you relate a job to a group, you can apply commands such as **SCHEDULE HOLD**, **SCHEDULE RELEASE**, and **SCHEDULE RUN** to the whole group. For example:

/GROUP=WEEKLY or **/GROUP=MONTHLY**.

/HOLD

/NOHOLD (D)

Places the new job on hold when the manager copies it, regardless of the starting time or schedule interval. The manager does not prompt you for this qualifier; you must specify it on the command line.

/INTERVAL=schedule_interval

/NOINTERVAL (D)

Specifies a schedule interval that determines when to run a copy of the job. Modifying the interval does not change the next scheduled start time for the job.

If you omit the **/INTERVAL** qualifier, the manager shows **STATUS=SCHEDULED** and **NEXT_TIME=NEVER** after each run. See the **/HOLD** qualifier.

The interval time should be in one of the following formats:

Format	Time
D hh:mm:ss.cc	Daily
H mm:ss.cc	Hourly
+dddd hh:mm:ss	Job Management Manager delta time
F[Y] [Q[qq]] [M[mm]] [W[ww]] [+/-] [D[ddd]] [hh:mm:ss.cc]	Fiscal time
M [-][dd] [hh:mm:ss.cc]	Monthly
0	Continuously

If you omit any part of an *hh:mm:ss.cc* specifier, the omitted part is set to 0 by default.

The following list explains the time formats in more detail:

Daily Format: D hh:mm:ss.cc

Runs the job daily at the time specified by *hh:mm:ss.cc*. If you omit all or part of *hh:mm:ss.cc*, that part is set to 0 by default.

For example:

- **D 2:** runs the job daily at 2 A.M.
- **D 14:10** runs the job daily at 2:10 P.M.
- **D 14:10:15** runs the job daily at 10 minutes and 15 seconds past 2 P.M.

Hourly Format: H mm:ss.cc

Runs the job hourly at *mm:ss.cc* past the hour. If you omit all or part of *mm:ss.cc*, that part is set to 0 by default.

For example:

- **H 10** runs the job hourly at 10 minutes after every hour.
- **H 4** runs the job at 4 minutes past every hour.
- **H 4:15** runs the job hourly at 4 minutes and 15 seconds past every hour.

Job Management Manager Delta Time Format: +dddd hh:mm:ss

Runs the job at the specified Job Management Manager delta time. The Job Management Manager delta time is the time interval from the starting time to a specified time in the future.

The delta time is added to the starting time. You must specify the days *+dddd*, even if you use 0.

For example:

- **+03 3:10** runs the job every 3 days, 3 hours, and 10 minutes.
- **+0 03** runs the job every 3 hours.
- **+0 00:30** runs the job every 30 minutes.

Note

Job Management Manager delta time is not the same as OpenVMS delta time (dddd-hh:mm:ss.cc).

Fiscal_Time Format: F[Y] [Q[qq]] [M[mm]] [W[ww]] [+/_] [D[ddd]][hh:mm:ss.cc]

Runs the job at the specified fiscal (F) time.

Some rules for specifying fiscal time interval:

- You must begin the fiscal time with F. The rest of the format is optional. The order of precedence for the fiscal date specifiers is left to right: year (Y), quarter (Q), month (M), week (W), and day (D).
- Place any value for a specifier directly after the specifier. For example, specify the third quarter as Q3, not Q 3.
- You can specify a quarter and week without a month, because the month falls within the quarter.
- The default day (D) is day 1.
- The default time [hh:mm:ss.c] is midnight. There must be a space before the time parameter. You can also use spaces within the time parameter.

For example:

- F Q3 W6 runs the job during the sixth week in the third quarter, on day 1 at midnight.
- F Q D5 12:00 runs the job on the fifth day of each quarter at noon.

The manager supports a 52- or 53-week fiscal year as described in the *Fiscal Tax Year* section of the *Internal Revenue Service Publication 538* (Rev. Nov. 88). Fiscal years have the following restrictions:

- 4 quarters a year
- 3 months a quarter
- 7 days a week
- 364 days a year
- 52 weeks a year
- 13 weeks a quarter
- Two 4-week months and one 5-week month in each quarter (the 5-week month must be the same month in each quarter)

In addition, the following restrictions apply to a 53-week fiscal year:

- 371 days a year
- 53 weeks a year
- Three 13-week quarters and one 14-week quarter
- Two 4-week months and one 5-week month in each quarter, with the exception of one 5-week or 6-week month (the month containing the extra week)

By default, the manager supports a fiscal calendar, which always ends on the Saturday that is closest to the end of the month of June. See the **SET FISCAL_YEAR** command for instructions on defining a different fiscal year.

Continuous_Time Format: 0

Runs the job continuously. This setting is useful when the job depends on other jobs.

Daily Format: D hh:mm:ss.cc

Runs the job daily at the time specified by *hh:mm:ss.cc*. If you omit all or part of *hh:mm:ss.cc*, that part is set to 0 by default.

For example:

- **D 2:** runs the job daily at 2 A.M.
- **D 14:10** runs the job daily at 2:10 P.M.
- **D 14:10:15** runs the job daily at 10 minutes and 15 seconds past 2 P.M.

Hourly Format: H mm:ss.cc

Runs the job hourly at *mm:ss.cc* past the hour. If you omit all or part of *mm:ss.cc*, that part is set to 0 by default.

For example:

- **H 10** runs the job hourly at 10 minutes after every hour.
- **H 4** runs the job at 4 minutes past every hour.
- **H 4:15** runs the job hourly at 4 minutes and 15 seconds past every hour.

Job Management Manager Delta Time Format: +dddd hh:mm:ss

Runs the job at the specified Job Management Manager delta time. The Job Management Manager delta time is the time interval from the starting time to a specified time in the future.

The delta time is added to the starting time. You must specify the days *+dddd*, even if you use 0.

For example:

- **+03 3:10** runs the job every 3 days, 3 hours, and 10 minutes.
- **+0 03** runs the job every 3 hours.
- **+0 00:30** runs the job every 30 minutes.

Note

Job Management Manager delta time is not the same as OpenVMS delta time (*dddd-hh:mm:ss.cc*).

Fiscal_Time Format: F[Y] [Q[qq]] [M[mm]] [W[ww]] [+/_] [D[ddd]][hh:mm:ss.cc]

Runs the job at the specified fiscal (F) time.

Some rules for specifying fiscal time interval:

- You must begin the fiscal time with F. The rest of the format is optional. The order of precedence for the fiscal date specifiers is left to right: year (Y), quarter (Q), month (M), week (W), and day (D).
- Place any value for a specifier directly after the specifier. For example, specify the third quarter as Q3, not Q 3.
- You can specify a quarter and week without a month, because the month falls within the quarter.
- The default day (D) is day 1.
- The default time [*hh:mm:ss.c*] is midnight. There must be a space before the time parameter. You can also use spaces within the time parameter.

For example:

- F Q3 W6 runs the job during the sixth week in the third quarter, on day 1 at midnight.
- F Q D5 12:00 runs the job on the fifth day of each quarter at noon.

The manager supports a 52- or 53-week fiscal year as described in the *Fiscal Tax Year* section of the *Internal Revenue Service Publication 538* (Rev. Nov. 88). Fiscal years have the following restrictions:

- 4 quarters a year
- 3 months a quarter
- 7 days a week
- 364 days a year
- 52 weeks a year
- 13 weeks a quarter
- Two 4-week months and one 5-week month in each quarter (the 5-week month must be the same month in each quarter)

In addition, the following restrictions apply to a 53-week fiscal year:

- 371 days a year
- 53 weeks a year
- Three 13-week quarters and one 14-week quarter
- Two 4-week months and one 5-week month in each quarter, with the exception of one 5-week or 6-week month (the month containing the extra week)

By default, the manager supports a fiscal calendar, which always ends on the Saturday that is closest to the end of the month of June. See the **SET FISCAL_YEAR** command for instructions on defining a different fiscal year.

Monthly Format: M [-] [dd] [hh:mm:ss.cc]

Runs the job at the specified monthly interval.

If you omit the day (*dd*), the default is the first day of the month. If *dd* is greater than the number of days in the current month, the job runs on the last day of the month. You can use a minus sign to specify that the job should run *dd* days before the end of the month.

For example:

- M 15 18:23 runs the job on the fifteenth day of each month at 6:23 P.M.
- M 13:10 runs the job on the first day of each month at 1:10 P.M.
- M 31 runs the job on the last day of every 30-day month at midnight.

Continuous_Time Format: 0

Runs the job continuously. This setting is useful when the job depends on other jobs.

/JOB_NAME=job_name_string /NOJOB_NAME (D)

Specifies a name for the new job, so you can refer to the job by name instead of by job number. Job names can have up to 40 characters. For example: **/JOB_NAME=MYJOB**.

/LOAD_BALANCE_GROUP

Specifies a load balance group name to associate with the (new) job. The group name can have up to 14 characters.

The **/JOB_NAME** qualifier is the same as **/NAME**.

/MAIL_ADDRESS=mail_destination_string

```
/MAIL_ADDRESS=MINE
```

Overrides the default username as the destination for mail notification when the job completes. For example:

You can specify an address of up to 50 characters. If you specify a longer string, the manager sends a warning message.

- If the mail destination string contains a comma or any spaces, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="SYSTEM, USER1"
```

- If the mail destination string is a mail distribution list, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="@MAIL.DIS"
```

Note

The default location of the mail distribution file is your `SYSS$LOGIN` directory.

/MAX_TIME=time_specifier

/NOMAX_TIME (D)

Instructs the manager to notify you by mail and terminal broadcast message if the job does not complete within a specified time from the start of the job. At the DCL prompt, express the time

interval in the OpenVMS delta-time format (dddd-hh:mm:ss.cc); in all other interfaces (including the shell), use Job Management Manager delta time (+dddd hh:mm:ss.cc).

For example, **/MAX_TIME=3-3:10** means notify me by mail and terminal broadcast message if the job does not complete within 3 days, 3 hours, and 10 minutes from the start time.

/MODE=mode_type
/MODE=DETACHED (D)

Sets the mode. Valid values are BATCH, DETACHED, and REMOTE. This qualifier is not supported with this command when a server is specified.

/NAME=job_name_string
/NONAME (D)

This qualifier is the same as the **/JOB_NAME** qualifier.

/NODE=nodename
/NONODE (D)

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/NOTIFY (D)
/NONOTIFY

Instructs the manager to send a terminal broadcast message to you when the job completes.

The default **/NOTIFY** instructs the manager not to send a terminal broadcast message when the job completes. If you use the default for both this qualifier and **/SEND_MAIL**, you do not receive any messages when the job completes.

/NOT_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job to NOT run on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/ONLY_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job to run ONLY on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/OPCOM
/NOOPCOM (D)

Specifies that the manager should send an OPCOM message upon completion.

/OUTPUT=file_name
/NOOUTPUT (D)

Specifies a file name to contain the job's output, such as:

- Reports
- Logs
- rocessed documents

The file name can have up to 255 characters. The following is an example of a full file name:

```
/OUTPUT=MYDISK: [MYDIRECTORY] TEST.LOG
```

If you omit the device or directory, the manager puts the output in your default device and directory as specified in the authorization file for the account. If a logical is used to define the location of the file it must be a system logical; it cannot be a process logical.

If you specify **/NOOUTPUT**, the manager does not save the output.

/POST_FUNCTION=postfunction_command
/NOPOST_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes after the main job's OpenVMS command. For example:

```
/POST_FUNCTION="DIR/PRINT [MYDIRECTORY]*.TXT;*"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks.

This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PRE_FUNCTION=prefunction_command
/NOPRE_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes before the main job's OpenVMS command. For example:

```
/PRE_FUNCTION="SET DEF [MYDIRECTORY]"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks

This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PROMPT
/NOPROMPT (D)

Specifies that the manager should prompt you with the complete set of qualifiers for this command. See the second example for this command.

If you do not specify either **/PROMPT** or **/NOPROMPT**. The manager issues a standard subset of qualifiers. See the first example.

If you specify **/NOPROMPT**, the manager does not provide any prompts for qualifiers.

/QPRIORITY=qpriority_value

Qpriority_value is an integer from 0 to 255. This is the priority that a job is assigned when it is submitted to a BATCH queue. The default is 100. This qualifier is supported with this command only for **/MODE=BATCH** jobs.

/QUEUE=queue_name_string
/QUEUE=SYS\$BATCH (D)

A string, up to 31 characters in length, that is the name of an existing queue on the system to which a job is submitted.

This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified.

/RDID=identifier
/NORDID (D)

Sets an identifier that allows you read access to a particular job. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/REMOTE_NODE=remote_node_value

Remote_node_value is a string that is either in the form of "user@node" or "node." Specifying only "node" will use the current username, in uppercase characters. Specifying the user further requires the **at** sign (@) as a separating character between the user and node. To maintain lowercase characters this string must be quoted, and it has a maximum length of 72 characters.

This qualifier is not supported with this command when a server is specified.

/RESTART (D)
/NORESTART

Instructs the manager to restart the job if it is marked in the database as running, but is not really running. This can happen if the job was interrupted by a system failure. If you specify **/NORESTART**, the job is put on hold after a system failure.

If the interrupted job has no node restriction, then it restarts on the new default node; otherwise, the job must wait until its node is available.

Note

The manager restarts the job from the beginning, unless the job has a restart test value. You use the **SCHEDULE SET RESTART_VALUE** command to assign a test-value symbol to restarted jobs.

/RETAIN=retain_condition
/NORETAIN

Specifies the conditions under which the manager should keep a completed job in its database. Valid qualifier values:

Value	Description
ALL (D)	Keeps a job in the database, regardless of its completion status.
ERROR	Keeps a job in the database only if the job completed with an error or warning status.
SUCCESS	Keeps a job in the Job Management Manager database only if it completed successfully.

If you specify **/NORETAIN**, the manager does not keep the job in its database after it runs.

/RETRY**/NORETRY (D)**

Instructs the manager to rerun a job if it completes with an error status. This qualifier is useful when the main job must wait for dependencies to complete.

If you specify **/RETRY**, the manager reruns the main job every 15 minutes until it succeeds, for up to 100 attempts. To change the **/RETRY** frequency and the maximum number of attempts, see the **SCHEDULE SET JOB** command.

/RUN_PRIORITY=process_priority_value

Specifies the default process priority that the manager uses to run the job. This qualifier is supported with this command only for **/MODE=DETACHED** jobs. The process priority is a number between 1 and 16.

If you omit the value or use a less than or equal to 0, the manager runs the job at its default priority of 4.

If you specify a value greater than 16, the manager uses a value of 16.

The run priority should be set no higher than your system's normal interactive job priority.

To choose a priority value for a Job Management Manager job, follow these rules:

Note

You need SETPRV or ALTPRI privileges to run a job at a priority value greater than the default priority for the manager or the job owner (UAF file). See your system manager.

- Use a value that is less than or equal to the default Job Management Manager value.
- Use a value that is greater than the default Job Management Manager priority and less than or equal to the job owner's default priority in the UAF file.
- Use a value that is greater than the default Job Management Manager priority and greater than the job owner's default priority, if the owner has SETPRV or ALTPRI default privileges.
 - Use the higher of the following two values:
 - The Job Management Manager default or the job owner's default
 - The owner does not have SETPRV or ALTPRI privileges

/SD_ACTION=keyword

This is the action that is to be taken if a job's next scheduled run time falls on a Special Day on which this job is restricted from running. Valid keywords:

- SKIP – Apply the interval until a valid date is found (default).
- HOLD – Put the job on hold.

/SD_ACTION applies to a job only if it has a **/NOT_ON** Special Days Restriction. This qualifier is not supported with this command when a server is specified.

/SD_CLASS

This qualifier indicates that operation applies to a Special Day Class and not to a job. This qualifier requires the **/DATES** qualifier, and cannot be used with any other qualifiers. This qualifier is not supported with this command when a server is specified.

/SD_MAIL_ON_ACTION (D)**/NOSD_MAIL_ON_ACTION**

If **/SD_MAIL_ON_ACTION** is specified, mail will be sent to the MAIL_ADDRESS of the job when a job encounters a Special Day Action when its next scheduled time is calculated. This qualifier only applies to a job if it has a **/NOT_ON** Special Days Restriction. This qualifier is not supported with this command when a server is specified.

/SD_RESTRICTION=(classname, ...)

Specifies a list of Special Day Class names to which this job is restricted. The class names must currently exist in the Special Day Class database. This qualifier is not supported with this command when a server is specified.

/SEND_MAIL=value**/NOSEND_MAIL (D)**

Specifies the conditions under which the manager sends a mail message when the job completes. By default, no mail notification is sent.

Valid qualifier values:

Value	Description
ALL	Sends a mail message in all cases, when the job completes with or without errors.
ERROR	Sends mail only if the job completes successfully.
SUCCESS	Sends mail only if the job completes with an error or warning status.

See **/NOTIFY** for information on receiving terminal broadcast messages.

/SERVER=remote_node

Creates this job on the specified remote node. For more information on specifying remote nodes with the **/SERVER** qualifier, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/SJOB=job_name**/NOSJOB (D)**

Sets the job number of the job to run when a job has not started within the STALL_NOTIFY interval of its scheduled time. If this job stalls, then the manager runs the specified job.

This qualifier is not supported with this command when a server is specified.

Note

The stall job (SJOB) must exist in the same database as the job that calls it.

/STALL_NOTIFY=stall_time
/NOSTALL_NOTIFY (D)

Instructs the manager to send a warning message and mail message if a job does not start within the specified OpenVMS delta time from its scheduled starting time. For example, **/STALL_NOTIFY=3-3:00** means send a message if the job has not started within 3 days and 3 hours of its scheduled starting time.

At the DCL prompt, express the time interval in the OpenVMS delta-time format (dddd-hh:mm:ss.cc); in all other interfaces (including the shell), use Job Management Manager delta time (+dddd hh:mm:ss.cc).

The manager sends the warning message to the job's owner or to the specified mail address. See the **/MAIL_ADDRESS** qualifier.

This feature is useful in a wide area network when job dependencies are on remote nodes experiencing network reliability problems.

/START_TIME=starting_time

Specifies the first time to run a job after it is created in the Job Management Manager database. The starting time should be in one of the following formats:

- *dd-mmm-yyyy hh:mm:ss.cc* – Specifies an absolute starting time.
- If you omit the year (yyyy), the default is the current calendar year. If you omit all or part of the time (*hh:mm:ss.cc*), the omitted part is set to 0 by default. If the time contains spaces, the entry must be set in quotation marks.
- The default time for the **/START** qualifier is the interval time that you specify with the **/INTERVAL** qualifier. If the starting time is earlier than the present time, the manager schedules the job to run immediately. The default is to apply the interval to "now" and not use Special Days.

For example:

- *-31-DEC-1996 13:* starts the job at 1 P.M. on December 31, 1996.
- *-31-DEC* starts the job at midnight on December 31 of the current year.
- *+dddd hh:mm:ss.cc* – Specifies a Job Management Manager delta time, based on the current date and time. You must specify the days (*+dddd*), even if you use 0. For example, **"+3 4:45"** starts the job 3 days, 4 hours, and 45 minutes from the present time.
- **TOMORROW hh:mm:ss.cc** – Specifies a starting time tomorrow. For example, **tomorrow 4:45** starts the job tomorrow 4 hours and 45 minutes after midnight.

Note

Job Management Manager delta time is not the same as OpenVMS delta time (dddd-hh:mm:ss.cc).

- **F[Yyy] [Qqq] [Mmm] [Www] [Dddd] [hh:mm:ss.cc]** – Specifies a fiscal time. See the **/INTERVAL** qualifier for a description of the format.
- **"now"** – Starts the job immediately.

- NEVER—Does not schedule a start time.

/SYMBOL=decl_symbol

Assigns a DCL local symbol to the job number that the manager creates. Users can then reference the DCL symbols instead of the job number. For example: **/SYMBOL=WRN** or **/SYMBOL=WEEKLY**.

You can specify this qualifier only on the command line. The manager does not prompt you for a **/SYMBOL** value, even when you use the **/PROMPT** qualifier.

/SYNCHRONIZATION=(job_specifier, ...)**/NOSYNCHRONIZATION=(job_specifier, ...)****/NOSYNCHRONIZATION (D)**

Specifies a list of up to 16 jobs that must complete successfully before this job can run. When you specify more than one job, separate each job with a comma and enclose the list in parentheses. For example:

```
/SYNCHRONIZATION=(MYJOB, YOURJOB, OURJOB)
```

You can specify the name or number of any existing job in the Job Management Manager database. For more information on description of job dependencies, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To refer to a job belonging to another user, add the **=username** specifier to the job specifier. For example, the following command qualifier refers to a job named *BACKUP* owned by the user *SYSTEM*:

```
/SYNCHRONIZATION=(BACKUP=SYSTEM)
```

/TJOB=job_name**/NOTJOB (D)**

Sets the job number of the job to run when the present job has exceeded its maximum run time. If this job's run time exceeds its **MAX_TIME** qualifier then the specified job will be run.

This qualifier is not supported with this command when a server is specified.

Note

The max_time job (TJOB) must exist in the same database as the job that calls it.

/TYPE=type_name**/NOTYPE (D)**

Specifies a job category. The name can have up to 40 characters. If you specify a job type, the manager can apply commands such as hold, release, and run to the entire category at one time. For example: **/TYPE=BACKUP**.

/USE_NEXT_TIME**/NOUSE_NEXT_TIME (D)**

You cannot use wildcard characters with **/TYPE**.

Instructs the manager to calculate the next run time for the new job by adding the schedule interval to the new job's next scheduled run time.

By default (**/NOUSE_NEXT**), the manager calculates the next run time by adding the schedule interval to the job's actual starting time.

This qualifier is useful if your new job has the following characteristics:

- A dependency
- A daily interval
- Occasionally waits until the next day to start running

/USER_NAME=user_name

Specifies the OpenVMS username under which the new job will run. This value overrides the username of the person creating the job. For example, if the default username is MYJOB and you want the job to run under username YOURJOB, specify **/USER_NAME=YOURJOB**.

Note

You need CMKRNL privilege to use a username other than your own. You cannot use the **/GROUP** or **/TYPE** qualifiers at the same time as the **/USER_NAME** qualifier. This is designed to avoid the potential for error.

/WRID=identifier

/NOWRID (D)

Sets an identifier that allows write access to a particular job. CMKRNL privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

Examples

1. This example creates a job without using the **/PROMPT** qualifier, so the manager prompts the user for a standard subset of the qualifiers. The user creates a new job called WKLY-RENAME, specifying that a command file named @SYS\$DEVICE:[USER1.PROJ-C]WKLY-COPY.COM should run this job on fiscal week 6 at 6 p.m. **only** if that day is a Friday.

```
SCHEDULE> CREATE
_VMS Command: @SYS$DEVICE:[DOE.PROJ-C]WKLY-COPY.COM
_Job Name [None] : WKLY RENAME
_Schedule Interval [None] : F W6 18:00:00
_Days [ALL]: (NONE,FRIDAY)
_Start Time [ 9-AUG-1996 18:00:00.46] :
_Output file [None] : SYS$DEVICE:[DOE.PROJ-C.WKLY]WKLY-RENAME.REP
  Comment [None]
: Check for weekly ljt/copy to subdirectory and
rename/check for renamed ljts. _%NSCHED-I-RQSTSUCCSS, Job 2043 - Created
The manager puts the output in a specified file named
SYS$DEVICE:[DOE.PROJ-C.WKLY]WKLY-RENAME.REP.
```

2. This example is similar to the first example, but the user specifies the **/PROMPT** qualifier.

```

SCHEDULE> CREATE/PROMPT
_VMS Command: @SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY-COPY.COM
_Job Name [None] : WEEKLY-RENAME
_Group [None] : WEEKLY
_Type [None] : PROJECT-COSTS
_Stall Notify [None] :
_Schedule Interval [None] : F W6 18:00:00
_Days [ALL]: (NONE,FRI)
_Special Day Restrictions [NONE]:
_Start Time [ 7-AUG-1996 18:00:00.04] :
_Output file [None] : SYS$DEVICE:[EXAMPLE.PROJECT-C]
WEEKLY- RENAME.REP
_Mode (Detached, Batch, Remote [Detached] :)
_Cluster Node [Default] :
_Retain (Success, Error, None or All [ALL]:) ALL
_Restart (Yes, No [Yes]:) YES
_Retry (Yes, No [No]:) YES
_Notify (Yes, No [Yes]:) NO
_Send-Mail (All, Error, Success or None [NONE]:) ALL
_Send MAIL on Special Day Action (Yes, No [No]:)
_Use_next_time (Yes, No [No]:) YES
_OPCOM (Yes, No [No] :)
_Mail_Address [EXAMPLE] : EXAMPLE
_User_Name [EXAMPLE] : EXAMPLE
_Run Priority [Default] :
_Pre Function [None] : DIR/PRINT[EXAMPLE.PROJECT-C]*.REP
_Post Function [None] : DIR/PRINT[EXAMPLE.PROJECT-C.WEEKLY]*.REP
_Maximum Time Warning [None] :
_Maximum Time Job [None] :
_Synchronization [None] :
_Comment [None] : Check for weekly rep's/copy to subdirectory
and rename/check new rep files
%NSCHED-I-RQSTSUCCSS, Job 10521 - Created

```

As a result, the manager prompts the user for the following additional qualifiers:

/GROUP	/PREFUNCTION
/TYPE	/POSTFUNCTION
/CLUSTER_NODE	/MAX_TIME
/RESTART	/SYNCHRONIZATION
/RETRY	/SD_RESTRICTION
/NOTIFY	/MODE
/SEND_MAIL	/RETAIN
/MAIL_ADDRESS	/OPCOM
/USER_NAME	/TJOB
/RUN_PRIORITY	/SJOB

The user specifies the following for mail notification:

- Do not notify the user with a terminal message about completion status.
- Mail the completion status to the mail address of the username.

- The username is the same as the owner of the job.
- Send mail in all cases, if the job completes successfully **or** with an error.

The user also specifies a prefunction and postfunction:

- Prefunction: Run the command:

```
DIR/PRINT [DOE.PROJECT-C] *.LJT;*
```

- Postfunction: Run the command:

```
DIR/PRINT [DOE.PROJECT-C.WEEKLY] *.LJT;*
```

DELETE

DELETE — Removes the specified job from the Job Management Manager database, or removes the Special Day Class if **/SD_CLASS** is specified.

Description

This is a management command when used to delete a Special Day Class Description.

You can delete a currently running job from the database without halting the job. To halt a job that is currently running, see the **SCHEDULE ABORT** command.

To delete a job, you must own it or have **WRITE** access to it. For more information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v311>].

Format

job_specifier [/qualifier]

Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/GROUP	None
/IGNORE	None
/SD_CLASS	None
/SERVER	None
/TYPE	None

Parameter

job_specifier

The name or number of the jobs you want to delete.

For example:

```
SCHEDULE> DELETE MYJOB
SCHEDULE> DELETE 123
```

To delete a job that belongs to another user, you must refer to the job by name and add the **=username** specifier to the name of the job. For example:

```
SCHEDULE> DELETE THISJOB=DOE
```

To delete a job on a remote node, you either add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> DELETE NODE1::MYJOB
SCHEDULE> DELETE NODE1::321
```

You can use wildcard characters to refer to job name, username, group name, and type name. For example, the following command deletes all jobs beginning with the letter B that are in groups beginning with W and owned by users whose names begin with D:

```
SCHEDULE> DELETE B*=D*/GROUP=W*
```

Qualifiers

CONFIRM

/NOCONFIRM (D)

Instructs the manager to request confirmation before deleting a job.

Note

VSI recommends that you use the **/CONFIRM** qualifier if you are deleting more than one job.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
Jobname (jobnumber) DELETE? [No]:
```

The default answer is no. You can enter one of the following answers:

To...	Answer...
Delete the job	YES, 1, or TRUE
Retain the job	NO, 0, or FALSE
Delete all following jobs without further confirmation	ALL
Stop the command	QUIT

/GROUP=group_name

Deletes all jobs that have this group name and match your username. You can use the asterisk (*) and percent (%) wildcard characters in the group name. For example: **/GROUP=H*** or **/GROUP=W***.

/IGNORE=jobdeps

This qualifier is valid only when used with **/SD_CLASS**; ignores the fact that there is currently a dependency on the specified Special Day Class, and deletes the Class. The default is not to delete classes that have current dependencies.

This qualifier is not supported with this command when a server is specified.

The valid keyword *jobdeps* means ignore the fact that there are one or more jobs that depend on this class.

/SD_CLASS

This qualifier indicates that operation applies to a Special Day Class and not to a job. The default is to delete classes only when there are no dependencies on those classes. See **/IGNORE** to override dependencies. This qualifier cannot be used with any other qualifiers except **/IGNORE**. This qualifier is not supported with this command when a server is specified.

/SERVER=remote_node

Deletes the job on the specified remote node or on the cluster that the remote node belongs to. For example: **/SERVER=NODE1**.

If you indicate the remote node in the job specification, this qualifier value is ignored.

For example:

```
SCHEDULE> DELETE NODE1::MYJOB/SERVER=NODE1
```

You must have a proxy account on the remote node or specify an account and password. For more information on accessing remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/TYPE=type_name

Deletes all jobs that have this type name and match your username. For example: **/TYPE=BACKUP** or **/TYPE=PROJECT-COSTS**.

You can use the asterisk (*) and percent (%) wildcard characters in the type name.

1. This command deletes a job named *JOBNAME*. The **/CONFIRM** qualifier is not used.

```
SCHEDULE> DELETE JOBNAME
%NSCHED-I-FLAGSET, Job JOBNAME - DELETE Requested
```

2. This command deletes a job named *JOBNAME* owned by user *DOE*. The **/CONFIRM** qualifier is not used.

```
SCHEDULE> DELETE JOBNAME=DOE
%NSCHED-I-FLAGSET, Job JOBNAME - DELETE Requested
```

3. This example uses the **/CONFIRM** qualifier, so the manager requests confirmation before deleting the job. After confirmation, the job named *JOBNAME* is deleted.

```
SCHEDULE> DELETE JOBNAME/CONFIRM
Job JOBNAME (jobnumber, DELETE? [No]) YES
%NSCHED-I-FLAGSET, Job JOBNAME - DELETE Requested
```

DELETE NSCHED\$:RETRY.DAT;

DELETE NSCHED\$:RETRY.DAT; — Deletes all job_dependency notifications on remote nodes currently being retried over the network. This is a management command. You perform this command at the DCL prompt.

Description

See the **SCHEDULE SET NETWORK INTERVAL_RETRY** command for a complete discussion of Job Management Manager retry features.

You must include the semicolon at the end of this command. DCL format requires the semicolon to delete a file.

Format

```
DELETE NSCHED$:RETRY.DAT;
```

Parameters

None.

Qualifiers

None.

Example

This example deletes the Job Management Manager file RETRY.DAT, which stores job_dependency notifications on remote nodes currently being attempted over the network.

```
$ DELETE NSCHED$:RETRY.DAT;
```

HOLD

HOLD — Puts a specified job on hold.

Description

To put a job on hold, you must own it or have EXECUTE access to it. For information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

The manager will not run a job that is on hold. You can run the job by using the **SCHEDULE RUN** command. You can take a job off hold by using the **SCHEDULE RELEASE** command.

Format

```
HOLD job_specifier [/qualifier]
```

Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/GROUP	None
/SERVER	None

Qualifiers	Defaults
/TYPE	None

Parameter

job_specifier

The name or number of the job that you want to put on hold. For example:

```
SCHEDULE> HOLD MYJOB
SCHEDULE> HOLD 123
```

You must specify a job. If you omit the job specifier, the manager prompts you for it.

To hold a job belonging to another user, you must refer to the job by name and add the **=username** specifier to the name of the job. For example:

```
SCHEDULE> HOLD THISJOB=DOE
```

To hold a job on a remote node, you either add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> HOLD NODE1::MYJOB
SCHEDULE> HOLD NODE1::321
```

You can use wildcard characters to refer to job name, username, group name, and type name. The following example holds all jobs beginning with the letter B that are in groups beginning with W and owned by users whose names begin with D:

```
SCHEDULE> HOLD B*=D*/GROUP=W*
```

Qualifiers

/CONFIRM

/NOCONFIRM (D)

Instructs the manager to request confirmation before putting a job on hold.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
Jobname (jobnumber) HOLD? [No]:
```

The default answer is no. You can enter one of the following answers:

To...	Answer...
Hold the job	YES, 1, or TRUE
Not hold the job	NO, 0, or FALSE
Hold all following jobs without further confirmation	ALL
Stop the command	QUIT

/GROUP=group_name

Holds all jobs that have this group name and match your username. For example:

```
/GROUP=HOURLY or /GROUP=WEEKLY.
```

You can use the asterisk (*) and percent (%) wildcard characters in the group name. For example: `/GROUP=H*` or `/GROUP=W*`.

/SERVER=remote_node

Holds the job on the specified remote node or on the cluster that the remote node belongs to. For example: `/SERVER=NODE1`.

If you indicate the remote node in the job specification, this qualifier value is ignored.

For example:

```
SCHEDULE> HOLD NODE1::MYJOB/SERVER=NODE1
```

You must have a proxy account on the remote node or specify an account and password. For more information on accessing remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/TYPE=type_name

Holds all jobs that have this type name and match your username. For example:

```
/TYPE=BACKUP or /TYPE=PROJECT-COSTS.
```

You can use the asterisk (*) and percent (%) wildcard characters in the type name.

Examples

1. This command puts a job named `JOBNAME` on hold. The job will not run again until you explicitly take it off hold with the **SCHEDULE RELEASE** command or the **SCHEDULE RUN** command. This example does not use the **/CONFIRM** qualifier.

```
SCHEDULE> HOLD JOBNAME
%NSCHED-I-FLAGSET, Job JOBNAME - HOLD Requested
```

2. This command puts a job named `JOBNAME` owned by user `DOE` on hold. The job will not run again until you explicitly take it off hold with the **SCHEDULE RELEASE** command or the **SCHEDULE RUN** command. This example does not use the **/CONFIRM** qualifier.

```
SCHEDULE> HOLD JOBNAME=DOE
%NSCHED-I-FLAGSET, Job Jobname - HOLD Requested
```

3. This command uses the **/CONFIRM** qualifier, so the manager requests confirmation before putting the job on hold. A job named `JOBNAME` is put on hold. The job will not run again until you explicitly take it off hold with the **SCHEDULE RELEASE** command or the **SCHEDULE RUN** command.

```
SCHEDULE> HOLD JOBNAME/CONFIRM
Job JOBNAME (jobnumber, HOLD? [No]) YES
%NSCHED-I-FLAGSET, Job JOBNAME - HOLD Requested
```

MODIFY

MODIFY — Modifies one or more jobs in the Job Management Manager database.

Description

To modify a job, you must own it or have WRITE access to it. For more information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To modify one job, you can do one of the following:

- Use the **SCHEDULE MODIFY** command qualifiers individually. See the first example for this command.
- Include the **/PROMPT** qualifier on the command line, so the manager will provide the complete set of qualifiers. See the second example.
- Specify qualifiers on the command line.

To modify more than one job, you must specify any qualifiers that you are modifying on the command line. You cannot use the **/PROMPT** qualifier.

Format

MODIFY *job_specifier* [**/qualifier**]

Qualifiers	Defaults ¹
/[NO]CLUSTER NODE	/NOCLUSTER NODE
/[NO]COMMENT	/NOCOMMENT
/[NO]CONFIRM	/NOCONFIRM
/CPULIMIT	0
/DATES	None
/DAYS	/DAYS=ALL
/EXID	/NOEXID
/[NO]GROUP	/NOGROUP
/[NO]INTERVAL	/NOINTERVAL
/[NO]JOB_NAME	/NOJOB_NAME
/LOAD_BALANCE_GROUP	None
/MAIL_ADDRESS	None
/[NO]MAX_TIME	/NOMAX_TIME
/MODE	/DETACHED
/[NO]NAME	/NONAME
//[NO]NEW_GROUP	/NONEW_GROUP
/[NO]NEW_TYPE	/NONEW_TYPE
/[NO]NEXT_TIME	/NONEXT_TIME
/[NO]NODE	/NONODE
/[NO]NOTIFY	/NOTIFY
/NOT_ON	Yes
/ONLY_ON	No

Qualifiers	Defaults ¹
/[NO]OPCOM	/NOOPCOM
/[NO]OUTPUT	/NOOUTPUT
/[NO]POST_FUNCTION	/NOPOST_FUNCTION
/[NO]PRE_FUNCTION	/NOPRE_FUNCTION
/[NO]PROMPT	None
/QPRIORITY	100
/QUEUE	/SYS\$BATCH
/[NO]RDID	/NORDID
/REMOTE_NODE	None
/[NO]RESTART	/RESTART
/[NO]RETAIN	/RETAIN=ALL
/[NO]RETRY	/NORETRY
/RUN_PRIORITY	See the text
/SD_ACTION	Skip
/SD_CLASS	None
/SD_MAIL_ON_ACTION	No
/SD_RESTRICTION	None
/[NO]SEND MAIL	/NOSEND_MAIL
/SERVER	None
/[NO]SJOB	/NOSJOB
/[NO]STALL_NOTIFY	/NOSTALL NOTIFY
/[NO]SYNCHRONIZATION	/NOSYNCHRONIZATION= (job_specifier, ...)
/[NO]TJOB	/NOTJOB
/[NO]TYPE	/NOTYPE
/[NO]USE_NEXT_TIME	/NOUSE_NEXT_TIME
/USER_NAME	Current user
/VMS_COMMAND	None
/[NO]WRID	/NOWRID

¹If not specified by the original job.

Parameter

job_specifier

The name or number of the jobs that you want to modify.

For example:

```
SCHEDULE> MODIFY MYJOB
SCHEDULE> MODIFY 123
```

You can modify several jobs with a single DCL command. You can specify the jobs that you want to modify with the **/GROUP** and **/TYPE** qualifiers, with wildcard characters, or with any combination of

qualifiers and wildcards. The following example modifies all of your jobs that begin with the letter S and belong to any group beginning with BACK.

```
SCHEDULE> MODIFY S*/GROUP=BACK*
```

The **/GROUP** and **/TYPE** qualifiers used with the **SCHEDULE MODIFY** command refer to the group and type of the original job. If you want to specify a new group and type, use **/NEW_GROUP** and **/NEW_TYPE**. For example:

```
SCHEDULE> MODIFY/GROUP=BK*/TYPE=DAILY/NEW_GROUP=P-COST - _SCHEDULE /  
NEW_TYPE=MONTHLY
```

In this example, the **SCHEDULE MODIFY** command is abbreviated. The command modifies the group and type of all jobs currently in any GROUP beginning with BK and of **TYPE DAILY**. The new jobs will be in **NEW_GROUP P-COST** and of **NEW_TYPE MONTHLY**.

To refer to a job belonging to another user, add the specifier **=username** to the job specifier. You can use wildcard characters with the username. For example:

```
SCHEDULE> MODIFY MYJOB=D*
```

To refer to a job on a remote node, add the node name to the job specifier. For example:

```
SCHEDULE> MODIFY NODE1::THISJOB=D*
```

For more information on how to specify a job, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Qualifiers

/CLUSTER_NODE=nodename /NOCLUSTER_NODE (D)

Restricts a job to running only on the specified node in the OpenVMS Cluster. If the manager is not running on that node when the job starts, this command places the request in the job database and issues a warning message that the manager is not running on the node. This qualifier is the same as **/NODE**. For example: **/CLUSTER_NODE=NODE1**.

This qualifier is supported with this command **only for /MODE=DETACHED** jobs.

/COMMENT=string /NOCOMMENT (D)

Specifies a text string you want to associate with the new job. You can use this string to retrieve logging information or to give more detail about the job's function. The maximum string is 80 characters. The manager truncates longer strings. To include quotation marks in the comment string, use two consecutive quotation marks. For example, to associate the comment string "This is my job" with your job, enter the following:

```
/COMMENT=""This is my job""
```

/CONFIRM /NOCONFIRM (D)

Instructs the manager to request confirmation before modifying a job.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
Jobname (jobnumber) MODIFY? [No]:
```

The default answer is no. You can enter one of the following answers:

To...	Answer...
Modify the job	YES, 1, or TRUE
Not modify the job	NO, 0, or FALSE
Modify all following jobs without further confirmation	ALL
Stop the command	QUIT

/CPULIMIT=integer

/CPULIMIT=0 (D)

An integer that is the number of 100ms ticks of CPU time to allow for the job before the system terminates the job. The default (zero) means INFINITE. This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified.

/DATES=(date_spec, ...)

/NODATES (D)

Date_spec is any valid OpenVMS date-time expression. Only the date portion of the specifications will be used.

This qualifier is used in conjunction with the **/SD_CLASS** qualifier to modify the dates contained in a Special Day Class. Dates can be added by using the **/DATES** qualifier, and specified dates can be removed by using the **/NODATES** qualifier. This qualifier requires the **/SD_CLASS** qualifier.

This qualifier is not supported with this command when a server is specified.

/DAYS=(day_specifier, ...)

Names the days of the week that the job runs. Valid day specifiers are:

- ALL
- NONE
- [NO]MONDAY
- [NO]TUESDAY
- [NO]WEDNESDAY
- [NO]THURSDAY
- [NO]FRIDAY
- [NO]SATURDAY
- [NO]SUNDAY

The following information lists the rules for using day specifiers:

- Scheduled days are listed by day specifiers separated by commas. For example, **/DAYS=(NONE,MONDAY, TUESDAY)**.
- Do not specify both ALL and NONE.
- You can negate days of the week to indicate that the job should not run on that particular day. For example, **/DAYS=(ALL,NOSATURDAY)** means do not run the job on Saturday.
- To run a job only on Saturday, use: **/DAYS=(NONE, SATURDAY)**.
- Day specifiers can be abbreviated, but must remain unique. For example, Saturday can be abbreviated to SA, and Sunday can be abbreviated to SU.
- If you give only one day specifier, omit the parentheses: **/DAYS=NOSATURDAY**.
- The default is **/DAYS=ALL**.

/EXID=identifier

/NOEXID (D)

Sets an identifier that allows execute access to a particular job. SYSPRV privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/GROUP=group_name

/NOGROUP (D)

Specifies the group of jobs that you want to modify. The name can have up to 40 characters. You can use wildcard characters to refer to the group name. For example, **/GROUP=MONTHLY** or **/GROUP=M**.

/INTERVAL=interval_time

/NOINTERVAL (D)

Modifies the schedule interval that determines when to run the new job. Use Job Management Manager delta time format. See the **/INTERVAL** qualifier under the **SCHEDULE CREATE** command for a description of interval formats. Modifying the interval does not change the next scheduled start time for the job.

/JOB_NAME=job_name_string

/NOJOB_NAME (D)

Specifies a name for the new job, so you can refer to the job by name instead of by job number. Job names can have up to 40 characters. For example: **/JOB_NAME=MYJOB**.

The **/JOB_NAME** qualifier is the same as **/NAME**.

/LOAD_BALANCE_GROUP

Specifies a load balance group name to associate with the (new) job. The group name can have up to 14 characters

/MAIL_ADDRESS=mail_destination_string

Overrides the default username as the destination for mail notification when the job completes. For example:

```
/MAIL_ADDRESS=MINE
```

You can specify an address of up to 50 characters. If you specify a longer string, the manager sends a warning message.

- If the mail destination string contains a comma or any spaces, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="SYSTEM, USER1 "
```

- If the mail destination string is a mail distribution list, you must enclose it in quotes. For example:

```
/MAIL_ADDRESS="@MAIL.DIS"
```

Note

The default location of the mail distribution file is your SYSS\$LOGIN directory.

/MAX_TIME=time_specifier**/NOMAX_TIME (D)**

Instructs the manager to notify you by mail and terminal broadcast message if the job does not complete within a specified time from the start of the job. At the DCL prompt, express the time interval in the OpenVMS delta-time format (dddd-hh:mm:ss.cc); in all other interfaces (including the shell), use Job Management Manager delta time (+dddd hh:mm:ss.cc).

For example, **/MAX_TIME=3-3:10** means notify me by mail and terminal broadcast message if the job does not complete within 3 days, 3 hours, and 10 minutes from the start time.

/MODE=mode_type**/MODE=DETACHED (D)**

Sets the mode. Valid values are BATCH, DETACHED, and REMOTE. This qualifier is not supported with this command when a server is specified.

/NAME=job_name_string**/NONAME (D)**

This qualifier is the same as the **/JOB_NAME** qualifier.

/NEW_GROUP=new_group_name**/NONEW_GROUP (D)**

Specifies a new group name to associate with the job. The group name can have up to 40 characters. For example: **/NEW_GROUP=WEEKLY**.

Note

/GROUP refers to the original job. **/NEW_GROUP** refers to the job that you are modifying.

You can negate this qualifier. For example, **/NONEW_GROUP** instructs the manager not to assign a new group to the modified job.

/NEW_TYPE=new_type_name
/NONEW_TYPE (D)

Specifies the type of the modified job. For example, **/NEW_TYPE=BACKUP**. The name can have up to 40 characters.

You can use **/NONEW_TYPE** to instruct the manager not to assign a new type to the modified job.

Note

The **/TYPE** qualifier refers to the original job. The **/NEW_TYPE** qualifier refers to the job that you are modifying.

/NEXT_TIME=starting_time
/NONEXT_TIME (D)

Specifies the next scheduled run time for the modified job. For details on starting_time formats, see the description of the **/START** qualifier under the **SCHEDULE CREATE** command. Specifying the next scheduled run time in this manner ignores any Special Day Restrictions that apply to the job.

Note

Modifying this field does not change the schedule interval for the modify procedure.

If the next run time is earlier than the present time, the manager schedules the job to run immediately.

/NODE=nodename
/NONODE (D)

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/NOTIFY (D)
/NONOTIFY

Instructs the manager to send a terminal broadcast message to you when the job completes.

The default **/NOTIFY** instructs the manager not to send a terminal broadcast message when the job completes. If you use the default for both this qualifier and **/SEND_MAIL**, you do not receive any messages when the job completes.

/NOT_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job to NOT run on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/ONLY_ON

Specifies that the Special Day Restriction associated for a job is to restrict the job to run ONLY on restricted dates. This qualifier is valid only for jobs that currently have a Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/OPCOM
/NOOPCOM (D)

Specifies that the manager should send an OPCOM message upon completion. This qualifier is not available for remote mode jobs.

/OUTPUT=file_name
/NOOUTPUT (D)

Specifies a file name to contain the job's output, such as:

- Reports
- Logs
- Processed documents

The file name can have up to 255 characters. The following is an example of a full file name:

```
/OUTPUT=MYDISK:[MYDIRECTORY]TEST.LOG
```

If you omit the device or directory, the manager puts the output in your default device and directory as specified in the authorization file for the account. If a logical is used to define the location of the file it must be a system logical; it cannot be a process logical.

If you specify **/NOOUTPUT**, the manager does not save the output.

/POST_FUNCTION=postfunction_command
/NOPOST_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes after the main job's OpenVMS command. For example:

```
/POST_FUNCTION="DIR/PRINT [MYDIRECTORY]*.TXT;*"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks.

This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PRE_FUNCTION=prefunction_command
/NOPRE_FUNCTION (D)

Specifies an OpenVMS command string of up to 1024 characters that the manager processes before the main job's OpenVMS command. For example:

```
/PRE_FUNCTION="SET DEF [MYDIRECTORY]"
```

If the command string contains the **at** sign (@) or includes spaces, enclose it in quotation marks.

This qualifier is not supported with this command for **/MODE=REMOTE** jobs.

For more information on prefunctions and postfunctions, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/PROMPT**/NOPROMPT (D)**

Specifies that the manager should prompt you with the complete set of qualifiers for this command. See the second example for the complete list of qualifiers.

If you do not specify either **/PROMPT** or **/NOPROMPT**, the manager prompts you for a subset of qualifiers: OpenVMS command, job name, interval, days, start time, output, and comments.

If you specify **/NOPROMPT**, the manager does not provide any prompts for qualifiers.

Note

You cannot use **/PROMPT** to modify several jobs with a single command. You must specify all qualifiers on the command line when modifying more than one job.

/QUEUE=queue_name_string**/QUEUE=SYS\$BATCH (D)**

A string, up to 31 characters in length, that is the name of an existing queue.

This qualifier is supported with this command only for **/MODE=BATCH** jobs, and is not supported when a server is specified.

/QRIORITY=qpriority_value

Qpriority_value is an integer from 0 to 255

This is the priority that a job is assigned when it is submitted to a BATCH queue. The default is 100. This qualifier is supported with this command only for **/MODE=BATCH** jobs.

/RDID=identifier**/NORDID (D)**

Sets an identifier that allows you read access to a particular job. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

/REMOTE_NODE=remote_node_value

Remote_node_value is a string that is either in the form of "user@node" or "node." Specifying only "node" will use the current username, in uppercase characters. Specifying the user further requires the **at** sign (@) as a separating character between the user and node. To maintain lowercase characters this string must be quoted, and it has a maximum length of 72 characters.

This qualifier is supported with this command only for **/MODE=REMOTE** jobs, and is not supported when a server is specified.

/RESTART (D)**/NORESTART**

Instructs the manager to restart the job if it is marked in the database as running, but is not really running. This can happen if the job was interrupted by a system failure. If you specify **/NORESTART**, the job is put on hold after a system failure.

If the interrupted job has no node restriction, then it restarts on the new default node; otherwise, the job must wait until its node is available.

Note

The manager restarts the job from the beginning, unless the job has a restart test value. You use the **SCHEDULE SET RESTART_VALUE** command to assign a test-value symbol to restarted jobs.

/RETAIN=retain_option

/NORETAIN

Specifies the conditions under which the manager should keep a completed job in its database. Valid qualifier values:

ALL (D)	Keeps a job in the database, regardless of its completion status.
ERROR	Keeps a job in the database only if the job completed with an error or warning status.
SUCCESS	Keeps a job in the Job Management Manager database only if it completed successfully.

If you specify **/NORETAIN**, the manager does not keep the job in its database after it runs.

/RETRY

/NORETRY (D)

Instructs the manager to rerun a job if it completes with an error status. This qualifier is useful when the main job must wait for dependencies to complete.

If you specify **/RETRY**, the manager reruns the main job every 15 minutes until it succeeds, for up to 100 attempts. To change the **/RETRY** frequency and the maximum number of attempts, see the **SCHEDULE SET JOB** command.

/RUN_PRIORITY=process_priority_value

Specifies the default process priority that the manager uses to run the job. The process priority is a number between 1 and 16. This qualifier is supported with this command **only for /MODE=DETACHED** jobs.

If you omit the value or use a less than or equal to 0, the manager runs the job at its default priority of 4.

If you specify a value greater than 16, the manager uses a value of 16.

The run priority should be set no higher than your system's normal interactive job priority.

To choose a priority value for a Job Management Manager job, follow these rules:

- Use a value that is less than or equal to the default Job Management Manager value.
- Use a value that is greater than the default Job Management Manager priority **and** less than or equal to the job owner's default priority in the UAF file.
- Use a value that is greater than the default Job Management Manager priority **and** greater than the job owner's default priority, if the owner has SETPRV or ALTPRI default privileges.

- Use the higher of the following two values:
 - The Job Management Manager default or the job owner's default
 - The owner does not have SETPRV or ALTPRI privileges

Note

You need SETPRV or ALTPRI privileges to run a job at a priority value greater than the default priority for the manager or the job owner (UAF file). See your system manager.

/SD_ACTION=keyword

This is the action that is to be taken if a job's next scheduled run time falls on a Special Day on which this job is restricted from running. Valid keywords:

- SKIP – Apply the interval until a valid date is found (default).
- HOLD – Put the job on hold.

/SD_ACTION applies to a job only if it has a **/NOT_ON** Special Days restriction. This qualifier is not supported with this command when a server is specified.

/SD_CLASS

This qualifier indicates that operation applies to a Special Day Class and not to a job. This qualifier is valid only with the **/DATES** qualifier, and cannot be used with any other qualifiers. This qualifier is not supported with this command when a server is specified.

/SD_MAIL_ON_ACTION (D)

/NOSD_MAIL_ON_ACTION

If **/SD_MAIL_ON_ACTION** is specified, mail will be sent to the MAIL_ADDRESS of the job when a job encounters a Special Day Action when its next scheduled time is calculated. This qualifier applies to a job only if it has a **/NOT_ON** Special Day Restriction. This qualifier is not supported with this command when a server is specified.

/SD_RESTRICTION=(classname, ...)

Specifies a list of Special Day Class names to which this job is restricted. The class names must currently exist in the Special Day Class database. This qualifier is not supported with this command when a server is specified.

/SEND_MAIL=value

/NOSEND_MAIL (D)

Specifies the conditions under which the manager sends a mail message when the job completes. By default, no mail notification is sent

Valid qualifier values:

Value	Description
ALL	Sends a mail message in all cases, when the job completes with or without errors.

Value	Description
ERROR	Sends mail only if the job completes successfully.
SUCCESS	Sends mail only if the job completes with an error or warning status.

See **/NOTIFY** for information on receiving terminal broadcast messages.

/SERVER=remote_node

Modifies a job on the specified remote node. If you specify a remote node in the job specifier, the manager ignores this value. For example:

```
SCHEDULE> MODIFY NODE1::MYJOB/SERVER=NODE1
```

For more information on specifying remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/SJOB=job_name **/NOSJOB (D)**

Sets the job number of the job to run when a job has not started within the **STALL_NOTIFY** interval of its scheduled time. If this job stalls, then the manager runs the specified job.

This qualifier is not supported with this command when a server is specified.

Note

The stall job (SJOB) must exist in the same database as the job that calls it.

/STALL_NOTIFY=stall_time **/NOSTALL_NOTIFY (D)**

Instructs the manager to send a warning message and mail message if a job does not start within the specified OpenVMS delta time from its scheduled starting time. For example, **/STALL_NOTIFY=3-3:00** means send a message if the job has not started within 3 days and 3 hours of its scheduled starting time.

At the DCL prompt, express the time interval in the OpenVMS delta-time format (*ddd-hh:mm:ss.cc*); in all other interfaces (including the shell), use Job Management Manager delta time (*+ddd hh:mm:ss.cc*).

The manager sends the warning message to the job's owner or to the specified mail address. See the **/MAIL_ADDRESS** qualifier.

This feature is useful in a wide area network when job dependencies are on remote nodes experiencing network reliability problems.

/SYNCHRONIZATION=(job_specifier, ...) **/NOSYNCHRONIZATION=(job_specifier, ...)/NOSYNCHRONIZATION (D)**

Specifies a list of up to 16 jobs that must complete successfully before this job can run. When you specify more than one job, separate each job with a comma and enclose the list in parentheses. For example:

```
/SYNCHRONIZATION=(MYJOB, YOURJOB, OURJOB)
```

Note

You cannot use `/SYNCHRONIZATION` or `/NOSYNCHRONIZATION` when modifying more than one job at a time. You must modify each job's dependency list individually.

You can specify the name or number of any existing job in the Job Management Manager database. For more information on description of job dependencies, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To refer to a job belonging to another user, add the `=username` specifier to the job specifier. For example, the following command qualifier refers to a job named `BACKUP` owned by the user `SYSTEM`:

```
/SYNCHRONIZATION= (BACKUP=SYSTEM)
```

Removing Jobs from the Dependency List

You can also specify jobs with the `/NOSYNCHRONIZATION` qualifier. The manager removes the specified jobs from the dependency list. For example, `/NOSYNCHRONIZATION=(MYJOB, THISJOB)` removes jobs named `MYJOB` and `THISJOB` from the dependency list.

If you use `/NOSYNCHRONIZATION` without specifying a job list, the manager removes all dependencies.

`/TJOB=job_name`
`/NOTJOB (D)`

Sets the job number of the job to run when the present job has exceeded its maximum run time. If this job's run time exceeds its `MAX_TIME` qualifier, then the specified job will be run.

This qualifier is not supported with this command when a server is specified.

Note

The `max_time` job (`TJOB`) must exist in the same database as the job that calls it.

`/TYPE=type_name`
`/NOTYPE (D)`

Specifies the type of job that you want to modify. The name can have up to 40 characters. You can use wildcard characters to refer to type. For example: `/TYPE=BACKUP` or `/TYPE=B*`

`/USE_NEXT_TIME`
`/NOUSE_NEXT_TIME (D)`

Instructs the manager to calculate the next run time for the job by adding the schedule interval to the new job's next scheduled run time.

By default (`/NOUSE_NEXT`), the manager calculates the next run time by adding the schedule interval to the job's actual starting time.

This qualifier is useful if your new job has the following characteristics:

- Depends on other jobs
- Runs on a daily interval
- Occasionally waits until the next day to start running

/USER_NAME=user_name

Specifies the OpenVMS username under which the new job will run. This value overrides the username of the person creating the job. For example, if the default username is MYJOB and you want the job to run under username YOURJOB, specify **/USER_NAME=YOURJOB**.

Note

You need the CMKRNL privilege to use a username other than your own. You cannot use the **/GROUP** or **/TYPE** qualifiers at the same time as the **/USER_NAME** qualifier. This is designed to avoid the potential for error.

/VMS_COMMAND=vms_command

Specifies the OpenVMS command to perform when the manager runs the job. You can specify a single command (such as **SHOW TIME**) or a command file (such as **@RENAME.COM**). The maximum command length is 1024 characters

In the case of remote mode jobs, this is the command to be executed on the remote node and operating system, and must follow the correct syntax for the operating system used. Use quotes to enclose a case-sensitive command.

If the command string contains spaces or begins with the **at** sign (**@**), you must enclose the string in quotation marks. For example:

```
$ SCHEDULE MODIFY/VMS_COMMAND="@RENAME.COM"  
$ SCHEDULE MODIFY/VMS_COMMAND="COPY FILENAME.EXT"
```

To include quotation marks within the command, specify two consecutive quotation marks. For example:

```
$ SCHEDULE MODIFY/VMS_COMMAND="WRITE SYS$OUTPUT ""Hello"""
```

WRID=identifier**/NOWRID (D)**

Sets an identifier that allows write access to a particular job. CMKRNL privilege is required. This qualifier is not supported with this command when a server is specified.

Only one identifier value is supported for each of the identifier access qualifiers.

Examples

1. In this example, the hyphen at the end of the DCL command line extends the command to a second command line. The manager does not issue prompts, because the user specifies **/NOPROMPT**. The manager assigns the job called **WKLY-RENAME** to a new group called DAILY and new type called FISCAL.

```
SCHEDULE> MODIFY WEEKLY-RENAME/NOPROMPT -  
SCHEDULE>/NEW_GROUP=DAILY/NEW_TYPE=FISCAL  
%NSCHED-I-RQSTSUCSS, Job WEEKLY-RENAME - Modified
```

2. This example specifies **/PROMPT**, so the manager issues the complete list of qualifiers. The user makes the same modifications as in the first example.

```

SCHEDULE> MODIFY/PROMPT
_Job name or number : WEEKLY-RENAME
_VMS Command [@SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY_COPY.COM] :
_Job Name [WEEKLY-RENAME] :
_New_Group [WEEKLY]: DAILY
_New_Type [PROJECT-COSTS] : FISCAL
_Schedule Interval [F W6 18:00:00] :
_Days [(FRI):)
_Special Day Restrictions [None]:
_Next Run Time [ 7-AUG-1996 18:00] :
_Stall Notify [None] : _Stall Time Job [None] :
_Output file [SYS$DEVICE:[EXAMPLE.PROJECT-C]WEEKLY-RENAME.REP] :
_Mode (Detached, Batch, Remote [DETACHED]:)
_Cluster Node [Default] :
_Retain (Success, Error, None or All [ALL]:)
_Restart (Yes, No [Yes]:)
_Retry (Yes, No [Yes]:)
_Notify (Yes, No [No]:)
_Send_Mail (All, Error, Success or None [ALL]:)
_Send MAIL on Special Day Action (Yes, No [No]:)
_Use_next_time (Yes, No [Yes]:)
_OPCOM (Yes, No [No]:)
_Mail_Address [EXAMPLE] :
_Username [EXAMPLE] :
_Run Priority [Default] :
_Pre Function [DIR/PRINT [EXAMPLE.PROJECT-C]*.REP]] :
_Post Function [DIR/PRINT [EXAMPLE.PROJECT-C]*.REP]/SIN] :
_Maximum Time Warning [None] : _
Maximum Time Job [None] :
_Synchronization [None] : _Comment [Check for weekly rep's/copy to
      subdirectory and rename/check new rep files] :
%NSCHED-I-RQSTSUCSS, Job WEEKLY-RENAME - Modified

```

OPTIMIZE DATABASE

OPTIMIZE DATABASE — Lets you reclaim unused space in the database.

Description

Reclaims unused space in the jobs database. This command affects the following data files in NSCHED \$DATA:VSS.DAT, DEPENDENCY.DAT and VSS2.DAT. Resets the counter of deleted jobs to zero. Shut down the manager and VSI Common Services Integration before running this command.

Because the manager is designed to run repetitious jobs rather than one-time jobs, VSI recommends that you use this command after you have deleted 100 job records from the job database.

If the percentage of deleted jobs is considerably higher than the number of active jobs, compress the database. Even if the deleted jobs are less than 100, performance can be affected if the active jobs are less than or equal to the deleted jobs.

To see the current number of deleted job records since the last job-database compression, use the **SCHEDULE SHOW DELETES** command.

This command supersedes `RUN NSCHED$:DB_UTILITY` for compressing and optimizing the jobs database. To repair the database, see `RUN NSCHED$:DB_UTILITY`.

Format

`OPTIMIZE DATABASE [/qualifier]`

Qualifiers	Defaults
/FULL	None

Parameters

None.

Qualifiers

`/FULL`

Cleans the file indicates and improves database access performance.

Examples

```
SCHEDULE>OPTIMIZE DATABASE
Working, please wait...
The following data files are now optimized:
NSCHED$:VSS.DAT
NSCHED$:DEPENDENCY.DAT
NSCHED$:VSS2.DAT
```

RELEASE

`RELEASE` — Lets you take a job off hold.

Description

When you use this command, the manager runs the job — if the current time is later than the job's next scheduled run time and all of the job's dependencies are satisfied.

To release a job, you must own it or have EXECUTE access to it. For more information on READ, EXECUTE, and WRITE privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Format

`RELEASE job_specifier [/qualifiers]`

Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/GROUP	None
/SERVER	None
/TYPE	None

Parameter

job_specifier

The name or number of the job that you want to release.

For example:

```
SCHEDULE> RELEASE MYJOB
SCHEDULE> RELEASE 123
```

The job specifier is required, unless you use the **/GROUP** or **/TYPE** qualifier. If you omit the job specifier, the manager prompts you for it. However, if you specify **/GROUP** or **/TYPE**, the manager does not prompt for the job specifier. The following example releases all of your jobs that belong to group **WEEKLY** and type **FISCAL**:

```
SCHEDULE> RELEASE /GROUP=WEEKLY/TYPE=FISCAL
```

To release a job belonging to another user, you must refer to the job by name and add the **=username** specifier to the job's name. For example:

```
SCHEDULE> RELEASE THISJOB=DOE
```

To release a job on a remote node, add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> RELEASE NODE1::MYJOB
SCHEDULE> RELEASE NODE1::321
SCHEDULE> RELEASE MYJOB/SERVER=NODE1
```

You can use wildcard characters to refer to job name, username, group name, and type name. The following command releases all jobs beginning with the letter **B** that are in any **GROUP** beginning with **W** and owned by users whose name begins with **D**:

```
SCHEDULE> RELEASE B*/GROUP=W*/USER_NAME=D*
```

Qualifiers

/CONFIRM

/NOCONFIRM (D)

Instructs the manager to request confirmation before releasing each job.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
Jobname (jobnumber) RELEASE? [No]:
```

The default answer is no. You can enter one of the following answers:

To...	Answer...
Release the job	YES, 1, or TRUE
Not release the job	NO, 0, or FALSE
Release all following jobs without further confirmation	ALL

To...	Answer...
Stop the command	QUIT

/GROUP=group_name

Releases all jobs that have this group name and match your username. For example:

/GROUP=HOURLY or **/GROUP=WEEKLY**.

You can use the asterisk (*) and percent (%) wildcard characters in the group name. For example:

/GROUP=H* or **/GROUP=W***.

/SERVER=remote_node

Releases the job on the specified remote node or on the cluster that the remote node belongs to. For example: **/SERVER=NODE1**.

If you indicate the remote node in the job specification, this qualifier value is ignored.

For example:

```
SCHEDULE> RELEASE NODE1::MYJOB/SERVER=NODE1
```

You must have a proxy account on the remote node or specify an account and password. For more information on accessing remote nodes, see the [VSI Job Management for OpenVMS Administration Guide](https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31) [https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31].

/TYPE=type_name

Releases all jobs that have this type name and match your username. For example:

/TYPE=BACKUP or **/TYPE=PROJECT-COSTS**.

You can use the asterisk (*) and percent (%) wildcard characters in the type name.

Examples

1. This command releases a job named JOBNAME. The **/CONFIRM** qualifier is not used.

```
SCHEDULE> RELEASE JOBNAME
%NSCHED-I-FLAGSET, Job JOBNAME - RELEASE Requested
```

2. This command releases a job named JOBNAME owned by user DOE. The **/CONFIRM** qualifier is not used.

```
SCHEDULE> RELEASE JOBNAME=DOE
%NSCHED-I-FLAGSET, Job JOBNAME - RELEASE Requested
```

3. This command specifies the **/CONFIRM** qualifier, so the manager requests confirmation before releasing the job named JOBNAME.

```
SCHEDULE> RELEASE JOBNAME/CONFIRM
Job JOBNAME (jobnumber, RELEASE? [No]) YES
%NSCHED-I-FLAGSET, Job JOBNAME - RELEASE Requested
```

RUN

RUN — Lets you run a job on demand, regardless of the job's next scheduled run time or dependencies.

Description

Running a job on demand does not alter its schedule interval; the manager recalculates the next scheduled run time.

To run a job, you must own it or have EXECUTE access to it. You must own the job or have WRITE access to it in order to change any of the parameters for a run-time override. For more information on READ, EXECUTE, and WRITE privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Format

RUN *job_specifier* [/*qualifier*]

Qualifiers	Defaults
/[NO]CLUSTER_NODE	/NOCLUSTER_NODE
/[NO]COMMENT	/NOCOMMENT
/[NO]CONFIRM	/NOCONFIRM
/GROUP	None
/MAIL_ADDRESS	Current address
/[NO]OUTPUT	/NOOUTPUT
/[NO]PARAMETERS	/NOPARAMETERS
/[NO]RESCHEDULE	/RESCHEDULE
/SERVER	None
/TYPE	None
/USER_NAME	Current user
/VMS_COMMAND	/Current command

Parameter

job_specifier

The name or number of the job that you want to run.

For example

```
SCHEDULE> RUN MYJOB
SCHEDULE> RUN 123
```

The job specifier is required. If you omit the job specifier, the manager prompts you for it.

To refer to a job belonging to another user, you must add the **=username** specifier to the job name. For example:

```
SCHEDULE> RUN THISJOB=DOE
```

To refer to a job on a remote node, add the node name to the job specifier. For example:

```
SCHEDULE> RUN NODE1::THISJOB
```

You can use wildcard characters to specify job name and username. For example:

```
SCHEDULE> RUN M*=D*
```

Note

When you use the **RUN** command with temporary overrides for any of the following values, the job will not be retried if the job fails:

- /CLUSTER_NODE
 - /MAIL_ADDRESS
 - /OUTPUT
 - /PARAMETERS
 - /SERVER
 - /USER_NAME
 - /VMS_COMMAND
-

Note

You cannot use override qualifiers such as **/CLUSTER_NODE** or **/COMMENT** if you are running more than one job at a time with a single **SCHEDULE RUN** command. For example, the following command is invalid:

```
SCHEDULE> RUN M*/NODE=NODE1
```

Qualifiers

/CLUSTER_NODE= nodename
/NOCLUSTER_NODE (D)

Specifies the node in the OpenVMS Cluster where you want this job to run. For example:

```
/CLUSTER_NODE=NODE1 .
```

This node overrides the original node in the database for this job run only. The manager replaces this node with the original node when this job completes.

/COMMENT=string
/NOCOMMENT(D)

Specifies a comment for this job run only. This comment overrides the original comment in the database. The manager replaces this comment string with the original string when this job completes.

The maximum length of the comment string is 80 characters. The manager truncates longer strings.

/CONFIRM
/NOCONFIRM (D)

Instructs the manager to request confirmation before running a job. When you specify **/CONFIRM**, the manager uses the following prompt:

Jobname (jobnumber) RUN? [No]:

The default answer is no. You can enter one of the following answers:

To...	Answer...
Run the job	YES, 1, or TRUE
Not run the job	NO, 0, or FALSE
Run all following jobs without further confirmation	ALL
Stop the command	QUIT

/GROUP=group_name

Runs all jobs that have this group name and match your username. The group name can have up to 40 characters. For example: **/GROUP=HOURLY** or **/GROUP=WEEKLY**.

If you specify **/GROUP**, you cannot use any override qualifiers such as **/COMMENT**.

You can use the asterisk (*) and percent (%) wildcard characters in the group name. For example: **/GROUP=H*** or **/GROUP=W***.

/MAIL_ADDRESS=mail_destination_string

Overrides the current mail address as the destination for mail notification for this job run only. The maximum length of this address is 50 characters.

When the job completes, the manager replaces this mail address with the original one.

/OUTPUT=file_name

/NOOUTPUT (D)

Specifies a file name of up to 255 characters to receive the output from this job run. This file overrides the original output file for this job run only. When the job completes, the manager reverts to the original output file for the next job run.

For example:

```
/OUTPUT=MYDISK:[MYDIRECTORY]TEST.LOG
```

If you omit the device or directory, the manager puts the output in your default device and directory as specified in the authorization file for the account. If a logical is used to define the location of the file it must be a system logical; it cannot be a process logical.

If you specify **/NOOUTPUT**, the manager does not save the output.

/PARAMETERS=parameter_string

/NOPARAMETERS (D)

Specifies a set of parameters to append to the OpenVMS command for this job run. The parameter string can have up to 132 characters.

For example:

```
$ SCHEDULE RUN "@RENAME.COM"/PARAMETERS="FILE-1 FILE-2 FILE-3"
```

Note

You must use quotation marks in this qualifier value. You cannot use commas or parentheses.

To pass a null parameter, use five sets of quotes, for example:

```
$ SCHEDULE RUN "@RENAME.COM"/PARAMETERS="FILE-1 """""" FILE-3"
```

When the job completes, the manager deletes these parameters from the OpenVMS command.

/RESCHEDULE (D)
/NORESCHEDULE

/NORESCHEDULE provides the ability to manually run a job and prevent the manager from recalculating the next run time. This allows running a job manually before its regularly scheduled time while retaining its current **NEXT_RUN_TIME** value instead of recalculating it to the next time interval. **RUN/RESCHEDULE** maintains the current default behavior of recalculating the next run time at job run.

/SERVER=remote_node

Runs this job on the specified remote node. You must have a proxy account on the remote node or specify an account and password.

For more information on accessing remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/TYPE=type_name

Runs all jobs that have this type of name. The name can have up to 40 characters. For example:
/TYPE=FISCAL.

If you specify **/TYPE**, you cannot use an override qualifier such as **/COMMENT**.

You can use the asterisk (*) and percent (%) wildcard characters in the type name. For example:
/TYPE=F*.

/USER_NAME=user_name

Specifies a username under which to run the job for this job run only. The username overrides the original name in the database. For example: **/USER_NAME=DOE.**

When the job completes, the manager replaces this username with the original name.

Note

You must have CMKRNL privilege to run a job under a username other than your own username. You cannot use the **/GROUP** or **/TYPE** qualifiers at the same time as the **/USER_NAME** qualifier. This is designed to avoid the potential for error.

/VMS_COMMAND=vms_command

Specifies an OpenVMS command to use for this job run only. The OpenVMS command overrides the original command in the database. For example: **/VMS_COMMAND="@WEEKLY-COPY.COM"**. The maximum command length is 1024 characters.

When the job completes, the manager replaces this OpenVMS command with the original command.

Note

When using `SCHED RUN/VMS_COMMAND=` to run a job with temporary overrides, the temporary `VMS_command` is not used if the job fails and is retried. The original `VMS_command` will be used when the job is retried.

Examples

1. In this example, the hyphen at the end of the DCL command line extends the command to a second command line. The manager runs your job `WKLY-RNM` immediately. For this run only, the manager puts the job's output in the file

```
MYDISK: [MYDIR] TEST.LOG.
SCHEDULE> RUN WKLY-RNM/OUTPUT=MYDISK: [MYDIR] TEST.LOG- _
SCHEDULE> /CLUSTER_NODE=NODE1
%NSCHED-I-FLAGSET, Job WKLY-RNM - Run Requested
Workload Scheduler Job 56 (Name: WKLY-RNM Started on node NODE1)
Workload Scheduler Job 56 (Name: WKLY-RNM Completed on node NODE1)
```

The job is run on node `NODE1`.

When the job completes, the manager replaces the values for `/OUTPUT` and `/CLUSTER_NODE` with the original values for these qualifiers.

2. This example is the same as the first example, but specifies `/CONFIRM` on the command line. As a result, the manager requests confirmation before running the job.

```
SCHEDULE> RUN WKLY-RNM/CONFIRM/OUTPUT=MYDISK: [MYDIR] TEST.LOG-
_SCHEDULE>/CLUSTER_NODE=NODE1
Job WKLY-RNM (56, RUN? [No]) YES
%NSCHED-I-FLAGSET, Job WKLY-RNM - Run Requested
Workload Scheduler Job 56 (Name: WKLY-RNM Started on node NODE1)
Workload Scheduler Job 56 (Name: WKLY-RNM Completed on node NODE1)
```

3. This command specifies that the manager run the job on node `NODE1`. However, the manager is not running on that node, so the software issues a warning message. If the manager was running on `NODE1`, it would have run the job immediately.

```
SCHEDULE> RUN WKLY-RNM/CLUSTER_NODE=NODE1
%NSCHED-I-FLAGSET, Job WKLY-RNM - Run Requested
%NSCHED-W-NOSCHED, No scheduler available to service request
```

RUN NSCHED\$:DB_UTILITY.EXE

`RUN NSCHED$:DB_UTILITY.EXE` — Repairs your current Job Management Manager job database. This is a management command. You perform this command at the DCL prompt.

Description

Use this command if you need to repair your database.

The command **OPTIMIZE DATABASE** replaces **DB_UTILITY** for jobs database compression and optimization.

Format

```
RUN NSCHED$:DB_UTILITY.EXE
```

Parameters

None.

Qualifiers

None.

Example

This example repairs your current Job Management Manager job database.

```
$ RUN NSCHED$:DB_UTILITY.EXE
```

RUN NSCHED\$:VSS_REPORTS.EXE

RUN NSCHED\$:VSS_REPORTS.EXE — Runs the Job Management Manager event-log report utility. This is a management command. You perform this command at the DCL prompt.

Description

The Job Management Manager event-log report utility provides the following reports:

- The job-resource utilization report
- The event-log report

The utility displays a menu that allows you to choose among various sorting and selection criteria.

To control the event classes that the manager writes to your event log, see the **SCHEDULE SET LOGGING** command. To see what the manager is currently logging, use the **SCHEDULE SHOW LOGGING** command.

Format

```
RUN NSCHED$:VSS_REPORTS.EXE
```

Parameters

None.

Qualifiers

None.

Example

This example accesses the Job Management Manager event-log report utility, allowing you to choose the kind of report, the report criteria, and whether or not to display or print the report.

```
$ RUN NSCHED$:VSS_REPORTS.EXE
```

SCHEDULE/INTERFACE

SCHEDULE/INTERFACE — Invokes the DECwindows interface for the manager. You enter this command at the DCL prompt (\$).

Description

If you do not use the /INTERFACE qualifier, this command invokes the manager as a subsystem and displays the SCHEDULE> prompt.

Format

```
SCHEDULE [/qualifier]
```

Qualifiers	Defaults
/INTERFACE	None

Parameters

None.

Qualifier

/INTERFACE=DECWINDOWS

You can specify DECwindows. For more information on the Motif interface, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Examples

1. This command invokes the Motif interface for the manager.

```
$ SCHEDULE/INTERFACE=DECwindows
```

2. This command omits the /**INTERFACE** qualifier, invoking the manager as a subsystem. The SCHEDULE> prompt is displayed.

```
$ SCHEDULE SCHEDULE>
```

SCRIPT JOB

SCRIPT JOB — Creates a command procedure that recreates the specified job or jobs when it is run.

Description

SCRIPT JOB facilitates the recreation of existing local jobs onto nonlocal systems. This function allows the user to specify a set of local Job Management Manager jobs, and optionally their dependencies and dependents and scripts a DCL command file capable of recreating the same jobs and dependency structure. The command file can then be copied over to another computer to recreate the same jobs and streams.

The scripting function is available only with the DCL user interface. Wildcard characters are permitted. You must own the jobs or have READ access to them to script them.

The scripting function assumes that all identifiers, username, node restriction, stall and timeout jobs are present or valid on the node, on which the scripted file gets executed.

If an entire dependency structure is requested, the jobs get scripted in such an order as to be able to recreate the entire tree.

Note

- The generated script does not support any Special Day characteristics of a job. Apply these settings manually after the script is run.
- The script does not support remote dependencies. Apply these settings manually after the script is run.
- For jobs which use Load Balance Groups, the **SCRIPT JOB** command adds commands to define the Load Balance Group, but the group might be empty. The jobs include the `/LOAD_BALANCE_GROUP` specifier. However, if no nodes are added to the Load Balance Group itself, the jobs run on any node in the target cluster.

Format

SCHEDULE SCRIPT JOB *job_specifier* [/qualifier]

Qualifiers	Defaults
/ALL	None
/GROUP= <i>group_name</i>	None
/INCLUDE= <i>keyword</i>	All
/OUTPUT= <i>filespec</i>	SCHEDULER\$SCRIPT.COM
/TYPE= <i>type_name</i>	None
/USER_NAME= <i>user_name</i>	Current user

Parameter

job_specifier

Specification of the job that will have its settings modified. Wildcard characters are permitted. To refer to a job belonging to another user by its name, you must append an "=" sign plus the username to the job_name. Use the form "jobname or number[=username]."

For example: FOOJOB=SYSTEM refers to job FOOJOB owned by user SYSTEM.

Qualifiers

/ALL

Selects jobs of all users in the database. This qualifier is equivalent to `user_name="*" in the job_specifier` or `/USER=*` qualifier.

/GROUP=group_name

Execute the command for all jobs which have this group name. Wildcard characters may be used in the `group_name` specification.

/INCLUDE=keyword

This qualifier indicates which related jobs should be scripted with the specified jobs. Related jobs are those (local) jobs that either depend on this job or are dependent on this job. Valid keywords are:

- **PARENTS**

All jobs on which this job depend (and their parents)

- **CHILDREN**

All jobs that depend on this job (and their children)

- **ALL**

All jobs related, however distant. This will capture an entire dependency structure, however complicated. **/INCLUDE=ALL** is the default if **/INCLUDE** is not specified.

/OUTPUT=file_name

Controls where the output display of the command is sent. If not specified, the output goes to `SCHEDULER$SCRIPT.COM`. If no file extension is given in the file name, it defaults to `.LIS`.

/TYPE=type_name

Execute the command for all jobs which have this type name. Wildcard characters may be used in `typename` specification.

/USER_NAME=user_name

Execute the command for all jobs that have a `user_name` field matching the specified username. Wildcard characters are allowed in the username specification. The username defaults to the caller's if not specified.

Examples

1. This example creates a command procedure called `MYJOB.COM` that can be used to recreate the entire job stream that contains `MYJOB`.

```
SCHEDULE> SCRIPT JOB MYJOB/INCLUDE=ALL/OUT=MYJOB.COM
```

2. This example creates a command procedure with the default file name `SCHEDULER$SCRIPT.COM` that can be used to recreate all jobs streams that contain jobs owned by `SYSTEM`.

```
SCHEDULE> SCRIPT JOB/USER_NAME=SYSTEM
```

3. This command creates a command procedure named 65231.LIS that can be used to recreate job 65231, all jobs on which it is dependent, and all jobs on which those jobs are dependent (including all related dependencies).

```
SCHEDULE> SCRIPT JOB 65231/INCLUDE=PARENTS/OUTPUT=65231
```

SET DEBUG

SET DEBUG — Sets debug logging on or off. This is a management command.

Description

The **SET DEBUG** command allows you to dynamically set debug logging on or off. Debug logging will record the activities of the scheduler in the file NSCHED\$:'nodename'.LOG. This file may grow large over time, and as a result it may not be desirable to have DEBUG turned on for all nodes all the time.

SET DEBUG allows users to dynamically set the debugging mechanism without stopping/restarting the manager.

Format

```
SET DEBUG option [/qualifier]
```

Qualifiers	Defaults
/ALL_NODES	None
/CLUSTER_NODE= <i>nodename</i>	None
/NODE= <i>nodename</i>	None
/SERVER= <i>nodename</i>	None

Options

- **ON**
Enables debug logging.
- **OFF**
Disables debug logging.

Qualifiers

/ALL_NODES

Formerly /ALL. Specifies that the debug value should be set on all nodes in the cluster.

/CLUSTER_NODE=*nodename*

Specifies a specific node of a cluster on which to set the debug value. If the **/CLUSTER_NODE** qualifier is not present, the node value is the node which the user is currently logged onto. This qualifier is synonymous with the **/NODE** qualifier.

/NODE=nodename

Same as **/CLUSTER_NODE**.

/SERVER=remote_node

Sets the debug value on this remote scheduler, or, if the **/ALL_NODES** qualifier is specified, on all nodes in the cluster of which the remote scheduler is a member.

Examples

1. This command sets debugging on for all nodes in the OpenVMS Cluster.

```
SCHEDULE> SET DEBUG ON/ALL_NODES
```

2. This command sets debug mode OFF for all nodes running the manager in the OpenVMS Cluster NODE1.

```
SCHEDULE> SET DEBUG OFF/SERVER=NODE1/ALL_NODES
```

SET DEFAULT

SET DEFAULT — Sets the specified Job Management Manager node as the default executor for the OpenVMS Cluster. This is a management command.

Description

The default agent node runs all Job Management Manager jobs that do not have a node restriction, unless load balancing is turned on. For more information on OpenVMS Cluster support and load balancing, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

The first node started on the OpenVMS Cluster becomes the default node. However, system managers can change the default node by using a **SCHEDULE SET DEFAULT** command.

Use **SCHEDULE SHOW DEFAULT** to see the current Job Management Manager default node.

Format

```
SET DEFAULT node
```

Parameter

node

Specifies a node to act as the default scheduler on the local OpenVMS Cluster.

Example

This command sets node NODE1 as the default node to run Job Management Manager jobs on a local OpenVMS Cluster.

```
SCHEDULE> SET DEFAULT NODE1
```

SET FISCAL_YEAR

SET FISCAL_YEAR — Defines a fiscal year to be used by the manager. This is a management command.

Description

A fiscal year (FY) is a company's financial year, used to schedule accounting events. If a fiscal year straddles two calendar years, it is named for the last calendar year it covers. For example, a fiscal year that starts in 1996 and ends in 1997 is called FY1997.

Use the **SHOW FISCAL_YEAR** command to display the currently defined fiscal year.

The manager supports a 52- or 53-week fiscal year as described in the Fiscal Tax Year section of the Internal Revenue Service Publication 538 (Rev. Nov. 88). Fiscal years have the following restrictions

- 4 quarters a year
- 3 months a quarter
- 7 days a week
- 364 days a year
- 52 weeks a year
- 13 weeks a quarter
- Two 4-week months and one 5-week month in each quarter. (The 5-week month must be the same month in each quarter.)

In addition, the following restrictions apply to a 53-week fiscal year

- 371 days a year
- 53 weeks a year
- Three 13-week quarters and one 14-week quarter
- Two 4-week months and one 5-week month in each quarter, with the exception of one 5-week or 6-week month (the month containing the extra week)

Fiscal logicals are no longer used as the default. If one of the fiscal logicals is defined, it overrides whatever is in the database, but only for that node. Since all scheduling is done on the default executor, the newly defined fiscal logicals would only take effect if the node they are on is also the default executor node. Otherwise, they take effect when and if the node becomes the default executor.

Format

SET FISCAL_YEAR [/qualifiers]

Qualifiers	Defaults
/EXTRA_WEEK_MONTH	None
/FIVE_WEEK_MONTH	None

Qualifiers	Defaults
/START_DATE	None

Parameters

None.

Qualifiers

/EXTRA_WEEK_MONTH=month

Specifies which month in a 53-week fiscal year contains week 53. Such years occur every fifth or sixth year. The value for this qualifier must be in the range 1 to 12.

/FIVE_WEEK_MONTH=month

Specifies which of the three months contains five weeks in any fiscal quarter. In a normal 52-week year, each fiscal quarter contains 13 weeks. Each quarter has two

4-week months and one 5-week month. The value for this qualifier must be in the range 1 to 3.

If you specify the same month as in the **/EXTRA_WEEK_MONTH** qualifier, that month will have 6 weeks in 53-week fiscal years.

/START_DATE=date

Base date for your fiscal calendar; all fiscal calendars are calculated relevant to this base date. This date defines the first day of a 53-week fiscal year. This fiscal year must not be a leap year (must not contain February 29th). The date has the following format: *dd-mmm-yyyy* (for example, 28-Jun-1981).

Fiscal years always end on the same day of the week. The manager supports both of the methods for determining the end of a fiscal year described in IRS Publication 538. These two methods are:

1. The fiscal year ends on the last day of the week in the month.
2. The fiscal year ends on the day of the week closest to the end of the month. The manager uses the base date given to determine which method to use.

The following information discusses tips on how to choose an appropriate start date.

If you have access to your company's fiscal calendar:

- Choose as your fiscal start date the first day of a 53-week fiscal year that does not contain a leap year (a year that does not have a February 29th).

If you do not have access to your company's fiscal calendar:

- Determine on what Day of the Week (DOW) your company's fiscal calendar starts.

This is usually Sunday.

- Find out what method (Last-DOW-in-Month or Closest-DOW-to-End- of-Month) your company wants to use to determine the end of its fiscal year.

- To use Last-DOW-in-Month Method: the base date chosen should be five days before the end of the month. For example, to end your fiscal year on the last DOW in June your start date should be June 25th. Determine the year of the fiscal start date by looking for a calendar year in which this day falls on the desired day of the week. For example, June 25th is a Sunday in 1989. Your fiscal start date would then be 25-Jun-1989.
- To use Closest-DOW-to-End-of-Month Method: the base date chosen should be two days before the end of the month. For example, to end your fiscal year on the DOW closest to the end of June your start date should be June 28th. Determine the year of the fiscal start date by looking for a calendar year in which this day falls on the desired day of the week. For example, June 28th is a Sunday in 1981. Your fiscal start date would then be 28-Jun-1981.

Make sure that the Fiscal Year starting with your base date is not a leap year (does not contain February 29th). Keep in mind that the fiscal year starting with your base date will be a 53-week fiscal year.

Note

As with the functionality of the Special Days support feature, if the Fiscal Calendar is modified in any way, the next run time of jobs will not be automatically recalculated until the jobs run again and recalculation occurs as a normal process. For those jobs that may be affected, users must manually modify the next run time of the jobs to reflect any modifications to the Fiscal Calendar.

Example

This command sets a fiscal calendar that starts on April 1 in 1996. It specifies a 53-week fiscal year with the ninth month containing week 53, and has five weeks in the third month of every quarter.

```
SCHEDULE> SET FISCAL_YEAR /START_DATE=01-APRIL-1997
/EXTRA_WEEK_MONTH=9 /FIVE_WEEK_MONTH=3
```

SET JOB

SET JOB — Lets you change certain job settings for a single job run.

Description

This command lets you change the number and frequency of attempts to run a job. You can also override or reset job dependencies for a job.

You must own a job or have EXECUTE access to it in order use this command.

Format

```
SET JOB job_specifier [/qualifiers]
```

Qualifiers	Defaults
/CLEAR_DEPENDENCY	None
/NO_DEPENDENCY	None
/RESTART_VALUE	None
/RETRY_ATTEMPTS	100

Qualifiers	Defaults
/RETRY_FREQUENCY	15

Parameter

job_specifier

Specifies the name or number of the job.

For example:

```
SCHEDULE> SET MYJOB
SCHEDULE> SET 123
```

To refer to a job belonging to another user, add the **=username** specifier to the job name. For example:

```
SCHEDULE> SET JOB THISJOB=YOURNAME
```

You cannot use wildcard characters for the job specifier.

Qualifiers

/CLEAR_DEPENDENCY

Resets the synchronization time of the specified job to the current time. This clears any dependency requirements that have already been met, so they must be met again. This argument also resets any dependencies overridden by the **/NO_DEPENDENCY** qualifier.

/NO_DEPENDENCY=(dependency_jobs)

Specifies a list of dependency jobs that the manager will override for the job's next run. After the job completes or the dependencies are modified, the manager replaces the original dependencies.

Note

Each **SET JOB/NO_DEPENDENCY** command that is issued for the same job overrides the previous command. For example, suppose job C is dependent on job A and job B. The following command would modify job C to remove its dependency on job A for the next job run only:

```
SCHEDULE> SET JOB C/NO_DEPENDENCY=(A)
```

When job C is run again, the following command is issued:

```
SCHEDULE> SET JOB C/NO_DEPENDENCY=(B)
```

The first command removes job C's dependency on job A. The second command removes job C's dependency on job B, but reinstates job C's dependency on job A by overriding the first command. To remove job C's dependency on both job A and job B for the next job run, you must put both job names in a list, for example:

```
SCHEDULE> SET JOB C/NO_DEPENDENCY=(A,B)
```

If you specify a dependency that is not in the job's dependency list, the manager ignores it.

If the specified job is in DEP WAIT state and you override all of its dependencies, the job runs immediately.

Use the **SCHEDULE SHOW JOBS/FULL** command to display dependency jobs that the manager has overridden. The dependency jobs are displayed with brackets ([]) around them, as if they had completed running.

/RESTART_VALUE=string **/NORESTART_VALUE**

Specifies the user string restart value, for the specified job from outside the job when the job is not running. **SET JOB /RESTART_VALUE** fails if the specified job is running.

See the command **SET RESTART_VALUE** for details about restart values usage, and examples.

To modify the restart value from a running job process, use the **SET RESTART_VALUE** command.

To clear the restart value previously set for the specified job, use **SET JOB /NORESTART_VALUE**. Alternately, you can use **SET JOB /RESTART_VALUE="" (null string)**. Both clear the restart value.

/RETRY_ATTEMPTS=max_attempts

Specifies the maximum number of times the manager will try to run the job. The manager tries to run the job until the job completes successfully or exceeds the **/RETRY_ATTEMPTS** limit.

You can specify a value of 1 to 10,000 for this qualifier. The initial default is 100 attempts.

The job must be set **/RETRY**. See the **/RETRY** qualifier under the descriptions of the **SCHEDULE COPY**, **SCHEDULE CREATE**, or **SCHEDULE MODIFY** commands for more information.

/RETRY_FREQUENCY=frequency

Specifies the frequency of each retry in minutes. The default is every 15 minutes. The frequency value must be between 1 and 60 minutes.

The following example causes the manager to retry the job every 1/2 hour for up to 50 times until it completes successfully:

```
/RETRY_ATTEMPTS=50/RETRY_FREQUENCY=30
```

The job must be set for **/RETRY**. See **/RETRY** in the **SCHEDULE COPY**, **SCHEDULE CREATE**, or **SCHEDULE MODIFY** commands for more information.

Example

This command specifies that the manager should override dependencies **YOURJOB** and **OURJOB** for the next run of the job named **WEEKLY-RENAME**.

```
SCHEDULE> SET JOB WEEKLY-RENAME/NO_DEP=(YOURJOB,OURJOB)
%NSCHED-I-RQSTSUCSS, Job WEEKLY-RENAME - Dependency override set
```

SET LOAD_BALANCE

SET LOAD_BALANCE — Lets a system manager turn the load-balancing feature on or off, on a local or remote OpenVMS Cluster. This is a management command.

Description

The system manager can turn load balancing on or off for an entire OpenVMS Cluster. Load balancing spreads the load of processing Job Management Manager jobs across all nodes of a OpenVMS Cluster, in order to achieve better performance.

If enabled, load balancing is performed by the default manager instance. Load balancing is applied to all jobs that do not have a **/NODE** restriction and are **MODE=DETACHED** jobs.

Format

```
SET LOAD_BALANCE option [/qualifier]
```

Option

option

Specifies whether to turn the load-balancing options on or off.

- **ON**
Enables load balancing.
- **OFF**
Disables load balancing.

Qualifier

/SERVER=remote_node

Lets you turn the load-balancing option for a remote OpenVMS Cluster on or off.

Examples

1. This example turns on the load-balancing option for a local OpenVMS Cluster.

```
SCHEDULE> SET LOAD_BALANCE ON
```

2. This example turns on the load-balancing option for the remote OpenVMS Cluster that includes node NODE2.

```
SCHEDULE> SET LOAD_BALANCE ON/SERVER=NODE2
```

SET LOGGING

SET LOGGING — Controls the type of information that the manager writes to the event-log file. This is a management command.

Description

This command lets the system manager choose the classes of information to log, such as broadcast messages and job events. The logical NSCHED\$DEFAULT_LOG controls

the default setting for logging. This logical is defined in the system specific startup file `NSCHED$COM:UJM$MANAGER$STARTUP_<nodename>.COM`.

The following Event Classes are configured for logging by default:

`JOB_EVENT`, `ABNORMAL_EVENT`, `TERMINATION_EVENT`, `INTERFACE_EVENT`, and `ERROR_TRAP`. However, you can change the default by editing the file.

To see the types of information being logged, use the **SCHEDULE SHOW LOGGING** command.

To display or print your current event-log report, you use the Job Management Manager event-log report utility. See the **RUN NSCHED\$:VSS_REPORTS.EXE** command.

To open or close an event-log file, see the **SCHEDULE CLOSE LOG_FILE** command. You may need to close the file when it grows too large, then reopen a new log file for future events.

Format

SET LOGGING class1, ...[/qualifiers]

Qualifiers	Defaults
/ALL_NODES	None
/CLUSTER_NODE	Cluster member to set logging onto
/NODE	Same as /CLUSTER_NODE
/SERVER	None

Parameter

class1, ...

class1, ...[/qualifiers]

Specifies the type of information that you want the manager to log. Similar types of information are grouped into an *event class*. The following table lists the event classes that the manager can write to the event log. You can also negate most of the event classes. If you do not specify a class, the command will restore the default event class list.

Event Class	Description
[NO]ABNORMAL_EVENT	Logs abnormal scheduler events.
ALL	Logs all events.
[NO]BROADCAST_MESSAGE	Logs broadcast messages.
[NO]DATABASE_CHECK	Logs requested database checks.
[NO]ERROR_TRAP	Logs error trapping.
[NO]INTERFACE EVENT	Logs user commands.
[NO]JOB_EVENT	Logs job events.
[NO]MAILBOX_MESSAGE	Logs mailbox messages.
NONE	Does not log any events.
[NO]NORMAL_EVENT	Logs normal scheduler events.

Event Class	Description
[NO]TERMINATION_EVENT	Logs scheduler terminations.
[NO]TIMER_SETTING	Logs timer settings.
[NO]STATE_CHANGE	Logs job-state changes.

To choose more than one event class with the **SCHEDULE SET LOGGING** command, separate the event classes with commas. For example:

```
SCHEDULE> SET LOGGING ABNORMAL, ERROR, TIMER
SCHEDULE> SET LOGGING ALL
SCHEDULE> SET LOGGING ALL, NOMAILBOX, NOBROADCAST
SCHEDULE> SET LOGGING NONE
```

Important

VSI does not recommend that you log all event classes because this causes your event-log file to grow very quickly.

Each event class can contain several subclasses of events. For example, the **JOB_EVENT** class logs the following kinds of job events:

- Starting
- Completing
- Aborting
- Restarting

The default logging includes the following classes:

- **JOB_EVENT**
- **ABNORMAL_EVENT**
- **TERMINATION_EVENT**
- **INTERFACE_EVENT**
- **ERROR_TRAP**

Qualifiers

/ALL_NODES

Formerly **/ALL**. Logs the specified event classes on all nodes of a OpenVMS Cluster.

/CLUSTER_NODE=nodename

Logs the specified event classes on one node of a OpenVMS Cluster.

If you omit this qualifier, logging is modified on the node you are logged in to.

This qualifier is the same as the **/NODE** qualifier.

/NODE=nodename

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/SERVER=remote_node

Sets the specified log classes for one remote node only.

If you use this qualifier with the **/ALL_NODES** qualifier, the manager sets the log classes for all the nodes in the remote node's OpenVMS Cluster. For example: **/ALL_NODES /SERVER=NODE2**.

Examples

1. This command logs normal events, abnormal events, and job terminations (usually caused by a system failure) on the user's current node.

```
SCHEDULE> SET LOGGING JOB_EVENT, ABNORMAL_EVENT,
TERMINATION_EVENT
```

2. This command is the same as the first example, but specifies remote node NODE2. The hyphen at the end of the first line lets the user continue the command on a second line.

```
SCHEDULE> SET LOGGING JOB_EVENT, ABNORMAL_EVENT, - _
SCHEDULE> TERMINATION_EVENT/SERVER=NODE2
```

3. This command is the same as examples 1 and 2, but specifies a node NODE1 on a OpenVMS Cluster.

```
SCHEDULE> SET LOGGING JOB_EVENT, ABNORMAL_EVENT, - _
SCHEDULE> TERMINATION_EVENT/CLUSTER_NODE=NODE1
```

SET MAX_JOBS

SET MAX_JOBS — Limits the number of jobs that the manager will run simultaneously, on one or more nodes in a local or remote OpenVMS Cluster, or on a remote agent. This is a management command.

Description

If you do not specify a node, the manager places the job limit on the node you are logged in to.

The default value for the job limit is equal to the value of the logical **NSCHED\$DEFAULT_JOB_MAX**. If you do not define **NSCHED\$DEFAULT_JOB_MAX**, the manager uses a default of six jobs; this default value is in the system specific startup file **NSCHED\$COM:UJM\$MANAGER\$STARTUP_nodename.COM**.

To see the current job limit for the manager, use the **SCHEDULE SHOW MAX_JOBS** command.

Format

```
SET MAX_JOBS job_limit [/qualifiers]
```

Qualifiers	Defaults
/ALL_NODES	None

Qualifiers	Defaults
/CLUSTER_NODE	Current node
/REMOTE_NODE	Same as /CLUSTER_NODE
/SERVER	None

Parameter

job_limit

Specifies the maximum number of jobs that the manager will run simultaneously.

For example:

```
SCHEDULE> SET MAX_JOBS 4
```

If the manager is currently running the maximum number of jobs, any other jobs that are scheduled to run must wait until one of the currently running jobs completes.

Qualifiers

/ALL_NODES

Formerly **/ALL**. Sets the specified job limit on all nodes of the OpenVMS Cluster.

/CLUSTER_NODE=nodename

Sets the specified job limit on the specified node of a OpenVMS Cluster.

If you omit this qualifier, the default is the node you are logged in to.

This qualifier is the same as the **/NODE** qualifier.

/NODE=nodename

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/REMOTE_NODE=remote_node

Sets the specified job limit on the specified remote agent. For example,

/REMOTE_NODE="ultrixmachine" sets the maximum job limit for the agent on node ultrixmachine.

/SERVER=remote_node

Sets the specified job limit on the specified remote node. For example, **/SERVER=NODE2** sets the maximum job limit on remote node NODE2.

If you use this qualifier with the **/ALL_NODES** qualifier, the manager sets the job limit for all nodes in the remote node's OpenVMS Cluster. For example: **/ALL_NODES /SERVER=NODE2**.

Examples

1. This command sets the maximum number of jobs to 4 on the node you are logged in to.

```
SCHEDULE> SET MAX_JOBS 4
```

2. This command sets the maximum number of jobs to 4 on all nodes of your local OpenVMS Cluster.

```
SCHEDULE> SET MAX_JOBS 4/ALL_NODES
```

3. This command sets the maximum number of jobs to 4 on node NODE2 only in the local OpenVMS Cluster.

```
SCHEDULE> SET MAX_JOBS 4/CLUSTER_NODE=NODE2
```

4. This command sets the maximum number of jobs to 4 on remote node NODE1 only.

```
SCHEDULE> SET MAX_JOBS 4/SERVER=NODE1
```

5. This command sets the maximum number of jobs to 4 on all nodes in node NODE1's OpenVMS Cluster.

```
SCHEDULE> SET MAX_JOBS 4/ALL_NODES/SERVER=NODE1
```

SET NETWORK EXPIRATION_RETRY

SET NETWORK EXPIRATION_RETRY — Sets the time limit for trying to send remote node job dependency notifications over the network. This is a management command.

Description

By default, the manager tries to send the notification every 15 minutes, for up to 2 days.

To change the default 15-minute interval, you use the **SCHEDULE SET NETWORK INTERVAL_RETRY** command. See the command description for more information on other Job Management Manager retry features.

See the **SCHEDULE SHOW NETWORK** command for information on how to review the network expiration setting and other retry settings.

Format

```
SET NETWORK EXPIRATION_RETRY "delta time" [/qualifier]
```

Parameter

delta time

Specifies the time limit for trying to resend remote node job dependency notifications. You express the time limit as an OpenVMS delta time. For example, "3 3:10" means 3 days, 3 hours, and 10 minutes.

For more information on delta time, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Qualifier

/SERVER=nodename

Sets the retry expiration time for the specified node's entire OpenVMS Cluster.

Examples

1. This command sets the retry expiration time to 3 days and 10 hours.

```
SCHEDULE> SET NETWORK EXPIRATION_RETRY "03 10"
```

2. This command sets the retry expiration time for node NODE1's OpenVMS Cluster to 3 days and 10 hours.

```
SCHEDULE> SET NETWORK EXPIRATION_RETRY "03 10"/SERVER=NODE1
```

SET NETWORK INTERVAL_RETRY

SET NETWORK INTERVAL_RETRY — Sets the interval for notifications between remote-node job dependencies during communication failures on a wide area network. This is a management command.

Description

The manager automatically sends notifications to remote nodes when a dependency job either completes successfully or is deleted.

For example, suppose Job B on node LOCAL depends on Job A on node REMOTE. When job A runs successfully or is deleted, node REMOTE must notify node LOCAL. However, if node LOCAL is off the network due to communication failure, node REMOTE keeps trying to send notification to node LOCAL at a specified time interval. You set the time interval with this command.

When a node receives notification that a dependency job has been deleted on a remote node, the manager automatically removes the deleted job from all job dependency lists in the job database.

By default, the manager tries to send the notification every 15 minutes, for up to 2 days. To change the default expiration time, see the **SCHEDULE SET NETWORK EXPIRATION_RETRY** command.

The manager automatically places all retry notifications currently being attempted in the RETRY.DAT file. System managers can use the **SCHEDULE SHOW NETWORK** command to see this file's contents. They can also stop all pending retry attempts by using the **DELETE NSCHED\$:RETRY.DAT;** command.

By default, the manager automatically logs all attempted retry events in the NSCHED\$:RETRY.LOG file. System managers can use the **TYPE NSCHED\$:RETRY.LOG** command to review this historical file's contents.

See the **SCHEDULE SHOW NETWORK** command for details on how to review this and other retry settings on your manager instance.

Format

```
SET NETWORK INTERVAL_RETRY "delta time" [/qualifier]
```

Parameter

delta time

Specifies the time limit for trying to resend notifications. You express the time limit as an OpenVMS delta time.

For more information on delta time, see *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

Qualifier

/SERVER=nodename

Sets the retry interval for the specified node's entire OpenVMS Cluster.

Examples

1. This command sets the retry interval to 3 days and 10 hours.

```
SCHEDULE> SET NETWORK INTERVAL_RETRY "03 10"
```

2. This command sets the retry interval to 10 minutes.

```
SCHEDULE> SET NETWORK INTERVAL_RETRY "00 00:10"
```

3. This command sets the retry interval to 10 minutes on node NODE1's OpenVMS Cluster.

```
SCHEDULE> SET NETWORK INTERVAL_RETRY "00 00:10"/SERVER=NODE1
```

SET PRIORITY

SET PRIORITY — Sets the default run time priority for DETACHED mode jobs run by the manager. This is a management command.

Description

The manager uses this priority value to run DETACHED mode jobs when the job's owner has not specified a specific priority in the job's database record. For information on setting a job's run priority, see the **SCHEDULE CREATE** command.

To see the current job priority setting for your manager instance, use the **SCHEDULE SHOW PRIORITY** command.

Format

SET PRIORITY value [/qualifier]

Qualifiers	Defaults
/ALL_NODES	None
/CLUSTER_NODE	Current node
/NODE	Same as /CLUSTER_NODE
/SERVER	None

Parameter

value

Specifies a job priority value from 1 to 15 for the manager. If you try to set a value greater than 15, the manager automatically sets it to 15. If you try to set a value less than 1, the manager automatically sets it to 1.

Note

This run time priority should not be set higher than the normal priority for interactive jobs.

Qualifiers

/ALL_NODES

Formerly **/ALL**. Sets the specified priority value for all nodes in the OpenVMS Cluster.

/CLUSTER_NODE=nodename

Sets the specified priority value for the specified node of a OpenVMS Cluster.

If you omit this qualifier, the default node is the node you are currently logged in to.

This qualifier is the same as the **/NODE** qualifier.

/NODE=node

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/SERVER=remote_node

Sets the specified priority value for the specified remote node.

If you use this qualifier with the **/ALL_NODES** qualifier, the manager sets the priority value for all nodes in the specified node's OpenVMS Cluster. For example: **/ALL_NODES /SERVER=NODE2**.

Examples

1. This command sets the priority value to 3 on the node you are logged in to.

```
SCHEDULE> SET PRIORITY 3
```

2. This command sets the priority value to 3 on all nodes in the local OpenVMS Cluster.

```
SCHEDULE> SET PRIORITY 3/ALL_NODES
```

3. This command sets the priority value to 3 on node NODE2 only in the local OpenVMS Cluster.

```
SCHEDULE> SET PRIORITY 3/CLUSTER_NODE=NODE2
```

4. This command sets the priority value to 3 on remote node NODE1 only.

```
SCHEDULE> SET PRIORITY 3/SERVER=NODE1
```

5. This code sets the priority value to 3 on all nodes in node NODE1's OpenVMS Cluster.

```
SCHEDULE> SET PRIORITY 3/ALL_NODES/SERVER=NODE1
```

SET RESTART_VALUE

SET RESTART_VALUE — Establishes and saves a test value for restarting an OpenVMS job.

Description

This command lets you specify at what point to restart a job interrupted by a system failure or other problem. When the system is available again, the job starts processing from the specified point.

Important

You can use this command only in a command procedure that the manager runs. If you use the command interactively, the manager takes no action.

If you specify a restart value with this command, the \$VSSRESTART symbol equals TRUE in the command procedure. If the job does not have a restart value set, the symbol equals FALSE in the command procedure. This symbol is similar to the \$RESTART symbol for an OpenVMS batch procedure.

The actual test value is held in the symbol BATCH\$RESTART, identical to the symbol for OpenVMS batch procedures.

This command is the same as OpenVMS command **SET RESTART_VALUE**.

Format

```
SET RESTART_VALUE test_value
```

Parameter

test_value

Specifies a test value for restarting a job in a command procedure. The test value can have up to 40 characters, with no spaces.

For example:

```
SCHEDULE> SET RESTART_VALUE STEP6
```

Qualifiers

None.

Example

This example shows part of a command procedure for a Job Management Manager job. The **SCHEDULE SET RESTART_VALUE** sets the restart value to either STEP1 or STEP2. If a system problem occurs while running the job, the manager will restart the job at the appropriate step.

```
$ If $VSSRESTART then goto 'BATCH$RESTART'  
$ STEP0:  
-
```

```
-  
$ !If we crash, restart at step1  
$ SCHEDULE SET RESTART_VALUE STEP1  
$ STEP1:  
-  
-  
$ !If we crash, restart at step2  
$ SCHEDULE SET RESTART_VALUE STEP2  
$ STEP2:  
-  
-  
$ EXIT
```

SHOW CPU_RATING

SHOW CPU_RATING — Shows the CPU rating of the local node.

Description

Identifies the CPU rating of the local node. If the machine has no rating in the ratings database, the command reports that the machine is not rated. For an updated ratings database, contact Computer Associates Technical Support.

Format

SHOW CPU_RATING [*/qualifier*]

Qualifiers	Defaults
/OUTPUT	None

Parameters

None.

Qualifiers

/OUTPUT=file_name

Writes the command output to a specified file. If you do not specify a file, the output goes to SYSS\$OUTPUT. If you omit the file extension, the default extension is .LIS.

Examples

```
SCHEDULE>SHOW CPU_RATING  
Machine Name <DS20> Hardware Name <COMPAQ AlphaServer DS20E 500 MH>  
Hardware Model <1921> Rating <1000>
```

SHOW DEFAULT

SHOW DEFAULT — Displays the default node that is running the manager on a local or remote OpenVMS Cluster.

Description

You can use this command to check the default node for a local or remote OpenVMS Cluster.

Format

SHOW DEFAULT [*/qualifier*]

Qualifiers	Defaults
/OUTPUT	SYSS\$OUTPUT

Parameters

None.

Qualifiers

/OUTPUT=file_name

Directs the output from the command to a specified file.

For example:

```
/OUTPUT=CURRENT.DEFAULT
/OUTPUT=[DOE.LOAD]CURRENT.DEFAULT
```

If you do omit this qualifier, the default file name is SYSS\$OUTPUT.

If you omit the file name extension, the default extension is .LIS.

Examples

1. This command displays the default node for a local OpenVMS Cluster.

```
SCHEDULE> SHOW DEFAULT
```

2. This command lists the default node for a local OpenVMS Cluster, in an output file named CURRENT.DEFAULT.

```
SCHEDULE> SHOW DEFAULT/OUTPUT=CURRENT.DEFAULT
```

SHOW DELETES

SHOW DELETES — Displays the number of jobs deleted from the job database since the database was last compressed or converted from a previous Job Management Manager software version.

Description

To compress your current job database, see the **OPTIMIZE DATABASE** command.

To delete a job from the job database, see the **SCHEDULE DELETE** command.

Format

SHOW DELETES

Parameters

None.

Qualifiers

None.

Example

This command displays the number of jobs deleted from the job database since the last database compression or conversion.

```
SCHEDULE> SHOW DELETES
```

SHOW DEPENDENCIES

SHOW DEPENDENCIES — Creates a file (default=SCHEDULER\$DEP_TREE.LIS) that contains a line-art picture of the dependency tree for each of the specified jobs.

Description

The output is written using character cell graphics in page format, designed for being printed (80 column mode) and is not designed for viewing on the screen. When printed out, the pages can be put together to show the entire picture. The layout of the boxes and lines is not the same layout as the Motif interface. The default size of the names is up to 8 characters. If desired, the maximum size of the names/boxes can be expanded to fit the largest name, or the user can set it.

Format

```
SHOW DEPENDENCIES [job_name or job_num] [/qualifier]
```

Qualifiers	Defaults
/GROUP= <i>groupname</i>	None
/TYPE= <i>typename</i>	None
/USER_NAME= <i>user_name</i>	Current user
/ALL	All jobs
/OUTPUT= <i>file_name</i>	SCHEDULER\$DEP_TREE.LIS
/SIZE[=]	8

Parameters

- **job_name**

The group name (optional, defaults to all). Wildcards are permitted.

- **job_num**

The job number (optional, defaults to all). Wildcards are permitted.

Qualifiers

/ALL

Shows all jobs.

/GROUP=groupname

Shows jobs in group **groupname** only; wildcards are permitted.

/OUTPUT=file_name

Causes output to be written to 'file_name.' The default is to write to the file SCHEDULER\$DEP_TREE.LIS.

/SIZE [=number]

/SIZE=8 (D)

Controls the size of the boxes around a job when it is printed.

Can be 0, 1, or a positive integer less than or equal to 40 (the maximum size of a job name), or it may be omitted.

Specifying 0 is the same as size=8. Specifying 1, or omitting, will size the display to fit the largest job name size, and specifying an integer will set the size of the display to that many characters. If a size greater than 40 characters is specified, a warning message will be displayed and the size will be reduced to 40 characters.

The default is to have the boxes sized to fit 8 characters of the job name. Specifying **/SIZE** without a value will size all the boxes to fit the largest job name of 40 characters. Lines are drawn in proportion to the box sizes.

/TYPE=typename

Shows jobs in type **typename** only; wildcards are permitted.

/USER_NAME=user_name

Shows all jobs owned by 'user,' wildcards are permitted.

Example

This command creates a file named SCHEDULER\$DEP_TREE.LIS that contains a picture of the dependency tree for the specified jobs.

```
SCHEDULE> SHOW DEPENDENCIES
```

SHOW FISCAL_YEAR

SHOW FISCAL_YEAR — Prints the calendar for the specified fiscal years.

Description

If you do not specify a fiscal year in the command, the manager prints a calendar of the current fiscal year.

You can use command qualifiers to override the current definition of the fiscal year and experiment with different fiscal year characteristics without actually altering the fiscal year.

Format

SHOW FISCAL_YEAR [*year1, ...*][*/qualifier*]

Qualifiers	Defaults
/START_DATE	None
/EXTRA_WEEK_MONTH	None
/FIVE_WEEK_MONTH	None
/OUTPUT	SYSS\$OUTPUT

Parameter

year1, ...

A list of years to be displayed; for example, 1995, 1996, 1997 (optional, defaults to current year).

Qualifiers

/START_DATE=date

The starting date of a 53-week, nonleap fiscal year. The default is a fiscal year starting on April 1 with a 53-week fiscal year in 1988. The format of the date is

```
dd-mmm-yyyy
For example:
01-JAN-1997
```

/EXTRA_WEEK_MONTH=month

The month that receives the extra week in a 53-week fiscal year. The value must be in the range 1 to 12.

/FIVE_WEEK_MONTH=month

The month, in a quarter, that has five weeks. The value must be in the range 1 to 3.

/OUTPUT=file_name

Directs output from the command to a specified file.

Examples

1. This command generates a fiscal calendar showing fiscal years 1995, 1996, and 1997.

```
SCHEDULE> SHOW FISCAL_YEAR 1995, 1996, 1997
```

2. This command generates a fiscal calendar for the year 1997, overriding the current `START_DATE` and `EXTRA_WEEK_MONTH` values.

```
SCHEDULE> SHOW FISCAL_YEAR 1997/START_DATE=23-JAN-1996 -
_SCHEDULE> /EXTRA_WEEK_MONTH=11
```

SHOW HISTORY

`SHOW HISTORY` — Displays information about the processing history of jobs, which is stored in a log file.

Description

You can specify the log file that has the history information. If not, the current scheduler log file is used.

Note

If you issue `SHOW HISTORY` from an account without `WORLD` privilege, the command will return incomplete data. To see full data, grant `WORLD` privilege to the account, or use an account with `WORLD` privilege.

Format

```
SHOW HISTORY [job_specifier] [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/BRIEF	None
/CLUSTER_NODE	None
/COMPLETION_STATUS	Success
/END_TIME	None
/FILE_NAME	None
/FULL	None
/GROUP_NAME	None
/OUTPUT	None
/[NO]RECORDED_RUNS	/NORECORDED_RUNS
/SERVER	None
/START_TIME	None
/STATUS	None
/TYPE	None
/USER_NAME	Current user

Parameter

job_specifier

Specifies the jobs to show (optional, defaults to all jobs). You can specify another user's job, as well as jobs on a remote node. You need READ access to specify another user's job.

For information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

To refer to another user's job by name, you must append an equal sign (=) and the username to the job name. To refer to a remote node, you must precede the job name or number with the node name plus two colons.

```
[remote_node::] job_name_or_number [=user_name]
```

You can use wildcard characters in the job name and username.

For example, **MYVAX : B*=SYSTEM** refers to all jobs beginning with the letter B, owned by user SYSTEM, and residing on remote node MYVAX. MYVAX may be a cluster member.

Qualifiers

/ALL

Displays information on the jobs of all users in the database. This qualifier is equivalent to specifying a username of =* in the job_specifier or using the qualifier **/USER=***.

/BRIEF

Displays a one-line report about the specified jobs. The report includes the following:

- Job name
- Job number
- Username
- Average elapsed time
- Current elapsed time
- Percent of time elapsed, in comparison to the predicted elapsed time (current/average x 100)

/CLUSTER_NODE=nodename

Displays information on jobs in the specified node. The manager displays the jobs scheduled to run on that node, as well as any jobs that are running on the node because it is the default node of the cluster. The default value is wildcard character (*), which specifies all nodes.

To see all jobs scheduled to run on the OpenVMS Cluster default node, specify "" as the node name.

This qualifier is the same as the **/NODE** qualifier.

/COMPLETION_STATUS=status_code

Displays information on jobs that match the specified completion status code. There are three possible values:

- SUCCESS (D)
- FAILURE
- ALL (success or failure)

/END_TIME=ending_time

Specifies the end time of the interval for which you want to display the history information. The end time is an absolute value. Use the following format:

dd-mmm-yyyy hh:mm:ss.cc

The time must be enclosed in quotation marks (""). The default time for hours and minutes (*hh:mm*) is 00:00.

To use this qualifier, you must also use the **/RECORDED_RUNS** qualifier. The default value is the current time, which will display the latest records. Do not specify a time later than the current time.

/FILE_NAME=file_name

Specifies the file that contains the historical information. If you do not specify a file, the manager uses the current scheduler log file.

/FULL

Specifies that a full report should be displayed. The report includes all available fields of interest about each job in the specified log file.

/GROUP=group_name

Displays information on jobs that belong to the specified group. You can use wildcard characters in the group name. The default is a wildcard (*), which specifies all groups.

/OUTPUT=file_name

Writes the command output to a specified file. If you do not specify a file, the output goes to SYS \$OUTPUT. If you omit the file extension, the default extension is .LIS.

/RECORDED_RUNS**/NORECORDED_RUNS (D)**

Displays individual history records rather than a summary of the records. You can also specify a time interval (**/START_TIME** and **/END_TIME**) to use with this qualifier. The default is **/NORECORDED_RUNS**, which displays a summary.

/SERVER=nodename

Displays information on jobs on the specified remote node. You must have a proxy account on that node, or specify an account and password.

/STATUS=[NO]status_name

Displays information on jobs that match the specified job status. Possible status values:

- [NO]RUNNING

- [NO]SCHEDULED
- [NO]HOLD
- [NO]DEP_WAIT
- [NO]WAITING

Using the **/STATUS=NORUNNING** qualifier displays information on all jobs that are not running.

/START_TIME=start_time

Specifies the starting time of the interval for which you want to display historical information. To use this qualifier, you must also use the **/RECORDED_RUNS** qualifier. If you omit the starting time, the default is the current time. Specify the starting time in the following format:

dd-mmm-yyyy hh:mm:ss.cc (absolute time)

The default time for hours and minutes (*hh:mm*) is 00:00. Do not specify a time earlier than the present time.

/TYPE=type_name

Displays information on jobs that belong to the specified type. You can use wildcard characters in the type name. The default is a wildcard (*), which specifies all types.

/USER_NAME=user_name

Displays information on jobs that belong to the specified user. You need READ access to specify another user's job.

For more information on privileges, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

You can use wildcard characters in the username. If you do not specify a username, the default is your username.

Example

This command shows all recorded runs of the job MYJOB from December 1, 1996 to December 10, 1997.

```
SCHEDULE> SHOW HISTORY MYJOB /RECORDED_RUNS - _  
SCHEDULE> /START=01-DEC-1996/END=10-DEC-1997
```

SHOW JOBS

SHOW JOBS — Displays information about one or more jobs, in a local or remote Job Management Manager database.

Description

You need READ access to show a job.

Format

```
SHOW JOBS [job_specifier] [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/BRIEF	None
/CLUSTER_NODE	None
/FULL	None
/GROUP_NAME	None
/NODE	None
/OUTPUT= <i>file_name</i>	SYSS\$OUTPUT
/PROCESS	None
/SERVER	None
/STATUS	None
/SYMBOLS	None
/TYPE	None
/USER_NAME	Current user
/VERIFY_REMOTE	None

Parameter

job_specifier

Displays the specified job. You can specify a job name or number. The job specifier is optional. If you omit it, the manager displays information on all the jobs you own.

To display information on jobs that belong to another user, add the **=username** specifier to the job specifier. For example:

```
SCHEDULE> SHOW JOBS THISJOB=DOE
```

You can specify a job group or type instead of a job name. For example:

```
SCHEDULE> SHOW JOBS/GROUP=HOURLY
SCHEDULE> SHOW JOBS/TYPE=FISCAL
```

When you show a job locally, it always knows the correct exit status (success/failure) of a remote mode job. When showing that same job from across the net, the mode is unknown, and the exit status tests for success/failure /unknown based on the number (odd/even).

To refer to a job on a remote node, you either add the node name to the job name or number, or use the **/SERVER** qualifier. For example:

```
SCHEDULE> SHOW JOBS NODE1::MYJOB
SCHEDULE> SHOW JOBS NODE1::123
```

You can use wildcard characters to specify job name, username, group name, and type name. For example, the following command displays information on all jobs that begin with the letter M, are on node NODE1, are owned by users whose name begins with D, and are in any group that begins with W:

```
SCHEDULE> SHOW JOBS NODE1::M*=D*/GROUP=W*
```

Qualifiers

/ALL

Displays information about all jobs in the database.

Specifying **/ALL** is the same as specifying a username =* in the job specifier, or using the **/USER_NAME=*** qualifier.

/BRIEF

Displays a one-line report on the specified jobs. This report contains the following information:

- Job name.
- Job number.
- Username.
- Current job state.
- The next scheduled run time (if scheduled).

/CLUSTER_NODE=nodename

Displays information on the following jobs owned by the user:

- Jobs scheduled to run on the specified node
- Jobs that are running on the specified node because it is the default node of the cluster

The default value is the wildcard character (*), which matches all nodes.

To see all jobs scheduled to run on the OpenVMS Cluster default node, specify two quotation marks (") as the node name.

For example: **/CLUSTER_NODE=" "**.

/FULL

Displays a full report on the specified jobs. Job dependencies that have been satisfied are displayed with brackets ([]) around them. The second example shows an example of a full job report.

/GROUP=group_name

Displays information on jobs that belong to the specified group name.

For example: **/GROUP=WEEKLY**.

You can use the asterisk (*) and percent (%) wildcard characters in the group name.

For example: **/GROUP=W***.

The default value is the wildcard character (*), which specifies all groups.

For example: **/GROUP=***.

To see jobs that have no group name, specify **/GROUP=""**.

/NODE=nodename

Displays information on the following jobs owned by the user:

- Jobs scheduled to run on the specified node
- Jobs that are running on the specified node because it is the default node

The default value is the wildcard character (*), which matches all nodes.

To see all jobs scheduled to run on the default node, specify two quotation marks ("") as the node name.

For example: **/NODE=""**.

/OUTPUT=file_name

Controls where the output display of the command is sent. If not specified, the output goes to SYS \$OUTPUT. If no file extension is given in the file name, it defaults to .LIS.

/PROCESS [job_id]

Mimics the **SHOW PROCESS** command from DCL. Operates on currently running jobs only. It may be possible to have this command return either NO JOB FOUND or JOB NOT RUNNING for a job that exists in the database but is not running. This command does not show process dynamic memory and subprocesses but has all other support of the **DCL SHOW PROCESS** command.

When showing jobs currently executing under a different user name, the normal OpenVMS privilege rules are required and the identifiers are not used. So, in order to show another user's process, GROUP or WORLD privileges are required.

This qualifier is invalid with the following qualifiers: **/STATUS**, **/SYMBOLS**, **/SERVER**, **/BRIEF**, or **/VERIFY_REMOTE**.

/SERVER=remote_node

Displays information on jobs on the specified remote node.

For example: **/SERVER=NODE1**.

You must have a proxy account on the remote node, or specify an account and password.

For more information on specifying remote nodes, see the *VSI Job Management for OpenVMS Administration Guide* [<https://docs.vmssoftware.com/docs/vsi-job-management-administration-guide-v31>].

/STATUS=status_name

Displays information on jobs whose current status matches the qualifier value. Possible status values:

- [NO]DEP_WAIT
- [NO]HOLD

- [NO]RUNNING
- [NO]SCHEDULED
- [NO]WAITING

You can use the [NO]... values to display information on jobs that do not match the specified status.

For example, `/STATUS=NORUNNING` displays information on jobs that are not running.

In addition to displaying the job statuses above, the DCL interface can also display the following:

- **NOTRUNNING**

Valid only for local jobs. This status appears when the database has a PID in it for a **RUNNING** job, and the user interface cannot find that PID running on the system. This can sometimes be a result of the manager being slow (the OpenVMS process terminates, but the manager has not processed the termination messages yet, so it believes it is still running).

- **RUNNING-V**

Valid only for `/MODE=REMOTE` jobs. This status appears when the manager has verified that the job is running on the remote node.

- **RUNNING-NV**

Valid only for `/MODE=REMOTE` jobs. This status appears when the manager has been unable to verify that the job is running on the remote node.

`/SYMBOLS [job_id]`

Creates a symbol for each of the qualifiers of a job. It does not take wildcards. If attempted with a job that does not exist, the symbols will be deleted. If attempted more than once, the new symbols will overwrite the old values. The current list of symbols is as follows:

- SCHED\$CLUSTER_NODE
- SCHED\$COMMENT
- SCHED\$CURRENT_NODE
- SCHED\$DAYS
- SCHED\$DEPENDENCIES
- SCHED\$EXID
- SCHED\$FAILURE_COUNT
- SCHED\$FISCAL_START
- SCHED\$GROUP
- SCHED\$INTERVAL
- SCHED\$JOB_NAME
- SCHED\$JOB_NUM

- SCHED\$LAST_EXIT_STATUS
- SCHED\$LAST_FINISH_TIME
- SCHED\$LAST_START_TIME
- SCHED\$LOCAL_DEPENDENTS
- NSCHED\$LOGFILE
- SCHED\$MAIL_TO
- SCHED\$MAX_TIME
- SCHED\$NEXT_SCHED
- SCHED\$NODE_DEPENDENTS
- SCHED\$NOTIFY
- SCHED\$OPCOM
- SCHED\$PARAMETER
- SCHED\$PID
- SCHED\$POST_EXIT_STATUS
- SCHED\$POST_FUNCTION
- SCHED\$PRE_EXIT_STATUS
- SCHED\$PRE_FUNCTION
- SCHED\$QPRIORITY
- SCHED\$RDID
- SCHED\$REQUESTED_STATE
- SCHED\$RERUN_COUNT
- SCHED\$RERUN_FREQ
- SCHED\$RESTART
- SCHED\$RESTART_PARM
- SCHED\$RETAIN
- SCHED\$RETRY
- SCHED\$RETRY_COUNT
- SCHED\$RETRY_MAX_ATTEMPTS
- SCHED\$RUN_PRIORITY

- SCHED\$SEND
- SCHED\$JOB
- SCHED\$STALL_TIME
- SCHED\$STATE
- SCHED\$SUCCESS_COUNT
- SCHED\$SYNC_TIME
- SCHED\$JOB
- SCHED\$TYPE
- SCHED\$UIC
- SCHED\$USERNAME
- SCHED\$USE_NEXT_TIME
- SCHED\$VMS_COMMAND
- SCHED\$WRID

/TYPE=type_name

Displays information on jobs that belong to the specified job type.

For example: **/TYPE=FISCAL**.

You can use the asterisk (*) and percent (%) wildcard character in the type name.

The default value is the (*) wildcard character, which specifies all types.

/USER_NAME=user_name

Displays information on jobs owned by the specified user.

For example: **/USER_NAME=DOE**.

Specifying **/USER_NAME=*** is the same as using the **/ALL** qualifier. It specifies jobs belonging to all users.

If you do not specify **/ALL**, **/USER_NAME**, or a (*) wildcard job specifier, the manager displays information for your jobs only.

/VERIFY_REMOTE

Meaningful with REMOTE mode jobs only. **/VERIFY_REMOTE** instructs the manager to attempt to prove that a remote job is running on a remote agent.

- If the job is known to be running, the job's state is RUNNING-V
- If the job is known not to be running, its state is shown as Not Running
- If the job's state cannot be verified, its state is Running-NV

Examples

1. This command displays a brief report for the job WEEKLY-RENAME.

```
SCHEDULE> SHOW JOBS/BRIEF
Job Name           Entry   User_Name      State           Next Run Time
WEEKLY-RENAME     56      DOE            Scheduled       11-MAY-1997 18:00
```

2. This command displays a full report for the job EXTRACT_NOTES.

```
SCHEDULE> SHOW JOB EXTRACT_NOTES/FULL
JOB NAME           Entry   User_name      State           Next Run Time
-----
EXTRACT_NOTES     10520   EXAMPLE        Scheduled       20-MAY-1997 03:00
VMS_Command : @DUA1:[EXAMPLE.NOTES]NIGHTLY_NOTES.COM
Group : (none)                               Type : (none)
Comment : This job extracts nightly notes
Last Start Time   : 19-APR-1997 03:00
Last Finish Time  : 19-APR-1997 03:35   Last Exit Status : SUCCESS
Schedule Interval : D 03:00
Mail to           : EXAMPLE (on ERROR)
Days              : (MON,TUE,WED,THU,FRI)
Output File       : DUA1:[EXAMPLE.NOTES]NIGHTLY.LOG
Cluster_CPU       : Default Notify user upon completion
Run Priority       : Default
Max_time Warning  : None Job Always retained
Stall Notify      : None No retry on Error
Success Count     : 86 Failure Count : 12
Owner UIC         : [300,300] No Restart on Crash
No Pre or Post Function for this job
No local jobs depend upon this job
This job has no Dependencies on other jobs
```

SHOW LOAD_BALANCE

SHOW LOAD_BALANCE — Shows whether load-balancing feature is on or off, for a local or remote OpenVMS Cluster.

Description

You use the **SCHEDULE SHOW LOAD_BALANCE** command to display the load-balancing feature setting, either on or off. See the command for a description of the load-balancing feature.

Format

SHOW LOAD_BALANCE [/qualifier]

Qualifiers	Defaults
/OUTPUT	SYSS\$OUTPUT
/SERVER	None

Parameters

None.

Qualifiers

/OUTPUT=file_name

Writes the command output to the specified file.

For example:

```
/OUTPUT=CURRENT.LOAD-BALANCE
/OUTPUT=[DOE.LOAD]CURRENT.LOAD
```

If you omit this qualifier, the default file name is SYSS\$OUTPUT. If you omit the file name extension, the default extension is .LIS.

/SERVER=remote_node

Displays the setting of the load-balancing feature on the specified remote node's OpenVMS Cluster.

For example: /SERVER=NODE2.

Examples

1. This command displays the load-balancing setting for a local OpenVMS Cluster.

```
SCHEDULE> SHOW LOAD_BALANCE
```

2. This command writes the load-balancing setting for a local OpenVMS Cluster to a file named CURRENT.LOAD-BALANCE.

```
SCHEDULE> SHOW LOAD_BALANCE/OUTPUT=CURRENT.LOAD-BALANCE
```

3. This command displays the load-balancing setting for remote node NODE2's

OpenVMS Cluster.

```
SCHEDULE> SHOW LOAD_BALANCE/SERVER=NODE2
```

SHOW LOGGING

SHOW LOGGING — Shows the event classes currently being written to the event log, for all nodes or a specific node, on a local or remote OpenVMS Cluster.

Description

To set event classes for your event log, use the **SCHEDULE SET LOGGING** command.

Format

```
SHOW LOGGING [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/CLUSTER_NODE	User's node (Synonym of /NODE)

Qualifiers	Defaults
/NODE	User's node
/OUTPUT	SYSS\$OUTPUT
/SERVER	None

Parameters

None.

Qualifiers

/ALL

Displays the event classes currently being logged on all nodes of a local OpenVMS Cluster.

/CLUSTER_NODE=node

Displays the event classes currently being logged on the specified node of a local OpenVMS Cluster.

For example: **/CLUSTER_NODE=NODE1.**

If you omit this qualifier, the default is the node you are logged in to. This qualifier is the same as the **/NODE** qualifier.

/NODE=node

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/OUTPUT=file_name

Writes the command's output to the specified file.

For example:

```
/OUTPUT=CURRENT.LOG
/OUTPUT=[DOE.LOGGING]CURRENT.LOG
```

If you omit this qualifier, the default file name is SYSS\$OUTPUT. If you omit the file name extension, the default extension is .LIS.

/SERVER=remote_node

Displays the event classes currently being logged on the specified remote node. For example:
/SERVER=NODE2.

If you use the **/SERVER** qualifier with the **/ALL** qualifier, this command displays the event classes currently being logged on all nodes in the specified node's OpenVMS Cluster. For example:
/ALL/SERVER=NODE2.

Examples

1. This command displays the event classes that the manager is logging on the node you are logged in to.

```
SCHEDULE> SHOW LOGGING
```

2. This command displays the event classes that the manager is logging on all nodes of a local OpenVMS Cluster.

```
SCHEDULE> SHOW LOGGING/ALL
```

3. This command displays the event classes that the manager is logging on node NODE1 of a OpenVMS Cluster.

```
SCHEDULE> SHOW LOGGING/CLUSTER_NODE=NODE1
```

4. This command writes the event classes that the manager is logging for your current node to a file named CURRENT.LOG.

```
SCHEDULE> SHOW LOGGING/OUTPUT=CURRENT.LOG
```

5. This command displays the event classes that the manager is logging on remote node NODE2.

```
SCHEDULE> SHOW LOGGING/SERVER=NODE2
```

6. This command displays the event classes that the manager is logging on all nodes of remote node NODE2's OpenVMS Cluster.

```
SCHEDULE> SHOW LOGGING/ALL/SERVER=NODE2
```

SHOW MAX_JOBS

SHOW MAX_JOBS — Shows the maximum number of Job Management Manager jobs that can run simultaneously, on one node or all nodes, in a local or remote OpenVMS Cluster. Also displays the number of jobs that are currently running.

Description

Use the **SCHEDULE SET MAX_JOBS** command to change the current maximum job limit for your manager instance.

Format

```
SHOW MAX_JOBS [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/CLUSTER_NODE	User's node
/NODE	Same as /CLUSTER_NODE
/OUTPUT	SYSS\$OUTPUT
/SERVER	None

Parameters

None.

Qualifiers

/ALL

Displays the maximum job limit for all nodes of the local OpenVMS Cluster.

/CLUSTER_NODE=nodename

Displays the maximum job limit for the specified node of a local OpenVMS Cluster.

For example: **/CLUSTER_NODE=NODE1.**

If you omit this qualifier, the default is the node you are logged in to. This qualifier is the same as the **/NODE** qualifier.

/NODE=node

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/OUTPUT=file_name

Writes the command's output to the specified file.

For example:

```
/OUTPUT=CURRENT.LIMIT  
/OUTPUT=[DOE.LOGGING]CURRENT.LIMIT
```

If you omit this qualifier, the default file name is SYSS\$OUTPUT.

If you omit the file name extension, the default extension is .LIS.

/SERVER=remote_node

Displays the maximum job limit for the specified remote node.

For example: **/SERVER=NODE2.**

If you use this qualifier with the **/ALL** qualifier, the command displays the maximum job limit on all nodes in the specified node's OpenVMS Cluster.

For example: **/ALL/SERVER=NODE2.**

Examples

1. This command displays the number of jobs running and the maximum number of jobs that can run, for the node you are logged in to.

```
SCHEDULE> SHOW MAX_JOBS
```

2. This command displays the number of jobs running and the maximum number of jobs that can run, for all nodes of a local OpenVMS Cluster.

```
SCHEDULE> SHOW MAX_JOBS/ALL
```

3. This command displays the number of jobs running and the maximum number of jobs that can run, for node NODE2.

```
SCHEDULE> SHOW MAX_JOBS/CLUSTER_NODE=NODE2
This command displays the number of jobs running and the
maximum number of jobs that can run, for remote node NODE1.
```

4. SCHEDULE> SHOW MAX_JOBS/SERVER=NODE1
5. This command displays the number of jobs running and the maximum number of jobs that can run, for all nodes in node NODE1's OpenVMS Cluster.

```
SCHEDULE> SHOW MAX_JOBS/ALL/SERVER=NODE1
```

Show Names

Show Names — Displays all of the GROUP and/or TYPE names that are in use across all of a user's jobs.

Description

The default is to show both GROUP and TYPE names for the current user on the current machine. Specifying **/GROUP** means show groups but not types. The opposite is true for **/TYPE**.

Format

```
SHOW NAMES [/qualifier]
```

Qualifiers	Defaults
/GROUP	None
/TYPE	None
/USER_NAME= <i>user_name</i>	Current user
/ALL	Show all jobs
/OUTPUT= <i>file_name</i>	SYSS\$OUTPUT
/SERVER= <i>nodename</i>	None

Parameters

None.

Qualifiers

/GROUP

Displays group names only, and not types.

/TYPE

Shows type names only, and not groups.

/USER_NAME=*user_name*

Show all jobs owned by a specified '*user_name*'.

/ALL

Show all jobs, including all group and type names.

/OUTPUT=file_name

Write the output to a specified 'file_name'. The default is screen.

/SERVER=nodename

Displays the names from a remote node.

Example

```
SCHEDULE> SHOW NAMES
```

```
Servernode: LOCAL
```

```
Username: COLLIER
```

```
Group Names:
```

- BACKUP
- DEMO
- TESTREMOTE
- UVAX_BACKUP

```
Type Names:
```

- DEMOTYPE
- BACKUP_LOGFILES

SHOW NETWORK

SHOW NETWORK — Shows the settings for the network-retry values, for a local or remote OpenVMS Cluster. This is a management command.

Description

When network problems occur, the manager tries to resend remote job notifications at set intervals for a set time period. You can set the retry interval and expiration time with commands. The **SCHEDULE SHOW NETWORK** command displays current information for the following:

- Alias node
- Value of **SCHEDULE SET NETWORK EXPIRATION_RETRY** command
- Value of **SCHEDULE SET NETWORK INTERVAL_RETRY** command
- All current retry notifications being attempted

See the **SCHEDULE SET NETWORK INTERVAL_RETRY** command for more information on these retry features.

SHOW NETWORK also supports the following for local events that send information to remote schedulers:

- Showing records for retrying remote job termination messages
- Showing records for retrying remote job deletion
- Showing records for retrying remote job dependency creation

Format

```
SHOW NETWORK [/qualifier]
```

Parameters

None.

Qualifier

/SERVER=remote_node

Displays retry information for the specified node's OpenVMS Cluster.

Examples

1. This command displays retry information for your local OpenVMS Cluster.

```
SCHEDULE> SHOW NETWORK
```

2. This command displays retry information for remote node NODE1's OpenVMS Cluster.

```
SCHEDULE> SHOW NETWORK/SERVER=NODE1
```

SHOW PRIORITY

SHOW PRIORITY — Shows the priority setting for running Job Management Manager jobs, for one node or all nodes, in a local or remote OpenVMS Cluster.

Description

This command displays the run priority used if the job's owner has not specified another run priority in the job's database record.

To set the run priority, use the **SCHEDULE SET PRIORITY** command.

See the **SCHEDULE CREATE** command for information on setting a specific job's run priority.

Format

```
SHOW PRIORITY [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/CLUSTER_NODE	User's node
/NODE	Same as /CLUSTER_NODE
/OUTPUT	SYSS\$OUTPUT
/SERVER	None

Parameters

None.

Qualifiers

/ALL

Displays the priority setting for all nodes in the OpenVMS Cluster.

/CLUSTER_NODE=**nodename**

Displays the priority setting for the specified node of a local OpenVMS Cluster.

For example: `/CLUSTER_NODE=NODE1`.

If you omit this qualifier, the default is the node you are logged in to.

This qualifier is the same as the `/NODE` **qualifier**.

/NODE=**node**

This qualifier is the same as the `/CLUSTER_NODE` qualifier.

/OUTPUT=**file_name**

Writes the command's output to a specified file.

For example:

```
/OUTPUT=CURRENT.PRIORITY
/OUTPUT=[DOE.LOGGING]CURRENT.PRIORITY
```

If you omit this qualifier, the default file name is SYSS\$OUTPUT.

If you omit the file name extension, the default extension is .LIS.

/SERVER=**remote_node**

Displays the priority setting for the specified remote node.

For example: `/SERVER=NODE2`.

If you use this qualifier with the `/ALL` qualifier, the command shows the priority setting on all nodes of the specified node's OpenVMS Cluster.

For example: `/ALL/SERVER=NODE2`.

Examples

1. This command displays the priority setting for the node you are logged in to.

```
SCHEDULE> SHOW PRIORITY
```

2. This command displays the priority setting on all nodes in the local OpenVMS Cluster.

```
SCHEDULE> SHOW PRIORITY/ALL
```

3. This command displays the priority setting for node NODE2 in the local OpenVMS Cluster.

```
SCHEDULE> SHOW PRIORITY/CLUSTER_NODE=NODE2
```

4. This command displays the priority setting for remote node NODE1.

```
SCHEDULE> SHOW PRIORITY/SERVER=NODE1
```

5. This command displays the priority setting for all nodes of remote node NODE1's OpenVMS Cluster.

```
SCHEDULE> SHOW PRIORITY/ALL/SERVER=NODE1
```

SHOW SCHEDULED_RUNS

SHOW SCHEDULED_RUNS — Predicts future schedules for running jobs, based on historical data.

Description

This command uses historical information from the Job Management Manager log file to predict future schedules for running jobs.

Format

```
SHOW SCHEDULED_RUNS [job_specifier] [/qualifier]
```

Qualifiers	Defaults
/ALL	None
/BRIEF	None
/CLUSTER_NODE	(*) wildcard
/END_TIME	24 hours from "now"
/FULL	None
/GROUP	(*) wildcard
/OUTPUT	SYSS\$OUTPUT
/TITLE	"VSI JM Manager Job Execution Schedule"
/TYPE	(*) wildcard
/USER_NAME	Current user
/START_TIME	"now"

Parameter

job_specifier

Specifies the jobs for which you want to show scheduling information. You can specify another user's job, as well as jobs on a remote node. Optional, defaults to the user's jobs.

To refer to another user's job by name, you must append an equal sign (=) plus the username to the job name. To refer to a remote node, you must precede the job name or number with the node name plus two colons, as follows:

```
[remote_node::] job_name_or_number [=user_name]
```

You can use wildcard characters in the job name and username. For example, **MYVAX::B*=SYSTEM** refers to all jobs beginning with the letter B, owned by user SYSTEM, and residing on remote node MYVAX. MYVAX may be a cluster member.

The output listing of scheduled jobs truncates job names to 20 characters when either the **/BRIEF** or **/FULL** qualifier is used; when neither qualifier is used, job names are truncated to 30 characters. If this is a problem, you can specify job numbers instead of names as unique identifiers.

Qualifiers

/ALL

Displays information for the jobs of all users in the database.

Specifying **/ALL** is the same as specifying username =* in the job specifier, or using the **/USER_NAME=*** qualifier.

/BRIEF

Displays a one-line report about the specified jobs. The report includes the following:

- Job name
- Job number
- Username
- Expected start time
- Expected end time
- Job owner

/CLUSTER_NODE=nodename

Displays information on the following jobs on the specified node:

- Jobs scheduled to run on the node
- Jobs that are running on the node because it is the default node of the cluster

The default value is the wildcard character (*), which matches all nodes.

To see all jobs scheduled to run on the OpenVMS Cluster default node, specify two quotation marks (") as the node name.

For example: `/CLUSTER_NODE=""`.

/END_TIME=ending_time

Shows the predicted schedule for a time interval that ends at the specified time. The default END_TIME equals the START_TIME plus 24 hours, which provides an interval of one day. Specify the end time in one of the following formats. Note the use of quotation marks.

"dd-mmm-yyyy hh:mm:ss.cc" (absolute end time)TOMORROW

The default time for hours and minutes (hh:mm) is 00:00. Do not specify an end time that is earlier than the start time. You cannot specify **/NOEND_TIME**.

/FULL

Displays a full report on the specified jobs. This information is similar to the information displayed by the **SCHEDULE SHOW HISTORY/FULL** command.

/GROUP=group_name

Displays information for jobs that belong to the specified group name. You can use the asterisk (*) and percent (%) wildcard characters in the group name. The default value is the wildcard character (*), which matches all nodes.

/OUTPUT=file_name

Writes the command's output to the specified file. If you omit this qualifier, the output goes to SYS \$OUTPUT. If you omit the file extension, the default is .LIS.

/START_TIME=starting_time

Shows the predicted schedule for a time interval that starts at the specified time. If you omit the starting time, the default is the current time. Use the following format to specify the starting time. Note the use of quotation marks.

"dd-mmm-yyyy hh:mm:ss.cc" (absolute start time)TOMORROW

The default time for hours and minutes (hh:mm) is 00:00. Do not specify an end time that is earlier than the start time. You cannot specify **/NOSTART_TIME**.

/TITLE=report_title

Specifies a title for the report. If you omit the title, the default title is "VSI JM Manager Job Execution Schedule."

/TYPE=type_name

Displays information for jobs of the specified type. You can use the (*) and (%) wildcard characters in the name. The default value is the wildcard character (*), which matches all nodes.

/USER_NAME=user_name

Displays information for jobs that belong to the specified username. You can use the (*) and percent (%) wildcard characters in the name. If you omit the username, the default is the caller's username.

Example

This command shows all jobs that are predicted to run between December 31, 1996 and January 1, 1997.

```
SCHEDULE> SHOW SCHEDULED_RUNS/START=31-DEC-1996 - _  
SCHEDULE> /END=01-JAN-1997/FULL
```

SHOW SD_CLASSES

SHOW SD_CLASSES — Displays the contents of the requested classes.

Description

Use this command to show the contents of Special Day Classes. For each selected class, the name is displayed followed by the dates in the class, broken out by year. If you do not specify a class, the manager prompts a `class_specifier`.

Format

```
SHOW SD_CLASSES [class_specifier]
```

Parameter

`class_specifier`

The name of the Special Day Class or Classes that you want to show. You can use wildcard characters to specify the class name.

Qualifiers

None.

Examples

This example shows all Special Day Classes with the string "holiday" in their name.

```
SCHEDULE> SHOW SD_CLASSES *HOLIDAY*
```

SHOW STATUS

SHOW STATUS — Shows the operating status for the manager, on one node or all nodes, for a local or remote OpenVMS Cluster.

Description

This command displays the following information for schedulers. This display for remote agents does not include the system options.

- Whether the manager is currently operating or not

- Software version ID
- Time started
- Current maximum number of jobs set by the **SCHEDULE SET MAX_JOBS**
- Number of jobs currently running
- Other system options, such as load balancing, logging level, debugging status, and default priority
- Nodes

Format

show status [*/qualifier*]

Qualifiers	Defaults
/ALL	None
/CLUSTER_NODE	User's node
/CONFIRM	None
/NODE	Same as /CLUSTER_NODE
/OUTPUT	SYSS\$OUTPUT
/REMOTE_NODE	None
/SERVER	None

Parameters

None.

Qualifiers

/ALL

Displays the Job Management Manager operating status for all nodes of a local OpenVMS Cluster.

/CLUSTER_NODE=nodename

Displays the Job Management Manager operating status for the specified node of a local OpenVMS Cluster.

For example:

```
/CLUSTER_NODE=NODE1 .
```

If you omit this qualifier, the default is the node you are logged in to.

This qualifier is the same as the **/NODE** qualifier.

/CONFIRM

Prompts for confirmation before stopping the software.

No prompt occurs unless either this qualifier is present on the command line or the logical name NSCHED\$CONFIRM_STOP is defined and translates to TRUE. In that case, use **/NOCONFIRM** to avoid prompting.

/NODE=nodename

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

/OUTPUT=file_name

Writes the command's output to the specified file.

For example:

```
/OUTPUT=CURRENT.LOG  
/OUTPUT=[DOE.SCHEDULERS]CURRENT.LOG
```

If you omit this qualifier, the default file name is SYSS\$OUTPUT.

If you omit the file name extension, the default extension is .LIS.

/REMOTE_NODE=remote_node

Shows the operating status on the specified remote agent.

For example, **/REMOTE_NODE="ultrixmachine"** shows the status of the agent on node *ultrixmachine*.

/SERVER=remote_node

Displays the Job Management Manager operating status for the specified remote node.

For example: **/SERVER=NODE2**.

If you use this qualifier with the **/ALL** qualifier, the command displays the Job Management Manager operating status for all nodes in the specified node's OpenVMS Cluster. For example:
/ALL/SERVER=NODE2.

Examples

1. This command displays the Job Management Manager operating status for the node (or the cluster, if the node is part of one) that you are logged in to.

```
SCHEDULE> SHOW STATUS
```

2. This command displays the Job Management Manager operating status for all nodes of a local OpenVMS Cluster.

```
SCHEDULE> SHOW STATUS/ALL
```

3. This command displays the Job Management Manager operating status for node NODE1 of a OpenVMS Cluster.

```
SCHEDULE> SHOW STATUS/CLUSTER_NODE=NODE1
```

4. This command writes the Job Management Manager operating status for your current node to a file named CURRENT.LOG.

```
SCHEDULE> SHOW STATUS/OUTPUT=CURRENT.LOG
```

5. This command displays the Job Management Manager operating status for remote node NODE2.

```
SCHEDULE> SHOW STATUS/SERVER=NODE2
```

6. This command displays the Job Management Manager operating status for all nodes in remote node NODE2's OpenVMS Cluster.

```
SCHEDULE> SHOW STATUS/ALL/SERVER=NODE2
```

STOP

STOP — Stops the manager on one node or all nodes in a local or remote OpenVMS Cluster. This is a management command.

Format

STOP [*/qualifiers*]

Qualifiers	Defaults
/ALL_NODES	None
/CLUSTER_NODE	User's node
/NODE	Same as /CLUSTER_NODE
/[NO]REQUEUE	/NOREQUEUE
/REMOTE_NODE	None
/SERVER	None

Parameters

None.

Qualifiers

/ALL_NODES

Formerly **/ALL**. Stops the manager on all nodes in the local OpenVMS Cluster.

/CLUSTER_NODE=**node**

Stops the manager on the specified node of the local OpenVMS Cluster.

If you omit this qualifier, the default is the node you are logged in to.

This qualifier is the same as the **/NODE** qualifier.

/NODE=**nodename**

This qualifier is the same as the **/CLUSTER_NODE** qualifier.

**/REQUEUE
NOREQUEUE (D)**

Stops all running jobs before stopping the manager. Jobs that have **/RESTART** enabled will immediately restart (fail over) on other nodes, if available.

Use **/REQUEUE** to ensure that jobs running when the operating system is brought down have the correct completion status.

/REMOTE_NODE=remote_node

Stops the manager on the specified remote agent.

For example, **/REMOTE_NODE="ultrixmachine"** stops the agent on node *ultrixmachine*.

/SERVER=remote_node

Stops the manager on the specified remote node.

If you use this qualifier with the **/ALL_NODES** qualifier, the command stops the manager on all nodes in the specified node's OpenVMS Cluster. For example: **/ALL_NODES/SERVER=NODE2**.

Examples

1. This command stops the manager on the node you are logged in to.

```
SCHEDULE> STOP
```

2. This command stops the manager on all nodes of a local OpenVMS Cluster.

```
SCHEDULE> STOP/ALL_NODES
```

3. This command stops the manager on node NODE1 of the local OpenVMS Cluster.

```
SCHEDULE> STOP/CLUSTER_NODE=NODE1
```

4. This command stops the manager on remote node NODE2.

```
SCHEDULE> STOP/SERVER=NODE2
```

5. This command stops the manager on all nodes in remote node NODE2's OpenVMS Cluster.

```
SCHEDULE> STOP/ALL_NODES/SERVER=NODE2
```

TYPE NSCHED\$:RETRY.LOG

TYPE NSCHED\$:RETRY.LOG — Shows a history of every notification retry event attempted from a remote node. This is a management command. You perform this command at the DCL prompt.

Description

This command displays the NSCHED\$:RETRY.LOG file. See the **SCHEDULE SET NETWORK INTERVAL_RETRY** command for a full description of the Job Management Manager retry features.

Format

```
TYPE NSCHED$:RETRY.LOG
```

Parameters

None.

Qualifiers

None.

Example

This command displays a history of every notification retry event attempted from a remote node.

```
$ TYPE NSCHED$:RETRY.LOG
```

Chapter 2. SCHEDULE CONFIG>

The following commands are entered at the `SCHEDULE Config>` prompt:

ADD NODE

`ADD NODE` — Adds a new node to the load balance group.

Description

Use this command to add a new node or list of nodes to a load balance group.

Format

```
ADD NODE node-name-or-node-list /qualifier
```

Parameter

`node-name-or-node-list`

The name of the cluster node you want to add to the load balance group or a comma-separated list of cluster node names. The group name can have up to 14 alphanumeric characters.

Qualifiers

```
/LOAD_BALANCE_GROUP=lbg_name
```

The name of the load balance group you want to add the nodes to.

Examples

This example creates a cluster node, `NODE1`, in `GROUP1` and a cluster node, `NODE2`, in

`GROUP2` and `GROUP3`:

```
$ SCHEDULE Config> ADD NODE NODE1
/LOAD_BALANCE_GROUP=GROUP1
Node NODE1 inserted in group GROUP1.
```

```
$ SCHEDULE Config> ADD NODE NODE2
/LOAD_BALANCE_GROUP=(GROUP2, GROUP3)
Node NODE2 inserted in group GROUP2.
Node NODE2 inserted in group GROUP3.
```

CREATE LOAD_BALANCE_GROUP

`CREATE LOAD_BALANCE_GROUP` — Creates a Load Balance Group. This is a management command.

Description

Use this command to create a new Load Balance Group or a list of new Load Balance Groups.

Format

```
CREATE LOAD_BALANCE_GROUP group-name-or-group-list
```

Parameter

group-name-or-group-list

The name of the load balance group you want to create or a comma-separated list of load balance group names you want to create. The group name can have up to 14 alpha-numeric characters.

Qualifiers

None.

Examples

This example creates load balance groups named GROUP1, GROUP2, GROUP3, and GROUP4.

```
$ SCHEDULE Config> CREATE LOAD_BALANCE_GROUP GROUP1
Group GROUP1 created.
$ SCHEDULE Config> CREATE LOAD_BALANCE_GROUP GROUP2, GROUP3, GROUP4
Group GROUP2 created.
Group GROUP3 created.
Group GROUP4 created.
```

DELETE LOAD_BALANCE_GROUP

DELETE LOAD_BALANCE_GROUP — Deletes a Load Balance Group. This is a management command.

Description

Use this command to delete a Load Balance Group or a list of Load Balance Groups.

Format

```
DELETE LOAD_BALANCE_GROUP group-name-or-group-list [/qualifier]
```

Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM

Parameter

group-name-or-group-list

The name of the load balance group you want to create or a comma-separated list of load balance group names you want to create. The group name can have up to 14 alpha-numeric characters.

Qualifiers

/CONFIRM

/NOCONFIRM (D)

Instructs the manager to prompt before deleting a Load Balance Group that is referenced by one or more jobs in the jobs database. The prompt is displayed once for each Load Balance Group listed in the delete command

Note

VSI recommends that you use the **/CONFIRM** qualifier if you are deleting more than one Load Balance group.

When you specify **/CONFIRM**, the manager uses the following prompt:

```
$SCHEDULE CONFIG DELETE LOAD_BALANCE_GROUP GROUP1 /CONFIRM
The Load Balance Group GROUP1 will also be removed from the nn jobs that
are still referencing it.
Do you want to proceed [YES]/NO ?
```

Where nn identifies the number of jobs that are assigned to run under this Load Balance Group.

You can enter one of the following answers:

To...	Answer...
Delete the Load Balance Group and remove it from all jobs that reference it	YES
Retain the Load Balance Group and all references	NO

Examples

The following example deletes load balance groups named GROUP1, GROUP2, GROUP3, and GROUP4:

```
$ SCHEDULE Config> DELETE LOAD_BALANCE_GROUP GROUP1
Group GROUP1 deleted.
```

```
$ SCHEDULE Config> DELETE LOAD_BALANCE_GROUP GROUP2, GROUP3, GROUP4
Group GROUP2 deleted.
Group GROUP3 deleted.
Group GROUP4 deleted.
```

The following example deletes the load balance group ALL_NODES and removes the group from the jobs referencing it:

```
$SCHEDULE CONFIG DELETE LOAD_BALANCE_GROUP ALL_NODES /CONFIRM
The Load Balance Group ALL_NODES will also be removed from the 2 jobs that
are still referencing it.
Do you want to proceed? [YES]/NO ? Y
Group ALL_NODES deleted.
```

LIST LOAD_BALANCE_GROUP

LIST LOAD_BALANCE_GROUP — Displays the load balance groups.

Description

Use this command to display the load balance groups. You can also use this command to view all information about each group in the list.

Format

```
LIST LOAD_BALANCE_GROUP [/qualifier]
```

Parameter

None.

Qualifiers

/FULL

Lists the cluster nodes that are members of each load balance group.

Examples

This example lists the Load Balance Groups:

```
$ SCHEDULE Config> LIST LOAD_BALANCE_GROUP
GROUP1
GROUP2
GROUP3
GROUP4
```

This example lists the Load Balance Groups and their associated nodes.

```
$ SCHEDULE Config> LIST LOAD_BALANCE_GROUP /FULL
Group GROUP1
NODE1
NODE2

Group GROUP2
NODE3
NODE4

Group GROUP3
NODE1
NODE2
NODE3
NODE4
```

REMOVE NODE

REMOVE NODE — Removes a node to the load balance group.

Description

Use this command to remove a node or list of nodes from a load balance group.

Format

```
REMOVE NODE node-name-or-node-list /qualifier
```

Parameter

node-name-or-node-list

The name of the cluster node you want to add to the load balance group or a comma-separated list of cluster node names. The group name can have up to 14 alpha-numeric characters.

Qualifiers

/LOAD_BALANCE_GROUP=lb_name

The name of the load balance group you want to remove the nodes from.

Examples

This example removes cluster node NODE1 from GROUP1 and cluster node NODE2 from GROUP2 and GROUP3:

```
$ SCHEDULE Config> REMOVE NODE NODE1
/LOAD_BALANCE_GROUP=GROUP1
Node NODE1 removed from group GROUP1.
```

```
$ SCHEDULE Config> REMOVE NODE NODE2
/LOAD_BALANCE_GROUP=GROUP2, GROUP3
Node NODE2 removed from group GROUP2.
Node NODE2 removed from group GROUP3.
```

SHOW LOAD_BALANCE_GROUP

SHOW LOAD_BALANCE_GROUP — Displays job information for a load balance group.

Description

Use this command to display job information based on the load balance group the jobs are part of.

Format

```
SHOW LOAD_BALANCE_GROUP group-name-or-group-list
```

Parameter

node-name-or-node-list

The name of the load balance group you want to create or a comma-separated list of load balance group names you want to create. The group name can have up to 14 alpha-numeric characters.

Qualifiers

None.

Examples

This example displays the information for **GROUP1**:

```
$ SCHEDULE Config> SHOW LOAD_BALANCE_GROUP GROUP1
Group GROUP1
NODE1
NODE2
```