# VMS Mount Utility Manual

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#### **April 1988**

This document describes the Mount Utility used to make disk and tape volumes available for data processing on VMS operating systems.

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Mount Utility Reference Manual,

Version 4.0.

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#### **Preface**

#### **Intended Audience**

This document is intended for many levels of user. It assumes, however, that all readers are familiar with the DIGITAL Command Language (DCL). For some Mount Utility (MOUNT) functions, you need a more extensive knowledge of VMS or familiarity with disk and magnetic tape media, or both. (The Guide to VMS Files and Devices and the Guide to Maintaining a VMS System provide significant information related to the Mount Utility.)

#### **Document Structure**

This document consists of the following four sections:

- Description—Provides a full description of the Mount Utility (MOUNT).
- Usage Summary—Outlines the following MOUNT information:
  - -Invoking the utility
  - -Exiting the utility
  - -Directing output
  - -Restrictions or privileges required
- Qualifiers—Describes MOUNT qualifiers, including format, parameters, and examples.
- Examples—Provides additional MOUNT examples.

#### **Associated Documents**

The Guide to VMS Files and Devices provides task-oriented instructions for preparing private disk and magnetic tape volumes for processing, as well as instructions for maintaining a VMS operating system environment. These instructions are intended to introduce the unsophisticated user to disk and magnetic tape operations, as well as to provide guidelines for the more experienced user and a system manager.

The VAX Volume Shadowing Manual describes how to mount volumes using the volume shadowing option.

### Preface

# Conventions

Convention	Meaning
RET	In examples, a key name (usually abbreviated) shown within a box indicates that you press a key on the keyboard; in text, a key name is not enclosed in a box. In this example, the key is the RETURN key. (Note that the RETURN key is not usually shown in syntax statements or in all examples; however, assume that you must press the RETURN key after entering a command or responding to a prompt.)
CTRL/C	A key combination, shown in uppercase with a slash separating two key names, indicates that you hold down the first key while you press the second key. For example, the key combination CTRL/C indicates that you hold down the key labeled CTRL while you press the key labeled C. In examples, a key combination is enclosed in a box.
\$ SHOW TIME 05-JUN-1988 11:55:22	In examples, system output (what the system displays) is shown in black. User input (what you enter) is shown in red.
\$ TYPE MYFILE.DAT	In examples, a vertical series of periods, or ellipsis, means either that not all the data that the system would display in response to a command is shown or that not all the data a user would enter is shown.
input-file,	In examples, a horizontal ellipsis indicates that additional parameters, values, or other information can be entered, that preceding items can be repeated one or more times, or that optional arguments in a statement have been omitted.
[logical-name]	Brackets indicate that the enclosed item is optional. (Brackets are not, however, optional in the syntax of a directory name in a file specification or in the syntax of a substring specification in an assignment statement.)
quotation marks apostrophes	The term quotation marks is used to refer to double quotation marks ("). The term apostrophe (') is used to refer to a single quotation mark.

# **New and Changed Features**

The Mount Utility (MOUNT) for VMS Version 5.0 includes the following new qualifiers:

```
/MULTI_VOLUME
/NOMULTI_VOLUME
```

The /MOUNT\_VERIFICATION qualifier now applies to magnetic tape volumes as well as to disk volumes.

This manual now includes the TAPE\_DATA option to the /CACHE=option qualifier, added in VMS Version 4.4. Also listed, but not described, are the qualifiers and qualifier options available to those who have the volume shadowing option.

# **MOUNT Description**

When you enter the DCL command MOUNT, the Mount Utility (MOUNT) does the following:

- 1 Ensures that the device has not been allocated to another user
- 2 Ensures that a volume is physically loaded on the device specified
- 3 Ensures that the label on the volume matches the label specified

For magnetic tape volumes, MOUNT also checks the volume accessibility field of the VOL1 label.

Normally, MOUNT allocates the device to the user who enters the command. However, mounting volumes with the /SHARE, /GROUP, or /SYSTEM qualifier deallocates the device, because the purpose of these qualifiers is to make the volume shareable.

Any subprocess in the process tree can mount or dismount a volume for the job. When a subprocess mounts a volume (for the job) as private, the master process of the job becomes the owner of this device. This provision is necessary because the subprocess may be deleted and the volume should remain privately mounted for this job. However, when a subprocess explicitly allocates a device and *then* mounts a private volume on this device, the subprocess retains device ownership. In this situation, only subprocesses with SHARE privilege have access to the device.

Upon successful completion of the operation, MOUNT notifies you with a message sent to SYS\$OUTPUT. If the operation fails for any reason, MOUNT notifies you with an error message.

# **MOUNT Usage Summary**

The Mount Utility (MOUNT) allows you to make a disk or magnetic tape volume available for processing.

#### **FORMAT**

MOUNT

device-name[:][,...] [volume-label[,...]] [logical-name[:]]

# COMMAND PARAMETERS

#### device-name[:][,...]

Specifies the physical device name or logical name of the device on which the volume is to be mounted. On a system where volumes are not connected to Hierarchical Storage Controllers (HSCs), use the following format:

#### ddcu:

The **dd** describes the device type of the physical devices used. For example, an RA60 disk drive is device type  $\mathbf{DJ}$ , and an RA80 or RA81 disk drive is device type  $\mathbf{DU}$ . The  $\mathbf{c}$  identifies the controller, and the  $\mathbf{u}$  identifies the unit number of the device.

On a system with Hierarchical Storage Controllers (HSCs), use one of the following formats:

#### node\$ddcu: allocation-class\$ddcu:

If your devices are dual ported to HSCs, use the allocation-class format. For example, \$125\$DUA23 represents an RA80 or RA81 disk with unit number 23. The disk's allocation class is \$125\$. The c part of the format is always A for HSC disks. TROLL\$DJA12 represents an RA60 disk with unit number 12. The device is connected to an HSC named TROLL. See the VMS VAXcluster Manual for more information about naming conventions.

Device names can be generic so that if no controller or unit number is specified, the system attempts to mount the first available device that satisfies those specified components of the device name(s). If no volume is physically mounted on the specified device, MOUNT displays a message requesting that you place the volume in the device; after you place the volume in the named drive, MOUNT then completes the operation.

If you specify more than one device name for a disk or magnetic tape volume set, separate the device names with either commas or plus signs. For a magnetic tape volume set, you can specify more volume labels than device names or more device names than volumes.

#### volume-label[,...]

Specifies the label on the volume. For disk volumes, labels can have from 1 through 12 characters; for magnetic tape volumes, labels can have from 0 through 6 characters.

### **MOUNT Usage Summary**

If you specify more than one volume label, separate the labels with either commas or plus signs. The volumes must be in the same volume set and the labels must be specified in ascending order according to relative volume number.

When you mount a magnetic tape volume set, the number of volume labels need not equal the number of device names specified. When a magnetic tape reaches the end-of-tape (EOT) mark, the system requests the operator to mount the next volume on one of the devices. The user is not informed of this request; only the operator is informed.

When you mount a disk volume set, each volume label specified in the list must correspond to a device name in the same position in the device name list.

The volume-label parameter is not required when you mount a volume with the /FOREIGN or /NOLABEL qualifier or when you specify /OVERRIDE=IDENTIFICATION. To specify a logical name when you enter either of these qualifiers, type any alphanumeric characters in the volume-label parameter position.

#### logical-name[:]

Defines a 1- through 255-alphanumeric character string logical name to be associated with the volume.

If you do not specify a logical name, the MOUNT command assigns the default logical name DISK\$volume-label to individual disk drives; it assigns the default logical name DISK\$volume-set-name to the device on which the root volume of a disk volume set is mounted. Note that if you specify a logical name in the mount request that is different from DISK\$volume-label or DISK\$volume-set-name, then two logical names are associated with the device.

If you do not specify a logical name for a magnetic tape drive, the MOUNT command assigns only one logical name, TAPE\$volume-label, to the first magnetic tape device in the list. No default logical volume set name is assigned in this case.

The MOUNT command places the name in the process logical name table, unless you specify /GROUP or /SYSTEM. In the latter cases, it places the logical names in the group or system logical name table.

Note: Avoid assigning a logical name that matches the file name of an executable image in SYS\$SYSTEM. Such an assignment prohibits you from invoking that image.

If the logical name of a volume is in a process-private table, then the name is not deleted when the volume is dismounted.

#### usage summary

To invoke the Mount Utility, enter the command MOUNT at the DCL prompt, followed by the device name, volume label, and logical name. If you omit a parameter, MOUNT prompts you for it. You must include a device name and a volume label (unless you specify /OVERRIDE=IDENTIFICATION or use the /FOREIGN or /NOLABEL qualifier); the logical name is optional.

The Mount Utility returns you to the DCL level after it either successfully completes the operation or fails, generating an error message. If you press CTRL/Y or CTRL/C, MOUNT aborts the operation and returns you to the DCL prompt.

### **MOUNT Usage Summary**

You can direct output from MOUNT operations with the /COMMENT and /MESSAGE qualifiers. When the mount operation requires operator assistance, use /COMMENT to specify additional information to be included with the operator request. The /COMMENT text string is sent to the operator log file and to SYS\$OUTPUT. The string must contain no more than 78 characters.

Use the /MESSAGE qualifier (this is the default) to send mount request messages to your current SYS\$OUTPUT device. If you specify /NOMESSAGE during an operator-assisted mount, messages are not sent to SYS\$OUTPUT; the operator sees them, however, if an operator terminal is enabled to receive messages.

Many MOUNT qualifiers require special privileges. Some qualifiers require different privileges according to which qualifier keyword you specify. See the individual qualifiers for details. Following is a list of MOUNT qualifiers that require special privileges:

Qualifier	Keywords	Required Privilege
/ACCESSED		OPER
/CACHE=	[NO]EXTENT[=n]	OPER
	[NO]FILE_ID[=n]	OPER
	[NO]QUOTA[=n]	OPER
/FOREIGN		VOLPRO <sup>1</sup>
/GROUP		GRPNAM
/MULTI_VOLUME		VOLPRO
/OVERRIDE=	ACCESSIBILITY	VOLPRO <sup>1</sup>
	EXPIRATION	VOLPRO <sup>1</sup>
	LOCK	VOLPRO <sup>1</sup>
/OWNER_UIC=	uic	VOLPRO <sup>1</sup>
/PROCESSOR=	UNIQUE	OPER
	SAME:device	OPER
	filespec	OPER and CMKRNL
/PROTECTION=	code	VOLPRO <sup>1</sup>
/QUOTA		VOLPRO <sup>1</sup>
/SYSTEM		SYSNAM
/WINDOWS=	n	OPER

<sup>&</sup>lt;sup>1</sup>Or your UIC must match the volume UIC.

# **MOUNT**MOUNT Qualifiers

### MOUNT QUALIFIERS

The following pages describe the Mount Utility qualifiers. The qualifiers are listed alphabetically and include examples, as needed. There are no subcommands for the Mount Utility.

## MOUNT /ACCESSED

# /ACCESSED

Specifies, for disk volumes, the approximate number of directories that will be in use concurrently on the volume.

#### **FORMAT**

/ACCESSED=n device-name

# QUALIFIER VALUE

n

Specifies the approximate number of directories that will be in use concurrently on the volume. Specify a value from 0 through 255 to override the default that was specified when the volume was initialized.

You need the user privilege OPER to use /ACCESSED.

#### **EXAMPLE**

\$ MOUNT/ACCESSED=150 DBA1 WORK

This command requests the volume labeled WORK to be mounted on DBA1, specifying 150 as the number of active directories on the volume.

# /ASSIST

Directs the mount operation to allow operator or user intervention if the mount request fails.

#### **FORMAT**

/ASSIST device-name /NOASSIST device-name

#### **DESCRIPTION**

When you specify the /ASSIST qualifier, MOUNT notifies the user and certain classes of operator if a failure occurs during the mount operation. If a failure occurs, the operator or user can either abort the operation or correct the error condition to allow the operation to continue.

The operator-assist messages are sent to all operator terminals that are enabled to receive messages; magnetic tape mount requests go to TAPE and DEVICE operators, and disk mount requests go to DISK and DEVICE operators. Thus, if you need operator assistance while mounting a disk device, a message is sent to DISK operators. See the description of the REPLY command in the VMS DCL Dictionary for more information about enabling and disabling operator terminals.

Any operator reply to a mount request is written to SYS\$OUTPUT to be displayed on the user's terminal or written in a batch job log.

If no operator terminal is enabled to receive and respond to a mount assist request, a message is displayed informing the user of the situation. If a volume is placed in the requested drive, no additional operator response is necessary. If the mount request originates from a batch job and no operator terminal is enabled to receive messages, the mount is aborted. See the VMS System Messages and Recovery Procedures Reference Manual for a description of the error messages and their suggested user actions.

The default is /ASSIST and can be overridden by /NOASSIST.

#### **EXAMPLE**

\$ MOUNT/NOASSIST DMAO: DOC WORK

%MOUNT-I-MOUNTED, DOC

mounted on \_NODE\$DMAO:

This command mounts an RK07 volume labeled DOC and assigns the logical name WORK. The /NOASSIST qualifier signals MOUNT that no operator intervention is necessary.

# MOUNT /AUTOMATIC

# /AUTOMATIC

Determines whether MOUNT enables or disables automatic volume switching and labeling for magnetic tape.

#### **FORMAT**

/AUTOMATIC device-name /NOAUTOMATIC device-name

#### **DESCRIPTION**

The default is /AUTOMATIC. If you have multiple magnetic tape drives allocated to a volume set, the Magnetic Tape Ancillary Control Process (MTAACP) performs the volume switch by sequentially selecting the next available drive allocated to the volume set. The MTAACP expects the next reel of the volume set to be loaded on that drive.

If the MTAACP is writing to the volume set, it creates a label and initializes the magnetic tape with that label and the protections established for the first magnetic tape of the volume set. If it is reading from the volume set, the MTAACP generates the label and attempts to mount the next magnetic tape with that label. If the drive has the wrong magnetic tape (or no magnetic tape) loaded, the MTAACP sends a message to the operator's console to prompt for the correct magnetic tape.

The label generated by the MTAACP fills the 6-character volume identifier field. The first four characters of the field contain the first four characters of the label specified in the MOUNT command, padded with an underscore when the label is not at least four characters. The fifth and sixth characters contain the relative volume number for this reel in the volume set.

If you specify /NOAUTOMATIC, the MTAACP requires operator intervention to switch to the next drive during end-of-tape processing, and requires that the operator specify a label for each new reel added to a volume set.

#### **EXAMPLE**

\$ MOUNT/NOAUTOMATIC MTAO: ABCD, EFGH

This command instructs MOUNT not to generate its own label for the second volume, but to use the ones supplied with the MOUNT command. If the second volume is not already labeled, then the operator must use REPLY /INIT and supply the second label.

# /BIND

Creates a volume set of one or more disk volumes or adds one or more volumes to an existing volume set.

#### **FORMAT**

/BIND=volume-set-name device-name[,...] volume-label[,...]

#### **KEYWORD**

#### volume-set-name

Specifies a 1- through 12-alphanumeric-character name identifying the volume set.

#### **DESCRIPTION**

You must specify the /BIND qualifier when you first create the volume set or each time you add a volume to the set. To dismount an individual volume of the volume set, you must use the DISMOUNT qualifier /UNIT. Otherwise, dismounting an individual volume dismounts the entire volume set.

When you create a volume set, the volumes specified in the volume-label list are assigned relative volume numbers based on their position in the label list. The first volume specified becomes the root volume of the set.

When you add a volume or volumes to a volume set, the first volume label specified must be that of the root volume, or the root volume must already be on line.

Note that if you attempt to create a volume set from two or more volumes that already contain files and data, the file system does not issue an error message when you issue the MOUNT/BIND command. However, the volumes are unusable as a volume set because the directory structures are not properly bound.

#### **EXAMPLE**

\$ MOUNT/BIND=LIBRARY DMAO:,DMA1:,DMA2: BOOK1,BOOK2,BOOK3

This command creates a volume set named LIBRARY. This volume set consists of the volumes labeled BOOK1, BOOK2, and BOOK3, which are mounted physically on devices DMA0, DMA1, and DMA2, respectively.

# MOUNT /BLOCKSIZE

# /BLOCKSIZE

Specifies the default block size for magnetic tape volumes.

#### **FORMAT**

#### /BLOCKSIZE=n device-name

#### QUALIFIER VALUE

#### n

Specifies the default block size value for magnetic tape volumes. Valid values are in the range 20 through 65,532 for VMS RMS operations, and 18 through 65,534 for non-VMS RMS operations. By default, records are written to magnetic tape volumes in 2048-byte blocks. For foreign or unlabeled magnetic tapes, the default is 512 bytes.

#### DESCRIPTION

You must specify /BLOCKSIZE in two situations:

- When mounting magnetic tapes that do not have HDR2 labels. For these
  magnetic tapes, you must specify the block size. For example, you must
  specify /BLOCKSIZE=512 to mount an RT-11 magnetic tape.
- When mounting magnetic tapes that contain blocks whose size exceeds the default block size (2048 bytes). In this case, specify the size of the largest block for the block size.

#### **EXAMPLE**

\$ MOUNT/FOREIGN/BLOCKSIZE=1000 MTA1:

In this example, the /BLOCKSIZE qualifier specifies a block size of 1000 bytes; the default for a magnetic tape mounted with the /FOREIGN qualifier is 512.

# /CACHE

For disks, controls whether caching limits established at system generation time are disabled or overridden. With the TAPE\_DATA option, enables write caching for the tape controller specified (if the tape controller supports write caching).

#### **FORMAT**

/CACHE=(keyword[,...]) /NOCACHE

#### **KEYWORDS**

# EXTENT[=n] NOEXTENT

Enables or disables extent caching. To enable extent caching, you must have the operator user privilege (OPER) and you must specify n, the number of entries in the extent cache. Note that NOEXTENT is equivalent to EXTENT=0; both disable extent caching.

# FILE\_ID[=n] NOFILE\_ID

Enables or disables file identification caching. To enable file identification caching, you must have the operator user privilege (OPER) and you must specify n, the number of entries, as a value greater than 1. Note that NOFILE\_ID is equivalent to FILE\_ID=1; both disable file identification caching.

#### LIMIT=n

Specifies the maximum amount of free space in the extent cache in one-thousandths of the currently available free space on the disk.

#### QUOTA[=n] NOQUOTA

Enables or disables quota caching. To enable quota caching, you must have the operator user privilege (OPER) and you must specify n, the number of entries in the quota cache. Normally n is set to the maximum number of active users expected for a disk with quotas enabled. Both NOQUOTA and QUOTA=0 disable quota file caching.

#### TAPE\_DATA

Enables write caching for a magnetic tape device if the tape controller supports write caching. /NOCACHE is the default for mounting tape devices. You must specify TAPE\_DATA to enable write caching. If the tape controller does not support write caching, the keyword is ignored.

#### WRITETHROUGH

Disables writeback caching, which writes only the file headers of files open for write when the files are closed. Thus, if you specify the WRITETHROUGH keyword, file headers are written to the disk on every file header operation.

## MOUNT /CACHE

#### **DESCRIPTION**

Used with the disk options, the /CACHE qualifier overrides one or more of the present disk caching limits established at system generation time. Used with the TAPE\_DATA option, the /CACHE qualifier enables write caching for the tape controller specified.

If you specify more than one option, separate them by commas and enclose the list in parentheses. The options [NO]EXTENT, [NO]FILE\_ID, LIMIT, and [NO]QUOTA apply only to a disk device. The option TAPE\_DATA applies only to a tape device.

If you specify /NOCACHE for a disk device, all caching is disabled for this volume. Note that the /NOCACHE qualifier is equivalent to /CACHE=(NOEXTENT,NOFILE\_ID,NOQUOTA,WRITETHROUGH).

If you specify /NOCACHE for a magnetic tape device, the tape controller's write cache is disabled for this volume. This is the default for the TAPE\_DATA option.

#### **EXAMPLES**

%MOUNT-I-MOUNTED, FILES mounted on \_NODE\$DMAO:

This command mounts an RK07 device labeled FILES and assigns the logical name WORK. The /CACHE qualifier enables an extent cache of 60 entries, a file identification cache of 60 entries, and a quota cache of 20; it disables writeback caching.

\$ MOUNT/CACHE=TAPE\_DATA MUAO: TAPE
%MOUNT-I-MOUNTED, TAPE mounted on \_NODE\$MUAO:

This command mounts the volume TAPE on device MUA0 and instructs MOUNT to enable the tape controller's write cache for MUA0.

# /CLUSTER

Specifies that after the volume is successfully mounted on the local node, or if it is already mounted /SYSTEM on the local node, it is to be mounted on every other node in the existing VAXcluster (that is, the volume is mounted clusterwide).

#### **FORMAT**

#### /CLUSTER device-name

#### **DESCRIPTION**

Only system or group volumes can be mounted clusterwide. If you specify the /CLUSTER qualifier with neither the /SYSTEM nor the /GROUP qualifier, the default is /SYSTEM. Note that you must use a cluster device-naming convention. Use either node\$device-name or allocation-class\$device-name as required by your configuration.

You need the user privileges GRPNAM and SYSNAM, respectively, to mount group and system volumes clusterwide.

If the system is not a member of a VAXcluster, the /CLUSTER qualifier has no effect.

## MOUNT /CLUSTER

#### **EXAMPLE**

**\$** MOUNT/CLUSTER DOPEY\$DMA1: SNOWWHITE DWARFDISK

%MOUNT-I-MOUNTED, SNOWWHITE mounted on \_DOPEY\$DMA1:

\$ SHOW DEVICE/FULL DWARFDISK:

Disk \$2\$DMA1: (DOPEY), device type RK07, is online, mounted, file-oriented device, shareable, served to cluster via MSCP Server, error logging is enabled.

Error count	0	Operations completed	159
Owner process	11 11	Owner UIC [92	28,49]
Owner process ID	00000000	Dev Prot S:RWED,O:RWED,G:F	RW,W:R
Reference count	1	Default buffer size	512
Total blocks	53790	Sectors per track	22
Total cylinders	815	Tracks per cylinder	3
Allocation class	2	•	
Volume label	"SNOWWHITE"	Relative volume number	0
Cluster size	3	Transaction count	1
Free blocks	51720	Maximum files allowed	6723
Extend quantity	5	Mount count	7
Mount status	System	Cache name "_\$255\$DWARF1:XQPC	CACHE"
Extent cache size	64	Maximum blocks in extent cache	5172
File ID cache size	64	Blocks currently in extent cache	0
Quota cache size	25	Maximum buffers in FCP cache	349

Volume status: subject to mount verification, file high-water marking, write-through caching enabled.

Volume is also mounted on DOC, HAPPY, GRUMPY, SLEEPY, SNEEZY, BASHFUL.

This MOUNT/CLUSTER command mounts the volume SNOWWHITE on DOPEY\$DMA1, then proceeds to mount the volume clusterwide. The SHOW DEVICE/FULL command displays information about the volume, including the other nodes on which it is mounted.

# /COMMENT

Specifies additional information to be included with the operator request when the mount operation requires operator assistance.

#### **FORMAT**

/COMMENT="string" device-name

#### **KEYWORD**

#### string

Specifies the text string that is output to the operator log file and the current SYS\$OUTPUT device. The string must contain no more than 78 characters.

#### **EXAMPLES**

\$ MOUNT DYA1: TESTSYS/COMMENT="Volume in cabinet 6."

%MOUNT-I-OPRQST, Please mount volume TESTSYS in device \_DYA1:
Volume in cabinet 6.

%MOUNT-I-MOUNTED TESTSYS mounted on \_DYA1:
%MOUNT-I-OPRQSTDON, operator request canceled - mount
completed successfully

This command requests the operator to mount the disk volume TESTSYS on the device DYA1. Notice that the /COMMENT qualifier is used to inform the operator of the location of the volume. After the operator places the volume in DYA1, MOUNT retries the operation. After the operation completes, the operator request is canceled.

\$ MOUNT DYA1: TESTSYS/COMMENT="Volume in cabinet 6."

\$ MOUNT-I-OPRQST, Please mount volume TESTSYS in device \_DYA1:

Volume in cabinet 6.

\$ MOUNT-I-OPREPLY, This is a '/pending' response from the operator.

31-DEC-1988 10:27:38.15, request 2 pending by operator TTB6

\$ MOUNT-I-OPREPLY, This is a '/abort' response from the operator.

31-DEC-1988 10:29:59.34, request 2 aborted by operator TTB6

\$ MOUNT-F-OPRABORT, mount aborted by operator

This command is the same as in the previous example. However, in this example, because the requested device is in use, the operator aborts the mount.

\$ MOUNT DYAO: TESTSYS/COMMENT="Volume in cabinet 6, once again with feeling."

%MOUNT-I-OPRQST, Please mount volume TESTSYS in device \_DYAO:

Volume in cabinet 6, once again with feeling.

%MOUNT-I-OPREPLY, Substitute DYA1:

31-DEC-1988 10:43:42.30, request 3 completed by operator TTB6

%MOUNT-I-MOUNTED, TESTSYS mounted on \_DYA1:

This command requests the operator to mount the volume TESTSYS on the device DYA0. In this example, the operator notices that the requested device is in use and redirects the mount to device DYA1.

# MOUNT /CONFIRM

# /CONFIRM

Applicable only if you have the volume shadowing option. See the  $\it{VAX}$   $\it{Volume Shadowing Manual}$ .

# /COPY

Applicable only if you have the volume shadowing option. See the  $\it{VAX}$   $\it{Volume Shadowing Manual}$ .

## MOUNT /DATA\_CHECK

# /DATA\_CHECK

Overrides the read-check or write-check option (or both) specified for a volume when it was initialized.

### FORMAT /DATA\_CHECK[=(keyword[,...])] device-name

### KEYWORDS READ

Performs checks following all read operations.

#### WRITE

Performs checks following all write operations.

#### **DESCRIPTION**

You can specify either or both of the keywords. If you specify more than one keyword, separate them by commas and enclose the list in parentheses.

If you specify the /DATA\_CHECK qualifier without specifying a keyword, MOUNT defaults to /DATA\_CHECK=WRITE.

#### **EXAMPLE**

\$ MOUNT/DATA\_CHECK=READ CLEMENS\$DBA2: SAM BOOK

This command mounts a volume labeled SAM on CLEMENS\$DBA2 and assigns the logical name BOOK. The /DATA\_CHECK=READ qualifier overrides a previous INITIALIZE/DATA\_CHECK=WRITE specification, so that subsequent read operations on BOOK are subject to data-checking operations.

# /DENSITY

Specifies the density (in bpi) at which a foreign or unlabeled magnetic tape is to be written.

#### **FORMAT**

#### [/FOREIGN][/NOLABEL]/DENSITY=n device-name

# QUALIFIER VALUE

#### n

Specifies a density of 800 bpi, 1600 bpi, or 6250 bpi, if supported by the magnetic tape drive. If you do not specify a density for a magnetic tape that was previously written, the density defaults to that of the first record on the volume.

#### **DESCRIPTION**

The specified density is used only if you specify /FOREIGN or /NOLABEL and the first operation performed on the magnetic tape is a write.

If you specify /LABEL, or if the first operation on the magnetic tape is a read, the magnetic tape is read or written at the density at which the first record on the magnetic tape is recorded. The default is /LABEL.

#### **EXAMPLE**

\$ MOUNT/FOREIGN/DENSITY=1600 MFAO: TAPE

This command mounts a foreign magnetic tape on drive MFA0 and assigns the logical name TAPE. The /DENSITY qualifier specifies that the magnetic tape is to be written at a density of 1600 bpi.

## MOUNT /EXTENSION

# /EXTENSION

Specifies the number of blocks by which disk files are to be extended on the volume unless otherwise specified by an individual command or program request.

#### **FORMAT**

/EXTENSION=n device-name

# QUALIFIER VALUE

n

Specifies a value from 0 through 65,535 to override the value specified when the volume was initialized.

#### **EXAMPLE**

\$ MOUNT/EXTENSION=64 DBAO: DOC WORK

This command mounts a volume labeled DOC on DBA0, assigns the logical name WORK, and specifies a default block extent of 64 for the files on WORK.

# /FOREIGN

Indicates that the volume is not in the standard format used by the VMS operating system.

#### **FORMAT**

#### /FOREIGN device-name

#### **DESCRIPTION**

You should use the /FOREIGN qualifier when a magnetic tape volume is not in the standard ANSI format, or when a disk volume is not in Files-11 format.

If you mount a volume with the /FOREIGN qualifier, the program you use to read the volume must be able to process the labels on the volume, if any. The VMS operating system does not provide an ancillary control process (ACP) to process the volume.

You must mount DOS-11 and RT-11 volumes with the /FOREIGN qualifier and process them with the Exchange Utility (EXCHANGE). See the VMS Exchange Utility Manual.

The default protection applied to foreign volumes is RWLP (Read, Write, Logical I/O, Physical I/O) for the system and owner. If you also specify /GROUP, group members are also given RWLP access. If you specify /SYSTEM or /SHARE, the group and world are both given RWLP access. If you mount a volume currently in Files–11 format with the /FOREIGN qualifier, you must have the user privilege VOLPRO, or your UIC must match the UIC on the volume.

#### **EXAMPLES**

**1 \$** MOUNT/FOREIGN MTA1: TAPE

This command mounts a foreign magnetic tape on drive MTA1.

\$ MOUNT/FOREIGN DMA2: SAVEDISK

This command mounts an RK07 device as a foreign volume on DMA2 and assigns the logical name SAVEDISK. As a volume that is not file structured, SAVEDISK can be used for sequential-disk BACKUP save operations.

### MOUNT /GROUP

# /GROUP

Makes the volume available to other users with the same group number in their UICs as the user entering the MOUNT command.

#### **FORMAT**

/GROUP device-name

#### **DESCRIPTION**

The logical name for the volume is placed in the group logical name table. You must have the user privilege GRPNAM to use the /GROUP qualifier.

Note that if the volume is owned by a group other than yours, access may be denied because of the volume protection.

#### **EXAMPLES**

\$ MOUNT/GROUP DB1:, DB2:, DB3: -\$ PAYVOL1, PAYVOL2, PAYVOL3 PAY

This command mounts and makes available on a group basis the volume set consisting of volumes labeled PAYVOL1, PAYVOL2, and PAYVOL3. The logical name PAY is assigned to the set; anyone wanting to access files on these volumes can refer to the set as PAY.

\$ MOUNT/GROUP/BIND=MASTER\_PAY -\_\$ DB4: PAYVOL4

This command adds the volume labeled PAYVOL4 to the existing volume set MASTER\_PAY. The root volume for the volume set must be on line when you enter this command.

# /HDR3

Controls whether ANSI standard header label 3 is written on a magnetic tape volume.

#### **FORMAT**

/HDR3 device-name /NOHDR3 device-name

#### **DESCRIPTION**

By default, header label 3 is written. You can specify the /NOHDR3 qualifier to write magnetic tapes that are to be used on other systems that do not process HDR3 labels correctly.

#### **EXAMPLE**

\$ INITIALIZE MTAO: ABCD
\$ MOUNT/NOHDR3 MTAO: ABCD

The INITIALIZE and MOUNT commands prepare an ANSI-formatted magnetic tape for processing. The /NOHDR3 qualifier specifies that no HDR3 labels are to be written, thus creating a magnetic tape that can be transported to systems that do not process implementation-dependent labels correctly.

# MOUNT /INITIALIZE=CONTINUATION

# /INITIALIZE=CONTINUATION

Specifies that any volume added to the magnetic tape volume set is initialized before you can write to the volume.

**FORMAT** 

/INITIALIZE=CONTINUATION device-name

### **EXAMPLE**

\$ MOUNT/INITIALIZE=CONTINUATION MTAO: ABCD

This /INITIALIZE=CONTINUATION qualifier instructs the MOUNT command to assign its own continuation label. In this case, the operator can enter the command REPLY/TO=n, and the system assigns a label derived from the original. It uses the label specified in the MOUNT command and adds the appropriate number (ABCD02, ABCD03, and so forth).

# /LABEL

Indicates that the volume is in the standard format used by the VMS operating system; that is, a magnetic tape volume is in the standard ANSI format, or a disk volume is in Files-11 format.

**FORMAT** 

/LABEL device-name /NOLABEL device-name

**DESCRIPTION** 

The default is /LABEL.

Note that /NOLABEL is equivalent to /FOREIGN.

#### **EXAMPLE**

\$ MOUNT/LABEL MFA1: TAPE

This command mounts an ANSI-labeled magnetic tape on MFA1 and assigns the logical name TAPE.

# MOUNT /MESSAGE

# /MESSAGE

Causes mount request messages to be sent to your current SYS\$OUTPUT device.

#### **FORMAT**

/MESSAGE device-name /NOMESSAGE device-name

#### **DESCRIPTION**

If you specify /NOMESSAGE during an operator-assisted mount, messages are not output to SYS\$OUTPUT; the operator sees them, however, provided an operator terminal is enabled.

The default is /MESSAGE.

#### **EXAMPLE**

\$ MOUNT/NOMESSAGE DLAO: SLIP DISC

In this example an RL02 device labeled SLIP is mounted on drive DLA0 and is assigned the logical name DISC. The /NOMESSAGE qualifier disables the broadcast of mount request messages to the user terminal.

# /MOUNT\_VERIFICATION

Specifies that the device is a candidate for mount verification.

**FORMAT** 

/MOUNT\_VERIFICATION device-name /NOMOUNT\_VERIFICATION device-name

**DESCRIPTION** 

The /MOUNT\_VERIFICATION qualifier affects Files-11 Structure Level 2 disks, and as of VMS Version 5.0 affects foreign and ANSI-labeled magnetic tape volumes. The default is /MOUNT\_VERIFICATION.

### **EXAMPLE**

\$ MOUNT/CACHE=(NOEXTENT,NOFILE\_ID,NOQUOTA,WRITETHROUGH) \_\$ /NOMOUNT\_VERIFICATION DMAO: FILES WORK
%MOUNT-I-MOUNTED, FILES mounted on \_NODE\$DMAO:

This command mounts an RK06 or RK07 device labeled FILES and assigns the logical name WORK. The /CACHE qualifier disables extent caching, file identification caching, quota caching, and writeback caching; the /NOMOUNT\_VERIFICATION qualifier disables mount verification.

# /MULTI\_VOLUME

For foreign or unlabeled magnetic tape volumes, determines whether you override MOUNT volume-access checks. Use /MULTI\_VOLUME to override access checks on volumes that do not contain labels that MOUNT can interpret. If you have software produced before VMS Version 5.0 that processes multiple-volume, foreign-mounted tape volumes without specifically mounting and dismounting each reel, you may now need to mount the first volume with the /MULTI\_VOLUME qualifier.

## **FORMAT**

# /MULTI\_VOLUME device-name /NOMULTI\_VOLUME device-name

## **DESCRIPTION**

Use this qualifier when a utility that supports multiple-volume, foreign-mounted magnetic tape sets needs to process subsequent volumes, and these volumes do not contain labels that the VMS Mount Utility can interpret.

As of VMS Version 5.0, by default, all tape volumes are subject to the complete access checks of the VMS Mount Utility (MOUNT). Some user-written and vendor-supplied utilities used prior to VMS Version 5.0 may mount only the first tape in a foreign tape set. To make these utilities compatible with VMS Version 5.0, you should alter them to perform explicit calls to the \$MOUNT and \$DISMOU system services for each reel in the set. As an alternative, you can now mount the magnetic tape sets to be used by these utilities with the /MULTI\_VOLUME qualifier.

You must specify the /FOREIGN qualifier with the /MULTI\_VOLUME qualifier and you must have the user privilege VOLPRO. The default is /NOMULTI\_VOLUME.

Note: The VMS Backup Utility has been modified for VMS Version 5.0 to explicitly perform calls to the \$MOUNT and \$DISMOU system services on each reel of a foreign-mounted magnetic tape set. For additional information, see the section on multiple volume save sets in the VMS Backup Utility Manual.

### **EXAMPLE**

\$ MOUNT/FOREIGN/MULTI\_VOLUME MUAO:

This command mounts a tape volume set. MOUNT performs an access check on the first volume in the set and proceeds without checks to subsequent reels as they are needed for processing.

# **/OVERRIDE**

Inhibits one or more protection checks that the MOUNT command performs.

## **FORMAT**

/OVERRIDE=(keyword[,...]) device-name

### **KEYWORDS**

### **ACCESSIBILITY**

For magnetic tapes only. If the installation allows, this keyword overrides any character in the Accessibility Field of the volume. The necessity of this keyword is defined by the installation. That is, each installation has the option of specifying a routine that the magnetic tape file system will use to process this field. By default, VMS provides a routine that checks this field in the following manner:

- If the magnetic tape was created on a version of VMS that conforms to Version 3 of ANSI, then you must use this keyword to override any character other than an ASCII space.
- If a VMS protection is specified and the magnetic tape conforms to an ANSI standard that is higher than Version 3, then you must use this keyword to override any character other than an ASCII 1.

To use the ACCESSIBILITY keyword, you must have the user privilege VOLPRO or own the volume.

## **EXPIRATION**

For magnetic tapes only. Allows you to override the expiration dates of a volume and its files. Use this keyword when the expiration date in the first file header label of any file that you want to overwrite has not been reached. You must have the user privilege VOLPRO or your UIC must match the UIC written on the volume.

### IDENTIFICATION

Overrides processing of the volume identifier in the volume label. Use this keyword to mount a volume for which you do not know the label. Only the volume identifier field is overridden. Volume protection, if any, is preserved. The volume must be mounted /NOSHARE (either explicitly or by default).

#### LOCK

Directs MOUNT not to write-lock the volume as a consequence of certain errors encountered while mounting it. Use this keyword when you are mounting a damaged volume to be repaired using the Verify Utility. You must have VOLPRO privilege or own the volume to use the LOCK keyword.

### OWNER\_IDENTIFIER

For magnetic tapes only. Overrides the processing of the owner identifier field. Use this keyword to interchange protected magnetic tapes between VMS and other DIGITAL operating systems.

# MOUNT /OVERRIDE

### **SETID**

For magnetic tapes only. Prevents MOUNT from checking the file-set identifier in the first file header label of the first file on a continuation volume. Use this keyword only for ANSI-labeled volumes on which the file-set identifier of the first file on a continuation volume differs from the file-set identifier of the first file of the first volume that was mounted.

### SHADOW\_MEMBERSHIP

Applicable only if you have the volume shadowing option. See the VAX Volume Shadowing Manual.

If you specify more than one keyword, separate them with commas and enclose the list in parentheses.

You need the user privileges OPER and VOLPRO to specify /OVERRIDE=(ACCESSIBILITY, EXPIRATION) along with the /FOREIGN qualifier; otherwise, the magnetic tape is not read.

## **EXAMPLE**

\$ MOUNT/OVERRIDE=IDENTIFICATION MFAO:

This command overrides the volume identification field, thus mounting a magnetic tape on MFA0 without a label specification.

# /OWNER\_UIC

Requests that the specified UIC be assigned ownership of the volume while it is mounted, overriding the ownership recorded on the volume. Or, if you are mounting a volume using the /FOREIGN qualifier, requests an owner UIC other than your current UIC.

## **FORMAT**

/OWNER\_UIC=uic device-name

## **KEYWORD**

### UIC

Specifies the User Identification Code (UIC) in the following format:

### [group,member]

You must use brackets in the UIC specification. The group number is an octal number in the range 0 through 37776; the member number is an octal number in the range 0 through 17776.

To use the /OWNER\_UIC qualifier for a Files-11 volume you must have the user privilege VOLPRO, or your UIC must match the UIC written on the volume.

## **EXAMPLE**

\$ MOUNT/OWNER\_UIC=[016,360] DRA3: WORK

This command mounts a disk device labeled WORK on DRA3 and assigns an owner UIC of [016,360].

# /PROCESSOR

For magnetic tapes and Files-11 Structure Level 1 disks, requests that the MOUNT command associate an Ancillary Control Process (ACP) to process the volume. The /PROCESSOR qualifier causes MOUNT to override the default manner in which ACPs are associated with devices.

For Files-11 Structure Level 2 disks, controls block cache allocation.

### **FORMAT**

## /PROCESSOR=keyword device-name

### **KEYWORDS**

### UNIQUE

For magnetic tape and Files-11 Structure Level 1 disks, creates a new process to execute a copy of the default ACP image for the specified device type or controller.

For Files-11 Structure Level 2 disks, allocates a separate block cache.

### SAME: device

For magnetic tape and Files-11 Structure Level 1 disks, uses the same ACP process currently being used by the device specified.

For Files–11 Structure Level 2 disks, takes the block cache allocation from the specified device.

## filespec

Creates a new process to execute the ACP image specified by the file specification (for example, a modified or a user-written ACP). You cannot use wildcard characters, or node and directory names in the file specification.

To use this keyword, you need CMKRNL and OPER privilege.

You must have the operator user privilege OPER to use the  $\protect\operatorname{PROCESSOR}$  qualifier.

### **EXAMPLE**

**\$** MOUNT/PROCESSOR=SAME:MTA1: MFAO:

This command directs MOUNT to mount a magnetic tape on MFA0 using the same ACP process currently associated with MTA1.

# /PROTECTION

Specifies the protection code to be assigned to the volume.

### **FORMAT**

## /PROTECTION=code device-name

### **KEYWORD**

#### code

Specifies the protection code according to the standard syntax rules for specifying protection. If you omit a protection category, that category of user is denied all access.

If you do not specify a protection code, the default is the protection that was assigned to the volume when it was initialized.

### **DESCRIPTION**

If you specify the /PROTECTION qualifier when you mount a volume with the /SYSTEM or /GROUP qualifier, the specified protection code overrides any access rights implied by the other qualifiers.

If you specify the /FOREIGN qualifier, the Execute and Delete access codes are synonyms for Logical and Physical. You can, however, specify the access codes P (Physical I/O) or L (Logical I/O), or both, to restrict the nature of input/output operations that different user categories can perform.

To use the /PROTECTION qualifier on a Files-11 volume, you must have the user privilege VOLPRO or your UIC must match the UIC written on the volume.

### **EXAMPLE**

\$ MOUNT/PROTECTION=(SYSTEM: RWE, O: RWED, G: RE, W:R) DBA1: WORKDISK

This command mounts a device labeled WORKDISK on DBA1 and assigns a protection code. Access to the volume will be READ, WRITE, and EXECUTE for SYSTEM users; READ, WRITE, EXECUTE, and DELETE for OWNER; READ and EXECUTE for GROUP users; and READ-only for users in the WORLD category.

## MOUNT /QUOTA

# /QUOTA

Controls whether or not quotas are to be enforced on the specified disk volume.

## **FORMAT**

/QUOTA device-name /NOQUOTA device-name

## **DESCRIPTION**

The default is /QUOTA, which enforces the quotas for each user. The /NOQUOTA qualifier inhibits this checking. To specify the /QUOTA qualifier, you must have the user privilege VOLPRO or your UIC must match the UIC written on the volume.

## **EXAMPLE**

\$ MOUNT/OWNER\_UIC=[016,360]/NOQUOTA DRA3: WORK

This command specifies that the disk volume labeled WORK on DRA3 has an owner UIC of [016,360] and no quotas enforced.

# /REBUILD

Controls whether or not MOUNT performs a rebuild operation on a disk volume.

## **FORMAT**

/REBUILD device-name /NOREBUILD device-name

### **DESCRIPTION**

If a disk volume is improperly dismounted (such as during a system failure), you must rebuild it to recover any caching limits that were enabled on the volume at the time of the dismount. By default, MOUNT attempts the rebuild. For a successful rebuild operation that includes reclaiming all of the available free space, you must mount *all* of the volume set members.

The rebuild may consume a considerable amount of time, depending on the number of files on the volume and, if quotas are in use, on the number of different file owners.

The following caches may have been in effect on the volume before it was dismounted:

- Preallocated free space (EXTENT cache)
- Preallocated file numbers (FILE\_ID cache)
- Disk quota usage caching (QUOTA cache)

If caching was in effect for preallocated free space or file numbers, the rebuild time is directly proportional to the greatest number of files that ever existed on the volume at one time. If disk quota caching was in effect, you can expect additional time that is proportional to the square of the number of entries in the disk quota file.

If none of these items were in effect, the rebuild is not necessary and does not occur.

If you use the /NOREBUILD qualifier, devices can be returned to active use immediately. You can then perform the rebuild later with the DCL command SET VOLUME/REBUILD (see the VMS DCL Dictionary).

For information about how to rebuild the system disk, refer to the Guide to Setting Up a VMS System.

### **EXAMPLES**

**\$** MOUNT/REBUILD NODE\$DBA2: WORKDISK

%MOUNT-I-MOUNTED, WORKDISK mounted on \_NODE\$DBA2:

%MOUNT-I-REBUILD, volume was improperly dismounted; rebuild in progress

In this example, the volume WORKDISK is mounted on NODE\$DBA2. Because the volume is found to have been improperly dismounted and the /REBUILD qualifier is in effect, MOUNT displays a message and proceeds to rebuild the volume.

# MOUNT /REBUILD

2

In this example, the volume WORKDISK is found to have been improperly dismounted, but because the /NOREBUILD qualifier is specified, a rebuild is not performed. Instead, MOUNT displays a message to inform you that the rebuild is needed, and proceeds to make WORKDISK available for use as is. You can rebuild the volume later with the DCL command SET VOLUME /REBUILD.

# /RECORDSIZE=n

Specifies the number of characters in each record of a magnetic tape volume.

### **FORMAT**

## /RECORDSIZE=n device-name

# QUALIFIER VALUE

## n

Specifies the block size in the range 20 through 65,532 bytes if you are using VMS RMS, or 18 through 65,534 bytes if you are not using VMS RMS.

## **DESCRIPTION**

You typically use this qualifier with the /FOREIGN and /BLOCKSIZE qualifiers to read or write fixed-length records on a block structured device. In this case, the record size must be less than or equal to the block size specified or used by default.

Use the /RECORDSIZE qualifier when mounting magnetic tapes without HDR2 labels (such as RT-11 magnetic tapes) to provide VMS RMS with default values for the maximum record size.

## **EXAMPLE**

**\$** MOUNT/FOREIGN/BLOCKSIZE=512/RECORDSIZE=512 MTAO:

In this example the magnetic tape is mounted on MTA0 with a default block size and record size of 512 characters.

# MOUNT /SHADOW

# /SHADOW

Applicable only if you have the volume shadowing option. See the  $\it{VAX}$   $\it{Volume Shadowing Manual}$ .

# /SHARE

Specifies, for a disk volume, that the volume is shareable.

## **FORMAT**

/SHARE device-name /NOSHARE device-name

## **DESCRIPTION**

If another user has already mounted the volume shareable, and you request it to be mounted with the /SHARE qualifier, any other qualifiers you enter are ignored.

By default, a volume is not shareable, and the MOUNT command allocates the device on which it is mounted.

If you previously allocated the device and specify the /SHARE qualifier, the MOUNT command deallocates the device so that other users can access it.

## **EXAMPLE**

\$ MOUNT/NOMESSAGE/SHARE DLAO: SLIP DISC

This command mounts the device labeled SLIP on DLA0, disables broadcasting of MOUNT messages, specifies that the volume is shareable, and assigns the logical name DISC.

# /SYSTEM

Makes the volume public, that is, available to all users of the system, as long as the UIC-based volume protection allows them access.

## **FORMAT**

/SYSTEM device-name

### **DESCRIPTION**

The logical name for the device is placed in the system logical name table. You must have the user privilege SYSNAM to use the /SYSTEM qualifier.

When you mount a volume with the /SYSTEM qualifier in a VAXcluster, you must use a volume label that is unique clusterwide, even if the specified volume is not mounted clusterwide.

### **EXAMPLES**

\$ MOUNT/NOMESSAGE/SYSTEM DUA1: SLIP SACH

This command mounts the volume labeled SLIP on DUA1 with mount messages disabled. The volume is made available systemwide. MOUNT also assigns the logical name SACH.

This command creates the volume set named MASTER\_PAY consisting of the initialized volumes labeled PAYVOL1, PAYVOL2, and PAYVOL3. These volumes are mounted physically on the devices named DB1, DB2, and DB3, respectively. The volume PAYVOL1 is the root volume of the set.

The volumes are mounted as system volumes to make them available to all users.

# /UNLOAD

Controls whether or not the disk or magnetic tape volume or volumes specified in the MOUNT command are unloaded when they are dismounted. The default is /UNLOAD.

**FORMAT** 

/UNLOAD device-name /NOUNLOAD device-name

## **EXAMPLE**

\$ MOUNT/NOUNLOAD DBA1: OFFENS STRAT

In this example, the volume labeled OFFENS is mounted on DBA1 with the /NOUNLOAD qualifier so that it can be dismounted without being physically unloaded. MOUNT also assigns the logical name STRAT.

## MOUNT /WINDOWS

# /WINDOWS

Specifies the number of mapping pointers to be allocated for file windows.

### **FORMAT**

/WINDOWS=n device-name

# QUALIFIER VALUE

n

Specifies a value from 7 through 80 that overrides the default value specified when the volume was initialized.

## **DESCRIPTION**

When a file is opened, the file system uses the mapping pointers to access data in the file. Use MOUNT/WINDOWS to override the default value specified when the volume was initialized. If no value was specified at volume initialization, the default number of mapping pointers is 7.

You must have the operator user privilege (OPER) to use the /WINDOWS qualifier.

## **EXAMPLE**

\$ MOUNT/SYSTEM/WINDOWS=25 DBA2: GONWITH THE\_WINDOW

This command makes the volume labeled GONWITH on DBA2 available systemwide and assigns the logical name THE\_WINDOW. You override the default number of mapping pointers by specifying a value of 25 for the /WINDOWS qualifier.

# /WRITE

Controls whether the volume can be written.

**FORMAT** 

/WRITE device-name /NOWRITE device-name

**DESCRIPTION** 

By default, a volume is considered read/write when it is mounted. You can specify /NOWRITE to provide read-only access to protect files. This is equivalent to write-locking the device.

## **EXAMPLE**

\$ MOUNT/CLUSTER/NOWRITE NODE\$DBA1: BOOKS

This command mounts a volume labeled BOOKS on NODE\$DBA1 and then proceeds to mount it on each node in the existing VAXcluster. The /NOWRITE qualifier makes the volume available for read-only access.

## **MOUNT**

## **MOUNT Examples**

# MOUNT EXAMPLES

The following examples describe how to use the Mount Utility with and without operator assistance.

For examples 1 and 2, operator assistance is not required, assuming the volumes are in the drives. Examples 3 through 6 describe operator-assisted mounts.

\$ MOUNT MTAO: MATHO6 STAT\_TAPE

'MOUNT-I-MOUNTED, MATHO6 mounted on \_MTAO:

\$ COPY STO61178.DAT STAT\_TAPE:

This MOUNT command requests the magnetic tape whose volume label is MATH06 to be mounted on the device MTA0 and assigns the logical name STAT\_TAPE to the volume.

Subsequently the COPY command copies the disk file ST061178.DAT to the magnetic tape.

\$ ALLOCATE DM:

%DCL-I-ALLOC, \_DMB2: allocated
\$ MOUNT DMB2: TEST\_FILES
%MOUNT-I-MOUNTED, TEST\_FILES mounted on \_DMB2:

This ALLOCATE command requests an available RK06/RK07 device. After the response from the ALLOCATE command, the physical volume can be placed on the allocated device. Then, the MOUNT command mounts the volume.

\$ MOUNT DM: TEST\_FILES

%MOUNT-I-OPRQST, Please mount volume TEST\_FILES in device \_DMB2:

%MOUNT-I-MOUNTED, TEST\_FILES mounted on \_DMB2:

This example achieves the same result as the series of commands in the preceding example. The MOUNT command requests an available RK06 /RK07 device for the volume labeled TEST\_FILES. After the volume is physically mounted in the device named in the response from MOUNT, the system completes the operation. Note that the device is automatically allocated by MOUNT.

\$ MOUNT DYA1: TESTSYS

MOUNT-I-OPRQST, Please mount volume TESTSYS in device DYA1:

CTRL/Y

SEXIT

MOUNT-I-OPRQSTCAN, operator request canceled

This MOUNT command requests the operator to mount the volume TESTSYS on the device DYA1. In this example, the user cancels the mount by pressing CTRL/Y. Notice that the image must exit before the mount request is actually canceled. Here, the EXIT command causes the image to exit. However, any command that is not performed within the command interpreter causes the current image to exit.

# MOUNT Examples

\$ MOUNT DYA1: TESTSYS

%MOUNT-I-OPRQST, Device \_DYA1: is not available for mounting.
%MOUNT-I-OPRQSTCAN, operator request canceled
%MOUNT-I-OPRQST, Please mount volume TESTSYS in device \_DYA1:
%MOUNT-I-MOUNTED, TESTSYS mounted on \_DYA1:
%MOUNT-I-OPRQSTDON, operator request canceled - mount
completed successfully

This MOUNT command requests the operator to mount the volume TESTSYS on the device DYA1. Because DYA1 is allocated to another user, the device cannot be mounted. In this case, the user can wait for the device to become available, redirect the mount to another device, or abort the mount. Here, the user remains in operator-assisted mount waiting for the process that is using the device to deallocate it. At this point, because the device is available but no volume is mounted, the original mount request is canceled, and a new request to mount TESTSYS is issued. Finally, the operator places the volume in the drive and lets MOUNT retry the mount. When the mount completes, the request is canceled.

\$ MOUNT DYA1: TESTSYS/COMMENT="Is there an operator around?"

%MOUNT-I-OPRQST, Please mount volume TESTSYS in device \_DYA1:
Is there an operator around?

%MOUNT-I-NOOPR, no operator available to service request

.

%MOUNT-I-MOUNTED, TESTSYS mounted on \_DYA1:
%MOUNT-I-OPRQSTDON, operator request canceled - mount
completed successfully

This MOUNT command requests the operator to mount the volume TESTSYS on the device DYA1. In this example, no operator is available to service the request. At this point, the user can abort the mount by pressing CTRL/Y, or wait for an operator. Here, the user waited, and an operator eventually became available to service the request.

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