HP DECset for OpenVMS

DIGITAL Test Manager Reference Manual

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This reference manual describes all the commands available for the HP DIGITAL Test Manager for OpenVMS. The commands are listed in alphabetical order.

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Preface

This reference manual describes the HP DIGITAL Test Manager for OpenVMS commands and gives an example of the command as it would be issued from the HP DIGITAL Test Manager subsystem. If the HP DECwindows interface is used when invoking the HP DIGITAL Test Manager, the commands are viewed with corresponding requests for the various parameters and qualifiers as described here.

This reference manual also provides a glossary of command parameters and qualifiers, as well as a listing of all display messages.

For more information about these commands, parameters, qualifiers, and messages, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Intended Audience

This reference is intended for programmers, software engineers, and project managers who are responsible for producing fully tested code.

Document Structure

This guide consists of the following sections:

- Part I— A general overview of the structure of a command, followed by the commands listed in alphabetical order
- Part II—A glossary of command parameters and command qualifiers
- Part III—A display message listing along with suggested user action

Associated Documents

The following documents might also be helpful when using the HP DIGITAL Test Manager:

- The *HP DECset for OpenVMS Guide to DIGITAL Test Manager* provides a tutorial description of the use of the HP DIGITAL Test Manager from a windows interface, and contains other important user information.
- The *HP DECset for OpenVMS Installation Guide* provides installation instructions for the HP DIGITAL Test Manager.

HP DIGITAL Test Manager is a component of the HP DECset tool kit. For more information on other HP DECset components, see the reference manuals for the individual components.

References to Other Products

Some older products that HP DECset components previously worked with might no longer be available or supported by HP. Any reference in this manual to such products does not imply actual support, or that recent interoperability testing has been conducted with these products.

Note

These references serve only to provide examples to those who continue to use these products with HP DECset.

Refer to the Software Product Description for a current list of the products that the HP DECset components are warranted to interact with and support.

Conventions

Table 1 lists the conventions used in this reference manual.

A dollar sign (\$) represents the OpenVMS DCL system prompt.
In interactive examples, a label enclosed in a box indicates that you press a key on the terminal, for example, Return.
The key combination $Ctrl/x$ indicates that you must press the key labeled $Ctrl$ while you simultaneously press another key, for example, $Ctrl/Y$ or $Ctrl/Z$.
The phrase KP n indicates that you must press the key labeled with the number or character n on the numeric keypad, for example, KP3 or KP
A horizontal ellipsis following a parameter, option, or value in syntax descriptions indicates additional parameters, options, or values you can enter.
A horizontal ellipsis in a figure or example indicates that not all of the statements are shown.
A vertical ellipsis indicates the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.
In format descriptions, if you choose more than one option, parentheses indicate that you must enclose the choices in parentheses.
In format descriptions, brackets indicate that whatever is enclosed is optional; you can select none, one, or all of the choices.
In format descriptions, braces surround a required choice of options; you must choose one of the options listed.
Boldface text represents the introduction of a new term.
Boldface monospace text represents user input in interactive examples.
(continued on next page)

 Table 1
 Conventions Used in This Reference

Convention	Description
italic text	Italic text represents book titles, parameters, arguments, and information that can vary in system messages (for example, Internal error <i>number</i>).
UPPERCASE	Uppercase indicates the name of a command, routine, file, file protection code, or the abbreviation of a system privilege.
lowercase	Lowercase in examples indicates that you are to substitute a word or value of your choice.
mouse	The term mouse refers to any pointing device, such as a mouse, puck, or stylus.
MB1,MB2,MB3	MB1 indicates the left mouse button, MB2 indicates the middle mouse button, and MB3 indicates the right mouse button.

Table 1 (Cont.) Conventions Used in This Reference

Command Dictionary

Command Format

HP DIGITAL Test Manager commands have the following format:

DTM> command [parameter...] [/qualifier...] "remark"

Table CD-1 describes the command-line elements.

Element	Description
Command	Describes the HP DIGITAL Test Manager action. Commands are a required part of the HP DIGITAL Test Manager command line.
Parameter	Specifies information required by some commands. Refer to the specific commands in this reference manual to determine whether a command requires parameters.
/Qualifier	Modifies the HP DIGITAL Test Manager action in a specific way. Qualifiers are an optional part of the HP DIGITAL Test Manager command line and can be placed anywhere on the command line after the command, in any combination. One exception to this occurs with test group expression qualifiers, which you must specify immediately following the test group expression to which it refers.
Remark	Associates a comment with any library-changing command to be logged in the history log file. Remarks are required on library- changing commands, although null remarks are acceptable.

Table CD–1 HP DIGITAL Test Manager Command-Line Elements

The following sections describe the formats for the HP DIGITAL Test Manager commands, parameters, qualifiers, and parameter qualifiers.

You can abbreviate HP DIGITAL Test Manager commands by specifying the minimum number of characters that uniquely identify the command.

Command Parameters

Parameter values for the HP DIGITAL Test Manager commands consist of the following:

- Collection names and expressions
- Group names and expressions
- Test names and expressions
- Variable names and expressions
- Variable values
- Result description names and expressions

- Object expressions
- Test group expressions
- File names

You can use the same name for a collection, group, test description, or variable. You cannot use names beginning with DTM\$, nor can you use the variable names P1 through P8. These names are reserved for use by HP DIGITAL Test Manager.

A name refers to a single item such as a collection, group, test, variable, and result description.

An expression refers to one or more items such as collections, groups, tests, variables, result descriptions, objects, and test groups.

Collection expressions, group expressions, result description expressions, test expressions, and variable expressions all contain names of the same type. For example, a collection expression contains only collection names and expressions that resolve to collection names.

Note

You cannot list items in result description expressions.

Object expressions and test group expressions contain more than one type of name. Object expressions can contain test names, group names, and collection names. Test group expressions can contain only test names and group names.

Expressions permit the use of wildcards. Use a comma to separate items in a list.

Qualifiers

HP DIGITAL Test Manager uses command qualifiers and parameter qualifiers. The following sections describe both types of qualifiers and their uses.

Command Qualifiers

Command qualifiers modify the command; you can place them anywhere on the command line after the command and in any combination. You can enter command qualifiers before or after any parameters and before or after the remark. Some command qualifiers require a value. If input is taken from a command file or if the command is entered in batch mode, the action is performed without confirmation, regardless of whether you specified the /CONFIRM or /NOCONFIRM qualifier.

Parameter Qualifiers

The two parameter qualifiers are /GROUP and /TEST_DESCRIPTION.

You use parameter qualifiers only with test group expressions to differentiate the items contained in the test group expression as representing either tests or groups.

The position of these qualifiers is significant. The /GROUP parameter qualifier identifies the item that it follows as a group name. Similarly, the /TEST_DESCRIPTION parameter qualifier identifies as a test name the item that it follows. The default parameter qualifier is /TEST_DESCRIPTION. Thus, if no parameter qualifier follows an item in a test group expression, HP DIGITAL Test Manager identifies that item as a test name. For example:

LMTEST1,LMTESTS/GROUP,RMTEST

In this test group expression, HP DIGITAL Test Manager identifies LMTEST1 and RMTEST as test names, and LMTESTS as a group name.

Remark

A **remark** is a comment that is associated with any command that modifies the HP DIGITAL Test Manager library. A remark can consist of up to 255 printable ASCII characters; the total command-line length follows OpenVMS conventions, so remarks are truncated if necessary. If a remark includes any space characters, you must enclose the remark in quotation marks (""). If a remark includes any quotation marks, you must use two sets of quotation marks (""*string*""). A remark is required with any library-modifying commands, but the remark can be null. Remarks are stored in the HP DIGITAL Test Manager history log file.

If you do not specify a remark on a library-modifying command, HP DIGITAL Test Manager prompts you for one. You do not need to include quotation marks with these remarks.

The remark parameter specifies the remark logged with the COPY or MODIFY command in the history file. The remark qualifier specifies the remark associated with the modified or copied group, test description, or variable.

You can also add a remark to the history by using the REMARK command. This command enables you to log any comments, not just usual events.

File Specification Format

When you specify a file for use in HP DIGITAL Test Manager, you must use a standard OpenVMS file specification. For a complete description of a file specification, see the *OpenVMS DCL Concepts Manual*. The format for a file specification is as follows:

node::device:[directory]filename.type

Command Categories

The following lists identify the related HP DIGITAL Test Manager commands and tasks. For information on a command, see its individual description in the Command Descriptions section.

Manipulating Test Commands

COPY TEST_DESCRIPTION	EXTRACT
CREATE TEST_DESCRIPTION	PLAY
DELETE TEST_DESCRIPTION	RECORD
DISPLAY	REMOVE TEST_DESCRIPTION
INSERT TEST_DESCRIPTION	SHOW TEST_DESCRIPTION
MODIFY TEST_DESCRIPTION	FILTER

Manipulating Group Commands

CREATE GROUP	MODIFY GROUP
DELETE GROUP	REMOVE GROUP
INSERT GROUP	SHOW GROUP

Manipulating Collection Commands

COMPARE	RUN
CREATE COLLECTION	STOP
DELETE COLLECTION	SUBMIT
RECREATE	SHOW COLLECTION
REVIEW	

Manipulating Variable Commands

CREATE VARIABLE	MODIFY VARIABLE
DELETE VARIABLE	SHOW VARIABLE

Manipulating Library Commands

CONVERT	SHOW LIBRARY
CREATE LIBRARY	SHOW BENCHMARK_DIRECTORY
SET LIBRARY	SHOW EPILOGUE
SET BENCHMARK_DIRECTORY	SHOW PROLOGUE
SET EPILOGUE	SHOW TEMPLATE_DIRECTORY
SET PROLOGUE	VERIFY
SET TEMPLATE_DIRECTORY	

Manipulating History Commands

DELETE HISTORY	REMARK
SHOW HISTORY	

Miscellaneous Commands

@file-specification	EXIT
ATTACH	HELP
DEFINE/KEY	SHOW VERSION
DTM	SPAWN

Review Subsystem Commands

DTM_REVIEW> @file-specification	DTM_REVIEW> LAST
DTM_REVIEW> ATTACH	DTM_REVIEW> NEXT
DTM_REVIEW> BACK	DTM_REVIEW> PCA
DTM_REVIEW> DEFINE/KEY	DTM_REVIEW> PRINT
DTM_REVIEW> EXIT	DTM_REVIEW> SELECT
DTM_REVIEW> FIRST	DTM_REVIEW> SHOW
DTM_REVIEW> HELP	DTM_REVIEW> SPAWN
DTM_REVIEW> INSERT	DTM_REVIEW> UPDATE

Command Descriptions

@file-specification

@file-specification

Command Qualifiers	Defaults
None	None

This command executes HP DIGITAL Test Manager commands contained in a specified file. The file can contain any HP DIGITAL Test Manager command, including another fcmd@file-specification command.

When HP DIGITAL Test Manager executes an EXIT command or reaches the end of the command procedure, control is returned to the current command level. The invoking command stream can be either the terminal or another command procedure.

Do not preface the commands in the specified file with the DTM command or dollar sign (\$). For example, enter SHOW LIBRARY not DTM SHOW LIBRARY or \$ SHOW LIBRARY.

Example

DTM> @MAIL_TEST %DTM-S-LIBIS, HP DIGITAL Test Manager library is DUA0:[USER01.DTMLIB] %DTM-S-RESUBMITTED, collection MAIL_TEST has been resubmitted -DTM-I-TEXT, Job MAIL_TEST (queue SYS\$BATCH, entry 18) started on SYS\$BATCH DTM>

This example executes the command procedure MAIL_TEST.COM containing the commands SET LIBRARY DUA0:[USER01.DTMLIB] and SUBMIT MAIL_TEST.

ATTACH

ATTACH [process-name] [/qualifier]

Command QualifiersDefaults/IDENTIFICATION=pidNone/PARENTNone

This command enables you to change control to a subprocess created with the SPAWN or SPAWN/WAIT commands, or to reconnect to a parent (original) process. See the SPAWN command for more information.

Example

MAIL> SPAWN DTM . . DTM> ATTACH/PARENT You have 0 new messages.

MAIL>

This example uses the OpenVMS Mail Utility (MAIL) command SPAWN to create a subprocess running HP DIGITAL Test Manager. The HP DIGITAL Test Manager ATTACH command is then used to attach the terminal back to the MAIL session, the parent process.

COMPARE

COMPARE collection-name [/qualifier...]

Command Qualifiers	Defaults
/CHARACTERS	See text
/FULL	None
/IGNORE=(keyword,)	None
/[NO]LOG	/LOG
/MASK=(keyword,)	See text
/[NO]PARALLEL	/NOPARALLEL
/RECORDS	/RECORDS
	(for noninteractive tests)
/SCREENS	/SCREENS
	(for interactive tests)
/SENTINEL=("begin-delimiter","end-delimiter")	None
/WIDTH=n	/WIDTH=132

This command prepares a collection to be reviewed by comparing the results generated for each test that was run to the test's benchmark file. This command compares the results of interactive terminal, HP DECwindows tests, and noninteractive tests by using the /SCREENS, /RECORDS, and /CHARACTERS qualifiers.

During character-by-character comparison, record boundaries in the result file are ignored. Line-feed and escape characters break the output into lines, which are then processed for differences.

HP DIGITAL Test Manager informs you if you use the COMPARE command with a collection that has already been compared. HP DIGITAL Test Manager automatically compares collections when they are executed. To prevent a collection from being automatically compared, specify the /NOCOMPARE qualifier with the CREATE COLLECTION command. You cannot use the COMPARE command with a collection that is in use.

This command also compares and reviews the completed part of a partially run collection. For information about the results, comparison statuses, and file statuses that can occur for a collection as a result of entering the COMPARE commands, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

If an error occurs while a comparison is being performed, the test being compared is given the comparison aborted status and is included in the test's result description.

Example

DTM> **COMPARE MAIL_COLL** %DTM-I-SUCCEEDED, the comparison for the test MAIL_TEST succeeded %DTM-I-SUCCEEDED, the comparison for the test SEND_MAIL_TEST succeeded %DTM-S-COMPARED, collection MAIL_COLL compared

> This example compares the results for all tests in the collection MAIL_COLL. For each test, HP DIGITAL Test Manager deletes the result files for tests whose benchmark and result files match, and it creates a difference file for tests whose benchmark and result files differ.

CONVERT LIBRARY

CONVERT LIBRARY existing-library-name new-library-name

Command Qualifiers	Defaults
None	None

This command creates a copy of an existing HP DIGITAL Test Manager library and converts the copy for use with this version of HP DIGITAL Test Manager. Libraries created with HP DIGITAL Test Manager Version 2.0 or later do not need to be converted. Conversion maintains everything in your existing library except collections. The existing library is not altered. Before converting a library, first create an empty directory to contain the new, converted library.

Example

```
$ CREATE/DIRECTORY [project.v1lib]
$ DTM
DTM> CONVERT LIBRARY [project.V1lib] [project.v2lib]
%DTM-S-COPIED, V1 variables copied
%DTM-S-COPIED, V1 groups copied
%DTM-S-COPIED, V1 test descriptions copied
-DTM-S-CONVERTED, your V1 library has been successfully converted to V2
```

This example first creates a new directory to contain the converted library. Then, the HP DIGITAL Test Manager system is entered and the existing library is converted. The benchmark files are not copied because they are stored outside the HP DIGITAL Test Manager library in a benchmark directory. They are accessible to the new library.

COPY TEST_DESCRIPTION

COPY TEST_DESCRIPTION test-name1 test-name2 [/qualifier...] "remark"

Command Qualifiers

/[NO]COMMAND=command /COMPARISON_TYPE=keyword /[NO]EPILOGUE=file-specification /NOFILTERS /NOGROUPS /[NO]LOG /[NO]PROLOGUE=file-specification /[NO]REMARK="remark" /[NO]TEMPLATE=file-specification /NOVARIABLES

Defaults

Current command Current default Current test epilogue Current filters Current group memberships /LOG Current test prologue Current remark Current remark Current template Current variables

Restrictions

- The /COMMAND qualifier applies to HP DECwindows tests only.
- The /NOFILTERS qualifier applies to interactive and noninteractive terminal tests only.

This command makes a copy of an existing test description. This enables you to create several similar test descriptions without entering information into all the test description fields. You can copy a test description as it is, or you can modify test description fields by specifying qualifier values. Because HP DIGITAL Test Manager does not permit you to have two test descriptions with the same name, the name for the new test description must be unique. The new test description belongs to the same groups as the existing test description. It is also associated with the same variables as the existing test description. If the test description you are copying describes an interactive test, the new test is marked interactive.

Example

```
DTM> COPY TEST_DESCRIPTION MAIL_TEST SHOW_ALL_TEST/PROLOGUE=NEWPRO.COM
_Remark:SHOW ALL test with new prologue file
%DTM-I-DEFAULTED, benchmark file name defaulted to SHOW_ALL_TEST.BMK
%DTM-S-COPIED, test description MAIL_TEST copied
-DTM-S-CREATED, test description SHOW_ALL_TEST created
DTM>
```

This example creates a copy of the existing test description, MAIL_TEST, and names the copy, SHOW_ALL_TEST. The prologue file named NEWPRO.COM is associated with the new test description.

CREATE COLLECTION

/TEST_DESCRIPTION

CREATE COLLECTION collection-name test-group-expression [/qualifier...]

Command Qualifiers	Defaults
/[NO]BENCHMARK_DIRECTORY=directory-specification	See text
/CLASS=(keyword=class-name,)	See text
/[NO]COMPARE[=(keyword,)]	/COMPARE
/[NO]EPILOGUE=file-specification	Current collection epilogue
/[NO]LOG	/LOG
/MASK=(keyword,)	See text
/[NO]PROLOGUE=file-specification	Current collection prologue
/[NO]REALTIME	/NOREALTIME
/SENTINEL=("begin-delimiter","end-delimiter")	None
/[NO]SUBMIT[=keyword,]	/NOSUBMIT
/[NO]TEMPLATE_DIRECTORY=directory-specification	See text
/VARIABLE=(variable-name=variable-value,)	See text
/[NO]VERIFY	/VERIFY
Parameter Qualifiers	Defaults
/GROUP	/TEST_DESCRIPTION

This command organizes a set of files that will be treated as a single entity for running tests. A collection can contain any combination of test types. You can execute a collection of tests either interactively or in batch mode. However, HP DECwindows tests require a connection to a workstation's HP DECwindows server to run in batch mode.

/TEST_DESCRIPTION

This command constructs a set of tests by taking a snapshot of the test descriptions at the time the collection is created. Therefore, any changes subsequently made to test descriptions contained in the collection are not reflected in the collection. However, changes made to files referenced by the collection might affect the collection at run time.

You can execute a collection interactively by using the RUN command, or noninteractively in batch mode by using the /SUBMIT command qualifier. If you choose to execute your tests in batch mode, HP DIGITAL Test Manager uses the collection name you specified as the name of the batch job. You can also execute a collection again with either the RUN or SUBMIT command.

HP DIGITAL Test Manager verifies the existence of files associated with the test descriptions in the collection when the collection is created. If a test description you include in a collection does not exist, the collection is not created. The collection is also not created if a variable you specify (on the CREATE COLLECTION command line) is not global or does not exist.

Example

DTM> CREATE COLLECTION MAIL_COLL MAIL*/NOPROLOGUE _Remark: Tests of MAIL commands %DTM-S-CREATED, collection MAIL_COLL created

This example creates the collection MAIL_COLL. It uses a qualifier to specify that there is no collection prologue file associated with this collection, and uses wildcards to specify which tests go into the collection.

CREATE GROUP

CREATE GROUP group-name [/qualifier] "remark"

Command Qualifier	Default
/[NO]LOG	/LOG

This command creates an empty group in the HP DIGITAL Test Manager library. After you create a group, you can include test descriptions and other groups in the group with the INSERT TEST_DESCRIPTION and INSERT GROUP commands.

Example

DTM> CREATE GROUP SEND_NONINT _Remark: Tests of MAIL commands that send text (SEND, REPLY, etc.) %DTM-S-CREATED, group SEND_NONINT created

This example creates the group SEND_NONINT.

CREATE LIBRARY

CREATE LIBRARY directory-specification [/qualifier] "remark"

Command Qualifier	Default
/[NO]LOG	/LOG

Restrictions

- Do not create subdirectories of the directory containing the HP DIGITAL Test Manager library. HP DIGITAL Test Manager recognizes that they are not part of the library and might delete them.
- Do not create or modify files in the HP DIGITAL Test Manager library and do not delete files from the HP DIGITAL Test Manager library.
- Do not access the HP DIGITAL Test Manager library with commands other than HP DIGITAL Test Manager commands. Use only HP DIGITAL Test Manager Review subsystem commands to access test run output files.

This command creates a HP DIGITAL Test Manager library in an empty OpenVMS directory. The library contains the files that HP DIGITAL Test Manager needs to describe, run, and review tests.

You can store benchmark files and template files in the HP DIGITAL Test Manager library or in CMS libraries. You must store all other files outside the HP DIGITAL Test Manager library in another directory or in a CMS library. If you do this, you must inform HP DIGITAL Test Manager where the files are stored.

You might find it useful to create a separate library for each project for which you use HP DIGITAL Test Manager.

Example

\$ CREATE/DIR [USER01.DTMLIB]
\$ DTM
DTM>
DTM> CREATE LIBRARY [USER01.DTMLIB]
%DTM-S-CREATED, DTM library DUA0:[USER01.DTMLIB] created

This example shows how to create a HP DIGITAL Test Manager library by first creating an empty directory, DTMLIB.DIR, and then using the CREATE LIBRARY command to turn this directory into a HP DIGITAL Test Manager library.

CREATE TEST_DESCRIPTION

CREATE TEST_DESCRIPTION test-name [/qualifier...] "remark"

Command Qualifiers

Defaults

/BENCHMARK=file-specification /COMMAND="DCL-command" /COMPARISON_TYPE=keyword /DECWINDOWS /EPILOGUE=file-specification /FILTER=(keyword,...) /[NO]INTERACTIVE /[NO]LOG /PROLOGUE=file-specification /TEMPLATE=file-specification /VARIABLE=(variable-name[=variable-value],...) /BENCHMARK=test-name.BMK None None None None /NOINTERACTIVE /LOG None See text None

Restrictions

- The /COMMAND qualifier applies to HP DECwindows tests only.
- The /FILTER qualifier applies to noninteractive and terminal tests only.
- You cannot specify commands with embedded quotes on the /COMMAND option of this command. HP DIGITAL Test Manager accepts the command, but removes the embedded quotes when the command is executed as part of test execution or recording.
- Do not include a rooted logical name (for example, DISK\$:[USER.]) in the specification of a test benchmark file. HP DIGITAL Test Manager successfully executes the test, but fails when comparing the test result file to the test benchmark file.

You can affect the name of a test benchmark file by using the following HP DIGITAL Test Manager commands:

- CREATE TEST/BENCHMARK
- MODIFY TEST/BENCHMARK
- SET BENCHMARK_DIRECTORY

This command creates a test description in the HP DIGITAL Test Manager library. A test description is all the information associated with a specific test.

The test-name parameter specifies a value for the test-name field of the test description. You can specify values for the other test description fields by supplying values for the appropriate command qualifiers.

The test name is the unique identifier of the test description and is the only means of access to a test description. The /TEMPLATE qualifier specifies the template file for this test. A template file is a command file that is a test or a recorded interactive session. If you do not specify a template file name at the time you create a test description, HP DIGITAL Test Manager supplies a default file name of the form *test-name*.COM, unless you specified the /INTERACTIVE or /DECWINDOWS qualifier, in which case the default file name is *test-name*.SESSION.

When you create a test description, you can include file specifications for the template, benchmark, prologue, or epilogue field, regardless of whether the specified file exists. HP DIGITAL Test Manager does not check whether the files exist; it creates the test description with the file names you supply or with default file names.

If you specify a name for the variable field, the variable must exist. If the variable does not exist, HP DIGITAL Test Manager will not create the test description.

When you create a collection to run your test, HP DIGITAL Test Manager searches for all the files specified in the test description. If a file is missing, the collection is not created. If you specify the /NOVERIFY qualifier on the CREATE COLLECTION command, HP DIGITAL Test Manager creates the collection without verifying that the files exist.

When the collection is created, HP DIGITAL Test Manager resolves the logical name. If you use a logical name in a file specification for a CREATE TEST_DESCRIPTION qualifier value, the logical name is not resolved until you place the test in a collection. If you specify the /NOVERIFY qualifier on the CREATE COLLECTION command, HP DIGITAL Test Manager creates the collection without resolving the logical name.

Examples

DTM> CREATE TEST_DESCRIPTION SEND_MAIL_TEST
 _Remark: Send a message test.
 %DTM-I-DEFAULTED, benchmark file name defaulted to SEND_MAIL_TEST.BMK
 %DTM-I-DEFAULTED, template file name defaulted to SEND_MAIL_TEST.COM
 %DTM-S-CREATED, test description SEND_MAIL_TEST created.

This example creates a noninteractive test description with the test name SEND_MAIL_TEST.

```
2. DTM> CREATE TEST_DESCRIPTION/TEMPLATE=MAIL_INT.COM -
_DTM> /INTERACTIVE/PROLOGUE=NOBROADCAST.COM/EPILOGUE=BROADCAST.COM
_test name: MAIL_TEST_INT
_Remark: Creating a MAIL test
%DTM-I-DEFAULTED, benchmark file name defaulted to MAIL_TEST_INT.BMK
%DTM-I-DEFAULTED, template file name defaulted to MAIL_TEST_INT.SESSION
%DTM-S-CREATED, test description MAIL_TEST_INT created
```

This example creates an interactive test description MAIL_TEST_INT and includes template, prologue, and epilogue file names. HP DIGITAL Test Manager prompts for the test name and remark.

CREATE VARIABLE

CREATE VARIABLE variable-name variable-value [/qualifier...] "remark"

Command Qualifiers	Defaults
/GLOBAL	/LOCAL
/LOCAL	/LOCAL
/[NO]LOG	/LOG
/LOGICAL	/SYMBOL
/NUMERIC	See text
/STRING	See text
/SYMBOL	/SYMBOL

This command defines a variable in the current HP DIGITAL Test Manager library. You can include only variables defined in the library in test descriptions or collections.

You specify the default value for a variable with the variable-value parameter. If you do not supply a variable value, HP DIGITAL Test Manager prompts you for one. Optional qualifiers enable you to specify how the variable is to be handled during processing. You can override this value for a particular test description.

You specify the value of a variable with the variable-value parameter. You specify its use as a local or global variable with the /GLOBAL or /LOCAL qualifier. You specify its use as a symbol or logical name with the /SYMBOL or /LOGICAL qualifier.

If you do not specify the /SYMBOL or /LOGICAL qualifier, HP DIGITAL Test Manager creates the variable as a symbol. If a variable is defined as a symbol, you must further define the variable value as either a text string, by using the /STRING qualifier, or a numeric value, by using the /NUMERIC qualifier. If you do not use one of these qualifiers, HP DIGITAL Test Manager interprets a quoted variable value as a text string and an unquoted variable value as a numerical value. When using the /NUMERIC and /STRING qualifiers, you must place DCL operators such as the plus sign (+) and minus sign (-) in a quoted string to be used as arithmetic operators. HP DIGITAL Test Manager attempts to prevent the generation of syntactically incorrect DCL assignment statements. Therefore, numeric symbol variables and logical variables cannot have a null value.

Example

DTM> CREATE VARIABLE/SYMBOL/LOCAL INPUT_FILE "emptyfil" _Remark: Name of input file, with an empty file as the default %DTM-S-CREATED, symbol variable INPUT_FILE created.

This example creates the variable INPUT_FILE. It is defined as a local symbol with a default value of "emptyfil". The quotation marks indicate that the value is a string.

DEFINE/KEY

DEFINE/KEY key-name "command-string" [/qualifier...]

Command Qualifiers	Defaults
/[NO]ECHO	/ECHO
/[NO]IF_STATE=(state-name,)	Current state
/[NO]LOCK_STATE	/NOLOCK_STATE
/[NO]SET_STATE=state-name	Current state
/[NO]TERMINATE	/NOTERMINATE

Restrictions

- Key definitions apply only to terminal environments.
- You can use the DEFINE/KEY command at the HP DIGITAL Test Manager subsystem level.

This command defines a key to enter a HP DIGITAL Test Manager command. You can customize your keyboard by defining keys to enter frequently used commands or long command strings.

The definitions you create with the DEFINE/KEY command are in effect only for the current HP DIGITAL Test Manager session; the next time you invoke HP DIGITAL Test Manager, only the default key definitions will be in effect. To save your key definitions for use in every HP DIGITAL Test Manager session, include them in a HP DIGITAL Test Manager initialization file. This file is executed whenever you invoke HP DIGITAL Test Manager as a subsystem. For information on how to create an initialization file, see the HP DECset for OpenVMS Guide to DIGITAL Test Manager. If you have key definitions that you want to save but do not necessarily want to use every time you invoke HP DIGITAL Test Manager, define them in a command procedure.

HP DIGITAL Test Manager provides a set of default definitions. You can use the DEFINE/KEY command to replace these definitions, or to define certain undefined keys. Pressing the PF2 key displays the default key definitions.

The state-name value used with the /IF_STATE, /LOCK_STATE, and /SET_STATE qualifiers can be any alphanumeric string. The state names defined by HP DIGITAL Test Manager are DTM and GOLD_DTM.

You can define the GOLD key (PF1) to execute HP DIGITAL Test Manager commands in two keystrokes by using the DEFINE/KEY command with the /SET_STATE=GOLD_DTM qualifier. By doing this, you can provide two definitions to the same key. For example, you can define KP1 to enter the CREATE GROUP command and define GOLD-KP1 to enter the MODIFY GROUP command.

Examples

1. DTM> DEFINE/KEY KP5 /IF_STATE=GOLD_DTM -_DTM> "SET LIBRARY DUA0:[USER01.LIB_B]"/TERMINATE DTM>

This example defines GOLD keypad 5 to set the default HP DIGITAL Test Manager library to a different library.

2. DTM> SET LIBRARY DUA0:[USER01.LIB_B]
%DTM-S-LIBIS, HP DIGITAL Test Manager library is DUA0:[USER01.LIB_B]
DTM>

When you subsequently press GOLD keypad 5, this text is displayed.

DELETE COLLECTION

DELETE COLLECTION collection-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

This command deletes one or more specified collections and any related difference or result files from the HP DIGITAL Test Manager library.

You cannot delete a collection that is in use. Also, you must have sufficient privileges to delete the files. If the collection run ended abnormally and you are unable to delete a collection, enter the VERIFY/RECOVER command and then reenter the DELETE COLLECTION command.

This command does not affect benchmark files.

Example

```
DTM> DELETE COLLECTION MAIL_COLL "No longer needed"
Confirm deletion of collection MAIL_COLL [Y/N] (N): y
%DTM-I-DELETED, collection MAIL_COLL deleted
%DTM-S-DELETIONS, 1 deletion completed
```

This example deletes the collection MAIL_COLL. The default /CONFIRM qualifier is in effect.

DELETE GROUP

DELETE GROUP group-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

Restriction

• You cannot delete a group if it contains any test descriptions or other groups, or if it is a subgroup of another group. If any test descriptions or groups are still in the group when you enter the DELETE GROUP command, HP DIGITAL Test Manager reports that the specified group has not been deleted.

This command deletes a group from the HP DIGITAL Test Manager library.

The SHOW GROUP/MEMBER command lists the groups of which the specified group is a member. The SHOW GROUP/CONTENTS command lists the groups and test descriptions contained in this group. Use the REMOVE TEST_DESCRIPTION command to remove test descriptions from the group. Use the REMOVE GROUP command to remove subgroups of the group or to remove the group from another group.

Example

DTM> **DELETE GROUP MAIL_NONINT/NOCONFIRM "Getting rid of this group"** %DTM-S-DELETED, group MAIL_NONINT deleted

This example deletes the group MAIL_NONINT. You are not prompted for confirmation because the /NOCONFIRM qualifier is in effect.

DELETE HISTORY

DELETE HISTORY [/qualifier...] "remark"

Command Qualifiers	Defaults
/BEFORE=time	See text
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG
/OUTPUT[=file-specification]	/OUTPUT=HISTORY.OUT

This command deletes history information from the history file. You specify the history information that you want removed by using the /BEFORE qualifier. That information is then placed in a file named HISTORY.OUT in your current directory. After you remove information from the history file, you cannot replace it.

This command is logged in the history file in the usual manner. In addition, it is also logged in the file at the point where history information is being deleted. The log entry takes the following form:

date time user-name REMARK "PREVIOUS HISTORY DELETED"

Example

```
DTM> DELETE HISTORY /BEFORE=08-JAN "Deleting old information"
Confirm DELETE HISTORY/BEFORE=8-Jan-1998 [Y/N] (N): Y
%DTM-S-HISTDEL, 150 history records deleted
DTM>
```

This example deletes all history records in the history file recorded before January 8, 1998. The deleted information is replaced with the following record:

* 8-JAN-1998 00:00:00 SMITH REMARK "PREVIOUS HISTORY DELETED"

DELETE TEST_DESCRIPTION

DELETE TEST_DESCRIPTION test-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

Restrictions

• You cannot delete a test description if it belongs to a group. Use the REMOVE TEST_DESCRIPTION command to remove a test description

from a group. Use the SHOW TEST_DESCRIPTION/GROUPS command to display the groups to which the test description belongs.

• Do not delete a test description that is part of an existing collection. If you delete a test description that is part of a collection, you might see error messages when you enter other HP DIGITAL Test Manager commands. For example, if you review a collection from which you have deleted a test description and its associated benchmark file for a noninteractive test, you will see a message indicating that the result description contains errors and you will be unable to examine the benchmark file for this result description. If you delete the test description and benchmark file for an interactive test that uses a screen comparison, you will be unable to examine any of the files associated with the test.

This command deletes the specified test description from the library. It also deletes the test description's benchmark file if it exists in the HP DIGITAL Test Manager library. If the benchmark file is outside the HP DIGITAL Test Manager library (in another directory or in a CMS library), HP DIGITAL Test Manager deletes the test description, but does not delete the benchmark file.

Result and difference files generated after a test run are not affected by the DELETE TEST_DESCRIPTION command. See the DELETE COLLECTION command description for information about deleting these files.

Example

DTM> **DELETE TEST_DESCRIPTION/NOCONFIRM RMTEST "Deleting RMTEST"** %DTM-S-DELETED, test_description RMTEST deleted

This example deletes the test description RMTEST. The /NOCONFIRM qualifier is in effect.

DELETE VARIABLE

DELETE VARIABLE variable-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

Restriction

• If you attempt to delete several variables and one or more of them are associated with test descriptions, HP DIGITAL Test Manager deletes only those variables not associated with a test description.

This command deletes one or more specified variables from the HP DIGITAL Test Manager library.

This command does not delete any variables currently associated with a test description. If you attempt such a deletion, HP DIGITAL Test Manager issues an error message. Use the SHOW VARIABLE/TEST_DESCRIPTION command to list the test descriptions with which a variable is associated. Use the MODIFY TEST_DESCRIPTION command to disassociate a variable from a test description.

For more information on variables, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

```
DTM> DELETE VARIABLE INPUT_FILE "Deleting variable INPUT_FILE"
Confirm deletion of variable INPUT_FILE [Y/N] (N): y
%DTM-S-DELETED, variable INPUT_FILE deleted.
```

This example deletes the variable INPUT_FILE. The default /CONFIRM qualifier is in effect.

DISPLAY

DISPLAY test-name [/qualifier]

Command Qualifier	Default
/BENCHMARK	/BENCHMARK

This command displays the benchmark file as it existed when it was created. For example, if the benchmark file contains dates or times that were recorded when the test was created, those dates or times are displayed rather than the current date or time. Commands in the benchmark file are not executed.

This command, used with the /BENCHMARK qualifier, searches for the benchmark file in the default benchmark directory unless this default is overridden by a benchmark directory specified on the test description.

Example

DTM> DISPLAY/BENCHMARK MEMO_TEST

This example displays the banner screen, screen 0, for interactive display. Follow the directions on the screen to display your benchmark file. For more information about displaying benchmark files for interactive terminal tests, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

DTM

DTM [/qualifier]

Command Qualifiers	Defaults
/[NO]INIT	/INIT
/INTERFACE=interface	/INTERFACE=CHARACTER_CELL

Entering the DTM command on the DCL command line invokes HP DIGITAL Test Manager and displays the DTM> prompt. To exit from the HP DIGITAL Test Manager system, enter the EXIT command or press Ctrl/Z.

Entering the DTM command with the /INTERFACE=DECWINDOWS qualifier invokes HP DIGITAL Test Manager and displays the HP DIGITAL Test Manager main window. The /INTERFACE=DECWINDOWS qualifier is valid only in a workstation environment. To exit from the HP DIGITAL Test Manager HP DECwindows interface, pull down the File menu and choose Exit.

Example

\$ **DTM** DTM>

This example shows how to invoke the HP DIGITAL Test Manager system.

EXIT

EXIT

Command Qualifiers	Defaults
None	None

This command terminates a HP DIGITAL Test Manager session and returns control to the DCL command-line level. You can also press Ctrl/Z to terminate a HP DIGITAL Test Manager session.

Example

DTM> **EXIT** \$

This example terminates a HP DIGITAL Test Manager session.

EXTRACT

EXTRACT session-file-specification [input-file-specification] [/qualifier...]

Command Qualifiers	Defaults
/DECWINDOWS	/INTERACTIVE
/INTERACTIVE	/INTERACTIVE
/[NO]LOG	/LOG
/TERMINATION_CHARACTER=character	/TERMINATION_CHARACTER=^P

Restrictions

- The EXTRACT command is used for interactive terminal and HP DECwindows tests only.
- The /TERMINATION_CHARACTER qualifier applies to terminal tests only.

This command extracts an input file from a terminal or HP DECwindows session file without altering the session file. An input file is a text file you can edit using the text editor of your choice.

For information about using the EXTRACT command with terminal session files and with HP DECwindows session files, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Examples

1. DTM> EXTRACT SAMPLE.SESSION SAMPLE.INP DTM-S-EXTRACTED, input file SAMPLE.INP created

This example creates the terminal input file SAMPLE.INP. You can edit this file and use it in conjunction with the RECORD/INPUT command.

2. DTM> **EXTRACT/DECWINDOWS DECW_SAMPLE.SESSION DECW_SAMPLE.INP** DTM-S-EXTRACTED, input file SAMPLE.INP created

This example creates the HP DECwindows input file DECW_SAMPLE.INP. You can edit this file and use it in conjunction with the RECORD/INPUT command.

FILTER

FILTER file-specification [/qualifier...]

Command Qualifiers	Default
/ALL	No filters
/DATE	/DATE
/DIRECTORIES	/DIRECTORIES
/FILE_NAMES	/FILE_NAMES

/[NO]LOG	/LOG
/TIME	/TIME
/TRACEBACK	/TRACEBACK
/VERSION	/VERSION
/[NO]USER_FILTER	/NOUSER_FILTER

Restriction

- This command is used with noninteractive and terminal tests only.
- Only HP DECTPU files can be specified as user filters with /USER_ FILTER qualifier. See the *HP DECset for OpenVMS Guide to DIGITAL Test Manager* for information on using user filters.

This command replaces run-time-dependent information with constants in a specified file to prevent differences from occurring when a comparison is performed.

You can use HP DIGITAL Test Manager filters on both HP DIGITAL Test Manager files and other ASCII files. This command enables you to prepare benchmarks for associations with tests or to see how result files would look if filters were run on them.

Example

DTM> **FILTER/ALL DUA0:[USER01.DTMLIB]FILTER.BMK ""** %DTM-S-FILTERED, expression successfully filtered

This example runs the six standard filters on the file FILTER.BMK.

HELP

HELP [topic]

Command Qualifiers	Defaults
None	None

This command displays HP DIGITAL Test Manager and Review subsystem commands information on your screen. You can access general HP DIGITAL Test Manager Help, which provides further information for specific HP DIGITAL Test Manager topics, or you can access specific HP DIGITAL Test Manager topics directly. If you do not specify a topic parameter, you get a display of available help features and instructions for displaying the text.
1. DTM> HELP COPY TEST_DESCRIPTION

This example shows how to access information about the COPY TEST_ DESCRIPTION command from the HP DIGITAL Test Manager system.

2. DTM_REVIEW> HELP SHOW/SUMMARY

This example shows how to access HP DIGITAL Test Manager help for the SHOW/SUMMARY command from the HP DIGITAL Test Manager Review subsystem.

INSERT GROUP

INSERT GROUP group-expression1 group-expression2 [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/[NO]LOG	/LOG

Restrictions

- HP DIGITAL Test Manager does not insert the same group into another group more than once. If the first group is already a subgroup of the second group, HP DIGITAL Test Manager informs you that the INSERT operation has already been done.
- HP DIGITAL Test Manager does not create recursive group structures. If group B is a subgroup of group A, group A cannot be a subgroup of group B.

This command places one or more groups (subgroups) into one or more other groups. Use this command to create a group hierarchy.

Subsequent changes to tests or subgroups inserted with the INSERT GROUP command are reflected in the group.

For more information on groups, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

DTM> INSERT GROUP MARGINS BOUNDARIES _Remark: Inserting group MARGINS into group BOUNDARIES %DTM-S-INSERTED, group MARGINS inserted into group BOUNDARIES

This example inserts the MARGINS group into the BOUNDARIES group.

INSERT TEST_DESCRIPTION

INSERT TEST_DESCRIPTION test-group-expression group-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM /[NO]LOG	/NOCONFIRM /LOG
	Defeative

Parameter Qualifiers	Defaults
/GROUP	/TEST_DESCRIPTION
/TEST_DESCRIPTION	/TEST_DESCRIPTION

This command places one or more test descriptions into one or more groups. HP DIGITAL Test Manager will not insert a test description into a group if it is already a member of the group.

You can specify test descriptions in a test-group-expression, which identifies the items in the expression as test names or as group names using the corresponding parameter qualifier. When you specify a test description, it is inserted into the groups specified in the group-expression parameter.

When you specify a group name, all the tests that currently belong to that group are inserted into the specified group in their current state. However, the group itself does not become a subgroup of the specified group, and the group name does not become affiliated with the group named in the group-expression parameter.

Subsequent changes made to the individual tests or to the contents of the inserted group are not reflected in the group. Use the INSERT TEST_DESCRIPTION command with a group name to include the specified subgroup of tests in their current state without having subsequent changes reflected in the final group. For more information about using groups, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

DTM> INSERT TEST_DESCRIPTION MARGINS/GROUP BOUNDARIES

_Remark: Inserting tests in MARGINS into BOUNDARIES %DTM-I-INSERTED, test description BOTTOMEDGE inserted into group BOUNDARIES %DTM-I-INSERTED, test description LMARGIN inserted into group BOUNDARIES %DTM-I-INSERTED, test description RMARGIN inserted into group BOUNDARIES %DTM-I-INSERTED, test description TOPEDGE inserted into group BOUNDARIES %DTM-S-INSERTIONS, 4 insertions completed

This example inserts all the test descriptions in the MARGINS group into the BOUNDARIES group. However, the MARGINS group itself is not inserted.

MODIFY GROUP

MODIFY GROUP group-expression [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]LOG	/LOG
/[NO]REMARK="string"	See text

This command replaces the remarks associated with existing groups. You specify the remark you want to modify by using the /REMARK qualifier. You can modify any number of groups with one MODIFY GROUP command.

The remark parameter specifies the remark associated with the MODIFY GROUP command and is logged with it in the history file. Because the remark is the only item you can modify for a group, HP DIGITAL Test Manager displays an error message if you do not supply a value for the /REMARK qualifier, or do not specify the /NOREMARK qualifier, which you use to delete any remarks in the specified group.

Example

DTM> MODIFY GROUP MARGINS/REMARK="All border tests" _Remark: Replacing remark for group MARGINS %DTM-S-MODIFIED, group MARGINS modified

This example replaces the existing remark associated with the group MARGINS with the remark "All border tests". It also logs the remark *Replacing remark for group MARGINS* with the MODIFY GROUP command in the history file.

MODIFY TEST_DESCRIPTION

MODIFY TEST_DESCRIPTION test-group-expression [/qualifier...] "remark"

Command Qualifiers

Defaults

/[NO]BENCHMARK=file-specification /[NO]COMMAND="DCL-command" /[NO]COMPARISON_TYPE=keyword /[NO]EPILOGUE=file-specification /[NO]FILTER=(keyword,...) /[NO]FILTER=(keyword,...) /[NO]FILTER=(keyword,...) /[NO]PROLOGUE=file-specification /[NO]REMARK="string" /[NO]TEMPLATE=file-specification /[NO]VARIABLE=(variable-name[=variable-value],...) Current benchmark None None Current test epilogue Current filters /LOG Current test prologue Current template Current template Current variables

Parameter Qualifiers	Defaults
/GROUP	/TEST_DESCRIPTION
/TEST_DESCRIPTION	/TEST_DESCRIPTION

Restrictions

- The /COMMAND qualifier applies to HP DECwindows tests only.
- The /FILTER qualifier applies to noninteractive and terminal tests only.
- Do not include a rooted logical name (for example, DISK\$:[USER.]) in the specification of a test benchmark file. HP DIGITAL Test Manager successfully executes the test, but fails when comparing the test result file to the test benchmark file.

You can affect the name of a test benchmark file by using the Following HP DIGITAL Test Manager commands:

- CREATE TEST/BENCHMARK
- MODIFY TEST/BENCHMARK
- SET BENCHMARK_DIRECTORY

This command changes field values for the test descriptions specified in the test group expression. You can modify all field values except the test name.

Command qualifiers enable you to specify the fields in the test description to be changed, and also the new values to be assigned to the fields. You can modify any number of fields with one MODIFY TEST_DESCRIPTION command.

The remark parameter is the remark associated with the MODIFY TEST_DESCRIPTION command and logged with the command in the history file. The /REMARK qualifier is the modified remark to be associated with the modified test description.

Example

DTM> MODIFY TEST_DESCRIPTION RMTEST/BENCHMARK=RMTEST.BMK _Remark: Replacing old benchmark file %DTM-S-MODIFIED, test description RMTEST modified.

This example replaces a benchmark file specification for the test description RMTEST.

MODIFY VARIABLE

MODIFY VARIABLE variable-expression [/qualifier...] "remark"

Command Qualifiers /GLOBAL /LOCAL /[NO]LOG /LOGICAL /NUMERIC /[NO]REMARK="string" /STRING /SYMBOL /VALUE=value Defaults Current scope /LOG Current usage Current type Current remark Current type Current usage Current usage Current value

This command changes information about variables in the HP DIGITAL Test Manager library. Command qualifiers enable you to change specific information about the variables. You can modify any amount of information with one MODIFY VARIABLE command.

Neither numeric symbols nor logical symbols can have a null value. These conditions would generate illegal DCL syntax statements, such as the following:

\$ variable_name =
\$ define variable_name ""

When modifying the type or value of a variable, HP DIGITAL Test Manager checks for this illegal condition in the variable fields of all test descriptions.

The remark parameter is the remark associated with the MODIFY VARIABLE command and logged with the command in the history file. The /REMARK qualifier is the modified remark to be associated with the modified variable.

Example

DTM> **MODIFY VARIABLE INPUT_FILE/VALUE=INPUT.RNO** _Remark: **Replacing value of INPUT_FILE with INPUT.RNO** %DTM-S-MODIFIED, variable INPUT_FILE modified.

This example assigns a new default value to the variable INPUT_FILE.

PLAY

PLAY file-specification [/qualifier...]

Command Qualifiers	Defaults
/COMMAND="DCL-command" /DECWINDOWS /[NO]DISPLAY=screen /INTERACTIVE /KEYSYM=key-symbol /[NO]LOG /[NO]REALTIME	/INTERACTIVE See text /INTERACTIVE /KEYSYM=F9 /LOG /NOREALTIME
/[NO]RESULT_FILE[=file-specification]	/NORESULT_FILE

Restriction

- You cannot play a HP DECwindows session file on a terminal screen.
- To set the proper display device, use the DCL command SET DISPLAY before invoking HP DIGITAL Test Manager. Otherwise, when you specify /DISPLAY=screen with PLAY/DECWINDOWS/COMMAND, the display device that you specify does not propagate to the application spawned by HP DIGITAL Test Manager for the /COMMAND option.

This command executes the specified session file and displays the output on your screen. The file is not part of a collection run and the results of the execution (if saved in a file) are not compared. Use qualifiers to select your output file and the screen on which to display the run.

The session file runs as if it were executing on the type of terminal on which it was recorded. If the display terminal has characteristics different from the recording terminal, the playback you see might not appear as you expect it to appear. Even so, the result file is correct regardless of the differences in terminal characteristics.

Example

```
DTM> PLAY MEMO_TEST.SESSION
%DTM-I-BEGIN, your interactive test session is now beginning...
.
.
%DTM-S-CONCLUDED, your interactive test session has concluded
DTM>
```

This example displays a message stating that your interactive terminal session is beginning, executes the specified session file, and displays a message stating that the execution has ended.

RECORD

RECORD test-name [/qualifier...] "remark"

Command Qualifiers	Default
/APPEND	None
/[NO]AUTO_COMPARE	See text
/DISPLAY=screen	See text
/[NO]EPILOGUE	See text
/[NO]FILTERS	See text
/INPUT=file-specification	See text
/KEYSYM=key-symbol	/KEYSYM=F9/P
/[NO]LOG	/LOG
/[NO]POINTER_MOTION	/NOPOINTER_MOTION
/[NO]PROLOGUE	See text
/[NO]REALTIME	/NOREALTIME
/TERMINATION_CHARACTER=character	See text
/[NO]VARIABLES	/NOVARIABLES

Restrictions

- The /APPEND qualifier applies to interactive terminal tests only.
- The /FILTER qualifier applies to noninteractive and terminal tests only.
- The /INPUT qualifier generates errors when you convert an input file to a session file if you include the comment directives {BEGIN_COMMENT} and {END_COMMENT} in the input file.
- A buffer limitation can cause the /INTERACTIVE qualifier to have an access violatation when recording tests of drawing applications that use REGIS or Sixel files. To avoid this problem, do the following:
 - Define the logical DTM\$PCDRIVER to 1 before recording or executing interactive terminal tests. HP DIGITAL Test Manager then uses HP DIGITAL Test Manager PCDRIVER instead of the VMS FTDRIVER.
 - To ensure that DTM\$PCDRIVER is defined when you run tests in batch, define DTM\$PCDRIVER within a test or collection prologue file.

This command instructs HP DIGITAL Test Manager to record a specified interactive terminal or HP DECwindows test. If you specify an input file by using the /INPUT qualifier, HP DIGITAL Test Manager records from the input file. If you do not use the /INPUT qualifier, HP DIGITAL Test Manager records from the terminal or HP DECwindows workstation. All activity that occurs in the recording session is stored in the resulting session file.

Note

The /INPUT/REALTIME option can duplicate wait records in the new session file when you use the option to record an interactive terminal test. This results in slower test execution. To remove the unwanted wait records, edit the session file. See the *HP DECset for OpenVMS Guide to DIGITAL Test Manager* for information on editing session files.

This command requires the name of the test to record. You must create this test using the CREATE TEST_DESCRIPTION command before using the RECORD command.

When you record a HP DECwindows test, HP DIGITAL Test Manager executes a command (if specified) before recording begins.

For information about the command sequence keys for controlling a recording session, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

This example shows the recording of interactive terminal test MAIL_TEST.

RECREATE

RECREATE collection-name [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

This command re-creates a collection, which provides the same attributes that were part of the original collection. When you create a collection, HP DIGITAL Test Manager stores the command in the history. When you re-create a collection using the RECREATE command, HP DIGITAL Test Manager uses the command stored in the history so none of the file specifications or qualifiers are changed.

HP DIGITAL Test Manager deletes the old collection and all files related to it (except the benchmark file) from the HP DIGITAL Test Manager library, then creates a new collection with the latest available versions of each required file.

You enter the RECREATE command to have your collection reflect changes made to a test, variable definitions, or something else in the library since you originally created the collection. You might also use this command if you subsequently created more tests to be included in the collection.

This command cannot re-create a collection that you have deleted.

____ Caution ___

Ensure that the prologue and epilogue files associated with the collection and template, prologue, and epilogue files associated with the tests in the collection exist in their proper directories. If HP DIGITAL Test Manager cannot find the template, prologue, or epilogue files specified on the original CREATE TEST_DESCRIPTION command, the original collection is deleted but a new collection is not created.

```
DTM> RECREATE MAIL_COLL
_Remark: Re-creating Collection MAIL_COLL
```

Collection MAIL_COLL has not been reviewed, confirm re-creation:[Y/N](N) Y

```
%DTM-S-DELETED, collection MAIL_COLL deleted
%DTM-S-CREATED, collection MAIL_COLL created
%DTM-S-RECREATED, collection MAIL_COLL has been re-created
```

This example re-creates collection MAIL_COLL. In this example, HP DIGITAL Test Manager prompts for confirmation to re-create the collection without first reviewing it.

REMARK

REMARK "remark" [/qualifier]

Command Qualifier	Default
/[NO]LOG	/LOG

This command adds a remark to the HP DIGITAL Test Manager history file. If you allow HP DIGITAL Test Manager to prompt you for a remark, the remark can be up to 254 characters. Otherwise, the total command-line length must follow OpenVMS conventions. The remark is recorded in the history file in the following format:

date time user-name REMARK "remark"

Use this command to enter a comment about an unusual occurrence in the HP DIGITAL Test Manager library.

Example

```
DTM> REMARK "Correcting problems created by -
_DTM> system crash while collection was running"
%DTM-S-REMARK, remark added to history file
```

This example adds the remark "Correcting problems created by system crash while collection was running". You might enter such a remark into your history file to clarify your reason for entering a VERIFY/RECOVER command to correct problems with the library.

REMOVE GROUP

REMOVE GROUP group-expression1 group-expression2 [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]LOG	/LOG

This command removes one or more groups from one or more other groups, which reverses the action of the INSERT GROUP command. Removing a group does not delete the group from the HP DIGITAL Test Manager library; it changes the group hierarchy by canceling a group's connection as a subgroup of another group.

Example

DTM> REMOVE GROUP RIGHTMARGIN MARGINS, BOUNDARIES /CONFIRM _Remark: Removing RIGHTMARGIN from MARGINS and BOUNDARIES Confirm removal of group RIGHTMARGIN from group BOUNDARIES [Y/N] (N) Y %DTM-I-REMOVED, group RIGHTMARGIN removed from group BOUNDARIES Confirm removal of group RIGHTMARGIN from group MARGINS [Y/N] (N) Y %DTM-I-REMOVED, group RIGHTMARGIN removed from group MARGINS %DTM-S-REMOVALS, 2 removals completed

This example removes the RIGHTMARGIN group from the BOUNDARIES and MARGINS groups and prompts you to confirm each transaction.

REMOVE TEST_DESCRIPTION

REMOVE TEST_DESCRIPTION	test-group-expression group-expression [/qualifier] "remark"
Command Qualifiers /[NO]CONFIRM /[NO]LOG	Defaults /CONFIRM /LOG
Parameter Qualifiers	Defaults
/GROUP	/TEST_DESCRIPTION
/TEST_DESCRIPTION	/TEST_DESCRIPTION

This command removes one or more test descriptions from one or more groups, which reverses the action of the INSERT TEST_DESCRIPTION command. It does not delete the test description from the HP DIGITAL Test Manager library.

DTM> REMOVE TEST_DESCRIPTION MARGINS/GROUP BOUNDARIES/NOCONFIRM _Remark: Removing MARGINS tests from BOUNDARIES %DTM-I-REMOVED, test_description BOTTOMEDGE removed from group BOUNDARIES %DTM-I-REMOVED, test_description LEFTMARGIN removed from group BOUNDARIES %DTM-I-REMOVED, test_description RIGHTMARGIN removed from group BOUNDARIES %DTM-I-REMOVED, test_description TOPEDGE removed from group BOUNDARIES %DTM-S-REMOVALS, 4 removals completed

This example removes all the tests in the MARGINS group from the BOUNDARIES group without prompting for confirmation.

REVIEW

REVIEW collection-name [/qualifier] ["remark"]

Command Qualifier	Default
/[NO]READ_ONLY	/NOREAD_ONLY

Restriction

• You can review only noninteractive and interactive terminal tests in the Review subsystem. HP DECwindows tests must be reviewed through the HP DIGITAL Test Manager HP DECwindows user interface (see the HP DECset for OpenVMS Guide to DIGITAL Test Manager).

When you enter the REVIEW command at the HP DIGITAL Test Manager prompt (or DTM REVIEW at the DCL prompt), you invoke the Review subsystem, which is signified by the DTM_REVIEW> prompt. This command invokes the Review subsystem in which you can examine and manipulate test results for the specified collection. HP DIGITAL Test Manager displays the Collection Summary Information.

You must run and compare a collection before you can review it. A summary of the results for each test description is stored in the result description for each test. A result description name for a test is the same as its test name.

If you enter the REVIEW command with the /NOREAD_ONLY qualifier, HP DIGITAL Test Manager identifies you as the primary reviewer of the collection. Only one person at a time can be the primary reviewer. This reviewer can use all Review subsystem commands.

If you specify the /READ_ONLY qualifier, you are designated as a read-only reviewer of the collection. HP DIGITAL Test Manager permits multiple, read-only reviewers for a collection. You can browse through the result descriptions and print files, but you cannot make any changes to the result descriptions. Read-only reviewers cannot enter the UPDATE or INSERT command.

The primary reviewer exercises control over the collection being reviewed. When a read-only reviewer reviews a collection, the collection summary information being reviewed (using the SHOW command) can be inaccurate if the primary reviewer is currently reviewing and manipulating the collection data. Consequently, print jobs might seem to disappear if the primary reviewer deletes the file marked for printing before you exit from the Review subsystem (the PRINT command executes when you leave the Review subsystem).

You can reduce the probability that a file marked for printing will disappear by using the PRINT command with the /NOW or /SELECTED qualifier. The /NOW qualifier causes HP DIGITAL Test Manager to queue for printing only the files specified on the current command line. The /SELECTED qualifier causes HP DIGITAL Test Manager to queue for printing all files specified during the current review session, including those specified on the current command line.

See the *HP DECset for OpenVMS Guide to DIGITAL Test Manager* and this command dictionary for more information about the Review subsystem and the commands it uses.

Example

```
DTM> REVIEW MAIL_COLL

Collection MAIL_COLL with 7 tests was created on 7-SEP-1998 09:30:28 by the

command:

CREATE COLLECTION MAIL_COLL MAIL* "Creating the MAIL tests collection"

Last Review Status = not previously reviewed

Success count = 4

Unsuccessful count = 1

New test count = 2

Updated test count = 0

Comparisons aborted = 0

Test not run count = 0

Result Description MAIL_TEST Comparison Status : Unsuccessful
```

DTM_REVIEW>

This example invokes the Review subsystem for the collection MAIL_COLL.

RUN

RUN collection-name [/qualifier...] "remark"

Command Qualifiers

/[NO]CONFIRM /[NO]LOG /[NO]LOG_FILE=file-specification /[NO]OUTPUT=file-specification Defaults /CONFIRM /LOG LOG_FILE=SYS\$OUTPUT /OUTPUT=SYS\$OUTPUT This command executes a collection of tests interactively by processing test template files or previously recorded session files. This produces a result file for each test in the collection. The result file is subsequently compared to its respective benchmark files.

When you enter the RUN command, your screen displays the output of the noninteractive and interactive terminal test templates as they are put into the result file; you are also shown any informational messages that are generated. You can use the /OUTPUT qualifier to redirect this output to a file, or you can suppress it with the /NOOUTPUT qualifier.

Regardless of the qualifier you use, the RUN command occupies your terminal or workstation while the collection executes. Therefore, when you do not need to see the output from your test, execute collections in batch mode using the HP DIGITAL Test Manager SUBMIT command instead of the RUN command. (See the SUBMIT command for more information on executing your collection in batch mode.)

Note _

If, instead of using the SUBMIT command, you submit a command procedure that includes the RUN command, you must specify /NOLOG_FILE or /LOG_FILE=file-specification, where the file specification names something other than SYS\$OUTPUT. If you specify SYS\$OUTPUT with the /LOG_FILE qualifier, the RUN command attempts to write to your batch job's log file. The OpenVMS operating system does not allow this file to be shared, and your RUN command will fail.

If you specify a test name rather than a collection name as the parameter to the RUN command, HP DIGITAL Test Manager prompts you to confirm that you want to create a collection containing the test. If you type YES, HP DIGITAL Test Manager creates a collection with the same collection name as the specified test name—if a collection by that name does not already exist—and executes this collection.

Press Ctrl/C to abort a RUN command. Pressing Ctrl/C allows HP DIGITAL Test Manager to clean up and restore the library to a consistent state. Do not press Ctrl/Y to abort a collection run.

The HP DIGITAL Test Manager RUN command is different from the DCL command RUN; you cannot use the DCL command RUN to execute a collection of tests.

DTM> RUN SEND_MAIL_TEST "simple test of SEND_MAIL_TEST command"

Starting SEND_MAIL_TEST test run...

%DTM-I-BEGIN, your interactive test session is now beginning...

%DTM-S-CONCLUDED, your interactive test session has concluded

Performing post-run cleanup with comparison...

DTM-I-SUCCEEDED, the comparison for test SEND_MAIL_TEST succeeded DTM-S-COMPARED, collection SEND_MAIL_TEST compared DTM>

This example executes the collection SEND_MAIL_TEST interactively.

SET BENCHMARK_DIRECTORY

SET BENCHMARK_DIRECTORY [directory-specification] [/qualifier] "remark"

SET NOBENCHMARK_DIRECTORY ["remark"]

Command Qualifier	Default
/[NO]LOG	/LOG

Restrictions

• Do not include a rooted logical name (for example, DISK\$:[USER.]) in the specification of a test benchmark file. HP DIGITAL Test Manager successfully executes the test, but fails when comparing the test result file to the test benchmark file.

You can affect the name of a test benchmark file by using the following HP DIGITAL Test Manager commands:

- CREATE TEST/BENCHMARK
- MODIFY TEST/BENCHMARK
- SET BENCHMARK_DIRECTORY

This command instructs HP DIGITAL Test Manager to establish the specified directory as the default directory for benchmark files for the current HP DIGITAL Test Manager library. HP DIGITAL Test Manager searches this directory for benchmark files and places new and updated benchmark files in this directory.

When you create a collection with the CREATE COLLECTION command and the /BENCHMARK_DIRECTORY qualifier and specify a default benchmark directory for the collection, HP DIGITAL Test Manager references that directory for benchmark files associated with tests in that collection. If you associate a directory specification with the benchmark file for a specific test, HP DIGITAL Test Manager references that directory rather than either the default benchmark directory for the library or the collection benchmark directory when executing that test.

If you store your benchmark files in a CMS library, you can use classes to specify which version of the benchmark file you want HP DIGITAL Test Manager to access. This allows you to select from several versions of a single benchmark file, which is useful if you are maintaining several base levels of a program.

The SET NOBENCHMARK_DIRECTORY command clears any default benchmark directory established with the SET BENCHMARK_DIRECTORY command.

Example

```
DTM> SET BENCHMARK_DIRECTORY DUA0:[USER01.BMK]
_Remark: New default benchmark directory
%DTM-S-NEWDEF, DUA0:[USER01.BMK] is the new default collection
benchmark directory
DTM>
```

This example establishes a new default benchmark directory for the library.

SET EPILOGUE

SET EPILOGUE file-specification [/qualifier] "remark"

SET NOEPILOGUE "remark"

Command Qualifier	Default
/[NO]LOG	/LOG

This command establishes the default collection epilogue file for all subsequently created collections. HP DIGITAL Test Manager verifies the existence of the collection epilogue when you create a collection. This file can be in a CMS library.

You can override the default when you create a collection by assigning another file with the CREATE COLLECTION/EPILOGUE command.

The SET NOEPILOGUE command cancels a previously established default collection epilogue file.

```
DTM> SET EPILOGUE DUA0:[USER01.DTMEPI]EPILOGUE.COM ""
%DTM-S-NEWDEF, DUA0:[USER01.DTMEPI]EPILOGUE.COM is the new default collection epilogue
```

This example specifies a file as the default collection epilogue file for subsequently created collections.

SET LIBRARY

SET LIBRARY directory-specification [/qualifier...]

Command Qualifiers	Defaults
/[NO]LOG	/LOG
/[NO]VERIFY	/VERIFY

This command selects an existing HP DIGITAL Test Manager library for use with HP DIGITAL Test Manager commands. This library is your current library and remains your current library until you select another library with the CREATE LIBRARY or SET LIBRARY command, or until you log out.

HP DIGITAL Test Manager issues an error message if you use the SET LIBRARY command with a directory specification that is not a HP DIGITAL Test Manager library.

Example

DTM> **SET LIBRARY [.DTMLIB]** %DTM-S-LIBIS, DTM library is DUA0:[USER01.DTMLIB]

This example selects a HP DIGITAL Test Manager library.

SET PROLOGUE

SET PROLOGUE file-specification [/qualifier] "remark"

SET NOPROLOGUE "remark"

Command Qualifier	Default
/[NO]LOG	/LOG

This command establishes the specified file as the default prologue file for subsequently created collections. HP DIGITAL Test Manager verifies the existence of the collection prologue when you create a collection. This file can be in a CMS library.

You can override the default when you create a collection by assigning another file with the CREATE COLLECTION/PROLOGUE command.

The SET NOPROLOGUE command cancels a previously established default collection prologue file.

Example

DTM> SET PROLOGUE DUA0:[USER01.DTMPRO]PROLOGUE.COM "" %DTM-S-NEWDEF, DUA0:[USER01.DTMPRO]prologue.com is the new default collection prologue.

This example specifies a default collection prologue file.

SET TEMPLATE_DIRECTORY

SET TEMPLATE_DIRECTORY directory-specification [/qualifier] "remark"

SET NOTEMPLATE_DIRECTORY "remark"

Command Qualifier	Default
/[NO]LOG	/LOG

This command instructs HP DIGITAL Test Manager to establish the specified directory as the default directory for template files in the current HP DIGITAL Test Manager library.

When you create a collection using the /TEMPLATE_DIRECTORY qualifier, HP DIGITAL Test Manager references that directory for templates associated with tests in that collection. If you include a directory specification in the template file specification for a test in the collection, HP DIGITAL Test Manager references that directory rather than either the default template directory or the collection template directory when executing that test.

If the directory you specify is a CMS library, HP DIGITAL Test Manager issues the appropriate CMS commands to remove, replace, or insert files in the library. These CMS commands are logged in the HP DIGITAL Test Manager history file.

If you store your template files in a CMS library, you can use classes to specify which version of the template file you want HP DIGITAL Test Manager to access. This allows you to select from several versions of a single template file, which is useful if you are maintaining several base levels of a program.

The SET NOTEMPLATE_DIRECTORY command clears any default template directory established with the SET TEMPLATE_DIRECTORY command.

```
DTM> SET TEMPLATE_DIRECTORY DUA0:[USER01.TEMPLATE]
_Remark: New default template directory
%DTM-S-NEWDEF, DUA0:[USER01.TEMPLATE] is the new default collection
template directory
DTM>
```

This example establishes a new default template directory for the library.

SHOW ALL

SHOW ALL [/qualifier]

Command Qualifier Default

/OUTPUT[=file-specification]

/OUTPUT=SYS\$OUTPUT

This command displays the current directory specifications for the directories or CMS libraries containing your epilogue, prologue, benchmark, and template files, and the number of collections, test descriptions, groups, and variables in the library.

Example

DTM> SHOW ALL

Description of HP DIGITAL Test Manager Library DBA1\$:[project.dsrlib]

```
Default template directory: DUA0:[USER01.TEMP] "Default template library"
Default benchmark directory: DUA0:[USER01.BMK] "Default benchmark library"
Default collection prologue: DUA0:[USER01.PROEPILIB]PROLOGUE_1.COM
Default collection epilogue: DUA0:[USER01.PROEPILIB]EPILOGUE_1.COM
Number of collections: 25
Number of test descriptions: 48
Number of groups: 8
Number of variables: 7
DTM>
```

This example describes the current HP DIGITAL Test Manager library.

SHOW BENCHMARK_DIRECTORY

SHOW BENCHMARK_DIRECTORY [/qualifier]

Command Qualifier	Default
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT

This command displays the directory specification for the current default directory for benchmark files. This directory can be a CMS library.

Note

Do not specify a directory that contains a concealed logical for the HP DIGITAL Test Manager library. A concealed logical can cause SHOW BENCHMARK_DIRECTORY to fail when HP DIGITAL Test Manager executes the specified collection.

Example

```
DTM> SHOW BENCHMARK_DIRECTORY
DUA0:[USER01.BMK] "Default benchmark library"
DTM>
```

This command displays the directory specification for the current default benchmark directory.

SHOW COLLECTION

SHOW COLLECTION collection-expression [/qualifier...]

Command Qualifiers	Defaults
/BENCHMARK_DIRECTORY	None
/BRIEF	/INTERMEDIATE
/CLASS=(keyword=class-name,)	None
/FULL	/INTERMEDIATE
/INTERMEDIATE	/INTERMEDIATE
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT
/TEMPLATE_DIRECTORY	None

This command displays information about collections in the current HP DIGITAL Test Manager library. These collections include currently running collections, collections that have been created but not run, collections that have been run but not deleted, and collections that have been run and stopped (partially run collections), but not deleted.

Table CD-2 shows the types of information that you can display in any combination about collections.

Information Type	Qualifiers
Amount of displayed information	/BRIEF, /INTERMEDIATE, and /FULL
Benchmark directory	/BENCHMARK_DIRECTORY
File output	/OUTPUT
CMS class	/CLASS=BENCHMARK and /CLASS=TEMPLATE
Template directory	/TEMPLATE_DIRECTORY

Table CD–2 Types of Collection Display Information

DTM> SHOW COLLECTION/BRIEF

Collections in HP DIGITAL Test Manager Library DUA0:[USER01.DTMLIB]

```
MAIL_COLL MAIL_SEND_COLL MAIL_SHOW_COLL DTM>
```

This command lists the names of all collections in the current library.

SHOW EPILOGUE

SHOW EPILOGUE [/qualifier]

Command Qualifier	Default
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT

This command displays the file specification for the default epilogue file for collections. The default collection epilogue file is established with the SET EPILOGUE command.

Example

```
DTM> SHOW EPILOGUE
DUA0:[USER01.PROEPILIB]EPILOGUE_1.COM "Default collection epilogue file"
DTM>
```

This example displays the file specification for the default collection epilogue file.

SHOW GROUP

SHOW GROUP group-expression [/qualifier...]

Command Qualifiers	Defaults
/BRIEF	/INTERMEDIATE
/[NO]CONTENTS[=n]	/CONTENTS=1
/FULL	/INTERMEDIATE
/INTERMEDIATE	/INTERMEDIATE
/MEMBER	None
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT

This command lists a group's name, its contents, and its creation remark. If you specify the SHOW GROUP command for more than one group, the groups are described in alphabetical order.

If you omit the group expression parameter, HP DIGITAL Test Manager displays information about all groups.

_ Note

The HP DIGITAL Test Manager HP DECwindows interface does not display the remarks associated with subgroups in the HP DIGITAL Test Manager Group View. To see the remarks associated with subgroups, use SHOW GROUP at the command-line interface.

Example

```
DTM> SHOW GROUP/CONTENTS=ALL MARGINS
Groups in HP DIGITAL Test Manager Library DISK$USER01:[PROJECT.DTMLIB]
MARGINS "test of margin commands"
LEFTMARGINS/GROUP
LMTEST1
LMTEST2
RIGHTMARGINS/GROUP
RMTEST1
RMTEST2
TEST1
```

This example displays the contents of the MARGINS group. Because /CONTENTS=ALL is specified, each group, test description, and remark is listed.

SHOW HISTORY

SHOW HISTORY [object-expression] [/qualifier...]

Command Qualifiers

/BEFORE=time /OUTPUT=file-specification /SINCE=time /[NO]TRANSACTIONS=(keyword,...) /USER=user-name Defaults See text /OUTPUT=SYS\$OUTPUT Library creation /TRANSACTIONS=ALL None

This command displays a chronological list of transactions performed on a HP DIGITAL Test Manager library. If you specify an object expression, history information about that HP DIGITAL Test Manager entity is displayed. HP DIGITAL Test Manager records all transactions that alter the library.

The qualifiers used with this command determine which library transactions should be reported. The qualifiers you use to specify all the conditions that must be true for a particular transaction record to be printed.

The following is an example transaction record:

12-MAY-1998 17:15:31 USER01 CREATE TEST MAIL_TEST "Going to test MAIL"

This record shows that on May 12, 1998 at 5:15 PM, USER01 entered the HP DIGITAL Test Manager CREATE TEST_DESCRIPTION command to create the MAIL_TEST test.

When you enter the DELETE HISTORY or REMARK command, HP DIGITAL Test Manager displays an asterisk (*) in the first column of the transaction record.

Because transaction records for tests, collections, groups, or variables that are deleted from the library are retained, the SHOW HISTORY command can display records for tests and groups that do not currently exist. If you use a deleted name again, SHOW HISTORY does not distinguish between the old and new histories.

DTM> SHOW HISTORY

History in HP DIGITAL Test Manager Library DUA0:[USER01.DTMLIB]
08-JAN-1998 15:33:59 SMITH CREATE LIBRARY DUA1:[USER01.DTMLIB] "New
HP DIGITAL Test Manager library"
08-JAN-1998 15:55:45 SMITH CREATE TEST_DESCRIPTION RMTEST "Run MAIL test"
08-JAN-1998 16:15:35 SMITH CREATE TEST_DESCRIPTION MEMO_TEST "First
interactive test of memo template"
.
DTM>

This command displays the history file for the current library.

SHOW LIBRARY

SHOW LIBRARY [/qualifier]

Command Qualifier	Default
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT

This command displays the file specification of the current HP DIGITAL Test Manager library, or informs you if the library is invalid or if no library has been set. If the library is invalid, HP DIGITAL Test Manager issues an error message instructing you to use the VERIFY command.

Example

```
DTM> SHOW LIBRARY
Your HP DIGITAL Test Manager library is DUA0:[USER01.DTMLIB]
```

This example displays your current HP DIGITAL Test Manager library.

SHOW PROLOGUE

SHOW PROLOGUE [/qualifier]

Command Qualifier

Default

/OUTPUT[=file-specification] /OUTPUT=SYS\$OUTPUT

This command displays the file specification for the default prologue file for collections. This file specification was established with a previous SET PROLOGUE command.

```
DTM> SHOW PROLOGUE
DUA0:[USER01.PROEPILIB]PROLOGUE_1.COM "Default collection prologue file"
DTM>
```

This example displays the file specification for the default collection prologue file.

SHOW TEMPLATE_DIRECTORY

SHOW TEMPLATE_DIRECTORY [/qualifier]

Command Qualifier	Default
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT

This command displays the directory specification for the default directory that contains the template files. This directory can be a CMS library.

Example

```
DTM> SHOW TEMPLATE_DIRECTORY
DUA0:[USER01.TEMPLATE] "Default template library"
DTM>
```

This example displays the directory specification for the current default template directory.

SHOW TEST_DESCRIPTION

SHOW TEST_DESCRIPTION [test-group-expression] [/qualifier...]

Command Qualifiers	Defaults
/BENCHMARK	See text
/BRIEF	/INTERMEDIATE
/COMMAND	See text
/COMPARISON_TYPE	See text
/EPILOGUE	See text
/FILTER	See text
/FULL	/INTERMEDIATE
/GROUPS	See text
/INTERMEDIATE	/INTERMEDIATE
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT
/PROLOGUE	See text
/REMARK	See text
/TEMPLATE	See text
/TYPE	See text
/VARIABLE	See text

Parameter Qualifiers
/GROUP
/TEST_DESCRIPTION

Defaults /TEST_DESCRIPTION /TEST_DESCRIPTION

Restrictions

- The /COMMAND qualifier applies to HP DECwindows tests only.
- The /FILTER qualifier applies to noninteractive and terminal tests only.

This command displays files and groups associated with the specified test descriptions. Table CD–3 lists information displayed with the SHOW TEST_DESCRIPTION command.

Command Qualifier	Function
/BENCHMARK /COMPARISON_TYPE /FILTER /EPILOGUE /PROLOGUE /TEMPLATE /VARIABLE /COMMAND	Display the contents of the specified test description fields.
/GROUPS /REMARK /TYPE	Display the groups and remark associated with the test description, and whether the test description describes an interactive or noninteractive test.
/BRIEF /INTERMEDIATE /FULL	Determine the amount of information displayed.
/OUTPUT	Redirect the output from the command.

Table CD–3 Information Displayed with SHOW TEST_DESCRIPTION Command

If you do not supply a test expression, HP DIGITAL Test Manager displays the intermediate level of information for all tests in the library.

DTM> SHOW TEST_DESCRIPTION SEND_MAIL_TEST Test descriptions in HP DIGITAL Test Manager Library DUA0:[USER01.DTMLIB] SEND_MAIL_TEST "MAIL SEND command test" Template = SEND_MAIL_TEST.COM Benchmark= SEND_MAIL_TEST_BMK

Benchmark= SEND_MAIL_TEST.BMK
Prologue = None Specified
Epilogue = None Specified

This example displays the contents of the test description SEND_MAIL_TEST.

SHOW VARIABLE

SHOW VARIABLE variable-expression [/qualifier...]

Command Qualifiers	Defaults
/BRIEF	/INTERMEDIATE
/FULL	/INTERMEDIATE
/INTERMEDIATE	/INTERMEDIATE
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT
/REMARK	See text
/SCOPE	See text
/TEST_DESCRIPTION	See text
/TYPE	See text
/USAGE	See text
/VALUE	See text

This command displays information about the specified variables. The variable must have been previously defined in the HP DIGITAL Test Manager library with the CREATE VARIABLE command.

The default qualifier, /INTERMEDIATE, displays the name, value, and remark for a variable.

__ Note __

The HP DIGITAL Test Manager HP DECwindows interface does not display the remarks associated with variables in the HP DIGITAL Test Manager Variable view. To see the remarks associated with variables, use SHOW VARIABLE at the command-line interface.

DTM> SHOW VARIABLE /VALUE INPUT_FILE

Variables in the HP DIGITAL Test Manager library DUA0:[USER01.PROJECT]

INPUT_FILE "input file for DSR tests"
 Value = INPUT.RNO

This example displays the value of the variable INPUT_FILE.

SHOW VERSION

SHOW VERSION [/qualifier]

Command Qualifier

[=file-specification]

Default /OUTPUT=SYS\$OUTPUT

This command displays the version of HP DIGITAL Test Manager you are using. You should include the full text of this message when you submit a Software Performance Report (SPR).

Example

DTM> **SHOW VERSION** HP DIGITAL Test Manager Version 3.9

This example displays the version number of HP DIGITAL Test Manager.

SPAWN

SPAWN [command] [/qualifier...]

Command Qualifiers	Defaults
/[NO]CARRIAGE_CONTROL	See text
/[NO]CLI[=cli]	See text
/INPUT=file-specification	See text
/[NO]KEYPAD	/KEYPAD
/[NO]LOGICAL_NAMES	/LOGICAL_NAMES
/[NO]NOTIFY	/NONOTIFY
/OUTPUT=file-specification	See text
/PROCESS=subprocess-name	See text
/[NO]PROMPT[=string]	See text
/[NO]SYMBOLS	/SYMBOLS
/[NO]WAIT	/WAIT

This command creates a subprocess from the current HP DIGITAL Test Manager session—the parent process. The context of your HP DIGITAL Test Manager session is copied to the subprocess. You can use the SPAWN command to leave HP DIGITAL Test Manager temporarily, to create another HP DIGITAL Test Manager session, or to edit a file and then return to your original HP DIGITAL Test Manager session.

Example

DTM> SPAWN MAIL

You have 1 new message.

MAIL>

This example spawns the OpenVMS Mail Utility from the HP DIGITAL Test Manager subsystem. Enter the ATTACH command to terminate the MAIL session and return to the HP DIGITAL Test Manager system level.

STOP

STOP collection-name [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/NOCONFIRM
/[NO]LOG	/LOG

This command stops the execution of a collection of tests that has been submitted to a batch queue. The batch job stops and is removed from the batch queue, necessary cleanup is performed on the database, and you see a message. All tests that have completed are available for comparison and review.

Press Ctrl/C to stop a collection running interactively.

You must have the appropriate privileges to stop a collection submitted by someone else. If the person is in your UIC group, you must have GROUP privilege. If the person is not in your UIC group, you must have WORLD privilege.

Example

```
DTM> STOP MAIL_COLL/CONFIRM "Stopping run of MAIL_COLL"
Confirm stop of collection MAIL_COLL [Y/N] (N): Y
%DTM-S-COLSTOPPED, collection MAIL_COLL has been stopped
DTM>
```

This example stops collection MAIL_COLL that is executing in batch mode.

SUBMIT

SUBMIT collection-name [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	/CONFIRM
/[NO]KEEP	/KEEP
/[NO]LOG	/LOG

Restriction You can submit collections that contain HP DECwindows tests, but you must be logged in to the HP DECwindows environment and initialize it for testing.

This command executes a collection of tests in batch. It processes test template files, or previously recorded session files, and produces a result file for each test in the collection. The result files are subsequently compared to their respective benchmark files.

You can use the following DCL command SUBMIT qualifiers with the HP DIGITAL Test Manager SUBMIT command:

/AFTER	/CHARACTERISTICS	/CPUTIME
/[NO]HOLD	/[NO]LOG_FILE	/NAME
/[NO]NOTIFY	/[NO]PRINTER	/PRIORITY
/QUEUE	/USER	/WSDEFAULT
/WSEXTENT	/WSQUOTA	

See the OpenVMS DCL Dictionary for more information about these qualifiers.

You can run collections more than once. When you rerun a collection of tests with the SUBMIT command, the collection is not re-created. The original collection is run again. For example, if you change any of the tests or the contents of any groups contained in the collection, these changes are not reflected in the resubmitted test run. If you enter the SUBMIT command to rerun a collection that you have not reviewed, HP DIGITAL Test Manager prompts you for confirmation before rerunning the collection.

Use the RECREATE command to re-create a collection with the most current version of all the files in the collection.

You cannot use the DCL command SUBMIT to submit a collection. You must use the HP DIGITAL Test Manager SUBMIT command.

Note

When you use the DCL qualifier /CHARACTERISTICS, HP DIGITAL Test Manager sets only the first characteristic specified on the created batch job. HP DIGITAL Test Manager ignores all other characteristics.

Example

```
DTM> SUBMIT MAIL_COLL/NOTIFY/LOG_FILE=[]/QUEUE=SYS$LARGE

%DTM-S-SUBMITTED, collection MAIL_COLL submitted

-DTM-I-TEXT, Job MAIL_COLL (queue SYS$LARGE entry 1000) started on

SYS$LARGE
```

This example submits the collection MAIL_COLL to the batch queue SYS\$LARGE. The log file is left in the default directory and you are notified when the collection has finished running.

VERIFY

VERIFY [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]LOG	/LOG
/RECOVER	None
/[NO]REPAIR	/NOREPAIR

When you enter this command, HP DIGITAL Test Manager evaluates the library structure, collections, and library files to verify that they are in a valid form.

If the library and collections are valid, the command executes successfully. If the library or the collections are invalid, HP DIGITAL Test Manager informs you to use the /RECOVER qualifier to correct some of the errors the VERIFY command discovers.

When you specify the VERIFY command with the /RECOVER qualifier and HP DIGITAL Test Manager encounters a subdirectory of the HP DIGITAL Test Manager library that contains files but is not associated with a collection, HP DIGITAL Test Manager issues a confirmation message before deleting the directory. For more information on recovering an invalid HP DIGITAL Test Manager library, see the HP DECset for OpenVMS Guide to DIGITAL Test Manager.

```
1. DTM> VERIFY
%DTM-I-VERFRE, free space list verified
%DTM-I-VERSTR, string list verified
%DTM-I-VERCOL, collection list verified
%DTM-I-VERGRO, group list verified
%DTM-I-VERTD, test description list verified
%DTM-I-VERVAR, variables list verified
%DTM-I-VERARC, archive list verified
%DTM-I-VERHEAD, user header information verified
%DTM-I-VERSPACE, contiguous space verified
%DTM-I-VERCOLDIR, collection directory structure verified
%DTM-S-VERIFIED, HP DIGITAL Test Manager library DUA0:[USER01.DTMLIB]
verified
DTM>
```

This example verifies that the current HP DIGITAL Test Manager library is valid.

2. DTM> VERIFY/RECOVER

%DTM-S-RECNOTNEC, recovery is not necessary; HP DIGITAL Test Manager library DUA0:[USER01.DTMLIB] is in a safe state DTM>

This example verifies that the current HP DIGITAL Test Manager library and its collections are valid, and informs you that you do not need to recover the library or its collections.

Review Subsystem Command Descriptions

The Review subsystem commands are arranged in alphabetical order with each command description containing the following:

- Command format
- Restrictions, if any
- Command parameters
- Descriptions of the command
- Examples

DTM_REVIEW> @file-specification

@file-specification

Command Qualifiers	Defaults
None	None

Restriction

• You can specify only Review subsystem commands with this @file-specification command.

This command executes the Review subsystem commands contained in the specified file. The file can contain any HP DIGITAL Test Manager Review subsystem command, including another @file-specification command. Do not preface the Review subsystem commands in a file with DTM or a dollar sign prompt (\$). For example, enter BACK 5 not DTM BACK 5.

When HP DIGITAL Test Manager executes an EXIT command or reaches the end of the command procedure, it leaves you at the current system level. The invoking command stream can be either the terminal or another command procedure.

Example

This example executes the command procedure REVIEW_FILE, which contains the NEXT/UNSUCCESSFUL and SHOW/DIFFERENCES commands.

DTM_REVIEW> ATTACH

ATTACH process-name [/qualifier...]

Command Qualifiers	Defaults
/IDENTIFICATION=pid	None
/PARENT	None

This command switches control from the current process to another process in your job. You can use the ATTACH command to change control between subprocesses you have created with the SPAWN command, or to reconnect to the parent process. You can also use the ATTACH command in conjunction with the SPAWN/WAIT command to return to the Review session without terminating the subprocess. See the SPAWN command for more information.

Example

```
MAIL> SPAWN DTM REVIEW
Collection name: MAIL COLL
Collection MAIL COLL with 1 test was created on 29-JUL-1998 15:13:54
by the command:
    CREATE COLLECTION MAIL_COLL MAIL_TEST "Recording MAIL on the terminal"
    Last review status = not previously reviewed
    Success count = 0
    Unsuccessful count = 1
    New test count = 0
    Updated test count = 0
    Comparisons aborted = 0
    Test not run count = 0
Result Description MAIL TEST
                                Comparison Status : Unsuccessful
DTM REVIEW> ATTACH/PARENT
You have 0 new messages.
MAIL>
```

This example uses the MAIL SPAWN command to create a subprocess executing a HP DIGITAL Test Manager Review subsystem to review the collection MAIL_COLL. The Review subsystem ATTACH command is then used to attach the terminal back to the mail session, which is the parent process.

DTM_REVIEW> BACK

BACK [count] [/qualifier...]

Command Qualifiers	Defaults
/COMPARISON_ABORTED	Previous result description
/NEW	Previous result description
/NOT_RUN	Previous result description
/SUCCESSFUL	Previous result description
/UNSUCCESSFUL	Previous result description
/UPDATED	Previous result description

This command moves you backward through the sequence of result descriptions being reviewed. The optional count parameter is the number of result descriptions to move backward from the current result description. If the parameter is omitted, you move back to the previous result description. The result description to which you move backward becomes the current result description.

For more information on comparison status qualifiers, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

```
DTM_REVIEW> BACK 2
.
.
```

This example displays the result description that is two positions behind the current result description.

DTM_REVIEW> DEFINE/KEY

DEFINE/KEY key-name "command-string" [/qualifier...]

Command Qualifiers	Defaults
/[NO]ECHO	/ECHO
/[NO]IF_STATE=(state-name,)	Current state
/[NO]LOCK_STATE	/NOLOCK_STATE
/[NO]SET_STATE=state-name	Current state
/[NO]TERMINATE	/NOTERMINATE

This command defines a key to enter a Review subsystem command. You can customize your keyboard by defining keys to enter frequently used commands, or command strings that are long.

The definitions you create with the DEFINE/KEY command are in effect only for the current Review subsystem session; the next time you invoke the Review subsystem, only the default key definitions will be in effect. To save your key definitions for use in every Review subsystem session, include them in an initialization file. This file is executed whenever you invoke the Review subsystem as a subsystem. For more information on the initialization file, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

If you have key definitions that you want to save but do not necessarily want to use every time you invoke the Review subsystem, store them in a command procedure.

HP DIGITAL Test Manager provides a set of default definitions. You can use the DEFINE/KEY command to replace these definitions, or to define certain undefined keys. Pressing the PF2 key displays the default key definitions. The state name value used with the /IF_STATE, /LOCK_STATE, and /SET_STATE qualifiers can be any alphanumeric string. The state names defined by HP DIGITAL Test Manager are DTM and GOLD_DTM.

Example

```
DTM_REVIEW> DEFINE/KEY KP1/IF_STATE=REVIEW/TERMINATE-
_DTM_REVIEW> "NEXT/SUCCESSFUL"
DTM_REVIEW> DEFINE/KEY KP1/IF_STATE=GOLD_REVIEW/TERMINATE-
_DTM_REVIEW> "BACK/SUCCESSFUL"
DTM_REVIEW>
```

This example defines two keys on the Review subsystem keypad. When you press the keypad 1 key, you move forward to the next result description for a successful test. When you press the GOLD key followed by the keypad 1 key, you move backward to the previous result description for a successful test.

DTM_REVIEW> EXIT

EXIT [/qualifier...]

Command Qualifiers	Defaults
/NOINSERT	Inserts test descriptions into group
/NOPRINT	Prints files

This command terminates the Review session and returns control to the previous command level where you invoked the Review subsystem. Unless you specify the /NOINSERT or /NOPRINT qualifier, tests marked with the INSERT command are placed in a group and files selected with the PRINT command are placed in the system's default printer queue.

You can also press Ctrl/Z to leave the Review subsystem as if you entered the EXIT command. You can press Ctrl/C to leave the Review subsystem, but it is as if you entered the EXIT command with the /NOINSERT and /NOPRINT qualifiers.

For information on comparison status qualifiers, see the HP DECset for OpenVMS Guide to DIGITAL Test Manager.

Example

DTM_REVIEW> **EXIT** %DTM-S-EXIT, leaving Review subsystem DTM>

This example shows how to exit from the Review subsystem.
DTM_REVIEW> FIRST

FIRST

Command Qualifiers

Defaults None

This command moves you to the first result description in the collection you are reviewing. The first result description becomes the current result description.

Example

DTM_REVIEW> FIRST . .

This example displays the first result description in a collection.

DTM_REVIEW> HELP

HELP [topic]

Command Qualifiers	Defaults
None	None

This command displays Review subsystem information on the screen.

The optional topic parameter enables you to get help on specific topics and on all Review subsystem commands. If you do not specify a topic, you get a display of available Help features and instructions for displaying the help text. If you specify a topic, information is displayed about that topic. If you specify a Review subsystem command, information is displayed about that command.

Example

```
DTM_REVIEW> HELP DEFINE

DTM

REVIEW

DEFINE/KEY

Defines a keypad key to execute a command string.

Format:

DTM_REVIEW> DEFINE/KEY key-name "command-string" [/qualifier...]

Additional information available:
```

Qualifiers /ECHO /NOECHO /IF_STATE=(state-name,...) /NOIF_STATE /LOCK_STATE /NOLOCK_STATE /SET_STATE=state-name /NOSET_STATE /TERMINATE /NOTERMINATE Parameters Command_Description Example

DTM REVIEW DEFINE/KEY Subtopic?

This example shows how to get help for the DEFINE/KEY command.

DTM_REVIEW> INSERT

INSERT [result-description-expression] [/qualifier...]

Command Qualifiers	Defaults
/COMPARISON_ABORTED	Current result description
/[NO]CONFIRM	/NOCONFIRM
/NEW	Current result description
/NOT_RUN	Current result description
/SUCCESSFUL	Current result description
/UNSUCCESSFUL	Current result description
/UPDATED	Current result description

This command marks test descriptions for insertion into a group that HP DIGITAL Test Manager creates when you exit from the Review subsystem. All test descriptions selected with the INSERT command during a Review session are inserted into the same group. One group is created for each review session. To create a second group, exit from the Review subsystem, initiate another Review session for the same collection, and create another group. The EXIT/NOINSERT command specifies that the marked test descriptions are not to be inserted into a group when you exit from the Review subsystem. The group is not created.

HP DIGITAL Test Manager supplies the group name based on the name of the collection you are reviewing and the number of times it has been reviewed. The format is as follows:

collection-name\$DTM_#

The number sign (#) specifies the number of times the collection has been reviewed.

Omitting the result-description-expression parameter marks the current test description for inclusion in the group. Specifying a result-description name marks for inclusion that test description only. That result description becomes the current result description. Specifying a result-description-expression containing wildcard characters marks for inclusion all tests whose resultdescription names match the result description expression. The current result description is not changed.

For information on comparison-status qualifiers, see the HP DECset for OpenVMS Guide to DIGITAL Test Manager.

Example

```
DTM_REVIEW> INSERT MAIL_TEST
DTM-S-MRKFORINSERT, test_description MAIL_TEST marked for insertion
DTM_REVIEW> EXIT
DTM-S-CREATED, group RUNMAIL$DTM_1 created
DTM-S-EXIT, leaving Review subsystem
DTM>
```

This example inserts the MAIL_TEST test into a group that is created upon leaving the Review subsystem.

DTM_REVIEW> LAST

LAST

Command Qualifiers	Defaults
None	None

This command moves you to the last result description of the collection you are reviewing—the current collection. The last result description becomes the current result description.

Example

```
DTM_REVIEW> LAST
.
.
.
```

This example displays the last result description in a collection.

DTM_REVIEW> NEXT

NEXT [count] [/qualifier...]

Command Qualifiers	Defaults
/COMPARISON_ABORTED	Next result description
/NEW	Next result description
/NOT_RUN	Next result description
/SUCCESSFUL	Next result description
/UNSUCCESSFUL	Next result description

/UPDATED

Next result description

This command moves you forward through the sequence of result descriptions being reviewed. Pressing the Return key also moves you forward to the next result description. The optional count parameter is the number of result descriptions to move forward from the current result description. If the parameter is omitted, you move forward to the next result description. You cannot use the NEXT command to move beyond the last result description. The result description to which you move forward becomes the current result description.

For more information on comparison status qualifiers, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Pressing the Return key at the DTM_REVIEW> prompt also moves you to the next result description.

Example

DTM_REVIEW> NEXT 2 . .

This example displays the result description that is two positions ahead of the current result description.

DTM_REVIEW> PCA

PCA

Command Qualifiers

Defaults None

This command invokes the Analyzer of the HP Performance and Coverage Analyzer (PCA).

The PCA command spawns a subprocess that invokes the Analyzer, specifies the default data file set up by HP DIGITAL Test Manager as input to the Analyzer, and sets up an Analyzer filter that includes only performance and coverage data collected while the current test was run. The subprocess spawned by the PCA command has all the globally defined symbols of the current process.

If the collection of tests you are reviewing was not run with the Collector, the Analyzer issues an error message when you enter the PCA command. The error message states that the expected data file does not exist. After the error message, you are returned to the Analyzer prompt (PCAA>). For

information about the HP Performance and Coverage Analyzer, see the *Guide* to HP Performance and Coverage Analyzer for OpenVMS Systems.

DTM_REVIEW> PRINT

PRINT [result-description-expression] [/qualifier...]

Command Qualifiers	Defaults
/BENCHMARK	/RESULT
/COMPARISON_ABORTED	Current result description
/DIFFERENCES	/RESULT
/[NO]LOG	/LOG
/NEW	Current result description
/NOT_RUN	Current result description
/NOW	See text
/RESULT	/RESULT
/SELECTED	See text
/SUCCESSFUL	Current result description
/UNSUCCESSFUL	Current result description
/UPDATED	Current result description

This command selects one or more files for printing.

HP DIGITAL Test Manager informs you if the specified files do not exist. When you exit from the Review subsystem, the files you select are placed in the print queue as a single print job, unless you specify otherwise. The /NOW qualifier selects all files specified on the current PRINT command, concatenates them, and places them immediately in the print queue. The /SELECTED qualifier selects all files specified on all previous PRINT commands during this review session as well as all files specified on the current PRINT command, concatenates them, and places them immediately in the print queue.

Result and difference files that you selected for printing but subsequently deleted with an UPDATE command are not printed. The /NOPRINT qualifier results in HP DIGITAL Test Manager not submitting the selected files to the print queue.

Omitting the result-description-expression parameter causes HP DIGITAL Test Manager to select files from the current result description. Specifying a result-description name causes HP DIGITAL Test Manager to select files from that result description only. That result description becomes the current result description.

Specifying a result-description-expression containing wildcard characters causes HP DIGITAL Test Manager to select files from all result descriptions whose result-description names match the result-description-expression. The current result description is not changed.

For information on comparison status and output file qualifiers, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

When HP DIGITAL Test Manager prints a benchmark file that is stored in a CMS library, the benchmark file is fetched and the fetched copy is deleted after it is printed.

Example

```
DTM_REVIEW> PRINT/DIFFERENCES

%DTM-S-PRINT, file DUA1:[USER01.DTMLIB.MAIL_COLLECTION]MAIL_TEST.DIF of

test MAIL_TEST selected for printing

DTM_REVIEW> EXIT

%DTM-S-PRINTQD, print job has been sent to the print queue

-DTM-I-TEXT, Job MAIL_TEST (queue SYS$PRINT, entry 32) started on SYS$PRINT

%DTM-S-EXIT, leaving Review subsystem

DTM>
```

This example shows how to queue the differences file for printing.

DTM_REVIEW> SELECT

SELECT result-description-name

Command Qualifiers	Defaults
None	None

This command moves you to the specified result description. The specified result description becomes the current result description.

Example

```
DTM_REVIEW> SELECT MAIL_TEST
Result Description MAIL TEST Comparison Status : Unsuccessful
```

This example displays the MAIL_TEST result description in a collection.

DTM_REVIEW> SHOW

SHOW [result-description-expression] [/qualifier...]

Command Qualifiers	Defaults
/BENCHMARK	/FILES
/COMPARISON_ABORTED	Current result description
/DIFFERENCES	/FILES
/FILES	/FILES
/NEW	Current result description
/NOT_RUN	Current result description
/OUTPUT[=file-specification]	/OUTPUT=SYS\$OUTPUT
/RESULT	/FILES

/SUCCESSFUL /SUMMARY /UNSUCCESSFUL /UPDATED Current result description /FILES Current result description Current result description

This command describes and displays output files for specified result descriptions. Using these qualifiers with comparison-status qualifiers displays the specified output files for result descriptions with the specified comparison status.

Omitting the result-description-expression parameter displays information about the current result description. Specifying a result description name displays information about that result description only. That result description becomes the current result description.

Specifying a result-description-expression parameter containing wildcard characters displays information about each result description that matches the result-description-expression. The current result description does not change.

You can specify the comparison-status qualifiers, /COMPARISON_ABORTED, /NEW, /NOT_RUN, /SUCCESSFUL, /UNSUCCESSFUL, and /UPDATED, only with a result-description-expression; you cannot use them with a result-description name. Using comparison-status qualifiers displays information about all result descriptions matching the result-description-expression and a comparison-status qualifier.

If a benchmark file exists, its file specification is also displayed. You cannot specify the /FILES qualifier with the output file qualifiers or with the /SUMMARY qualifier.

You cannot specify the /SUMMARY qualifier with the /FILES qualifier, the output-file qualifiers, or the comparison-status qualifiers.

HP DIGITAL Test Manager provides you with a set of default keypad definitions for positioning benchmark, result, or difference screen images when you use the Review subsystem SHOW/BENCHMARK, SHOW/RESULT, or SHOW/DIFFERENCES commands. For more information, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

You can use the DEFINE/KEY command to replace these definitions, or to define the undefined keypad keys. Pressing the PF2 key displays the default key definitions. See the HP DIGITAL Test Manager Review subsystem DEFINE/KEY command section for more information about defining keys.

For information on comparison status and the /FILES and /SUMMARY qualifiers, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

Example

```
DTM_REVIEW> SHOW/UNSUCCESSFUL
Result Description YYY Comparison Status : Unsuccessful
Benchmark File is DUA1:[USER01.DTM.DTMLIB]YYY.BMK
Result file is present
Difference file is present
```

DTM_REVIEW>

This example displays all the unsuccessful result descriptions in a collection.

DTM_REVIEW> SPAWN

SPAWN [command] [/qualifier...]

Command Qualifiers	Defaults
/CARRIAGE_CONTROL	See text
/[NO]CLI[=cli]	See text
/INPUT=file-specification	See text
/[NO]KEYPAD	/KEYPAD
/[NO]LOGICAL_NAMES	/LOGICAL_NAMES
/[NO]NOTIFY	/NONOTIFY
/OUTPUT=file-specification	See text
/PROCESS=subprocess-name	See text
/[NO]PROMPT[=string]	See text
/[NO]SYMBOLS	/SYMBOLS
/[NO]WAIT	/WAIT

This command creates a subprocess of the current HP DIGITAL Test Manager session (the parent process). The context of the HP DIGITAL Test Manager session is copied to the subprocess.

You can use this command to leave the Review subsystem temporarily to create another HP DIGITAL Test Manager session, or to edit a file and then return to the original Review session.

Example

DTM_REVIEW> SPAWN MAIL

You have 1 new message.

MAIL>

This example spawns the OpenVMS Mail Utility from the HP DIGITAL Test Manager subsystem. Enter the ATTACH command to terminate the MAIL session and return to the HP DIGITAL Test Manager system level.

DTM_REVIEW> UPDATE

UPDATE [result-description-expression] [/qualifier...] "remark"

Command Qualifiers	Defaults
/[NO]CONFIRM	See text
/[NO]LOG	/LOG

This command creates a new benchmark file from the existing result file for the specified result descriptions, and deletes the previous benchmark file if it resides in the HP DIGITAL Test Manager library. On HP DECwindows benchmark image files, masked areas are transferred to the new benchmark when it is updated.

To be updated, the result description must have a comparison status of comparison aborted, unsuccessful, or new. You cannot update the benchmark file for a result description with a comparison status of successful, not run, or updated. HP DIGITAL Test Manager automatically deletes the result file for successful tests.

Omitting the result-description-expression parameter causes HP DIGITAL Test Manager to update the benchmark file for the current result description, if its comparison status is comparison aborted, new, or unsuccessful. Specifying a result-description name causes HP DIGITAL Test Manager to update the benchmark file for that result description only, provided that its comparison status is comparison aborted, new, or unsuccessful. This result description becomes the current result description.

Specifying a result-description-expression containing wildcard characters causes HP DIGITAL Test Manager to update benchmark files for all test descriptions whose result-description names match the result-description-expression and whose comparison status is comparison aborted, new, or unsuccessful. The current result description is not changed.

If you store the benchmark files in a CMS library, the UPDATE command issues the CMS RESERVE and REPLACE commands to replace the old benchmark file. The result file is used as input to the CMS REPLACE command. If you use CMS classes for the benchmark files, the UPDATE command also issues the CMS INSERT command with the /SUPERSEDE qualifier to place the current generation of the benchmark file into the class. If HP DIGITAL Test Manager is updating a generation other than the latest, it creates a variant line designated D. When you update a benchmark file in a CMS library for a new test with no existing benchmark file, HP DIGITAL Test Manager creates a new element in the specified CMS library. If you also specify a class, the new element is also inserted into the class.

Use the UPDATE command only when you are sure you want to delete the current benchmark file and replace it with the current result file. This procedure is irreversible; therefore, carefully consider the possible effects before using the UPDATE command.

You can also replace benchmark files with the MODIFY TEST_DESCRIPTION command with the /BENCHMARK=file-name or /NOBENCHMARK qualifier.

Example

DTM_REVIEW> **SELECT MSGTEST** Result Description MSGTEST Comparison Status : Unsuccessful DTM_REVIEW> **UPDATE** %DTM_I_UPDATED, the benchmark for test MSGTEST has been updated DTM_REVIEW>

This example selects the MSGTEST test results and then uses the UPDATE command to replace the current benchmark file with the test results.

Glossary

This glossary contains two parts: a list of command parameters and a list of command qualifiers. Together, they complete the information presented in the Test Manager command dictionary.

Test Manager Command Parameters

This glossary lists the Test Manager command parameters in alphabetic order.

collection-expression

Specifies the collections to be displayed or deleted. A collection expression can be a collection name, or a list of collection names separated by commas. You can use wildcards.

collection-name

Identifies a set of tests that are run as a collection in batch mode. A collection name consists of up to 39 characters. You cannot use wildcards to specify the collection-name parameter. The collection name cannot begin with DTM\$; names with this prefix are reserved for use by HP DIGITAL Test Manager. A collection can be re-created, compared, and stopped.

command

Specifies an optional command to be executed by the subprocess you are creating. If you specify the command parameter, you create a subprocess that executes the command and returns control to the HP DIGITAL Test Manager session when the command terminates. If you include the /INPUT qualifier with the command parameter, the subprocess reads commands from the specified input file after the command string executes. The command string can be up to 132 characters.

If you omit the command parameter, the SPAWN command creates a subprocess and attaches the terminal to it. You can return to the HP DIGITAL Test Manager session by logging out of the subprocess, or by entering the ATTACH/PARENT command. If you have created several subprocesses, you can switch between them by using the ATTACH/IDENTIFICATION command.

command-string

Specifies the command string to be entered when you press the defined key. The command string can be a Review subsystem command. If the command contains any spaces, enclose the command string in quotation marks ("").

count

Specifies an integer that indicates the number of result descriptions to move backward from the current result description. The default is 1.

directory-specification

Specifies a directory that has been defined as a HP DIGITAL Test Manager library with the CREATE LIBRARY command. The directory specification must adhere to OpenVMS specifications for directory names. Do not specify your current default directory, or another directory that contains files, to be the library directory.

Also, in the case of benchmark and template directories, this parameter specifies the directory that HP DIGITAL Test Manager searches for benchmark and template files.

existing-library-name

Specifies the directory for the existing HP DIGITAL Test Manager library you want to convert.

file-specification

Specifies the command procedure you want to execute. If the file specification does not include a file type, HP DIGITAL Test Manager assumes the default file type .COM. You can use command procedures to:

- Specify a file to be filtered.
- Specify a file containing the interactive terminal or HP DECwindows session that is to be executed.
- Specify a file to be the default prologue file.
- Specify a file to be the default epilogue file.

group-expression

Specifies the group from which test descriptions are to be inserted, modified, deleted, or displayed. A group expression can be a group name, or a list of group names separated by commas. You can use wildcards.

group-expression1

Specifies the group or groups to be inserted or removed. These groups become subgroups of the groups into which they are inserted. A group expression can be a group name, or a list of group names separated by commas. You can use wildcards.

group-expression2

Specifies the group or groups into which the subgroups specified in the groupexpression1 parameter are to be inserted or removed. A group expression can be a group name or a list of group names separated by commas. You can use wildcards.

group-name

Identifies a group—a category you create to organize tests. A group name consists of up to 39 characters and follows the same syntax rules as for file names.

You cannot use wildcards to specify the group-name parameter. You cannot begin the group name with DTM\$; names with this prefix are reserved for use by HP DIGITAL Test Manager. A group name must be unique among group names in this HP DIGITAL Test Manager library. HP DIGITAL Test Manager informs you of any error in naming.

input-file-specification

Specifies an existing input file or the file specification for the input file to be created. If you enter a file name only or omit this parameter, HP DIGITAL Test Manager uses the session file name and supplies the file type .INP. If the input file is to be placed in a CMS library, HP DIGITAL Test Manager executes either a CMS CREATE ELEMENT command, or CMS RESERVE and REPLACE commands to place the file in the specified CMS library. HP DIGITAL Test Manager also executes a CMS FETCH command for the session-file element, and deletes the element when done.

key-name

Specifies the key to define. You can use the DEFINE/KEY command to define the following keys:

PF1 to PF4 KP0 to KP9 period (.) comma (,) minus (-)Enter left arrow (\leftarrow) right arrow (\rightarrow) Find (E1) Insert Here (E2) Remove (E3) Select (E4) Prev Screen (E5) Next Screen (E6) Help Do F6 to F20

new-library-name

Specifies the directory for the new HP DIGITAL Test Manager library you want to create.

object-expression

Specifies a HP DIGITAL Test Manager object about which history information is to be displayed. The object expression can be a test name, group name, collection name, variable name, or a list of these names separated by commas. You can use wildcards.

process-name

Specifies an existing process to which you want to attach the terminal.

If you specify either the /IDENTIFICATION or /PARENT qualifier, do not specify the process-name parameter or the other qualifier. If you do not specify a qualifier, you must specify a process name.

remark

Specifies a string that contains a comment. You must specify a remark within quotation marks (""). The exception to this rule is when you specify a remark string at the remark prompt. If you do not provide a remark string, you are prompted for one. A null remark is permitted.

result-description-name

Specifies the name of the selected result description. The result-description name for a test is the same as its test name. The result-description name is required; you cannot specify a result-description-expression.

result-description-expression

Specifies one or more result descriptions from which the specified files are to be selected for printing, or whose benchmark files are to be updated. This parameter also specifies one or more test descriptions for insertion into a group created when you exit from the Review subsystem. If you omit this parameter, HP DIGITAL Test Manager inserts test descriptions from the current collection into a group.

session-file-specification

Specifies a session file to create. If you omit this parameter or specify a file name only, HP DIGITAL Test Manager uses the session file name and supplies the file type .SESSION. If the session file is to be placed in a CMS library, HP DIGITAL Test Manager executes either a CMS CREATE ELEMENT command, or CMS RESERVE and REPLACE commands to place the file in the specified CMS library.

HP DIGITAL Test Manager also executes a CMS FETCH command for the session-file element and deletes the element when done.

test-expression

Specifies the test descriptions to delete. The test expression can be a test name, or a list of test names separated by commas. You can use wildcards.

test-group-expression

Specifies items of a test expression or a group expression, including test names, group names, and wildcard forms of these names. Separate items in a test-group-expression with commas. Use the /GROUP or /TEST_DESCRIPTION qualifier to identify items in a test expression as part of a test or a group.

test-name

Specifies the name of the test description for an interactive terminal test whose benchmark file is to be displayed or recorded. A test name consists of up to 39 characters and follows the same syntax rules as for file names. You cannot use wildcards to specify the test-name parameter. The test name cannot begin with DTM\$ because names with this prefix are reserved for use by HP DIGITAL Test Manager.

test-name1

Specifies the name of the test description to be copied. You cannot use wildcards to specify the test-name parameters. The test-name1 and test-name2 parameters must be different; you cannot copy a test description to itself.

test-name2

Specifies the name of the test description to be created. You cannot use wildcards to specify the test name parameters. The test-name1 and test-name2 parameters must be different.

topic

Specifies a HP DIGITAL Test Manager Review subsystem subject about which you want information. A topic can be either a subject (such as KEYPAD) that is discussed in the Review subsystem help file or a Review subsystem command. (The command can include qualifiers.) Enter the HELP command to obtain a list of Review subsystem help topics.

variable-expression

Specifies the variables to modify or the variable about which to display information. The variable expression can be a variable name, or a list of variable names separated by commas. You can use wildcards.

variable-name

Specifies that the variable name, which must be unique, consists of up to 39 characters, and follows OpenVMS rules for file names. You cannot use wildcards, the variable names P1 through P8, or variable names beginning with DTM\$, which are reserved for use by HP DIGITAL Test Manager.

variable-value

Specifies the variable's value. This value remains in effect until you redefine it for a particular test description.

HP DIGITAL Test Manager Command Qualifiers

This section lists the HP DIGITAL Test Manager command qualifiers in alphabetic order.

/ALL

Specifies that all the filters be run on the specified file.

/APPEND

Continues recording the specified test after the end of the input file is reached. The /APPEND qualifier applies to interactive terminal tests only.

If you specify an input file using the /INPUT qualifier, HP DIGITAL Test Manager records using input from the input file. When the end of the input file is reached, this qualifier enables you to record further. If you do not specify this qualifier, recording is terminated when the end of the input file is reached.

/AUTO_COMPARE /NOAUTO_COMPARE

Determines whether automatic screen comparison is enabled at the start of your interactive terminal recording session; there are no automatic comparisons for HP DECwindows tests. By default, automatic screen compare is in effect. The /NOAUTO_COMPARE qualifier disables automatic screen compare.

/BEFORE=time

When used with the SHOW HISTORY command, this qualifier lists all history information before a specified date. The time is the current date and time and the information displayed is whatever was logged before entering the SHOW HISTORY command.

When used with the DELETE HISTORY command, this qualifier deletes all history information from the history file dated before the specified date. The deleted information is replaced by a single entry stating that history information has been deleted from the history file.

If you omit the /BEFORE qualifier, the default is to remove information that was logged before the time you enter the command. If you include the /BEFORE qualifier and do not specify a time, the default is TODAY.

You can specify the time as an absolute, delta, or combination time value or as one of the following keywords: TODAY, TOMORROW, or YESTERDAY. HP DIGITAL Test Manager interprets TOMORROW as the time at which you enter the DELETE HISTORY command.

/BENCHMARK=file-specification /NOBENCHMARK

Displays the file specification for the benchmark file associated with the specified test description. If you use the default benchmark when you create the test description, the benchmark file specification is displayed in the following format:

test-name.BMK

For a noninteractive test, HP DIGITAL Test Manager displays the benchmark file. For an interactive test, HP DIGITAL Test Manager displays the benchmark file screen-by-screen and provides you with a keypad for manipulating the file. The keypad and the procedure for using it are described in the HP DECset for OpenVMS Guide to DIGITAL Test Manager.

If the benchmark file is in a CMS library, HP DIGITAL Test Manager fetches the benchmark.

If you include a comparison-status qualifier with the /BENCHMARK qualifier, HP DIGITAL Test Manager displays the benchmark file for result descriptions with the specified comparison status.

/BENCHMARK_DIRECTORY=directory-specification /NOBENCHMARK_DIRECTORY

Determines whether HP DIGITAL Test Manager should search the default benchmark directory for benchmark files for the specified collection.

If you do not include a directory, HP DIGITAL Test Manager searches the default benchmark directory for the benchmark file established by the SET BENCHMARK_DIRECTORY command.

If you include a directory in the benchmark file specification for a test within the collection, HP DIGITAL Test Manager searches that directory for the benchmark file and (if found) overrides the default directory. The directory you specify can be either another directory or a CMS library.

The /NOBENCHMARK_DIRECTORY qualifier overrides the default benchmark directory for the specified collection. HP DIGITAL Test Manager searches your default directory for all benchmark files without directory specifications.

/BRIEF

Depending on the command, this qualifier displays the name of a collection, group, test, or variable. The default is /INTERMEDIATE. You cannot specify both the /CONTENTS and /BRIEF qualifiers with the same command.

/CARRIAGE_CONTROL /NOCARRIAGE_CONTROL

Determines whether carriage-control or line-feed characters, or both, are prefixed to the DCL prompt string of the subprocess. The default is the current setting of the parent process.

/CHARACTERS

Performs a character-by-character comparison of the results file with the benchmark file. The default is /SCREENS for interactive tests and /RECORDS for noninteractive tests.

/CLASS=(keyword=class-name,...)

Specifies the optional CMS class for benchmark files and template files stored in CMS libraries. The keywords, BENCHMARK and TEMPLATE, designate the name of the specific set of generations of elements. If you do not specify a class and the file is stored in a CMS library, the latest generation on the main line of descent is used. See the *Guide to HP Code Management System for OpenVMS Systems* for more information about classes.

You can specify the same class names for your benchmark and template files. If you specify both keywords, separate them with a comma and enclose the list in parentheses. If you specify only one keyword, omit the parentheses.

/CLI[=cli] /NOCLI

Specifies an alternate command-language interpreter (CLI) for the subprocess to use. The CLI you specify must be located in SYS\$SYSTEM and have the file type .EXE. The default is the CLI, which the parent process uses.

/COMMAND=command

Specifies a new command to be executed before playing a session file or the recording and execution of a HP DECwindows test begins. By default, the new test description has the same command as the copied test description.

If you specify the /COMMAND qualifier, you associate a new command with the new test description. If you specify the /NOCOMMAND qualifier, the associated command is not copied with the test description. This qualifier applies to HP DECwindows tests only.

/COMPARE[=(keyword,...)] /NOCOMPARE

Determines whether HP DIGITAL Test Manager compares the results of each test with its benchmark file (the file that contains expected test results) after the collection is executed. The default is /COMPARE.

The /COMPARE qualifier specifies that HP DIGITAL Test Manager is to compare all tests after the collection is executed. A collection must be compared before it can be reviewed. Any differences between the results for a test and its benchmark file are recorded in a difference file for that test. Tests without benchmarks can be compared, but will be marked with the comparison status of new test.

When you review tests, you can have benchmark files generated for them. When you enter the /COMPARE qualifier, the COMPARE command default qualifiers (/SCREENS, /LOG, and /WIDTH=132) are in effect. You can optionally specify any of the following COMPARE command qualifiers as keywords:

CHARACTERS FULL IGNORE=keyword [NO]PARALLEL RECORDS SCREENS WIDTH

The /COMPARE qualifier keywords have the same effect as the COMPARE command qualifiers. See the COMPARE command qualifiers for a description of the /COMPARE qualifier keywords.

If you specify more than one keyword, separate the keywords with commas and enclose the list in parentheses. If you specify only one keyword, you can omit the parentheses.

The /NOCOMPARE qualifier prevents the automatic comparison that HP DIGITAL Test Manager ordinarily performs when the collection is executed. You can use the COMPARE command later to compare test results for collections created with the /NOCOMPARE qualifier.

/COMPARISON_ABORTED

Depending on the Review subsystem command, you can use this qualifier to do the following:

- Move to the previous result description for a test whose comparison aborted.
- Move to the next result description for a test whose comparison aborted.
- Display output files (benchmark, difference, and result) for specified result descriptions having the comparison aborted comparison status.

/COMPARISON_TYPE

Displays the comparison type associated with the specified test description.

/COMPARISON_TYPE=keyword

Specifies how the result and benchmark files are to be compared. A comparison type is not associated with the test description. The valid values for keyword are as follows:

Keyword	Meaning
CHARACTERS	Compares files character-by-character.
RECORDS	Compares files record-by-record. This is the default for noninteractive terminal tests.
SCREENS	Compares files screen-by-screen; screens not marked are not compared. This is the default for interactive terminal and HP DECwindows tests.

HP DECwindows tests can use only the SCREENS comparison type. The SCREENS comparison type is also the default comparison type for interactive terminal tests. If you specify the /COMPARISON_TYPE=SCREENS qualifier for a noninteractive test, this value is ignored. The /NOCOMPARISON_TYPE qualifier disassociates any comparison type from the test description.

/CONFIRM (D) /NOCONFIRM

Depending on the command, you can use this qualifier to:

- Enter a confirmation prompt when re-creating a collection.
- Enter a confirmation prompt when deleting test descriptions or other items from the test library.
- Enter a confirmation prompt to abort the execution of a collection.

- Enter a confirmation prompt to rerun a collection that has not been reviewed. If you have executed a collection without reviewing it, you are prompted to confirm submission of the collection.
- Enter a confirmation prompt for the processing of each test description marked for insertion.
- Enter a confirmation prompt for each test name (and test results) to be updated.

The valid responses are Yes, No, All, and Quit.

/CONTENTS[=n] /CONTENTS[=ALL] /NOCONTENTS

Displays the name of each group and the names of all test descriptions and groups contained in the specified groups. The default is /CONTENTS=1.

The /CONTENTS=n qualifier displays this information for n levels of groups within each specified group. If n is greater than 1, all nested groups for n levels are expanded and displayed.

The /CONTENTS=ALL qualifier displays this information for all groups within each group. The /NOCONTENTS qualifier displays the group names only.

/DATE

Where the date form is abbreviated, the date filter replaces date stamps by substituting a "d" for each displayed number of the day of the month, an "m" for each displayed letter of the month, and a "y" for each displayed number of the year. Where the date form is spelled out, the month name is replaced by "month," the numeric day is replaced by "day," and the year is replaced by "year."

The following list shows some examples of the date filtering functions; this list is not all-inclusive:

17-OCT-1998 with dd-mmm-yyyy 17 OCT 98 with dd mmm yy 98.OCT.17 with yy.mmm.dd 10/17/98 with mm/dd/yy 1998/10/17 with yyyy/mm/dd October 17, 1998 with month day, year Oct. 17, 1998 with month day, year 17.October.1998 with day.month.year 98-October-17 with year-month-day

/DECWINDOWS

Depending on the command, you can use this qualifier to do the following:

- Specify that the session file being played is a HP DECwindows session file.
- Specify that the file to be translated is a HP DECwindows input file.
- Specify that the test being created is marked as a HP DECwindows test.
- Specify that the session file is a recorded HP DECwindows session.
- Print difference files from a specified result descriptions.

/DIFFERENCES

Displays and prints difference files from the specified result descriptions. The default is /RESULT. If the benchmark file exists, its file specification is displayed.

For a noninteractive test, HP DIGITAL Test Manager displays the difference file. For an interactive test, HP DIGITAL Test Manager displays the benchmark and result files screen-by-screen with differences marked, and provides you with a keypad for manipulating the files. The keypad and the procedure for using it are described in the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

If you include a comparison-status qualifier with the /DIFFERENCES qualifier, HP DIGITAL Test Manager displays the difference file for result descriptions with the specified comparison status.

/DIRECTORIES

Replaces the directory specification field in the file specification with DISK:[DIRECTORY].

/DISPLAY=screen

Specifies the display device on which the output is to be displayed. For interactive terminal tests, the default is SYS\$OUTPUT; for HP DECwindows tests, the default is the HP DECwindows server, which is specified by the DCL command SET DISPLAY.

/ECHO (D) /NOECHO

Specifies whether the command is displayed on your screen after you press the defined key. You cannot specify both the /NOECHO and /NOTERMINATE qualifiers.

/EPILOGUE=file-specification /NOEPILOGUE

Depending on the command, you can use this qualifier to:

- Add the specified epilogue file to the test description. The test epilogue file is run immediately after the test template file is executed.
- Determine whether an epilogue file is associated with a specified test description.
- Determine whether the default collection epilogue is run with a specified collection.
- Specify whether the epilogue file should be replaced or disassociated from a specified test description.
- Specify whether HP DIGITAL Test Manager executes the epilogue file when interactive recording terminates.

You cannot store epilogue files in the HP DIGITAL Test Manager library; store them in another directory or in a CMS library.

/FILES

Displays the comparison status for result descriptions and states whether output files (benchmark, difference, and result files) exist for the result description. The default is /FILES. If the benchmark file exists, its file specification is displayed.

You cannot include the /FILES qualifier with the included /BENCHMARK, /DIFFERENCES, /RESULT, and /SUMMARY qualifiers.

/FILE_NAMES

Replaces the file names with FILENAME.EXT.

/FILTER

Displays the names for all filters associated with the specified test description.

/FILTER=(keyword,...)

Available for interactive and noninteractive terminal tests only, this qualifier selects one or more filters to remove run-time data from the result file that the test run produces.

The valid values for keyword are as follows:

Keyword	Filter
ALL	Specifies that all the filters in this table be used.
DATE	Where the date form is abbreviated, the date filter replaces date stamps by substituting a "d" for each displayed number of the day of the month, an "m" for each displayed letter of the month, and a "y" for each displayed number of the year. Where the date form is spelled out, the month name is replaced by "month," the numeric day is replaced by "day," and the year is replaced by "year."
	The following list shows some examples of the date filtering functions; this list is not all-inclusive:
	17-OCT-1998 with dd-mmm-yyyy 17 OCT 98 with dd mmm yy 98.OCT.17 with yy.mmm.dd 10/17/98 with mm/dd/yy 1998/10/17 with yyyy/mm/dd October 17, 1998 with month day, year Oct. 17, 1998 with month day, year 17.October.1998 with day.month.year 98-October-17 with year-month-day
TIME	Replaces time stamps with the following forms:
	15:37:53.22 with hh:mm:ss.xxxx 15:37:53 with hh:mm:ss 15:37 with hh:mm 3:37 PM with hh:mm xm 15H37m with hhHmmm 15H37' with hhHmm' 15.37 h with hh.mm h 15 h $37"53$ s with hh h mm"ss s 15 h 37 min with hh h mm min kl 15.37 with kl hh.mm h 15.37 with h hh.mm
FILE_NAMES	Replaces file names with FILENAME.EXT.
DIRECTORIES	Replaces the directory specification field in the file specification with DISK:[DIRECTORY].
TRACE_BACK	Replaces 32-bit memory addresses with <i>xxxxxxx</i> and 64-bit memory addresses with <i>xxxxxxxx xxxxxxxx</i> .
VERSION	Replaces file versions with VERSION.

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

/FILTER=(keyword,...) /NOFILTER=(keyword,...)

Selects one or more filters to remove run-time variables from the result file produced from the collection run. The following table shows the valid values for keywords.

Filter Type	Description
ALL	Specifies that all the filters in this table be used.
DATE	Where the date form is abbreviated, the date filter replaces date stamps by substituting a "d" for each displayed number of the day of the month, an "m" for each displayed letter of the month, and a "y" for each displayed number of the year. Where the date form is spelled out, the month name is replaced by "month," the numeric day is replaced by "day," and the year is replaced by "year."
	The following list shows some examples of the date filtering functions; this list is not all-inclusive:
	17-OCT-1998 with dd-mmm-yyyy 17 OCT 98 with dd mmm yy 98.OCT.17 with yy.mmm.dd 10/17/98 with mm/dd/yy 1998/10/17 with yyyy/mm/dd October 17, 1998 with month day, year Oct. 17, 1998 with month day, year 17.October.1998 with day.month.year 98-October-17 with year-month-day

Filter Type	Description
TIME	Replaces time stamps with the following forms:
	15:37:53.22 with hh:mm:ss.xxxx
	15:37:53 with hh:mm:ss
	15:37 with hh:mm
	3:37 PM with hh:mm xm
	15H37m with hhHmmm
	15H37' with hhHmm'
	15.37 h with hh.mm h
	15 h 37"53 s with hh h mm"ss s
	15 h 37 min with hh h mm min
	kl 15.37 with kl hh.mm
	h 15.37 with h hh.mm
FILE_NAMES	Replaces file names with FILENAME.EXT.
DIRECTORIES	Replaces the directory specification field in the file specification with DISK:[DIRECTORY].
TRACE_BACK	Replaces 32-bit memory addresses with <i>xxxxxxx</i> and 64-bit memory addresses with <i>xxxxxxx xxxxxxxx</i> .
VERSION	Replaces file versions with VERSION.

If you specify more than one keyword, separate the keywords with commas and enclose the list in parentheses. If you specify only one keyword, omit the parentheses. The /FILTER qualifier associates the specified filters with the test description.

The /NOFILTER qualifier removes the specified filters from the test description.

HP DIGITAL Test Manager does not replace the filters associated with the test description.

/FILTERS /NOFILTERS (D)

Specifies whether HP DIGITAL Test Manager is to filter the benchmark file produced when interactive recording terminates. When the test is recorded, HP DIGITAL Test Manager invokes only the filters specified on the CREATE TEST_DESCRIPTION command.

/FULL

Depending on the command, you can use this qualifier to do the following:

- Display information about collections in the test library.
- Display the contents of one or more groups in the test library.
- Display the contents of all test description fields in the test library.
- Display the name, value, scope, usage, and remark for a specified variable in the test library and list the tests with which the variable is associated.

The following example shows the information displayed for a collection in the test library:

```
Collections in the HP DIGITAL Test Manager Library library-name
COLLECTION NAME NUMBER tests DATE TIME "remark"
      Command: COMMAND-LINE
      Status: RUN, COMPARISON, AND REVIEW STATUS
      Successful count: NUMBER Unsuccessful count: NUMBER
      New test count: NUMBER
                                  Updated test count: NUMBER
      Test not run count: NUMBER Comparisons aborted: NUMBER
      Default template directory: DIRECTORY SPECIFICATION
      Template class: CLASS_NAME
      Default benchmark directory: DIRECTORY_SPECIFICATION
      Benchmark class: CLASS NAME
      Proloque: FILE SPECIFICATION
      Epilogue: FILE_SPECIFICATION
      Last Review: DATE TIME
      Result Description COLLECTION NAME
                                            Comparison Status: Successful
      Benchmark file is device: [username]COLLECTION_NAME.BMK
      Result file does not exist
      Difference file does not exist
```

/GLOBAL

Makes the variable expression globally accessible. You cannot specify both the /LOCAL and /GLOBAL qualifiers with the same MODIFY VARIABLE or the CREATE VARIABLE command. The default is /LOCAL.

/GROUPS

Displays the names of the group or groups with which the test is affiliated. Because of the existence of the /GROUP parameter qualifier for this command, you cannot abbreviate the /GROUPS qualifier.

/IDENTIFICATION=pid

Specifies the process identification (PID) of the process to which you want to attach your terminal. You can omit the leading zeros when you specify a PID.

If you specify the /IDENTIFICATION qualifier, do not specify the process-name parameter or the /PARENT qualifier. If you do not specify a qualifier, you must specify a process name.

/IF_STATE=(state-name,...) /NOIF_STATE

Specifies a list of states, any one of which must be set to enable the specified key definition. The default is the current state. HP DIGITAL Test Manager defines the two states, REVIEW and GOLD_REVIEW. The /NOIF_STATE qualifier selects the current state.

/IGNORE=keyword

The /IGNORE qualifier enables you to specify that various aspects of benchmark and result files are to be ignored during comparison.

The following keywords apply to noninteractive and interactive terminal tests only:

Keyword	Result
CASE	Ignore any differences between the case of alphabetic characters (A,a,B,b, \ldots) .
FORM-FEEDS	Ignore form-feed characters.
LEADING_BLANKS	Ignore leading blanks and tabs.
SPACING	Treat multiple blanks and tabs as a single space.
TRAILING_BLANKS	Ignore trailing blanks and tabs.

For interactive terminal tests, if you specify the /IGNORE and /SCREENS qualifiers together, HP DIGITAL Test Manager performs the comparison screen-by-screen and ignores the /IGNORE qualifier.

If you specify more than one keyword, separate the keywords with commas and enclose the list in parentheses. The output file (your result file) is not changed in any way by the /IGNORE qualifier.

The following keyword applies to HP DECwindows tests only:

Keyword	Result
MASK	Ignore masked areas defined on HP DECwindows benchmark images.

/INIT (D) /NOINIT

Specifies whether HP DIGITAL Test Manager executes the initialization file (defined by the logical name DTM\$INIT) when invoked. The default is to execute any existing initialization file whenever you invoke HP DIGITAL Test Manager.

/INPUT=file-specification

Specifies an input file containing one or more commands for the spawned subprocess to execute and a textual representation of an interactive terminal or HP DECwindows session file. You must create the input file by entering the EXTRACT command on a previously recorded session.

If you specify a command with an input file, the command is processed before the commands in the input file. The subprocess terminates when processing is complete. You cannot use wildcards in the file specification.

/INTERACTIVE /NOINTERACTIVE (D)

Specifies that the session file being played is an interactive terminal session file. The /INTERACTIVE qualifier marks a test description as containing an interactive terminal test. The /NOINTERACTIVE qualifier marks a test description as containing a noninteractive test.

/INTERFACE=interface

Specifies that HP DIGITAL Test Manager is to run in the character-cell (terminal) or HP DECwindows environment. The options for this qualifier are CHARACTER_CELL (the default) and HP DECwindows.

/INTERMEDIATE

Depending on the command, you can use this qualifier to do the following:

- Display the name, value, and remark for a specified variable.
- Display the contents of the benchmark, template, prologue, and epilogue fields associated with a specified test description.

- List the group name and any remark added during the creation, modification, or copying of a specified group.
- Display the name and comparison status for a specified collection in the test library.

The following eaxmple shows the information displayed for a test description:

Test descriptions in HP DIGITAL Test Manager library library-name

```
Test_name "remark"
Template = file-name
Benchmark= file-name
Prologue = file-name
Epilogue = file-name
```

/KEEP (D) /NOKEEP

Controls whether the log file is deleted after is it printed.

/KEYPAD (D) /NOKEYPAD

Determines whether DCL keypad symbols and the current DCL keypad state are copied from the parent process to the subprocess. Use the /NOKEYPAD qualifier if you do not want the key settings to be copied.

/KEYSYM

Specifies the key symbol associated with a key for use in controlling HP DECwindows test recording sessions. The default key symbol is 0xFFE9, which is the Compose Character key.

To respecify the keysym key, enter its decimal or hexadecimal encoding. For example, to use Ctrl as the command-key symbol, enter the following command:

DTM> RECORD test-name/KEYSYM=0xFFE3

The command keysym key must be in the HP DECwindows Latin-1 keysym encodings. Display the file DECW\$INCLUDE:KEYSYMDEF.H with the DCL command TYPE to view a listing of the Latin-1 keysym keys.)

/LOCAL

Makes the variable expression locally accessible. You cannot specify both the /LOCAL and /GLOBAL qualifiers with the same MODIFY VARIABLE or CREATE VARIABLE command. The default is /LOCAL.

/LOCK_STATE /NOLOCK_STATE (D)

Retains the state specified with the /SET_STATE qualifier until you use the /SET_STATE qualifier again to change it.

/LOG (D) /NOLOG

Controls whether HP DIGITAL Test Manager displays informational and success messages on your screen.

/LOGICAL

Defines the variable as a OpenVMS logical name. You cannot specify both /LOGICAL and /SYMBOL with the same CREATE VARIABLE or MODIFY VARIABLE command. The default is /SYMBOL.

/LOGICAL_NAMES (D) /NOLOGICAL_NAMES

Determines whether the system passes process logical names and logical name tables to the subprocess, except those marked CONFINE or those created in executive or kernel mode.

/LOG_FILE=file-specification /NOLOG_FILE

Specifies whether a log file for the collection is to be created and where the contents of the log file is to be displayed.

This file is similar in content to the log file created when you enter the HP DIGITAL Test Manager SUBMIT command to run a collection of tests in batch mode. The log file contains output the test run generates other than the output from the test itself, such as output generated by the prologue and epilogue files.

The /LOG_FILE qualifier creates a log file in the specified file. The output is directed to SYS\$OUTPUT. The /NOLOG_FILE qualifier suppresses the creation of a log file.

/MASK=(keyword,...)

Selects one or more sets of mask patterns that will cause certain run-time data to be ignored during the comparison of screens for interactive terminal tests. Such run-time data is ignored by substituting blank space for patterns in both the benchmark and result screens before they are compared.

Keyword	Mask
ALL	Specifies that all the masks in this table be used
DATE	The date mask ignores comparison of date stamps
	The following list shows some examples of the date patterns to be ignored; this list is not all-inclusive:
	17-OCT-1998 17 OCT 98 98.OCT.17 10/17/98 1998/10/17 October 17, 1998 Oct. 17, 1998 17.October.1998 98-October-17
TIME	Ignores time stamps with the following forms:
	15:37:53.22 15:37:53 15:37 3:37 PM 15H37m 15H37' 15.37 h 15 h 37"53 s 15 h 37 min kl 15.37 h 15.37
VERSION	Ignores file version on file names
FILE_NAMES	Ignores file names of the form FILENAME.EXT
DIRECTORIES	Ignores directory specification fields of the form DISK:[DIRECTORY

The valid values for keyword are as follows:

If you specify more than one keyword, separate the keywords with commas and enclose the list in parentheses. If you specify only one keyword, omit the parentheses. Masking is performed in the order of the keywords previously shown.

/MEMBER

Lists the groups of which the specified groups are members.
/NEW

Depending on the Review subsystem command, you can use this qualifier to do the following:

- Move to the previous result description for a new test.
- Mark for inclusion the test description for new tests.
- Move to the next result description for a new test.
- Print files from result descriptions for new tests.
- Show whether output files exist for result descriptions having the new comparison status.

/NOFILTERS

Specifies that no filters be associated with the new test description. By default, the filters associated with the existing interactive or noninteractive terminal test descriptions are also associated with the new test descriptions.

/NOGROUPS

Specifies that the new test description does not belong to any groups. If you do not specify this qualifier, the new test description belongs to the same group (or groups) as the previous test description.

/NOINSERT

Specifies that a group is not to be created from tests marked with the INSERT command when you exit the Review subsystem.

/NOPRINT

Specifies that files marked with the PRINT command are not to be printed when you exit the Review subsystem.

/NOTIFY /NONOTIFY (D)

Determines whether a message is sent to the terminal to notify you that the subprocess has completed or aborted. You must specify the /NOWAIT qualifier with the /NOTIFY qualifier.

/NOT_RUN

Depending on the Review subsystem command, you can use this qualifier to do the following:

- Move to the previous result description for a test that did not run.
- Mark for inclusion test descriptions for tests that did not run.
- Move to the next result description for a test that did not run.
- Print files from result descriptions for tests that did not run.
- Determine whether output files (benchmark, difference, and result files) exist for result descriptions with the not run comparison status.

/NOVARIABLES

Specifies that no variables be associated with the new test description. If you do not specify this qualifier, the variables associated with the old test description are associated with the new test description.

/NOW

Concatenates all files selected for printing on the current PRINT command and immediately places them in the print queue. The default is to place the concatenated files in the print queue when you exit from the Review subsystem.

/NUMERIC

Used only with the /SYMBOL qualifier, the /NUMERIC qualifier defines the symbol type as a numeric value. Use this qualifier to change a string variable of a symbol to a numeric value. When specifying a qualifier to the CREATE VARIABLE command, you must use either /NUMERIC or /STRING.

If the variable value is not enclosed in quotation marks (" "), the variable type is defined as a numeric value.

/OUTPUT=file-specification

Depending on the command, you can use this qualifier to direct information to a specified file. If you specify the file name but omit the file type, the file type defaults to .LIS.

/PARALLEL /NOPARALLEL (D)

Specifies whether the lines that do not match in the result and benchmark files are formatted side by side.

If you specify the /[NO]PARALLEL and /SCREENS qualifiers together, HP DIGITAL Test Manager performs the comparison screen-by-screen and ignores the /[NO]PARALLEL qualifier.

/PARENT

Specifies that the process you want to attach to is the original (parent) process.

If you specify the /PARENT qualifier, do not specify the process name parameter or the /IDENTIFICATION qualifier. If you do not specify a qualifier, you must specify a process name.

/POINTER_MOTION /NOPOINTER_MOTION

The pointer motion during a test is recorded in XY records in the session file. Since most of these records are unnecessary for the correct operation of the test, they are eliminated except when one or more buttons are held. On playback, the pointer moves directly to the location of each button press, which speeds up the test execution.

If it becomes necessary to record all pointer motion, use the /POINTER_MOTION qualifier with the RECORD command to specify whether pointer motion should be recorded. The default is /NOPOINTER_MOTION. Control this feature from the HP DECwindows interface with the toggle button in the Record window.

/PROCESS=subprocess-name

Specifies the name of the subprocess to be created. The default name for the subprocess is USERNAME_n (where n denotes a unique number).

/PROLOGUE=file-specification /NOPROLOGUE

Depending on the command, you can use this qualifier to do the following:

- Display the file specification for the prologue file associated with the specified test description.
- Determine whether a prologue file is associated with a test description.
- Determine whether a prologue file is to be run with a specified collection.
- Add a specified prologue file to a test description.

- Determine whether the prologue file should be replaced or disassociated from a specified test description.
- Specify whether HP DIGITAL Test Manager executes the prologue file before interactive recording begins.

/PROMPT[=string]

Specifies the DCL prompt string for the subprocess. The default is to copy the current prompt string from the parent process. If you specify /PROMPT but do not specify a string, the default prompt is displayed.

/READ_ONLY /NOREAD_ONLY (D)

Determines whether you are a primary or read-only user of the Review subsystem. There can be only one primary reviewer at a time. This reviewer can enter all Review subsystem commands. There can be multiple read-only reviewers who cannot make changes to the result descriptions, or to the files they describe. Read-only reviewers cannot enter the INSERT or UPDATE command.

/REALTIME /NOREALTIME (D)

Specifies that all input time delays that occur during an interactive terminal session are preserved during playback. This enables HP DIGITAL Test Manager to send input to the application at a rate determined solely on the speed at which they were recorded and not on the rate at which the applications being tested request input.

When specified with the RECORD command, the /REALTIME qualifier forces time delays to be recorded as WAIT records in the same session file. When used with the PLAY and CREATE COLLECTION commands, the /REALTIME qualifier forces recorded timing information to be interpreted as input time delays, and test synchronization (based on application read detection) is disabled.

Use the /REALTIME qualifier sparingly because it slows down the execution of your tests. Although time delays are preserved during playback, HP DIGITAL Test Manager cannot absolutely guarantee accurate playback of time-dependent applications. For such applications, the readiness of the application to accept input can be highly dependent on the current system performance and load. When executing such tests, it is recommended that you run these tests on a system where processing demands are strictly regulated.

/RECORDS

For noninteractive and interactive terminal tests, the /RECORDS qualifier performs a record-by-record comparison of the result and benchmark files. The default is /SCREENS for interactive tests and /RECORDS for noninteractive tests.

Records are identical only if they contain the same characters. Use this type of comparison only when you expect the record in which a string appears to be the same each time a comparison is performed.

Use caution when specifying the /RECORDS qualifier for an interactive test, because the records in the result file are not guaranteed to be written the same way each time the test runs. You might want to use the /RECORDS qualifier for an interactive test whose result file is not generated by HP DIGITAL Test Manager (for example, if you rename a test output file to be DTM\$RESULT).

/RECOVER

Attempts to restore the current library and its collections to a usable state in the event of a process or job abortion, or a system failure. It also cleans up the library by deleting files and directories that HP DIGITAL Test Manager does not own.

/REMARK="string" /NOREMARK

Depending on the command, you can use this qualifier to do the following:

- Display the remark associated with the test description.
- Specify whether to replace or delete a remark associated with a specified group.
- Specify whether to replace or delete the remark associated with a specified test description.
- Display the remark associated with a specified variable.
- Determine whether to replace or remove the remark associated with a specified variable.

/REPAIR /NOREPAIR (D)

Attempts to reclaim all loose blocks in the current HP DIGITAL Test Manager library and to delete illegal files found in the library. If HP DIGITAL Test Manager encounters a subdirectory of the HP DIGITAL Test Manager library that contains files and the directory is not associated with a collection, HP DIGITAL Test Manager issues a confirmation message before deleting the directory.

/RESULT

Depending on the Review subsystem command, you can use this qualifier to do the following:

- Print the result file from a specified result description.
- Display a specified result file.

For a noninteractive test, HP DIGITAL Test Manager displays the result file. If the benchmark file exists, its file specification is displayed.

For an interactive test, HP DIGITAL Test Manager displays the result file screen-by-screen and provides you with a keypad for manipulating the file. The keypad and the procedure for using it are described in the HP DECset for OpenVMS Guide to DIGITAL Test Manager.

If you include a comparison status qualifier with the /RESULT qualifier, HP DIGITAL Test Manager displays the result file for result descriptions with the specified comparison status.

/RESULT_FILE=file-specification /NORESULT_FILE (D)

Specifies whether a file is to receive a copy of the output. If you specify /RESULT_FILE but do not include a file specification, HP DIGITAL Test Manager places the results in a file named *file-name*.RES. If you specify the /NORESULT_FILE qualifier (the default), the session file is played but the output is not saved.

/SCOPE

Displays the scope of the variable. The scope can be either global or local.

/SCREENS

Performs a screen-by-screen comparison of the result and benchmark files for an interactive test. The default is /SCREENS for interactive tests and /RECORDS for noninteractive tests.

/SELECTED

Concatenates all files already selected for printing and the currently specified file, and immediately places them in the print queue.

The default is to place the concatenated files in the print queue when you exit from the Review subsystem.

/SENTINEL=("begin-delimiter","end-delimiter")

Specifies a pair of strings used to delimit a section of text to be ignored during the comparison of result and benchmark files for noninteractive tests. The delimiters can be up to 256 characters per line and must be unique. Any text between and including the delimiters is treated as if it does not exist.

If you do not enclose the sentinel strings in quotation marks, they are converted to uppercase before the comparison of the files. Sentinel strings can contain any characters, but if you include spaces or tabs they must be enclosed in quotation marks.

/SET_STATE=state-name /NOSET_STATE

Associates a state with the key you are defining. The default is the current state. HP DIGITAL Test Manager defines the two state names as DTM and GOLD_DTM. You cannot define a key specifying both the /SET_STATE and /TERMINATE qualifiers. The /NOSET_STATE qualifier selects the current state.

When defining keys in the Review subsystem, HP DIGITAL Test Manager defines the two state names as REVIEW and GOLD_REVIEW. You cannot define a key specifying both /SET_STATE and /TERMINATE, or /NOECHO and /NOTERMINATE.

/SINCE=time

Specifies that only those history entries dated on or after the given time are to be displayed. All transactions recorded since the library was created are displayed. The time value can be an absolute, delta, or combination time value, or one of the following keywords: TODAY, TOMORROW, or YESTERDAY. If you specify the /SINCE qualifier but do not specify a value, HP DIGITAL Test Manager defaults to /SINCE=TODAY.

/STRING

Used with the /SYMBOL qualifier, the /STRING qualifier defines a symbol type as a text string. Use this qualifier to define an unquoted symbol value as a text string. You cannot specify both /NUMERIC and /STRING with the same CREATE VARIABLE or MODIFY VARIABLE commands.

If the variable value is enclosed in quotation marks (" "), the variable type is defined as a text string.

/SUBMIT[=(keyword,...)] /NOSUBMIT (D)

Determines whether the collection is executed immediately after it is created. You can submit collections that contain HP DECwindows tests, but HP DIGITAL Test Manager must be connected to a HP DECwindows server for the tests to execute.

The /SUBMIT qualifier executes the collection in batch mode immediately after the collection is created. When you enter the /SUBMIT qualifier, the SUBMIT command qualifiers (/KEEP and /LOG) are in effect. You can optionally specify any of the following SUBMIT command qualifiers as keywords:

AFTER	[NO]CHARACTERISTICS	CPUTIME
[NO]HOLD	[NO]KEEP	[NO]LOG_FILE
NAME	[NO]NOTIFY	[NO]PRINTER
PRIORITY	QUEUE	[NO]USER
WSDEFAULT	WSEXTENT	WSQUOTA

If you specify more than one keyword, separate the keywords with commas and enclose the list in parentheses. If you specify only one keyword, you can omit the parentheses.

The /NOSUBMIT qualifier creates the collection without submitting it to the batch queue. To run the collection, use the SUBMIT command.

/SUCCESSFUL

Depending on the command, you can use this qualifier to do the following:

- Move to the previous successfully compared result description.
- Move to the next successfully compared result description.
- Mark for inclusion test descriptions for tests that compared successfully.
- Print files from result descriptions for tests that compared successfully.

• Determine whether output files exist for result descriptions with the successful comparison status.

/SUMMARY

Displays the Collection Summary Information (the information displayed when you first enter the Review subsystem). The default is /FILES. You cannot specify the /SUMMARY and /FILES qualifiers with the same command.

The /SUMMARY qualifier is mutually exclusive with all qualifiers except the /OUTPUT qualifier.

/SYMBOL

Changes a variable from an OpenVMS logical name to an OpenVMS symbol. When you specify a variable as a symbol with the /SYMBOL qualifier, you must further define it as either a numeric value (with the /NUMERIC qualifier), or a text string (with the /STRING qualifier). You cannot specify both /LOGICAL and /SYMBOL with the same CREATE VARIABLE command. The default is /SYMBOL.

/TEMPLATE="file-specification" /NOTEMPLATE

Depending on the command, you can use this qualifier to do the following:

- Display the file specification for the template associated with the specified test description.
- Specify the command file that runs a test. The contents of the template file can be an interactive terminal or HP DECwindows session. HP DIGITAL Test Manager supplies a template file name of the form *test-name*.COM for noninteractive tests and *test-name*.SESSION for interactive and HP DECwindows tests.
- Specify whether to replace or disassociate a test description from the template file. A test description must always have a template file.

/TEMPLATE_DIRECTORY

Displays the directory specification of the template directory used by this collection. Displays the directory specification of the default directory for the current library.

/TEMPLATE_DIRECTORY=directory-specification /NOTEMPLATE_DIRECTORY

Determines whether HP DIGITAL Test Manager should search the default template directory for template files for the specified collection.

If you do not include a directory, HP DIGITAL Test Manager searches the default template directory for the template file established by the SET TEMPLATE_DIRECTORY command.

If you include a directory in the template file specification for a test within the collection, HP DIGITAL Test Manager searches that directory for the template file. The directory you specify can be either another directory or a CMS library.

The /NOTEMPLATE_DIRECTORY qualifier overrides the default template directory for the specified collection. HP DIGITAL Test Manager searches your default directory for all template files without directory specifications.

/TERMINATE /NOTERMINATE (D)

Determines whether the specified command string executes when you press the defined key. When you use the /NOTERMINATE qualifier, you must press the Return key to execute a command. You cannot specify both the /SET_STATE qualifier and the /TERMINATE qualifier, or the /NOECHO qualifier with the /NOTERMINATE qualifier.

/TERMINATION_CHARACTER=character

Specifies a character sequence for interactive terminal sessions that, when pressed twice, terminates the recording of an interactive terminal or HP DECwindows session. The termination character can be any single character, such as an asterisk (*) or a control sequence, such as Ctrl/P (the default).

When pressed once, Ctrl/P temporarily suspends the recording session to introduce a recording function. For example, Ctrl/P E (end automatic screen comparison) is the recording function instructing HP DIGITAL Test Manager to terminate automatic screen comparison and to begin manual screen comparison.

The termination character can be any single character, such as an asterisk (*), or a control sequence, such as Ctrl/P. To specify a control character, enter a circumflex (^) followed by a letter. For example, to enter the termination character sequence Ctrl/D, enter a circumflex followed by a D (/TERMINATION_CHARACTER=^D). You can also specify a termination character by its ASCII decimal representation. For example, you can use the ASCII number 16 to specify Ctrl/P.

On interactive terminal tests, you can also terminate the recording session by entering the DCL command LOGOUT. If you do not want an accounting summary, enter the DCL command STOP/IDENTIFICATION=0.

/TEST_DESCRIPTION

Lists the test descriptions with which a variable is associated.

/TIME

Replaces time stamps with the following forms:

15:37:53.22 with hh:mm:ss.xxxx 15:37:53 with hh:mm:ss 15:37 with hh:mm 3:37 PM with hh:mm xm 15H37m with hhHmmm 15H37' with hhHmm' 15.37 h with hh.mm h 15 h 37"53 s with hh h mm"ss s 15 h 37 min with hh h mm min kl 15.37 with kl hh.mm h 15.37 with h hh.mm

/TRACE_BACK

Replaces 32-bit memory addresses with *xxxxxxx* and 64-bit memory addresses with *xxxxxxxx* xxxxxxxx.

/TRANSACTION=(keyword,...) /NOTRANSACTION=(keyword,...)

Displays all transaction records generated by the commands associated with the keywords you specify. The default is to list transaction records for all transactions in the HP DIGITAL Test Manager library. The valid keyword values are as follows:

ALL	Displays all transactions recorded in the history file
COPY	Displays all COPY commands
CREATE	Displays all CREATE commands
DELETE	Displays all DELETE commands
INSERT	Displays all INSERT commands
MODIFY	Displays all MODIFY commands
RECORD	Displays all RECORD commands

RECREATE	Displays all RECREATE commands
REMARK	Displays all REMARK commands
REMOVE	Displays all REMOVE commands
REVIEW	Displays all REVIEW commands
RUN	Displays all RUN commands
SET	Displays all SET commands
STOP	Displays all STOP commands
SUBMIT	Displays all SUBMIT commands
UPDATE	Displays all Review UPDATE commands
VERIFY	Displays all VERIFY commands

If you specify more than one command, you must enclose the list of commands in parentheses and separate them with commas.

The /TRANSACTION qualifier directs HP DIGITAL Test Manager to list transaction records only for the listed commands.

The /NOTRANSACTION qualifier directs HP DIGITAL Test Manager to list transaction records for all commands except the listed commands.

/TYPE

Displays the type of a specified test description (NONINTERACTIVE, INTERACTIVE, or DECWINDOWS) and the type of a specified variable (STRING or NUMERIC).

/UNSUCCESSFUL

Depending on the command, you can use this qualifier to do the following:

- Move to the previous unsuccessfully compared result description.
- Move to the next unsuccessfully compared result description.
- Mark for inclusion test descriptions for tests that compared unsuccessfully.
- Print files from result descriptions for tests that compared unsuccessfully.
- Determine whether output files exist for result descriptions with the unsuccessful comparison status.

/UPDATED

Depending on the command, you can use this qualifier to do the following:

- Move to the previous updated result description.
- Move to the next result description whose benchmark file has been updated.
- Mark for inclusion test descriptions for tests whose benchmark files have been updated.
- Print files from result descriptions whose benchmark files have been updated.
- Determine whether output files exist for result descriptions with the updated comparison status.

/USAGE

Displays the use of the variable, which can be as a symbol or a logical.

/USER=user-name

Lists in chronological order the library transactions performed by the specified user. You cannot use wildcards in user names.

/VALUE

Displays the variable's default value. If no value has been supplied, the null value is displayed.

/VALUE=value

Changes the value of the variable. A value specified with the MODIFY VARIABLE command replaces any previous value for the variable.

/VARIABLE /NOVARIABLE (D)

Displays the names and values for all variables associated with the test description. The /NOVARIABLE qualifier disassociates the specified variables from the test description.

/VARIABLE=(variable-name=variable-value,...)

Depending on the command, you can use this qualifier to do the following:

- Override the values of the specified global variables for a specified collection.
- Associate existing variables with new test descriptions.

- Associate existing variables with the test description being modified.
- Redefine variable values for test descriptions.

All variables must be defined in the test library using the CREATE VARIABLE command. Also, all variables created using the CREATE VARIABLE command are local in scope. You cannot use wildcards.

/VARIABLES /NOVARIABLES (D)

For the RECORD command this parameter specifies whether Digital Test Manager is to define symbols and logical names as specified by the variables associated with the test before recording starts.

/VERIFY (D) /NOVERIFY

Verifies that the specified directory is a valid HP DIGITAL Test Manager library before selecting it to be the current test library. If the specified directory is not a valid library, HP DIGITAL Test Manager issues an error message.

You also can use this qualifier to verify the existence of files associated with test descriptions before creating a collection. If a referenced file does not exist, HP DIGITAL Test Manager does not create the collection.

/VERSION

Replaces file versions with VERSION.

/WAIT (D) /NOWAIT

Controls whether the system waits until the subprocess is completed before allowing more commands to be issued by the parent process. The /NOWAIT qualifier enables you to enter more commands while the specified subprocess is running. If you specify the /NOWAIT qualifier, you should also specify /OUTPUT to direct output to a file (rather than to the screen). This prevents your terminal from being used by both processes simultaneously.

/WIDTH=n

For noninteractive and interactive terminal tests that were compared with the /CHARACTERS or /RECORDS qualifier, the /WIDTH qualifier specifies the maximum width allowed for the differences report. The minimum width is 48 columns and the maximum width is 511 columns. The default value is 132 columns.

Test Manager Messages

Message Display

HP DIGITAL Test Manager messages are displayed on the current output device. For an interactive user, this device is a terminal or workstation. If HP DIGITAL Test Manager is run in batch mode, messages are written to the log file.

A HP DIGITAL Test Manager message has the following format:

%DTM-severity_code-message_name, text of message

Table Messages–1 shows how the message fields are interpreted.

Component	Description
%DTM	This prefix indicates that the message originates from HP DIGITAL Test Manager.
Severity_code	A single letter indicates one of the five codes described in Table Messages–2.
Message_name	A unique name identifying the message.
Text of message	A one- or two-sentence message describing an event that has occurred.

Table Messages–1 HP DIGITAL Test Manager Message Fields

HP DIGITAL Test Manager issues messages with varying severity levels. The severity level of a message indicates the general nature of the message and is represented by one of the codes in Table Messages–2.

Table Messages–2 HP DIGITAL Test Manager Message Severity Codes

Code	Description
S (Successful)	Indicates that HP DIGITAL Test Manager has performed the request.
I (Information)	Indicates certain kinds of information about the command you entered. For example, HP DIGITAL Test Manager informs you if it is waiting for the database to become available.
W (Warning)	Indicates that HP DIGITAL Test Manager has encountered a minor conflict, but one that does not stop processing of your command.
E (Error)	Indicates that HP DIGITAL Test Manager is unable to perform the requested command; you must correct the problem and enter the command again. Processing of the command might continue.
	(continued on next name)

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Table Messages–2 (Cont.)	HP DIGITAL Test Manager Message Severity Co	des

Code	Description
F (Fatal)	Indicates that HP DIGITAL Test Manager is about to terminate because of a problem that prevents it from continuing any further. Processing of the command stops.

Some fatal error problems can be resolved by entering a VERIFY command with the /RECOVER qualifier. For more information, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

HP DIGITAL Test Manager Messages

This section lists the HP DIGITAL Test Manager messages with a brief explanation of each message and the recommended user action. If no user action is required, this section is omitted. The messages are listed in alphabetical order, by message name. A term enclosed in single quotation marks is variable information and HP DIGITAL Test Manager substitutes appropriate information when the message is displayed on the screen or in the log file.

_ Note __

Every message begins with $\% \mathrm{DTM}$ and a one-letter severity code before the message name.

ABORTING, job 'job-name' (entry 'number') is aborting in queue 'queue-name'

Explanation: The execution of the specified job was stopped and the job is in the process of aborting.

User Action: Wait for the job to finish aborting before trying to use the collection.

ABSTIM, 'qualifier' time value must be absolute

Explanation: Specify an absolute time value for the /BEFORE and /SINCE qualifiers.

User Action: Correct the time value and enter the command again.

ACCVIO, access violation reading routine argument at virtual address 'address'

Explanation: HP DIGITAL Test Manager could not access a routine argument passed to it by the callable interface.

User Action: Correct the call to DTM\$DTM.

ALLOW, could not allocate structure

Explanation: HP DIGITAL Test Manager could not allocate an internal structure.

User Action: Check quotas and SYSGEN parameters. See the secondary messages for more information.

ALPHACHAR, the first character in 'expression' must be alphanumeric **Explanation:** You specified an expression that does not begin with a letter or number.

User Action: Correct the expression and enter the command again.

ALRDYCOMPARED, 'type' (collection or test) 'name' has already been compared

Explanation: If the 'type' is a collection, you cannot recompare a collection once it has been reviewed. If the 'type' is a test, the test was compared previously and will not be compared again.

ALRDYEXISTS, 'name' is already an 'object-name'

Explanation: You specified a name for a collection, group, test description, or variable that already exists in the current library.

User Action: Select another name and enter the command again.

ALRDYINGRP, object 'name' is already in group 'name'

Explanation: The test description or group already belongs to the specified group.

ALRDYUPD, the benchmark for result description 'name' has already been updated

Explanation: You tried to update a benchmark file that has already been updated.

ANSI_CRT, recording terminal was an ANSI CRT, display terminal is not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

ASSIGNERR, unable to assign an I/O channel to device

Explanation: HP DIGITAL Test Manager could not access the specified device.

User Action: Check your quotas and SYSGEN parameters, make sure the device is available, and check the device's protection and ownership.

ASTERR, error declaring an AST

Explanation: A system service failed to create an Asynchronous System Trap (AST).

User Action: Check the AST quotas.

ASTERROR, AST routine received the following error:

Explanation: An error occurred at Asynchronous System Trap (AST) level.

User Action: See the secondary messages for more information.

ASTRONLY, the only parameter recognized by this command is '*'

Explanation: You entered a parameter other than an asterisk (*). If you enter any parameter at all, it must be the asterisk wildcard character.

User Action: Enter the command again with no parameter, or with an asterisk (*).

ATTACHERR, could not put pseudoterminal in ATTACH mode **Explanation:** HP DIGITAL Test Manager could not put the PTY device into ATTACH mode.

User Action: Submit a Software Performance Report (SPR).

AVO_TERM, recording terminal had AVO option, display terminal does not **Explanation:** The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

BADCOLL, there is something wrong with collection 'collection-name'

Explanation: There is a problem with the specified collection.

User Action: Delete the collection or, if the collection is required, restore the library from a backup tape.

BADCTRLRECORD, Playback encountered an invalid CONTROL record in memory

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

BADLENSTR, 'type' block length is 'length', should be 'length'
Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.
User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

BADLIB, there is something wrong with your HP DIGITAL Test Manager library

Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct. **User Action:** Restore the library from a backup tape to ensure that you are using a consistent library.

BADORDSTR, 'type' block 'name' is out of order

Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

BADPROCESS, error processing file_spec at line ##

Explanation: An error has been found processing a HP DECwindows session file.

User Action: Investigate the error and submit a Software Performance Report (SPR).

BADPROTOCOL, corrupted protocol packet

Explanation: HP DIGITAL Test Manager encountered an unrecognized HP DECwindows protocol packet.

BADPTR, 'type' block has address 'address' outside range of database
Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.
User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

BADSESSION, session file has been corrupted Explanation: The session file is corrupt. User Action: Rerecord the session file.

BADSESSIONREAD, Error reading session file file_spec at line ##

Explanation: The HP DECwindows playback system failed to read the session file at the line specified.

User Action: Check for a corrupted session file. Extract and restore the session file to verify its contents. Submit a Software Performance Report (SPR).

BADSTATUS, UNKNOWN error status returned from load_extension() Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

BADTYPSTR, 'type' block type is 'identifier', it should be 'identifier' Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

- BADVERSTR, 'type' block version is 'identifier', it should be 'identifier'
 Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.
 User Action: Restore the library from a backup tape to ensure that you are using a consistent library.
- BADWRITE, Fatal error writing output file file_spec while processing input file line ##

Explanation: A fatal error has occurred while writing the HP DECwindows binary session file.

User Action: Investigate the error and submit a Software Performance Report (SPR).

- BCKPTRSTR, 'type' back pointer is 'identifier' previous block is 'identifier'
 Explanation: HP DIGITAL Test Manager has discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.
 User Action: Restore the library from a backup tape to ensure that you are using a consistent library.
- BEGIN, your interactive test session is now beginning... Explanation: Your recording session is beginning.
- BMK_NOTSAVED, no benchmark file will be saved Explanation: Your benchmark file will not be saved.
- BMK_SAVED, benchmark has been saved in file 'name' **Explanation:** Your benchmark file has been saved.
- CANTCREATETASK, cannot create new task

Explanation: HP DIGITAL Test Manager was unable to create a task. **User Action:** Check the subprocess quota.

CANTSETMODMAP, cannot set modifier mappings
Explanation: HP DIGITAL Test Manager cannot set or restore keyboard modifier mappings when the Lock key is pressed.
User Action: Release the Lock key and try the operation again.

CANTOPEN, cannot open display on requested device 'device-name' **Explanation:** HP DIGITAL Test Manager cannot open a connection to the HP DECwindows server.

User Action: Check the translation of the DECW\$DISPLAY logical name.

CANTRESUB, cannot resubmit this collection

Explanation: You cannot resubmit this collection.

CFREEFAIL, Unable to free a data_structure

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

CHECKCMS, check that SYS\$SHARE:CMSPROSHR.EXE is installed

Explanation: The HP Code Management System (CMS) shareable image CMSSHR.EXE could not be activated.

User Action: Verify that the CMS startup file was executed when your system booted and that SYS\$SHARE:CMSPROSHR.EXE is installed with the /OPEN/SHARE/PROTECTED qualifiers. Consult with your system manager.

CLEANUPERR, Clean_up Error clean_up operation

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

CLREFERR, unable to clear a system event flag

Explanation: A system service failed to clear an event flag. **User Action:** Check your quotas and SYSGEN parameters. Consult with your system manager.

CMDFILABORT, aborting execution of commands from command file 'name' Explanation: An error occurred while HP DIGITAL Test Manager was executing commands from your startup command file.

User Action: Correct the command that caused the error.

CMDNOTALLOWED, 'command' command is not allowed when Reviewing in Read_only mode

Explanation: You attempted to enter an INSERT or UPDATE command while reviewing a collection in read-only mode.

User Action: Exit the Review subsystem and then reenter it without the /READ_ONLY qualifier. As the primary reviewer, you can enter the INSERT and UPDATE commands.

CMDTOOLONG, command over 255 characters long, RECREATE 'name' will not work

Explanation: The original CREATE COLLECTION command was more than 255 characters long. Due to restrictions in the command-line interface (CLI), you cannot currently use the RECREATE command for this collection.

User Action: Use the DELETE COLLECTION command to manually delete the existing collection. Then, reenter the original CREATE COLLECTION command.

CMPSTATIGNORED, comparison status qualifier ignored

Explanation: You specified both a result-description-name parameter and one or more comparison-status qualifiers on a command. HP DIGITAL Test Manager ignored the comparison-status qualifiers.

CMSTRYAGNLAT, could not lock CMS library 'library-name'

Explanation: HP DIGITAL Test Manager attempted to lock a CMS library, but could not because the library was in use.

User Action: Reenter the command when the library is no longer in use.

CNTRLABORT, Abort with Clean Up...

Explanation: This message is seen when you enter a Ctrl/Y or Ctrl/C from the terminal where HP DIGITAL Test Manager is doing a HP DECwindows-based operation.

CNTSTR, block 'type' count is 'actual-count', it should be 'correct-count' **Explanation:** The specified block type count is incorrect.

User Action: Use the VERIFY/RECOVER command to restore your library to a usable state.

CNVNOTNEC, conversion not necessary, library already version 'number' **Explanation:** The old library you specified in the CONVERT LIBRARY command does not need to be converted. COLLINUSE, collection 'name' is in use

Explanation: The collection you specified is currently in use.

User Action: Wait and enter the command again when the collection is not in use. If you see this message for a collection that you know is not in use, there is a problem with the collection. Use the VERIFY/RECOVER command to restore your library to a usable state.

COLNOTCOMP, collection 'name' has not been compared

Explanation: You tried to review a collection that has not yet been compared.

User Action: Compare the collection and enter the command again.

COLNOTRUN, collection 'name' has not been run

Explanation: You tried to compare or review a collection that has not yet been executed.

User Action: Execute the collection and enter the command again after the collection has finished executing.

COLNOTRVW, collection 'name' has not been reviewed

Explanation: You tried to resubmit or re-create a collection that has not been reviewed.

User Action: Review the collection and enter the command again.

COLSTATERR, collection is in an inconsistent state

Explanation: The collection is in an unusable state.

User Action: Use the VERIFY/RECOVER command to restore the collection to a usable state.

COLSTOPPED, collection 'name' has been stopped

Explanation: HP DIGITAL Test Manager stopped execution of the specified collection.

COMPARED, collection 'name' compared

Explanation: HP DIGITAL Test Manager compared the specified collection.

CONCLUDED, your interactive test session has concluded **Explanation:** You terminated the recording session.

CONDTRACE, routine_name called routine_name which returned **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

CONTROLC, operation aborted by Ctrl/C

Explanation: You pressed Ctrl/C to abort an operation in progress. **User Action:** Enter the command again to restart the operation.

CONFIGIOFAIL, Config_Io error returned from extension

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

CONNECTFAIL, Connection FAILED to Node node_name

Explanation: HP DIGITAL Test Manager could not establish a HP DECwindows connection to the specified workstation.

User Action: Define DECW\$DISPLAY to be the node name of the workstation being used. This often solves subprocess failure conditions when HP DIGITAL Test Manager is given a command to spawn for HP DECwindows recording.

CONVERTED, version 'number' library successfully converted to version 'number'

Explanation: HP DIGITAL Test Manager converted the library.

COPIED, test description 'name' copied

Explanation: HP DIGITAL Test Manager copied the specified test description.

CREATED, 'object' 'name' created

Explanation: HP DIGITAL Test Manager created the specified collection, group, test description, variable, or library.

CR_FILLS, recording terminal needs no crfill, display terminal does

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

CTRLCERR, error enabling CTRL/C ASTs

Explanation: HP DIGITAL Test Manager could not enable Ctrl/C on your terminal.

User Action: Check your terminal's protection, existence, and ownership.

CURRCOMPARE, collection 'name' is currently being compared

Explanation: You tried to compare a collection that is currently being compared.

User Action: Wait and enter the command again after the collection has been compared.

CURRTERM, characteristics of current terminal will be used

Explanation: HP DIGITAL Test Manager could not extract the terminal characteristics information from the specified session file because it could not find the file. HP DIGITAL Test Manager will use the terminal characteristics of your current terminal.

DASSGNERR, unable to deassign the I/O channel to 'device'

Explanation: A system service could not release control of the specified device.

User Action: Check the availability, protection, and ownership of the device.

DCTRL, error disabling control characters

Explanation: A system service failed to disable Ctrl/Y handling. **User Action:** See the secondary messages for more information.

DEALLOC, failed to deallocate 'structure'

Explanation: An internal structure could not be deallocated. **User Action:** See the secondary messages for more information. DEC_CRT1, recording terminal had characteristic DEC_CRT, display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

DEC_CRT2, recording terminal had characteristic DEC_CRT2, display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display may look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

DECW_NETFAIL, Unable to communicate with the HP DECwindows server **Explanation:** HP DIGITAL Test Manager is unable to communicate with the HP DECwindows server due to a network failure.

User Action: Contact your system manager.

DEFAULTDIR, default directory cannot be a HP DIGITAL Test Manager library or any of its subdirectories

Explanation: You cannot set your default directory to the HP DIGITAL Test Manager library, or to any of its subdirectories.

User Action: Change your default directory to be different from the HP DIGITAL Test Manager library or any of its subdirectories, and enter the command again.

DEFAULTED, 'type' file name defaulted to 'name'

Explanation: HP DIGITAL Test Manager provided a default file name or type.

User Action: Check the default name or type to verify that it agrees with the existing file name or type.

DEFCANCEL, default 'item' canceled

Explanation: HP DIGITAL Test Manager canceled your current default benchmark directory, template directory, collection prologue file, or collection epilogue file.

DELETED, 'object' 'name' deleted

Explanation: HP DIGITAL Test Manager deleted the specified collection, group, test description, or variable.

DELETIONS, 'count' deletion(s) completed

Explanation: HP DIGITAL Test Manager deleted the specified number of items.

DELSINRUN, test description 'name' has been deleted since this collection was run

Explanation: HP DIGITAL Test Manager cannot insert this test description into the group created from the Review subsystem because the test description has been deleted.

DEVUNKNOWN, device type unknown-VT100 assumed

Explanation: Your terminal is of an unknown device type. HP DIGITAL Test Manager will record the interactive terminal session as if you were using a VT100 series terminal.

DIFFERENT, files for test 'name' are different

Explanation: The COMPARE command detected differences between the result and benchmark files for the specified test description.

DIREXISTS, directory 'name' already exists

Explanation: HP DIGITAL Test Manager could not create the specified collection. The collection subdirectory it tried to create already exists.

DISPLAYSUP, display will be suppressed since device 'name' is not a terminal

Explanation: You entered a PLAY or RUN command with SYS\$OUTPUT specifying a device other than a terminal. The test will execute properly, but you will not be able to monitor its progress visually.

DUPLICATETASK, duplicate task name

Explanation: An attempt was made to create a duplicate task. HP DIGITAL Test Manager assigns task names based on the operation being performed and the object on which the operation is being performed.

User Action: Wait for the original task to terminate.

ECTRL, error enabling control characters

Explanation: A system service failed to enable Ctrl/Y handling.

User Action: See the secondary messages for more information.

EIGHTBIT, recording terminal handles 8-bit, display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

EMPTYGROUP, group 'name' contains no test descriptions

Explanation: The specified group contains no test descriptions.

User Action: Enter the command again without the named group, or examine the library to see if this group should contain test descriptions.

ENDPTRSTR, 'type' end pointer is 'identifier', last block is 'identifier'

Explanation: The last block type is incorrect.

User Action: Use the VERIFY/RECOVER command to restore your library to a usable state.

ERRCOMP, error comparing test 'name'

Explanation: HP DIGITAL Test Manager could not compare the result and benchmark files for the specified test.

User Action: See the secondary message for more information.

ERRCREASSOC, error associating variable 'name' with test description 'name'

Explanation: HP DIGITAL Test Manager could not associate the specified variable and test description.

User Action: See the secondary message for more information.

ERRCRETASK, task not created

Explanation: An error occurred while HP DIGITAL Test Manager was creating a task, so it could not create the task.

User Action: See the secondary message for more information.

 $ERRDELETIONS, \ \ `count' \ deletion(s) \ completed \ with \ `count' \ errors$

Explanation: HP DIGITAL Test Manager encountered one or more errors while deleting items.

ERRDELFIL, error deleting file 'name'

Explanation: HP DIGITAL Test Manager could not delete the specified file.

User Action: Check the file protection and enter the command again.

ERREMOVALS, 'count' removal(s) completed with 'count' error(s) **Explanation:** HP DIGITAL Test Manager encountered one or more errors while removing test descriptions or groups.

ERRINCOLL, error in collection 'name'

Explanation: The specified collection contains errors. **User Action:** Use the VERIFY/RECOVER command to restore your library to a usable state.

ERRINSERTIONS, 'count' insertion(s) completed with 'count' error(s) **Explanation:** HP DIGITAL Test Manager encountered one or more errors while inserting test descriptions or groups.

ERRINTD, error in test description 'name'

Explanation: The specified test description contains errors. **User Action:** Use the VERIFY/RECOVER command to restore your library to a usable state.

ERRMODIFIES, 'count' modification(s) completed with 'count' error(s) **Explanation:** HP DIGITAL Test Manager encountered one or more errors while modifying test descriptions or variables.

ERRORACT, error activating image 'filename' Explanation: HP DIGITAL Test Manager could not activate the required shareable images.

User Action: See your system manager.

ERROVERRIDE, error associating new value of variable 'name' with test description 'name'

Explanation: HP DIGITAL Test Manager encountered one or more errors while associating an override value with the specified variable.

User Action: See the secondary message for more information.

ERRPAREXP, error parsing 'type' expression

Explanation: You entered a collection, group, test description, or variable expression with illegal syntax.

User Action: Correct the expression and enter the command again. See the secondary message for more information.

ERRSUBDIR, library subdirectory 'name' matches no existing collection **Explanation:** A subdirectory exists in the HP DIGITAL Test Manager library that is not related to a valid collection.

User Action: Delete the subdirectory from the HP DIGITAL Test Manager library.

 $ERRUPDATES, \ \ `count' \ update(s) \ completed \ with \ \ `count' \ error(s)$

Explanation: HP DIGITAL Test Manager encountered one or more errors while updating benchmark files.

ERRVERARC, archive list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERCOL, collection list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERCOLFIL, one or more files missing from collection subdirectory Explanation: HP DIGITAL Test Manager discovered errors in the collection directory structure.

User Action: Re-create the collection.

ERRVERFRE, free space list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct. **User Action:** Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERGRO, group list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERHEAD, user header information verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERSPACE, contiguous space verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERSTR, string list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERTD, test description list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

ERRVERVAR, variables list verified with errors

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct. **User Action:** Restore the library from a backup tape to ensure that you are using a consistent library.

EXIT, leaving Review subsystem

Explanation: HP DIGITAL Test Manager exited the Review subsystem.

EXITERR, error on exit from Review subsystem

Explanation: HP DIGITAL Test Manager encountered one or more errors while exiting the Review subsystem.

EXPRIGNORED, 'expression type' expression ignored

Explanation: HP DIGITAL Test Manager ignored the specified expression because the command is syntactically incorrect. HP DIGITAL Test Manager will execute the command as if you had not entered the expression.

User Action: See the secondary message for more information.

EXTLOADFAIL, Connection made to node_name, but failed to load Xtrap extension

Explanation: The connection was successfully made to the HP DECwindows workstation, but the server extension was not loaded by the HP DECwindows server.

User Action: Make sure that the

DECW\$SERVER_EXTENSION_XTRAP.EXE image is in SYS\$LIBRARY of the workstation that will be used by HP DIGITAL Test Manager. Restarting the HP DECwindows server on the workstation being used could also solve the problem, assuming that the Xtrap extension is in SYS\$LIBRARY.

EXTRACTED, input file 'file-name' created

Explanation: HP DIGITAL Test Manager extracted the input file from the specified session file.

FAILTOCONN, client failed to connect

Explanation: A client that connected during a record operation did not connect to HP DIGITAL Test Manager during a play operation.

User Action: Determine why the client did not connect and try the operation again.

FILENOTEXIST, 'type' file 'name' does not exist

Explanation: The specified file does not exist. When a file (except the benchmark file) is named in a test description, the file must exist when a collection containing the test description is created.

User Action: See the *HP DECset for OpenVMS Guide to DIGITAL Test Manager* to determine whether the missing file is one that you can create and modify.

FILMOVED, 'template/benchmark' file 'name' moved to CMS library

Explanation: HP DIGITAL Test Manager moved the specified benchmark or template file from your default directory to the specified HP Code Management System (CMS) library.

FILNAMERR, error in 'type' file-name 'name'

Explanation: There is a syntax error in the specified file name.

User Action: Enter the command again with a proper file name. See the secondary message for more information.

FILNOTMOVED, 'template/benchmark' file 'name' not moved to CMS library 'library name'

Explanation: HP DIGITAL Test Manager was unable to move the specified file into the specified CMS library.

User Action: See the subsequent CMS messages to determine the problem, then use CMS directly to place the file into the CMS library.

FILTERED, expression successfully filtered

Explanation: The expression was translated and the file was filtered.

FORCESYNCH, Forcing Synch on *** synch_string ***

Explanation: A timeout on a marked synchronization record will force the HP DECwindows playback system to artificially match and satisfy the synchronization string.

User Action: Check that proper synchronization text records have been selected as synchronization points. The best records for selection should be guaranteed to occur during each playback of the session file.

FREEEFERR, unable to deallocate a system event flag

Explanation: A system service failed to deallocate an event flag.

User Action: Check the quota and SYSGEN parameters. Consult with your system manager.
FROMSELF, cannot remove group 'name' from itself

Explanation: You tried to remove the specified group from itself. Because a group cannot be a member of itself, you cannot remove a group from itself.

GETDVIERR, could not get information about device 'device'

Explanation: A system service failed to obtain information about the specified device.

User Action: Verify that the device exists. Check the device protection and ownership.

GETEFERR, unable to allocate a system event flag

Explanation: A system service failed to allocate an event flag.

User Action: Check your quotas and SYSGEN parameters. Consult with your system manager.

HASFILES, directory 'name' contains files

Explanation: You tried to create a HP DIGITAL Test Manager library in a directory that is not empty.

User Action: Delete the files and reenter the CREATE LIBRARY command for the same directory, or create the library in a different directory.

HASMEMBERS, group 'name' contains one or more groups or test descriptions

Explanation: You tried to delete a group that is not empty.

User Action: Remove any groups and test descriptions from the group, then enter the command again.

HASREFERENCE, variable 'name' referenced by a test description

Explanation: You tried to delete a variable that is referenced by one or more test descriptions.

User Action: Enter the SHOW VARIABLE/TEST_DESCRIPTION command to list the tests that reference this variable. Subsequently, remove the references to the variable with the MODIFY TEST_ DESCRIPTION command and reenter the DELETE VARIABLE command. HISNOTSTM, history file record format is not stream_lf

Explanation: The library history file (00DTM.HIS) must be in stream_lf (line-feed) format. Note that if you edit the history file, the format may no longer be stream_lf.

User Action: Use the VERIFY/RECOVER command to correct the file format.

HISTDEL, 'count' history records deleted

Explanation: HP DIGITAL Test Manager deleted some or all of your library history. By default, the deleted history information is placed in the file HISTORY.DMP in your default directory.

HOLDING, job 'job-name' (entry 'number') is holding in queue 'queue-name'

Explanation: The specified job is waiting to execute.

IDENTICAL, files for test 'name' are identical

Explanation: The result and benchmark files for this result description are identical.

ILLCHAR, illegal character in 'name'

Explanation: The expression you entered contains a character that is not allowed in this context.

User Action: Correct the expression and enter the command again.

ILLEGALDEV, illegal device name specified

Explanation: You included an illegal device specification in a library directory specification or in a file specification.

User Action: Correct the device specification and enter the command again.

ILLFILEINLIB, 'type' file 'name' contains illegal HP DIGITAL Test Manager library specification

Explanation: The file specification cannot refer to the HP DIGITAL Test Manager library.

User Action: Correct the file specification and enter the command again.

ILLPRIORITY, /PRIORITY not in range 0 to 255

Explanation: You tried to submit a collection to the batch queue with a priority value outside the allowed range.

User Action: Correct the priority value and enter the command again.

ILLQUAL, 'name' is an illegal qualifier; use /TEST_DESCRIPTION or /GROUP

Explanation: You cannot use the specified qualifier in a test group expression. You can use only the /GROUP and /TEST_DESCRIPTION parameter qualifiers in this context,

User Action: Verify the validity and position of the qualifier, then enter the command again.

ILLRECORD, unrecognized record type 'type'

Explanation: A record in the session file being processed begins with the specified unrecognized type designator.

User Action: Delete or modify the illegal record, or use a previous correct version of the file.

ILLTIME, /CPUTIME value is not a delta time

Explanation: You tried to submit a collection with a /CPUTIME qualifier value that is not a delta time.

User Action: Correct the value and enter the command again.

ILLWSDEFAULT, /WSDEFAULT not in range 1 to 65535

Explanation: You tried to submit a collection with a /WSDEFAULT qualifier value outside the allowed range.

User Action: Correct the value and enter the command again.

ILLWSEXTENT, /WSEXTENT not in range 1 to 65535

Explanation: You tried to submit a collection with a /WSEXTENT qualifier value outside the allowed range.

User Action: Correct the value and enter the command again.

ILLWSQUOTA, /WSQUOTA not in range 1 to 65535

Explanation: You tried to submit a collection with a /WSQUOTA qualifier value outside the allowed range.

User Action: Correct the value and enter the command again.

INPDEALLOC, Deallocated only ## of ## input buffers

Explanation: This is an internal HP DIGITAL Test Manager condition. It is not serious, and can occur during aborted HP DECwindows operations.

User Action: Submit a Software Performance Report (SPR).

INPERR, command line input error

Explanation: You entered a command containing a syntax error. **User Action:** See the secondary messages for more information.

INPMBXINIT, Error Initializing input mailbox

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INPUTEOF, Unexpected end-of-file in input file

Explanation: The end of a HP DECwindows input file was reached before expected.

User Action: Check for input file corruption, then submit a Software Performance Report (SPR).

INSERTED, 'object' 'name' inserted into group 'name'

Explanation: HP DIGITAL Test Manager inserted the group or test description into the specified group.

INSERTIONS, 'count' insertions completed

Explanation: HP DIGITAL Test Manager completed the specified number of insertions.

INTOSELF, cannot insert group 'name' into itself

Explanation: You tried to insert the specified group into itself. A group cannot be a member of itself.

INUSE, HP DIGITAL Test Manager library 'directory-spec' is in use, please wait

Explanation: The HP DIGITAL Test Manager library is currently being used by someone else. HP DIGITAL Test Manager will wait and automatically continue execution of your command as soon as the library is free.

INVCONTROLREC, Session file contains an invalid CONTROL record **Explanation:** The HP DECwindows playback system found an invalid control record in the session file it was loading into memory.

User Action: Check for corrupted session-file contents. This error should be caught by the extract or restore operations.

INVDECNETXPORT, Invalid transport Direction for HP DECnet **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INVDWOPT, invalid option specified for HP DECwindows test

Explanation: A command qualifier was selected that is invalid for HP DECwindows tests.

User Action: Remove the invalid qualifier and reenter the command.

INVINTOPT, invalid option specified for interactive terminal test

Explanation: A command qualifier was selected that is invalid for interactive terminal tests.

User Action: Remove the invalid qualifier and reenter the command.

INVKBDCMD, Invalid keyboard command

Explanation: During HP DECwindows recording, any HP DIGITAL Test Manager command entered at the workstation that is not recognized produces this error and a bell.

INVKEYSYM, invalid keysym'keysym'

Explanation: The keysym specified is unrecognized

User Action: See the Command Dictionary section of this reference for the proper keysym format and reenter the command.

INVLINES, ## invalid lines were encountered in input file file_spec

Explanation: When extracting or restoring a HP DECwindows session file or input file, this message indicates the number of invalid lines encountered.

User Action: Be sure to start with original recorded files, and fix all scripting errors identified by the RESTORE command.

INVMBXPORT, Invalid transport Direction for MBX

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INVNONOPT, invalid option specified for noninteractive test Explanation: A command qualifier was selected that is invalid for noninteractive tests.

User Action: Remove the invalid qualifier and reenter the command.

INVPARMNUM, routine DTM\$DTM was called with an invalid number of parameters

Explanation: A call to the HP DIGITAL Test Manager callable interface has an incorrect number of parameters.

User Action: Correct the call (see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*).

INVPLAYRECORD, Playback encountered an invalid record in memory **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INVRECMODE, Invalid Script record mode

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

INVRECORD, Invalid input record found at line ## of file file_spec

Explanation: An invalid HP DECwindows input record has been found. This record can be a session-file record or an input-file ASCII record. The extract or restore programs could not identify the record type.

User Action: The session file or the input file has become corrupted. Check past versions of the same files to track down where the problem began.

INVRECTYPE, Invalid Script record type

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

INVRESOURCEMSK, Invalid resource bit mask in clean_up() switch **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INVSTRDES, invalid string descriptor at virtual address 'address'

Explanation: A string descriptor containing the command line passed to the HP DIGITAL Test Manager callable interface has an invalid format. **User Action:** Correct the string descriptor format.

INVSYNTAX, Invalid script syntax at line ##

Explanation: The specified line contains a scripting error. **User Action:** Check the specified source lines for typographical errors, errors specifying a script record, or otherwise corrupted record text.

INVTRMCHR, invalid termination character 'string' specified **Explanation:** You specified an invalid string for the /TERMINATION_CHARACTER qualifier.

User Action: Correct the string specification and enter the command again.

INVXPORTVAL, Invalid dcb w_transport value.

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

INVXTRAPEXT, Invalid Xtrap Extension: OS Ident = #, Owner = #, Version = #

Explanation: HP DIGITAL Test Manager has identified a version mismatch between itself and the Xtrap extension currently loaded on the workstation.

User Action: Make sure that the latest DECW\$SERVER_EXTENSION_XTRAP.EXE has been placed in SYS\$LIBRARY of the workstation in question. Restart the HP DECwindows server on the workstation in question to load the correct Xtrap extension. IOERROR, error 'opening' file 'name'

Explanation: An I/O error occurred while HP DIGITAL Test Manager was reading, writing, opening, or closing the specified file. The type of file, the specified action, and the file name are included in the message text.

User Action: Verify that the file exists and check the file protection and ownership. See the secondary messages for more information.

ISMEMBER, 'object' 'name' is a member of group 'name'

Explanation: You tried to delete a group or test description that belongs to another group.

User Action: Remove the test description or group from all groups to which it belongs, then enter the command again.

LF_FILLS, recording terminal needs no fill, display terminal does

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

LIBIS, HP DIGITAL Test Manager library is 'directory-spec'

Explanation: Your HP DIGITAL Test Manager library is now defined to be the specified directory.

LINEOFERR, At line ## in file file_spec

Explanation: Indicates the line number of an error found when restoring a HP DECwindows input file.

User Action: Locate and correct the specified error.

LOSTDECNETLINK, Lost HP DECnet link. Stopping Device

Explanation: This indicates that HP DIGITAL Test Manager has lost its connection to the workstation being used as a result of a problem with the workstation HP DECnet link.

User Action: Try to identify the problem that caused the workstation to abort the HP DECnet link to HP DIGITAL Test Manager. If recording or playback was active through the quitting of a session, this error can be expected. Quitting from a session shuts down all HP DIGITAL Test Manager communication with the remote workstation.

LOWERCASE, recording terminal had lowercase, display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

MASKCANTALLOC, 'type' block 'name'

Explanation: HP DIGITAL Test Manager cannot allocate enough internal memory for editing this file.

User Action: Increase virtual memory quotas.

MASKCANT_GET_ATTRS, 'type' block 'name'

Explanation: HP DIGITAL Test Manager cannot obtain the frame attributes for a particular frame in this file. As a result, HP DIGITAL Test Manager cannot determine whether or not masked regions already exist for this frame.

User Action: Check protections on the file. The users should have at least read access.

MASKDDIFNULL, 'type' block 'name',

Explanation: The file is empty. It does not contain any image frames.

MAXTASKS, cannot create task, reached task limit

Explanation: An attempt was made to create more tasks than HP DIGITAL Test Manager allows.

User Action: Wait for an existing task to terminate and try the operation again.

MAXWARN, Maximum number (##) of syntax warnings reached

Explanation: The message indicates that the maximum number of errors has been reached processing a HP DECwindows input file.

User Action: Correct the specified errors and perform the extract or restore again.

MECHFORM, recording terminal supports FF, but display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

MECH_TAB, recording terminal supported tabs, display terminal does not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

MEMALLOCFAIL, Unable to allocate memory for data_structure

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Check your system's memory configuration for tuning problems. Submit a Software Performance Report (SPR).

MISBLKSTR, a 'type' block was not hit during pass 1

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

 $MODIFICATIONS, \ `count'\ modification(s)\ completed$

Explanation: HP DIGITAL Test Manager modified the specified number of test descriptions or variables.

MODIFIED, 'object' 'name' modified

Explanation: HP DIGITAL Test Manager modified the specified test description or variable.

- MRKFORINSERT, test_description 'name' marked for insertion **Explanation:** HP DIGITAL Test Manager marked the specified test description for insertion into the group created when you exited the Review subsystem.
- MSSBLKSTR, there were 'count' 'identifier' type blocks found on pass 1, there were 'count' blocks found on pass 2

Explanation: HP DIGITAL Test Manager discovered an inconsistency or error in your HP DIGITAL Test Manager library that it cannot correct.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

MUSTBEDIR, 'string' must be a directory specification

Explanation: HP DIGITAL Test Manager expected a directory specification where you entered the specified string of characters.

User Action: Correct the parameter and enter the command again.

MUSTBEGLOB, variable 'name' must be global for CREATE COLLECTION to override

Explanation: The variable you specified on the CREATE COLLECTION command is a local variable.

User Action: Verify that you entered the correct variable name, then reenter the command with a variable that is global in scope.

NETMBXREAD, Unexpected IOSB Error on network command MBX read **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NETMSGBADPARAM, Process_netcmd() encountered an Invalid link message code

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NETREADFAILED, Process_netcmd() failed: could not queue read to netcmd MBX

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NEWASSOCVAL, superseding old association value between variable 'name' and test description 'name'

Explanation: This variable and test description are already associated. The new value you specified supersedes the existing value.

NEWDEF, 'file' is the new default collection 'prologue/epilogue'

Explanation: You specified a new default collection prologue file or collection epilogue file.

NEWWIDTH, recording terminal has width n, display terminal has width m

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

NEWTERM, recording terminal was a 'terminal-type', display terminal is a 'terminal-type'

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

NOASSOC, variable 'name' was not associated with test-description 'name' **Explanation:** You attempted to remove a nonexistent association between the specified variable and test description.

NOATTACH, could not attach to process

Explanation: HP DIGITAL Test Manager could not issue the specified ATTACH command.

User Action: Verify the existence of the process to which you want to attach and verify that it is part of your job. See the secondary messages for more information.

NOCANCEL, Error canceling device

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NOCMDKEYCODE, KEYSYM to KEYCODE translation for command key failed

Explanation: This is an internal HP DIGITAL Test Manager DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NOCOMPARE, collection 'name' not compared

Explanation: HP DIGITAL Test Manager could not compare the specified collection.

NOCONVERT, error converting your 'V1' library to 'V2'

Explanation: HP DIGITAL Test Manager could not convert your library. **User Action:** See the secondary message for more information.

NOCOPY, error copying 'object' 'name'

Explanation: HP DIGITAL Test Manager could not copy the specified collection, group, test description, or variable.

User Action: See the secondary message for more information.

NOCREATE, error creating 'object' 'name'

Explanation: HP DIGITAL Test Manager could not create the specified collection, group, test description, variable, or library.

NOCTRLC, Control-C could not be enabled on terminal device

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition indicating that Ctrl/C will not be recognized from the current terminal.

User Action: Submit a Software Performance Report (SPR) specifying this and any additional error messages.

NOCTRLY, Control-Y could not be enabled on terminal device

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition indicating that Ctrl/Y will not be recognized from the current terminal.

User Action: Submit a Software Performance Report (SPR) specifying this and any additional error messages.

NOCURRES, you are not currently positioned at a result description **Explanation:** You entered a Review subsystem command that requires you to be positioned at a result description.

User Action: Enter a Review subsystem command to select a result description, then enter the command again.

NODASSGN, Error Deassigning device

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NODECUI, HP DECwindows files cannot be displayed on a terminal **Explanation:** You tried to display a HP DECwindows result or benchmark file on a terminal.

User Action: Use a HP DECwindows workstation to display the file.

NODECWFMT, 'library-name' file 'file-name' is not in HP DECwindows format

Explanation: When attempting to compare a HP DECwindows test, HP DIGITAL Test Manager found files that were not run in the HP DECwindows test format.

User Action: Rerun the test to create new files for comparison.

NODECWINDOWS, HP DECwindows is not installed on this system Explanation: HP DECwindows is not installed on this system. User Action: See your system manager.

NODEFINE, your DEFINE/KEY command is syntactically incorrect **Explanation:** An error exists in the DEFINE/KEY command you entered. **User Action:** See the secondary messages for more information.

NODEL, cannot delete 'object'

Explanation: HP DIGITAL Test Manager could not delete the specified collection, group, test description, or variable.

User Action: See the secondary message for more information.

NODELETE, error deleting 'object' 'name'

Explanation: HP DIGITAL Test Manager could not delete the specified collection, group, test description, or variable.

User Action: See the secondary message for more information.

NODELETIONS, no 'name' deletions performed **Explanation:** HP DIGITAL Test Manager could not delete the specified items. User Action: See the secondary message for more information. NODELFUTURE, cannot delete history of future events **Explanation:** You specified a time that is later than the current time. User Action: Correct the time value and enter the command again. NODISPLAY, could not display benchmark for test 'name' **Explanation:** The DISPLAY/BENCHMARK command could not display the specified benchmark file. User Action: See the secondary messages for more information. NOEXTRACT, input file not extracted from 'session file' Explanation: HP DIGITAL Test Manager could not extract an input file from the specified session file. User Action: See the secondary message for more information. NOHIS, no history records found Explanation: The current HP DIGITAL Test Manager library contains no history records for the specified object. NOINPUTFILE, Could not open ASCII Input file file_spec Explanation: The ASCII HP DECwindows input file could not be opened. User Action: See the secondary message for more information. NOINSERT, error inserting 'object' 'name' into group 'name' Explanation: HP DIGITAL Test Manager could not insert the test description or group into the specified group. User Action: See the secondary message for more information. NOINSERTIONS, no 'type' insertions performed Explanation: HP DIGITAL Test Manager did not perform the specified insertions. **User Action:** See the secondary message for more information.

NOLCKKEYCODE, KEYSYM to KEYCODE translation for command lock key failed

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NOMATCH, no match was found for 'type' expression 'expression'
Explanation: HP DIGITAL Test Manager could not find any item in the library or collection to match your command-line expression.
User Action: Verify the spelling and meaning of your expression, then reenter the command.

NOMARK, cannot mark result description 'name' for insertion
 Explanation: HP DIGITAL Test Manager could not mark the named result description for insertion upon leaving the Review subsystem.
 User Action: See the secondary message for more information.

NOMEM, Not enough internal memory to contain session file file_spec **Explanation:** The HP DECwindows playback system ran out of memory loading a session file. The session file was too big to fit within the memory constraints of the playback system, which is currently 1000 blocks.

User Action: Subdivide your script into smaller tasks and submit a Software Performance Report (SPR).

NOMODARG, arguments do not specify any modifications to 'object' **Explanation:** HP DIGITAL Test Manager did not modify the test description or variable because you did not specify any fields to be modified.

User Action: Enter the command again with one or more qualifiers specifying the fields to modify.

NOMODIFIES, no 'type' modifications performed

Explanation: HP DIGITAL Test Manager performed no modifications. **User Action:** See the secondary message for more information.

NOMODIFY, error modifying 'object' 'name'

Explanation: HP DIGITAL Test Manager could not modify the specified test description or variable.

User Action: See the secondary message for more information.

NOMORE, no more 'type' result descriptions found **Explanation:** HP DIGITAL Test Manager could not find a result description matching the result description expression.

NOMOVE, result description position not changed

Explanation: HP DIGITAL Test Manager did not move you to the specified result description because the command you entered was syntactically incorrect.

User Action: See the secondary message for more information.

NOMSGBLK, CheckStatus could not create a Message Block

Explanation: HP DIGITAL Test Manager could not allocate memory for an error message block.

User Action: Check your system's memory configuration for tuning problems.

NONETCMD, Allocation of the network link command buffer failed **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

NONETOBJ, Network object has not been declared

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

NONTTYRECORDER, recording might only be performed when running on a terminal

Explanation: You cannot record a terminal session while executing in batch mode.

User Action: Verify that SYS\$INPUT and SYS\$OUTPUT are specified as terminals.

NONULL, NULL not found in Record ###

Explanation: HP DIGITAL Test Manager Restore of an input file expects that records be null-terminated. A NULL terminator was not found.

User Action: Check for input file corruption, then submit a Software Performance Report (SPR).

NOPARTWILD, no partial wildcards allowed in result description expression **Explanation:** Partial wildcards are not allowed as parameters to the SELECT Review subsystem command.

User Action: Enter the command again, specifying a result description name, the asterisk (*) wildcard, or no parameter.

NOPRINT, cannot print 'file type' 'name'

Explanation: HP DIGITAL Test Manager could not print the specified file.

User Action: See the secondary message for more information.

NOPRINTQD, error submitting job to print queue

Explanation: HP DIGITAL Test Manager could not submit the specified files to the print field queue.

User Action: See the secondary message for more information.

NORECLAIM, error reclaiming loose type 'type' block

Explanation: The HP DIGITAL Test Manager VERIFY/REPAIR command found a loose block of the specified type in the library, but was unable to move it to the proper location.

User Action: Restore your library from a backup tape.

NORECORD, No output record produced - program continuing

Explanation: When HP DIGITAL Test Manager is extracting a HP DECwindows session file, any invalid binary record will produce this error.

User Action: Check that a previous restore has not corrupted the session file being extracted. Use the original session file and rerecord the test.

NORECOVER, error recovering library

Explanation: HP DIGITAL Test Manager could not recover your library. **User Action:** Restore your library from a backup tape.

NORECREATE, error re-creating collection 'name'

Explanation: HP DIGITAL Test Manager could not re-create your collection.

NOREF, unable to reference 'directory'

Explanation: You tried to execute a HP DIGITAL Test Manager command without first selecting a HP DIGITAL Test Manager library.

User Action: Use the SET LIBRARY command to select a HP DIGITAL Test Manager library. Enter the command again.

NOREMARK, error adding remark to DTM library

Explanation: HP DIGITAL Test Manager could not enter your remark in the library history file.

User Action: See the secondary messages for more information.

- NOREMOVAL, error removing 'object' 'name' from group 'name'
 Explanation: HP DIGITAL Test Manager could not remove the group or test description from the specified group.
 User Action: See the secondary message for more information.
- NOREMOVALS, no 'type' removals performed

Explanation: HP DIGITAL Test Manager performed no removals.

NOREPAIR, error repairing library

Explanation: HP DIGITAL Test Manager could not repair your library. **User Action:** Restore your library from a backup tape.

- NORESTORE, session file not restored from 'file-name'
 Explanation: HP DIGITAL Test Manager could not restore the session file from the specified input file.
 User Action: See the secondary message for more information.
- NORESUBMIT, collection 'name' cannot be resubmitted **Explanation:** HP DIGITAL Test Manager could not resubmit the specified collection.

User Action: See the secondary message for more information.

NORETRIEVE, could not retrieve 'information' for test 'name' **Explanation:** HP DIGITAL Test Manager could not access the specified information for the specified test description. NOREVIEW, error reviewing collection

Explanation: HP DIGITAL Test Manager could not review the specified collection.

User Action: See the secondary message for more information.

NOSESSIONFILE, Could not open session file file_spec

Explanation: The session file could not be opened.

User Action: See the secondary message for more information.

NOSET, could not set default 'item'

Explanation: HP DIGITAL Test Manager could not establish the collection prologue file, collection epilogue file, benchmark directory, or template directory.

User Action: Correct the expression and reenter the command.

NOSHOW, error showing 'object' 'name'

Explanation: HP DIGITAL Test Manager could not display the specified result, benchmark, or differences file; or it could not display the test description, variable, group, or collection.

NOSINCE, error executing /SINCE operation

Explanation: HP DIGITAL Test Manager could not display the library history as specified by the /SINCE qualifier.

User Action: See the secondary messages for more information (see the HISNOTSTM message).

NOSPAWN, could not spawn a subprocess

Explanation: HP DIGITAL Test Manager could not spawn a subprocess. **User Action:** Verify your process quotas and job limits, then reenter the command.

NOSPEC, no 'item' specified

Explanation: No default benchmark directory, template directory, collection prologue file, or collection epilogue file exists.

NOSRCHLST, search lists are not allowed in this context: 'name'

Explanation: You cannot use a search list here.

NOSTOP, collection 'name' was not stopped

Explanation: HP DIGITAL Test Manager did not stop the collection.

NOSUBMIT, collection 'name' cannot be submitted

Explanation: HP DIGITAL Test Manager could not submit the specified collection.

User Action: See the secondary message for more information.

NOSUCHJOB, job 'number' does not exist in queue 'name'

Explanation: HP DIGITAL Test Manager could not find an executing batch job for the collection.

User Action: Use the VERIFY/RECOVER command to restore your library to a usable state, then enter the command again.

NOSYNCHRECORD, Can't force synch: No entry to remove from synch_queue **Explanation:** This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

NOTAPPLIC, the /STRING and /NUMERIC qualifiers are not applicable to logical variable 'name'

Explanation: HP DIGITAL Test Manager did not modify the variable type because the variable currently has a logical type. Therefore, it cannot have the string or numeric type.

User Action: Verify that the current usage for the variable is correct.

NOTCHANGED, the default 'name' directory was not changed **Explanation:** HP DIGITAL Test Manager could not change the specified directory.

NOTCRELIB, first history record is not DTM CREATE LIBRARY transaction **Explanation:** The first record of every history file should be a transaction of the CREATE LIBRARY command. It is likely that the history file has been edited.

NOTDELTATIME, DTM\$DELAY_TIMEOUT must specify a DELTA TIME.

- DELTA Times are of the form '0 00:00:00.0'.
- Using default timeout of 0 00:03:00.00>

Explanation: The HP DIGITAL Test Manager timeout logical has been incorrectly specified. The HP DIGITAL Test Manager default timeout value will be used.

User Action: Redefine the logical with a valid OpenVMS DELTA time specification, as noted.

NOTDTMLIB, 'directory_spec' is not a valid HP DIGITAL Test Manager library

Explanation: You specified a directory that is not a valid HP DIGITAL Test Manager library.

User Action: Correct the directory specification and enter the command again.

NOTESTCMP, no tests in collection 'name' could be compared **Explanation:** No tests ran in this collection; consequently, no result files were produced.

User Action: This collection can be resubmitted or re-created.

NOTFILTERED, expression 'expression' could not be filtered

Explanation: There was a problem either translating the expression or finding the resolved file specification.

User Action: See the secondary message for more information.

NOTFINISHED, collection 'name' has not finished running

Explanation: You tried to compare a collection that is still executing.

User Action: Enter the command again when the collection has finished executing.

NOTFOUND, 'object' not found

Explanation: HP DIGITAL Test Manager could not find the specified collection, group, test description, or variable.

NOTINTER, test description 'name' is not interactive

Explanation: You performed an operation reserved for interactive tests on a noninteractive test.

NOTINTEST, no 'field' associated with this test description **Explanation:** The prologue, epilogue, variable, or filter is not associated with this test.

User Action: Enter the command again without the qualifier.

NOTLATIN1, the specified character is not in the Latin 1 keysym encodings **Explanation:** The termination character specified for a HP DECwindows test cannot be found in the HP DECwindows Latin 1 keysym encodings.

User Action: Enter the command again with a valid termination character.

NOTMASKED, 'type' block 'name'

Explanation: The DDIF file was not masked because an error was encountered.

User Action: See the secondary message for more information.

NOTMEMBER, 'type' 'name' is not currently a member of group 'name'

Explanation: You selected a group or test description for removal from a specified group, but the test description or group is not currently a member of the specified group.

NOTRANSLATE, unrecognized sequence 'sequence' will not be translated **Explanation:** HP DIGITAL Test Manager cannot provide a translation for a special string or for a recording function or nonprinting text while creating the input or session file. HP DIGITAL Test Manager will copy the untranslated sequence to the file.

User Action: Verify that the sequence is correct. If it is correct, use a text editor to include the correct translation in the file being created.

NOTRUN, collection 'name' was not found running in the batch queues **Explanation:** You tried to stop a collection that is not currently executing in any batch queue.

NOTYETRUN, collection 'name' has not yet been run

Explanation: You tried to review or compare a collection that has not yet been executed.

User Action: Use the DTM command RUN or SUBMIT to execute the collection, then enter the command again.

NOUPDATE, the benchmark file for result description 'name' has not been updated

Explanation: HP DIGITAL Test Manager encountered an error while updating the benchmark file.

User Action: See the secondary message for more information.

NOVERIFY, HP DIGITAL Test Manager library 'name' not verified **Explanation:** HP DIGITAL Test Manager encountered errors that it cannot correct while trying to verify the library.

User Action: Restore the library from a backup tape to ensure that you are using a consistent library.

- NOWLDCARD, wildcards are not allowed in this context: 'string'Explanation: You specified a wildcard character where none is allowed.User Action: Replace the expression with a name and enter the command again.
- NO_PC_DEV, your system does not contain the PC: device

Explanation: The device PC: does not exist on your system. **User Action:** Verify that the PCDRIVER is installed on your system and check the system startup procedure to ensure that the PCDRIVER is being loaded.

NULLEXPR, a null 'type' expression is not allowed in this context Explanation: You entered an empty string for a required parameter. User Action: Enter the command again with a valid parameter.

NULLNAME, a null value for qualifier 'name' is not permitted in this context

Explanation: You entered an empty string for a required qualifier. **User Action:** Enter the command again with a valid qualifier.

NULLNUM, numeric symbol variables cannot have a null value

Explanation: Numeric symbols with null values generate invalid DCL symbol assignment statements of the form VARIABLE =. This is not allowed.

User Action: If you specified both the /VALUE and /NUMERIC qualifiers with a MODIFY or CREATE command, enter the command again with one qualifier or the other, but not both. If you were attempting to modify an existing variable, examine it with the SHOW VARIABLE command to verify that your modification is sensible.

NULLOG, logical variables cannot have a null value

Explanation: Logicals with null values generate invalid DCL DEFINE statements.

User Action: If you specified both the /VALUE and /LOGICAL qualifiers with a MODIFY or CREATE command, enter the command again with one qualifier or the other, but not both. If you were attempting to modify an existing variable, examine it with the SHOW VARIABLE command to verify that your modification is sensible.

OLDLIB, your current library is an old version, please use the CONVERT command

Explanation: Your current library was created by a previous incompatible version of HP DIGITAL Test Manager.

User Action: For instructions to convert your library, see the *HP DECset* for *OpenVMS Guide to DIGITAL Test Manager*.

OPENIN, error opening 'name' as input

Explanation: The COMPARE command could not open the specified file for input.

OPENOUT, error opening 'name' for output

Explanation: The COMPARE command could not open the specified file for output.

ORIGBENMISS, original benchmark 'name' no longer exists; current benchmark is 'name'

Explanation: The original benchmark file has been changed.

OUTDEALLOC, deallocated only ## of ## output buffers

Explanation: This is an internal HP DIGITAL Test Manager condition. It is not serious, and can occur during aborted HP DECwindows operations. **User Action:** Submit a Software Performance Report (SPR).

OUTFILEINCOMP, Output file file_spec is incomplete

Explanation: This indicates that errors have been found while processing a HP DECwindows input file. The output file has been generated, but is not complete and should not be used.

User Action: Correct the specified errors and perform the restore again.

OUTMBXINIT, Error Initializing output mailbox

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

OVERRUN, data overrun using PC: device

Explanation: Your program transmitted data at a rate that HP DIGITAL Test Manager could not handle.

User Action: Verify that your parent process is not running at a low priority, or rerun your program when the system is not as heavily loaded.

PAGESIZE, recording terminal has PAGESIZE n, display terminal PAGESIZE m

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

PARTCMP, collection 'name' was partially compared

Explanation: HP DIGITAL Test Manager partially compared the specified collection.

PC_CHECK, check that PCDRIVER is installed and PC0: and PTY0: exist

Explanation: PCDRIVER is not present or is improperly installed. **User Action:** Check the system startup procedure to ensure that PCDRIVER is loaded. Verify that the devices PCO:, PTY0:, and VTA0:

exist.

PC_READ, error reading from PC: device

Explanation: An error occurred while reading from the PC: device. **User Action:** Check the quotas and protections.

PC_WRITE, error writing to PC: device

Explanation: An error occurred while writing to the PC: device.

User Action: Check the default protections and process quotas.

PENDING, job 'job-name' (entry 'number') is pending in queue 'queue-name'

Explanation: The job is waiting for room in the batch queue before beginning its execution.

PKT_NOTFILTERED, string not filtered, unrecognized packet format Explanation: HP DIGITAL Test Manager could not filter a string in a HP DECwindows result or benchmark file.

User Action: Regenerate the result or benchmark file.

PLAYFAILED, play of session 'name' has failed **Explanation:** HP DIGITAL Test Manager could not execute the specified test.

User Action: See the secondary messages for more information.

PRINT, file 'name' of test 'name' selected for printing Explanation: HP DIGITAL Test Manager marked the specified file for printing.

PRINTQD, print job has been sent to the print queue

Explanation: HP DIGITAL Test Manager submitted the specified job to the print queue.

PROCEEDING, proceeding with command execution

Explanation: Your library is now free and HP DIGITAL Test Manager is continuing to execute your command.

PTY_ERR, could not create pseudoterminal for 'name'

Explanation: HP DIGITAL Test Manager could not create a PTY: device like the specified device.

User Action: Check the SYSGEN parameters and process quotas, then verify that PCDRIVER is loaded. See the secondary messages for more information.

QUALEXPRCONFLICT, the / qualifier ' conflicts with the 'expression type' expression

Explanation: The specified qualifier and expression cannot both be included on the same command.

User Action: See the primary message for more information.

READOUTPUTERR, Read_workstation_output() FAILED with OpenVMS status ##

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

REASSURE, nonetheless, result file will be properly built

Explanation: Previous informational messages stated that the terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded. This message assures you that HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file.

RECORDING, Recording...

Explanation: This indicates that HP DECwindows recording has successfully started.

RECORDEND, Recording stopped

Explanation: HP DECwindows recording has been successfully stopped.

RECGRO, inserting group 'name' into group 'name' would create a recursive group

Explanation: You cannot build a recursive group (a group that contains itself).

User Action: Create a new group with a different name and insert the group into the new group.

RECLAIMED, loose type 'type' block reclaimed

Explanation: The DTM command VERIFY/REPAIR has identified a loose block in the library and moved it back to its proper place.

RECNOTNEC, recovery is not necessary; HP DIGITAL Test Manager library 'directory-spec' is in a safe state

Explanation: The HP DIGITAL Test Manager library is not in need of recovery. HP DIGITAL Test Manager made no changes to the library.

RECORDED, test 'name' has been successfully recorded

Explanation: HP DIGITAL Test Manager recorded the interactive session.

RECORDFAILED, session file for test description 'name' has not been recorded

Explanation: HP DIGITAL Test Manager could not record the interactive session.

User Action: See the secondary messages for more information.

- RECOVERED, HP DIGITAL Test Manager library 'directory-spec' recovered **Explanation:** Your HP DIGITAL Test Manager library has been recovered and is ready for use.
- RECREATED, collection 'name' has been re-created **Explanation:** HP DIGITAL Test Manager deleted and re-created the specified collection.
- REMARK, remark added to history file

Explanation: HP DIGITAL Test Manager added your remark to the history file.

REMOVALS, 'count' removals completed

Explanation: HP DIGITAL Test Manager performed the specified number of removals.

- REMOVED, 'object' 'name' removed from group 'name'Explanation: HP DIGITAL Test Manager removed the group or test description from the specified group.
- REMQFAILURE, Unable to REMQ a data_structure
 Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.
 User Action: Submit a Software Performance Report (SPR).
- REPAIRED, HP DIGITAL Test Manager library 'directory-spec' repaired **Explanation:** Your HP DIGITAL Test Manager library has been repaired and is ready for use.
- REQUIREDSYNCH, The Record at line ## SHOULD be a SYNCH Record. (It matches Synch Record *** string *** at line ##)

Explanation: The specified line number contains a text record that precedes an identical text record marked as a synchronization point.

User Action: Make the record at the specified line a synchronization record, or choose another synchronization text record instead of the currently marked synchronization point. A synchronization record must be unique back to, but not including, the last synchronization record.

RESDESCERR, the information stored in this result description is in error **Explanation:** One of the files associated with the result description is in error or has been deleted.

User Action: You cannot review this result description as it is. For information on using the REVIEW INSERT command and on reexecuting the test, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

RESERVNAM, 'name' is reserved for HP DIGITAL Test Manager use only **Explanation:** The name you specified is reserved for use only by HP DIGITAL Test Manager.

User Action: Enter the command again with a different name.

RESTORED, session file 'file-name' created

Explanation: HP DIGITAL Test Manager restored the session file from the specified input file.

RESTRMERR, could not restore terminal characteristics for 'terminal'

Explanation: A system service failed to restore your terminal's characteristics.

User Action: See the secondary messages for more information.

RESUBMITTED, collection 'name' has been resubmitted

Explanation: The collection is now executing in batch mode.

RETTODTM, Returning to DTM

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition indicating that a signaled error is returning control to the HP DIGITAL Test Manager command level.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

RUNFAILED, run of collection 'name' has failed

Explanation: HP DIGITAL Test Manager could not execute the specified collection.

User Action: See the secondary messages for more information.

SAVSCREEN, Saving Screen...

Explanation: During a HP DECwindows recording session, this message indicates that HP DIGITAL Test Manager is saving the pixels from the workstation display screen.

User Action: The user should not use the workstation keyboard or pointer until the save screen is complete. The completion of the save-screen operation is signaled by a bell at the workstation, and a message to SYS\$OUTPUT if SYS\$OUTPUT is active.

SAVSCRNCMPLT, Save screen complete

Explanation: The pixels of a workstation display screen have been saved to a file.

User Action: Recording can continue.

SAVSCR_CDDIF, Error creating ddif file to receive screens

Explanation: An error was encountered trying to open the DDIF file that holds the pixels of a saved HP DECwindows display screen.

User Action: Try to identify why the file was unable to be created.

SAVSCR_NOMEM, Insufficient virtual memory to save screen

Explanation: There was not enough system memory to fully process the saving of a HP DECwindows save screen during recording.

User Action: Tune system memory usage using the Monitor Pool DCL command and other system management resources to identify any system problems.

SCOPETRM, recording terminal was a scope, but display terminal is not

Explanation: The terminal on which you are monitoring an executing test has characteristics different from the terminal on which the test was recorded.

User Action: HP DIGITAL Test Manager is executing the test correctly (even though the display might look incorrect) and will create a proper result file. Use the Review subsystem SHOW/RESULT command to display the result file.

SENSEMODEERR, could not get terminal characteristics for 'terminal'

Explanation: A system service failed to obtain the specified terminal's device characteristics.

User Action: Verify that the terminal exists and check the terminal's protection and ownership.

SESSION_BAD, session file 'name' has invalid format

Explanation: The session file contains invalid data. Most likely, you edited a session file created by HP DIGITAL Test Manager, or you created a session file without using the appropriate HP DIGITAL Test Manager commands.

User Action: If you modified the session file, verify your changes or replace the session file with a backup version. Make sure the first record in the session file is a 12-byte terminal characteristics block. For more information, see the *HP DECset for OpenVMS Guide to DIGITAL Test Manager*.

SESSIONFILELOAD, # script lines processed, # blocks read

Explanation: This is an informational message indicating the number of session file lines that were read into memory and the corresponding block count that the lines represent.

SESSION_READ, error reading session file 'name'

Explanation: HP DIGITAL Test Manager could not read from the specified session file.

User Action: Verify that the file exists, and check the file's protection and ownership. See the secondary messages for more information.

SESSION_WRITE, error writing session file 'name'

Explanation: HP DIGITAL Test Manager could not write data to the specified file.

User Action: Verify that the file exists, and check the file's protection and ownership. See the secondary messages for more information.

SETMODEERR, could not change terminal characteristics for 'terminal'

Explanation: A system service failed to change the specified terminal's device characteristics.

User Action: Verify that the terminal exists, and check the terminal's protection and ownership.

SETTRMERR, could not change terminal characteristics for 'terminal'

Explanation: A system service failed to change your terminal's characteristics.

User Action: Verify the terminal's protection and ownership.

- SIGSTATUS, routine_name Signaling on error returned by routine_call
 Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition indicating that a severe error has occurred.
 User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.
- SIGTRACE, routine_name is signaling an exit

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

SIMTERM_CLS, could not deallocate simulated terminal

Explanation: An error occurred while terminating terminal simulation. **User Action:** See the secondary messages for more information.

SIMTERM_ERR, error simulating terminal

Explanation: An error occurred while simulating your terminal. **User Action:** See the secondary messages for more information.

SIMTERM_OPN, could not create simulated terminal

Explanation: HP DIGITAL Test Manager could not simulate your terminal.

User Action: See the secondary messages for more information.

STARTDELHIS, no deletable history records before 'date'

Explanation: You specified a date for the /BEFORE qualifier prior to the date of the first history record that can be deleted. The CREATE LIBRARY record cannot be deleted.

User Action: Correct the date and enter the command again.

STARTHIS, library history starts at 'date'

Explanation: You specified a date for the /BEFORE qualifier prior to the date the library was created.

User Action: Correct the date and enter the command again.

STARTIOFAIL, START_IO FAILED with status = ##

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

STRTOOLONG, string of 'count' characters is too longExplanation: The name you specified is too long.User Action: Enter the command again with a shorter name.

SUBMITTED, collection 'name' submitted

Explanation: HP DIGITAL Test Manager submitted the specified collection for batch processing.

SUBSYSONLY, EXIT can only be used to leave the subsystem level

Explanation: The EXIT command is valid only when you are using HP DIGITAL Test Manager as a subsystem, or when you are in the Review subsystem.

SUCCEEDED, the comparison for the test 'name' succeeded Explanation: The result file for the specified test matched its benchmark file.

TASKSTRTOOBIG, HP DECnet Task string is too big

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

TEST_CONFLICT, DTM test already running

Explanation: Cannot record or play a HP DECwindows test on the default HP DECwindows server because a HP DIGITAL Test Manager HP DECwindows test is already being recorded or played on the current display.

User Action: Wait for the current recording or play operation to terminate.

TESTNOTRUN, test 'name' was not run

Explanation: Execution of the collection stopped before all tests had executed.

User Action: See the *HP DECset for OpenVMS Guide to DIGITAL Test Manager* for instructions for reviewing a partially run collection, and for reexecuting the tests that did not execute. TIMEORDER, BEFORE and SINCE time values cannot be resolved

Explanation: You specified an incorrect sequence of time values for the /BEFORE and /SINCE qualifiers. (The /SINCE qualifier value must indicate a time prior to that indicated by the /BEFORE qualifier value.)

User Action: Verify that you are entering the correct values, then reenter the command.

TOODEEP, eighth-level directory 'directory_spec' one level too deep **Explanation:** You specified an eighth-level directory on the CREATE LIBRARY command, which is the deepest directory level RMS allows. You cannot create a HP DIGITAL Test Manager library in an eighth-level directory because then HP DIGITAL Test Manager cannot create any collection subdirectories.

User Action: Create another directory no deeper than seven levels.

TOOLONG, 'name' is too long, maximum of 'number' characters

Explanation: The specified expression is too long.

User Action: Enter the command again with a shorter expression.

TRMCTRL, control characters must be in range ^A through ^Z

Explanation: You specified a termination character as an out-of-range control character. Valid control characters include those between Ctrl/A and Ctrl/Z, inclusive.

User Action: Correctly specify the termination character.

TRMRANGE, termination character must be in range 0-255

Explanation: You specified a termination character that was either greater than 225 or negative. Valid values include decimal ASCII values between 0 and 255, inclusive.

User Action: Correctly specify the termination character.

TRMSYNTAX, specify termination character as single character or ^x or decimal ASCII value

Explanation: You specified an invalid termination character. Valid termination characters include single characters, control characters between Ctrl/A and Ctrl/Z, inclusive, and decimal ASCII values between 0 and 225, inclusive.

User Action: Correctly specify the termination character.

TRYAGNLAT, please try again later

Explanation: Your library is currently locked by another user. **User Action:** Wait and enter the command again later.

TTY_READ, error reading from tty: device

Explanation: An error occurred while reading from your terminal. **User Action:** See the secondary messages for more information.

TTY_WRITE, error writing to tty: device

Explanation: An error occurred while writing to your terminal. **User Action:** See the secondary messages for more information.

UNDEFLIB, HP DIGITAL Test Manager library is now undefined Explanation: You do not have a current HP DIGITAL Test Manager library.

User Action: Enter a SET LIBRARY command to establish a current HP DIGITAL Test Manager library.

UNKLNKSTATE, Network link is in unknown state

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

UNKNOWN_SEQ, unknown control or escape sequence 'string'

Explanation: Your program output an ASCII control character or an escape sequence that HP DIGITAL Test Manager did not understand. HP DIGITAL Test Manager could not determine its effect on your terminal screen.

User Action: Examine your session file to find the control character or escape sequence HP DIGITAL Test Manager did not understand. Verify that your program is outputting the correct escape sequences for the terminal on which it is running. For example, is it sending a VT100 escape sequence to a VT52 terminal? Verify that you are running your program and test on an appropriate terminal that is supported by HP. Verify that you are not using a terminal feature that this version of HP DIGITAL Test Manager does not support. Verify that you are not sending ReGIS or SIXEL codes to your terminal.
UNMATQUOT, unmatched quote character in expression 'string' Explanation: HP DIGITAL Test Manager detected a missing closing quote character (' or ").

User Action: Enter the command again with a correctly quoted string.

- UNSUCCESS, the comparison for the test 'name' was unsuccessful **Explanation:** The result file for the specified test did not match its benchmark file.
- UNSUPFRMT, format of file 'name' not supported by COMPARE **Explanation:** One of the files HP DIGITAL Test Manager is attempting to compare is not a text file.

UNWINDFAILED, SYS\$UNWIND Failed

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR).

UPDATED, the benchmark for test 'name' has been updated **Explanation:** HP DIGITAL Test Manager replaced the current benchmark file with the result file.

UPDATERR, error in attempt to update the benchmark file for 'resultdescription-name'

Explanation: HP DIGITAL Test Manager could not replace the benchmark file with the result file, or HP DIGITAL Test Manager could not delete the result file.

User Action: See the secondary message for more information.

UPDATES, 'count' updates completed

Explanation: HP DIGITAL Test Manager updated the specified benchmark files.

UPDNOTNEC, update not necessary for 'result-description-name' Explanation: You tried to update the benchmark file for a successful or updated test.

USERECOVER, use HP DIGITAL Test Manager VERIFY/RECOVER **Explanation:** Your library is in an inconsistent state.

User Action: Use the VERIFY/RECOVER command to restore your library to a usable state.

USESETLIB, use HP DIGITAL Test Manager SET LIBRARYExplanation: Your HP DIGITAL Test Manager library is undefined.User Action: Use the SET LIBRARY command to select a library and reenter the command.

VALREQUIRED, value required for variable 'name' in this context

Explanation: When you include the /VARIABLE qualifier with the CREATE COLLECTION command, you must include a variable value for every variable name you list.

User Action: Specify a variable value for every variable name you include.

VARCONFLICT, cannot change variable 'name' from 'null string/non-null numeric' to null numeric

Explanation: You cannot create a numeric symbol variable with a null value.

User Action: Examine the use of this variable and determine whether the attempted operation makes sense for this variable.

VARNOVAL, 'name' variable has no default value. Must associate one with this test

Explanation: The specified variable does not have a default value.

User Action: Use the MODIFY VARIABLE command to associate a default value with the variable.

VERARC, archive list verified

Explanation: This phase of the VERIFY command completed successfully.

VOCAL, collection list verified

Explanation: This phase of the VERIFY command completed successfully.

VERCOLDIR, collection directory structure verified

Explanation: This phase of the VERIFY command completed successfully.

VERFRE, free space list verified

Explanation: This phase of the VERIFY command completed successfully.

VERGRO, group list verified

Explanation: This phase of the VERIFY command completed successfully.

VERHEAD, user header information verified

Explanation: This phase of the VERIFY command completed successfully.

- VERIFIED, HP DIGITAL Test Manager library 'directory-spec' verified **Explanation:** Your HP DIGITAL Test Manager library has been successfully verified.
- VERNOTALL, explicit version numbers not allowed in input file specifications
 Explanation: You cannot include a version number on a file specification entered as a parameter to a HP DIGITAL Test Manager command.
 User Action: Remove the version number references from all file specifications and enter the command again.
- VERSPACE, contiguous space verified

Explanation: This phase of the VERIFY command completed successfully.

VERSTR, string list verified

Explanation: This phase of the VERIFY command completed successfully.

VERTD, test description list verified

Explanation: This phase of the VERIFY command completed successfully.

VERVAR, variables list verified **Explanation:** This phase of the VERIFY command completed successfully.

WAITFRERR, unable to wait for a system event flag to set

Explanation: A system service failed while waiting for an event flag. **User Action:** Check your quotas and SYSGEN parameters. Consult with your system manager.

WAITING, HP DIGITAL Test Manager library 'name' is still in use Explanation: Someone else is still using your library, and your command cannot yet be executed.

User Action: HP DIGITAL Test Manager will automatically resume execution of your command when the library is free.

WLDNOTALLOWED, wildcard in expression 'name' not allowed **Explanation:** You cannot include a wildcard character (* or %) in the specified parameter.

User Action: Enter the command again with a valid parameter.

XINFOFAIL, Xtrap_info request to Xtrap failed

Explanation: This is an internal HP DIGITAL Test Manager HP DECwindows condition.

User Action: Submit a Software Performance Report (SPR), specifying this and any additional error messages.

YOUDEL, you must manually delete the collection files

Explanation: HP DIGITAL Test Manager could not delete all the files in the specified collection.

User Action: Use the DCL command DELETE to delete the remaining files.

YOUDELCRE, you must manually delete and re-create this collection

Explanation: The original CREATE COLLECTION command was more than 255 characters long. Due to restrictions in the command-line interface (CLI), you cannot currently use the RECREATE command for this collection.

User Action: Use the DELETE COLLECTION command to manually delete the existing collection. Then reenter the original CREATE COLLECTION command line.

ZLENBLO, a zero length block was found during pass 2

Explanation: The library structure contains an error.

User Action: Use the VERIFY/RECOVER command to restore your library to a usable state.

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