ICARDA VAX / VMS SYSTEM COMMANDS

USER MANUAL

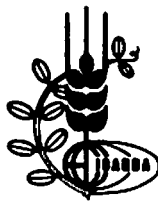Khaled S. El-Bizri

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ICARDA VAX/VMS SYSTEM COMMANDS
User Manual

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Introduction

This manual is a detailed review of the commands available at ICARDA's computing systems. The commands include standard VAX/VMS commands and others developed at ICARDA.

The manual is orientated towards the current version of VAX/VMS. It deals with systems operating under VMS and MicroVMS. The first part is the The Command Language, which deals with the syntax of the commands, defining a somewhat rigorous but flexible grammer. The second part is the Command **Descriptions** which defines the vocabulary of the language, in verbs, parameters, qualifiers and other elements.

Some readers may be inclined to ignore the niceties of linguistics, as expounded in the first part, and use this manual as a reference document for the commands themselves. The first part, however, should help a deeper understanding, and probably more than a logically interesting discourse in computing linguistics.

The manual was prepared with reference to a number of publications:

- *Command Language User's Guide, Digital Equipment Corporation, 1980;*
- *Computer Programming and Architecture, Henry M. Levy and Richard H. Eckhouse, Jr., Digital Press, 1980;*
- *Introduction to VAX/VMS, Terry C. Shannon, Profession Press, 1985;*
- *VAX/VMS Inernals and Data Structures, L. J. Kenah and S. F. Bate, Digital Press, 1984;*

It should be read in conjunction with: *ICARDA VAX/VMS User Guide, Computer Services, ICARDA, 1985.*

TABLE OF CONTNENTS

Part I

The Command Language

Operating System Commands

The operating system of the VAX-11 computers at the Tel Hedya Computer Centre is a common one. It is known as VAX/VMS. VAX stands for Virtual Address Extension. VMS stands for Virtual Memory System.

Commands activate programs. They in turn execute commands or functions requested by the user. The commands available at ICARDA form a superset of those available on a standard VAX/VMS operating system. The standard set is known as the Digital Command Language, DCL.

Corresponding to the language definition there exists a command interpreter which translates the linguistic formalisms into instructions understandable by the computer. In this part of the manual we shall deal with the structure of the commands using English as the metalanguage.

1.1 **The Command String**

The operating system responds to commands entered by the user. Each command consists of a number of components. The components define a command string.

1.2.1 **The Components Command String**

The command string contains one **verb**, and may contain parameters and **qualifiers**, depending on the verb itself and its intended use.

The verb specifies the command to be executed. COPY and PRINT are examples of two verbs. A parameter specifies the object of the verb: i.e. what the verb should act upon. Parameter values include, for example, a file specification or a queue name. A qualifier describes or modifies the action of a verb or parameter. For example, in the command:

$ PRINT/COPIES=5 MYFILE.LIS

PRINT is the verb, COPIES is the qualifier that has the value 5, MYFILE.LIS is the parameter of the PRINT command which is the file specification of the file to be printed.

Verbs are combined with a qualifier, in certain instances, to make a verb pair. SHOW QUEUE, for example, is a verb pair combining the verb SHOW and the qualifier QUEUE. A verb pair should be treated as a verb in interpreting the action resulting from invoking it. In the following we shall refer to a verb pair as a verb, unless emphasis of the link between the two components in the context of the discussion, is intended.

1.2.2 Rules for Entering Command Strings

There are a few rules for entering command strings. They define the structure of the command which is known, as in linguistics, the syntax of the command.

- A command string starts with a verb. If the verb is a verb pair, parameters and qualifiers may not be inserted between its two elements.

  The following example shows a command which contains a verb pair consisting of a verb SHOW and a parameter QUEUE.

  $ SHOW QUEUE LPA0:

  The additional parameter LPA0:, which provides the name of the queue whose entries are to be listed, is specified after the verb pair.

- If a qualifier is used in the command it must be specified after the verb, thus:

  $ SHOW QUEUE/FULL LPA0:

  in which the qualifier FULL was entered to produce a full listing of the entries queued to LPA0:.

- Any combination of uppercase and lowercase letters are permissible in a command string.

- Multiple spaces and tabs do not affect the interpretation of the command string. They are reduced by the command interpreter to a single space.

- At least one blank character must separate the verb from the first parameter.

- At least one blank must separate each additional parameter from the previous parameter. Multiple spaces and tabs are permitted in all cases where a single blank is required.

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- Each qualifier must be preceded with a solidus, also known as the slash character: /. The solidus can be preceded or followed by any number of spaces or tabs.

1.2.3 Rules for Entering Parameters

Not all verbs require parameters. Some are optional the others are required. The following rules apply to both optional and required parameters.

- A command string may contain a single parameter or a list of parameters. Commas are used to separate the parameters in a parameter list. In the command string:

    $ DIRECTORY MYFILE.LIS, NEWFIL.LIS, OLDFIL.LIS

    MYFILE.LIS, NEWFIL.LIS and OLDFIL.LIS are the parameters. The commas are called the delimiters of the parameters.

- Any number of spaces or tab characters can precede or follow the delimiters.

When a verb accepts more than one parameter the notation [,...] is used. For example,

    $ MONITOR class-name[,...]

shows that you can use the verb MONITOR with at least one class name, but optionally with more, to be specified in a list following the first.

1.2.4 Rules for Entering Qualifiers

Note that many qualifiers permit a negative form. For example, NOLIST is the negative form of the LIST qualifier.

If the same qualifier was specified more than once in a command string, or both a positive and negative form of the same qualifier, are specified the command interpreter will proceed according to the last specification. For example:

    $ PRINT MYFILE /COPIES=3/BURST/COPIES=2/NOBURST

Only the COPIES=2 and NOBURST qualifiers in this command are processed.

You can use additional qualifiers after more than one parameter in the command string. For example:

    $ PRINT/COPIES=1 A.DAT/COPIES=2, B.DAT/COPIES=3, C.DAT

In this example, two copies of the file A.DAT are printed, three copies of the B.DAT are printed, and one copy of the

file C.DAT is printed. Therefore, for the file A.DAT, the qualifier COPIES=2 overrides COPIES=1. For the file B.DAT, the qualifier COPIES=3 override COPIES=1. For the file C.DAT, the COPIES=1 qualifier applies.

Some commands contain conflicting qualifiers which cannot be specified in the same command string. The command descriptions in Part II specify if qualifiers cannot be used together. The command interpreter usually issues an error message if you use incompatible qualifiers.

There are two types of qualifiers: Command Qualifiers, Positional Qualifiers.

1. Command qualifiers modify the action of the verb in the command. They may occur anywhere in a command string.

2. Positional qualifiers modify the action of the verb but will have different meanings depending on where they occur in the command string.

1.2.4.1 Command Qualifiers
Command qualifiers have the same meaning, whether they follow the command verb or the parameter. For example, the commands:

```
$ PRINT/HOLD SPRING.SUM,FALL.SUM
$ PRINT SPRING.SUM,FALL.SUM/HOLD
```

are equivalent. Both files are placed in a hold state.

1.2.4.2 Positional Qualifiers
Positional qualifiers have different meanings depending on where they occur in the command string. If you place a positional qualifier after the command verb but before the first parameter the qualifier affects the entire command string. If you place a positional qualifier after a parameter, the qualifier affects only that parameter. For example,

```
$ PRINT/COPIES=2 SPRING.SUM,FALL.SUM
$ PRINT SPRING.SUM/COPIES=2,FALL.SUM
```

The first PRINT command specifies two copies of each of the files SPRING.SUM and FALL.SUM. The second PRINT command requests two copies of the file SPRING.SUM, but only one copy of FALL.SUM by default.

2.2.1 Continuing Commands on More Than One Line

You can enter a command string on more than one line by using a hyphen as a continuation least mark at the end of the line to be continued.

When you continue a command on more than one line, the command interpreter uses the prompt $ at the beginning of each line to indicate that it is still accepting the same command. For example:

```
$ TYPE -
$_ TAXES.MEM
```

Command string continuation is especially useful when you enter a command and want to specify many qualifiers. For example:

```
$ PRINT MYFILE.-
$_/AFTER=17:00
$_/COPIES=20-
$_/NAME="COMGUIDE"
```

There is no restriction on the number of lines used for one command. You can use any numbers of lines so long as the total number of characters entered does not exceed 1024.

2.2.3 Abbreviating Components of the Command String

You can abbreviate verbs and qualifiers when you enter command strings. The rules for abbreviation are described below. Note, however, that when the command interpreter examines a command string, it examines only the first four characters of a verb or a qualifier. Parameters cannot, however, be abbreviated. Instead, default values may be used to affect a form of abbreviation.

2.2.3.1 Abbreviating Command Names

You can abbreviate a command name to its first four characters. You may truncate command names to fewer characters as long as the truncated command is unique within the set of available commands. For example, the TYPE command is currently the only command that begins with the character "T", therefore, it could be truncated to just one character. The DIRECTORY and DIFFERENCE commands, however, have the same first two characters, so these commands cannot be truncated to fewer than two characters.

The commands, CONTINUE and RUN are two exceptions to the minimum truncation rule because they can be abbreviated to their first character even though other commands beginning with the same character.

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2.2.2.3 Abbreviating Qualifiers and Keywords

You can truncate a qualifier name to four or fewer characters if the abbreviation leads to a unique string among other qualifiers in the same command, if any.

In applying the minimum four character truncation rule, for negative qualifier the NO in NOLIST, say, does not count. In this case, the minimum truncation that guarantees uniqueness of the qualifier is NOLIST. The solidus character which must precede each qualifier is also disregarded in counting characters. However, the underscore character , _ , is counted. BY_OWNER for example is recognized by the interpreter to contain eight characters. The minimum number of characters reviewed to insure uniqueness will, according to the four-character rule be, BY_O.

2.3.1 Entering File Specifications as Parameter Values

File specifications are the commonest type of parameters used by commands. A file specification consists of the device, directory, file name, file type and the file version number. See ICARDA VAX/VMS User Manual.

Each command interprets file specifications and the defaults for file specifications in its own context.

If you supply a list of file specifications as a parameter for a command, the command interpreter applies temporary defaults to the file specifications in the list. The following section describes how the temporary defaults are setup.

2.3.2 Temporary Defaults

All commands which accept lists of input files apply temporary defaults when a command string that contains more than one input file specification is entered. That is, if a complete file specification for each file in the list is not given, the computer will apply defaults taken from previous file specifications in the same list.

The command interpreter applies temporary defaults to: device names, directory names, file names and file types. If a file specification explicitly includes a device or a directory name, the device and directory names become the temporary defaults for the interpretation of subsequent file specifications in the list until a different device or directory name or both are explicitly entered.

To substitute your current default directory for a temporary default, specify the directory in brackets with no directory name. For example, if your current default

directory is [COMSER], you can issue the following command:

$ PRINT [COMASS]TEST.DAT,[ ]FINAL

The command interpreter will interpret the second file specification as [COMSER]FINAL.DAT. The empty brackets indicate that FINAL exists in [COMSER] but that its type is DAT taken from the default set by the first file in the list.

Temporary defaults may be setup for file names and files. For example, assume that the current default device and directory name are DRA7:[COMSER]. The following example shows how temporary defaults are applied to a list of file specifications that are parameters in a PRINT command.

$ PRINT DJA1:[CRISP]TEST1.DAT-
$_ TEST.-
$_ [COMASS]SUMMARY.TST, -
$_ DRA7:FINAL.

The above command prints the files:

DJA1:[CRISP]TEST1.DAT
DJA1:[CRISP]TEST2.DAT
DJA1:[COMASS]SUMMARY.TST
DRA7:[COMASS]FINAL.TST

2.4   Qualifier Defaults
A qualifier default may be understood as being what happens if you omit the qualifier from the command string. Qualifiers can be present or they may be absent by default. The format block in the command descriptions in Part II lists the default action for each qualifier. In addition the following types of qualifiers are described:

- Qualifiers with positive and negative forms
- Qualifiers which require values
- Qualifiers which accept optional values
- Qualifiers which override other qualifiers
- Qualifiers which affect command execution only if explicitly present.

1. In most cases a negative form of the qualifier is achieved by inserting 'NO' before the qualifier itself. For example, DELETE and NODELETE.

Some commands have default settings which are the negative or positive form of the qualifier. The default setting of the qualifier need not to be entered.

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2. The next example shows a qualifier which requires a value. The default action is shown on the right.

/COPIES=n   /COPIES=1

If you omit the COPIES qualifier, the default is COPIES=1. If you use the COPIES qualifier, you must provide a value.

3. The following example shows the syntax for a qualifier which affects command execution only if it was explicitly present. For such a qualifier there is default setting.

/ABORT   None.

The ABORT qualifier does not affect the command if it is not specified.

2.4.1 Qualifiers Which Accept Values

Qualifiers can accept the following types of values:

- Keywords
- File specifications
- Character strings
- Numeric values

1. When a value is entered for a qualifier it must be separated from the qualifier with either an equal sign or a colon. For example the following expressions are equivalent:

/OUTPUT=DR2:NEW.DAT   /OUTPUT:DR2:NEW.DAT
/COPIES=3   /COPIES:3
/OVERRIDE=EXPIRATION   /OVERRIDE:EXPIRATION

2. Some qualifier keyword values require additional data. In these cases, you must separate the keyword from its data with a colon or an equal sign. For example, the following expressions are equivalent.

/SIZE=ALLOCATION
/SIZE:ALLOCATION

In the command descriptions in Part II the following notation is used to indicate that a qualifier can accept a value or a list of values.

/qualifier=(value[,...])   The qualifier requires a value or a list of values. If you specify a single value, you can omit the parentheses.

However, if you specify a list of values, you must separate the values with commas and enclose them in parentheses.

/qualifier[=(value[,..])]   The qualifier accepts an optional value or list of values. You can omit the parentheses if you specify one value. However, if you specify a list of values, you must separate the values with commas and enclose them in parentheses.

3. To specify multiple keywords which require values, enclose the list in parentheses and separate the keyword and value with either an equal sing or a colon. For example:

    /BLOCK=(START:0,END:10)

    When you enter values for qualifiers, follow the rules for specifying these values in command strings outlined above.

2.4.2 Qualifiers Which Create Output Files

Some qualifiers create output from a command and optionally accept a file specification for the output file name.

The default file specification for output files created by these qualifiers depends on the location of the qualifier in the command. The rules are as follows:

1. If the qualifier is present by default, the output file specification will have the default device directory and name of the input file. The qualifier provides a default file type.

2. If the qualifier is used after the command name, and if the qualifier does not include an output file specification, the output file specification will have the same device and directory as the current default device and directory. The name of the output file will be the same as the input file. The qualifier provides a default file type.

3. If the qualifier specifies a file specification for the output file, then any parts in the file specification will be used to name corresponding parts of the output file.

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4. The version number of the output file is always one greater than any existing file with the same file name and file type.

2.5 Interrupting the Execution of Commands

Most commands are executed by executing particular programs. Thus when you issue most commands, the command interpreter passes control to the image for the command.

You can interrupt the execution of a command by pressing [CTRL/Y]. When the image corresponding to the command is interrupted, control is returned to the command interpreter, and will receive the prompt.

At the prompt, you can either terminate the image or keep it in an interrupted state until you return to it.

To return to an interrupted command, use the CONTINUE command as shown:

$ DIRECTORY/FULL
    |
    |
    |
[CTRL/Y]
$ SHOW DEFAULT
$ CONTINUE
    |
    |
(resumes directory listing)
    |
    |

In this example the DIRECTORY command is interrupted, SHOW DEFAULT command is issued, and then the DIRECTORY command is resumed.

The commands in Table 1.1 may be performed after an interruption without causing the interrupted command to exit. The interrupted command may be continued after the execution of the second command. Therefore, if you interrupt a command, you can issue any of these commands in without losing the context for your original command. If you issue any other commands, or if you execute a command procedure, then the interrupted image is forced to exit.

```
EXIT          SHOW DEFAULT
CONTINUE      SHOW QUOTA
DEFINE        SET DEFAULT
STOP          SHOW TIME
```

Table 1.1
Commands which may be inserted
During the Extension of others.

Date and Time Specifications

Certain commands and qualifiers require date and time values. Time should be specified according to the specifications of the verb, qualifier or parameter. Time specifications have three different formats: Absolute time format, delta time format and combination time format.

1. **Absolute Time**

   An absolute time is a specific date or time of day. The format for an absolute time is:

   [dd-mmm-yyyy[:]][hh:mm:ss.cc]

Field	Meaning
dd	Day of the month; an integer in range of 1-31
mmm	Month; specified as JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, or DEC
yyy	Year, an integer
hh	Hour of the day; an integer in the range of 0-59
mm	Minute of the hour; an integer in the range of 0-59
ss	Seconds; an integer in the range of 0-59
cc	Hundredths of a second; an integer in the range of 0-59

Note that the square brackets enclose optional components of the command. You specify an absolute time value using either the date or the time, or both.

If you specify both the date and the time you must type the colon between the date and the time. You can also truncate either the date or the time on the right. The date field, if specified, must, however, always contain at least one hyphen.

You can omit any of the fields within the date or time, as long as you type the punctuation marks. The operation system will supply default values. If you omit a field from the date, the operating system supplies the corresponding field for the current date. If you omit a field from the time, the operating system supplies a default value of zero.

Note that the period between seconds and hundredths of seconds is a delimiter. It is not a decimal point. For example, to specify five tenths of a second, you must set cc equal to 50.

You may also use one of the following keywords to specify an absolute time:

Keyword	Meaning
TODAY	The current day, month, and year at 00:00:00.0 o'clock
TOMORROW	24 hours after 00:00:00.0 o'clock today
YESTERDAY	24 hours before 00:00:00:0 o'clock today

The following examples show absolute time specifications:

15-APR 1985:12	12:00 noon on April 15, 1985
15-APR	Midnight (00:00 o'clock) at the beginning of the 15th of April, this year
15	3:00 P.M., today
15-	The 15th day of the current month and 18:30 6:30 P.M., today
15--::30	00:30 o'clock, on the 15th day of the current month
00:00:00.2	Two-hundredths of a second after midnight, today

Note that if you issue a command and specify an absolute time which has already passed, the operating system will execute the specified action immediately.

2. Delta Time
A delta time is an offset from the current time to a time in the future. The format for a delta time is:

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[ddd-][hh:mm:ss.cc]

Field	Meaning
dddd	Number of days; an integer in the range of 0-9999
Ah	Number of hours; an integer in the range of 3-23
mm	Number of minutes; an integer in the range of 0-59
ss	Number of seconds; an integer in the range of 0-59
cc	Number of hundredths of seconds; an integer in the range of 0-99

You can truncate a delta time on the right. You can also omit any of the fields, as long as you supply the punctuation marks. Truncated or omitted fields are set to zero. You can begin, a delta time with either the day or the time field. If you begin with a day, you must include the hyphen.

The following examples show delta time specifications:

3-	3 days from now (72 hours).
3	3 hours from now.
:30	30 minutes from now.
3-:30	3 days and 30 minutes from now.
15:30	15 hours and 30 minutes from now.

Note that the delta time format may not be used in places where the command interpreter also accepts absolute or combination time formats. In these places you must use the combination time format to specify an offset from the current time.

3.   Combination Time ·
Combination time consists of an absolute time value plus or minus a delta time value. The delta time portion of the combination time must always be preceded by a plus or minus sign. Whenever a plus sign precedes the delta time value, the entire time specification must be enclosed in quotation marks. However, if a minus sign is used, no quotes are required

When you specify a combination time, you can omit the absolute time. If you omit the absolute time value, the

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delta time is offset from the current date and time of day.

If you specify any part of the absolute time, the defaults are those specified in the description of absolute time. However, it is recommended that you specify date-time information as completely as possible.

The variable fields and default fields for absolute and delta time values are the same as those described in the preceding sections. The following examples show combination time specifications:

"+5"   Current time plus 5 hours. The absolute
                time portion is omitted, so it defaults to
                the current data and time.

"+:5"   Current time plus 5 minutes. The absolute
                time portion is omitted, so it defaults to
                the current date and time.

"15-APR-:+:5"   12:05 AM on April 15 of the current year.
                The absolute time specification (before the
                colon) defaults to midnight on April 15 of
                the current year. The plus sign indicates
                a positive offset.

"TOMORROW+1=00:00" Tomorrow plus 1 day.

-:5   Current time minus 5 minutes. The absolute
                time specification is omitted, so it
                defaults to the current date and time.

-1   Current time minus 1 hour. The minus sign
                indicates a negative offset. (The 1 is
                interpreted as an hour, not a day, because
                it is not followed by a slash.)

-1-00   Current time minus 1 day. The minus sign
                indicates a negative offset. The slash
                separates the day from the time field.

15-APR:-00:10   11:50 PM on April 14 of the current year.
                The absolute time specification before the
                colon (15-APR) defaults to midnight on
                April of the current year. The minus sign
                after APR: indicates a negative offset.
                The hyphen indicates that the value for
                the day is missing.

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Part II

Command Description

ACCOUNTING

Invokes the Accounting Utility to collect, record, and report accounting data.

Format: ACCOUNTING [file-spec[,...]]

Parameters Qualifiers:

ACCOUNT	BEFORE	BRIEF	ENTRY	FULL
JOB	OUTPUT	PRIORITY	PROCESS	QUEUE
SUMMARY	TERMINAL	USER		

ACCOUNT=(["-",]account-name[,...])
NOACCOUNT (D)   If the ACCOUNT qualifier was used, ACCOUNTING will include in the report only those records in the accounting file related to the specified account-name.

If the first keyword in the list is a minus sign enclosed in quotation marks, "-", all records are selected except those matching any account-name in the list.

If you omit the qualifier or specify NOACCOUNT, the account-name will not be used as a criterion for selection.

BEFORE[=time]
NOBEFOR (D)   If the qualifier BEFORE was used, ACCOUNTING will include in the report only there results in the accounting file which are dated earlier than the specified one. You can specify an absolute time, delta time, or a combination of the two. See HELP SPECIFY DATE_TIME for the format.

If you specify BEFORE without the time or omit the qualifier, the current date and time is used by default.

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BRIEF

BRIEF (D)   Displays the accounting data in the
                             default, brief, format. Other
                             qualifiers which control the format are
                             FULL and SUMMARY.

ENTRY=(["-",]queue-entry[,...])
NOENTRY (D)   If ENTRY was used, ACCOUNTING will
                             produce a report in which only those
                             records related to the specified
                             queue-entry are included.

                             If the first keyword in the list is a
                             minus sign enclosed in quotation marks,
                             "-". The records selected are those
                             which do not relate to the specified
                             queue entry or entries in the list.

FULL

NOFULL (D)   By default, records are displayed in
                             the brief format. You must specify
                             FULL to have the full contents of each
                             selected record displayed.

                             If you specify NOFULL or omit the
                             qualifier, records are displayed in
                             the brief format.

                             Do not use this qualifier with the
                             BRIEF or SUMMARY qualifiers.

JOB=(["-",]job-name[,...])
NOJOB (D)   If JOB was used, ACCOUNTING will
                             include in the report only those
                             records matching the specified job-name
                             from the accounting file.

                             If the first keyword in the list is a
                             minus sign enclosed in quotation
                             marks, "-", all records are selected
                             except those matching any name in the
                             list.

                             If you specify NOJOB or omit the
                             qualifier, the job-name will not be
                             used as a criterion for selection.

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OUTPUT[=file-spec]
NOOUTPUT   If OUTPUT was used, the report is
                       output to a specified file.

                       The OUTPUT qualifier allows you to
                       specify the name of the file to contain
                       the selected records. If you omit the
                       device or directory specification,
                       the current device and default
                       directory are used. If you omit
                       the file name, then the file name of
                       the input file is used. The file type
                       if omitted is LIS.

                       If you omit this qualifier, the
                       selected records are output to the
                       current output device.

PRIORITY=(["-",]priority[,...])
NOPRIORITY (D)   If the qualifier PRIORITY was used only
                       those records matching the specified
                       priority are selected from the
                       accounting file.

                       If the first keyword in the list is a
                       minus sign enclosed in quotation
                       marks , "-", all records are selected
                       except those matching any priority in
                       the list.

                       If you specify NOPRIORITY or omit the
                       qualifier, the priority will not be
                       used as a criterion for selection.

PROCESS=(["-",]process-type[,...])
NOPROCESS (D)   If the qualifier PROCESS was used only
                       those records matching the specified
                       process-type are selected from the
                       accounting file.

                       You may specify any of the following
                       process types:

                       BATCH for batch processes.
                       DETACHED for detached processes.
                       INTERACTIVE for interactive processes.

                       If the first keyword in the list is a
                       minus sign enclosed in quotation marks,

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"-", all records are selected except those matching any process-type in the list.

If you specify NOPROCESS or omit the qualifier, the process-type will not be used as a criterion for selection.

QUEUE=(["-",]queue-name[,...])
NOQUEUE (D)   If the qualifier QUEUE was used only those records matching the specified queue-name are selected from the accounting file.

If the first keyword in the list is a minus sign enclosed in quotation marks, "-", all records are selected except those matching any queue-name in the list.

If you specify NOQUEUE or omit the qualifier, the queue-name will not be used as a criterion for selection.

SUMMARY=(summary-item[,...])
NOSUMMARY   Specifies that a summary of the selected records, grouped by the list of summary keys, be produced. If you specify SUMMARY without a value, then SUMMARY=USER is assumed. Use the REPORT qualifier to control what information is summarized.

You can specify any of the following summary items:

ACCOUNT	Account name from the UAF
DATE	YYYY MM DD
DAY	Day of month (1-31)
HOUR	Hour of day (0-23)
IMAGE	Image name
JOB	Name of batch job or print job
MONTH	Month of year (1-12)
PROCESS	Process type
QUEUE	Batch or device queue name
TERMINAL	Terminal name
TYPE	Type of record For example, logout or batch.
USER	User name from UAF

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WEEKDAY   Day of week   For example,
1=Sunday, 2=Monday.

If you omit the qualifier or specify
NOSUMMARY, no summary of the selected
records is produced.

Do not use this qualifier with the
BINARY or FULL qualifiers.

TERMINAL=(["-",]terminal-name[,...])
NOTERMINAL (D)   If the qualifier TERMINAL was used,
only those records matching the
specified terminal-names are selected.

If the first keyword in the list is a
minus sign enclosed in quotation marks,
"-", all records are selected except
those matching any terminal-name in the
list.

If you specify NOTERMINAL or omit the
qualifier, the terminal-name will not
be used as a criterion for selection.

USER=(["-",]user-name[,...])
NOUSER (D)   If the qualifier USER was used only
those records matching the specified
user-name are selected.

If the first keyword in the list is a
minus sign enclosed in quotation marks,
"-", all records are selected except
those matching any name in the list.

If you specify NOUSER or omit the
qualifier, the user-name will not be
used as a criterion for selection.

APPEND

Adds the contents of one or more specified input files to the end of a specified output file.

Format: APPEND input-file-spec[,...] output-file-spec

Command Parameters

input-file-spec[,...] Specifies the names of one or more input files to be appended. You can use wild card file specifications.

output-file-spec   Specifies the name of the file to which the input files are to be appended.

You must specify at least one field in the output file specification. If you do not specify a device and/or directory, the APPEND command uses your current default device and directory. For other fields that you do not specify, the APPEND command uses the corresponding field of the input file specification.

If you use the asterisk wildcard character in any field or fields of the output file specification, the APPEND command uses the corresponding field of the related input file specification.

Parameters Qualifiers:

LOG

NOLOG (D)   If the qualifier LOG was used the APPEND command displays the file specification and size of each file appended.

NEW-VERSION

NONEW-VERSION (D) If the qualifier NEW-VERSION was used

the APPEND command creates a new file.
By default, the output file specified
must already exist.

CONTINUE

Resumes execution of a command, a program, or a command procedure that was interrupted by pressing [CTRL-Y] or [CTRL-C].

Format: CONTINUE

COPY

Creates a new file from one or more existing files. The
COPY command can:

- Copy one file to another file.
- Concatenate more than one file into a single output
  file.
- Copy a group of files to another group of files.

Format: COPY input-file-spec[,...] output-file-spec

Command Parameters
input-file-spec[,...] Specifies the names of one or more
input file to be copied. If you
specify more than one input file, you
can separate them with either a comma
or a plus signs.

You can use wild card characters in the
file specification.

output-file-spec Specifies the name of the output file
into which the input files are to be
copied.

You must specify at least one field in
the output file specification. If the
device or directory are not specified,
your current default device and
directory are used. The COPY command
replaces any other missing fields (file
name, file type, version number) with
corresponding field of the input file
specification.

Wildcard character may be used in place
of the file name, file type and version
number. The COPY command uses the
corresponding field in the related
input file to name the output file.

Full use of wild card characters is
allowed for directories in the output

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file specification.

Parameters Qualifiers
CONCATENATE   LOG   OVERLAY   REPLACE

CONCATENATE   (D)
NOCONCATENATE   If CONCATENATE is used, and when a wild
                            card character is used in any component
                            of the input file specification, a
                            single output file is created from all
                            files that satisfy the input file
                            specification.

                            By default, a single output file
                            consisting of the concatenation of all
                            input files matching the file
                            specification is produced.   If
                            NOCONCATENATE was used the number of
                            files created will equal the number of
                            input files.

LOG
NOLOG (D)   If LOG was used the COPY command
                            displays the file specification and
                            size of each file copied.

OVERLAY
NOOVERLAY (D)   Specifies that data in the input file
                            be copied into an existing output file,
                            overlaying the existing data. The
                            physical location of the file on disk
                            does not change.

                            The OVERLAY qualifier is ignored if the
                            output file is written to a
                            non-file-structured device.

REPLACE
NOREPLACE (D)   Specifies that if a file already exists
                            with the same file specification as
                            that entered for the output file, the
                            existing file is to be deleted. The
                            COPY command allocates new space for
                            the output file.

By default, the COPY command creates a
new version of a file if the file
already exists, incrementing the
version number. If the version numbers
of the files also conflict, an error
occurs.

DEFINE

Creates a logical name table entry and assigns an
equivalence name string to the specified logical name.

Format: DEFINE logical-name[:] equivalence-name[:]

Parameters

logical-name[:]   Specifies a logical name string,
                       consisting of 1 to 63 characters. If
                       the string contains any characters
                       besides alphanumeric or underscore
                       characters, enclose it in quotation
                       marks.

equivalence-name[:] Defines an equivalence name, consisting
                     of 1 to 63 characters, to be associated
                     with the logical name in the specified
                     logical name table. If the string
                     contains other than alphanumeric or
                     underscore characters, it must be
                     enclosed in quotation marks.

Parameter Qualifiers:

USER_MODE   Specifies, for an entry in the process
                       logical name table, that the logical
                       name be entered in the user mode. User
                       mode entries are deleted when any image
                       exits, that is, after any command or
                       user program, when a command procedure
                       exits, or when a STOP command is
                       issued.

DELETE

The DELETE command performs the following functions:

* Deletes one or more files from a mass storage disk volume.

* Deletes entries from a queue (DELETE/ENTRY).

Format: DELETE file-spec[,...]

Parameters

file-spec[,...]   Specifies the names of one or more files to be deleted. The first file specification must contain an explicit or default directory specification plus a file name, a file type, and a version number. Subsequent file specifications must contain a version number. You can specify wild card characters in any of the file specification fields.

To delete more than one file, separate the file specifications with a comma or a plus sign.

For deleting an entry in a queue specify the name of the queue in which the job exists.

Parameter Qualifiers

BEFORE	CONFIRM	CREATED	EXPIRED
LOG	MODIFIED	SINCE	

BEFORE

BEFORE[=time]   Specifies that only the files dated earlier than a particular time be deleted. An absolute time, delta time, or combination of the two may be given.

If BEFORE is specified without a time, BEFORE=TODAY is assumed.

All files created or modified within the specified time are deleted, unless

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the CREATED, EXPIRED, or MODIFIED qualifiers are used.

CONFIRM
NOCONFIRM (D)

If CONFIRM is used the DELETE will request you to confirm whether or not the file should actually be deleted. For a file to be deleted, you must respond to a prompt with a Y. If anything else is entered, the file is not deleted.

CREATED

Specifies that only files created within the defined time period be deleted.

EXPIRED

Specifies that only files which have reached their expiration dates within the specified time be deleted.

If any file does not have an expiration date associated with it, it is assumed to have expired at the time the DELETE command is issued.

LOG
NOLOG (D)

If LOG was used the DELETE will display the file specification of each file after its deletion.

MODIFIED

Specifies that only files which were modified within the defined time period be deleted.

SINCE
SINCE[=time]

Specifies that only the files dated later than a particular time be deleted. You can specify an absolute time, delta time, or combination of the two.

If SINCE is specified and no value is given, the DELETE command assumes SINCE=TODAY.

All files created or modified within the specified time are deleted, unless

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DIFFERENCES

Compares the contents of two files and creates a listing
of those records that do not match.

Format: DIFFERENCES master-file-spec [revision-file-spec]

Parameters

master-file-spec   Specifies the name of the primary input
file to be compared. The file
specification must include a file name
and a file type. No wildcard is
allowed.

revision-file-spec   Specifies the name of the secondary
input file to be compared. Any
unspecified part of the file
specification will be set to the
corresponding part of the primary input
file specification. No wild-carding is
allowed.

                            If you do not specify a secondary input
file, the DIFFERENCES command uses the
next lowest version of the primary
input file.

Parameter Qualifiers

CHANGE_BAR	COMMENT_DELIMITER	IGNORE	MATCH
MAXIMUM_DIFFERENCES	MERGED	MODE	OUTPUT
PARALLEL SEPARATED	WIDTH	WINDOW	

CHANGE_BAR

CHANGE_BAR[=(format[,...])] If CHANGE_BAR was used, the
output contains a listing of the
associated file(s) with a change bar
character next to the lines in the file
that do not match. You can specify any
of the following format keywords "c", a
change bar character.

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In ASCII output mode, the change bar character, c, specifies a one-character code that will appear in the left margin next to records which do not have a match.

COMMENT DELIMITER

COMMENT_DELIMITER[=(characters[,...])] Specifies one or more comment delimiters.

You can specify a comment delimiter by listing either the character itself or by using one of the following keywords:

COLON	COMMA	EXCLAMATION
FORM_FEED	LEFT	RIGHT
SEMI_COLON	SLASH	SPACE
TAB		

Multicharacter comment delimiters are not allowed.

If you do not include a comment character, DIFFERENCES assumes a default comment character based on the file type.

IGNORE

IGNORE=(characters[,...]) Specifies one or more special characters, strings, or records to be ignored during the comparison. It also controls whether the comparison records are output to the listing file exactly as they appeared in the input file or as edited records. You can request DIFFERENCES to ignore the following:

BLANK_LINES	COMMENTS	FORM_FEEDS
HEADER[=n]	TRAILING_SPACES	
SPACING		

By default, the DIFFERENCES command compares every character in each file and reports all differences.

DIFFERENCES lists records in the output file with all ignored characters deleted. You can choose how you want the records to appear by specifying either EDITED or EXACT along with the characters to ignore.

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MATCH
MATCH=size   Specifies the number of records that
                             constitute a match.

                             By default, after DIFFERENCES finds
                             unmatched records, it assumes that the
                             files once again match after it finds
                             three sequential records that match.
                             Use MATCH to override the default match
                             size of 3.

MAXIMUM DIFFERENCES
MAXIMUM_DIFFERENCES=n Specifies that DIFFERENCES is to
                             terminate after n unmatched records
                             have been found.

                             If DIFFERENCES reaches the maximum
                             number of differences that you specify,
                             it will output only those records that
                             were detected before the maximum was
                             reached. Also, it will output, at most,
                             one listing file and return a warning
                             message.

                             By default, there is no maximum number
                             of differences. All records in the
                             specified input files are compared.

MERGED
MERGED[=n] (D)   Requests that the output file contains
                             a merged list of differences. The value
                             n is a decimal number less than or
                             equal to the size of a match,
                             indicating the number of matched
                             records to list after each list of
                             unmatched records.

                             By default, DIFFERENCES produces a
                             merged listing with one matched record
                             listed after each set of unmatched
                             records.

MODE
MODE=(radix[,...])   Specifies the format of the output
                             listing. You can request that the
                             output be formatted in one or more
                             radix modes by specifying the following
                             keywords:

ASCII   HEXADECIMAL   OCTAL

By default, DIFFERENCES writes the output file in ASCII. If you specify more than one qualifier of the above, the output listing contains the file comparison in each output radix specified as a qualifier.

If you specify PARALLEL, the MODE qualifier is ignored for that listing file.

OUTPUT

OUTPUT[=file-spec]   Defines an output file to receive the output difference list. If you omit the OUTPUT qualifier, the output is written to the current output device. If you specify OUTPUT without a file specification, the output is directed to a file with the same name as the master file with a file type of DIF.

No wild card characters are allowed in the file specification.

PARALLEL

PARALLEL[=n]   Requests that the output file shall contain a parallel list of differences. The value n is a decimal number less than or equal to the size of the match. This number indicates the number of matched records to list after each list of unmatched records.

SEPARATED

SEPARATED[=(input-file[,...])]   Requests that the output file shall contain sequential lists of unmatched records from the specified input files. You can designate the desired input files by specifying either MASTER or REVISION.

If you specify the SEPARATED qualifier without designating any input files, DIFFERENCES will generate separated listings for both input files.

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WIDTH
WIDTH=n

Specifies the width of lines in the output listing.

By default, output is 132 characters wide, unless output is directed to the terminal. In this case, the output line width is controlled by the terminal line width. See the SET TERMINAL command for specifying terminal line width.

WINDOW
WINDOW=size

Specifies the number of records to search before listing a record as unmatched and continuing with the next record in the input file.

By default, DIFFERENCES searches to the end of both files before listing a record as unmatched.

DIRECTORY

Provides a list of files or information about a file or group of files.

Format: DIRECTORY [file-spec[,...]]

Parameters
file-spec[,...]   Specifies one or more files to be listed. The syntax of a file specification determines what file(s) will be listed, as follows:

- If you do not enter a file specification, the DIRECTORY command lists all versions of the files in your current default directory.
- If you specify only a device name, the DIRECTORY command uses your default directory specification.
- If the file name, file type or version number is not included in the file specification, the DIRECTORY command assumes the asterisk wildcard for missing fields.

If you specify more than one file, separate the file specifications with either a comma or a plus sign. The use of a wildcard is permitted for any part of the file specification.

Parameter Qualifiers

BEFORE	BRIEF	COLUMN	CREATED	DATE	EXCLUDE
EXPIRED	FULL	HEADING	MODIFIED	OUTPUT	PRINTER
SINCE	SIZE	TOTAL	TRAILING	VERSIONS	

BEFORE
BEFORE[=time]   Specifies that only those files dated earlier than a particular time be listed. You can specify an absolute date and time. See Date and Time specification in Part I.

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This qualifier is normally used in conjunction with one of the following qualifiers: CREATED, EXPIRED, or MODIFIED. The default is CREATED/BEFORE=TODAY.

BRIEF

Includes only the file name, type, and version number of each file to be listed. The BRIEF qualifier is overridden whenever any of the following formatting qualifiers is specified:

SIZE, DATE, NOHEADING, or FULL.

BRIEF is the default.

COLUMN
COLUMN=n

Lists the files using the specified number of columns on each line of the display. By default, the number of columns is four.

Valid for /BRIEF format only.

CREATED

Selects the files according to their date of creation. This qualifier is relevant only when used with the BEFORE or SINCE qualifier, and should not be used with the EXPIRED or MODIFIED qualifier.

CREATED is the default for BEFORE or SINCE.

DATE[=option]
NODATE (D)

Includes the creation, expiration, or date last written for each file listed. If you specify DATE without an option, CREATED is assumed. The options are:

BACKUP	Lists the date of the last back-up
CREATED	Lists the creation date
EXPIRED	Lists the expiration date
MODIFIED	Lists the last date the file was written
ALL	Lists all four file dates shown above

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EXCLUDE

EXCLUDE=(file-spec[,...]) Excludes the file specification(s) listed from the directory search. You may use wild card characters for the file specification(s). At least one file specification is required. The file specification must not include a device or directory.

If you omit the version number from a file specification, all versions of the specified file are excluded from the search.

EXPIRED Selects files according to the planned expiration date for each file. This qualifier is relevant only with the BEFORE or SINCE qualifiers, and should not be used with the CREATED or MODIFIED qualifiers.

FULL Lists full file attributes with each file.

The FULL qualifier overrides the default brief listing format.

HEADING (D)
NOHEADING Used to specify whether heading lines consisting of a device description and directory specification are printed or not.

When you specify NOHEADING, the output appears in single column format with the full file specification on every file.

MODIFIED Selects files according to the last date the file was modified. This qualifier is relevant only with the BEFORE or SINCE qualifier, and should not be used with the CREATED or EXPIRED qualifier.

OUTPUT
OUTPUT[=file-spec] Requests that the DIRECTORY command

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output be written to the file specified rather than to the current output device. If you specify the OUTPUT qualifier without a file specification, the output is directed to the output device.

Partial file-specification are expanded using DIRECTORY.LIS.

PRINTER

Queues the output for printing under the name given by the OUTPUT qualifier. If you specify PRINTER without the OUTPUT qualifier, the output is directed to a file named DIRECTORY.LIS, which is spooled for printing automatically and then deleted.

SINCE
SINCE[=time]

Specifies that only those files dated after a specified time be printed. You can specify an absolute time, delta time, or a combination of the two.

This qualifier is normally used in conjunction with one of the following qualifiers: CREATED, EXPIRED, or MODIFIED. The default is CREATED/SINCE=TODAY.

SIZE[=option]
NOSIZE (D)

Provides the file size in blocks used and/or allocated for each file listed, according to the option you specify. If you specify SIZE without an option, the USED option is assumed.

The options you can specify are:

ALLOCATION	Lists the file size in blocks allocated.
USED	Lists the file size in blocks used.
ALL	Lists both blocks used and allocated.

TOTAL

Inhibits the listing of all individual file information and prints only the trailing lines as described under the

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TRAILING qualifier. Equivalent to the
command DIR/SIZ.

TRAILING (D)
NOTRAILING   Used to specify whether trailing lines
that summarize the directory are
printed or not.

VERSIONS
VERSIONS=n   Causes the latest n versions of each of
the files selected to be listed. If
you omit the VERSIONS qualifier, by
default the listing includes all
versions of each file. A value less
than 1 is not allowed.

EDIT

EDT Invokes the EDT standard, screen-oriented text editor. It is described in more details in the ICARDA VAX/VMS User Manual.

Format: EDIT file-spec

Parameters

file-spec

All of the editors take a single file-specification which is the name of the file to be edited. No wildcard characters are permitted.

The file must be a disk file on a Files-11 formatted volume. If the file does not exist, the interactive editors will create it.

Parameter Qualifiers:

COMMAND   JOURNAL   READ_ONLY   RECOVER

COMMAND[=file-spec] (D)
NOCOMMAND

When EDT is invoked it searches the current directory for a file of the name EDTINI.EDT. It uses the contents of this file to initialize a number of editing parameters.

If you have an initialization file of a different name then EDTINI.EDT use the COMMAND qualifier and give the name of the file containing your editor initialization command .

If you want to override the initialization in your EDTINI.EDT file use the NOCOMMAND qualifier.

Note that if EDT cannot find EDTINI.EDT or your specified file in a COMMAND qualifier, then the editing session commences without an error message.

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JOURNAL[=file-spec] (D)
NOJOURNAL

EDT opens a journal file or the start of each editing session in which RECOVER is not used. This file contains all the EDT commands entered until an exit occurs. If your editing session ends abnormally, you can invoke EDT again, and reinstate all commands from the aborted session. If you specify the NOJOURNAL qualifier, no journal file is generated and hence no recovery is possible.

If you omit the JOURNAL qualifier, or if you specify the qualifier without a file specification, the editor creates a journal file with the same file name as your input file and a default file type of JOU.

READ_ONLY
NOREAD_ONLY (D)

You may open a file for editing but prevent accidentally altering its contents, by using the qualifier READ_ONLY. If EDT was invoked with the READ_ONLY qualifier no journal file is created.

EDIT/EDT/READ_ONLY is equivalent to EDIT/EDT/NOOUTPUT/NOJOURNAL.

RECOVER
NORECOVER (D)

Determines whether or not EDT reads commands from a journal file prior to starting the editing session.

The RECOVER qualifier requests EDT to open the input file and then read EDT commands from the file specified by input-filename the type is .JOU. This automatically restores all commands that were lost during a previously aborted editing session.

If the journal file has another name, specify it with the JOURNAL qualifier.

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If an error occurs, for whatever reason, the operating system reports it in a specific format giving as much details as possible to enable tracing the error.

Format: %FACILITY-X-CODE, error-message-text

FACILITY   is the name of the facility which produced the error, for example, DCL for language interpreter.

X   is a one-letter code indicating the level severity of the error. The severities are:

                        E - Error
                        F - Severe error
                        I - Informational
                        S - Success
                        W - Warning

CODE   is an abbreviation for the message text.

error-message-text   is a short description of the nature of the error.

EXIT

Terminates processing of the current command procedure. If the command procedure was executed from within another command procedure, control returns to the calling procedure.

If a command procedure is not being executed, the EXIT command terminates the current image.

Format: EXIT

HELP

Displays on the current default output device information available in the system help files or any help library you specify.

Format: HELP [keyword ...]

Parameters
keyword ...
Specifies one or more keywords that indicate what information you want. Information is located in a hierarchical manner, depending on the level of information required.

If you specify an asterisk in place of any keyword, the HELP command displays all information available at that level.

If you specify an ellipsis (...) after any keyword, you obtain everything in the help file at that level.

You can specify percent signs and asterisks in the keyword as wild card characters.

Parameter Qualifiers
INSTRUCTIONS   PAGE   PROMPT

INSTRUCTIONS
NOINSTRUCTIONS (D)   Used to obtain a description of how to use the HELP command when HELP is given without any parameters.

PAGE
NOPAGE (D)
Help information is scrolled on the screen without a halt when a screen-full of information is displayed. If you use the PAGE qualifier page breaks are issued when the terminal screen is full.

PROMPT (D)
NOPROMPT

At the end of display of HELP information, HELP enquires from the user if more information is required. TO prevent this, use NOPROMPT.

LOGIN

There is no LOGIN command. Rather, you set the attention of the system and signal your intention to access the system by pressing [CTRL-C], [CTRL-Y], or RETURN on a terminal not currently in use. The system then prompts for your user and your password, and validates them.

Format: [CTRL-C] or [CTRL-Y] or RETURN

LOGOUT

Terminates an interactive terminal session.

Format: LOGOUT

Qualifiers:
BRIEF   FULL

BRIEF   Requests that the brief form of the
                         logout message be displayed. The
                         command interpreter displays your user
                         name and the date and time at which you
                         logged out.

FULL   Requests the long form of the logout
                         message. The command interpreter
                         displays a summary of accounting
                         information for the terminal session.

Invokes the VAX/VMS Electronic Mail Utility. This utility
is used to send messages to other users of the computer.

The MAIL Utility is described in the ICARDA VAX/VMS System
User Manual. MAIL also has an interactive help available
during a MAIL session.

Format: MAIL [file-spec] [username[,...]]

Parameters

file-spec

Specifies an optional file containing
message text to be sent to the
specified users. If you omit the file
type, the default file type is TXT. The
username parameter is required with the
file-specification parameter. No wild
card characters are allowed.

If you omit the file-specification
parameter, the MAIL Utility is invoked
to process MAIL commands interactively.

username[,...]

Specifies one or more users to
receive the message. If the
file-specification parameter is
specified, this parameter is required.
A user name is the name that the user
uses to log in. If any user is on
a remote node, you should precede that
username parameter with the name of
the remote node followed by two colons
(::).

As an alternative to listing the user
names, you can specify a distribution
list file containing user names. Simply
precede the distribution list file
specification with a commercial 'at'
sign and enclose this construction in
quotation marks. The file you specify
should contain the user names, entered
one per line. If you omit the file
type, the default file type is DIS. No
wild card characters are allowed in

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the   distribution   list   file
specification.

Parameter Qualifiers
SUBJECT

SUBJECT
SUBJECT=text   Specifies the subject of the message
                            for the heading. If the text consists
                            of more than one word, enclose the
                            text in quotation marks.

                            If you omit this qualifier, the message
                            is sent without a subject anotation.

Invokes the VAX-11 MERGE Utility to combine two through ten similarly sorted input files and create a single output file. Note that input files to be merged must be in sorted order.

Format: MERGE input-file-spec1,[,...] output-file-spec

Parameters

input-file-spec1,input-file-spec2[,...] Specifies the names of the sorted files whose records are to be merged. At least two files, but not more than ten, must be specified, and separated by commas. The keys must be the same in all files.

output-file-spec Specifies the name of the merged file to be created. Its qualifiers can request characteristics for the merged output file. The command string may have only one output file specification.

Parameter Qualifiers

CHECK_SEQUENCE   COLLATING_SEQUENCE

CHECK_SEQUENCE Examines the input files to be merged to ensure they are in order.

COLLATING_SEQUENCE

COLLATING_SEQUENCE=sequence Specifies the collating sequence in which records are to be arranged. The sequence may be ASCII or EBCDIC. The default is COLLATING_SEQUENCE=ASCII.

Note that the EBCDIC option causes the input files to be merged as if the EBCDIC key characters were translated

into ASCII key characters and then merged as an ASCII key. The records do not change.

MONITOR

Invokes the VAX/VMS Monitor Utility to monitor classes of system-wide performance data at a specified interval. It produces three types of optional output:

- Recording file
- Statistical terminal display
- Statistical summary file

You can collect data from a running system or from a previously created recording file.

The MONITOR Utility is described in detail in the VAX/VMS Utilities Reference Manual.

Format: MONITOR class-name[,...]

Parameters

class-name[,...]   Specifies one or more classes of performance data to be monitored. The available class-names are:

FCP   File system ACP statistics.
IO   System I/O statistics.
LOCK   Lock management statistics.
MODES Time spent in mode.
PAGE   Page management statistics.
POOL   Space allocation in the nonpaged dynamic pool.
PROC   Statistics on all processes.
STATE Number of processes in each of the schedule states.

The class-name parameter qualifiers control the type of display and summary output format generated for each class-name specified. Each of these qualifiers applies only to the immediately preceding class-name.

Class-name qualifiers:
ALL	AVERAGE	BEGINNING	COMMENT	CURRENT
DISPLAY	ENDING	INPUT	INTERVAL	MAXIMUM
MINIMUM	PERCENT	SUMMARY	VIEWING-TIME	

Class-name qualifiers must not appear as a part of the command verb.

ALL

Specifies that a table of current, average, minimum, and maximum statistics is to be included in the display and summary output.

ALL is the default for the FCP, IO, LOCK, PAGE and POOL class-names. It may not be used with the PROCESSES class-name.

AVERAGE

Selects "average" statistics in bar graph form for display and summary output.

This qualifier may not be used with the PROCESSES class-name.

BEGINNING
BEGINNING=time

Specifies the time that monitoring is to begin. See HELP SPECIFY DATE_TIME for the time format.

If you specify a future time for a running system request, the process hibernates until the specified time.

COMMENT="string"
NOCOMMENT (D)

Specifies a message of up to 60 characters to be stored in the recording file. This is valid only when RECORD is specified.

When the recording file containing the comment is played back, the comment string is included in the display or summary.

CURRENT

Selects "current" statistics in bar graph form for display and summary output.

The CURRENT qualifier is the default for the MODES and STATES class-names. It may not be used with the PROCESSES class-name.

DISPLAY[=file-spec] (D)
NODISPLAY
If the qualifier was used collected data is to be formatted and displayed.

The DISPLAY qualifier allows you to specify the name of the display file to contain screen image output. If you omit the optional file-specification, data is written to the current output device.

ENDING
ENDING=time
Specifies the time that monitoring is to end.

If you are monitoring a running system, and you omit the ENDING qualifier, monitoring ends when you terminate the request with [CTRL-C].

INPUT[=file-spec]
NOINPUT (D)
Used to indicate whether performance data is collected from an input file or from the running system.

The INPUT qualifier allows you to specify the name of an input file. The default name is MONITOR.DAT. This file must have been produced by a previous MONITOR run which specified RECORD.

INTERVAL
INTERVAL=seconds
Specifies the sampling interval between data collection events, recording events, and display events.

For live requests, INTERVAL specifies the number of seconds between successive collection and recording events. For playback requests, INTERVAL is used to combine records of the input file for display and re-recording.

The default interval for monitoring the running system is three seconds. For playback requests, the interval value defaults to the value specified in the input recording file.

MAXIMUM

Selects "maximum" statistics in bar graph form for display and summary output.

This qualifier may not be used with the PROCESSES class-name.

MINIMUM

Selects "minimum" statistics in bar graph form for display and summary output.

This qualifier may not be used with the PROCESSES class-name.

PERCENT
NOPERCENT (D)

Permits selecting expressing the performance statistics in percentage values in the display and summary report.

The PERCENT qualifier is applicable only to the MODES and STATES class-names. It may be specified with any of the statistic qualifiers (ALL, AVERAGE, CURRENT, MAXIMUM, MINIMUM).

SUMMARY[=file-spec]
NOSUMMARY (D)

If SUMMARY was selected an ASCII file is created containing summary statistics on all collected data for this MONITOR request. The default file-specification is MONITOR.SUM.

The summary file that is generated at the end of monitoring contains one page of output for each requested class. The format of each page is similar to that of display output and is determined by the class-name qualifiers.

VIEWING_TIME
VIEWING_TIME=

Seconds For DISPLAY requests. This qualifier specifies the duration for each screen image display.

If you are monitoring the running system, VIEWING_TIME defaults to the

INTERVAL value.   If you are using an
input file, VIEWING_TIME defaults to
three seconds.

PASSWORD

Specifies the password associated with the user name.

Password can be from 1 to 8 characters long. The characters may be any characters in the alphabet or the arabic numerals. The underscrore and the dollar sign are permissible as well.

Invokes the VAX/VMS Telephone Utility, PHONE, to talk to other users on your system.

The PHONE utility is described in detail in the ICARDA VAX/VMS System User Manual.

Format: PHONE [phone-command]

Parameters

[phone-command]   Specifies an optional command that enables you to control your phone conversation. You may specify a command as part of the PHONE command line, or you may enter it at any time during the phone conversation by typing the switch hook character (%) and the desired command.

The following commands are allowed:

ANSWER   DIAL   DIRECTORY   EXIT
FACSIMILE   HANGUP   HELP   HOLD
MAIL   REJECT   UNHOLD

For more detailed descriptions of each phone-command, either use the HELP command after invoking PHONE or see the VAX-11 Utilities Reference Manual.

Parameter Qualifiers
SCROLL   SWITCH_HOOK   VIEWPORT_SIZE

SCROLL (D)
NOSCROLL   Specifies whether the text of the conversation should be scrolled or wrapped when the viewport becomes full. If SCROLL is specified, existing text is scrolled up one line while new text appears on the bottom line.

If NOSCROLL is specified, text is wrapped around and new text appears on

the top line of the viewport.

SWITCH HOOK
SWITCH_HOOK="c"   Specifies the telephone switch hook character that signals the entry of a command during a conversation. Normally, all text that you type is considered part of the conversation. When you type the switch hook character, all text up to the next carriage return or switch hook is treated as a command.

The default switch hook character is the percent sign.

VIEWPORT SIZE
VIEWPORT_SIZE=nn   Specifies the maximum number of lines in a viewport, including the heading line and the bottom line of dashes. The valid range of values is 3 to 10, with a default of 10.

PHOTO

When you type PHOTO/LOG the PHOTO utility records your terminal session or a part of it. See PLAYBACK for information on viewing saved terminal sessions.

Format: PHOTO (/qualifier...)

Qualifiers
INPUT   LOG   OFF   PAUSE   STAT

INPUT   Used in conjunction with LOG. Specifies
                               that you wish only the characters INPUT
                               from the terminal to be logged.   The
                               computer responses are not entered.
                               This facility is used in the production
                               of a batch command file.

LOG [=logfile-name] Turns on PHOTO, and optionally allows
                               the specification of a file where the
                               terminal session will be stored. If no
                               logfile-name   is   specified,   then
                               PHOTO.LOG in the default directory is
                               created.

OFF   Turn off PHOTO logging. The name of the
                               active logfile is printed for use with
                               the PLAYBACK utility.

PAUSE=pause_char_value During a PHOTO session, you may
                               temporarily suspend logging by entering
                               [CTRL-D].   To   resume   PHOTO,   reenter
                               [CTRL-D].   In   some   environments,
                               [CTRL-D] may conflict with some other
                               application. When used with LOG, this
                               qualifier allows you to specify the
                               ASCII value of a different pause
                               character.   The default is 4 for
                               [CTRL-D].

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STAT

Gives a brief report on the current state of PHOTO logging. Missed characters are usually caused by excessive terminal output. Contact Computer Services if your system misses characters.

PLAYBACK

The PLAYBACK utility redisplays a terminal session previously recorded by PHOTO. See PHOTO for information on how to record a terminal session.

Format: PLAYBACK [/qualifier[/...]]

Qualifiers
INPUT   OUTPUT   TYPE   RECORD

INPUT [=logfile_name] Indicates the name of the PHOTO
                      logfile to be played back. The default
                      is PHOTO.LOG.

OUTPUT [=playbackfile name] The name of a file, terminal or
                      other device onto which the logfile is
                      to be played back. The default is the
                      logical name TT: (normally your
                      terminal).

TYPE=[option]INPUT   To be used when playing back your
                      logfile after you have specified
                      PHOTO/LOG/INPUT which recorded only the
                      characters actually typed at the
                      terminal.

RECORD   Normally, the OUTPUT file is output in
                      a binary mode which can not be EDITed
                      nor PRINTed. This qualifier specifies
                      that the output file should be
                      deblocked into carriage control format.

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PRINT

Queues one or more files for printing on the a default system printer or on a specified device.

Format: PRINT file-spec[,...]

Parameters

file-spec[,...]   Specifies one or more files to be printed. If you specify more than one file, separate the file specifications with either a comma or a plus sign. In either case, the PRINT command concatenates the files into a single print job.

If you do not specify a file type for the first input file, the PRINT command uses the default file type of LIS.

Parameter Qualifiers

AFTER	BURST	COPIES	DELETE	DEVICE
FEED	FLAG_PAGE	FORMS	HEADER	HOLD
IDENTIFY	JOB_COUNT	NAME	NOTIFY	PAGE_COUNT
PRIORITY	QUEUE	SPACE		

AFTER=time   Requests that the file is not printed until a specific time of day.

You may specify an absolute time, delta time, or a combination of the two.

If the specified time has already passed, the file is queued for printing immediately.

BURST
NOBURST (D)   Controls whether a burst page is included on output or not. A burst page precedes a flag page and contains the same information. However, it is printed over the perforation between pages allowing easy identification of

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multiple files in a single print job.

COPIES
COPIES=n   Specifies the number of copies to
print. By default, the PRINT command
prints a single copy of a file.

If you specify COPIES after the PRINT
command name, each file in the
parameter list is printed the specified
number of times.

If you specify COPIES following a file
specification, only that file is
printed the specified number of times.

DELETE
NODELETE (D)   Controls whether files are deleted
after printing or not. If you specify
DELETE after the PRINT command name,
all files specified are deleted. If
you specify DELETE after a file
specification, only that file is
deleted after it is printed.

DEVICE
DEVICE=device-name[:] Requests that the file or files
specified be queued for printing on a
specific device to which queueing is
allowed. If the DEVICE qualifier is not
specified, files are queued, by
default, to System Printer. This
qualifier is synonymous with the QUEUE
qualifier.

FEED(D)
NOFEED   If the qualifier was used the PRINT
command automatically inserts form
feeds when it is near the end of a page
or not. By default, the PRINT command
inserts a form feed when the printer is
within four lines of the end of the
form.

FLAG PAGE
NOFLAG_PAGE   If the qualifier was used a flag page
is printed preceding output or not.
Use this qualifier to override the

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installation-defined defaults, set up for printers when they are started.

If you specify the FLAG_PAGE qualifier as a command qualifier with the command name, a flag page is printed for the entire job.

If you specify the FLAG_PAGE qualifier with any file specification, a separate flag page is printed preceding the associated file.

FORMS=type

Specifies the forms type required for the specified file or files.

Specify the forms type using a numeric value or alphanumeric code. Codes for forms types are installation-defined. Contact System Operations for codes used at ICARDA.

HEADER
NOHEADER (D)

The qualifier HEADER permits printing the name of the file at the top of each output page. By default, the file specification is not printed.

HOLD
NOHOLD (D)

When you specify the HOLD qualifier, the file is not released for actual printing until you use the SET QUEUE/ENTRY command to release it.

IDENTIFY (D)
NOIDENTIFY

The qualifier IDENTIFY permits the display of a message indicating the job number of the print job and the name of the queue in which it is entered.

JOB_COUNT
JOB_COUNT=n

Requests that the entire print job be printed n times, where n is a decimal number from 1 through 255. By default the job is printed once.

NAME
NAME=job-name

Defines a 1- through 9-alphanumeric character name string to identify the job. The job name is displayed by the SHOW QUEUE command and is printed in the top and bottom rows of the flag page for the job.

NOTIFY
NONOTIFY (D)

If NOTIFY is used, a message PRINT is broadcast to the terminal at which you are logged on, notifying you when your print job has been completed or aborted.

PAGE COUNT
PAGE_COUNT=n

Specifies the number of pages of the file to be printed. You can only use PAGE_COUNT to qualify file specifications; it cannot qualify the command name.

By default, all pages in a file are printed.

PRIORITY
PRIORITY=n

Specifies the priority of the print job. The priority, n, must be in the range of 0 through 31, where 0 is the lowest priority and 31 is the highest.

QUEUE
QUEUE=queue-name[:]

Requests that the specified file or files be printed on a specific device. This qualifier is synonymous with the DEVICE qualifier.

SPACE
NOSPACE (D)

The qualifier SPACE permits inserting double-spaces between lines.

PURGE

Deletes all but the highest-numbered version or versions of a specified file or files.

Format: PURGE [file-spec[,...]]

Parameter Qualifiers
KEEP   LOG

Parameters

file-spec[,...]   Specifies one or more files to be purged. If you do not provide a file specification, the PURGE command purges all files in the current default directory.

The PURGE command does not provide file name or file type defaults; version numbers are not allowed. You can use wildcard characters in the directory specification, file name or file type fields.

KEEP

KEEP=n   Specifies the maximum number of versions to retain, of the specified file(s). By default, all but the highest-numbered version of the specified file(s) are deleted.

LOG

NOLOG (D)   If the qualifier was used the PURGE command displays the file specifications of files as it deletes them.

QUEUES

The following commands can be used to control print and
batch queues and the entries in them.

DELETE/ENTRY   Delete a pending entry from a queue
PRINT   Place an entry in a print queue
SHOW QUEUE   Display status of entries in a queue
SUBMIT   Place an entry in a batch queue

For details of the above see the relevant entry in this
manual.

Changes the directory specification, file name, file type, or file version of an existing disk file or disk directory.

Format: RENAME input-file-spec[,...] output-file-spec

Parameters

input-file-spec[,...] Specifies the names of one or more files whose specifications are to be changed.

You can use wild card characters in the directory specification, file name, file type, or version number fields of the file specification.

output-file-spec Provides the new file specification to be applied to the input file. The RENAME command uses the device, directory, file name, and file type of the input file specification to provide defaults for nonspecified fields in the output file.

You can specify an asterisk in place of the directory specification, file name, file type, or version number of the output-file-specification parameter; the RENAME command uses the corresponding field in the input file specification to name the output file.

Parameter Qualifiers
CONFIRM   LOG   NEW_VERSION

CONFIRM
NOCONFIRM (D)   If the qualifier was used the RENAME command displays the file specification of each file before renaming and requests you to confirm whether or not the file actually should be renamed.

LOG
NOLOG (D)

If the qualifier was used the RENAME command displays the file specification of each file that it renames.

NEW VERSION (D)
NONEW VERSION

If the qualifier was used the RENAME command automatically assigns a new version number to the output file, if a file with the same file name and file type already exists.

REQUEST

Displays a message at the System Operator's terminal, and optionally requests a reply.

Format: REQUEST "message-text"

Parameters

"message-text"   Specifies the text of a message to be displayed at the specified operator's terminal(s).

The message text can have a maximum of 128 characters; if you type more than one word, enclose the text in quotation marks (").

Parameter Qualifiers

REPLY   TO

REPLY   Requests a reply to the specified message.

If you request a reply, the message is assigned a unique identification so that the operator can respond. You will not be able to continue until the operator responds, unless you use [CTRL-Y].

TO

TO[=(operators[,...])] Specifies one or more operators to whom you wish to send the message. You can specify one or more of the following keywords. If you specify more than one keyword, separate them with commas and enclose the list in parentheses. By default, the message is sent to all terminals currently designated as operators' terminals.

CENTRAL   Send to the central system operator

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DEVICES	Send to operators assigned to disks and tapes
DISKS	Send to operators assigned to disk volumes
PRINTERS	Send to operators assigned to printer requests
TAPE	Send to operators assigned mount and dismount tapes

SEARCH

Searches one or more files for a specified string or strings and lists all the lines containing occurrences of the string(s).

Format: SEARCH file-spec[,...] search-string[,...]

Parameters

file-spec[,...]   Specifies the names of one or more files to be searched. You must specify at least one file name. If you specify more than one file name, separate them with commas.

Wildcard characters are allowed in the file specification.

search-string[,...] Specifies one or more strings to search for in the specified files. If the search-string contains any lowercase letters or special characters, enclose it in quotation marks.

Parameter Qualifiers

EXACT	EXCLUDE	HEADING	LOG	MATCH
OUTPUT	REMAINING	WINDOW		

EXACT

NOEXACT (D)   If the qualifier was used SEARCH matches the search-string exactly, or treats uppercase and lowercase as equivalent. The default is to treat uppercase and lowercase as equivalent.

EXCLUDE

EXCLUDE=(file-spec[,...]) Causes SEARCH to exclude the listed file specification(s) from the search. A file specification for this qualifier must not include a device or directory specification. However, wild card characters are allowed in the file specification.

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HEADING (D)
NOHEADING

If the qualifier was used the file names and window separators are printed in the output. File names are printed only when more than one file is specified or when wild cards are used. The window separator, a line of asterisk characters, is printed between groups of lines that belong to different windows.

LOG
NOLOG (D)

If the qualifier was used SEARCH produces a line containing the file name and the number of records and matches for each file searched.

MATCH
MATCH=option

Indicates how SEARCH interprets multiple search strings when attempting to find a match. You may use one of the following options:

OR A match occurs if a record contains any of the search strings. OR is the default match.

AND A match occurs if and only if all of the search strings are present in the single record.

NAND The negation of AND. A match occurs only if any of the search strings is not present in the record.

NOR The negation of OR. A match occurs only if all of the search strings are not present in the record.

OUTPUT[=file-spec]
NOOUTPUT

If the qualifier was used the results of the search are output to a specified file. By default, the results are output to the current output device.

RETAINING
NORETAINING (D)

If the qualifier was used SEARCH prints all records from the first matched record to the end of the file. The

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REMAINING qualifier overrides the WINDOW n2 qualifier.

WINDOW[=(n1,n2)]
NOWINDOW (D)   Controls the number of lines that are
                               listed along with the line containing
                               the search string.

                               If you specify the WINDOW qualifier
                               with a single number n, the matched
                               line is centered in the window.

                               If the form WINDOW=(n1,n2) is used, n1
                               refers to the number of lines above the
                               matched line and n2 refers to the
                               number of lines below. Either of these
                               numbers can be zero.

                               If you specify WINDOW without
                               specifying a number, a five line window
                               is assumed. (WINDOW, WINDOW=5 and
                               WINDOW=(2,2) are all equivalent.)

                               If WINDOW=0 is specified, SEARCH will
                               display the file name of each file
                               containing a match, but no records.

SET

Defines or changes, for the current terminal session or batch job, characteristics associated with files and devices owned by the process.

Format: SET option

Option:

SET DEFAULT

Change default device and/or directory name for the current process. The new default is applied to all subsequent file specifications that do not explicitly give a device or directory name.

When you change the default device assignment, the system equates the specified device with the logical name SYS$DISK.

Format: SET DEFAULT device-name[:]

SET PASSWORD

Allows users to change their own passwords. See the ICARDA
VAX/VMS User Manual for details.

Format: SET PASSWORD

SET QUEUE

Changes the current status or attributes of a file that is queued for printing or for batch job execution but not yet processed by the system.

Format: SET QUEUE/ENTRY=job-number [queue-name[:]]

The ENTRY qualifier is required.

SHOW DAYTIME

Displays the current date and time

Format: SHOW [DAY]TIME

SHOW DEFAULT

Displays the current default device and directory name.
These defaults are applied whenever you omit a device or
directory name from a file specification.

Format: SHOW DEFAULT

SHOW PRINTER

Displays the default characteristics currently defined for
the system printer.

Format: SHOW PRINTER   device-name[:]

SHOW QUEUE

Displays the current status of entries in the print and/or batch job queues.

Format: SHOW QUEUE [queue-name[:]]

Parameters Qualifiers
ALL   BATCH   BRIEF   DEVICE   FULL

ALL
Displays the names of all jobs in the specified queue. By default, the SHOW QUEUE command displays only current jobs and pending jobs owned by the current process.

BATCH
Displays entries in all batch job queues.

BRIEF
Requests a brief listing of information about jobs in the queue. When you specify BRIEF, only the user name, job number and queue name are displayed.

DEVICE
Displays the status of jobs in all device queues.

FULL
Displays the file specifications of each file in each pending job in the queue.

SHOW QUOTA

Displays the current disk quota authorized to and used by a specific user on a specific disk. This display also includes a calculation of the amount of space available and the amount of overdraft permitted.

Format: SHOW QUOTA

SHOW TERMINAL

Displays the current characteristics of a specific terminal. Each of these characteristics can be changed with a corresponding option of

Format: SHOW TERMINAL [device-name[:]]

STOP

Terminates execution of:

- A command or image that was interrupted by [CTRL-Y]
- A command procedure
- STOP/QUEUE halts operations of a batch or print queue
- STOP/REQUEUE moves a job being printed to a new queue

Format: STOP [process-name]

Parameter Qualifiers
ABORT   ENTRY   NEXT   PRIORITY

Parametersprocess-name Specifies the character-string of 1
to 15 characters   name of the process
to be deleted. You may not stop the
process belonging to other users.

QUEUE queue-name[:] Specifies the name of the queue to be
stopped, or of the queue containing a
job to be stopped.

REQUEUE queue-name[:] Specifies the name of the queue
printing the job which is to be
requeued.

SUBMIT

Enters one or more command procedures in the batch job queue.

Format: SUBMIT file-spec[,...]

Parameters

file-spec[,...]   Specifies one or more command procedures to be submitted for batch job execution. You must specify a file name; if you do not specify a file type, the SUBMIT command uses the default file type of COM. If you specify more than one file, you can separate them either with commas (,) or plus signs (+); in either case, the files are concatenated and processed as a single input stream.

Full wild card characters are allowed in the file specification.

Parameter Qualifiers

AFTER	CPUTIME	DELETE	HOLD	IDENTIFY	KEEP
LOG_FILE NAME		NOTIFY	PRINTER	PRIORITY	QUEUE
WSQUOTA					

AFTER=time   Requests that the job be held until after a specific time. If the specified time has already passed, the job is queued for immediate processing.

You may specify an absolute time, delta time, or a combination of the two. See HELP SPECIFY DATE_TIME for rules for time entries.

CPUTIME

CPUTIME=n   Defines a CPU time limit for the batch job. You may specify a delta time, the value 0, or the words NONE or INFINITE for n.

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DELETE
NODELETE (D)   If the qualifier was used the command files are deleted after processing.

If you specify DELETE after the SUBMIT command name, all files in the job will be deleted. If you specify the DELETE qualifier following a file specification, only that file will be deleted.

HOLD
NOHOLD (D)   If the qualifier was used or not the job is to be made available for immediate processing.

If you specify HOLD, the job is not released for processing until you specifically release it with the RELEASE qualifier of the SET QUEUE/ENTRY command.

IDENTIFY (D)
NOIDENTIFY   If the qualifier was used the system displays the job number assigned to the job and the name of the queue in which the job was entered.

KEEP
NOKEEP (D)   If the qualifier was used the log file is deleted after it is printed. By default, NOKEEP is assumed.

If you specify NOPRINT, KEEP is assumed.

LOG_FILE=file-spec (D)
NOLOG_FILE   If the qualifier was used a specified log file is created for the job. By default, the log file is written to a file in your login directory having the same name as the first command file and a file type of LOG.

NAME
NAME=job-name   Defines a 1- through 9- character name of an alphanumeric to identify the job. The job name is displayed by the SHOW

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QUEUE command, and is printed on the flag page of the batch job output log, replacing the file name of the log file.

If you do not specify /NAME, the name string defaults to the file name of the first, or only, file in the job.

NOTIFY
NONOTIFY (D)   If the qualifier was used a message is broadcast to any terminal at which you are logged in, notifying you that your job has completed.

PRINTER=queue-name (D)
NOPRINTER   If the qualifier was used the job log is queued for printing when your job is completed. The PRINTER qualifier allows you to specify a particular print queue. By default, if you omit the qualifier, the job log is printed on SYS$PRINT.

If you specify NOPRINTER, KEEP is assumed.

PRIORITY
PRIORITY=n   Specifies the priority for the specified job. The priority, n, must be in the range 0 through 31, where 0 is the lowest priority and 31 is the highest.

QUEUE
QUEUE=queue-name[:]   Specifies the name of a specific batch job queue to which the job is to be submitted.

WSQUOTA
WSQUOTA=n   Defines the maximum working set size for the batch job. This is the working set quota. You may specify a positive integer in the range 1 through 65535, 0, or the word NONE for n.

TYPE

Displays the contents of a file or group of files on the current output device.

Format: TYPE file-spec[,...]

Parameter Qualifiers
OUTPUT

Parameters
file-spec[,...]   Specifies one or more files to be displayed. If you specify a file name and do not specify a file type, the TYPE command uses the default file type of LIS.

You can specify wild card characters in place of the directory file name, file type, or file version number fields. The TYPE command displays all files that satisfy the file description.

OUTPUT
OUTPUT=file-spec   Requests that the output from the TYPE command be written to the specified file, rather than to output device.

UNLOCK

Makes accessible a file that became inaccessible as a
result of being improperly closed.

Format: UNLOCK file-spec[,...]

Parameter Qualifiers

CONFIRM   LOG

CONFIRM

NOCONFIRM (D)   If the qualifier was used the UNLOCK
                       command displays the file specification
                       of each file before unlocking it and
                       requests you to confirm whether or not
                       the file actually should be unlocked.

LOG

NOLOG (D)   If the qualifier was used the UNLOCK
                       command displays the file specification
                       of each file that it unlocked.