[1] Requires certain bits to be set in the privilege word.

[2] Available only on a multiprocessor system.

[3] Used with KI10/KL10 virtual memory processors only.

[4] Operator-privileged formats.

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decsystem10

OPERATING SYSTEM COMMANDS

REFERENCE CARD

(6.02 Monitor)

DEC-10-OTSMB-C-D

digital

CONVENTIONS

The following conventions have been used in illustrating command formats:

Convention	Meaning
UPPERCASE LETTERS	Represent necessary portions of the command line format.
lowercase letters	Represent variable portions of the command line format.
{ }	Represent alternative selections for the command line; one of the alternatives within the braces must be chosen by the user.
[ ]	Represent optional portions of the command line.

The following lists the variable portions of the command line descriptions. The left-column lists the variable names used on this reference card; the right-column explains what the user must supply in place of the variable name.

^	A delimiter of an identifier; it can be any alphanumeric character.
addr	An octal address.
arg	A letter or word specifying the desired function of a command.
condition	One or more reasons for allowing (not allowing) a break condition to occur. It can be either READ, WRITE, EXECUTE ALL, or MUUO.
core	A decimal number of blocks (n or nK) or pages (nP) of core.
ctrl-file-spec	A file specification, plus switches and keyword parameters, for the control file being submitted to the Batch input queue.
device	Either dev, devnn, devnnu, or devu.
dev:	Any physical device name.
devnn:	Any physical device name, followed by a 2-digit node number.

Convention	Meaning
devnnu:	Any physical device name, followed by a 2-digit node number and a 1-digit unit number.
devu:	Any physical device name followed by a 1-digit unit number.
drives	The physical drives on which a unit is to be mounted.
file[.ext]	Any legal filename from one to six characters, followed by an optional filename extension.
file-spec	A device name, a filename, a filename extension, and a directory name: [device:] file [.ext] [[directory]]
input-specifications	A list of input file specifications for the files to be processed.
jobn	A user's job number assigned by the system.
jobname	A name of up to six characters for the job being entered into one of the system queues.
lh	The left half of a 36-bit word.
log-dev	Any logical device name from one to six alphanumeric characters.
log-file-spec	A file specification for the file that is to be used to record action taken during the execution of the control file.
name	A one- to six-character SIXBIT name to be used as an identifier. In some command lines, name must be delimited by an alphanumeric character (refer to the description of ^).
n	A number.
nnn	The density for the specified magnetic tape. The density can be 200, 556, or 800 bpi.
nnnn	A decimal number between 3 and 4094 designating the block size for the specified magnetic tape.

Convention	Meaning
<nnn>	A three-digit octal code indicating the protection of a file.
m	A TTY number.
prog	A program name of six or fewer characters.
queue name	A queue name which can be either INP:, LPT:, CDP:, PTP:, or PLT:.
rh	The right half of a 36-bit word.
/switches	One or more switches used to modify the command string. Each switch is preceded by a slash.
text	A message to be sent to the designated user or terminal.
[user number]	A numeric identification assigned to the user for the purpose of gaining access to the system. It is usually two numbers separated by a comma.

Note that the complete command format has been shown for the commands. Depending on the circumstances, only part of this format may be required. Refer to the DECsystem-10 Operating System Commands manual in order to determine the arguments required for a particular task. In addition, the commands can be abbreviated as long as the abbreviation does not conflict with any other command abbreviation.

Many command strings allow wild-card characters to be used in place of alphanumeric characters. These characters permit more than one file or directory to be referenced by a single specification. Two such wild-card characters are available:

1. * — The asterisk is a wild card for an entire field. When positioned in the appropriate context, it means:

	Examples	
a. any filename or extension	*.EXT	FILNAM.*
b. any project number or programmer number (also any subfile directory)	[*,1164]	[27,*]

Note that *.* and [*,*] are also possible.

2. ? — The question mark is a wild card for a single character. It can be used in any field mentioned above, provided the * does not share the field. It means: any character.

.EX? FIL???.EX? ?ILNAM.[27,116?] [*,11??]

In addition, the directory name can be specified with the project number, the programmer number, or both numbers missing.

COMMANDS

ASSIGN { dev / devnn / devnnu / devu } [log-dev] ↵

Allocates an I/O device to the user's job without operator intervention. Assigns a logical name to a device.

ATTACH jobn [user number] ↵

Detaches the current job and connects the terminal to the specified detached job.

BACKSPACE MTAn:m { FILES / RECORDS } ↵

Spaces a magtape backward the specified number of files or records.

CCONTINUE ↵

Continues the program from the point at which it was interrupted, but leaves the terminal in monitor mode.

CLOSE device ↵

Terminates I/O currently in progress on the specified device, performs the CLOSE monitor call, but does not release the device.

COMPILE list ↵

Produces relocatable binary files for the specified source files.

CONTINUE ↵

Continues the program from the point at which it was interrupted.

COPY file-spec <nnn> = file-spec [,...] ↵

Transfers files from one I/O device to another.

CORE n ↵

Types or modifies the amount of core assigned to the user's job.

CPUNCH jobname = list of input specifications ↵

Places entries into the card punch output spooling queue.

CREATE file.ext ↵

Opens a new file on disk for creation with LINED.

CREF ↵

Lists on the line printer any cross-referenced listing files generated by a previous COMPILE, LOAD, EXECUTE, or DEBUG command.

CSTART addr ↵

Begins execution of a program that was either loaded with a GET command or interrupted, but leaves the terminal in monitor mode.

D lh rh addr ↵

Deposits information in the user's core area.

DAYTIME ↵

Types the current date followed by the time of day.

DCORE file-specification ↵

Writes a core image file of the user's core area.

DDT ↵

Copies the saved program counter and starts the program at the beginning address of DDT, if DDT was loaded with the program (automatic in 6.01 and later monitors).

DEASSIGN device ↵

Returns devices assigned to the user's job to the monitor's pool of available devices and clears logical name assignments.

DEBUG list ↵

Produces relocatable binary files for the specified source files, loads the .REL file along with an appropriate system debugging program, and prepares for debugging.

DELETE list ↵

Deletes files from DECtape or disk.

DETACH ↵

Disconnects the terminal from the current job without affecting the status of the job.

DIRECT [output file specification = list of input file specifications] ↵

Lists the directory entries for the specified. No argument causes the user's directory entries to be listed.

DISMOUNT device [/switches] ↵

Returns, via the operator, devices assigned to the user's job to the monitor's pool of available devices.

DSK jobn ↵

Types disk usage for the combined structures of the specified job.

DUMP { /command [/command...] / @ file-specification } ↵

Writes a core image file, analyzes the file written, and provides printed output.

E addr ↵

Examines the specified core location in the user's core area.

EDIT file.ext ↵

Opens the specified file for editing with LINED.

EOF MTAn: ↵

Writes an end-of-file mark on the specified magnetic tape.

EXECUTE list ↵

Produces relocatable binary files for the specified source files, loads the .REL files, and begins execution.

FILE { C ↵ / D, id, file.ext, file.ext ↵ / F, ^tape-id^, file-spec [,...] ↵ / L, id ↵ / R, ^tape-id^, file-spec [,...] ↵ / W ↵ / Z, ^tape-id^ , file-spec [,...] ↵ }

Provides remote control, via the operator, of DECtape to disk and disk to DECtape transfers.

FINISH device

Terminates I/O in progress on the specified device and performs a RELEASE monitor call and a DEASSIGN command.

FUDGE

Creates a library REL file by reading a temporary file generated by a previous COMPILE, LOAD, EXECUTE, or DEBUG command containing the /FUDGE switch.

GET file-spec core ↵

Loads a core image for the specified device, but does not begin execution.

HALT↵ (CTRL/C)

Stops the job and stores the program counter in the job data area. CTRL/C can be used at user level as well as at monitor level.

HELP [{device* / device:name}] ↵

Outputs useful information on various system features.

INITIA [arg] ↵

Performs standard system initialization for the terminal issuing the command.

JCONT jobn ↵

Continues the specified job if it was in a ↑C state.

KJOB [file-spec =/letter list-of-file-structure-names,...] ↵

Gives up access to the system.

LABEL device: ^name^ ↵

Writes an identifier onto a DECtape.

LIST list ↵

Lists the specified files on the line printer.

LOAD list ↵

Produces relocatable binary files for the specified files, and loads the .REL files generated.

LOCATE node-id ↵

Establishes logically, the user's job at a specified node.

LOGIN [{ user number [/switches] / [user number] [/switches] }] ↵

Provides access to the system.

MAKE file-spec ↵

Opens a new file on disk for creation with TECO.

MOUNT device: log-dev: [/switches] [drives] ↵

Allocates an I/O device to the user's job via the operator.

NODE [node-id] [physical-device-name] [logical-device-name] ↵

Types out node information, or assigns the designated I/O device to the specified node, and optionally assigns a logical device name.

NSAVE file-specification [core] ↵

Writes a core image of the user's core area on the specified device.

NSSAVE file-specification [core] ↵

Writes a core image of the user's core area on the specified device.

OSAVE file-specification [core] ↵

Writes a core image of the user's core area on the specified device.

OSSAVE file-specification [core] ↵

Writes a core image of the user's core area on the specified device.

PJOB ↵

Outputs the job number to which the terminal is currently attached.

PLEASE device:program!text ↵

Provides two-way communication between the user and the operator.

PLOT jobname = list-of-input-specifications ↵

Places entries into the plotter output queue.

PRESERVE file.ext [,...] ↵

Renames the specified files with the standard protection code ORed with 100.

PRINT jobname = list-of-input-specifications ↵

Places entries into the line printer output spooling queue.

PROTECT file <nnn> [,...] ↵

Sets the specified files to the requested protections.

QUEUE { INP:jobname = ctrl-file-spec, log-file-spec ↵ / queue name:jobname = list-of-file-specs ↵ / listing-file-specs/LIST = list-of-queue-names ↵ }

Enters items into the specified system queue.

R file.ext [core] ↵

Loads a core image from the system device (SYS:) and starts it at the location specified within the file.

REASSIGN device: [jobn] ↵

Gives the specified device to the designated job.

REENTER ↵

Starts the program at an alternate entry point specified by the program.

RENAME new = old [,new = old,...] ↵

Changes the name and protection of one or more files on DECtape or disk.

RESOURCES ↵

Outputs the names of all available devices (except PTYs and TTYs), all file structures,and all physical units not in file structures.

REWIND device: ↵

Rewinds a magnetic tape or DECtape.

RUN file-spec [core] ↵

Loads a core image from the specified device and starts it at the location specified within the file.

SAVE file-spec [core] ↵

Writes a core image of the user's core area on the specified device.

SCHED ↵

Outputs the schedule bits set by the last SET SCHED command.

SEND { device:text ↵ / JOB n text ↵ / n: text ↵ }

Provides a one-way interconsole line of communication.

SET BLOCKSIZE device:nnnn ↵

Sets the default blocksize for the specified magnetic tape.

SET BREAK { AT addr ON condition ↵ / NO condition ↵ / NONE ↵ / USERS[4] ↵ / NO USERS[4] ↵ }

Sets address break locations in programs according to specified conditions.

SET CDR filename ↵

Sets the filename for the next card-reader spooling intercept.

SET CPU[1,2] { CPxn ↵ / NO CPxn ↵ / ALL ↵ / ONLY CPxn ↵ }

Sets the CPU specification for the job.

SET DENSITY device:nnn ↵

Sets the default density for the specified magnetic tape.

SET DSKFUL { ERROR ↵ / PAUSE ↵ }

Controls the job when the user has exhausted his disk space.

SET DSKPRI n ↵[1]

Sets the priority for the job's disk operations (data transfers and head positionings).

SET HPQ n ↵[1]

Sets the high priority scheduler run queue for the job.

SET PHYSICAL {LIMIT core↵ / GUIDELINE core↵}

Specifies when the job will go virtual and specifies a guideline for the page fault handler if GUIDELINE is designated.

SET SPOOL {device: [,...]↵ / ALL↵ / NONE↵ / NO device [,...]↵}

Adds devices to or deletes devices from the list of spooled devices for this job.

SET TIME n↵

Sets the central processor time limit for this job.

SET TTY {NO arg↵ / arg↵}

Sets properties to be associated with the terminal.

SET VIRTUAL LIMIT core↵

Specifies the limit on the virtual memory for a job.

SET WATCH {arg [,...]↵ / ALL↵ / NONE↵ / NO arg [,...]↵}

Sets the output of incremental job statistics.

SKIP MTAn: {x FILES↵ / x RECORDS↵ / EOT↵}

Moves the specified magnetic tape forward the designated number of files or records or to the logical end of tape.

SSAVE file-spec [core]↵

Writes a core image of the user's core area on the specified device.

START addr↵

Begins execution of a program either previously loaded with the GET command or interrupted while running.

SUBMIT jobname = ctrl-file-spec, log-file-spec [/switches]↵

Places entries into the Batch input queue.

SYSTAT [arg]↵

Prints information about the current status of the system.

TECO file-spec↵

Opens the specified file for editing with TECO.

TIME jobn↵

Outputs the running time for the specified job.

TPUNCH jobname = list-of-input-specs↵

Places entries into the paper tape punch output spooling queue.

TTY {NO arg↵ / arg↵}

Sets properties to be associated with the terminal.

TYPE list↵

Types the specified file(s) on the user's terminal.

UNLOAD device↵

Rewinds and unloads the specified magnetic tape or DECtape.

{USESTAT↵ / CTRL/T}

Prints information on the terminal concerning the user's job. CTRL/T can be used at the user level also.

VERSION↵

Outputs the version number of a program on the terminal.

WHERE device↵

Outputs the node number of the specified device.

ZERO device : [[directory]]↵

Clears the directory of the specified device.