Command Summary for vi and emacs

Task	vi Command	emacs Command
Start the editor	vi [file]	emacs
Read a file	:r file	C-x C-f
Move the cursor by:		
character	l, h	C-b, C-f
word	w, W	M-b, M-f
line	j, k	C-p, C-n
sentence	), (	M-a, M-e
screen	CTRL/B, CTRL/F	C-v, M-v
Insert text:		Position the cursor where the text is needed and enter the text.
after cursor	a	
at end of line	A	
before cursor	i	
at beginning of line	I	
Delete text:		
a character	x, X	DEL, C-d
a word	dw, dW	
a line	dd	
to a mark	d 'letter	
Kill text:		
a word		M-DEL, M-d
a line		C-k
to a mark		C-w
Search through text:		
forward	/pattern	C-s
backward	?pattern	C-r
repeat	n, N	C-s, C-r
Set a mark	m letter	C-@, C-SPC
Put text (yank for emacs):		
before cursor	p	C-y
after cursor	P	
Recover lost edits	vi -rfile	M-x
Redraw the screen	CTRL/L	C-l
Write out a file	:w file	C-x, C-s
Leave the editor:		
saving changes	:wq	C-x, C-c
without saving changes	:q!	

Command Summary for mailx

Task	mailx command
Send a message	mailx address
Edit the message you are sending	~e
Read a file into a message	~r filename
Forward a message	~f [messsage]
Modify header information	~h
Invoke mailx	mailx
Read a new message	Press Return
Read the next message	+
Read the previous message	-
Reply to a message	R (sender only) or r (sender and all recipients)
Display a list of messages	h
File a message in a folder	s [+]foldername
Delete a message	d [messsage]
Delete the current message and display the next message	dp
Edit a message	e [messsage]
List the names of folders	folders
Undelete deleted messages	u [messsage]
Leave mailx	
update mailbox	quit
without updating mailbox	exit

DEC OSF/1

digital™

Quick Reference Card
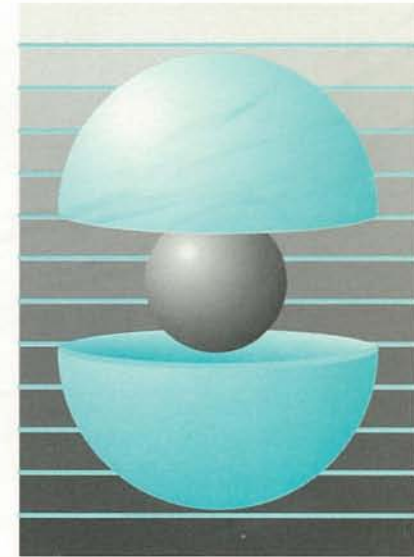
Built-in C Shell Variables

Variable	Description
argv	Contains a value or values that can be used by the shell or shell scripts.
autologout	Logs you off the system automatically if you are idle for a specified period of time.
cwd	Contains the pathname to your current directory.
home	Contains the pathname of your home directory.
ignoreeof	Specifies whether CTRL/C can be used to log out of the system.
cdpath	Specifies alternative directories to be searched by the system when locating subdirectories with the cd, chdir, or push commands.
noclobber	Specifies whether a file can be overwritten.
notify	Specifies whether you are notified when a background process has completed.
path	Specifies the search path that the shell uses to find commands.
prompt	Customizes your C shell prompt.
shell	Specifies the shell to create when a program creates a subshell.
status	Specifies whether the most recently executed command completed without error (a value of zero is returned) or with an error (a nonzero value is returned).

Meanings for Octal Permissions

Octal Number	Permissions	Description
0	None	No permission granted.
1	--x	Execute permission granted.
2	-w-	Write permission granted.
3	-wx	Write and execute permission granted.
4	r--	Read permission granted.
5	r-x	Read and execute permission granted.
6	rw-	Read and write permission granted.
7	rwx	Read, write, and execute permission granted.

Important Files in Your Home Directory

File Name	Purpose of the File
.cshrc	Defines your C shell environment with the .login file. (Read each time you start a new shell.)
default.DECterm	Stores customization information for DECterms.
.kshrc	Defines your Korn shell environment with the .profile file. (Read each time you start a new shell.)
.login	Defines your C shell environment. (Read only when you log in to the system.)
.mh_profile	Defines the environment for MH.
.mailrc	Defines the environment for mailx (Mail) and mail (binmail).
.mwmrc	Defines workspace menus and key bindings.
.profile	Defines your Korn and Bourne shell environments. (Read only when you log in to the system.)
.X11Startup	Controls which applications are invoked when you start a work-station session.
.XDefaults	Records Session Manager customizations.

Rules for Forming Regular Expressions

Expression	Rule
0–9, A–Z, a–z, most punctuation	Matches itself.
.	Matches any single character.
\char	Matches the character following the backslash regardless of whether that character is a metacharacter.
*	Matches any number of occurrences of the preceding expression, including none.
[chars]	Matches any one of the characters within the brackets. Ranges of characters can be abbreviated.
^	Matches the beginning of a line when used at the beginning of an expression. When used as the first character inside brackets, excludes the bracketed characters from being matched. Otherwise, matches itself.
expr expr ...	Forms a compound expression that matches any string which matches the first simple expression, then the second, and so on.

Shell Metacharacters

Metacharacter	Description
Input/Output	
<	Redirects input.
>	Redirects output to a specified file.
<<	Redirects input and specifies that the shell should read input up to a specified line.
>>	Redirects output and specifies that the shell should add output to the end of a file.
2>	Redirects diagnostic output to a specified file. (Bourne shell only)
>!	Redirects output and specifies that if the `noclobber` variable is set (prevents overwriting of files), it should be ignored so that the files can be overwritten. (C shell only)
>&	Redirects both diagnostic and standard output and appends them to a file. (C and Korn shells only)
>>&	Redirects both diagnostic and standard output to the end of an existing file. (C shell only)
Expansion/ Substitution	
$	Specifies variable substitution. (C shell only)
!	Specifies history substitution. (C shell only)
:	Precedes substitution modifiers. (C shell only)
^	Used in special kinds of history substitution. (C shell only)
`	Specifies command substitution. (C shell only)
${...}	Specifies variable substitution. (Bourne and Korn shells only)
%	Specifies job number substitution. (Korn shell only)
...`	Specifies command output substitution. (Korn shell only)
`...`	Specifies command output substitution. (Bourne shell only)

Shell Metacharacters (Continued)

Metacharacter	Description
Syntactic	
;	Separates commands that should be executed sequentially.
|	Separates commands that are part of a pipeline.
&&	Runs the next command if the current command succeeds.
||	Runs the next command if the current command fails.
;;	Separates elements of a case construct. (Bourne and Korn shells only)
&	Runs a command in the background.
( )	Groups commands to run as a separate process in a subshell.
{ }	Groups commands without creating a subshell. (Korn shell only)
Filename	
/	Separates the parts of a file's pathname.
?	Matches any single character except a leading dot (.).
*	Matches any sequence of characters except a leading dot (.).
[ ]	Matches any of the enclosed characters.
~	Specifies a home directory when used at the beginning of file names. (C and Korn shells only)
Quotation	
\	Specifies that the following character should be interpreted literally; that is, without its special meaning to the shell.
'...'	Specifies that any of the enclosed characters (except for ' in Korn and C shells, and &' in Bourne shell) should be interpreted literally; that is, without their special meaning to the shell.
"..."	Provides a special form of quoting. Specifies that the $, ' (grave accent), and \ characters keep their special meaning, while all other enclosed characters are interpreted literally; that is, without their special meaning to the shell.

Built–in Korn and Bourne Shell Variables

Variable	Description
HOME	Specifies the name of your login directory; the directory that is the currrent directory when you log in.
PATH	Specifies the directories through which your system searches to find and execute commands.
CDPATH	Specifies the directories that the cd command searches to find the specified argument to cd .
MAIL	Specifies the pathname of the file where your mail is deposited.
MAILCHECK	Specifies in seconds how often the shell checks for mail. (600 seconds is the default.)
SHELL	Specifies your default shell.
PS1	Specifies the default Bourne shell prompt. The default value is $ (dollar sign).
PS2	Specifies the secondary prompt string; the string that the shell displays when it requires more input after you enter a command line.
HISTFILE	Specifies the pathname of the file that is used to store the command history. (Korn shell only)
EDITOR	Specifies the default editor for command line editing at the shell prompt and for file name completion. (Korn shell only)
FCEDIT	Specifies the default editor for the fc command. (Korn shell only)
HISTSIZE	Specifies the number of previously entered commands that are accessible by this shell. (Korn shell only)

apropos - Finds reference pages by keyword

apropos *keyword*

bg - Puts jobs in the background

C shell   **bg [%*job* ...]**
Korn shell **bg [*job* ...]**

cat - Concatenates or displays files

cat [-benrstuv] *file* ... | -

-n   Displays output lines preceded by a line number.

cd - Changes the current directory

cd [*directory*]

clear - Clears the terminal screen

clear

chmod - Changes permission codes

chmod [-fR] [*who*]+|-|=*permission* ... *file* | *directory* ...
chmod [-fR] *absolute-mode file* | *directory* ...

-R   Causes chmod to set the permission code on each file in
     the specified directory. If the directory contains other
     directories, chmod sets the permission codes on all the
     files in those directories. The command continues moving
     down the directory tree, setting the permission codes on
     all files, until it reaches the bottom of the tree.

compress - Compresses data

compress [-cCdfFnqvV] [-b *bits*] [*file* ...]
uncompress [-cCfFnqvV] [*file* ...]
zcat [*file*...]

cp - Copies a file

cp [-fhip] *source-file destination-file*
cp [-fhip] *source-file* ... *destination-directory*
cp [-fhip] [-R | -r] [*source-file* | *source directory*] ...
    destination-directory

-i   Prompts you for a file name when the cp command
       would write over an existing file.

-R   When the source is a directory, copies the directory
       and the entire subtree to the new location.

date - Displays or sets the date

date [-u] [+*field-descriptor* ...]

df - Displays statistics on free disk space

df [-eikn] [-t *type*] [*file* | *file-system* ...]

-k   Reports statistics in kilobtyes, rather than 512-byte
       blocks.

diff - Compares text files

diff [-c*lines* | -e | -f | -h | -n] [-bitw] *file1 file2*
diff [-c*lines* | -e | -f | -h | -n] [-bilrstw] [-S*file*] *directory1 directory2*
diff [-D*string*] [-bitw] *file1 file2*

-b   Ignores trailing spaces and tabs and considers all other
       strings of spaces and tabs to be identical.

-*clines* Produces a diff listing with the specified number of
       lines displayed around the different line. The default is
       three lines.

-i   Ignores the case (uppercase or lowercase) of letters.

-w   Ignores spaces and tabs.

du - Displays a summary of disk usage

du [-aklrsx] [*file* ...] [*directory* ...]

-a   Displays the number of blocks in the specified files.

-s   Displays only the total number of blocks used by the
       specified directories (or files, if used with the -a flag).

exit - Causes the shell to exit

exit

fg - Brings jobs into the foreground

C shell   **fg [%*job* ...]**
Korn shell **fg [*job* ...]**

file - Determines file type

file [-c] [-f *file*] [-m *magic-file*] *file* ...

find - Finds files matching an expression

find *pathname* ... [-name *expression*] [-print]
find *pathname* ... *expression*

-name *expression*   Searches for file names that match the
                  named *expression*.

-print   Displays the pathname to all files that
                  meet the requirements of *expression*.

ftp - Transfers a file between a local and remote host

ftp [-dgintv] [*host*]

grep - Searches a file for a pattern

grep [-bcilnqsvw] [-p *paragraph-sep*] *pattern* | -e *pattern*
    [*file* ...]

-c   Displays only a count of the matching lines.

-i   Ignores the case (uppercase or lowercase) of letters in
      locating *pattern*.

-l   Lists the name of each file that contains lines matching
      pattern.

groups - Displays your group membership

groups [*user*]

head - Displays the beginning of files

head [-*count*] [*file* ...]

-*count* Specifies the number of lines to display. The default
       number is 10.

jobs - Displays information about jobs

C shell   **jobs [-l]**
Korn shell **jobs [-lnp] [*job* ...]**

-l   Adds process IDs to the jobs command display.

kill - Sends a message to a running process

kill [-*signal-name* | -*signal-number*] *process-id* ...
kill -l

lpq - Displays information about files queued to printers

lpq [+][*number*] [-l] [-P*printer*] [*request-ID* ...] [*user* ...]

-l   Displays information about each of the files composing the print request.

-P   Displays information about only the named printer.

lpr - Sends files to the printer queue for printing

**lpr [-hjmrx] [*filetype-flag*] [-C *class*] [-i[*number*]] [-l *tray*]
[-J *name*] [-K*sides*] [-o *number*] [-O*orientation*]
[-P*printer*] [-T *title*] [-w*number*] [-# *number*] file ... | -**

-h   Suppresses the printing of the cover page for the print job.

-J *name*   Specifies the request name to appear on the cover page for the print job.

-K*sides*   Prints the pages of the job as specified by the *sides* argument, if your printer supports that method of printing. Specify 2 for two-sided printing as it appears in a bound book.

-m   Sends mail upon completion of the print job.

-P*printer*   Sends the file to the specified printer.

-#*number*   Produces the specified number of copies.

lprm - Removes files from the printer queue

lprm [-P*printer*] [-] [*request_ID* ...] [*user* ...]

-P*printer*   Removes the file from the specified printer queue.

-    Removes all print requests that you own.

ls - Lists and generates information about files

ls [-aAbcCdfFgiILmnopqrRstux1] [*file* ... | *directory* ...]

-a   Lists all entries in a directory, including entries that begin with a dot (.).

-F   Puts a slash (/) after each file name if the file is a directory, an asterisk (*) if the file can be executed, an equal sign (=) if the file is a socket, and an at sign (@) if the file is a symbolic link.

-l   Displays the mode, number of links, owner, group, size (in bytes), and time of last modification for each file.

-R   Lists all subdirectories and their contents.

man - Displays reference pages

man [-] [-M *pathname*] [-t] [*section title* ...] ...
man [-M *pathname*] -k *keyword* ...
man [-] [-M *pathname*] [-t] [*section*] *title* ...
man [-M *pathname*] -f *title* ...

-k   Locates reference pages by keywords if the whatis database exists.

-M *pathname*   Specifies an alternative location where the man command should search for reference pages.

mkdir - Makes a directory

mkdir [-m *mode*] [-p] *directory* ...

-m *mode*   Sets the file permissions to *mode*, a symbolic string as defined for the chmod command, after creating the directory.

-p   Creates intermediate directories, as necessary.

more, page - Displays a file one screenful at a time

**more [-cdflpsuvwz] [-*number*] [+*line-number* | +g | +G |
+/*pattern*] [*file* ...]**
page [-cdflpsuvwz] [-*number*] [+*line-number* | +g | +G |
+/*pattern*] [*file* ...]

+g   Begins displaying at the last screenful of the file. The more command does not exit, so you have the opportunity to scroll or page backward through the file.

+*line-number*   Begins displaying at the specified *line-number*.

+/*pattern*   Begins displaying at the line containing the regular expression *pattern*.

-*number*   Sets the number of lines in the display window to *number*.

mv - Moves files and directories

mv [-i | -f] *file1 file2*
mv [-i | -f] *file1* ... *directory*
mv [-i | -f] *directory1* ... *directory2*

-i   Prompts you for a file name when the mv command would write over an existing file or directory.

passwd, chfn, chsh - Changes password file information

passwd [-f | -s] *username*
chfn [*username*]
chsh [*username*]

-f   Modifies the general information (phone number, office number, and so on) for the specified user by invoking the the chfn command.

-s   Modifies the login shell of the specified user by invoking the chsh command.

ps - Displays current process status

**ps [aAeghjlLmsStuvwx] [oO *specifier*] [=*header*], ... t [*tty*]
*process-number***
ps [-adefjlm] [-oO *specifier*] [=*header*], ... [-g *glist*] [-p *plist*]
[-s *slist*] [-t *tlist*] [-u *ulist*]

pwd - Displays the pathname of the current directory

pwd

rcp - Copies files between a local and a remote host or two remote hosts

rcp [-pr] *source destination*

-r   Copies recursively. This flag can be specified only with directories.

rlogin - Connects the local host with a remote host

rlogin [-8] [-e*character*] [-l*user*] *remote-host*

-l *user*   Changes the remote user name to the one you specify.

rm - Removes (unlinks) files or directories

rm [-efir] *file* ...

-i   Prompts you before deleting each file (interactive flag).

rmdir - Removes a directory

rmdir *directory ...*

rsh - Executes the specified command at the remote host or logs in to the remote host

rsh [-dn] [-l *user***]** *remote-host* **[***command***] [***argument ...***]**

-l *user*   Specifies that rsh log in to *remote-host* as the specified *user*, rather than the local user name.

ruptime - Displays the status of hosts on the network

ruptime [-ar] [-l | -t | -u] [*machine-name***]**

rwho - Shows which users are logged in to hosts on the local network

rwho [-a] [*user ...***]**

-a   Displays information for all users. Without this flag, rwho omits information for users whose sessions have been idle for an hour or more.

sort - Sorts or merges files

sort [-Abcdfimnru] [-o *output-file***] [-t***character***]**
[-T *directory***] [-y[***kilobytes***]] [-z***record-size***]**
[+*fskip***][***.cskip***] [-***fskip***][***.cskip***] [-bdfinr] ...** *file*

-m   Merges only (assumes sorted output).
-o *output-file*   Directs output to the named file, rather than to standard output.
-r   Reverses the order of the sort.

tail - Displays the end of files

tail [+ | -*number***[***unit***]] -r**
tail [+ | -*number*[*unit*]] [-f *file*]

tar - Manipulates tape archives

tar [-]*required-flag* **[bBfFhilLmpPsSvw***n***] [-n | -o]**
[*flag-argument ...***] [-e** *exception***] ... [-C** *directory***] ... [***file ...***]**

Required Flags

c   Writes the named files to the beginning of the tape.
r   Writes the named files to the end of the tape.
t   Lists the files on the tape.
u   Adds the named files to the tape if they are not on the tape.
x   Extracts the named files from the tape.

Optional Flags

-v   Displays information about tar's actions (verbose flag).
-w   Waits for you to confirm before taking any action.

telnet - Provides the TELNET interface for logging in to a remote host

telnet [-d] [-l *user***] [-n** *trace-file***] [***host***] [***port***]**

tty - Returns the pathname of a terminal device

tty [-s]

uucp - Copies files from one UNIX system to another UNIX system

uucp [-d | -f] [-g*grade***] [-cCjmr] [-n***user***] [-s***file***]**
[-x*debug-level***]** *source ... destination*

-c   Copies files directly to a remote host, bypassing the spooling directory.
-j   Displays the job number of the transfer operation.
-m   Sends you mail when the transfer to a remote host is complete.

uuencode uudecode - Encodes or decodes binary files

uuencode [*file***]** *remotefile*
uudecode [*file ...***]**

uustat - Reports status of and provides job control for remote file transfer

uustat [-a | -k*job-number* **| -m | -p | -q | -r***job-number***]**
[-s*system***] [-u***user***]**

-k*job-number*   Kills the specified uucp or uux job.

-u*user*   Displays information about the specified user's jobs.

uux - Runs a command on another host

uux [-c | -C] [-n | -z] [- | -p] [-a*user***] [-b***jr***] [-g***grade***] [-s***file***]**
[-x*debug-level***]** *command-string*

-j   Displays the job number of the process running the command on the remote host.

wc - Counts the lines, words, and bytes in a file

wc [-clw] [*file ...***]**

-c   Counts only bytes.
-l   Counts only lines.
-w   Counts only words.

whatis - Describes a command's function

whatis [-M *pathname***]** *keyword*

whereis - Locates source, binary, and reference page files for programs

whereis [-bmsu] [-BMS *directory ...* **-f]** *program ...*

which - Locates a program file, including aliases and paths

which *program ...*

who - Identifies users currently logged in

who [-a] [-A*file* **] [-bdHlpqrstTu] [***file***]**
whoami

write - Sends messages to other users

write [-r] [-n *node***]** *user* **[***line***]**
write *user@node* [*line*]
write -h *handle,reply*
write -q [-n *node*]