

# UNIX Commands for DOS Nerds

*The MS-DOS operating system is by no mistake quite similar to UNIX in its command structure. A few of the command names have been changed to protect the innocent.*

## *A MSDOS - UNIX Dictionary*

NOTE: UNIX is case-sensitive. All UNIX commands should be entered in lowercase unless otherwise noted.

MS-DOS Command	UNIX Equivalent Command
cd	cd
copy	cp
date	date
delete	rm
dir	ls
echo	echo
md or mkdir	mkdir
rd or rmdir	rmdir
ren or rename	mv
type	cat

## *UNIX Filename Conventions*

UNIX filenames follow the same conventions as those for MS-DOS. ? and \* are still wildcards. The filename extension can be up to four characters long, rather than the three allowed in MS-DOS. The directory structure and naming is identical to that of MS-DOS.

## *UNIX Command Details*

<u>Command</u>	<u>Example Use</u>
cd	cd \ cd mom Changes to directory "mom" cd .. Changes to parent directory
cp	cp jim.htm john.htm  Copies "jim.htm" to "john.htm," leaving "jim.htm" intact. Two files now have the same data.
date	date Shows system date

## Command

## Example Use

rm	rm jim.htm rm jim.*	<i>Removes "jim.htm" from disk. Removes every file starting with "jim" from directory.</i>
ls	ls  ls -l  ls -l *.htm	<i>Shows all files in current directory. Shows filenames only.  Shows all files, but in "long" form. This gives complete infor- mation about each file, including filesize and date created.  Shows all files with the exten- sion ".htm"</i>
echo	echo "Now starting mail daemon..."	<i>Echoes text to output device. More powerful than DOS echo, as variables can be echoed too.</i>
mkdir	mkdir web	<i>Creates a subdirectory called "web."</i>
rmdir	rmdir web	<i>Removes the subdirectory called "web." Subdirectory should be empty before issuing "rmdir."</i>
mv	mv jim.htm helen.htm  mv jim.htm web\jim.htm	<i>"Moves" jim.htm to helen.htm. In this case, what has actually hap- pened is that "jim.htm" has been RENAMED to "helen.htm."  In this case, the file is actually MOVED to a new location; specifically, to the subdirectory called "web." Contrast this to a COPY operation: The original file is no longer in the current directory!</i>
cat	cat jim.htm	<i>Types "jim.htm" to the screen, just like a "type" command in DOS.</i>

## UNIX Commands with no MS-DOS Equivalents

UNIX is a multi-user environment, unlike DOS (except for those in our audience with multiple personality disorder). UNIX also has a wide variety of useful communications tools for connecting with other systems, and exchanging files and viruses.

UNIX Command	Purpose
chmod	Change file mode
crontab	Set up time-table for automatic process execution
df	Show how much disk space is free
du	Show disk space usage
find <filename>	Locate a file
finger <username>	Show information on a user
ftp <hostname>	Transfer files between computers
kill <process #>	End another process
man <cmd>	Online MANual for <cmd>
nice <program>	Run process at low priority
nohup <program>	Run program in background after logout
ping <hostname>	Check on availability of remote host
ps	Get process status
rlogin <hostname>	Remote login to another UNIX system
telnet <hostname>	Remote login to any system using IP
vi <filename>	Visual Editor (See "vi commands")
who	See who is online

## UNIX Special Characters

*These characters and sequences have special significance in UNIX. The symbol ^ means "control."*

Character or Sequence	Meaning
^C	Interrupt foreground process
^D	Logout or mark end-of-file / end-of-input
@	Kill line, start over
;	Statement terminator - use for multiple commands in one line.
&	Run command in background
>	Redirect program output
<	Redirect program input
	Pipe (Output of one program to input of next)
2>	Redirect STDERR of program
* ?	Wildcards for file name specification
[ ]	Introduce/terminate character class

## UNIX Visual Editor ("VI")

"VI" is a text editor available on most UNIX systems. It is a line-oriented full-screen-display utility designed to be accessed from a wide variety of computer platforms. There are several principles upon which "VI" operates:

- The default "VI" mode is COMMAND mode. In order to insert text, the letter "i" must be typed.
- Upper and lower case letters are different commands and must be watched closely.
- To get into command mode from text insertion mode, press [ESC].
- Some commands are single letters; these are executed immediately after they are entered.
- Other commands are typed as a line of text, just like in the UNIX shell. These commands start with the ":" character. Type ":" in command mode to begin entering one of these commands, and press [RETURN] at the end of the command line.
- ^ means a CONTROL character

Controlling "VI"	
Command	Action
:q	Quit when no changes have been made
:q!	Quit and abandon any changes
:wq	Write new text file and quit
:w	Write new file, remain within "VI"
:set all	Show possible "set" command list
:set showmode	Forces "VI" to always display the editing mode in LRH corner of screen

Cursor Movement and Screen Management Commands	
Command	Action
^L	"Repaint" screen
^G	Show current line number
^	Go to beginning of current line
\$	Go to end of current line
H	Go to beginning of top line on screen
L	Go to beginning of bottom line on screen
j , [RETURN], +	Move down one line on screen
k , -	Move up one line on screen
^B	Go back one screenful
G	Go to end of file
^D	Down 1/2 screen
^J	Up 1/2 screen
#G	Goto line number #

<b>Text Insertion and Deletion</b>	
<b>Command</b>	<b>Action</b>
i	Insert text at current cursor position
I	Insert text at start of current line
O	Insert new line before current line
x	Delete one character at cursor position
dd	Delete an entire line
Y	Yank entire line into copy buffer
p	Put buffer text at current cursor position

<b>Search Commands</b>	
<b>Command</b>	<b>Action</b>
/pattern	Searches for "pattern" in a forward direction starting at current cursor position
?pattern	Searches for "pattern" in reverse direction starting at current cursor position

- There are many other "VI" commands available - consult the "VI" documentation (MAN command) for more details.