

Short unix command reference

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Unix is case-sensitive, so LS is not the same as ls. The same applies to filenames. You can use the “Tab”-key for completing commands.

1. Wildcards are single characters that match against none or more character(s) in a file or directory name:

* matches any number of characters.

? matches one character.

~ short for home directory (~ / is your home directory, ~007 is home of user 007).

. short for current directory.

.. short for one directory up in tree.

2. Commands...

...for getting help:

man *command* read the online manual page for a command
apropos *keyword* list commands with keyword in their man pages
which *command* list path of named executable

...for handling files:

ls	list files and directories
ls -a	list all files and directories (also hidden files starting with .)
ls -rtlh	list files with additional information about filesize, owner etc. Access right coding: -rwxrwxrwx is a file that everyone can read, write, and execute. dr-x—— is a directory only the owner can change to, read, but not write.
mkdir <i>directory</i>	make named directory
cd <i>directory</i>	change to named directory
cd	change to home directory
cd ..	change one directory up
pwd	display the path of the current directory
cp <i>file1 file2</i>	copy file1 and call it file2
cp -r <i>directory1 directory2</i>	copy directory
mv <i>file1 file2</i>	move file1 to file2
rm <i>file</i>	remove a file
rm -r <i>directory</i>	remove a directory
cat <i>file1 file2 > file0</i>	concatenate file1 and file2 to file0
gzip <i>file > file.gz</i>	compress file
gunzip <i>file.gz > file</i>	decompress file
tar -czvf <i>file.tgz directory/*</i>	compress directory into tar-file
tar -xzvf <i>file.tgz</i>	uncompress directory from tar-file
ps2pdf <i>file.ps file.pdf</i>	convert postscript to pdf format
pdf2ps <i>file.pdf file.ps</i>	convert pdf to postscript format. More conversion tools exist.
sort <i>file</i>	sort data in named file
chmod [options] <i>file</i>	change access rights for named file. Symbol meaning in options: u – user (owner), g – group, o – others, a – all, r – read access, w – write access, x – execute access (and access directory), “+” – add permission, “-” – take away permission.

chmod a+r <i>file</i>	give read access to everyone
chmod -R og-xr <i>directory</i>	take away read, write and execute access from everyone except user (owner) for everything in named directory
wc [option] <i>file</i>	print number of words (-w), characters (-m), bytes (-c), or lines (-l) in file
find <i>/path</i> -name <i>file</i>	find named file in named absolute path
du -h	size used by each subdirectory in current directory
du -skh	size of current directory

..for displaying and editing files:

cat <i>file</i>	display a file
less <i>file</i>	display a file a page at a time. To go forward, type the space bar. To go back up, type b. To quit, type q. To search, type /keyword. To search backwards, type ?keyword.
echo <i>text</i>	print text to standard output (screen)
echo <i>text</i> > <i>file</i>	print text to file
echo <i>text</i> >> <i>file</i>	append text to file
nedit <i>file</i>	edit named file. Other text editors are vi, emacs, xemacs...
libreoffice	LibreOffice = "free Word"
gimp <i>graphicfile</i>	display and play with graphic file
display <i>graphicfile</i>	display graphic file
tkdiff <i>file1 file2</i>	compare files line by line
head -10 <i>file</i>	display the first 10 lines of a file
tail -100 <i>file</i>	display the last 100 lines of a file
grep [options] ' <i>keyword</i> ' <i>file</i>	search file for keyword. -i: search case-insensitive; -v: search non-matching lines; -n: precede each matching line with the line number; -c: return number of matching lines; -A 10: list 10 lines following each match; -B 4: list 4 lines preceding each match

... for handling jobs, commands and their output:

<i>command</i> > <i>file</i>	redirect standard output to a file
<i>command</i> >> <i>file</i>	append standard output to a file
<i>command</i> < <i>file</i>	redirect standard input from a file
<i>command1</i> <i>command2</i>	pipe the output of <i>command1</i> to the input of <i>command2</i>
<i>command</i> &	run command in background
control-C	kill the job running in the foreground
control-Z	suspend the job running in the foreground
bg	background the suspended job
jobs	list current jobs
fg %1	foreground job number 1
kill %1	kill job number 1
ps	list current processes in shell
top	list all processes running on machine. Updates automatically. To exit, type q.
kill 26152	kill process number 26152
history	show command history list
!g	recall last command starting with "g"