Unix/Linux Command Reference



File Commands

ls - directory listing

ls -al - formatted listing with hidden files

cd *dir* - change directory to *dir*

cd - change to home

pwd - show current directory

mkdir dir - create a directory dir

rm file - delete file

rm -r dir - delete directory dir

rm -f file - force remove file

rm -rf dir - force remove directory dir *

cp file1 file2 - copy file1 to file2

cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist

mv *file1 file2* - rename or move *file1* to *file2* if *file2* is an existing directory, moves *file1* into directory *file2*

ln -s file link - create symbolic link link to file

touch file - create or update file

cat > file - places standard input into file

more file - output the contents of file

head file - output the first 10 lines of file

tail file - output the last 10 lines of file

tail -f *file* - output the contents of *file* as it grows, starting with the last 10 lines

Process Management

ps - display your currently active processes

top - display all running processes

kill pid - kill process id pid

killall proc - kill all processes named proc *

bg - lists stopped or background jobs; resume a stopped job in the background

fg - brings the most recent job to foreground

fg n - brings job n to the foreground

File Permissions

chmod *octal file* - change the permissions of *file* to *octal*, which can be found separately for user, group, and world by adding:

- 4 read (r)
- 2 write (w)
- 1 execute (x)

Examples:

chmod 777 - read, write, execute for all

chmod 755 - rwx for owner, rx for group and world For more options, see **man chmod**.

SSH

ssh user@host - connect to host as user

ssh -p port user@host - connect to host on port
port as user

ssh-copy-id user@host - add your key to host for
user to enable a keyed or passwordless login

Searching

grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir

 ${\it command}$ | ${\it grep pattern}$ - search for ${\it pattern}$ in the output of ${\it command}$

locate file - find all instances of file

System Info

date - show the current date and time

cal - show this month's calendar

uptime - show current uptime

w - display who is online

whoami - who you are logged in as

finger *user* - display information about *user*

uname -a - show kernel information

cat /proc/cpuinfo - cpu information

cat /proc/meminfo - memory information

man command - show the manual for command

df - show disk usage

du - show directory space usage

free - show memory and swap usage

whereis *app* - show possible locations of *app* which *app* - show which *app* will be run by default

Compression

tar cf file.tar files - create a tar named file.tar containing files

tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression

tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression

tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz

gzip -d file.gz - decompresses file.gz back to file

Network

ping host - ping host and output results

whois domain - get whois information for domain

| dig domain - get DNS information for domain

dig -x host - reverse lookup host

wget file - download file

wget -c file - continue a stopped download

Installation

Install from source:

./configure

make

make install

dpkg -i *pkg.deb* - install a package (Debian)

rpm -Uvh pkg.rpm - install a package (RPM)

Shortcuts

Ctrl+C - halts the current command

Ctrl+Z - stops the current command, resume with

fg in the foreground or bg in the background

Ctrl+D - log out of current session, similar to exit

Ctrl+W - erases one word in the current line

Ctrl+U - erases the whole line

Ctrl+R - type to bring up a recent command

!! - repeats the last command

exit - log out of current session

* use with extreme caution.

