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*

***command* | grep *pattern*** – search for *pattern* in the output of *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.