

LINUX
Commands

Shell Job Control

- jobs** → List your jobs.
- &** → Run a job in the background.
- ^Z** → Suspend the current (foreground) job.
- suspend** → Suspend a shell.
- fg** → Unsuspend a job; bring it into the foreground.
- bg** → Make a suspended job run in the background.

Basic File Operations

- ls** → List files in a directory.
- cp** → Copy a file.
- mv** → Rename ("move") a file.
- rm** → Delete ("remove") a file.
- ln** → Create links (alternative names) to a file.
- shred** → Completely erase a file when the file is deleted.

Directory Operations

- cd** → Change your current directory.
- pwd** → Print the name of your current directory, i.e., "where you are now" in the filesystem.
- basename** → Print the final part of a file path.
- dirname** → Print a file path without its final part.
- mkdir** → Create (make) a directory.
- rmdir** → Delete (remove) an empty directory.
- rm -r** → Delete a nonempty directory and its contents.

File Viewing

- cat** → View files in their entirety.
- less** → View text files one page at a time.
- head** → View the first lines of a text file.
- tail** → View the last lines of a text file.
- nl** → View text files with their lines numbered.
- strings** → Display text that's embedded in a binary file.
- od** → View data in octal (or other formats).
- xxd** → View data in hexadecimal.
- acoread** → View PDF files.
- gv** → View PostScript or PDF files.
- xdvi** → View TeX DVI files.

File Creation and Editing

- emacs** → Text editor from Free Software Foundation.
- vim** → Text editor, extension of Unix vi.
- soffice** → Office suite for editing Microsoft Word, Excel, and PowerPoint documents.
- abiword** → Edit Microsoft Word documents.
- gnnumeric** → Edit Excel spreadsheets.

File Properties

- stat** → Display attributes of files and directories.
- wc** → Count bytes, words, lines in a file.
- du** → Measure disk usage of files and directories.
- file** → Identify (guess) the type of a file.
- touch** → Change timestamps of files and directories.
- chown** → Change owner of files and directories.
- chgrp** → Change group ownership of files and directories.
- chmod** → Change protection mode of files and directories.
- umask** → Set a default mode for new files and directories.
- chattr** → Change extended attributes of files and directories.
- lsattr** → List extended attributes of files and directories.

File Location

- find** → Locate files in a directory hierarchy.
- xargs** → Process a list of located files (and much more).
- locate** → Create an index of files, and search the index for string.
- which** → Locate executables in your search path (command).
- type** → Locate executables in your search path (bash built-in).
- whereis** → Locate executables, documentation, and source files.

File Text Manipulation

- grep** → Find lines in a file that match a regular expression.
- cut** → Extract columns from a file.
- paste** → Append columns.
- tr** → Translate characters into other characters.
- sort** → Sort lines of text by various criteria.
- uniq** → Locate identical lines in a file.
- tee** → Copy a file and print it on standard output, simultaneously.

File Compression and Packaging

- tar** → Package multiple files into a single file.
- gzip** → Compress files with GNU Zip.
- gunzip** → Uncompress GNU Zip files.
- bzip2** → Compress files in BZip format.
- bunzip2** → Uncompress BZip files.
- bzcat** → Compress/uncompress BZip files via standard input/output.
- compress** → Compress files with traditional Unix compression.
- uncompress** → Uncompress files with traditional Unix compression.
- zcat** → Compress/uncompress file via standard input/output (gzip or compress).
- zip** → Compress files in Windows Zip format.
- unzip** → Uncompress Windows Zip files.
- metamail** → Extract MIME data to files.

File Comparison

- diff** → Line-by-line comparison of two files or directories.
- comm** → Line-by-line comparison of two sorted files.
- cmp** → Byte-by-byte comparison of two files.
- md5sum** → Compute a checksum of the given files (MD5).

Printing

- lpr** → Print a file.
- lpq** → View the print queue.
- lprm** → Remove a print job from the queue.

Spell Checking

- look** → Look up the spelling of a word quickly.
- aspell** → Interactive spelling checker.
- spell** → Batch spelling checker.

Disks and Filesystems

- df** → Display available space on mounted filesystems.
- mount** → Make a disk partition accessible.
- umount** → Unmount a disk partition (make it inaccessible).
- fsck** → Check a disk partition for errors.
- sync** → Flush all disk caches to disk.
- lshtw**
- inxi**
- lsblk**

Backups and Remote Storage

- dump** → Write a disk partition to a backup medium.
- restore** → Restore the results of a dump.
- cdrecord** → Burn a CD, DVD, or Blu-ray disc.
- rsync** → Mirror a set of files onto another device or host.
- mt** → Control a tape drive.

Viewing Processes

- ps** → List process.
- uptime** → View the system load.
- w** → List active processes for all users.
- top** → Monitor resource-intensive processes interactively.
- htop**
- iotop**
- powertop**
- gnome-system-monitor** → Monitor system load and processes graphically.
- xload** → Simple, graphical monitor of system load.
- free** → Display free memory.
- pidof** → Command, which looks up and prints the PID of a process by its name.
- rmon**

check

- ssh**
- munin - monitoring**

Controlling Processes

- kill** → Terminate a process (or send it a signal).
- killall**
- nice** → Invoke a program at a particular priority.
- renice** → Change a process's priority as it runs.
- cpulimit**

Scheduling Jobs

- sleep** → Wait a set number of seconds, doing nothing.
- watch** → Run a program at set intervals.
- at** → Schedule a job for a single, future time.
- crontab** → Schedule jobs for many future times.

Logins, Logouts, and Shutdowns

- shutdown** → Halts or reboots a Linux system.

Users and Their Environment

- logname** → Print your login name.
- whoami** → Print your current, effective username.
- id** → Print the user ID and group membership of a user.
- who** → List logged-in users, long output.
- users** → List logged-in users, short output.
- finger** → Print information about users.
- last** → Determine when someone last logged in.
- printenv** → Print your environment.

User Account Management

- useradd** → Create an account.
- userdel** → Delete an account.
- usermod** → Modify an account.
- passwd** → Change a password.
- chfn** → Change a user's personal information.
- chsh** → Change a user's shell.

Group Management

- groups** → Print the group membership of a user.
- groupadd** → Create a group.
- groupdel** → Delete a group.
- groupmod** → Modify a group.

Host Information

- uname** → Print basic system information.
- hostname** → Print the system's hostname.
- dnsdomainname** → Same as hostname -d.
- domainname** → Same as hostname -y.
- nisdomainname** → Same as hostname -y.
- ypdomainname** → Same as hostname -y.
- ip** → Set and display network interface information.
- ifconfig** → Older command to set and display network interface information.

Host Location

- host** → Look up hostnames, IP addresses, and DNS info.
- whois** → Look up the registrants of Internet domains.
- ping** → Check if a remote host is reachable.
- traceroute** → View the network path to a remote host.
- dig** → <http://kb.mediatemple.net/questions/909/Understanding+the+dig+command>
- dig** → <http://www.cyberciti.biz/faq/linux-unix-dig-command-examples-usage-syntax/>

Network Connections

- ssh** → Securely log into a remote host, or run commands on it.
- telnet** → Log into a remote host (insecure).
- scp** → Securely copy files to/from a remote host (batch).
- sftp** → Securely copy files to/from a remote host (interactive).
- ftp** → Copy files to/from a remote host (interactive, insecure).

Email

- thunderbird** → Graphical mail client.
- evolution** → Graphical mail client.
- mutt** → Text-based mail client.
- mail** → Minimal text-based mail client.
- mailq** → View the outgoing mail queue on your system.

Web Browsing

- firefox** → Full-featured web browser.
- lynx** → Text-only web browser.
- wget** → Download web pages and files.

Usenet News

- slrn** → Usenet newsreader.

Instant Messaging

- gaim** → Instant messaging and IRC client.
- talk** → Linux/Unix chat program.
- write** → Send messages to a terminal.
- mesg** → Prohibit talk and write.
- tty** → Print your terminal device name.

Screen Output

- echo** → Print simple text on standard output.
- printf** → Print formatted text on standard output.
- yes** → Print repeated text on standard output.
- seq** → Print a sequence of numbers on standard output.
- clear** → Clear the screen or window.

Math and Calculations

- xcalc** → Display a graphical calculator.
- expr** → Evaluate simple math on the command line.
- dc** → Text-based calculator.

Dates and Times

- xclock** → Display a graphical clock.
- cal** → Print a calendar.
- date** → Print or set the date and time.
- ntpdate** → Set the system time using a remote timeserver.

Graphics and Screensavers

- eog** → Display graphics files.
- geeqie** → Display graphics files and slideshows.
- ksnapshot** → Take a screenshot (screen capture).
- gimp** → Edit graphics files.
- dia** → Draw structured diagrams.
- gnuplot** → Create graphs and plots.
- xscreensaver** → Run a screensaver.

Audio

- amarok, rhythmbox, xmms** → Audio file players (MP3, WAV, OGG).
- grip** → CD player, ripper, and MP3 encoder.
- cdparanoia** → Rip audio from CDs to WAV files.
- lame** → Convert from WAV to MP3.
- id3tag** → Edit ID3 tags.
- audacity** → Edit audio files.
- k3b** → CD burner with graphical interface.

Video

- mplayer** → Video file playback.
- gxine** → Simple DVD player.
- kino** → Video editor.
- HandBrake** → Video ripper.

Network

- traceroute** → View the network path to a remote host.
- ifconfig** → Older command to set and display network interface information.
- netstat** → Commands
- who** → List logged-in users, long output.
- tcpdump**
- ping** → Check if a remote host is reachable.
- ifup/ifdown**
- nslookup**
- dig**
- mtr** → mtr combines the functionality of the traceroute and ping programs in a single network diagnostic tool.