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| **Linux Cheat Sheet**  ***Ubuntu Commands*** | |
| **System Information** | **Shell Built-in Commands** |
| [*free*](https://linuxsimply.com/free-command-in-linux/)Displays the amount of free and used memory in the system | Sets environment variables that are used by  [*export*](https://linuxsimply.com/export-command-in-linux/)processes started by the shell that exported the variable |

[*ps*](https://linuxsimply.com/ps-command-in-linux/)Displays a snapshot of the current processes [*echo*](https://linuxsimply.com/echo-command-in-linux/)Displays text on the screen or redirects it to a

file or variable

*ps aux*

Displays detailed information about all

processes currently running

[*alias*](https://linuxsimply.com/alias-command-in-linux/)Creates a shortcut or alternate name for a command

[*uptime*](https://linuxsimply.com/uptime-command-in-linux/)Displays the current uptime of the system [*unalias*](https://linuxsimply.com/unalias-command-in-linux/)Removes an alias previously created with the

"alias" command.

*w*

Displays the list of currently logged-in users

[*exit*](https://linuxsimply.com/exit-command-in-linux/)

Closes the current shell or terminal session

[*uname*](https://linuxsimply.com/uname-command-in-linux/)Displays system information

*uname -a*

Displays detailed system information

[*hostname*](https://linuxsimply.com/hostname-command-in-linux/)Displays the name of the current host Provides access to the documentation of

[*clear*](https://linuxsimply.com/clear-command-in-linux/)Clears the terminal screen

[*bash*](https://linuxsimply.com/bash-command-in-linux/)Enables users to interact with Linux Operating System

[*declare*](https://linuxsimply.com/declare-command-in-linux/)Declares variables and specifies their attributes, such as their data type or scope

Executes a script in the current shell

*info*

various installed software packages

[*source*](https://linuxsimply.com/source-command-in-linux/)

environment rather than creating a new

subshell to run the script

*lshw* Lists hardware configuration of the system

[*history*](https://linuxsimply.com/history-command-in-linux/)Displays a list of previously executed commands

*help* Displays information about built-in shell commands

# System Monitoring

[*top*](https://linuxsimply.com/top-command-in-linux/)Displays information about the active processes running on the system

[*htop*](https://linuxsimply.com/htop-command-in-linux/)Shows a list of all the running processes throughout the system

Shows detailed information about system

*man*

Displays the manual page for a specified

command

[tty](https://linuxsimply.com/tty-command-in-linux/)

Reports the file name of the terminal device that is currently used to interact with the shell

[*uptime*](https://linuxsimply.com/uptime-command-in-linux/)

Displays how long the system has been running

and the current system load averages

*sudo -s*

Starts a shell with root privileges

Measures the execution time of a command or

script

[*time*](https://linuxsimply.com/time-command-in-linux/)

Displays information about the active processes

on the system, including their process ID (PID), CPU usage, memory usage, and other details

[*ps*](https://linuxsimply.com/ps-command-in-linux/)

Allows users to run programs with the

security privileges of another user, typically the root user

[*sudo*](https://linuxsimply.com/sudo-command-in-linux/)

**System Administration**

*sudo -s -u -* Starts a shell with the privileges of the

*user* specified user

[*vmstat*](https://linuxsimply.com/vmstat-command-in-linux/)

[*free*](https://linuxsimply.com/free-command-in-linux/)

performance, including memory usage, CPU utilization, and Input/Output (I/O) statistics

Displays the total amount of free and used memory in the system, as well as the buffers and cached memory used by the kernel

*sudo -k* Invalidates the user's cached credentials

[*dmesg*](https://linuxsimply.com/dmesg-command-in-linux/)

Displays the kernel ring buffer messages, which include system boot messages and other kernel- related messages



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*sudo*



*sudo -H*

*nautilus*

Opens the file browser with root privileges

**File Management and Manipulation**

Displays information about a user, including

their login name, full name, home directory, login shell, and the time they last logged in

[*finger*](https://linuxsimply.com/finger-command-in-linux/)

*sudo visudo* Opens the sudoers file for editing

**Linux Cheat Sheet**

***Ubuntu Commands***

*sudo* Restarts the GDM (GNOME Display Manager)

*/etc/init.d/g* service

*dm restart*

*/etc/init.d/k dm restart*

[*sync*](https://linuxsimply.com/sync-command-in-linux/)

Forces all file system changes to be written to

disk

[*install*](https://linuxsimply.com/install-command-in-linux/)

Installs one or more packages on a Linux

system using a package manager

**Compression and Archiving**

Compares two files line by line and shows the

differences between them

[*diff*](https://linuxsimply.com/diff-command-in-linux/)

*ls -a* Lists all files in a directory, including hidden files

[*passwd*](https://linuxsimply.com/passwd-command-in-linux/)Allows users to change their password

Restarts the KDM (KDE Display Manager) service

[*ls*](https://linuxsimply.com/ls-command-in-linux/)Lists files in a directory

*ls -al*

Lists all files in a directory, including hidden

files, with detailed information

*ls -R* Lists files in a directory and all of its subdirectories

[*shutdown*](https://linuxsimply.com/shutdown-command-in-linux/)Shuts down the system in a safe way

[*reboot*](https://linuxsimply.com/reboot-command-in-linux/)Reboots the system

[*touch*](https://linuxsimply.com/touch-command-in-linux/)Modifies timestamps of a file or creates an empty file if it doesn't exist

[*setstatus*](https://linuxsimply.com/sestatus-command-in-linux/)Displays the status of the SELinux security system

[*zip*](https://linuxsimply.com/zip-command-in-linux/)Archives files and directories into a compressed zip archive format

[*service*](https://linuxsimply.com/service-command-in-linux/)

Controls system services, such as starting,

stopping, and restarting them

[*env*](https://linuxsimply.com/env-command-in-linux/)

Displays the current environment variables or

sets a new environment variable

[*getent*](https://linuxsimply.com/getent-command-in-linux/)

Retrieves entries from databases

[*bzip2*](https://linuxsimply.com/bzip2-command-in-linux/)

Compresses files using the Burrows-Wheeler

block sorting text compression algorithm and Huffman coding

Compresses files using the Lempel-Ziv

algorithm and Huffman coding

[*gzip*](https://linuxsimply.com/gzip-command-in-linux/)

Extract the contents of a zip archive file

[*unzip*](https://linuxsimply.com/unzip-command-in-linux/)

[*jobs*](https://linuxsimply.com/jobs-command-in-linux/)Displays a list of jobs running in the

background of a shell

Changes the permissions of file and

determines who can read, write, or execute a file

[*chmod*](https://linuxsimply.com/chmod-command-in-linux/)

**Permission Management**

[*chown*](https://linuxsimply.com/chown-command-in-linux/)Changes the owner and/or group of a file or directory

[*gunzip*](https://linuxsimply.com/gunzip-command-in-linux/)Decompresses files that have been compressed

using gzip

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| [*tar*](https://linuxsimply.com/tar-command-in-linux/)Creates and manipulates archive files |
| **Package Management** |
| [*apt-get*](https://linuxsimply.com/apt-get-command-in-linux/#Example_1_Update_The_Package_Repository_Using_the_apt-get_Command_in_Linux)Updates the list of available packages  [*update*](https://linuxsimply.com/apt-get-command-in-linux/#Example_1_Update_The_Package_Repository_Using_the_apt-get_Command_in_Linux) |
| *apt-get* Upgrades all installed packages to their latest  *upgrade* version |

*apt-get dist-* Upgrades all installed packages to their latest

*upgrade* version

*apt-get install pkg apt-get purge pkg*

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| **File and Directory Management** | |
| [*mkdir*](https://linuxsimply.com/mkdir-command-in-linux/) | Creates a new directory |
| [*pwd*](https://linuxsimply.com/pwd-command-in-linux/) | Prints the current working directory |
| [*cd*](https://linuxsimply.com/cd-command-in-linux/) | Changes the current working directory to a  specified directory |

Installs a package

Completely removes a package, including its configuration files

[*patch*](https://linuxsimply.com/patch-command-in-linux/)Applies a patch file to an original file, making the changes specified in the patch file



**Linux Cheat Sheet**

***Ubuntu Commands***

*cd ..*

Changes the current working directory to the *apt-get -f* Attempts to fix any broken dependencies and

parent directory of the current directory *install* install missing packages

[*dpkg -l*](https://linuxsimply.com/dpkg-in-linux/#How_to_List_Installed_Packages_Using_DPKG)Lists all installed packages

[*rm [file]*](https://linuxsimply.com/rm-command-in-linux/)Removes a file

*rm -r [dir]* Removes a directory and its contents

*dpkg - - configure -a*

*dpkg -i*

*pkg.deb*

Installs a package from a .deb file

Configures all packages that have been unpacked but not yet configured

*rm -f [file]* Forces the removal of a file

[*locate*](https://linuxsimply.com/locate-command-in-linux/)

Searches for files in a database that contains

a cached record of all files on the system

Compares two files byte-by-byte and reports

the first byte and line that differs between them

[*cmp*](https://linuxsimply.com/cmp-command-in-linux/)

Displays the disk usage statistics for the file

system

[*df*](https://linuxsimply.com/df-command-in-linux/)

**Disk Management**

*autoremove* dependencies and are no longer needed

Removes any packages that were installed as

*apt-get*

[*du*](https://linuxsimply.com/du-command-in-linux/)Estimates the file space usage

*rm -rf [dir]* Forces the removal of a directory and its contents

*snap* Installs and manage applications on systems

[*comm*](https://linuxsimply.com/comm-command-in-linux/)

[*stat*](https://linuxsimply.com/stat-command-in-linux/)

Compares two sorted files line by line and displays the lines that are common or unique to each file

Displays detailed information about a file, including its size, permissions, owner, and modification time

*df -h* Displays the disk usage statistics for the file system in human-readable format

Allows users to create, delete, and modify

[*cp*](https://linuxsimply.com/cp-command-in-linux/)Copies files or directories

[*lsof*](https://linuxsimply.com/lsof-command-in-linux/)Lists all open files and the processes that opened them

[*shred*](https://linuxsimply.com/shred-command-in-linux/)

Securely deletes files by overwriting them

multiple times with random data

[*chgrp*](https://linuxsimply.com/chgrp-command-in-linux/)

Changes the group ownership of files and

directories

*fdisk*

partitions on hard drives, flash drives, and other storage devices

[*file*](https://linuxsimply.com/file-command-in-linux/)Determines the type of a file by examining its contents

[*mount*](https://linuxsimply.com/mount-command-in-linux/)

Mounts a file system, making it accessible at a

specified mount point in the directory tree

[*mv*](https://linuxsimply.com/mv-command-in-linux/)

Moves or renames files or directories

Displays and manipulates network interfaces

and routing tables

[*ip*](https://linuxsimply.com/ip-command-in-linux/)

**Network Management**

Counts the number of lines, words, and

characters in a text file

[*wc*](https://linuxsimply.com/wc-command-in-linux/)

**Text Processing**

Creates a new ext2/ext3/ext4 file system on a

specified device

[*mke2fs*](https://linuxsimply.com/mke2fs-command-in-linux/)

[*fsck*](https://linuxsimply.com/fsck-command-in-linux/)Checks and repairs a file system for errors

[*dd*](https://linuxsimply.com/dd-command-in-linux/)Copies and converts data between files, partitions, and devices at the block level

[*mkfs*](https://linuxsimply.com/mkfs-command-in-linux/)

Creates a new file system on a specified device and supports various file system types such as ext2, ext3, ext4, NTFS, and FAT32

[*ping*](https://linuxsimply.com/ping-command-in-linux/)Sends a packet to a host and measures the response time

[*ssh*](https://linuxsimply.com/ssh-command-in-linux/)Remotely logs into a server or other device over a network

[*sort*](https://linuxsimply.com/sort-command-in-linux/)Sorts the lines of a text file in alphabetical or numerical order

[*nano*](https://linuxsimply.com/nano-command-in-linux/)Allows users to create and edit text files



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| **Linux Cheat Sheet** |  |
| ***Ubuntu Commands*** |  |
| [*scp*](https://linuxsimply.com/scp-command-in-linux/)Transfers files between hosts on a network | [*jed*](https://linuxsimply.com/jed-command-in-linux/)Opens up a powerful text editor that supports multiple modes and macros |
| **User Management** | Opens up a powerful text editor that uses  [*vi*](https://linuxsimply.com/vi-command-in-linux/)modal editing to allow for quick and efficient editing |
| Creates a new user account, including setting  [*useradd*](https://linuxsimply.com/useradd-command-in-linux/)up a home directory and assigning a  password | [*paste*](https://linuxsimply.com/paste-command-in-linux/)Merges lines from multiple files and writes them to the standard output |
| [*adduser*](https://linuxsimply.com/adduser-command-in-linux/)Creates a new user account interactively or using command-line options | Searches a text file for lines that match a  [*egrep*](https://linuxsimply.com/egrep-command-in-linux/)specified pattern using extended regular expressions |
| [*who*](https://linuxsimply.com/who-command-in-linux/)Displays information about the users who are currently logged in | [*cut*](https://linuxsimply.com/cut-command-in-linux/)Extracts specific columns or fields from a text file |
| [*whoami*](https://linuxsimply.com/whoami-command-in-linux/)Displays the current username of the user who is logged in | [*whereis*](https://linuxsimply.com/whereis-command-in-linux/)Locates the binary, source, and manual page files for a command |
| [*id*](https://linuxsimply.com/id-command-in-linux/)Dissplays the user and group IDs of a specified user or the current user | [*whatis*](https://linuxsimply.com/whatis-command-in-linux/)Displays a brief description of a command |
| Modifies a user account, such as changing the  [*usermod*](https://linuxsimply.com/usermod-command-in-linux/)user's login name, password, home directory, or group membership | [*which*](https://linuxsimply.com/which-command-in-linux/)Displays the location of a command or script in the system's PATH |
| [*users*](https://linuxsimply.com/users-command-in-linux/)Displays a list of usernames of users who are currently logged in | [*at*](https://linuxsimply.com/at-command-in-linux/)Schedules a one-time command or script to run at a specified time |
| Switches the current user to another user  [*su*](https://linuxsimply.com/su-command-in-linux/)account, usually with elevated privileges, by prompting for the target user's password | [*tee*](https://linuxsimply.com/tee-command-in-linux/)Redirects the output of a command to a file and to the screen |
| [*chage*](https://linuxsimply.com/chage-command-in-linux/)Modifies the password expiry information for a user | [*date*](https://linuxsimply.com/date-command-in-linux/)Displays the current date and time |
| [*userdel*](https://linuxsimply.com/userdel-command-in-linux/)Deletes a user account and all associated files and directories | Opens up a more advanced version of the vi  [*vim*](https://linuxsimply.com/vim-command-in-linux/)editor with additional features such as syntax  highlighting and plugins |
| [*addgroup*](https://linuxsimply.com/addgroup-command-in-linux/)Creates a new user group | [*split*](https://linuxsimply.com/split-command-in-linux/)Splits a text file into smaller files based on the number of lines or bytes |
| [*groupadd*](https://linuxsimply.com/groupadd-command-in-linux/)Creates a new user group | [*sed*](https://linuxsimply.com/sed-command-in-linux/)A stream editor that performs editing operations on a text stream or file |
| [*groupmod*](https://linuxsimply.com/groupmod-command-in-linux/)Modifies the properties of an existing user group | [*tr*](https://linuxsimply.com/tr-command-in-linux/)Translates or deletes characters in a text stream or file |
| **Network Configuration & Firewall**  **Management** | [*uniq*](https://linuxsimply.com/uniq-command-in-linux/)Filters out duplicate lines from a sorted text file |
| [*wget*](https://linuxsimply.com/wget-command-in-linux/)Downloads files from the internet | [*cat*](https://linuxsimply.com/cat-command-in-linux/)Displays the contents of a file on the terminal |
| [*ifconfig*](https://linuxsimply.com/ifconfig-command-in-linux/)Shows network interface configuration | [*head*](https://linuxsimply.com/head-command-in-linux/)Displays the first ten lines of a file on the terminal |
| *iwconfig* Shows wireless network interface  configuration | [*tail*](https://linuxsimply.com/tail-command-in-linux/)Displays the last ten lines of a file |

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| **Linux Cheat Sheet** |
| ***Ubuntu Commands*** |

[*grep*](https://linuxsimply.com/grep-command-in-linux/)Searches for a specific pattern or text in a file or output



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| *sudo iwlist*  *scan* | Scans for available wireless networks |
| *sudo systemctl restart networking.s*  *ervice* | Restarts the networking service |
| *ifup interface* | Brings up a network interface |
| *ifdown*  *interface* | Brings down a network interface |
| [*firewall -cmd*](https://linuxsimply.com/firewall-cmd-command-in-linux/) | Allows users to configure and manage the  firewall settings |
| [*ufw enable*](https://linuxsimply.com/ufw-command-in-linux/#Example_5_Activate_Deactivate_the_Firewall_Using_the_ufw_Command_in_Linux) | Enables the firewall |
| *ufw disable* | Disables the firewall |
| *ufw default*  *allow* | Sets the default policy to allow traffic |
| *ufw default deny* | Sets the default policy to deny traffic |
| *ufw status* | Shows the status of the firewall |
| *ufw allow*  *port* | Opens a port |
| *ufw deny*  *port* | Closes a port |
| *ufw deny*  *from ip* | Blocks traffic from a specific IP address |

[*less*](https://linuxsimply.com/less-command-in-linux/)

Displays the contents of a file one page at a

time, allowing scrolling back and forth

[*more*](https://linuxsimply.com/more-command-in-linux/)

*lsblk*

Display the contents of a text file one screen at

a time allowing user to scroll up and down through the file, search for specific text, and navigate to specific lines

# Miscellaneous

Lists information about all available or specified block devices and can also display the relationship between the different devices, such as partitions and logical volumes

[*enable*](https://linuxsimply.com/enable-command-in-linux/)Enables or disables a service at startup or a specific hardware device or driver

[*bc*](https://linuxsimply.com/bc-command-in-linux/)

Command-line calculator that allows for

floating-point arithmetic and advanced mathematical functions

[*cron*](https://linuxsimply.com/cron-command-in-linux/)Automates tasks to run at specified times or intervals

[*crontab*](https://linuxsimply.com/crontab-command-in-linux/)

Schedules periodic commands or scripts to run

at specified intervals

[*ncal*](https://linuxsimply.com/ncal-command-in-linux/)Displays a calendar for a given month or year

Opens terminal in Ubuntu

**Ubuntu Terminal Shortcuts**

[*neofetch*](https://linuxsimply.com/neofetch-command-in-linux/)

Displays system information and an ASCII art

logo of the operating system

[*tree*](https://linuxsimply.com/tree-command-in-linux/)Displays a directory tree structure in a hierarchical format

CTRL+ALT+T

CTRL+A Places the cursor at the start of the active line

CTRL+E

Places the cursor at the end of the active line.

CTRL+U Removes the entire active line

CTRL+K

Removes the command from the cursor to the right

CTRL+W Removes the word preceding the cursor

CTRL+R

Performs a history search for commands that match the user's input

CTRL+C Stop the active process

CTRL+ D

Closes the current terminal

CTRL+Z

Sends the signal SIGSTOP to temporarily halt the active process

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**Linux Cheat Sheet**

***Ubuntu Commands***

CTRL+L

**Ubuntu Terminal Shortcuts**

Clears terminal display

CTRL+Q Resumes suspended commands

CTRL+S

Halts command output to the screen

CTRL+Z Halts the current command and places it in the background

CTRL+G

Exits the history search mode

CTRL+J Completes the history search at the current command line

*CTRL+O*

Executes the command found in the reverse search

*CTRL+N / DOWN ARROW* Displays the following command line

*CTRL+P / UP ARROW*

Displays the preceding command line

*CTRL+ \_* Undo the last action

*ALT+F*

Goes forward one word

*ALT+B* Goes back one word

*ALT+P*

Searches the history forward from the current line

*CTRL+SHIFT+T* Opens a new tab on the currently active terminal

*CTRL+SHIFT+W*

Closes the active tab

*CTRL+SHIFT+C* Copies the highlighted characters to the clipboard

*CTRL+SHIFT+V or SHIFT+INSERT*

Pastes contents of the clipboard to the active line

*Up/Down Arrow keys* Allows to quickly execute previous commands multiple times

*TAB*

Completes the typing command

*CTRL+B / LEFT ARROW* Moves cursor position one character backward

*CTRL+F / RIGHT ARROW*

Moves cursor position one character forward

*CTRL+XX*

Switches between the current cursor position and the start

line

*CTRL+]+A*

Moves the cursor forward to next character of A

*ALT+CTRL+]+A* Backs the cursor to the preceding character of A

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