

Linux Commands Reference Chart

Category	Command	Description
File System & Navigation	cd <directory>	Change to a specified directory.
	ls	List files and directories in the current directory.
	pwd	Print the current working directory.
	mkdir <dir_name>	Create a new directory.
	rmdir <dir_name>	Remove an empty directory.
	rm -rf <file/dir>	Remove files or directories forcefully (be cautious!).
	cp <source> <destination>	Copy files or directories.
	mv <source> <destination>	Move or rename files/directories.
File Viewing & Editing	cat <file>	Display contents of a file.
	less <file>	View the contents of a file page-by-page (use arrow keys to scroll).
	nano <file>	Open a file for editing using Nano text editor.
	vim <file>	Open a file for editing using Vim text editor.
	head <file>	View the first 10 lines of a file (can use -n for specific lines).
	tail <file>	View the last 10 lines of a file (can use -n for specific lines).
Permissions	grep <pattern> <file>	Search for a pattern in a file.
	chmod <permissions> <file>	Change the permissions of a file or directory (e.g., chmod 755 file.sh).
	chown <user>:<group> <file>	Change the owner and/or group of a file.
	sudo <command>	Run a command with superuser (root) privileges.
	umask	Set default file permissions for newly created files.
Networking	ping <host>	Check network connectivity to a host.

	netstat	Display network connections, routing tables, and interface statistics.
	ss	Socket statistics (more advanced than netstat).
	ifconfig / ip a	Show network interfaces and their configuration.
	curl <url>	Transfer data from or to a server (works for HTTP, FTP, etc.).
	wget <url>	Download files from a URL.
System Monitoring	top	Display real-time system processes and resource usage.
	htop	Interactive, enhanced version of top (installable via apt install htop).
	ps aux	Show all currently running processes on the system.
	df -h	Display disk space usage of filesystems in a human-readable format.
	du -sh <dir>	Show the disk usage of a directory.
	free -h	Display system memory usage in a human-readable format.
Disk & File System	fdisk -l	List partition tables for storage devices.
	mount <device> <mount_point>	Mount a storage device to a directory.
	umount <mount_point>	Unmount a storage device.
	fsck <device>	Check and repair a filesystem.
Process Management	kill <pid>	Terminate a process by its process ID.
	killall <process_name>	Terminate all instances of a process by name.
	bg	Move a job to the background.
	fg	Bring a job to the foreground.
	nohup <command>	Run a command immune to hangups (useful for long-running processes).
Archiving & Compression	tar -cvf <archive.tar> <dir>	Create a .tar archive from a directory.

	<code>tar -xvf <archive.tar></code>	Extract a .tar archive.
	<code>gzip <file></code>	Compress a file using gzip (creates .gz file).
	<code>gunzip <file.gz></code>	Decompress a .gz file.
	<code>zip <file.zip> <file1> <file2></code>	Create a zip archive.
	<code>unzip <file.zip></code>	Extract files from a zip archive.
System Updates	<code>apt-get update</code>	Update package lists for Ubuntu/Debian-based systems.
	<code>apt-get upgrade</code>	Upgrade installed packages for Ubuntu/Debian-based systems.
	<code>yum update</code>	Update packages for RHEL/CentOS-based systems.
	<code>dnf upgrade</code>	Upgrade packages for Fedora-based systems.
System Info	<code>uname -a</code>	Display detailed system information (kernel version, architecture, etc.).
	<code>uptime</code>	Display the system uptime and load averages.
	<code>lscpu</code>	Show information about the CPU architecture.
	<code>lsblk</code>	List information about all available block devices (disks).
	<code>free -h</code>	Display memory usage in a human-readable format.
Search & Find	<code>find <path> -name <filename></code>	Search for files by name.
	<code>locate <filename></code>	Locate a file on the system using a pre-built index (faster than find).
	<code>which <command></code>	Find the location of an executable command.
Text Processing	<code>awk '{print \$1}' <file></code>	Process and print specific columns from a file.
	<code>sed 's/old/new/g' <file></code>	Stream editor to replace text in a file.
	<code>cut -d' ' -f1 <file></code>	Extract specific fields from a file.
Package Management	<code>dpkg -l</code>	List installed packages (Debian/Ubuntu).
	<code>rpm -qa</code>	List installed packages (RedHat/CentOS).
	<code>apt-get install <package></code>	Install a package (Ubuntu/Debian).
	<code>yum install <package></code>	Install a package (CentOS/RHEL).