50 Essential Linux Commands – Summary Guide

This document contains simplified descriptions and examples of 50 common Linux commands.

ls

Lists files and directories in the current directory.

Example:
ls -l

cd

Changes the current directory.

Example:
cd /home/user

pwd

Displays the current working directory.

Example:
pwd

mkdir

Creates a new directory.

Example:
mkdir new_folder

rmdir

Removes an empty directory.

Example:
rmdir old_folder

rm

Removes files or directories.

Example:
rm file.txt
rm -r folder

touch

Creates an empty file or updates file timestamp.

Example:
touch notes.txt

cp

Copies files or directories.

Example:
cp file.txt backup.txt
cp -r dir1 dir2

mv

Moves or renames files or directories.

Example:
mv oldname.txt newname.txt

cat

Displays file content.

Example:
cat file.txt

nano

Opens a text editor in terminal.

Example:
nano file.txt

vim

Powerful command-line text editor.

Example:
vim file.txt

head

Displays first lines of a file.

Example:
head file.txt

tail

Displays last lines of a file.

Example:
tail file.txt

chmod
Changes file permissions.

Example:
chmod 755 script.sh

chown
Changes file owner and group.

Example:
chown user:user file

sudo
Runs command as superuser.

Example:
sudo apt update

apt
Package manager for Debian systems.

Example:
sudo apt install git

yum
Package manager for RHEL systems.

Example:
sudo yum install git

man
Shows manual/help for command.

Example:
man ls

history
Shows previously executed commands.

Example:
history

clear
Clears terminal screen.

Example:
clear

df

Shows disk space usage.

Example:
df -h

du

Shows directory/file size.

Example:
du -sh *

ps

Shows running processes.

Example:
ps aux

top

Displays active system processes.

Example:
top

htop

Interactive process viewer (if installed).

Example:
htop

kill

Terminates a process by PID.

Example:
kill 1234

ping

Checks network connectivity.

Example:
ping google.com

wget
Downloads files from the internet.

Example:
wget https://example.com/file.zip

curl
Transfers data from URLs.

Example:
curl https://api.github.com

ssh
Connects to remote server via SSH.

Example:
ssh user@server-ip

scp
Securely copies files to/from remote system.

Example:
scp file.txt user@server:/path

mount
Mounts a filesystem.

Example:
sudo mount /dev/sdb1 /mnt

umount
Unmounts a filesystem.

Example:
sudo umount /mnt

echo
Prints text to screen.

Example:
echo "Hello World"

whoami
Shows current logged user.

Example:
whoami

uname

Shows system information.

Example:
uname -a

grep

Searches text in files.

Example:
grep 'main' file.c

find

Finds files/directories.

Example:
find / -name file.txt

tar

Archives/unarchives files.

Example:
tar -xvf file.tar

zip

Creates compressed zip files.

Example:
zip archive.zip file.txt

unzip

Extracts zip files.

Example:
unzip archive.zip

df

Shows disk free space.

Example:
df -h

free
Displays memory usage.

Example:
free -m

locate
Finds files quickly using database.

Example:
locate test.txt

service
Controls services.

Example:
sudo service nginx restart

systemctl
Controls system services (modern).

Example:
sudo systemctl restart ssh

alias
Creates command shortcuts.

Example:
alias ll='ls -la'

reboot
Reboots the system.

Example:
sudo reboot

shutdown
Shuts down the system.

Example:
sudo shutdown now