

# Linux Command Cheat Sheet

A comprehensive reference for commonly used Linux/Unix commands, organized by category for quick access. Perfect for developers, system administrators, and Linux enthusiasts!

## File Commands

Command	Description
ls	List directory contents.
ls -al	Formatted listing with hidden files.
cd dir	Change directory to dir.
cd	Change to the home directory.
pwd	Show the current directory.
mkdir dir	Create a new directory named dir.
rm file	Delete a file.
rm -r dir	Recursively delete a directory and its contents.
rm -f file	Forcefully remove a file without confirmation.
rm -rf dir	Forcefully remove a directory and its contents (Use with caution).
cp file1 file2	Copy file1 to file2.
cp -r dir1 dir2	Recursively copy dir1 to dir2. Creates dir2 if it doesn't exist.
mv file1 file2	Rename or move file1 to file2. If file2 is a directory, moves file1 into it.
ln -s file link	Create a symbolic link named link to file.
touch file	Create an empty file or update the timestamp of an existing file.
cat > file	Redirect standard input into file.
more file	Display the contents of file page by page.
head file	Output the first 10 lines of file.
tail file	Output the last 10 lines of file.
tail -f file	Monitor the contents of file as it grows, starting with the last 10 lines.

## Process Management

Command	Description
ps	Display your currently active processes.
top	Display all running processes in real-time.
kill pid	Terminate the process with ID pid.
killall proc	Kill all processes named proc.
bg	List stopped or background jobs; resume a stopped job in the background.
fg	Bring the most recent job to the foreground.
fg n	Bring job number n to the foreground.

## File Permissions

Command	Description
chmod octal file	<p>Change the permissions of file to octal. Permissions are calculated as:</p> <ul style="list-style-type: none"> <li>• 4 – Read (r)</li> <li>• 2 – Write (w)</li> <li>• 1 – Execute (x)</li> </ul> <p>Examples:</p> <p>chmod 777 – Read, write, execute for all.</p> <p>chmod 755 – Read/write/execute for owner, read/execute for group and others.</p>

## SSH (Secure Shell)

Command	Description
ssh user@host	Connect to host as user.
ssh -p port user@host	Connect to host on a specific port as user.
ssh-copy-id user@host	Add your SSH key to host for passwordless login.

## Searching

Command	Description
grep pattern files	Search for pattern in files.
grep -r pattern dir	Recursively search for pattern in dir.
command   grep pattern	Search for pattern in the output of command.
locate file	Find all instances of file using the file database.

## System Information

Command	Description
date	Show the current date and time.
cal	Show this month's calendar.
uptime	Show the system's current uptime.
w	Display who is online.
whoami	Display the username you're logged in as.
finger user	Display information about user.
uname -a	Show kernel information.
cat /proc/cpuinfo	Display CPU information.
cat /proc/meminfo	Display 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 version of app will be run by default.

## Compression

Command	Description
tar cf file.tar files	Create a tar archive named file.tar containing files.
tar xf file.tar	Extract files from file.tar.
tar czf file.tar.gz files	Create a tar archive with Gzip compression.
tar xzf file.tar.gz	Extract a tar archive compressed with Gzip.
tar cjf file.tar.bz2 files	Create a tar archive with Bzip2 compression.
tar xjf file.tar.bz2	Extract a tar archive compressed with Bzip2.
gzip file	Compress file and rename it to file.gz.
gzip -d file.gz	Decompress file.gz back to file.

## Network

Command	Description

ping host	Ping host and display results.
whois domain	Get WHOIS information for domain.
dig domain	Get DNS information for domain.
dig -x host	Perform a reverse DNS lookup for host.
wget file	Download file from the web.
wget -c file	Continue a previously stopped download.

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## ▮ Installation

### Install from Source:

```
```bash ./configure make make install
```