

# Linux Commands

## Directory



<b>cd</b> navigate through files and directories	<b>cd..</b> move one directory up	<b>cd-</b> move to your previous directory	<b>pwd</b> show the directory currently working in	<b>rmdir</b> delete a directory and its contents
<b>mkdir [directory]</b> create a new directory		<b>scp [file_name.txt] [server/tmp]</b> securely copy a specific file to a server directory		
<b>rsync -a [./your/directory] [./backup/]</b> synchronize the contents of a specific directory with a backup directory				

## Disk Usage



<b>df</b> get a report on the system's disk space usage	<b>du</b> check the disk space usage of a file or directory	<b>fdisk -l</b> show disk partitions, sizes, and types	<b>du -ah</b> show disk usage for all files and directory
<b>du -sh</b> show disk usage of the current directory	<b>findmnt</b> show target mount point for all filesystems		

## File Commands



<b>ls</b> list files in a directory	<b>ls -R</b> list all files in the sub-directories	<b>ls -a</b> list all hidden files	<b>ls -al</b> list all files and directories with detailed information like permissions, size, owner, etc
<b>cat</b> list the contents of a file on standard output	<b>cat &gt; filename</b> creates a new file	<b>diff</b> compare the contents of two files line by line	<b>tar</b> archive multiple files into a common Linux file format
<b>cat filename 1 filename2&gt;filename3</b> joins two files (1 and 2) and stores the output in a new file (3)		<b>tar xf [compressed_file. tar]</b> extract archived file	
<b>cat filename   tr a-z A-Z &gt;output.txt</b> convert a file to upper or lower case		<b>tar czf [compressed_file.tar.gz]</b> create a gzip-compressed tar file	
<b>tar cf [compressed_file. tar] [file_name]</b> create an archived file from a file		<b>gzip [file_name]</b> compress a file with the .gz extension	
<b>chmod</b> change the read, write, and execute permissions of files and directories	<b>chown</b> change or transfer file ownership		<b>rm [file_name]</b> remove a file



## File Commands



<b>rm -r [directory_name]</b> remove a directory recursively	<b>rm -rf [directory_name]</b> remove a directory recursively without requiring confirmation	<b>wc</b> print the number of words, lines, and bytes in a file
<b>cp</b> copy files from the current directory to a different directory	<b>cp [file_name1] [file_name2]</b> copy the contents of the first file to the second file	<b>wget</b> download files from the internet
<b>cp -r [directory_name1] [directory_name2]</b> recursively copy the contents of the first directory into the second directory	<b>mv</b> to move or rename files	
<b>mv [file_name1] [file_name2]</b> rename file_name1 to file_name2	<b>ln -s /path/to/[file_name] [link_name]</b> create a symbolic link to a file	
<b>touch [file_name]</b> create a new file	<b>more [file_name]</b> show the contents of a file	<b>head [file_name]</b> show the first 10 lines of a file
<b>tail [file_name]</b> show the last 10 lines of a file	<b>gpg -c [file_name]</b> encrypt a file	<b>gpg [file_name.gpg]</b> decrypt a file
<b>sudo</b> perform tasks that need administrative or root permissions	<b>locate</b> to search for a file or directory	<b>find</b> to locate files within a directory
<b>jobs</b> display current jobs		
<b>kill</b> terminate an unresponsive program	<b>history</b> review the commands you entered before	<b>uname</b> print information about your Linux system
<b>man</b> show manual instructions of Linux commands		
<b>zip</b> compress files into a zip archive	<b>unzip</b> extract zipped files from a zip archive	<b>top</b> monitor system resource usage
<b>ps</b> show a snapshot of active processes		
<b>echo</b> move data into a file	<b>hostname</b> know the name of your host/network	<b>ping</b> check connectivity to a server

## Network



<b>ip addr show</b> show IP addresses and network interfaces	<b>ifconfig</b> show IP addresses of all network interfaces	<b>netstat -pnltu</b> show active ports	<b>netstat -nutlp</b> show more information about a domain
<b>whois [domain]</b> show more information about a domain	<b>dig [domain]</b> show DNS information about a domain	<b>host [domain]</b> do an IP lookup for a domain	

## Linux Commands

### System

#### **uname -r**

show system information

#### **last reboot**

show system reboot history

#### **timedatectl**

query and change the system clock

#### **date**

show current time and date

#### **hostname -i**

show the IP address of the system

#### **uptime**

show how long the system has been running, including load average

### User

#### **id**

show details of the user

#### **passwd**

add a password to a user's account

#### **useradd**

create a new user

#### **last**

show last logins

#### **userdel [user\_name]**

remove a user

## Keyboard Shortcuts

#### **Ctrl + E**

move to the end of the line

#### **Ctrl + A**

move to the beginning of the line

#### **Ctrl + C**

stop and terminate the current command

#### **Ctrl + W**

cut one word before the cursor and add it to the clipboard

#### **TAB**

autofill typing

#### **Ctrl + Q**

unfreeze the terminal

#### **Ctrl + Z**

pause the command

#### **Ctrl + S**

freeze the terminal

#### **Ctrl + U**

cut part of the line before the cursor and add it to the clipboard

#### **Ctrl + K**

cut part of the line after the cursor and add it to the clipboard

#### **Ctrl + Y**

paste from clipboard

#### **Ctrl + R**

recall the last command that matches the provided characters

#### **Ctrl + G**

exit command history without running a command

#### **Ctrl + O**

run the previously recalled command

#### **!!**

repeat the last command

#### **exit**

log out of the current session