

# Basic Linux Commands

Command	Description
<code>hostnamectl</code>	Get system information including, operating system, kernel, and release version
<code>date</code>	Display the current system date and time
<code>hostname</code>	Display the hostname of the system
<code>ifconfig</code>	Display the IP and Mac Address of the system
<code>w</code>	Display currently logged in users in the system
<code>top</code>	Display all running processes
<code>ls</code>	List all files and directories in the current working directory
<code>ls -al</code>	List all files and directories including, hidden files and other information like permissions, size, and owner
<code>cd</code>	Change the directory to the home directory
<code>cd ..</code>	Change the directory to one level up
<code>cat filename</code>	Display the content of the file
<code>cat file1 file2 &gt; file3</code>	Combine two files named file1 and file2 and store the output in a new file file3
<code>tail filename</code>	Display the last 10 lines of a file
<code>head filename</code>	Display the first 10 lines of a file
<code>mv oldfile newfile</code>	Rename a file
<code>rm filename</code>	Delete a file
<code>mkdir dirname</code>	Create a directory

Command	Description
<code>rm -rf dirname</code>	Remove a directory
<code>history</code>	Print a history list of all commands
<code>clear</code>	Clear the terminal
<code>shutdown -h now</code>	Shut down the system
<code>reboot</code>	Restart the system
<code>ping host-ip</code>	Check connectivity between two hosts

## File Permission Commands

Command	Description
<code>ls -l filename</code>	Check the current permission of any file
<code>chmod 777 filename</code>	Assign full(read, write, and execute) permission to everyone
<code>chmod -R 777 dirname</code>	Assign full permission to the directory and all sub-directories
<code>chmod 766 filename</code>	Assign full permission to the owner, and read and write permission to group and others
<code>chmod -x filename</code>	Remove the execution permission of any file
<code>chown username filename</code>	Change the ownership of a file
<code>chown user:group filename</code>	Change the owner and group ownership of a file
<code>chown -R user:group dirname</code>	Change the owner and group ownership of the directory and all sub-directories

# User and Group Management Commands

Command	Description
<code>w</code>	Display all login users
<code>useradd username</code>	Add a new user account
<code>userdel -r username</code>	Delete a user account
<code>usermod [option] username</code>	Change the user account information including, group, home directory, shell, expiration date
<code>usermod -aG groupname username</code>	Add a user to a specific group
<code>groupadd groupname</code>	Create a new group
<code>groupdel groupname</code>	Remove a group
<code>last</code>	Display information of the last login user
<code>id</code>	Display UID and GID of the current user

# Process Management Commands

When you run any application in Linux. The application will get a process ID or PID. Process Management helps you to monitor and manage your application.

Command	Description
<code>ps</code>	Display all active processes
<code>ps -ef   grep processname</code>	Display information of specific process
<code>top</code>	Manage and display all processes in realtime
<code>pstree</code>	Display processes in the tree-like diagram

Command	Description
<code>lsdf</code>	List all files opened by running processes
<code>kill pid</code>	Kill a specific process using process ID
<code>killall processname</code>	Kill all processes by name
<code>bg</code>	Display stopped or background jobs
<code>pidof processname</code>	Get the PID of any process

## Disk Management Commands

<code>mount /dev/sda1 /mnt</code>	Mount any partition to any directory
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## Package Management Command

In this section, we will show a list of all commands to install, remove and manage packages in Linux.

Command	Description
<code>apt-get install packagename</code>	Install the package on Debian based distributions
<code>apt-get remove packagename</code>	Remove a package on Debian based distributions
<code>dpkg -l   grep -i installed</code>	Get a list of all packages on Debian based distributions
<code>dpkg -i packagename.deb</code>	Install .deb package
<code>apt-get update</code>	Update the repository on Debian based distributions
<code>apt-get upgrade packagename</code>	Upgrade a specific package on Debian based distributions

Command	Description
<code>apt-get autoremove</code>	Remove all unwanted packages on Debian based distributions
<code>yum install packagename</code>	Install the package on RPM-based distributions
<code>yum remove packagename</code>	Remove a package on RPM-based distributions
<code>yum update</code>	Update all system packages to the latest version on RPM-based distributions
<code>yum list --installed</code>	List all installed packages on RPM-based distributions
<code>yum list --available</code>	List all available packages on RPM-based distributions

## Compress and Uncompress Commands

Tar, Zip, and Unzip are the most popular command-line utility in Linux used to compress and uncompress files and directories.

Command	Description
<code>tar -cvf filename.tar filename</code>	Compress a file in the Tar archive
<code>tar -xvf filename.tar</code>	Uncompress a Tar file
<code>tar -tvf filename.tar</code>	List the content of the Tar file
<code>tar -xvf filename.tar file1.txt</code>	Untar a single file from Tar file
<code>tar -rvf filename.tar file2.txt</code>	Add a file to the Tar file
<code>zip filename.zip filename</code>	Compress a single file to a zip
<code>zip filename.zip file1.txt file2.txt file3.txt</code>	Compress multiple files to a zip
<code>zip -u filename.zip file4.txt</code>	Add a file to a zip file
<code>zip -d filename.zip file4.txt</code>	Delete a file from a zip file

## Command

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unzip -l filename.zip
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unzip filename.zip
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```
unzip filename.zip -d /dirname
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## Description

Display the content of zip archive file

Unzip a file

Unzip a file to a specific directory