

Basic Linux Commands - The A+ Survival Guide

man - The manual command - Shows the manual (help file) for the input command

Example: man cd

This would show the manual (help file) for the change directory command.

ls -

The list command - Use for viewing files, folders, and directories.

Example: ls /bin

This would show the contents of the bin folder.

grep - The grep command - Use to search files for strings of characters, and displays the matching lines from those files.

Example: grep "Find me." myfile.txt

This would search myfile.txt for every line that includes the exact string, "Find me."

cd - The change directory command - Allows you to navigate between directories.

Example: cd/etc/shadow - This would move you to the shadow folder.

shutdown - The shutdown command - Allows you to bring the system down.

Example: shutdown 20:00

This would tell the system to shut down at 8 PM.

pwd - The print working directory command - Allows you to view the full path to the current (working) directory.

Example: pwd

This would tell the system to display the current working directory.

passwd - The password command - Use to change the password of a user account. Normal users may change their own password. Administrators (using su or sudo) may change the password of another user.

Example: `passwd`

This would tell the system you want to change the current user's password. You will be prompted to enter the current password, then the new password, and then you will be asked to verify the new password.

mv - The move command - Use to move a file to another folder location. Can be used to rename files when they are moved.

Example: `mv myfile.txt /home/shared/shared.txt`

This would rename `myfile.txt` to `shared.txt` and move it to the `/home/shared` directory

cp - The copy command - Use to copy files and/or directories. Can also rename files

Example: `cp myfile.txt /home/shared`

This would copy `myfile.txt` and place the copy in the `/home/shared` directory.

rm - The remove command - Use to remove (delete) files or directories.

Example: `rm /shareddocuments`

This would remove (delete) the `shareddocuments` folder and all of its contents.

chmod - The change mode command - Use to set/change the permissions of files or directories. Permissions may be read (r), write (w), or execute (x). Permissions are assigned to the user (u), the user's group (g), and others (o).

Example: `chmod u=rwx,g-rx,o=r myfile.txt`

This would set the listed permissions on `myfile.txt`

chown - The change owner command - Use to set/change the owner of a file or directory.

Example: `chown root /shareddocuments`

This would change the owner of the `shareddocuments` folder to root.

ifconfig - The interface configuration command - Use to view/change the configuration of the network interfaces on your system.

Example: `ifconfig`

This would display information about all operational network interfaces.

iwconfig - The wireless interface configuration command - Use to view/change the configuration of wireless network interfaces on your system.

Example: `iwconfig wlan0 mode Ad-Hoc`

This would configure interface `wlan0` to connect in Ad-Hoc mode.

ps - The process command - Use to view a list of the current processes.

Example: `ps ax`

Example: `ps -ef`

These commands will give a full list of processes.

su - The substitute user (or super user) command - Change the active user ID for the current shell session.

Example: `su root`

If the proper password is entered, this would change the active user context to root for the rest of the session. All subsequent commands will be run as root.

sudo - The substitute user do (or super user do) command - Change the active user context for the current shell session command.

Example: `sudo -u root ./setup.sh`

If the proper password is entered, this would tell the system to run the `setup.sh` script using root access (for example, to run the script in a location where only root may execute).

apt-get - The Advanced Packaging Tool - A (Debian/Ubuntu) command line tool for working with software packages. Packages may be installed, modified, or removed. Most often, administrator privileges are required, so apt-get is typically run using su or sudo.

Example: `sudu apt-get install chromium`

This would (after providing the correct password for sudo) install the chromium browser package as root.

vi - The vi editor - The vi editor is a full screen editor and has two modes of operation:

- Command mode commands which cause action to be taken on the file, and
- Insert mode in which entered text is inserted into the file.

In the command mode, every character typed is a command that does something to the text file being edited; a character typed in the command mode may even cause the vi editor to enter the insert mode.

In the insert mode, every character typed is added to the text in the file; pressing the `<Esc>` (Escape) key turns off the Insert mode.

Example: `vi MyFile.txt`

This would open MyFile.txt in the vi editor.

dd - The data duplicator command - Copies and file, converting the format of the data if directed to do so by the parameters passed. “if” refers to the input file. “of” refers to the output file. It is commonly used for backup operations.

Use this command with caution. Using the wrong parameters or values to wipe, overwrite, or destroy the data on your storage media.

Example: `dd if=/dev/sda of=~/disk1.img`

This would create a file, disk1.img file of the contents of the /dev/sda hard drive.