

Basic Linux Commands

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So, you have installed your favorite linux distro and you are sitting in front of it. Probably you must have heard a lot of frightening things about its console. Here you will see some basic linux commands which will help you to get familiar with linux command line. So let's continue with the linux commands cheatsheet.

But first a few words about a very basic command called man. man comes from manual and it works like this man command_name. With this command you can view information on how to use any command of your system. There is even a man page for man! Try typing man man and you'll get the point. So if you want further information and details on a command listed below just type man command_name

Lets get started!

Viewing, copying, moving and deleting files

ls	Display the contents of the current directory
ls -a	Display also hidden files and hidden directories
cp filename /path/dir_name	Copy filename into directory /path/dir_name
cp -r dir_name /path/dir_name2	Copy the entire dir_name into /path/dir_name2
cp filename1 filename2 /path/dir_name	Copy filename1 and filename2 into /path/dir_name
rm name	Remove a file or directory called name
rm -r name	Remove an entire directory as well as its included files and subdirectories
mv filename /path/dir_name	Move filename into /path/dir_name
mv filename1 filename2	Rename filename1 to filename2
cat filename	Display filenames contents
more filename	Display filename in pages. Use spacebar to view next page
head filename	Display filenames first 10 lines
head -15 filename	Display filenames first 15 lines
tail filename	Display filenames last 10 lines
tail -15 filename	Display filenames last 15 lines
pwd	Display current directory
cd /path/dir_name	Change to directory /path/dir_name
cd ..	Go 1 directory up

mkdir dir_name	Create directory dir_name
rmdir dir_name	Delete directory dir_name

Finding files and text within files

updatedb	Update (create first time used) a database of all files under the root directory /
locate filename	Find file filename searching in the database
find / -name filename	Starting from the root directory search for the file called filename
find / -name *filename	Same as above but search for file containing the string filename
grep string /path/dir_name	Starting from /path/dir_name search for all files containing string
which application_name	Search \$path for application app_name
whereis application_name	Search \$path, man pages and source files for application_name

Archived files

Decompress

tar -xzf filename.tgz	Decompress tgz file
tar -xzf filename.tar.gz	Decompress tar.gz file
tar -xjf filename.tar.bz2	Decompress tar.bz2 file

Compress

tar -czf filename.tar /path/dir_name	Compress directory /path/dir_name to filename.tar
gzip -c filename > filename.gz	Compress /path/dir_name to filename.tar.gz
bzip2 -c filename > filename.bz2	Compress /path/dir_name to filename.tar.bz2

Using rpm files

rpm -hiv package.rpm	Install rpm called package.rpm
rpm -hiv --force package.rpm	Install rpm called package.rpm by force
rpm -hUv package.rpm	Upgrade rpm called package.rpm
rpm -e package.rpm	Delete rpm called package.rpm
rpm -qpil package.rpm	List files in not-installed rpm called package.rpm
rpm -ql package.rpm	List files in installed rpm called package.rpm
rpm -q str	List installed rpms containing the string str
rpm -qf /path/application_name	Display the rpm that contains application application_name

Starting and Stopping

startx	Start the X system
shutdown -h now	Shutdown the system now and do not reboot
halt	Same as above
shutdown -r now	Reboot
reboot	Same as above
shutdown -r +10	Reboot in 10 minutes

Mounting filesystems

mount -t vfat /dev/sd(a)(1) /mnt/c_drive	Mount the first partition 1 of the first hard disk drive a which is in fat32 vfat format under /mnt/c_drive directory
mount -t iso9660 /dev/cdrom /mnt/cdrom	Mount cdrom under /mnt/cdrom directory
umount /mnt/hda1	Unmount the above

User administration

users	Display users currently logged in
adduser username	Create a new user called username
passwd username	Define password for user called username
who	List logged-in users
whoami	Display current user
finger username	Displays info about user username
su	Log in as root from current login
su -	Log in as root from current login and take root's path
exit	Exit from console login (ie, logout).

Processes

command	Execute command in the foreground
command &	Execute command in the background
ctrl+z	Suspend a program
ctrl+c	Interrupt a program
ps	List all processes
kill -9 pid	Kill process with id pid
top	Monitor processes in real time

Networking

<code>hostname</code>	List the system's hostname
<code>ifconfig</code>	Set/Display network information
<code>host ip</code>	Resolves ip's hostname
<code>ping ip/hostname</code>	Check if ip/hostname is reachable
<code>traceroute ip/hostname</code>	Find network path to ip/hostname

System Information

<code>uname -a</code>	General system information
<code>fdisk -l</code>	List partition tables
<code>cp filename /path/dir_name</code>	Copy filename into directory /path/dir_name
<code>df -T -h</code>	List filesystem disk space usage
<code>lspci</code>	List PCI devices
<code>lsusb</code>	List USB devices
<code>free -m</code>	Display RAM+Swap usage

Program Compile

<code>gcc -o output file.c</code>	Compile a C program
<code>./output</code>	Run a C program you have compiled
<code>g++ -o output file.cpp</code>	Compile a C++ program
<code>./output</code>	Run a C++ program you have compiled
<code>./configure && make && su -c 'make install'</code>	Configure, compile and install a program with Makefile