Linux Cheat Sheet

Basic Linux Commands

Command	Description
ls	Lists all files and directories in the present working directory
ls -R	Lists files in sub-directories as well
ls -a	Lists hidden files as well
ls -al	Lists files and directories with detailed information like permissions,size, owner, etc.
cd or cd ~	Navigate to HOME directory
cd ..	Move one level up
cd	To change to a particular directory
cd /	Move to the root directory
cat > filename	Creates a new file
cat filename	Displays the file content
cat file1 file2 > file3	Joins two files (file1, file2) and stores the output in a new file (file3)
mv file "new file path"	Moves the files to the new location
mv filename new_file_name	Renames the file to a new filename
sudo	Allows regular users to run programs with the security privileges of the superuser or root
rm filename	Deletes a file
man	Gives help information on a command
history	Gives a list of all past commands typed in the current terminal session
clear	Clears the terminal
mkdir directoryname	Creates a new directory in the present working directory or a at the specified path
rmdir	Deletes a directory
mv	Renames a directory
pr -x	Divides the file into x columns
pr -h	Assigns a header to the file
pr -n	Denotes the file with Line Numbers
lp -nc , lpr c	Prints "c" copies of the File
lp-d lp-P	Specifies name of the printer
apt-get	Command used to install and update packages
mail -s 'subject' -c 'cc-address' -b 'bcc-address' 'to-address'	Command to send email
mail -s "Subject" to-address < Filename	Command to send email with attachment

Process command

Command	Description
bg	To send a process to the background
fg	To run a stopped process in the foreground
top	Details on all Active Processes
ps	Give the status of processes running for a user
ps PID	Gives the status of a particular process
pidof	Gives the Process ID (PID) of a process
kill PID	Kills a process
nice	Starts a process with a given priority
renice	Changes priority of an already running process
df	Gives free hard disk space on your system
free	Gives free RAM on your system

Environment Variables command

Command	Description
echo $VARIABLE	To display value of a variable
env	Displays all environment variables
VARIABLE_NAME= variable_value	Create a new variable
Unset	Remove a variable
export Variable=value	To set value of an environment variable

Memory and Process

Command	Description
free -m	display free and used system memory
killall	stop all process by name
sensors	CPU temperature
top	display current processes, real time monitoring
kill -1 -9	send signal to process
service [start|stop|restart]	manage or run sysV init script
ps aux	display current processes, snapshot
dmesg -k	display system messages

User management commands of linux

Command	Description
sudo adduser username	To add a new user
sudo passwd -l 'username'	To change the password of a user
sudo userdel -r 'username'	To remove a newly created user
sudo usermod -a -G GROUPNAME USERNAME	To add a user to a group
sudo deluser USER GROUPNAME	To remove a user from a group
finger	Shows information of all the users logged in
finger username	Gives information of a particular user

File management

Command	Description
find	search for a file
ls -a -C -h	list content of directory
rm -r -f	remove files and directory
locate -i	find file, using updatedb(8) database
cp -a -R -i	copy files or directory
du -s	disk usage
file -b -i	identify the file type
mv -f -i	move files or directory
grep, egrep, fgrep -i -v	print lines matching pattern

File Permission commands

Command	Description
ls -l	to show file type and access permission
r	read permission
w	write permission
x	execute permission
-=	no permission
Chown user	For changing the ownership of a file/directory
Chown user:group filename	change the user as well as group for a file or directory

Networking command

Command	Description
SSH username@ip-address or	login into a remote Linux machine using SSH
Ping hostname="" or =""	To ping and Analyzing network and host connections
dir	Display files in the current directory of a remote computer
cd "dirname"	change directory to "dirname" on a remote computer
put file	upload 'file' from local to remote computer
get file	Download 'file' from remote to local computer
quit	Logout

VI Editing Commands

Command	Description
i	Insert at cursor (goes into insert mode)
a	Write after cursor (goes into insert mode)
A	Write at the end of line (goes into insert mode)
ESC	Terminate insert mode
u	Undo last change
U	Undo all changes to the entire line
o	Open a new line (goes into insert mode)
dd	Delete line
3dd	Delete 3 lines
D	Delete contents of line after the cursor
C	Delete contents of a line after the cursor and insert new text. Press ESC key to end insertion.
dw	Delete word
4dw	Delete 4 words
cw	Change word
x	Delete character at the cursor
r	Replace character
R	Overwrite characters from cursor onward
s	Substitute one character under cursor continue to insert
S	Substitute entire line and begin to insert at the beginning of the line
~	Change case of individual character