Linux commands in detail

1. List command:

* ls or ls <file or directory name>: will list contents of file or directory
* ls <path of directory>
* ls .. : will give information one folder back
* ls ../.. : will give information two folder back
* ls –l : ‘l’ is a flag, will give you information in long format
* ls –a: will list hidden files
* ls –al : will hidden files in long list
* ls –ls : will present sorted list in ascending order of size
* ls <directory name>/\*.html : will print html files
* ls –ls> <filename>: will save all the records of ls command
* man ls : will give information of ls command

1. cd command:

* cd /: will move to root directory
* cd ~: home directory
* cd ..: will move control to parent directory
* cd <absolute path of directory>

1. cat command:

* cat <file name>: will show the file contents
* cat <file1> <file2> : will display the contents of file1 and file2
* cat –b <filename>: will number lines but not an blank line
* cat –s <filename>: squeeze all lines of file into single line but doesn’t modify file contents.
* Cat > <filename>: will allow you to insert data into <filename> .
* Cat <filename1> >> <filename2> : will append file1 content to file2

1. > and >>:

* > is to transfer data one to another
* >> is to append to one file to another

1. mkdir command:

* mkdir image/pics: will create directory inside image directory
* mkdir –p new\_directory/new\_sub\_directory: will create new\_directory and new\_sub\_directory inside it.
* Mkdir –p names/{john,tom,bob} //Note: here space will be accepted as part of name so don’t enter space if not required

1. rmdir command:

* rmdir <directory name>
* rmdir –p a/b/c/d : to remove whole directory a with its subdirectories
* rmdir –pv a/b/c/d : will show the process of command, v for verbos will show the process
* rm –r a/b: will remove a as well as contents of a directory

1. cp command:

* cp file1.txt file2.txt : will copy content of file1 to file2
* cp file1 file2 file3: file3 is desination
* cp –I file1.txt dir\_name: will ask you do you want overwrite if file1.txt already exists in dir\_name
* cp –R dir1 dir3

1. mv command:

* mv file1 file2: will move content of file1 to file2
* mv –I file1 dir : will ask you weather you want to overwrite file 1 in dir or no
* mv dir1 dir2: will move dir1 to dir2
* mv dir1 dir3: will move the contents of the dir3

1. less command:

* less <filename> : will presents contents of file in more manageable way
* SPACE to go downward, B to go upwards, /word will search the entered word
* ?word : down to up search

1. sudo command:

* sudo mkdir newdir: will create a new directory in / directory

1. top command:

* will give system information

1. kill command;

* kill will kill process by providing process id

1. pidof command;

* will return pid number by providing process name

1. echo text:

* Will display text which was given as input.
* echo –e will recognize ‘/’ escape sequence

1. chmod command:

* will change permissions of any file
* chmod o+x : other add permission to others to execute
* chmod g+x: other add permission to group to execute
* chmod ug=rwx : changed permission for user and group to read, write and executable

1. chmod u+rw,g=rw,o+r : will grant read write permission to others, will grant rea write permission o group, will grant read permission to others

# Scripting:

1. nano myscript.sh: will create script file having name myscript file
2. ./name\_of\_scriptfile : will execute that script
3. #!/bin/bash : is starting of any script file
4. Which command:

* Will give the location of any command

1. Useradd mark –m –s /bin/bash –g users
2. Octal and numerical permission in linux:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Users | | | Group | | | | others | | | |
| R | W | X | R | | W | X | R | | W | x |
| 1 | 1 | 1 | 1 | | 0 | 1 | 1 | | 1 | 1 |
| 7 | | | | 5 | | | | 7 | | |

* chmod 111 <filename>

1. whatis : will give short description of any command
2. useradd:

* useradd name\_of\_user –m(default home directly will be created) –s(allows user to use shell) /bin/bash(name of shell) –g users –c(comment) “my first comment”
* you have to use sudo to create or delete new users.

1. Sudo Passwd user\_name: will allow you to set new password of user
2. Sudo Userdel username : will delete user
3. Sudo userdel –r username : to delete user as well it’s directory

# Group management:

1. cat /etc/group : will show groups
2. sudo groupadd name\_of\_group : wil add new group
3. sudo groupdel name of\_the\_group : wiil remove group
4. df : will give amout of available disk space
5. df –h: will give amout of available disk space with appropriate units
6. du : will give disk information for present directory
7. du –s : will give summary about disk space usage
8. free : will give user and free space
9. free with flags : -m(megabyte), -k(kilobyte), -g(gigabyte)
10. watch : to repeat command repeatedly

# Searching:

1. find :

* find directory –name filename : will give the path of filename entered
* find directory –name \*.txt : will give files ending with .txt extention
* find location –mtime time : will search for file create few time ago it can be 1 day, 2 day etc,..

1. wc filename : will show number of lines, words and characters

* wc –c filename: will give number of characters
* wc –l filename: will give number of lines
* wc -w filemame: will give number of word
* wc –L filename: will give length of longest line

# time and date:

1. cal : will give calender of current month

* ncal : will represent weekdays vertically
* cal month year : will give calender of given month and year
* cal -3: previous, current and next month

1. date : will give current date and time

# package mangement

1. sudo apt-get update : will resynchronize files
2. packagename –version : will give version of package installed
3. sudo apt-get install packagename : will install package
4. sudo apt-get remove packagename: will remove that package not it’s configuration files
5. sudo apt-get remove --purge packagename : will package as well as configuration

# connectivity

1. ifconfig : will give information about connectivity information
2. ifconfig interfacename: will give information of a particular connectivity interface
3. ifconfig name\_of\_interface down : will disconnect device from interface or network
4. ifconfig name\_of\_interface up : will connect device to interface.

# File compression

1. tar –cvf filename.tar filename : will create tar file, v is to see including process.
2. Tar –xvf filename.tar filename : to uncompress
3. tar –cvfz filename.tar.gz filename : to compress in gz format
4. tar –xvfz filename.tar.gz filename : to uncompress