# Linux/Unix commands

1. Tar command can create backup of your application, configurations files and folders of the system. Tar stands for ‘tape archive’ and can archive multiple files and directories into a tar file. This tar can also be compressed using gzip and bzip2 compression utility.

Create a new tar archive.

* the c tells tar to create a new archive,
* v sets the screen output to verbose so I’ll get updates, and
* f points to the filename I’d like to give the archive.

$ tar cvf archive\_name.tar dirname/

1. grep command

Search for a given string in a file (case in-sensitive search that’s why ‘-i’).

$ grep -i "the" demo\_file

1. Find command

files using file-name (case in-sensitive find)

$ find -iname "MyCProgram.c"

### ssh command

ssh stands for **“Secure Shell”**. It is a protocol used to securely connect to a remote server/system. ssh is secure in the sense that it transfers the data in encrypted form between the host and the client

Login to remote host

ssh -l jsmith remotehost.example.com

1. Linux 'sed' command stands for stream editor. It is used to edit streams (files) using regular expressions. But this editing is not permanent. It remains only in display, but in actual, file content remains the same.

When you copy a DOS file to Unix, you could find \r\n in the end of each line. This example converts the DOS file format to Unix file format using sed command.

$sed 's/.$//' filename

1. awk command

awk command searches files for text containing a pattern. When a line or text matches, awk performs a specific action on that line/text.

Print only specific field from a file.

$ awk '{print $2,$5;}' employee.txt

### vim command

Go to the 143rd line of file

$ vim +143 filename.txt

1. diff stands for difference. This command is used to display the differences in the files by comparing the files line by line.

$ diff <options> file1 file2

Different symbols of diff command output:

* a -> it indicates that something has been added
* c -> it indicates that some text has been changed
* d -> it indicates some text has been deleted

### sort command

Sort a file in descending order

$ sort -r names.txt

1. export command

To export an environment variable:

$ export ORACLE\_HOME=/u01/app/oracle/product/10.2.0

### xargs command

xargs is a Unix command which can be used to build and execute commands from standard input. Importance: Some commands like grep can accept input as parameters, but some commands accepts arguments, this is place where xargs came into picture.

Search all jpg images in the system and archive it.

# find / -name \*.jpg -type f -print | xargs tar -cvzf images.tar.gz

### ls command

Ls Command in Linux (List Files and Directories).It is used to list information about files and directories within the file system.

Display filesize in human readable format (e.g. KB, MB etc.,)

$ ls -lh

-rw-r----- 1 ramesh team-dev 8.9M Jun 12 15:27 arch-linux.txt.gz

1. pwd is Print working directory
2. Use “cd -” to toggle between the last two directories
3. gzip command

Display compression ratio of the compressed file using gzip -l

$ gzip -l \*.gz

compressed uncompressed ratio uncompressed\_name

23709 97975 75.8% asp-patch-rpms.txt

### bzip2 command

To create a \*.bz2 compressed file:

$ bzip2 test.txt

1. unzip command

View the contents of \*.zip file (Without unzipping it):

$ unzip -l jasper.zip

### shutdown command

Shutdown the system and turn the power off immediately.

# shutdown -h now

Shutdown the system after 10 minutes.

# shutdown -h +10

### ftp command

 FTP is an Internet Protocol used for Transmitting Files over the Internet/Network from Source Computer to Destination. Basically, the FTP server uses a Client-Server Architecture to transfer files.

Both ftp and secure ftp (sftp) has similar commands. To connect to a remote server and download multiple files, do the following.

$ ftp IP/hostname

ftp> mget \*.html

### crontab command

View crontab entry for a specific user

# crontab -u john -l

Crontab stands for Cron Table. This is a Linux system file that creates a table-like structure where fields are separated by white space.

1. Service command

Instead of calling the scripts located in the /etc/init.d/ directory with their full path, you can use the service command.

Check the status of a service:

# service ssh status

### ps command

ps command is used to display information about the processes that are running in the system.

To view current running processes.

$ ps -ef | more

### free command

This command is used to display the free, used, swap memory available in the system.

The output is displayed in bytes.

$ free

### top command

top command displays the top processes in the system ( by default sorted by cpu usage ).

To displays only the processes that belong to a particular user use -u option. The following will show only the top processes that belongs to oracle user.

$ top -u oracle

### df command

Displays the file system disk space usage.

### kill command

Use kill command to terminate a process. First get the process id using ps -ef command, then use kill -9 to kill the running Linux process

$ kill -9 7243

### rm command

Get confirmation before removing the file.

$ rm -i filename.txt

### cp command

Copy file1 to file2

$ cp -p file1 file2

### mv command

move file1 to file2. if file2 exists prompt for confirmation before overwritting it.

$ mv -i file1 file2

### cat command

You can view multiple files at the same time.

$ cat file1 file2

### mount command

To mount a file system, you should first create a directory and mount it as shown below.

# mkdir /u01

# mount /dev/sdb1 /u01

### chmod command

chmod command is used to change the permissions for a file or directory.

Give full access to user and group (i.e read, write and execute) on a specific file.

$ chmod ug+rwx file.txt

### chown command

chown command is used to change the owner and group of a file.

### passwd command

Change your password from command line using passwd. This will prompt for the old password followed by the new password.

$ passwd

### mkdir command

Following example creates a directory called temp under your home directory.

$ mkdir ~/temp

### ifconfig command

Use ifconfig command to view or configure a network interface on the Linux system.View all the interfaces along with status.

$ ifconfig -a

1. Uname command displays important information about the system such as — Kernel name, Host name, Kernel release number,  
   Processor type, etc.,

$ uname -a

### whereis command

When you want to find out where a specific Unix command exists (for example, where does ls command exists?), you can execute the following command.

$ whereis ls

### whatis command

Whatis command displays a single line description about a command.

$ whatis ls

### locate command

Using locate command you can quickly search for the location of a specific file (or group of files). Locate command uses the database created by updatedb.

The example below shows all files in the system that contains the word crontab in it.

$ locate crontab

### man command

The man command is a built-in manual for using Linux commands. It allows users to view the reference manuals of a command or utility run in the terminal

Display the man page of a specific command.

$ man crontab

### tail command

Print the last 10 lines of a file by default.

$ tail filename.txt

### less command

less is very efficient while viewing huge log files, as it doesn’t need to load the full file while opening.

$ less huge-log-file.log

### su command

Switch to a different user account using su command. Super user can switch to any other user without entering their password.

$ su - USERNAME

### mysql command

mysql is probably the most widely used open source database on Linux. Even if you don’t run a mysql database on your server, you might end-up using the mysql command ( client ) to connect to a mysql database running on the remote server.

To connect to a local mysql database.

$ mysql -u root -p

### yum command

YUM (Yellowdog Updater Modified) is an open source command-line as well as graphical based package management tool for RPM (RedHat Package Manager) based Linux systems. It allows users and system administrator to easily install, update, remove or search software packages on a systems.

To install apache using yum.

$ yum install httpd

1. RPM Command in Linux RPM stands for**Red Hat Package Manager**. It is an open-source package manager (default) and the most famous utility of package management for Red Hat-based systems such as Fedora, CentOS etc

To uninstall/remove apache using rpm.

# rpm -ev httpd

### ping command

Ping a remote host by sending only 5 packets.

$ ping -c 5 gmail.com

### date command

Set the system date:

# date -s "01/31/2010 23:59:53"

### wget command

The quick and effective method to download software, music, video from internet is using wget command.

$ wget http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-3.2.1.tar.gz