USER MANAGEMENT IN LINUX

User management includes everything from creating a user to deleting a user on your system.

root: The root user is the superuser and have all the powers for creating a user, deleting a user and can even login with the other user's account. The root user always has userid 0.

Commands used in user management:

1.To create a user:

syntax: useradd username

2.To see/verify the added user:

syntax: cat/etc/passwd

3.To set password for a particular user:

syntax: passwd username

4.To switch the user:

syntax: su username

5.To come out from a particular user

exit

6.To delete a user:

syntax: userdel username

GROUP MANAGEMENT IN LINUX

Users can be listed in different groups. Group allow us to set permission on the group level instead of setting the permission on individual level.

Commands used in user management:

1.To create a group:

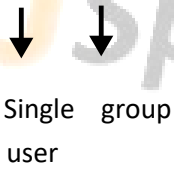
syntax: groupadd groupname

2.To verify the added group:

syntax: cat/etc/group

3.To add the user to the group:

syntax: usermod -a -G groupname username



4.To set password for a group

syntax: gpasswd groupname

5.To delete a group

syntax: groupdel groupname

6.To remove a user from a group

syntax: gpasswd -d username groupname

FILE PERMISSIONS

All the three owners (owner, group, other users) in the Linux system have three types of permissions defined.

Three types of permissions:

1.**Read(r):** The read permission allows you to open and read the content of a file. But you can't do any editing or modification in the file.

2.**Write(w):** The write permission allows you to edit, remove or rename a file.

3.**Execute(x):** In Linux system you can't run or execute a program unless execute permission is set.

read--->4
write--->2 ——— **7**
execute--->1

Three user permissions example :

1.owner : r+w+x =7

2.group : r+x ---> 4+1=5

3.other user: x=1

Commands used in File Permission:

1.To see the permission of directories/files: **ls -l**

2.To give permission to a file:

chmod 761 filename

ex: file3---->owner - r+x = 4+1=5

group - r+w = 4+2=6

user - r+x = 4+1=5

FILE COMPRESSION

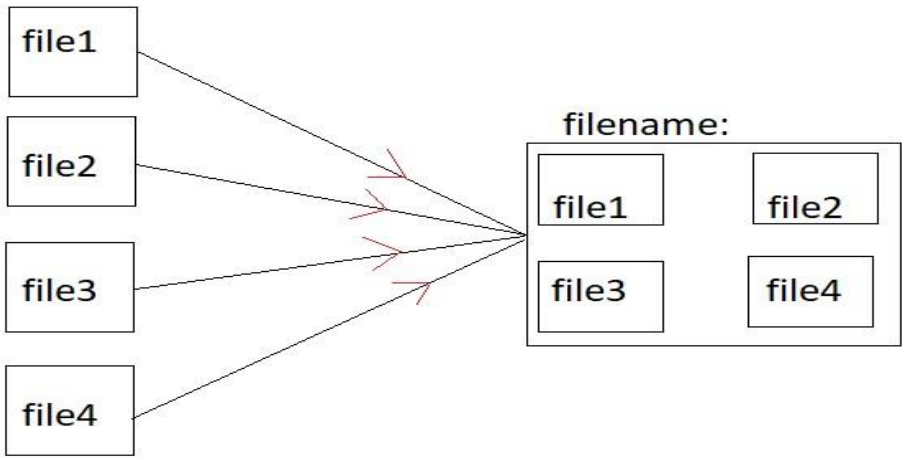
Reducing the size of the files by bringing them together is called File compression.

There are three ways to compress a file

1.tar

2.zip

3.gzip



1.tar (tape archive): [archive is a single file that contains collection of files]

-tape archive is a file format archive that contains of multiple files.

-It is not a compression command, it will only pull a number of files into a single file, just for easy transportation.

To create a tar file :

syntax: tar cvf filename.tar files names

c- create

v- verbose

f- forcefully

To extract the tar file :

tar xvf filename.tar

x-extract

v-verbose

f-forcefully

2. zip : zip is a file format that contain multiple files combined together and compressed into a single file.

To create a zip file :

syntax: zip filename.zip filesname

To extract zip file:

unzip filename.zip

3.gzip: gzip is used to decompress the files.

syntax: gzip filename.tar or filename.zip