

NETWORKING & SYSTEM ADMINISTRATION LAB

Experiment No.: 8

Aim

Familiarization of Linux Commands – Part 08

Name: Sanio Luke Sebastian

Roll No: 35

Batch: B

Date: 25-04-2022

Procedure

Note : sudo: “super user do” command is used to access/perform admin privileged activities.

1. **sudo useradd “username”:** This command is used to add a user to the system and create an account with the specified username.

```
mca@S35:~$ sudo useradd Sanio
[sudo] password for mca:
mca@S35:~$ sudo useradd Sanio
useradd: user 'Sanio' already exists
mca@S35:~$
```

2. **sudo passwd “username”:** It lets you to change the password of the mentioned user account if it exists.

```
mca@S35:~$ sudo passwd Sanio
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
mca@S35:~$
```

3. **sudo groupadd -g “unique-no” “group-name”:** This command helps to create a new group in the system with specified unique ID and with new non-existing Group Name.

```
mca@S35:~$ sudo groupadd -g 404 MCAReg-B
mca@S35:~$ sudo groupadd -g 404 MCAReg-B
groupadd: group 'MCAReg-B' already exists
mca@S35:~$
```

4. **sudo usermod -G “group-name” “username”**: This command helps to add an existing created user to the mentioned group.

```
mca@S35:~$ sudo usermod -G MCAReg-B Sanio
mca@S35:~$ id Sanio
uid=1004(Sanio) gid=1005(Sanio) groups=1005(Sanio),404(MCAReg-B)
mca@S35:~$
```

```
mca@S35:~$ sudo usermod -G MCAReg-B Power
usermod: user 'Power' does not exist
mca@S35:~$
```

- a) **id “username”**: This helps to get the status of the mentioned user like to which group that user belongs, what is the unique number, etc.

```
mca@S35:~$ sudo usermod -G MCAReg-B Sanio
mca@S35:~$ id Sanio
uid=1004(Sanio) gid=1005(Sanio) groups=1005(Sanio),404(MCAReg-B)
mca@S35:~$
```

5. **compugen -g**: This helps to list out all the existing groups in the system.

```
mca@S35:~$ compugen -g
root
daemon
bin
sys
adm
tty
```

```
libvirt-qemu
libvirt-dnsmasq
student
exam
Sanio
MCAReg-B
Amal
Jyothi
mca@S35:~$
```

- a) **compugen -g “group-name”**: This command is used to list only the mentioned group name if it exists.

```
mca@S35:~$ compugen -g Amal
mca@S35:~$ compugen -g Jyothi
Jyothi
mca@S35:~$
```

6. **sudo userdel “user-name”**: This command helps to delete an existing mentioned user from the system.

```
mca@S35:~$ sudo userdel SanSample
mca@S35:~$ sudo userdel SanSample
userdel: user 'SanSample' does not exist
mca@S35:~$
```

- a) **sudo userdel “group-name”**: This command helps to delete an existing mentioned group from the system.

```
mca@S35:~$ sudo groupdel Amal
mca@S35:~$ sudo groupdel Amal
groupdel: group 'Amal' does not exist
mca@S35:~$
```

7. **chmod**: This is command used to change/edit the privileges of the files/folders.

```
mca@S35:~$ chmod --help
Usage: chmod [OPTION]... MODE[,MODE]... FILE...
       or:  chmod [OPTION]... OCTAL-MODE FILE...
       or:  chmod [OPTION]... --reference=RFILE FILE...
Change the mode of each FILE to MODE.
With --reference, change the mode of each FILE to that of RFILE.

  -c, --changes           like verbose but report only when a change is made
  -f, --silent, --quiet  suppress most error messages
  -v, --verbose           output a diagnostic for every file processed
                        --no-preserve-root  do not treat '/' specially (the default)
                        --preserve-root    fail to operate recursively on '/'
                        --reference=RFILE  use RFILE's mode instead of MODE values
  -R, --recursive        change files and directories recursively
  --help                 display this help and exit
  --version              output version information and exit

Each MODE is of the form '[ugoa]*([-+=]([rwxXst]*|[ugo]))+|[-+=][0-7]+'.
```

GNU coreutils online help: <<http://www.gnu.org/software/coreutils/>>
Full documentation at: <<http://www.gnu.org/software/coreutils/chmod>>
or available locally via: info '(coreutils) chmod invocation'

```
mca@S35:~$
```

- a) **chmod –(rwx) [filename/foldername]**: This command helps to restrict the mentioned privileges for the mentioned file or folder.

NOTE:

1. **r** -> read
2. **w** -> write
3. **x** -> execute

```
mca@S35:~$ chmod -wx sample.txt
mca@S35:~$ cat >> sample.txt
bash: sample.txt: Permission denied
mca@S35:~$
```

- b) **chmod +(rwx) [filename/foldername]**: This command helps to give mentioned privileges for the mentioned file or folder.

```
mca@S35:~$ chmod +rwx sample.txt
mca@S35:~$ cat >> sample.txt
Adding the newest line.
^Z
[3]+  Stopped                  cat >> sample.txt
mca@S35:~$
```

8. **sudo chown “group-name” [filename]**: This command enables you to transfer the ownership of the mentioned file from current user to another mentioned user.

```
mca@S35:~$ sudo chown Sanio sample.txt
[sudo] password for mca:
mca@S35:~$ ls -l sample.txt
-rwxr-xr-x 1 Sanio mca 106 Apr 25 15:01 sample.txt
mca@S35:~$
```