

# **LINUX COMMANDS**

## **ASSIGNMENT- 3**

Submitted By

Adarsh V

MCA A

Roll NO: 4

## USERMOD

- usermod command is used to change the properties of a user in Linux through the command line
- command-line utility that allows you to modify a user's login information
- #usermod --help
- #usermod -u 2000 Tom

```
user@user-VirtualBox:~$ usermod --help
Usage: usermod [options] LOGIN

Options:
  -b, --badnames          allow bad names
  -c, --comment COMMENT   new value of the GECOS field
  -d, --home HOME_DIR     new home directory for the user account
  -e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE set password inactive after expiration
                           to INACTIVE
  -g, --gid GROUP          force use GROUP as new primary group
  -G, --groups GROUPS      new list of supplementary GROUPS
  -a, --append             append the user to the supplemental GROUPS
                           mentioned by the -G option without removing
                           the user from other groups
  -h, --help              display this help message and exit
  -l, --login NEW_LOGIN   new value of the login name
  -L, --lock              lock the user account
  -m, --move-home         move contents of the home directory to the
                           new location (use only with -d)
  -o, --non-unique         allow using duplicate (non-unique) UID
  -p, --password PASSWORD use encrypted password for the new password
  -R, --root CHROOT_DIR   directory to chroot into
  -P, --prefix PREFIX_DIR prefix directory where are located the /etc/* files
  -s, --shell SHELL       new login shell for the user account
  -u, --uid UID            new UID for the user account
  -U, --unlock            unlock the user account
  -v, --add-subuids FIRST-LAST add range of subordinate uids

user@user-VirtualBox:~$ usermod -u 1000 user
usermod: no changes
user@user-VirtualBox:~$ usermod -u 2000 user
usermod: user user is currently used by process 678
user@user-VirtualBox:~$
```

## GROUPADD

- groupadd command creates a new group account using the values specified on the command line and the default values from the system.
- #groupadd student

```
user@user-VirtualBox:~$ sudo groupadd student
[sudo] password for user:
root
```

## GROUPS

- print the groups a user is in
- #groups alice

```
user@user-VirtualBox:~$ groups user
user : user adm cdrom sudo dip plugdev lpadmin lxd sambashare
user@user-VirtualBox:~$
```

## GROUPDEL

- groupdel command modifies the system account files, deleting all entries that refer to group. The named group must exist
- #groupdel marketing

```
user@user-VirtualBox:~$ sudo groupdel student
user@user-VirtualBox:~$
```

## GROUPMOD

- The groupmod command modifies the definition of the specified group by modifying the appropriate entry in the group database.
- # groupmod -n group1 group2

```
user@user-VirtualBox:~$ sudo groupmod -n student1 teacher
user@user-VirtualBox:~$
```

## CHMOD

- To change directory permissions of file/ Directory in Linux.  
#chmod whowhatwhich file/directory
- chmod +rwx filename to add permissions.
- chmod -rwx directoryname to remove permissions.
- chmod +x filename to allow executable permissions.
- chmod -wx filename to take out write and executable permissions.
- #chmod u+x test
- #chmod g-rwx test #chmod o-r test 4

```
user@user-VirtualBox:~$ chmod +rwx halo.txt
user@user-VirtualBox:~$
```

## CHOWN

- The chown command allows you to change the user and/or group ownership of a given file, directory.
- #chown Tom Test

```
user@user-VirtualBox:~$ chown user new.txt
user@user-VirtualBox:~$
```

## ID

- id command in Linux is used to find out user and group names and numeric ID's (UID or group ID) of the current user.
- #id

```
user@user-VirtualBox:~$ id
uid=1000(user) gid=1000(user) groups=1000(user),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),121(lpadmin),132(lxd),133(sambashare)
user@user-VirtualBox:~$
```

## PS

- • The ps command, short for Process Status, is a command line utility that is used to display
- or view information related to the processes running in a Linux system.
- • PID – This is the unique process ID
- • TTY – This is the type of terminal that the user is logged in to
- • TIME – This is the time in minutes and seconds that the process has been running
- • CMD – The command that launched the process
- #ps -a

```
user@user-VirtualBox:~$ ps -a
  PID TTY          TIME CMD
   764 tty2      00:00:00 gnome-session-b
  2996 tty3      00:00:00 sh
  3055 tty3      00:00:00 gnome-session-b
  5799 pts/0      00:00:00 ps
user@user-VirtualBox:~$
```

## TOP

- top command is used to show the Linux processes. It provides a dynamic real-time view of the running system

- #top -u rose

```
user@user-VirtualBox:~$ top -u user
```

```
top - 15:28:49 up 52 min, 2 users, load average: 0.16, 0.07, 0.09
Tasks: 233 total, 1 running, 232 sleeping, 0 stopped, 0 zombie
%Cpu(s): 6.5 us, 3.1 sy, 0.0 ni, 90.4 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 3927.3 total, 1899.8 free, 1068.1 used, 959.4 buff/cache
MiB Swap: 925.4 total, 925.4 free, 0.0 used. 2607.1 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
934	user	20	0	4028072	353952	125104	S	5.6	8.8	2:42.86	gnome-+
4717	user	20	0	411340	49736	37960	S	1.0	1.2	0:07.32	gnome-+
<b>5800</b>	<b>user</b>	<b>20</b>	<b>0</b>	<b>21580</b>	<b>3924</b>	<b>3324</b>	<b>R</b>	<b>0.3</b>	<b>0.1</b>	<b>0:00.10</b>	<b>top</b>
678	user	20	0	16200	9700	7416	S	0.0	0.2	0:01.17	systemd
680	user	20	0	100604	3436	20	S	0.0	0.1	0:00.00	(sd-pa+
745	user	9	-11	90764	5960	4836	S	0.0	0.1	0:00.11	pipewi+
746	user	9	-11	82828	5816	4804	S	0.0	0.1	0:00.06	pipewi+
747	user	9	-11	1417592	19500	14976	S	0.0	0.5	0:02.13	pulsea+
750	user	39	19	521388	24932	16752	S	0.0	0.6	0:00.39	tracke+
752	user	20	0	250172	7048	6064	S	0.0	0.2	0:00.19	gnome-+
756	user	20	0	171604	6204	5688	S	0.0	0.2	0:00.01	gdm-wa+
759	user	20	0	9608	5900	4040	S	0.0	0.1	0:02.01	dbus-d+
764	user	20	0	229916	15376	13696	S	0.0	0.4	0:00.08	gnome-+
767	user	20	0	249732	7924	7048	S	0.0	0.2	0:00.10	gvfsd
794	user	20	0	379668	5904	5384	S	0.0	0.1	0:00.01	gvfsd-+
798	user	20	0	325104	9816	8404	S	0.0	0.2	0:00.37	gvfs-u+
834	user	20	0	322944	7676	6816	S	0.0	0.2	0:00.33	gvfs-a+
844	user	20	0	246576	6980	6276	S	0.0	0.2	0:00.05	gvfs-g+
855	user	20	0	245836	6644	6112	S	0.0	0.2	0:00.04	gvfs-g+
865	user	20	0	567912	41372	34760	S	0.0	1.0	0:00.20	goa-da+
878	user	20	0	100964	4864	4428	S	0.0	0.1	0:00.00	gnome-+
887	user	20	0	665064	17708	14928	S	0.0	0.4	0:00.33	gnome-+