

ASSIGNMENT

**SUBJECT: NETWORKING AND SYSTEM ADMINISTRATION
LAB**

TOPIC: BASIC LINUX COMMANDS PART 3

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1.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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ usermod --help
Usage: usermod [options] LOGIN

Options:
  -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
                              him/her 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
  -s, --shell SHELL           new login shell for the user account
```

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ sudo usermod -u 2000 achu
```

2. groupadd

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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ usermod --help
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Options:
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  -h, --help                  display this help message and exit
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  -R, --root CHROOT_DIR       directory to chroot into
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```

```
ssl-cert:x:112:  
lpadmin:x:113:onworks  
lightdm:x:114:  
nopasswdlogin:x:115:  
ssh:x:116:  
whoopsie:x:117:  
mlocate:x:118:  
avahi-autoipd:x:119:  
avahi:x:120:  
bluetooth:x:121:  
scanner:x:122:saned  
colord:x:123:  
pulse:x:124:  
pulse-access:x:125:  
rtkit:x:126:  
saned:x:127:  
onworks:x:1000:  
smbshare:x:128:onworks  
bachu:x:1001:  
trees:x:1002:  
plants:x:1003:  
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ groups  
onworks adm cdrom sudo dip plugdev lpadmin sambashare  
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```

3. groups

- print the groups a user is in

```
onworks@onworks-Standard-PC-1440FX-PIIX-1996:~$ groups achu
achu : achu
```

4. groupdel

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

```
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,onworks
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
```

[illegible]

5. groupmod

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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ sudo groupmod -n group3 group2
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```

6. chmod

- To change directory permissions of file/ Directory in Linux
- 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.

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ groups
onworks adm cdrom sudo dip plugdev lpadmin sambashare
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir books
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ls -ld books
drwxrwxr-x 2 onworks onworks 4096 Aug 13 08:35 books
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ chmod g -w books
chmod: cannot access 'g': No such file or directory
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ls -ld books
dr-xr-xr-x 2 onworks onworks 4096 Aug 13 08:35 books
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ chmod o+w books
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ls -ld books
dr-xr-xrwx 2 onworks onworks 4096 Aug 13 08:35 books
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```

7. chown

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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ mkdir test
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ sudo chown ammu test
```

8. 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

```
uid=1001(achu) gid=1001(achu) groups=1001(achu)
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$
```


9. 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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ ps -a
  PID TTY          TIME CMD
 24915 pts/1    00:00:00 ps
```

10. top

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

```
onworks@onworks-Standard-PC-i440FX-PIIX-1996:~$ top -u achu

top - 08:56:23 up 5 min,  1 user,  load average: 0,39, 0,55, 0,27
Tasks: 160 total,   1 running, 123 sleeping,   0 stopped,   0 zombie
%Cpu(s):  7,3 us,   2,2 sy,   0,0 ni, 90,5 id,   0,0 wa,   0,0 hi,   0,0 si,   0,0 st
KiB Mem : 3024932 total,   524648 free,   463304 used,  2036980 buff/cache
KiB Swap:  998396 total,   998396 free,        0 used.  2197648 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR S  %CPU  %MEM    TIME+  COMMAND
 1111 achu      20   0    1920    880    120 R   100   0,0    0:00.0  ps
```