

Exercises about users and groups management

1. Add two new groups named “daw” and “crey”

```
root@student-VirtualBox:/home/student# groupadd daw
root@student-VirtualBox:/home/student# groupadd crey
root@student-VirtualBox:/home/student#
```

```
testgroup1:x:1001:
testgroup3:x:2000:
testgroup5:x:2001:
daw:x:2002:
crey:x:2003:
root@student-VirtualBox:/home/student#
```

2. Change “daw” and “crey” GIDS to 2001 and 2002, respectively.

Here we can see how we can change the gid using the command “*groupmod -g*”.

```
daw:x:2006:
crey:x:2003:
root@student-VirtualBox:/home/student# groupmod -g 2001 daw
root@student-VirtualBox:/home/student# groupmod -g 2002 crey
root@student-VirtualBox:/home/student# grep 200 /etc/group
daw:x:2001:
crey:x:2002:
root@student-VirtualBox:/home/student#
```

3. Create a new group called “profesores” with GID of 2000. Then, modify the group name to teachers

To do this we use the command “*groupmod -n*”.

```
root@student-VirtualBox:/home/student# groupadd -g 2000 profesor
root@student-VirtualBox:/home/student# grep 200 /etc/group
daw:x:2001:
crey:x:2002:
profesor:x:2000:
root@student-VirtualBox:/home/student# groupmod -n teacher profesor
root@student-VirtualBox:/home/student# grep 200 /etc/group
daw:x:2001:
crey:x:2002:
teacher:x:2000:
root@student-VirtualBox:/home/student#
```

4. Verify that you have correctly created the groups named “daw”, “crey” and “teachers”

We can see the groups created with the command *grep* how is shown in the previous picture.

5. Add a new user named “jhon” whose primary group is “crey”. Has the home directory been created with the default command?

```
useradd -g -m jhon,** m es necesario ssimpre
```

The home directory is created by default in this case.

```
testuser3:x:1003:100::/home/testgroup3:/bin/sh
jhon:x:1004:2002::/home/jhon:/bin/sh
root@student-VirtualBox:/home/student# useradd -g 2002 jhon
```

6. Add a new user named “mary”, whose primary group is “daw” and the home directory /home/mary

```
Useradd -daw -m mary
```

```
root@student-VirtualBox:/home/student# useradd -g 2001 -d "/home/mari" mari
root@student-VirtualBox:/home/student#
```

```
jhon:x:1004:2002::/home/jhon:/bin/sh
mari:x:1005:2001::/home/mari:/bin/sh
root@student-VirtualBox:/home/student#
```

7. Add a new user named “martha”, whose primary group is “teachers”, the home directory /home/martha and belonging to the secondary group “crey”.

```
jhon:x:1004:2002::/home/jhon:/bin/sh
mari:x:1005:2001::/home/mari:/bin/sh
student@student-VirtualBox:~$ sudo su
[sudo] password for student:
root@student-VirtualBox:/home/student# useradd -g 2000 -G 2002 -d "/home/martha" martha
root@student-VirtualBox:/home/student#
```

```
Useradd -g teachers -G crey -m martha
```

```
jhon:x:1004:2002::/home/jhon:/bin/sh
mari:x:1005:2001::/home/mari:/bin/sh
martha:x:1006:2000::/home/martha:/bin/sh
root@student-VirtualBox:/home/student#
```

8. Add the following names to the users that you have just created:

- a. John= “John Doe”
- b. Mary = “Mary Williams”
- c. Martha = “Martha Jones”

```
jhon:x:1004:2002::/home/jhon:/bin/sh
mari:x:1005:2001::/home/mari:/bin/sh
martha:x:1006:2000::/home/martha:/bin/sh
root@student-VirtualBox:/home/student# useradd -c "Jhon Doe" jhon
useradd: user 'jhon' already exists
root@student-VirtualBox:/home/student# usermod -c "Jhon Doe" jhon
root@student-VirtualBox:/home/student# usermod -c "Mary Williams" mari
root@student-VirtualBox:/home/student# usermod -c "Martha Jones" martha
```

```
gnome-initial-setup:x:121000:121000::/run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
student:x:1000:1000:STUDENT,,,:/home/student:/bin/bash
systemd-coredump:x:999:999:systemd Core Dumper:/:usr/sbin/nologin
vboxadd:x:998:1::/var/run/vboxadd:/bin/false
testuser3:x:1003:100::/home/testgroup3:/bin/sh
jhon:x:1004:2002:Jhon Doe:/home/jhon:/bin/sh
mari:x:1005:2001:Mary Williams:/home/mari:/bin/sh
martha:x:1006:2000:Martha Jones:/home/martha:/bin/sh
root@student-VirtualBox:/home/student#
```

9. How could you check that you have created all the users with the right primary groups?

`cat /etc/passwd` or `grep crey /etc/group`

10. Verify if crey and daw groups have martha as a member

```
root@student-VirtualBox:/home/student# grep 200 /etc/group
daw:x:2001:
crey:x:2002:martha
teacher:x:2000:
```

11. Can you log in with any of the users you have created?

We cannot log in at the momento because I haven't assigned a password yet.

12. Set the password "martha22" for the user "martha"

We can do this in two different ways, we can make it a encrypted password as the following:

1º We have to use the command `openssl passwd-crypt martha22`, with this we get an encrypted password that is `zgvdsfgdfg/asdfjsdfg`

2º `Usermod - zgvdsfgdfg / asdfjsdfg martha`

Another way to put a password is using the command `passwd martha` how is shown bellow:

```

root@student-VirtualBox:/home/student# passwd martha
New password:
Retype new password:
passwd: password updated successfully
root@student-VirtualBox:/home/student# login martha
Password:
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.11.0-38-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

237 updates can be installed immediately.
40 of these updates are security updates.
To see these additional updates run: apt list --upgradable

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Your Hardware Enablement Stack (HWE) is supported until April 2025.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

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applicable law.

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```



13. Display on the shell prompt the groups to which Martha belongs

```

student@student-VirtualBox:~$ id martha
uid=1006(martha) gid=2000(teacher) groups=2000(teacher),2002(crey)
student@student-VirtualBox:~$

```

14. Create a directory named “teachers” in “/home”. Then, assign the directory “/home/teachers” to the user martha (you can do all the steps typing just one command)

```

root@student-VirtualBox:/home/student# ls
config Desktop Documents Downloads exercises Music Pictures Public snap systems Templates Videos
root@student-VirtualBox:/home/student# mkdir teachers && usermod -d "/home/teachers" martha
root@student-VirtualBox:/home/student#

```

Other way to do this is with the command `usermod -d "/home/teachers" -m martha`.

15. Now, log in as user “martha”. Run the command “cd \$SHOME” and check that the home directory is “/home/teachers”

```
root@student-VirtualBox:/home/student# login martha
Password:
```

```
Last login: mié nov 17 12:41:36 CET 2021 on pts/0
$ $HOME
-sh: 1: /home/teachers: Permission denied
$
```

Or

```
Last login: mié nov 17 12:47:37 CET 2021 on pts/0
$ pwd
/home/teachers
$
```

16. Go back to the root shell

Use the command: `exit`

17. Change the shell of the user named “john” to “sh”

`Usermod -s /bin/bash jhon`

```
root@student-VirtualBox:/home/student# usermod -s /bin/bash jhon
root@student-VirtualBox:/home/student# grep jhon /etc/passwd
jhon:x:1004:2002:Jhon Doe:/home/jhon:/bin/bash
root@student-VirtualBox:/home/student#
```

18. Add the user “martha” to the secondary group “daw” without removing the already assigned secondary groups.

`Usermod -G daw -a martha`

It is necessary use the parameter -a, otherwise if we don't use it the user martha it will disappear from the other group, in this way with -a we can have the user in both groups.

19. Run a command to print the following information for each user

```
root@student-VirtualBox:/home/student# id jhon
uid=1004(jhon) gid=2002(crey) groups=2002(crey)
root@student-VirtualBox:/home/student# id mari
uid=1005(mari) gid=2001(daw) groups=2001(daw)
root@student-VirtualBox:/home/student# id martha
uid=1006(martha) gid=2000(teacher) groups=2000(teacher),2002(crey)
root@student-VirtualBox:/home/student#
```

20. Delete all the groups you have created. Could you delete them? Why?

It is not possible to delete the groups because we can not delete a primary group of an user.

21. Delete all the users you have created, including the files and directories inside the home.

```
root@student-VirtualBox:/home/student# userdel -r jhon
userdel: jhon mail spool (/var/mail/jhon) not found
userdel: jhon home directory (/home/jhon) not found
root@student-VirtualBox:/home/student# groupdel crey
root@student-VirtualBox:/home/student#
```

22. Try again to delete the groups

```
root@student-VirtualBox:/home/student# userdel -r jhon
userdel: jhon mail spool (/var/mail/jhon) not found
userdel: jhon home directory (/home/jhon) not found
root@student-VirtualBox:/home/student# groupdel crey
root@student-VirtualBox:/home/student#
```

We need to delete every user, and directories inside of the group, and after that we can delete each group.