

UD10.Linux

Using the terminal

Desarrollo de Aplicaciones Web

1er Curso

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The terminal

In Ubuntu: Start → System Tools → Qterminal OR
CTRL+ALT+T

```
profesor@profesor-virtualbox:~$
```

USER	HOSTNAME	CURRENT DIRECTORY
-------------	-----------------	------------------------------

The terminal: using commands

Just type the command and press Enter:

```
profesor@profesor-virtualbox:~$ ls  
Desktop Documents Downloads Music Pictures
```

Some command have *arguments*:

```
profesor@profesor-virtualbox:~$ ls -l  
total 36  
drwxrwxr-x 2 profesor profesor 4096 feb  6 08:42 Desktop  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Documents  
drwxr-xr-x 2 profesor profesor 4096 ene 31 10:11 Downloads  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Music  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Pictures  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Public  
drwxr-xr-x 3 profesor profesor 4096 ene 31 10:04 snap  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Templates  
drwxr-xr-x 2 profesor profesor 4096 ene 31 09:39 Videos
```

The terminalS: multi-user

Just press CTRL+ALT+F[1-7]. In the example, F2

```
Ubuntu 20.04.1 LTS profesor-virtualbox tty2 TERMINAL 2
profesor-virtualbox login student USER STUDENT
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-65-generic x86_64)

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

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

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.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

student@profesor-virtualbox:~$ _
```

The terminalS: multi-user

You can go back to the graphic terminal pressing
CTRL+ALT+F1.

```
profesor@profesor-virtualbox:/home$ cd student
profesor@profesor-virtualbox:/home/student$ ls
profesor@profesor-virtualbox:/home/student$ █
```

```
Last login: Sat Feb  6 09:16:14 CET 2021 on tty2
student@profesor-virtualbox:~$ pwd
/home/student
student@profesor-virtualbox:~$ _
```

The terminal...

Sometimes (or always ;))

The  is faster than the 

- Use  key to “go back in time”



- Use Tab Key to complete a command.



The terminal...

No news good news

Linux terminal (by default) will not inform about the success of a command, just if there's an error.

“Go” to your directory: type `cd`

Type `cat /etc/passwd`

Type `cat etc/passwd`

Users and groups

Files you must learn in /etc directory:

- passwd
- shadow (you must be root: *I AM ROOOOOT*)
- group



In the class notes you have links to webpages where these files are explained.

Permissions

What a user or group can do with files and directories. It depends on who is accessing: owner, group member or other.

```
shum@sol1:~$ ls -l
total 20
drwx----- 2 shum  staff  4096 Jan 16 22:04 Mail
drwx----- 3 shum  staff  4096 Jan 16 14:15 csc128
drwxr-xr-x  2 shum  staff  4096 Jan 13 16:42 public
drwxr-xr-x  2 shum  staff  4096 Jan 16 14:07 public_html
-rw-r--r--  1 shum  staff   628 Jan 15 20:04 verse
```

file type

number of hard links

user (owner) name

group name

size

date/time last modified

filename

permissions: rwx

- r: readable
- w: writeable
- x: executable

Legend:

- green: user permissions
- cyan: group permissions
- red: other (everyone) permissions

Checking default permissions

Default file permissions here are: 664 (rw+rw+r)

```
profesor@profesor-virtualbox:~/Documents$ touch myfile.txt
profesor@profesor-virtualbox:~/Documents$ ls -l
total 0
-rw-rw-r-- 1 profesor profesor 0 feb  7 11:07 myfile.txt
```

Check also with *umask*. The value is 002 which is the result of 666-664. Check also with *umask -S* (*Symbolic notation*).

Which are the default permissions for directories?

Special permissions

<https://www.geeksforgeeks.org/setuid-setgid-and-sticky-bits-in-linux-file-permissions/>