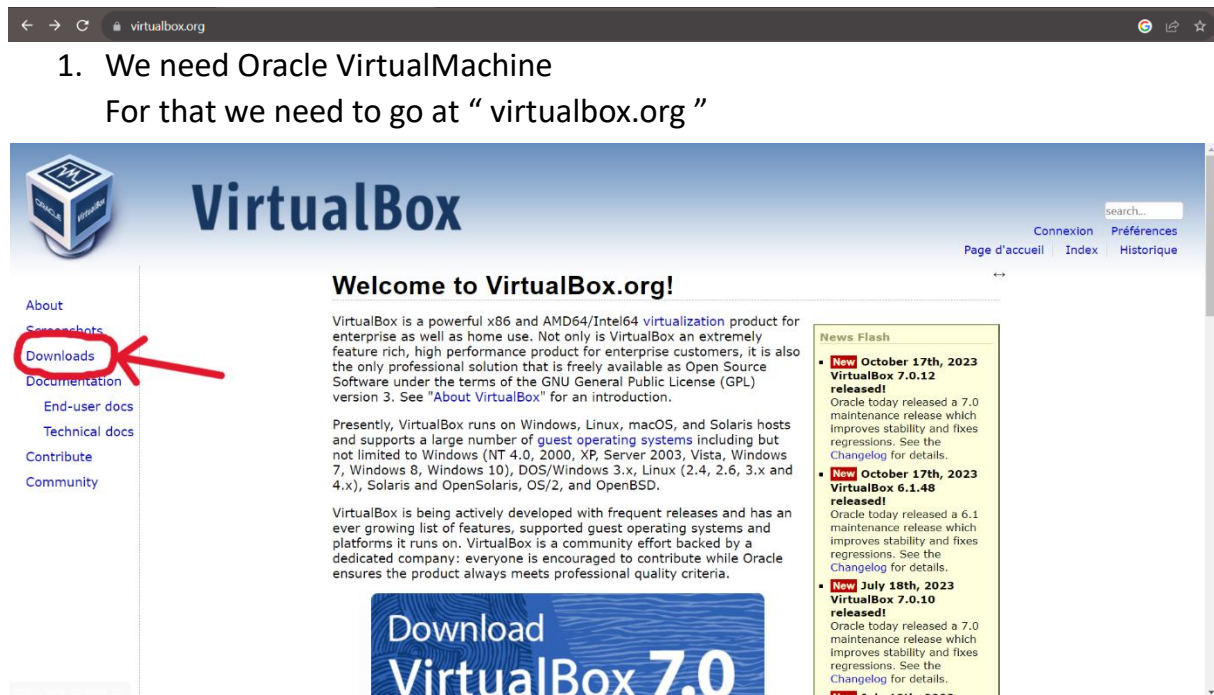# How to install Debian on Virtual Machine

First, what is Debian ?

Debian is a free and open-source operating system and one of the most popular Linux distributions. It can be downloaded for free at "debian.org" .

How to install Debian ?

1. We need Oracle VirtualMachine
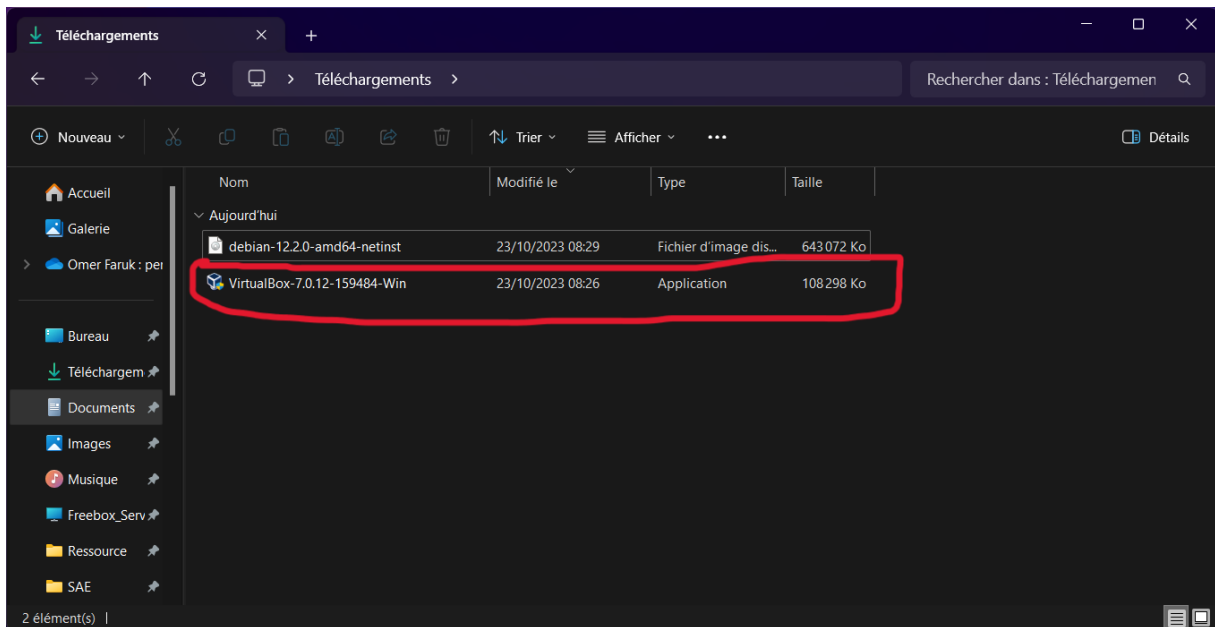   For that we need to go at " virtualbox.org "

Then, we do choose the write version of our Operating Systems. Here we use Windows so we choose "Windows Host" and we need to patient a little bit.
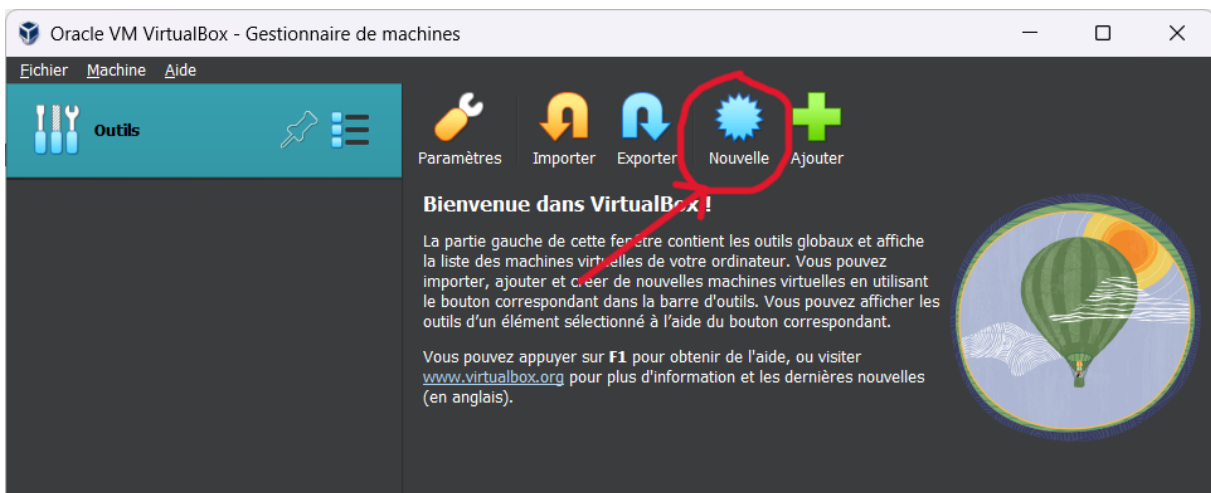
2. Waiting the download of VirtualBox, we download Debian ISO.
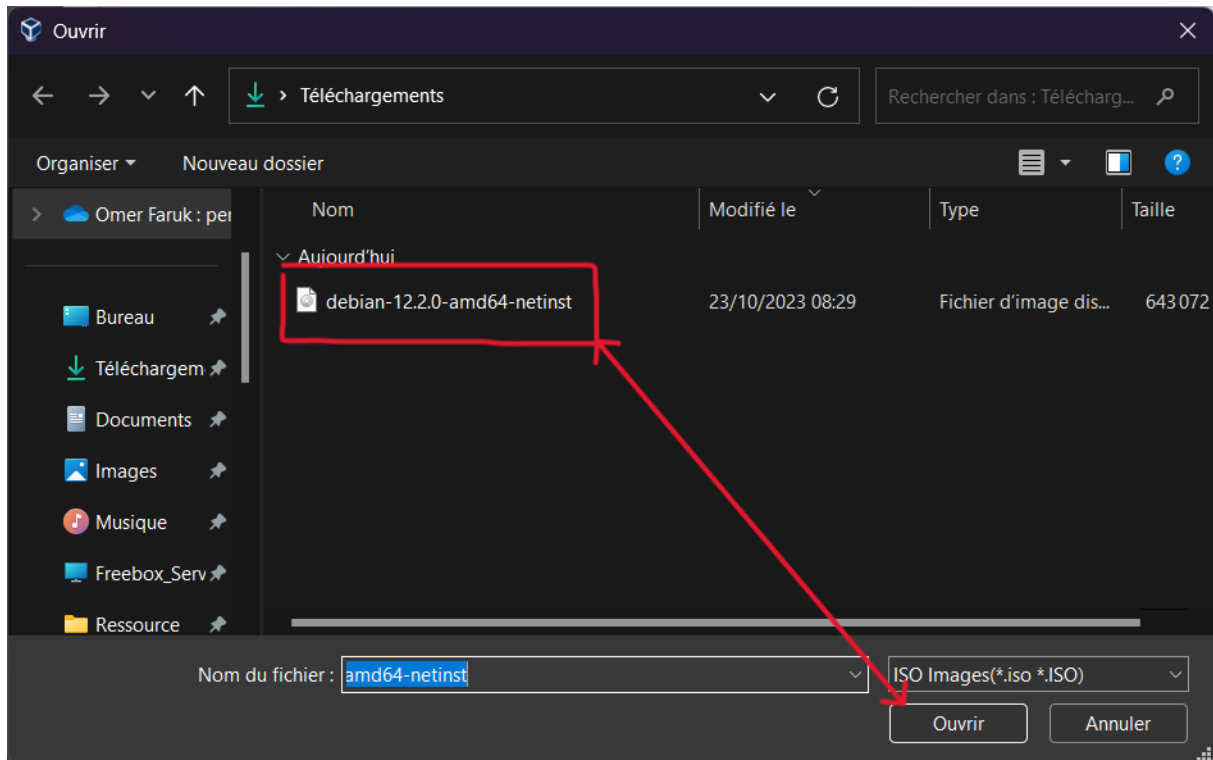

3. After the download of the VirtualBox and Debian ISO, we need to go at downloaded file and launch VirtualBox.
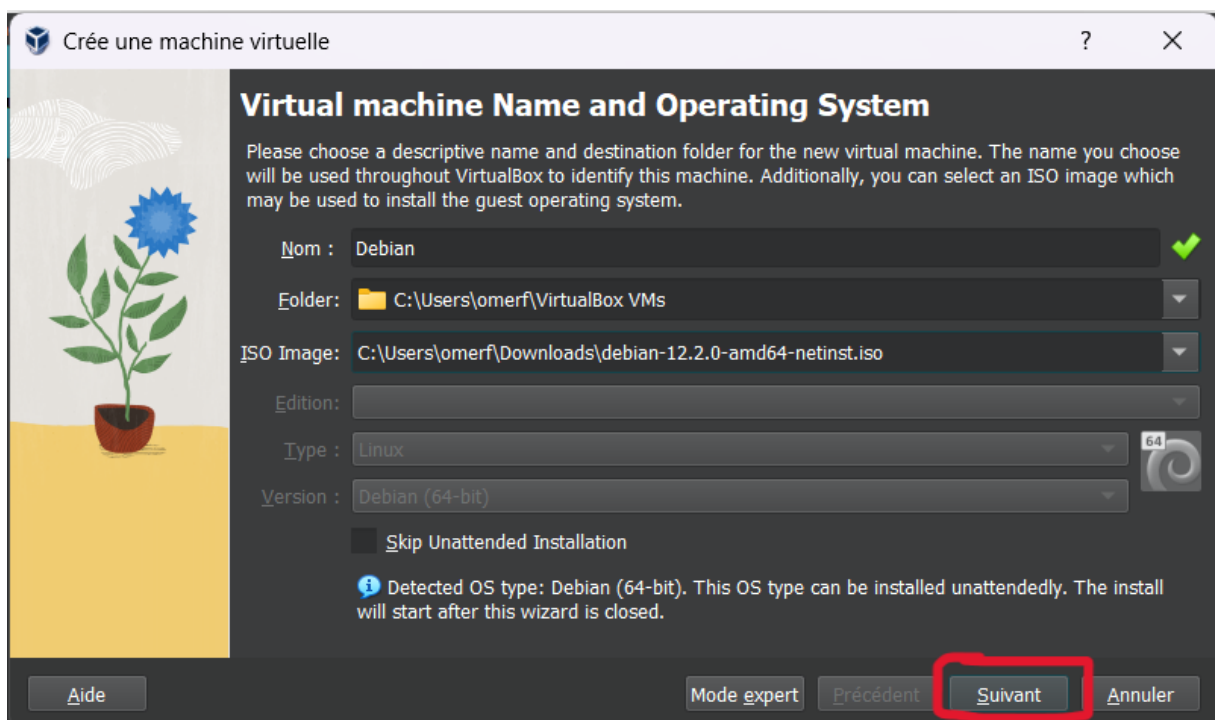

4. When Oracle was open, click on the "nouvelle" icon.

5. We need to setup the name and the OS of the Virtual Machine.
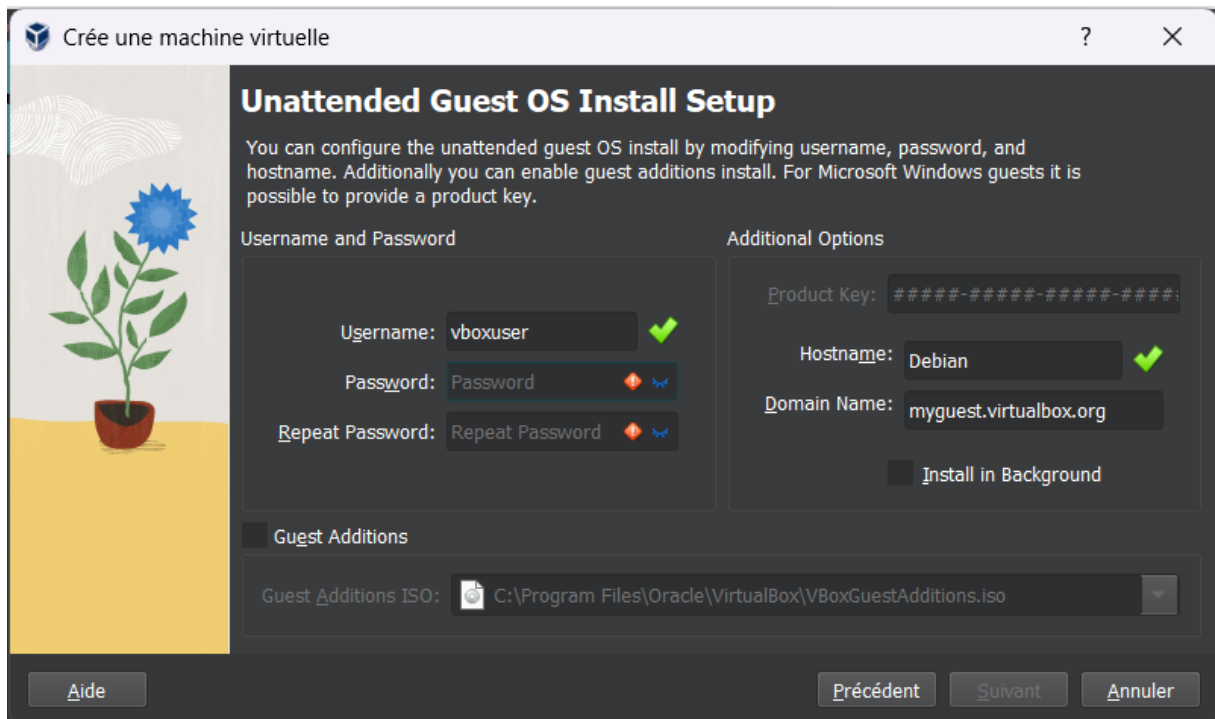   For add the OS, we take the ISO downloaded before and add it.

6. When the name and OS are setup, we can pass to the next step.

7. Here we need to setup the password. You need to enter a username and a password.
   Keep your username and the password it will be useful in the rest of this tutorial.

After entering your information you can click on next.t.

8. In this page we will setup the hardware of Virtual Machine.
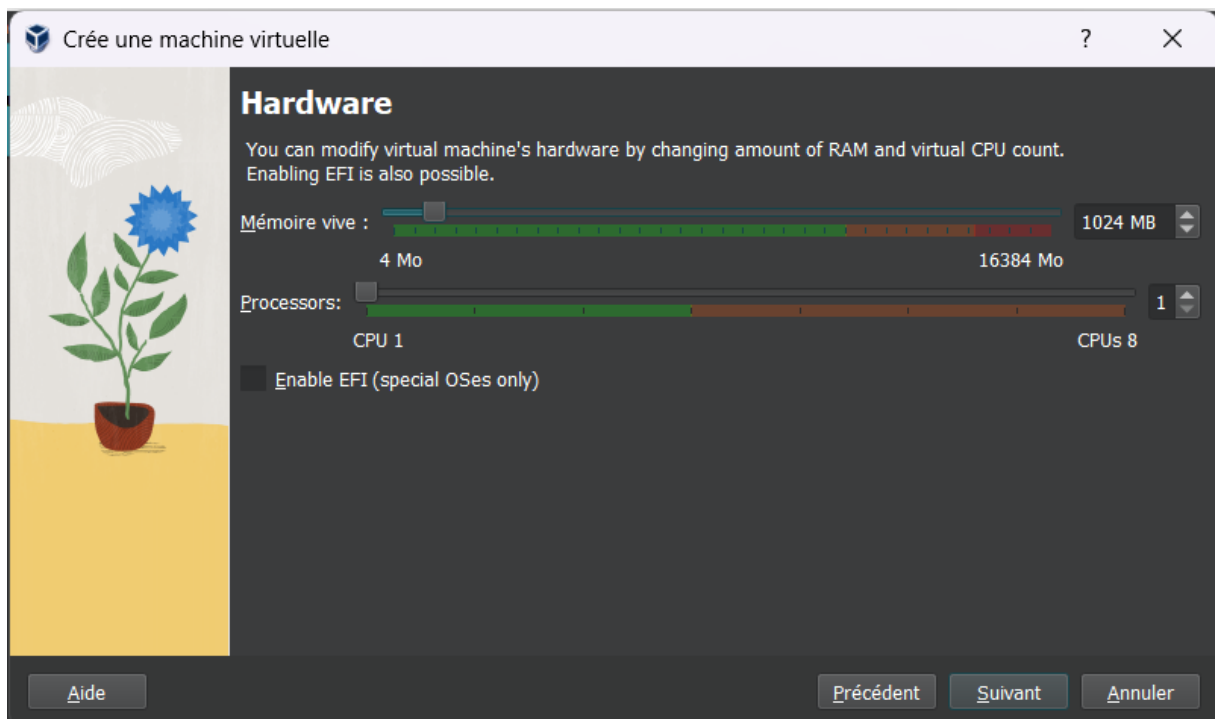
Install Type	RAM (minimum)	RAM (recommended)	Hard Drive
No desktop	256 megabytes	512 megabytes	2 gigabytes
With Desktop	1 gigabytes	2 gigabytes	10 gigabytes

According to the website "debian.org", a minimum of 256 Megabytes of RAM is required but 512 Megabytes of Ram is recommended for command line use. Otherwise for graphics use, you need at least 1 GB of RAM but 2 GB of RAM is recommended.

"The minimum values assumes that swap will be enabled and a non-liveCD image is used. The "No desktop" value assumes that the non-graphical (text-based) installer is used"

(Source)

9. In the next step we need to choose the Hard Disk size of Debian.
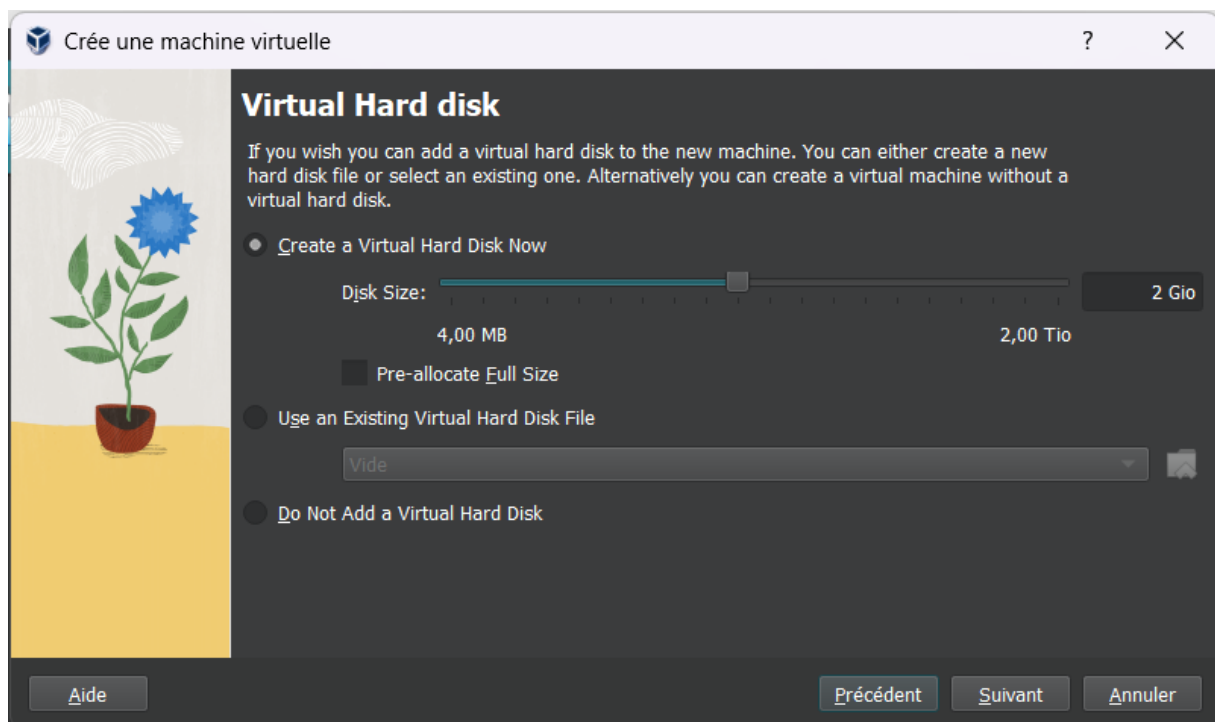
| Task	Installed size (MB)	Download size (MB)	Space needed to install (MB)
Desktop environment			
• GNOME (default)	2790	786	3576
• KDE Plasma	4122	1212	5334
• Xfce	2187	621	2808
• LXDE	2271	653	2924
• MATE	2574	711	3285
• Cinnamon	4197	1251	5448
Web server	44	11	55
SSH server	2	0	2

Following the same website we need a minimum space of 3576 MB for install GNOME GUI (Graphical User Interface). For the size of hard disk for this Virtual Machine we choose 10 Gio. **(Source)**

10. Here we have a summary of the our Virtual Machine.
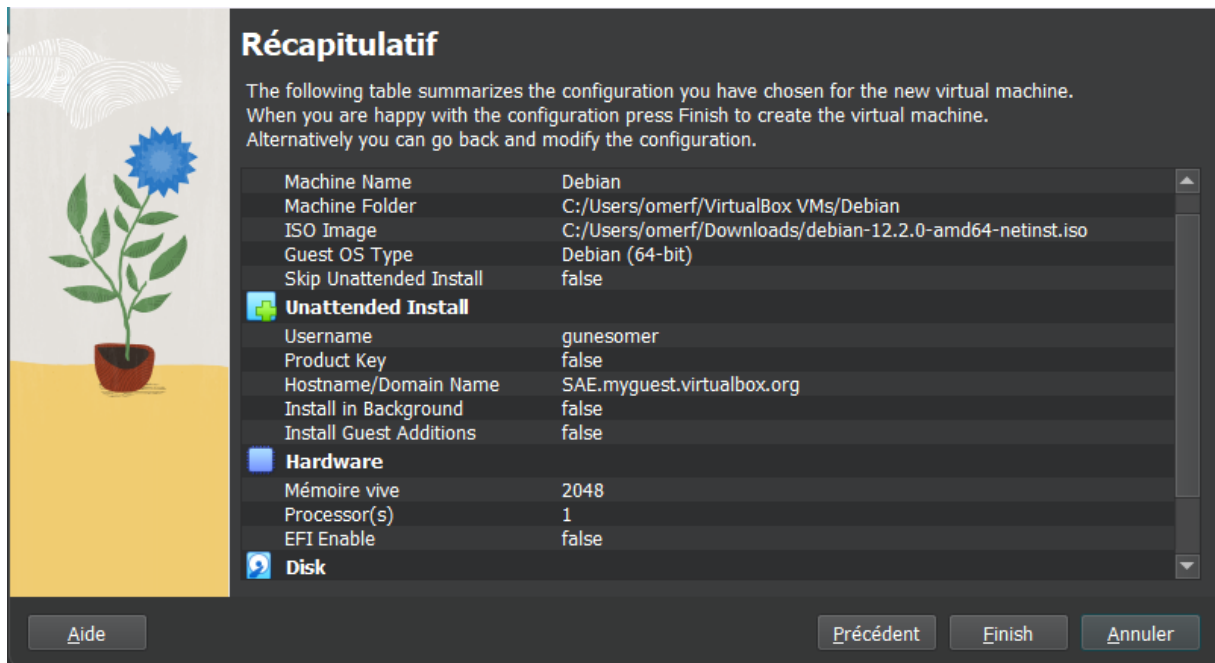
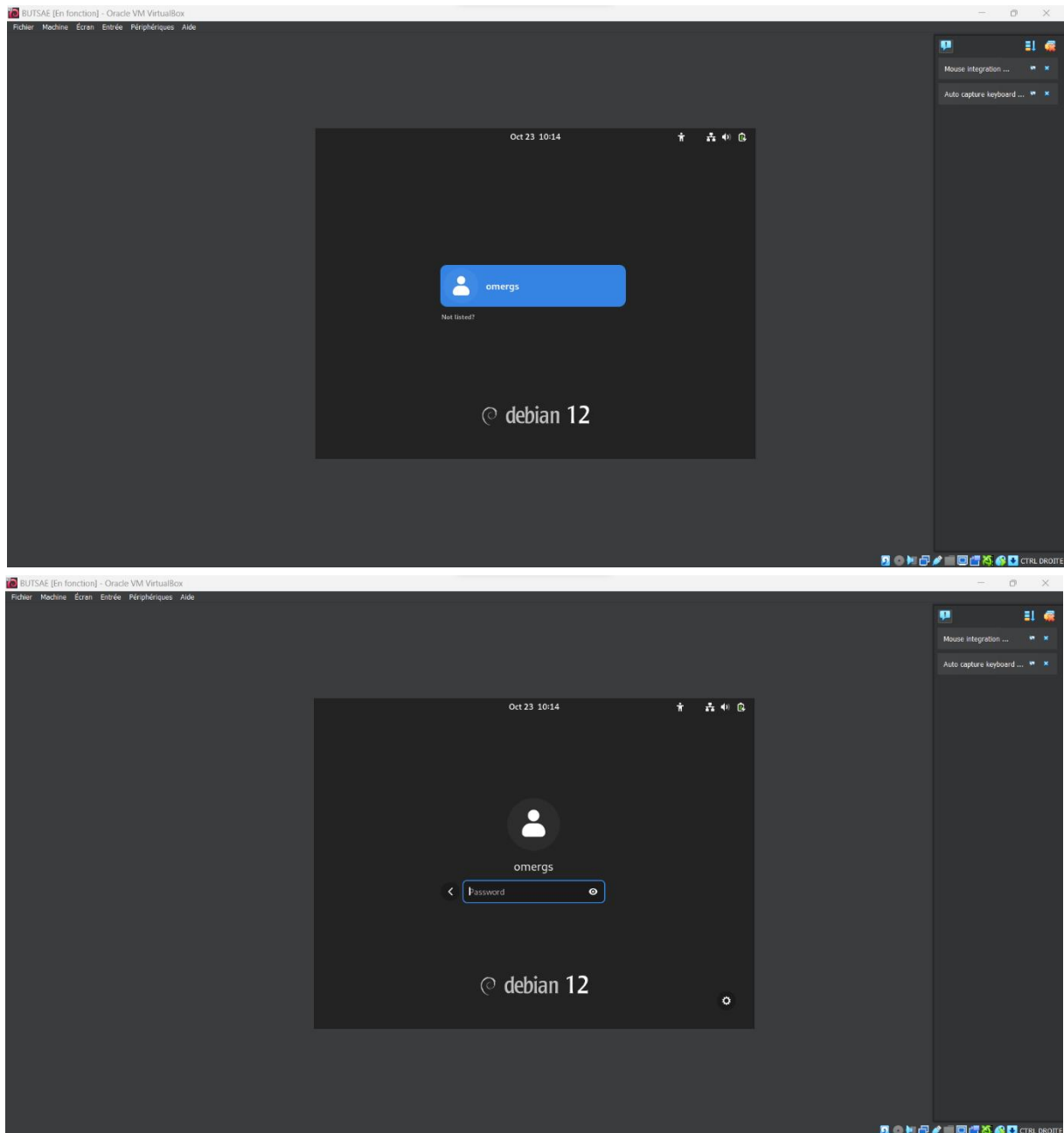After reading summary click on "Finish" for save the configuration.

11. Debian will launch automatically when we save configuration.
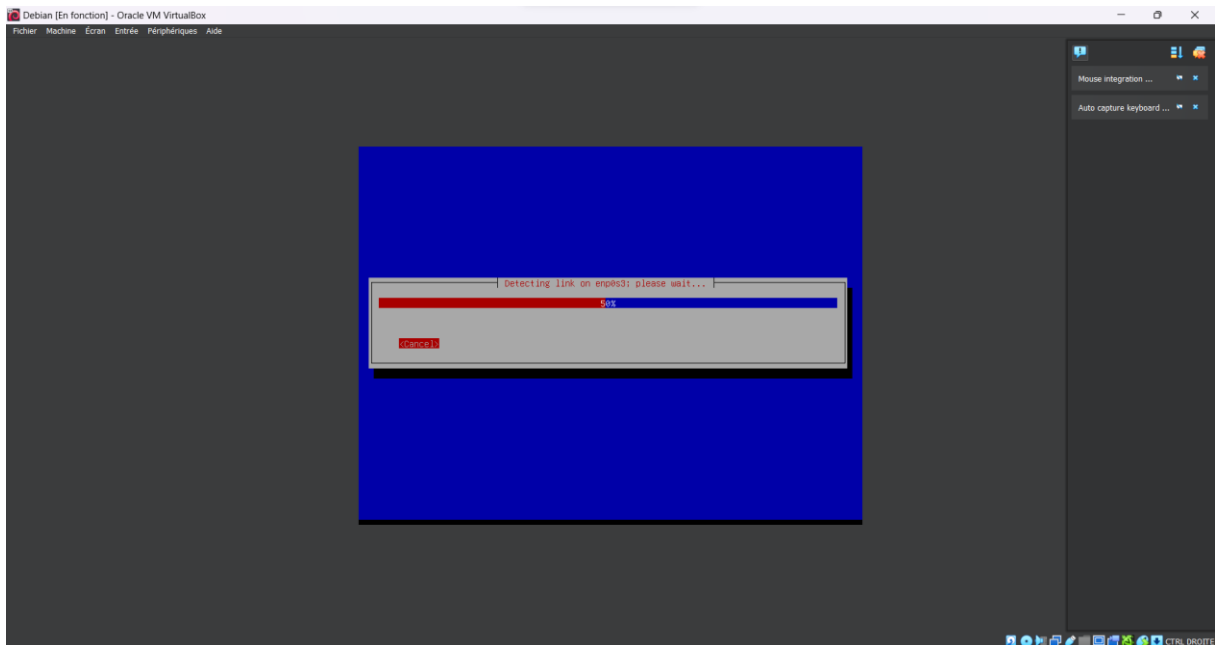
During 10 minutes the files of Debian will be installed. So don't quit Debian Virtual Machine and Oracle Virtual Machine.
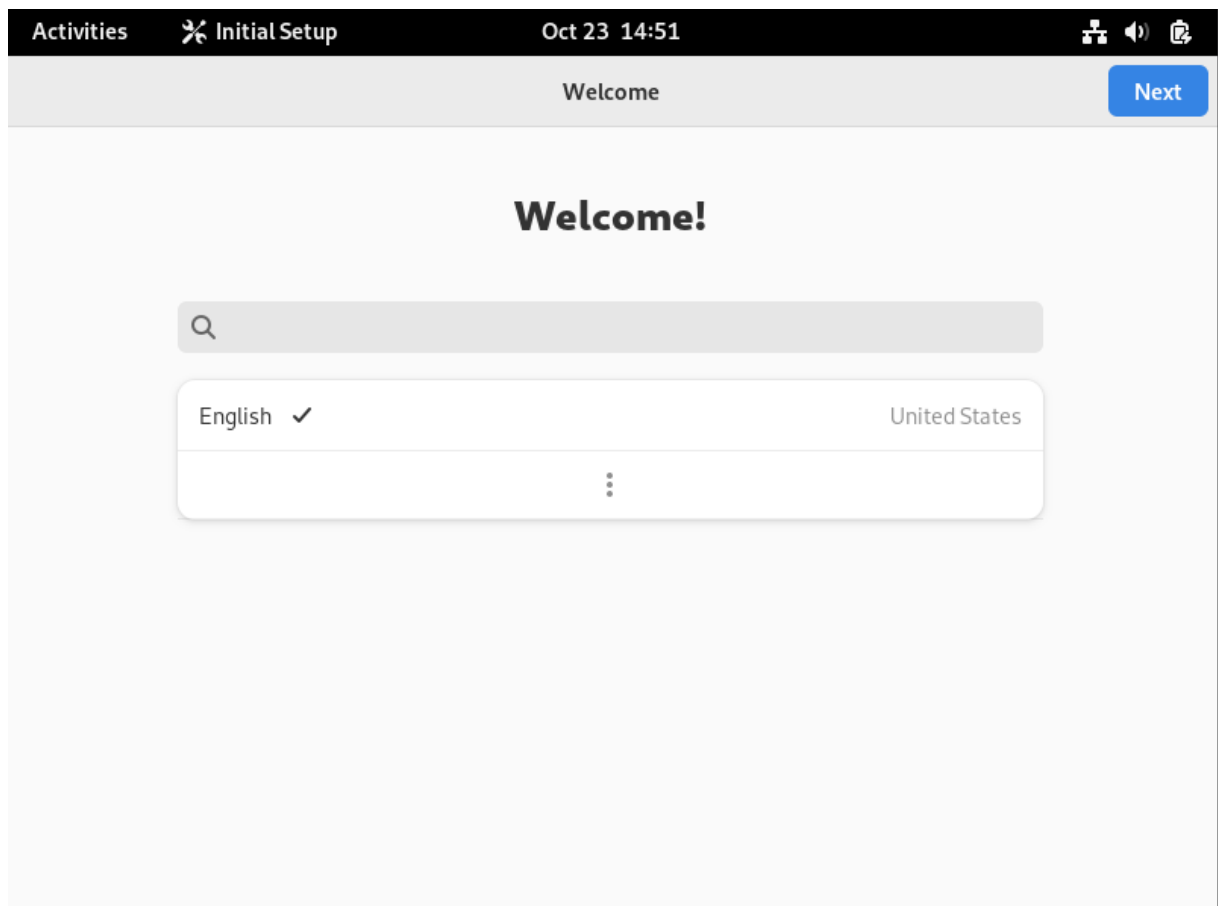
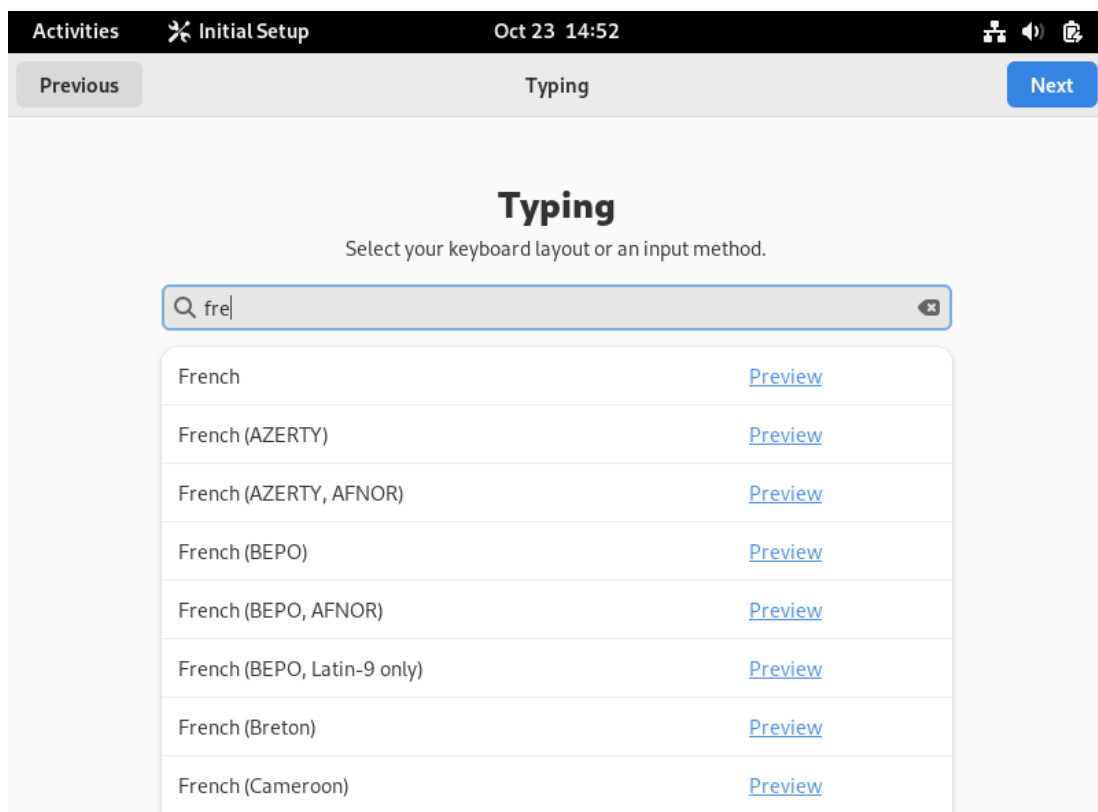12. So here we need to take the password, we saved in 7th step.

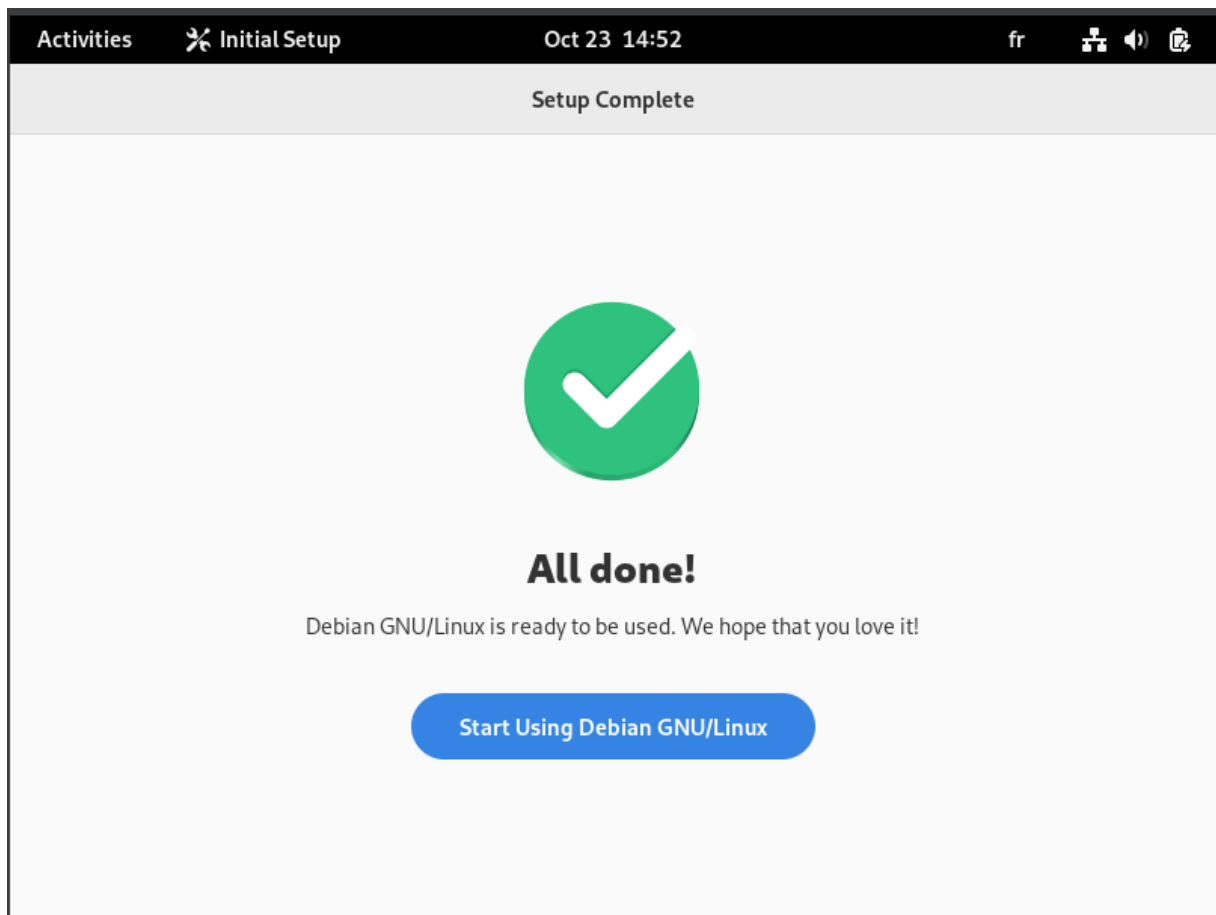After putting your password, the desktop of Debian will launch.

13. Here you do parameters your OS language.

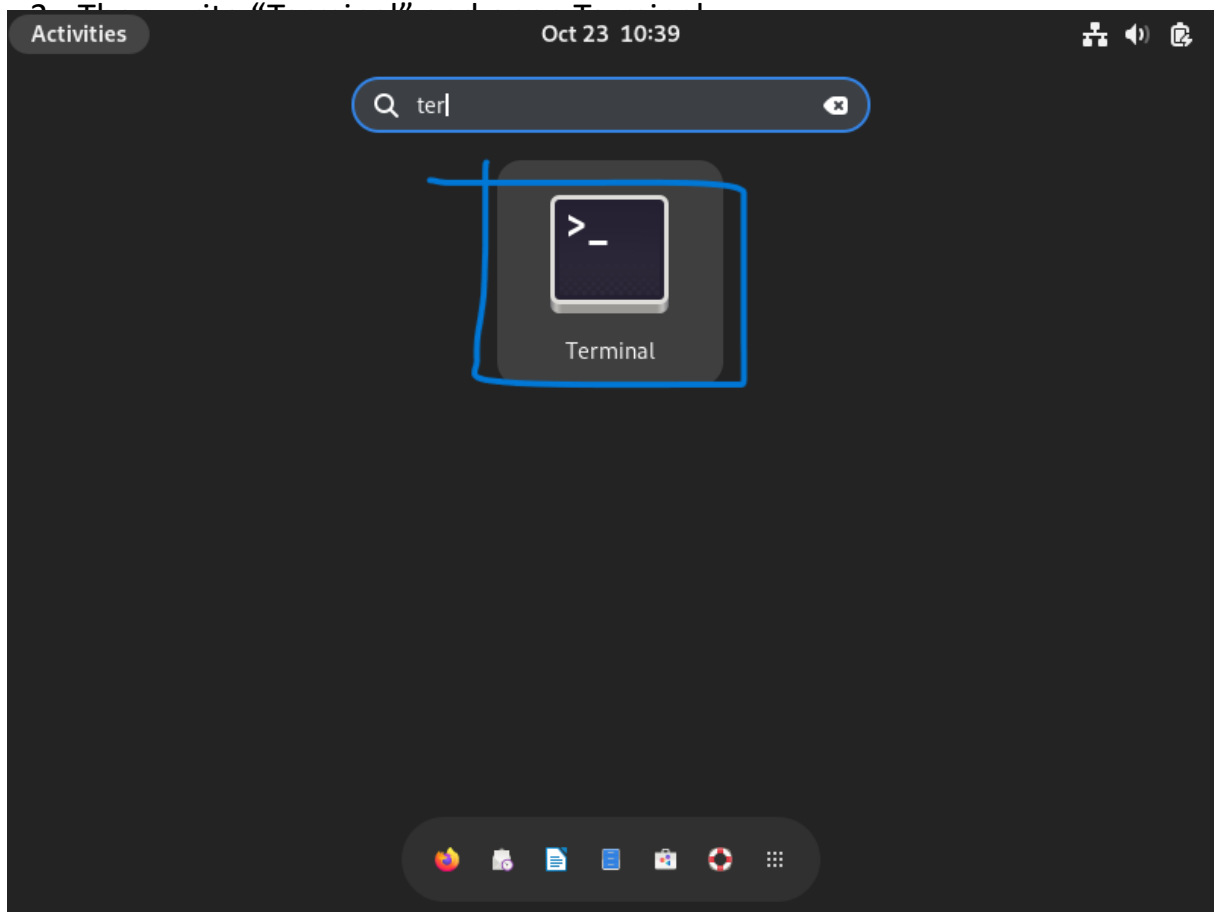14. After you choose your language, you need to choose your keyboard language.

And it's okay, we're there. You have successfully installed Debian which is a Linux distribution on a virtual machine. In the following we will show you some useful commands to get started with Debian.

How to go in the Debian Terminal :
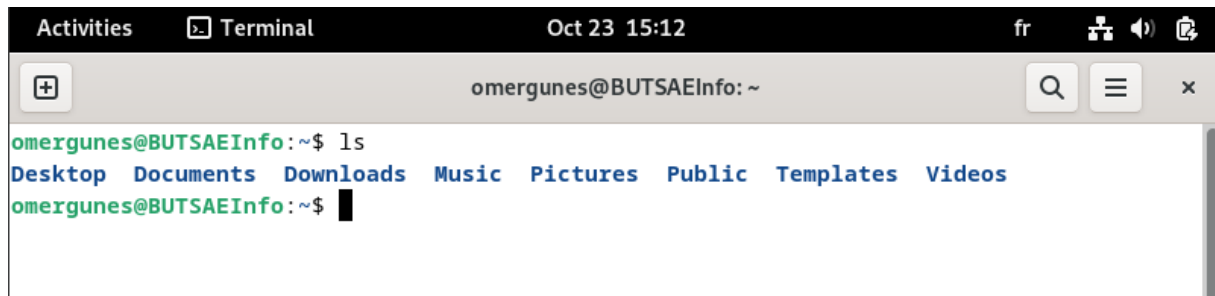
1. Click on "Activities" :

2.

4. And you have opened Debian terminal.

Useful command for Debian Terminal :

Display the content of current folder : "ls"

Go into a folder : cd "name of the folder"

Create a folder : mkdir "name of the folder"

In the GUI we have :

- An option to change the Resolution of the OS.
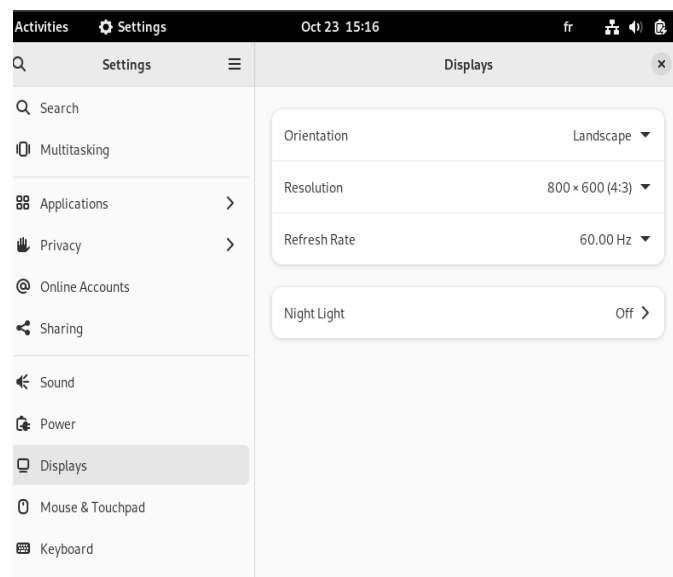
- Network connection settings
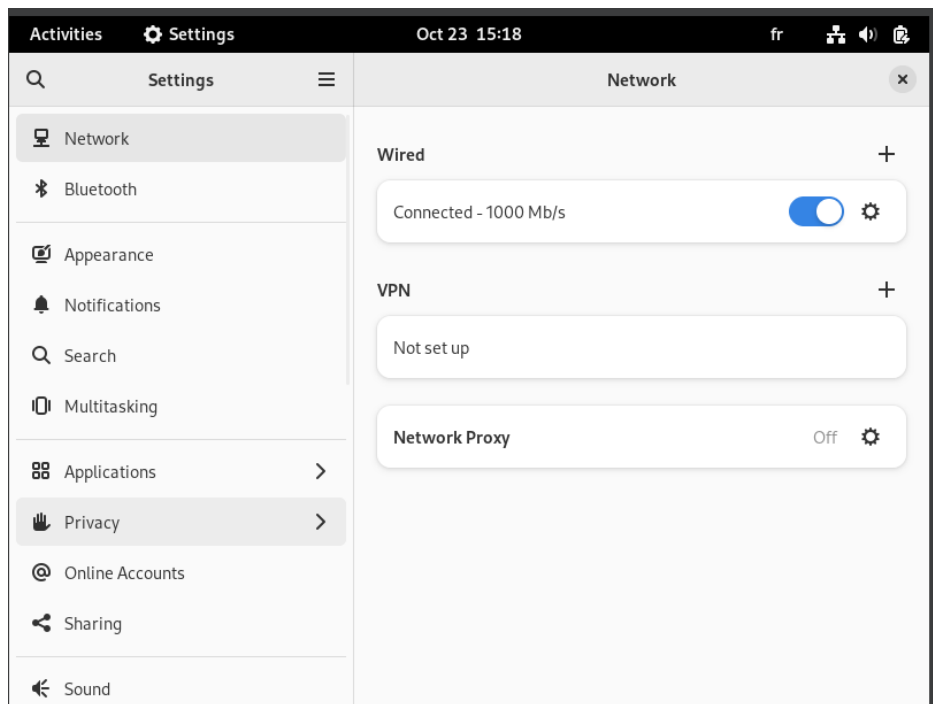
- And we have Firefox to navigate in web.