Report
S1.03

TP Install Party
For the 22/09/2022

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BASOL Nathan
LEDERREY Lussandre
INFO1A2

The goal of this tutorial will be to install Ubuntu on a Virtual Machine
It's divided into 3 sections :
   1) Download and install VirtualBox
   2) Create the Virtual Machine
   3) Start and use it

1) Download and install VirtualBox

- Go on https://www.virtualbox.org/wiki/Downloads and click on
  `Windows hosts` (the version number may differ of what you
  see on the screenshot)
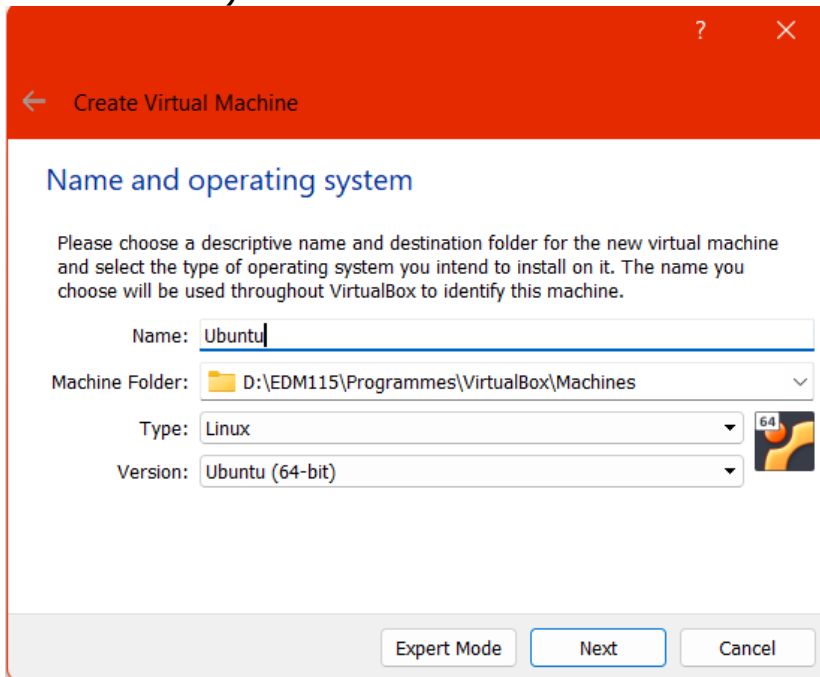
- Install the downloaded file by following the steps of the wizard
- Go to https://ubuntu.com/download/desktop and click on the
  green `Download` button (here again, the version may differ). It
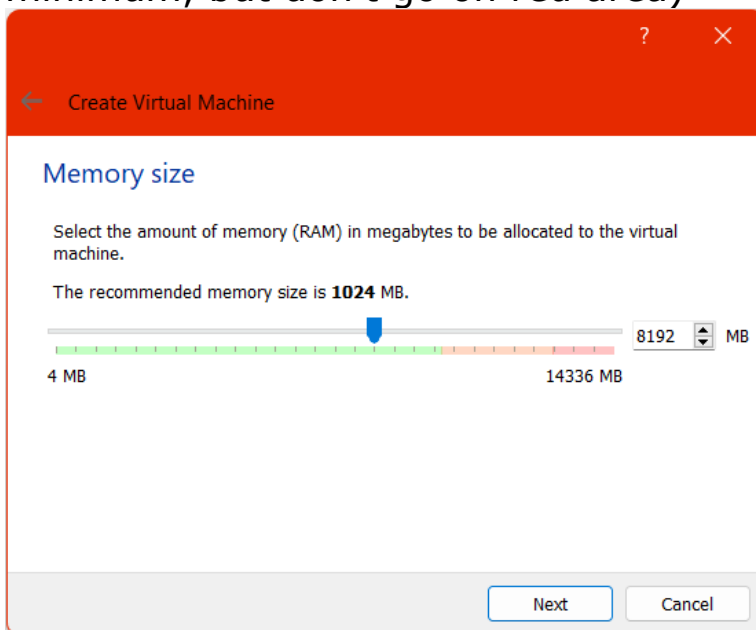 may take some time, so go drink some coffee
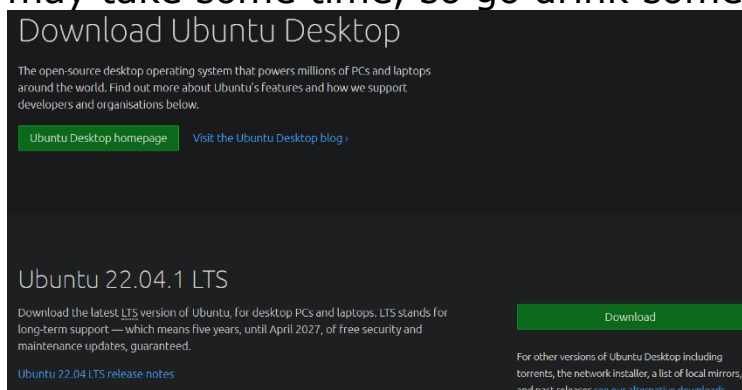
2) Create the Virtual Machine

- Launch `VirtualBox` as `Administrator`

- At the top, click on the blue `New` button New

- Give a name to your virtual machine (you can set it to anything, but choosing `Ubuntu` will automatically set the type and version)
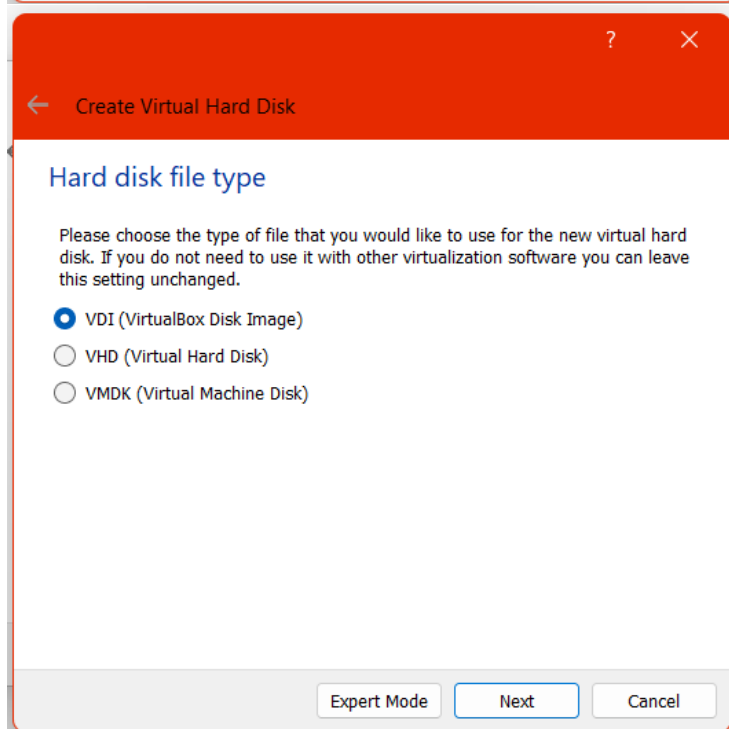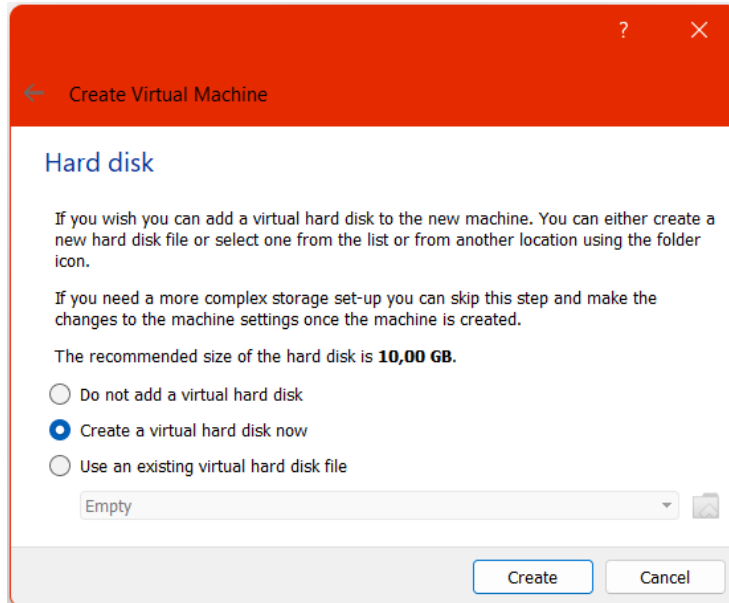

- Give a correct amount of RAM to your machine (1 Gb minimum, but don't go on red area)

- Keep `Create a virtual hard disk now` and click on `Create`. Keep it VDI. Then, go on `Fixed size`, and choose a correct size for the virtual disk (15-25 Gb is a fair value). Click again on `Create`
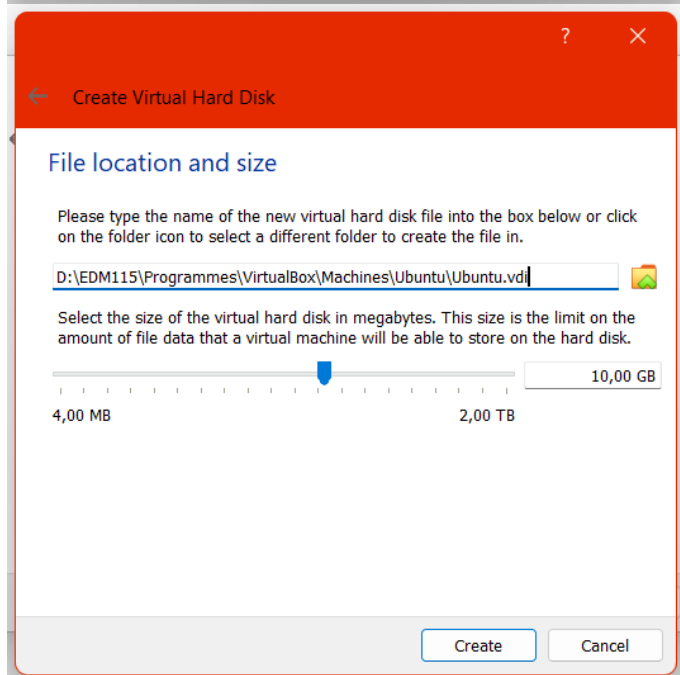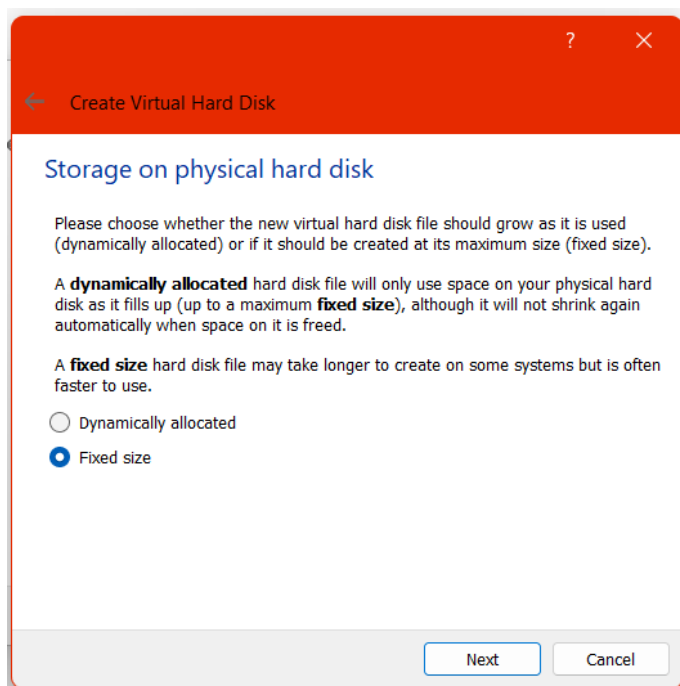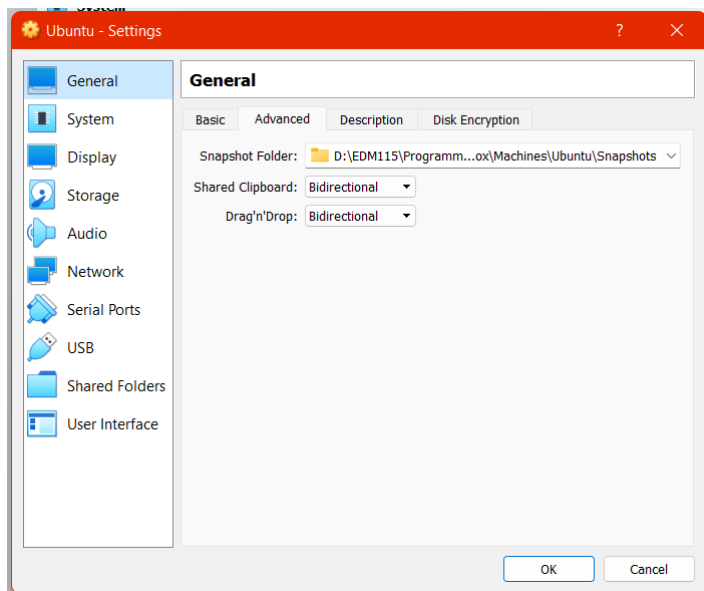
- Wait until the disk is created
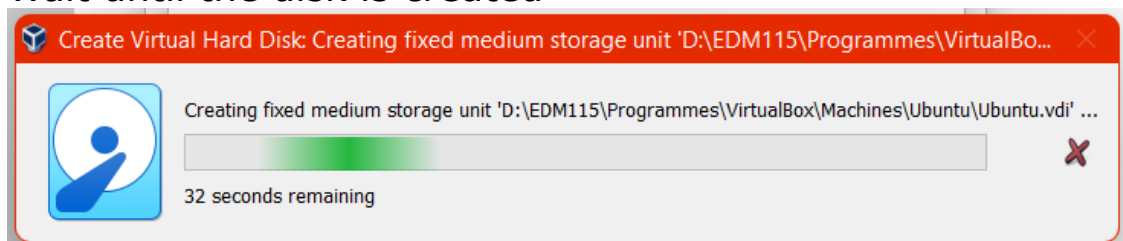
- Once it's done, click on the orange `Settings` button
- On `General` → `Advanced`, make both `Shared Clipboard` and `Drag'n'Drop Bidirectional`

- On `System` → `Processor`, allocate more `Processors` to the machine. Don't go on read area !!
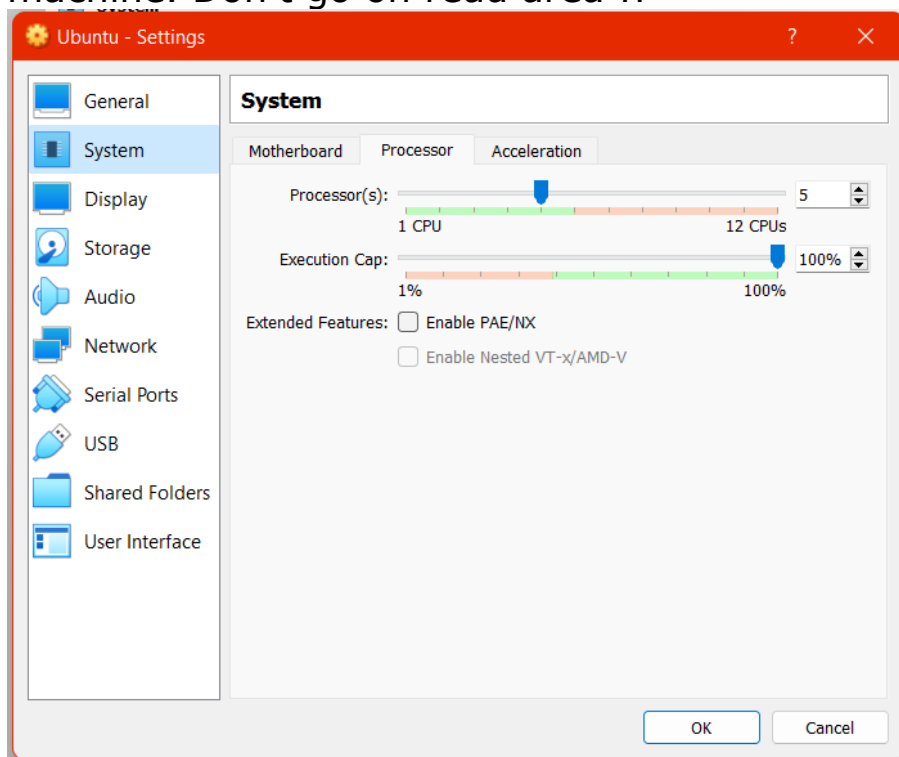
- On `Display` → `Screen`, put the `Video Memory` to the maximum (128 Mb)
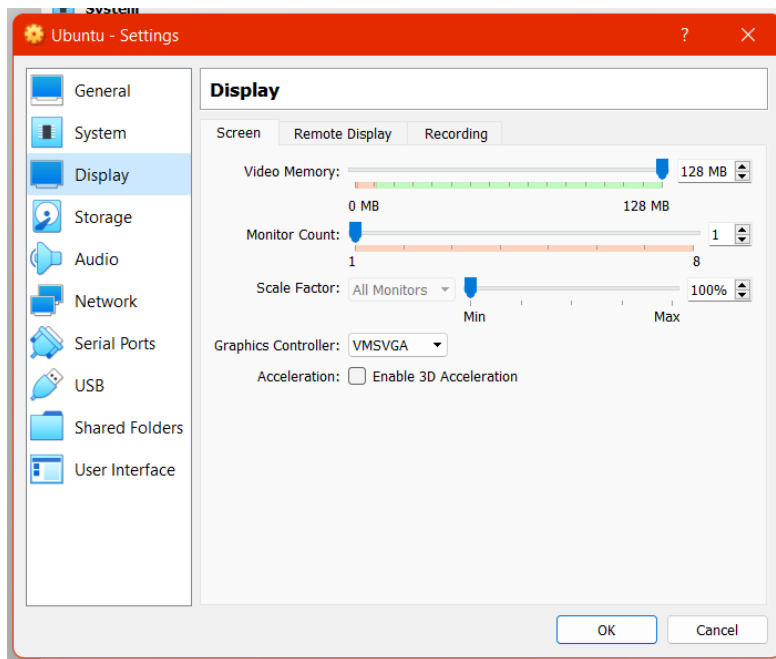
- And for the sake of God, make sure that 3D Acceleration is **DISABLED** !! Else, you will end up with a Kernel Panic error and a glitchy screen 🥲 (and no one wants that)

- Finally, go on `Storage`. Click on `Empty`, then the Disk logo after Optical Drive, and click `Choose a disk file`. Select the `.iso` of Ubuntu you downloaded before
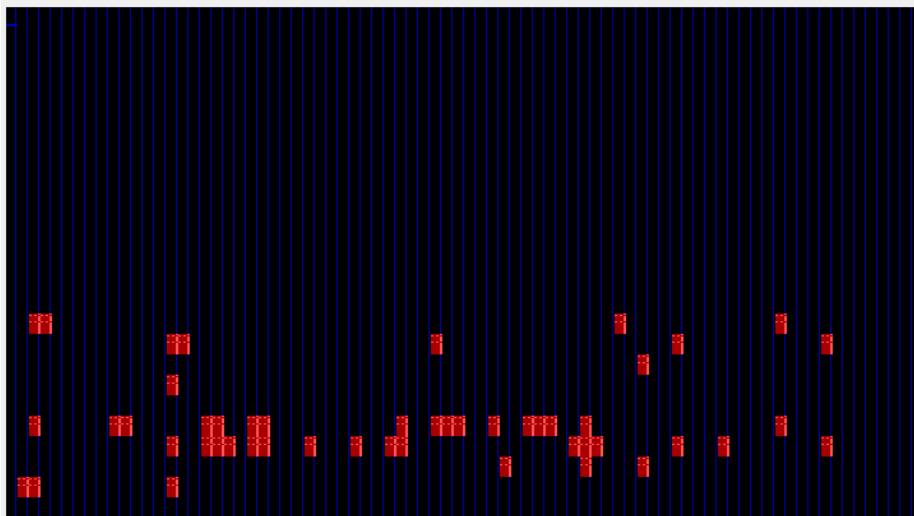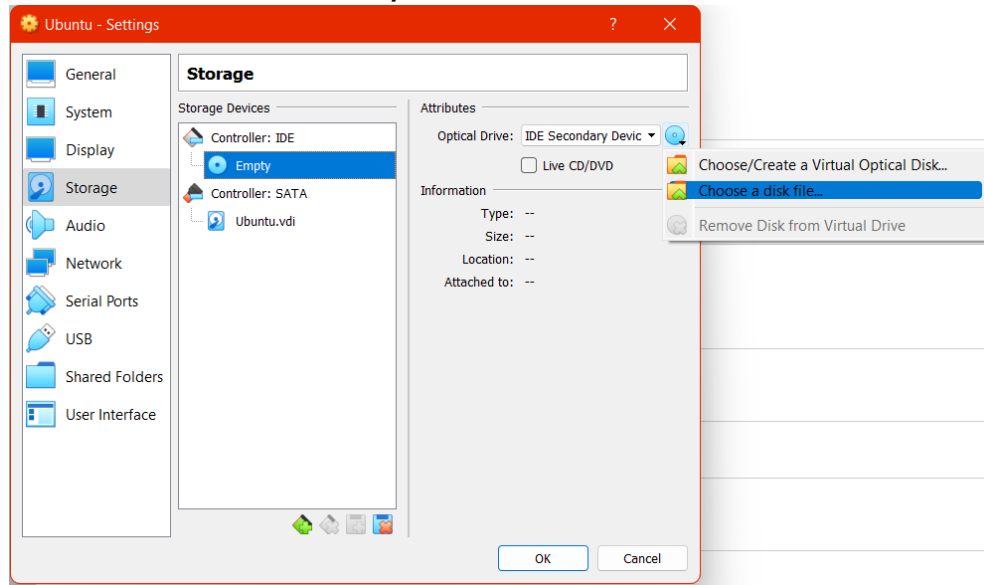

- Now click Ok, then click on the green `Start` button (not the dropdown arrow)

3) Start and use it

- Click on `Install Ubuntu`, then choose `French` and in the second row `French-French (legacy, alt.)` (else you'll have your keyboard in qwerty, pretty bad for typing your password)
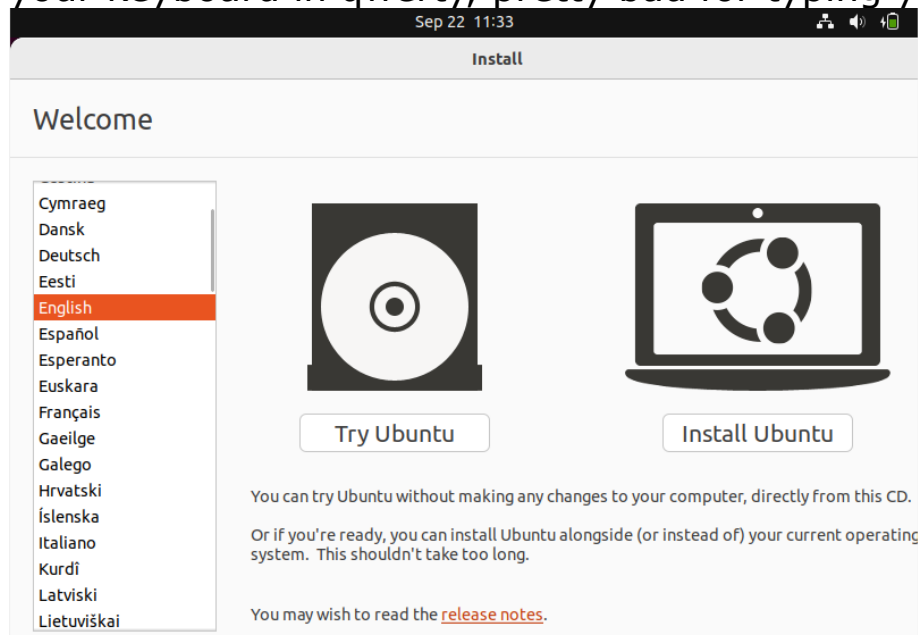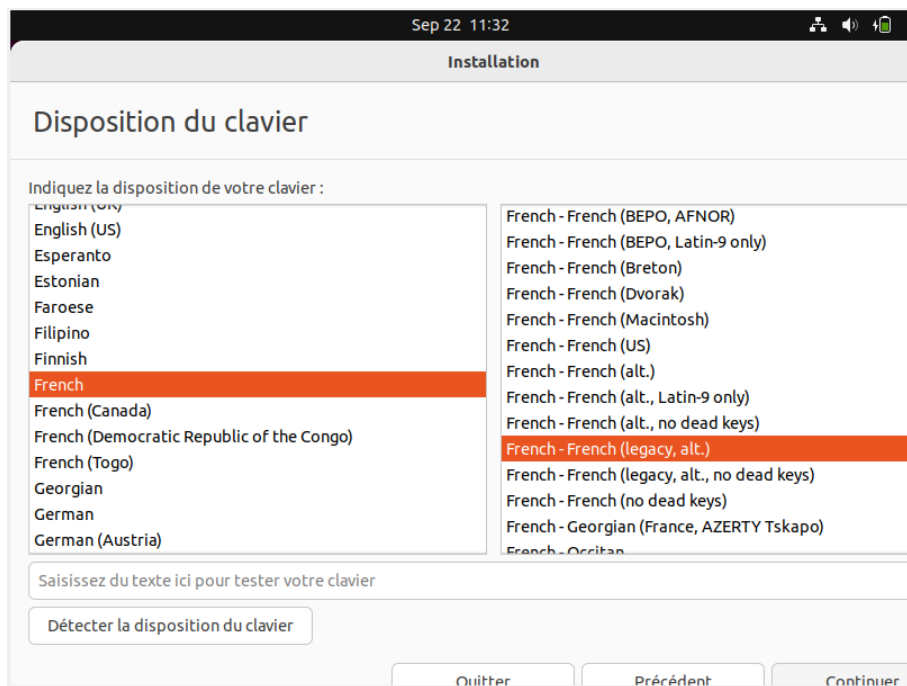
- Tick the last checkbox to install additional drivers which will help you to connect easily to networks and handle correctly some peripherals
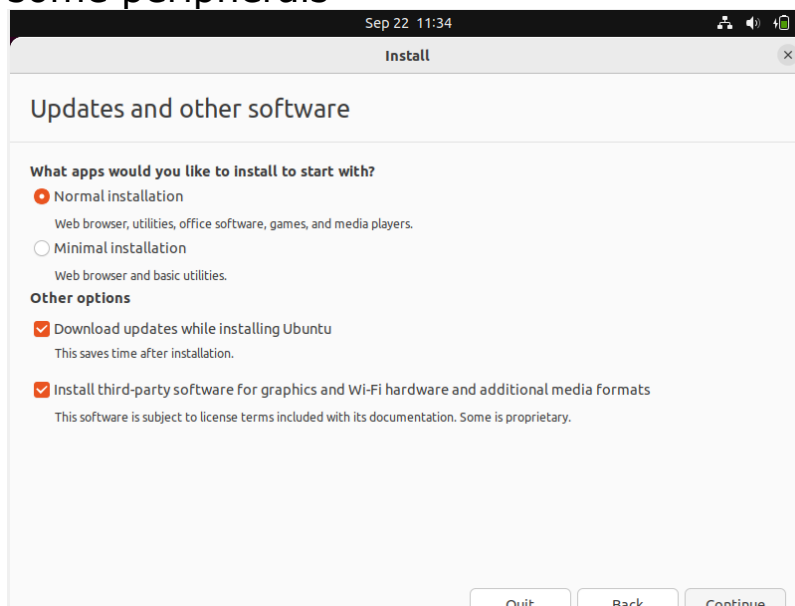
- Keep `Erase disk` enabled and click on `Install Now`, then `Continue`
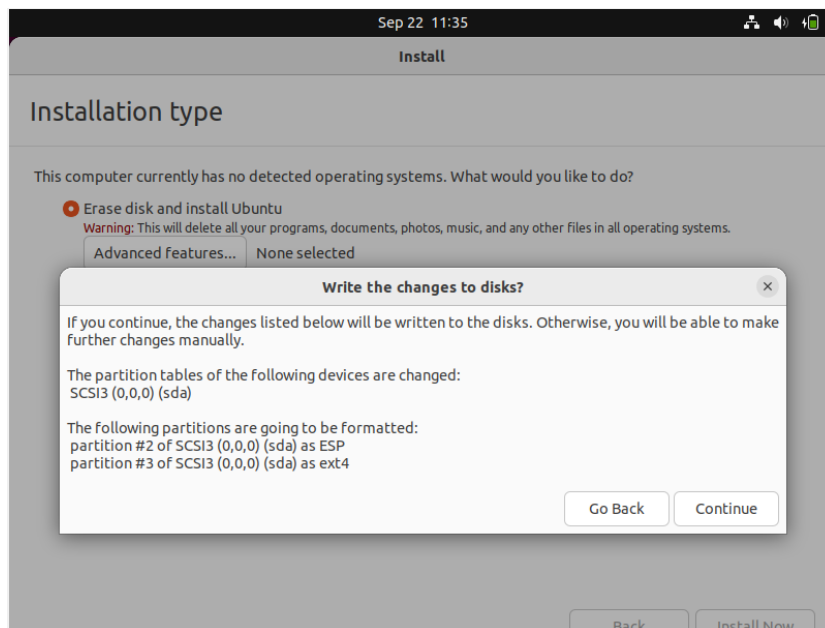
- Select your `time zone`
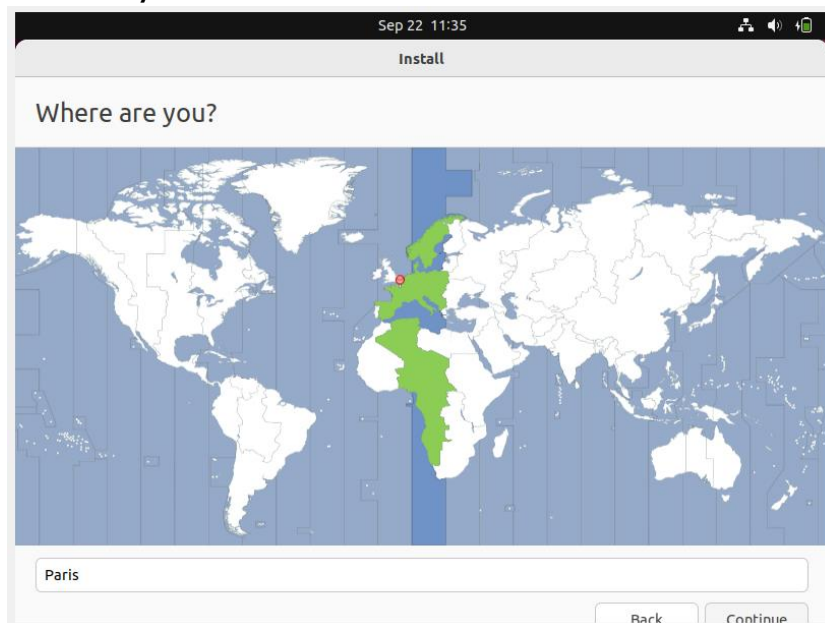
- On the `Who are you ?` screen, there's some elements to pay attention with :
  - ➤ `Your name` is something personal that won't show up
  - ➤ `Your computer's name` will show up in your local network, and will be used to identify your machine
  - ➤ The `username` and `password` will be used to log you in. DON'T LOOSE THEM !
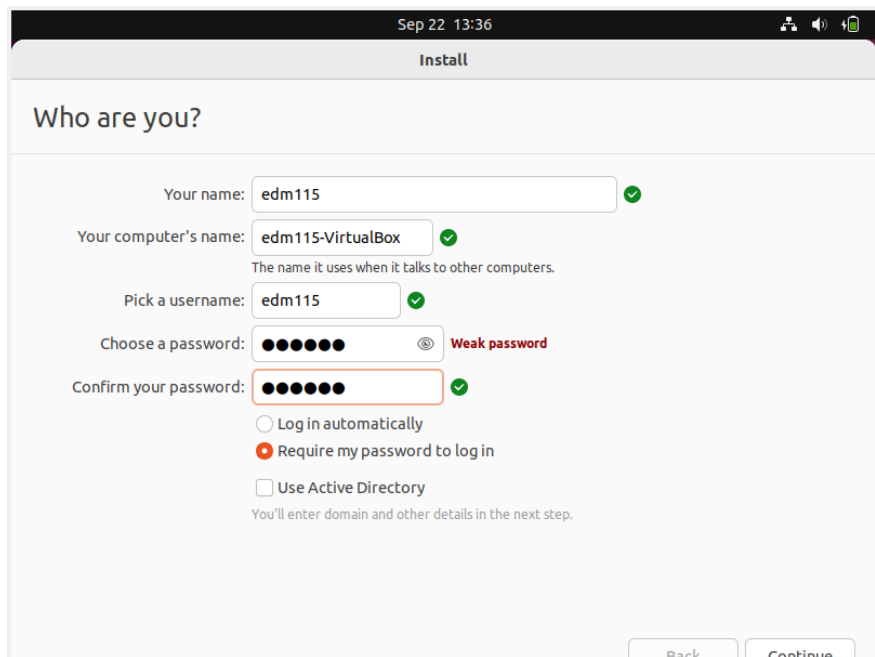
- Wait until the system is installed. Time for a second cup of coffee…
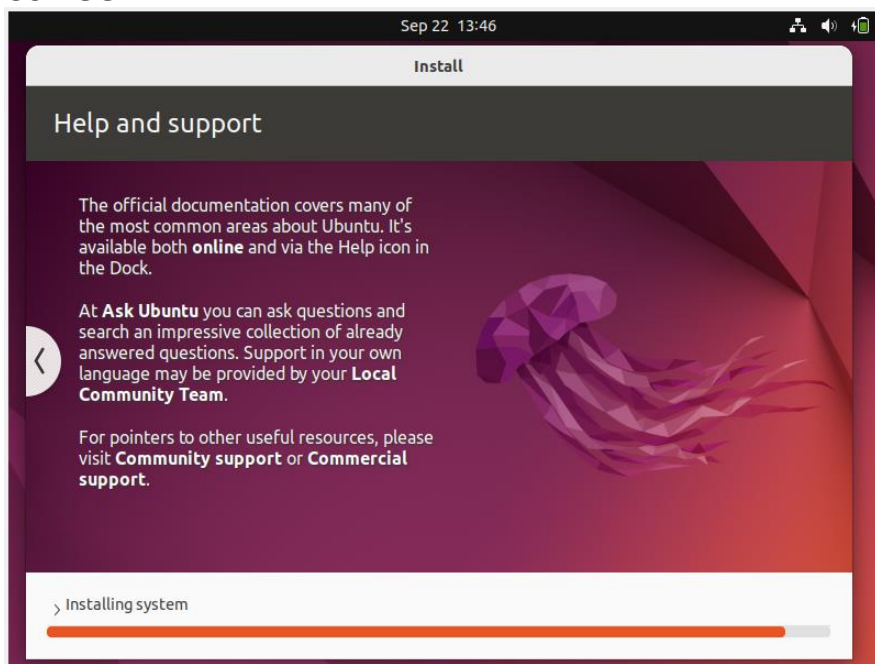
- When it's done, click on `Restart Now`, then click on the `Enter` key when prompted
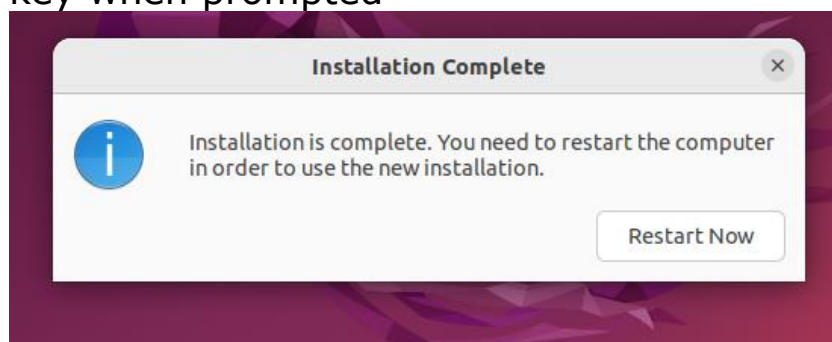
- Log in your session, and admire Ubuntu 😊 You can test some basic commands to make sure it's working


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To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

edm115@edm115-VirtualBox:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  Videos
edm115@edm115-VirtualBox:~$ mkdir test
edm115@edm115-VirtualBox:~$ cd test
edm115@edm115-VirtualBox:~/test$ touch a.txt
edm115@edm115-VirtualBox:~/test$ nano a.txt
edm115@edm115-VirtualBox:~/test$ ls
a.txt
edm115@edm115-VirtualBox:~/test$ cd ../Desktop  && ls
edm115@edm115-VirtualBox:~/Desktop$
```

But there's one problem : the size is so tiny 🥵 By default, all VirtualBox instances will have a resolution of 640×480. Here's how to solve it :

- Go in the `applications panel` (the 9 dots in bottom left corner)
- Scroll down to `Display`, then change the `Resolution`

  You may be tempted to choose the *exact* resolution of your screen. However, it's not at all the right choice. Simply because it won't fit the screen, and you will have scrollbars. My experience showed that it's better to keep your monitor ratio (i.e. 16:9) and choose 2 resolutions under the one of your display. That way, it will fit as maximum as possible the window, but without scrollbars
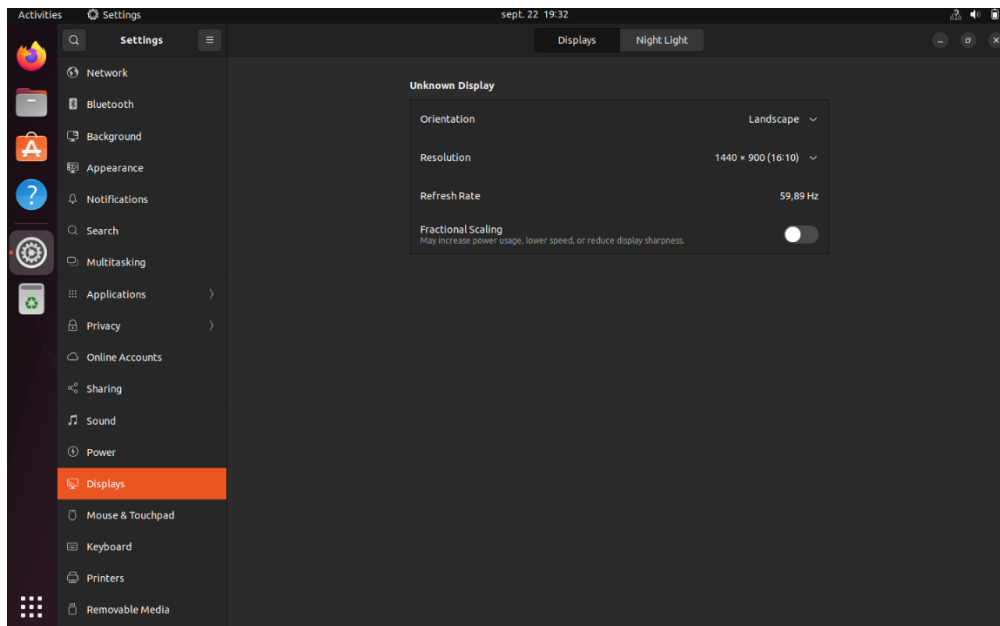
- And that's all ! Ubuntu is installed inside your computer, without needing to buy another machine or create a dual-boot *(note : you can safely delete the 3,6 Gb `.iso` file. The system is stored in another place)*