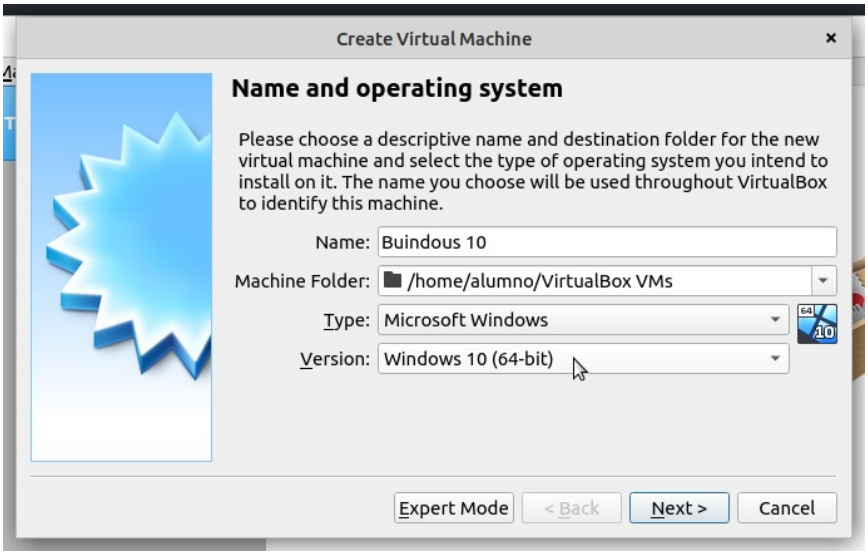
Exercises about OS installations

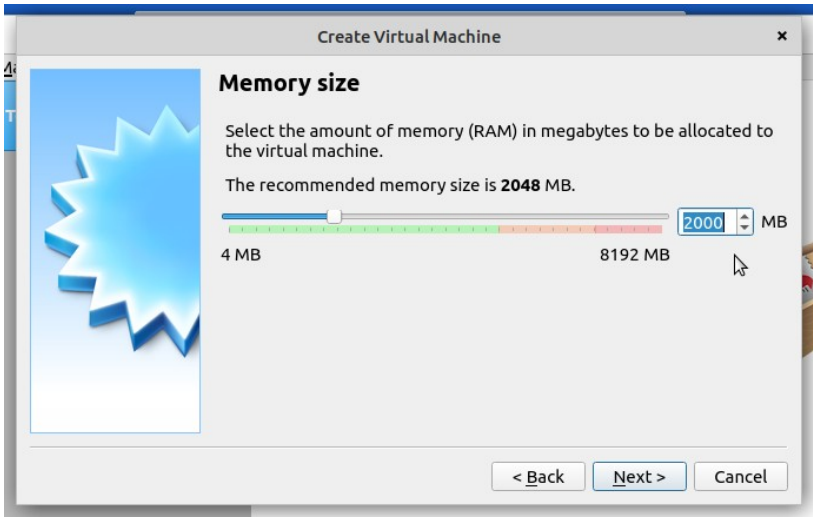
To solve the exercises, create a document with screenshots including the settings for each part.

1. **Create an empty virtual machine and configure the following settings:**

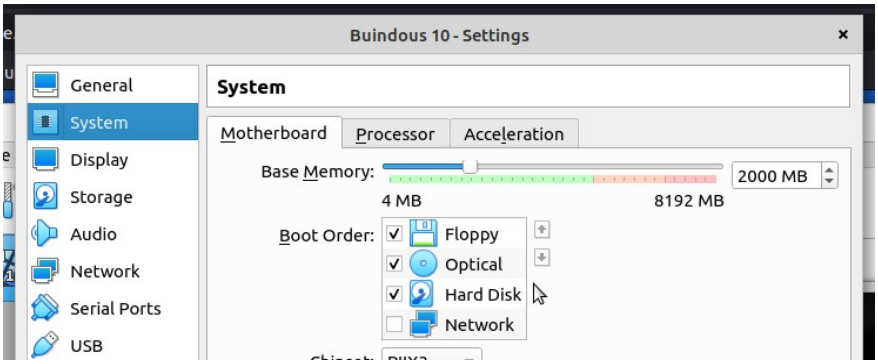
- For Windows 10 (64 bits, or 32 if you do not have enough RAM in your physical computer).



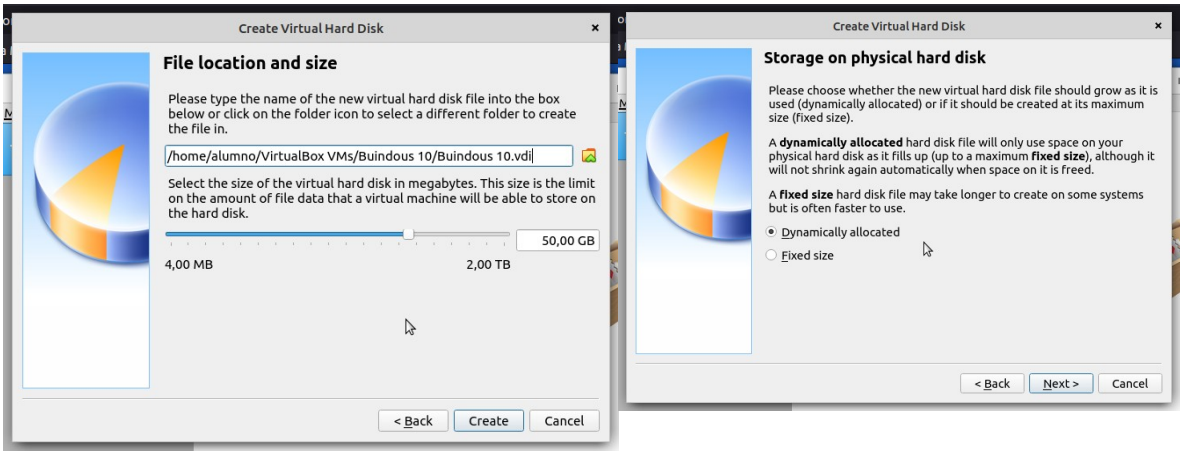
- 2GB of RAM memory.



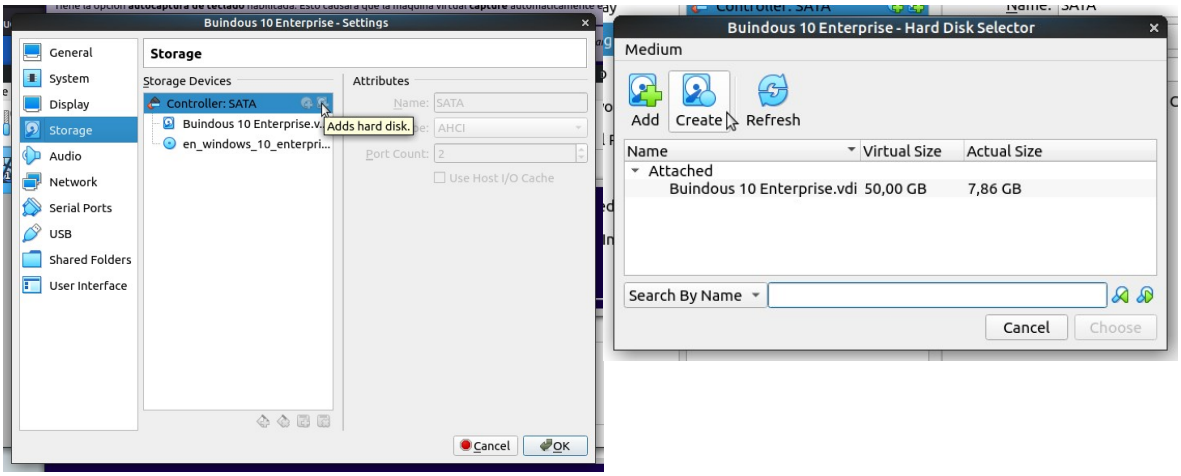
- Boot order (CD and hard drive).

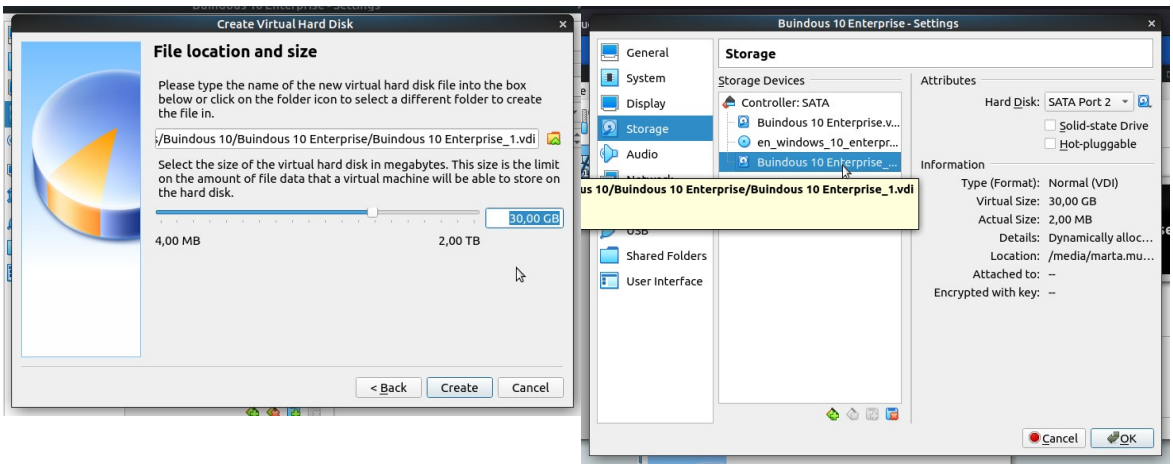


- Two hard drives: one with 50 GB for the operating system and another one with 30 GB empty. Select the type of disk that can dynamically increase.

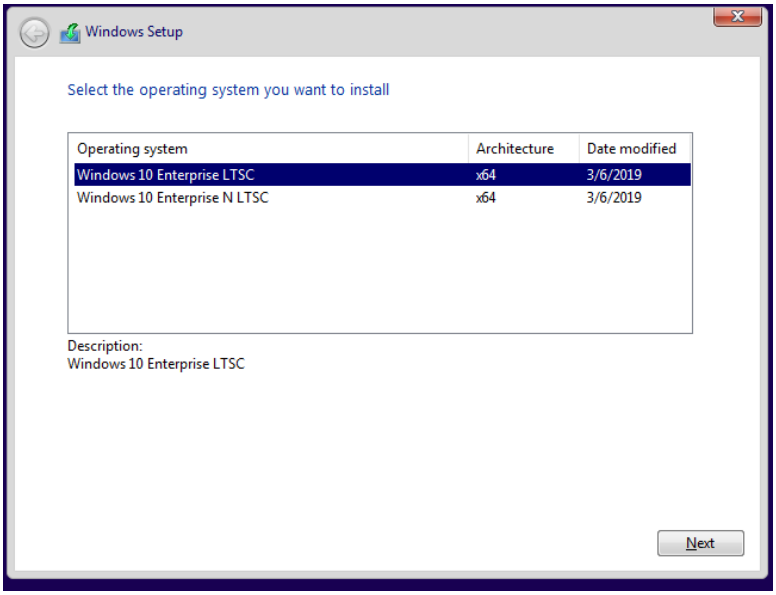


Once the first hard drive is created, I go to Controller: SATA in Settings> Storage and I add a new hard disk. In the next menu, I selected Create, and in Flie Location and size I choose 30 GB.

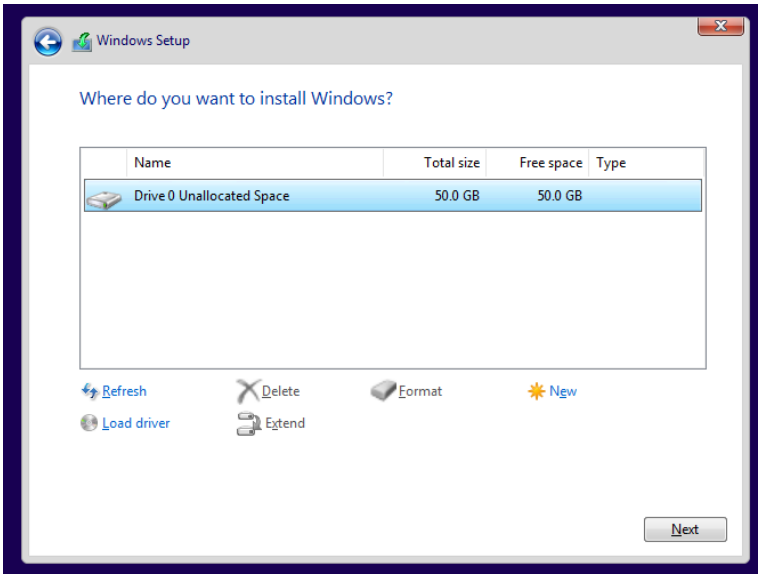


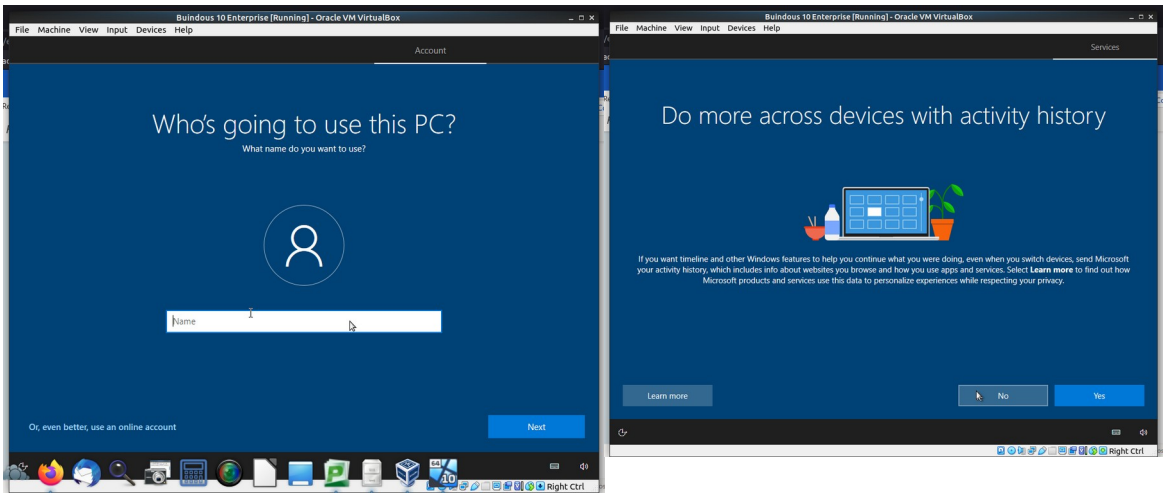


1. **Install Windows 10 in the virtual machine from exercise 1. You must add the following settings:**



I have installed it as Custom, in order to create Windows 10 and not to upgrade it from any data.

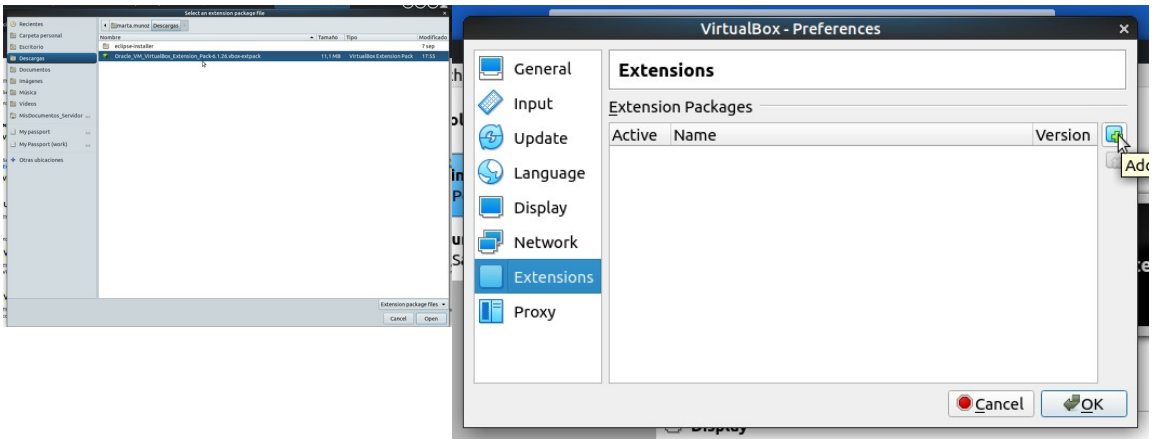




While setting all the features during the installation of Windows, I choose as few things as possible, in order to create the lightest installation of this OS.

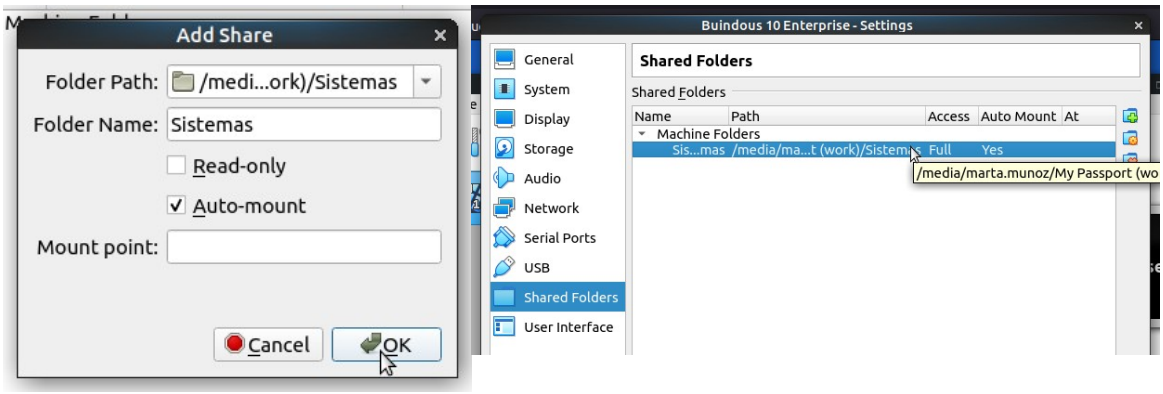
- USB 3.0 support.

I search for the extension in VM Virtual Box website (https://www.virtualbox.org/wiki/Downloads). Then, in File > Preferences, I add the package and install it.

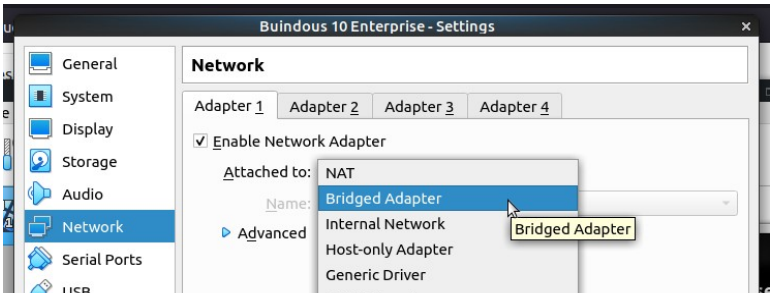


- Shared folders.

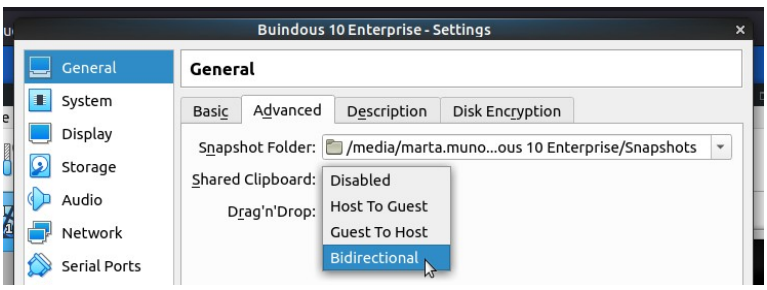
In Settings, from the OS, I selected Shared Folders and choose the following features:



- Internet connection including access to the rest of computers of the network.

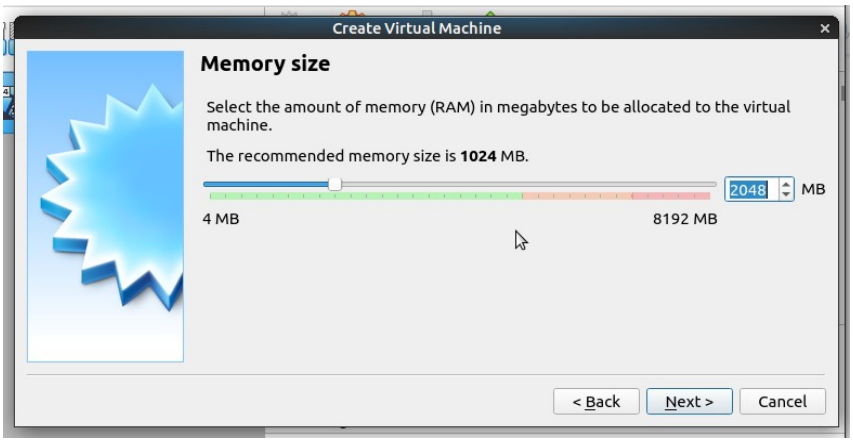


- You will be able to copy and paste from the host to the guest and vice versa.

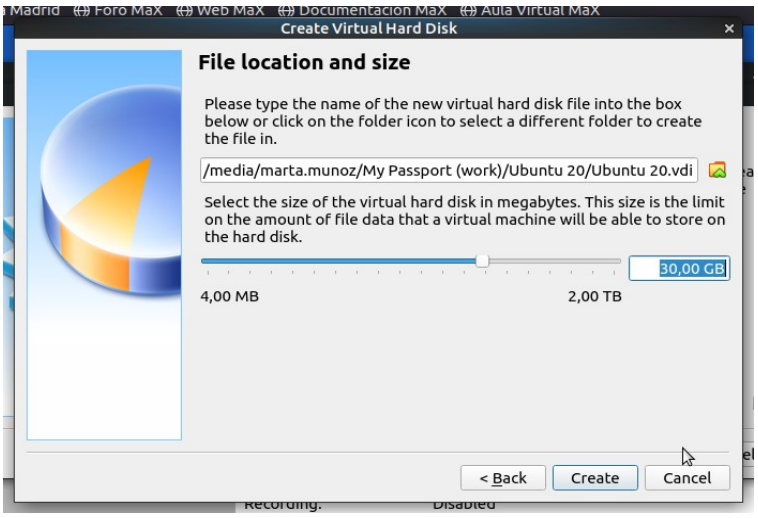


1. **Create another 64-bits virtual machine and install Ubuntu 16.04. The virtual machine must meet the following requirements:**

- 2 GB of RAM memory.

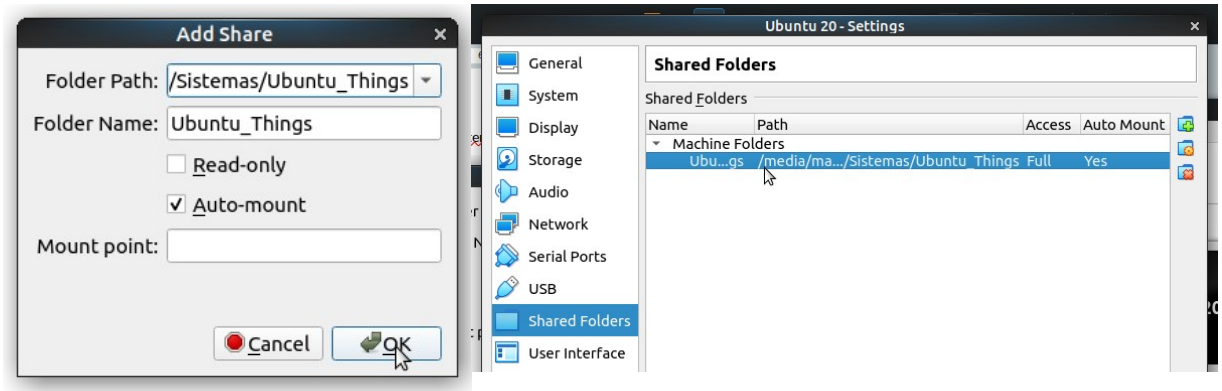


- Just one disk of 30 GB.

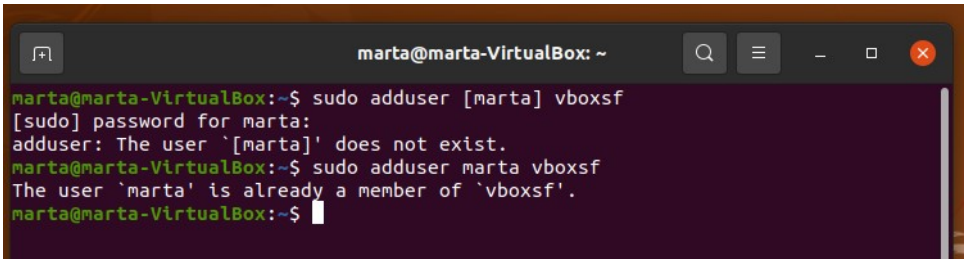


- A shared folder to an external disk.

I have attached a folder to my external disk, where It's also installed:



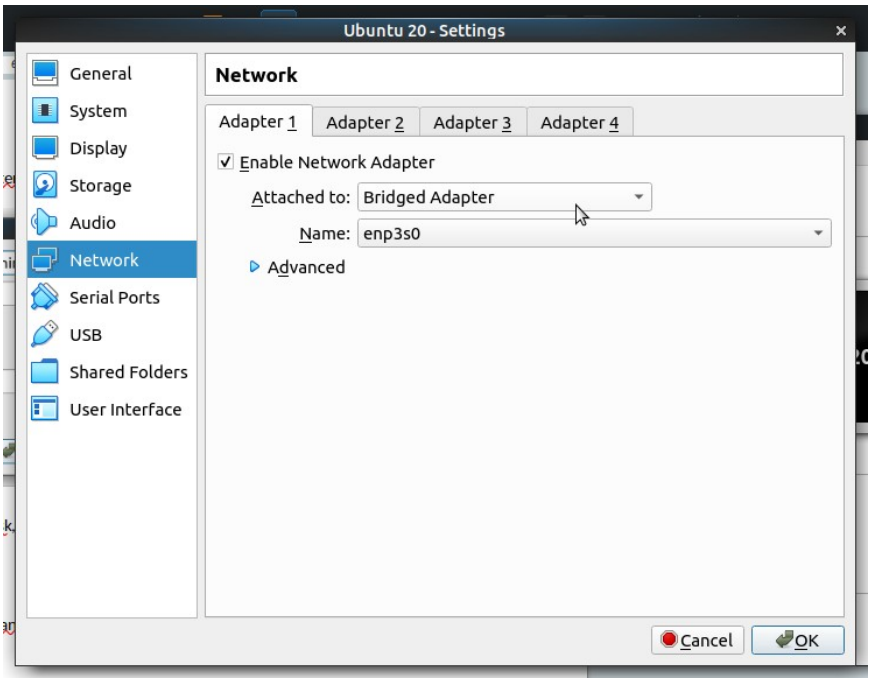
Then, I use the terminal from Ubuntu (and obviusly started it from VM). As you use, I already execute the command:



Now, when I access the shared folder in the Media folder as described above, I should see any files in that exist in that folder on the host machine.

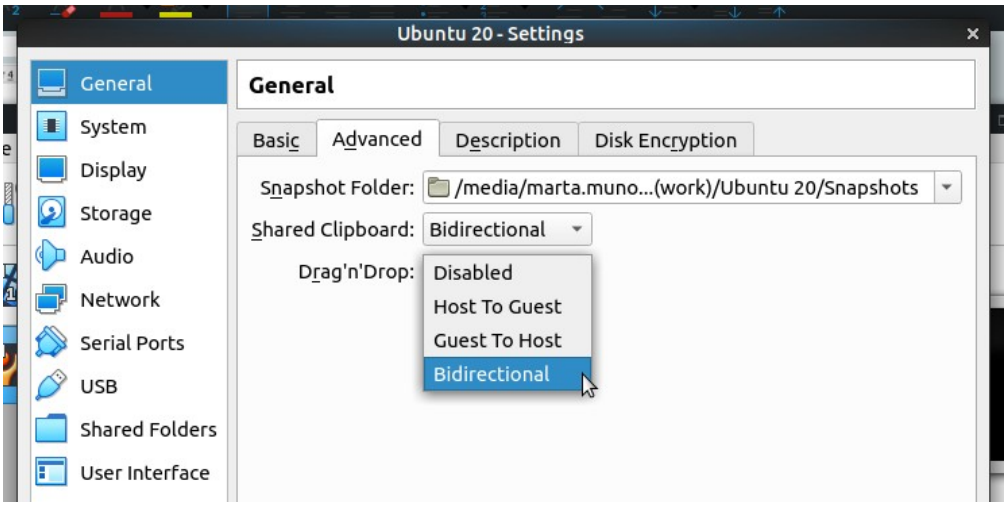
- Internet connection.

I set in Settings > Network the attachment to a Bridged Adapter.



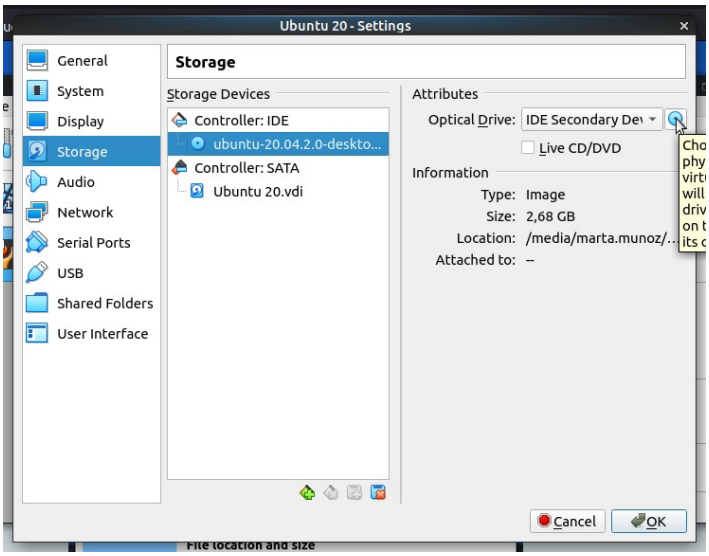
- You will be able to copy and paste from the host to the guest and vice versa.

In order to do this, I go to Settings > General > Advanced, and change the following settings to Bidirectional:

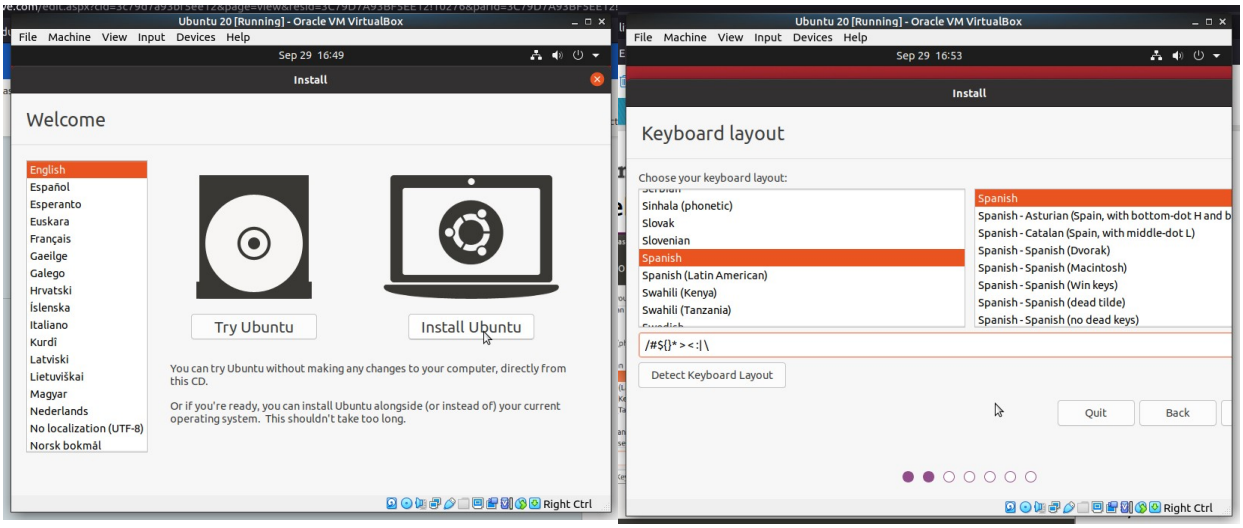


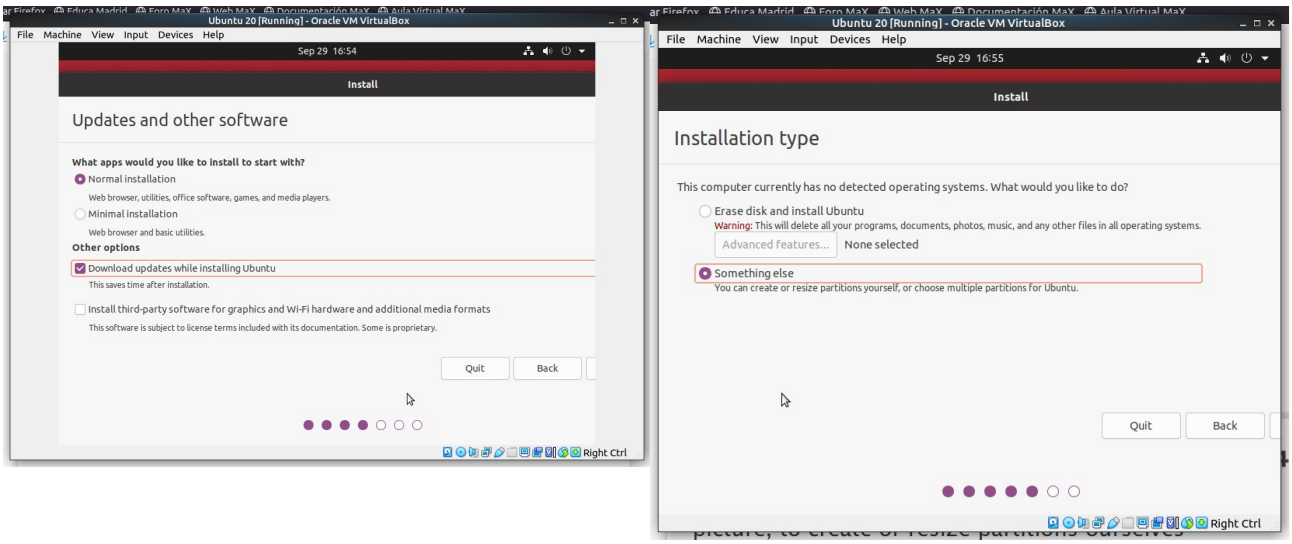
INSTALLATION PROCCESS OF UBUNTU:

I choose the disk where the program is going to read the installation package of Ubuntu:

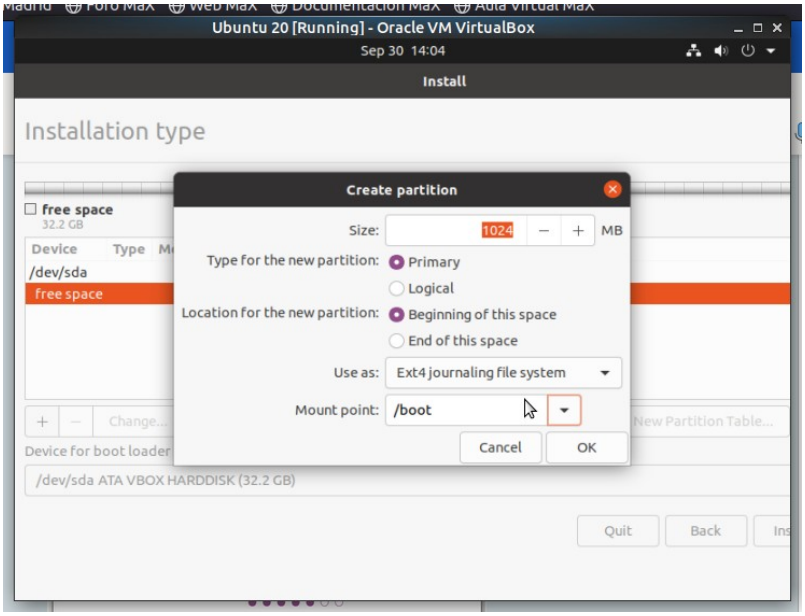


Then, I run Ubuntu:

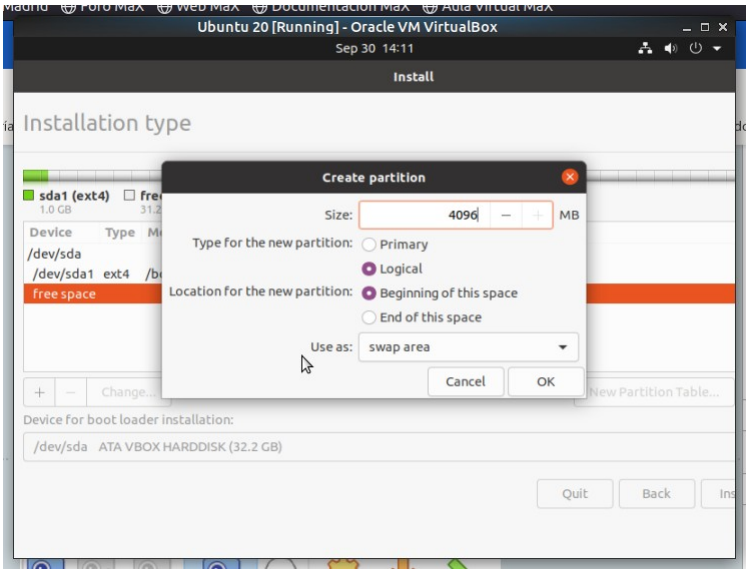




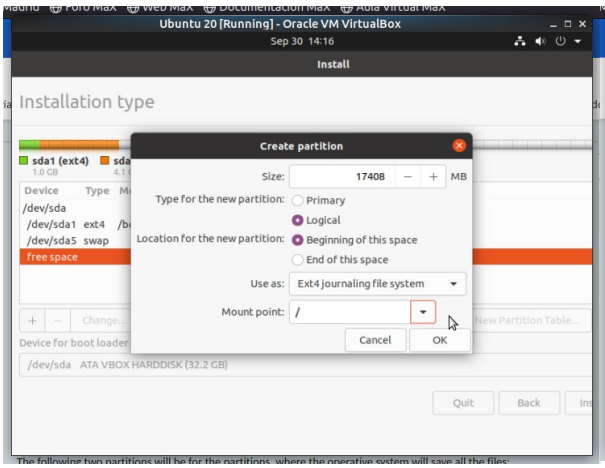
I create a new partition table, where I create a primary partition (MBR), for BOOT:

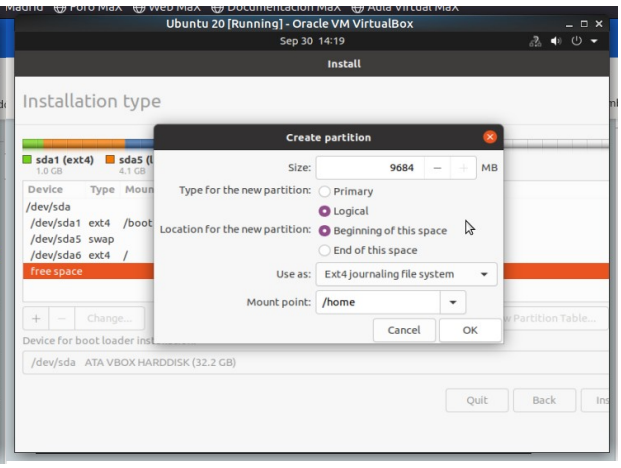


Then, I create another one, a logical partition specially dedicated to the RAM memory:

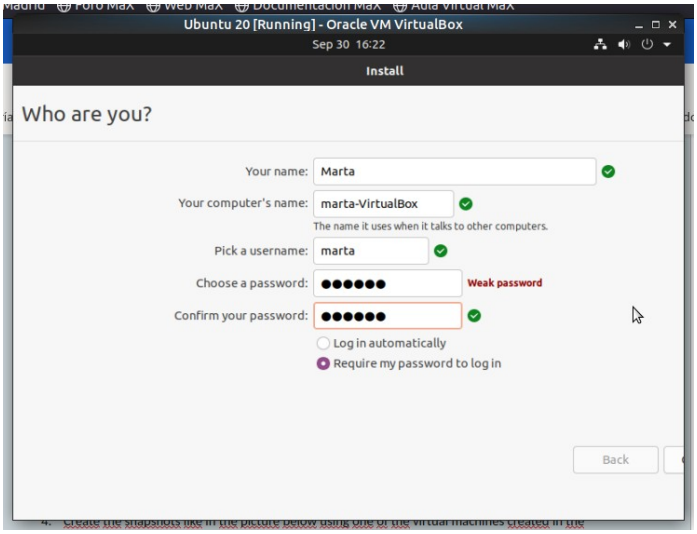


The following two partitions will be for the partitions, where the operative system will save all the files:

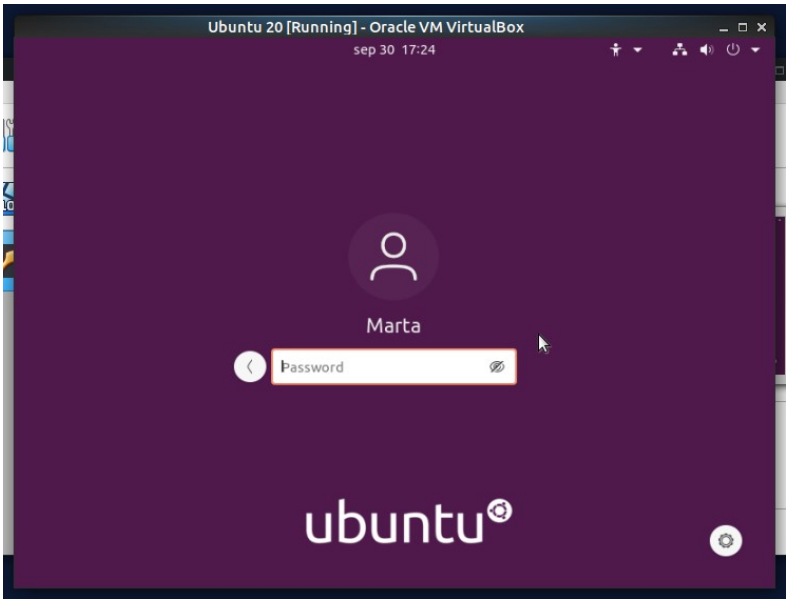




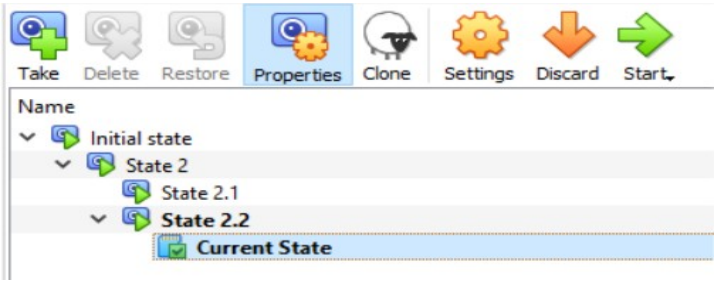
Then, while Ubuntu has created the partitions, I choose the time zone and then type my user's name:



Ubuntu has been installed and it's ready!

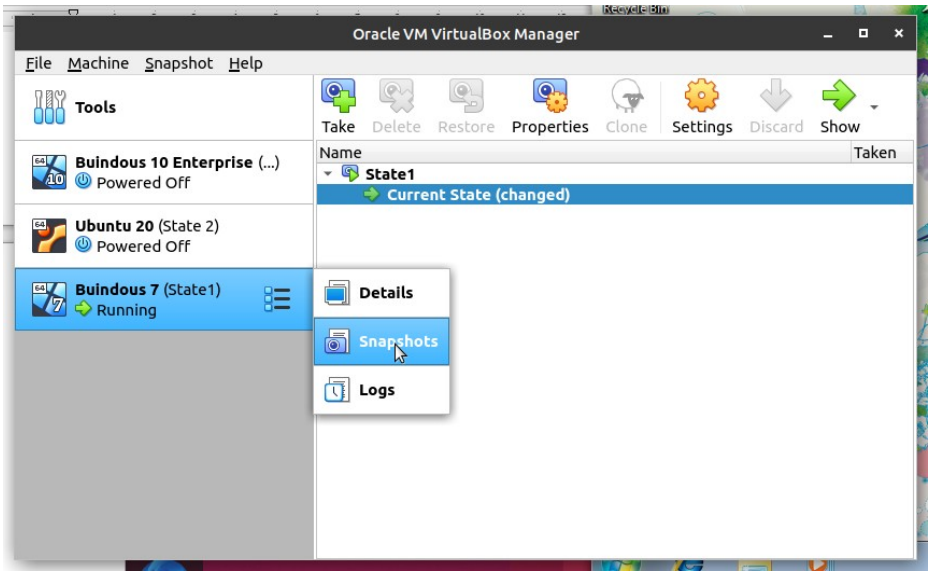


1. **Create the snapshots like in the picture below using one of the virtual machines created in the previous exercises. Before each snapshot, you must change something in the operating system. This tool is normally used when performing a critical action or installing software. But, in this case, you can do something so easy as creating a new file to study the different states.**



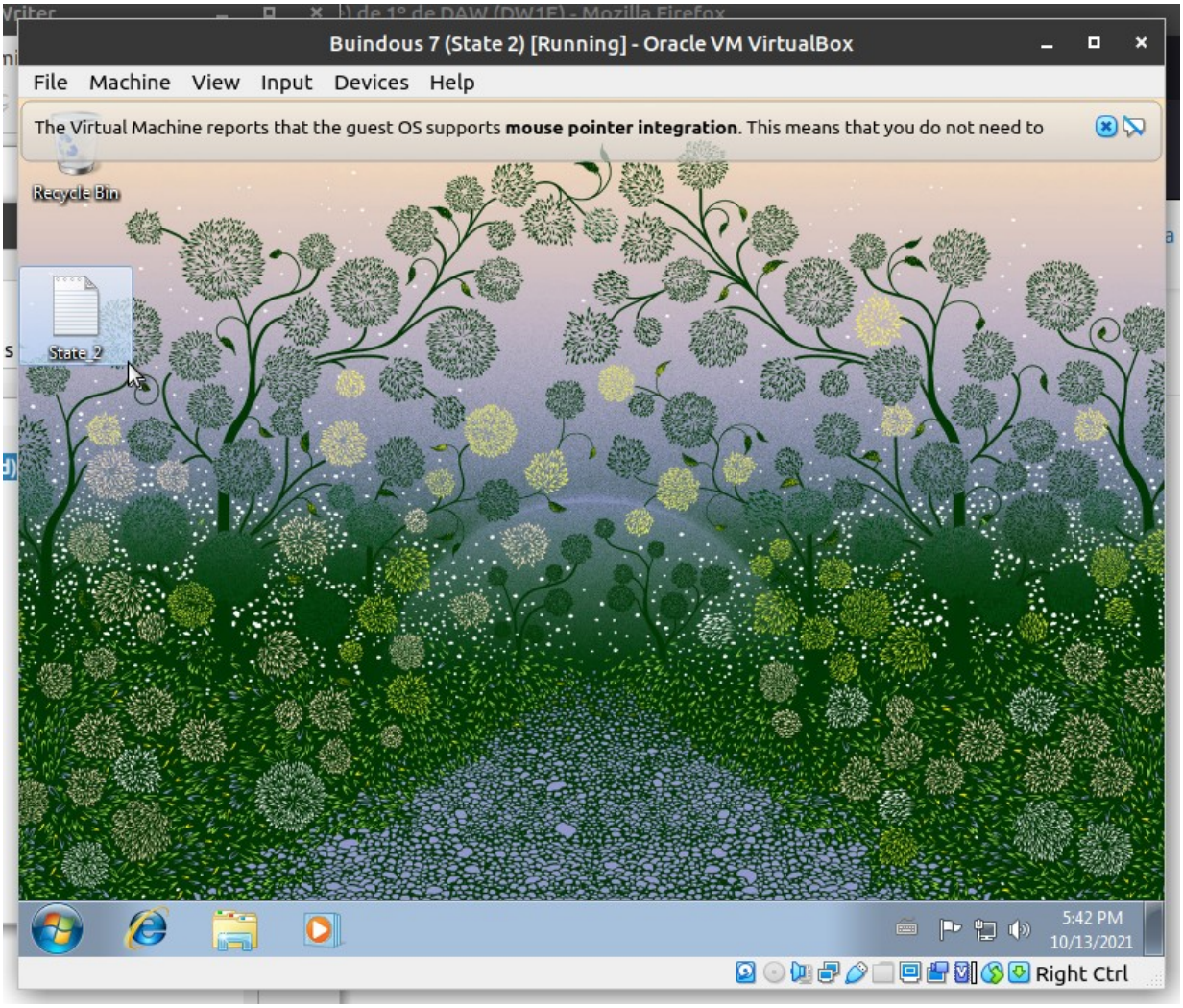
Then, complete the following actions in order:

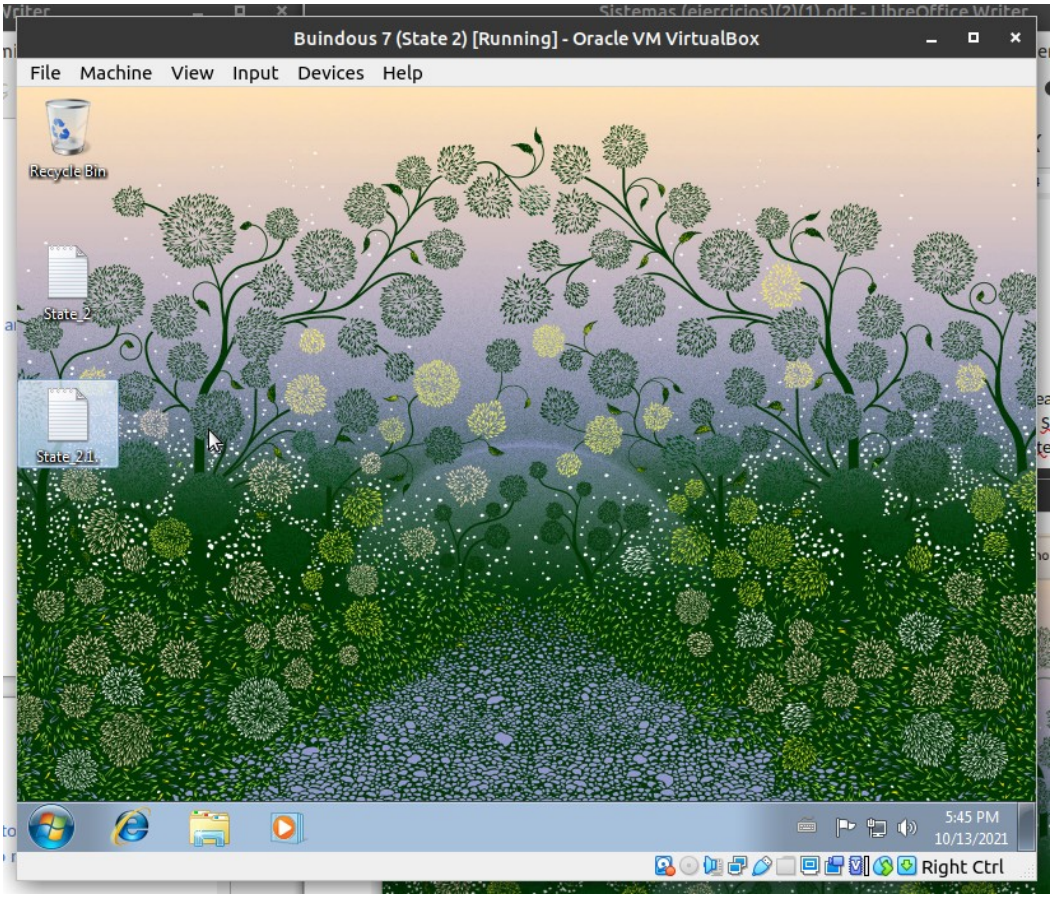
First, I choose the following option in order to get access to Snapshots chart:

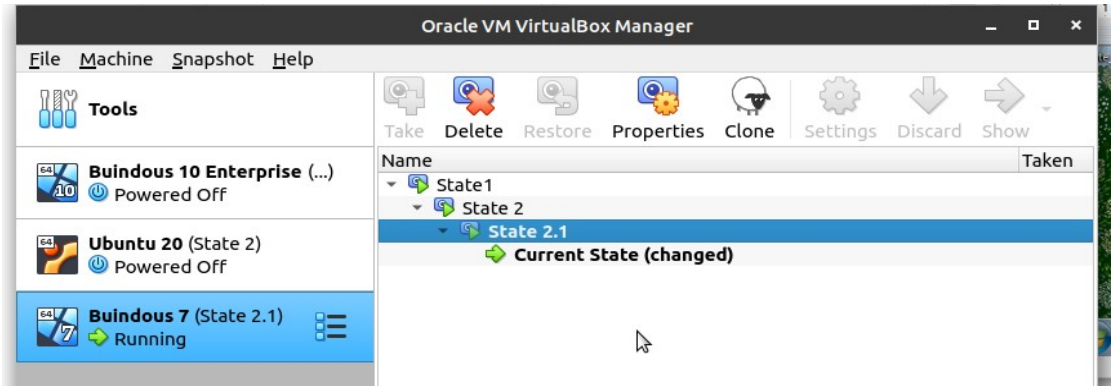


- **Restore State 2**

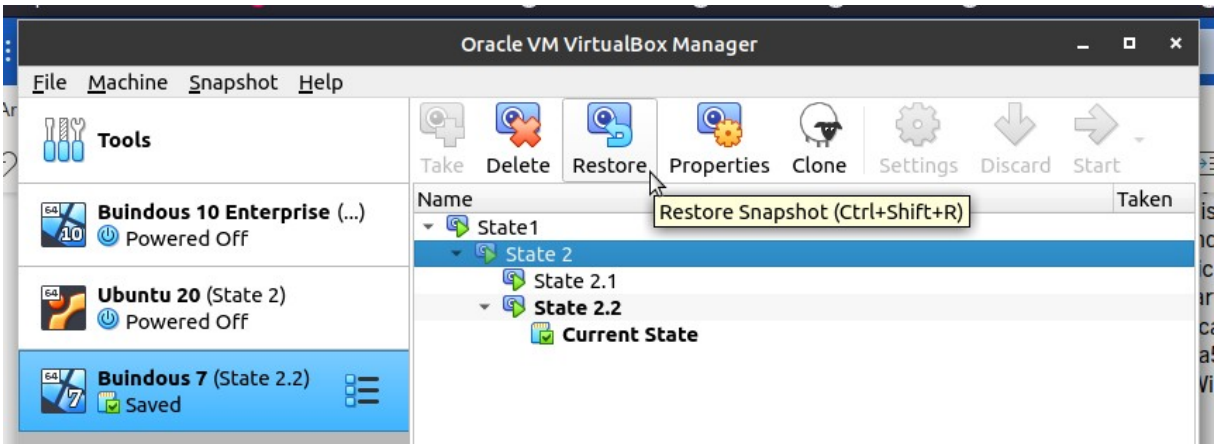
  The first State is created, when I started the OS. Later, I created State 2 when I created a document, named as “State 2”. State 2.1. is created when I have created another document.





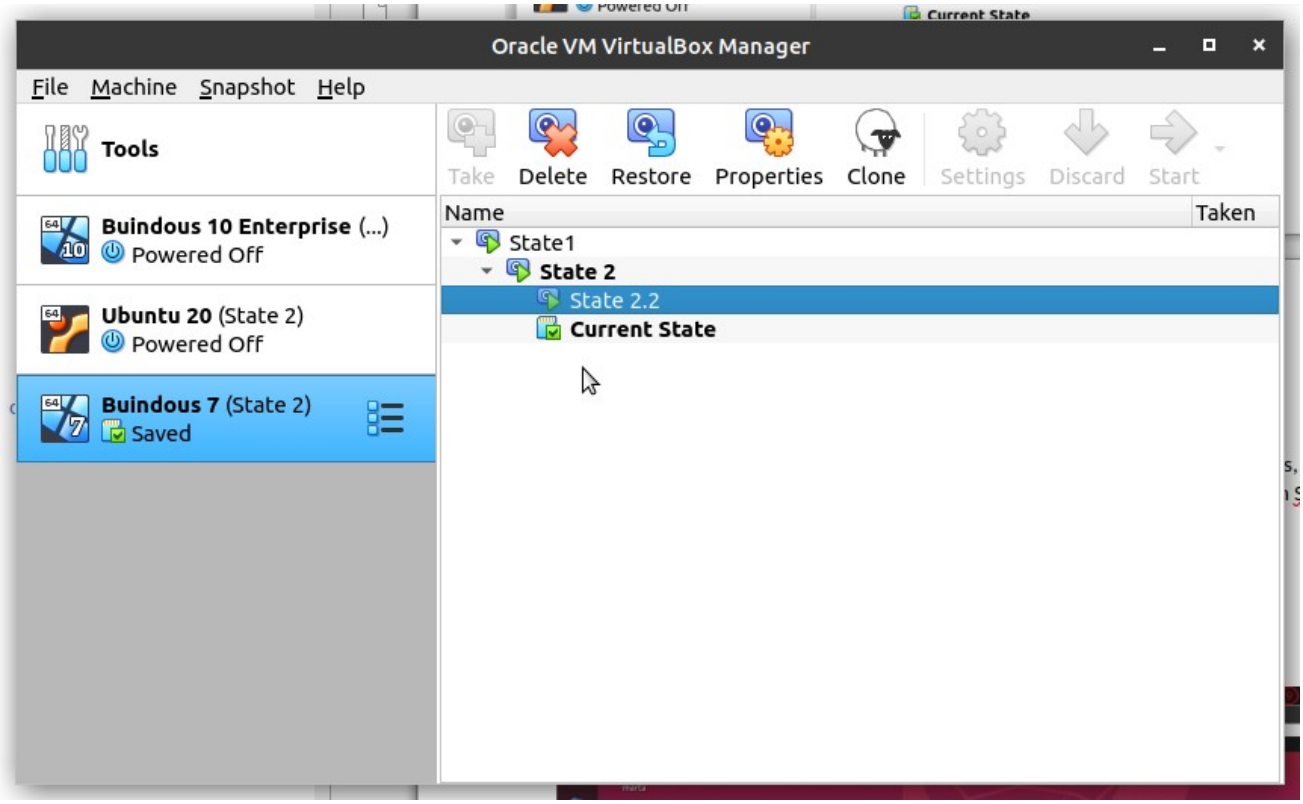


Later, I shutdown Windows and go back to state 2. If I want to create an State 2 in the same path, I must Restore State 2, and I unchecked the box “Create a snapshot of the current machine state”, because it’s not needed:



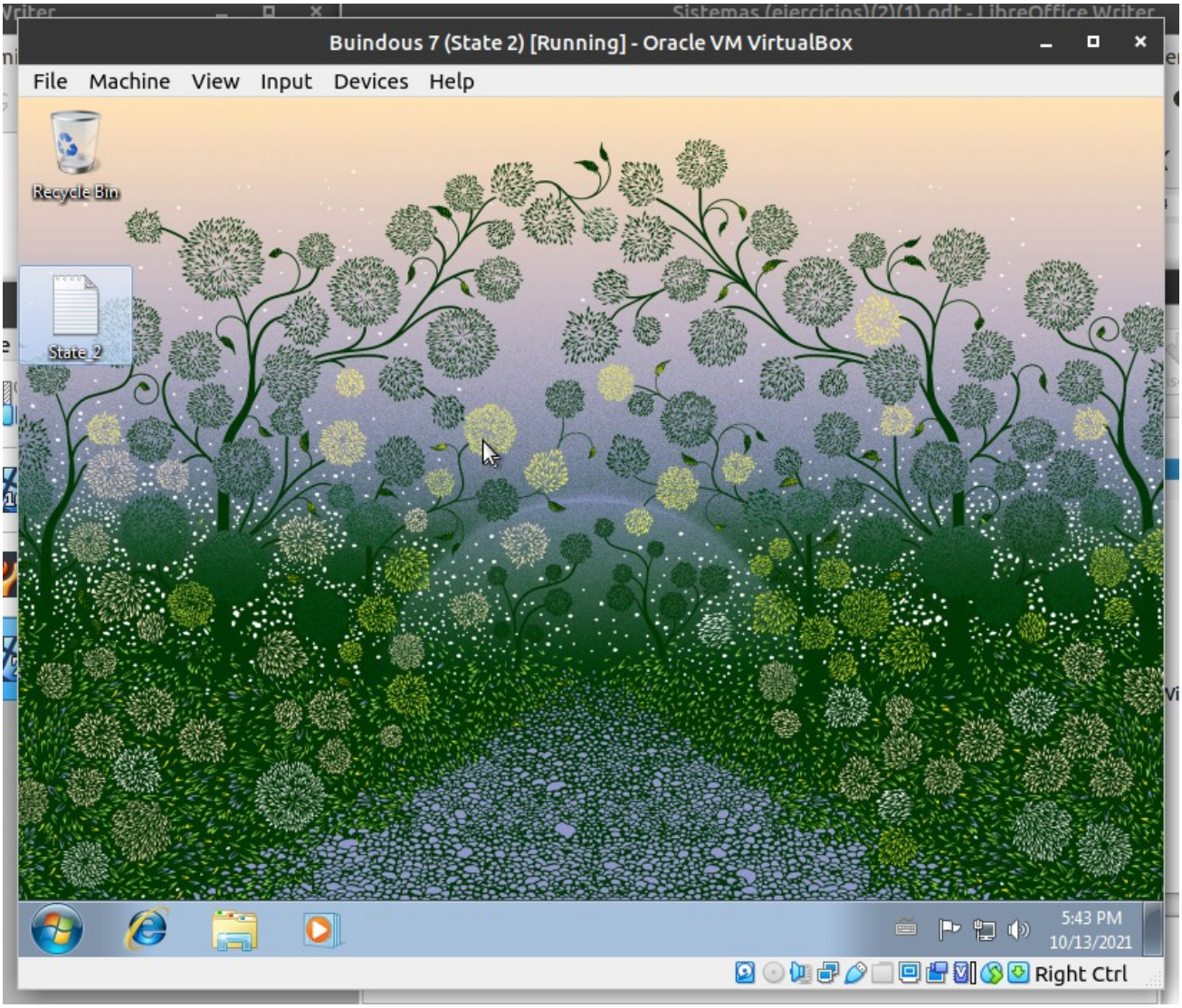
- **Delete State 2.1 and explain what happens**

  In order to do this, I power off the OS. Then, I restart State 2. State 2.1 disappears, because this state is later. Virtual Box merges al changes, becase they are in the same path. Being in State 2, State 2.1. is just disappeared.



- **Restore State 2.2**

As it's in the same path, VM will automaticaly merge, because it´s above the previous State (State 2).



- **Delete State 2.2 and explain what happens**

  If this state is deleted, it's merged with 2.2., so the screenshot of the desktop in Windows appears the same as in the 2.2. Consecuently, State 2.2 has not been deleted.