

# CREATE A VIRTUAL MACHINE AND INSTALL UBUNTU 20 OS

## MATERIAL:

Virtual Box Version 6.1.14 r140239 (Qt5.6.2)

Ubuntu 20 x64 bits ISO

## TASKS

### 1. Create a 64-bits virtual machine and install Ubuntu 16.04.

The virtual machine must meet the following requirements:

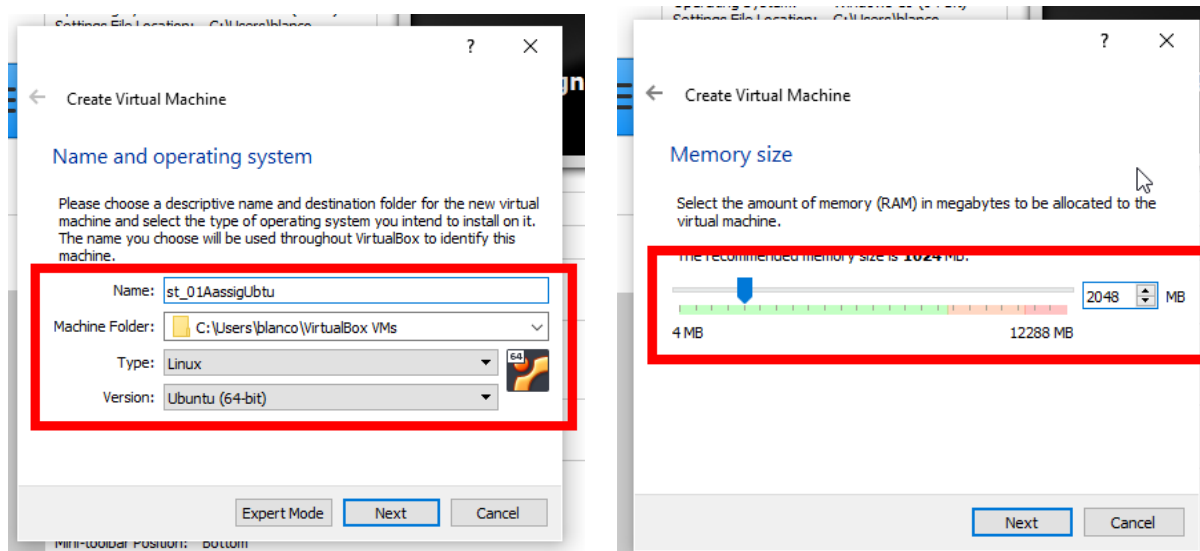
- 2 GB of RAM memory.
- Just one disk of 30 GB.
- A shared folder to an external disk.
- Internet connection.
- You will be able to copy and paste from the host to the guest and vice versa.

### 2. 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:

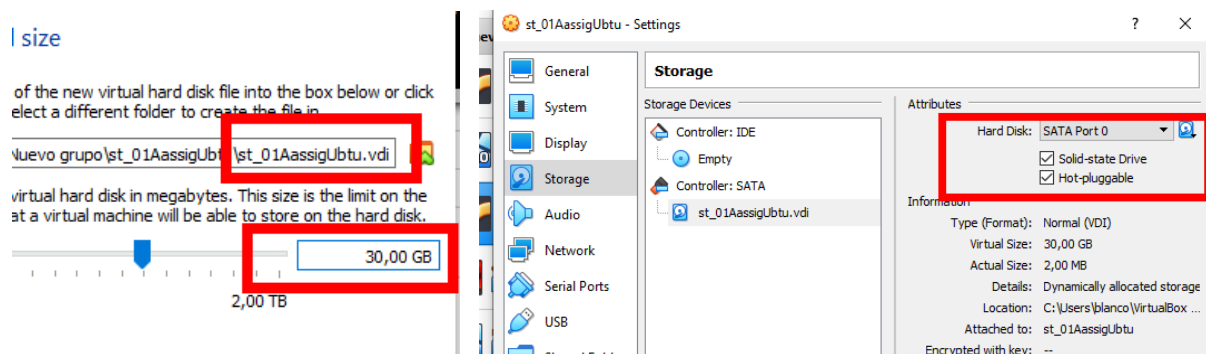
- Restore State 2
- Delete State 2.1 and explain what happens
- Restore State 2.2
- Delete State 2.2 and explain what happens

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

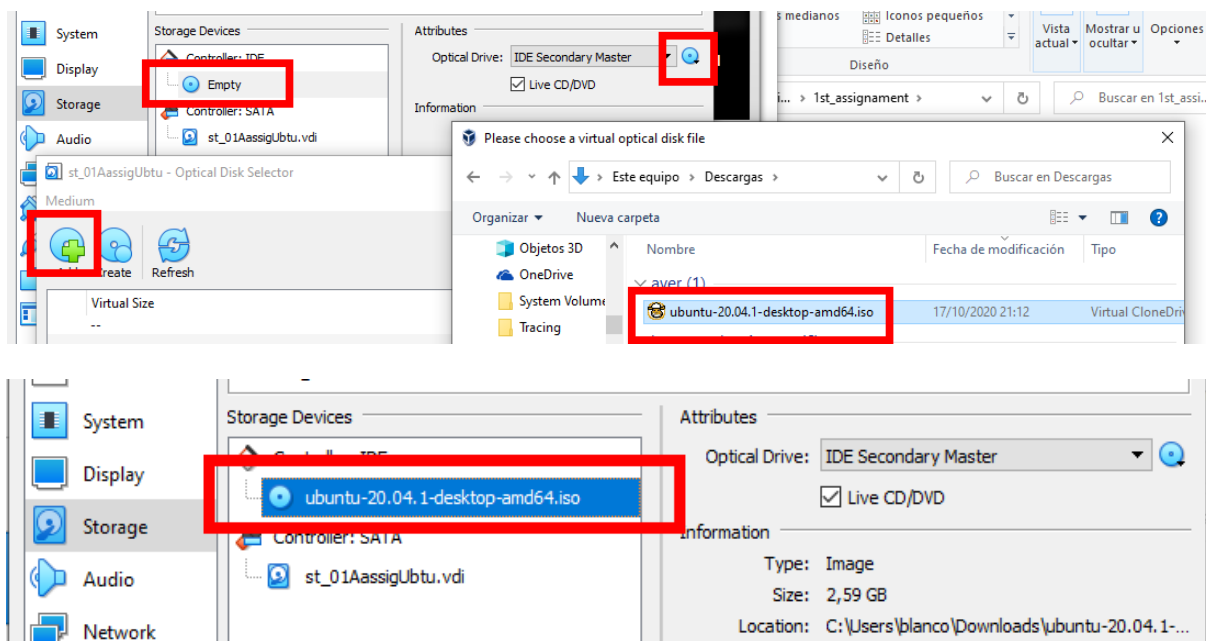
The minimum information that is needed to create a VM: Set the name, type Linux, distribution Ubuntu 64x. Set RAM size



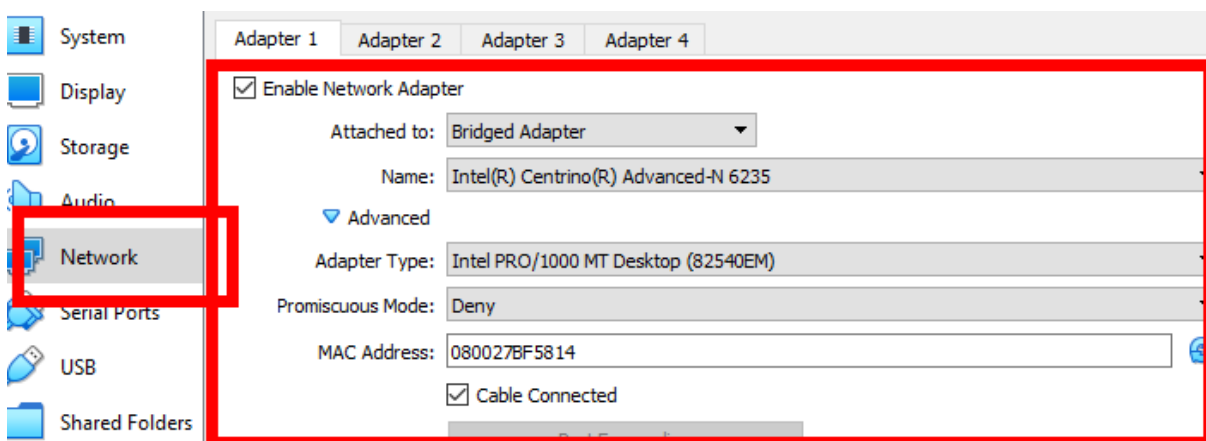
Specify the Hard Disk features: VDI, dynamically allocated (VHD grows in size when the guest stores data, and allocate space, in this case 30 GBs



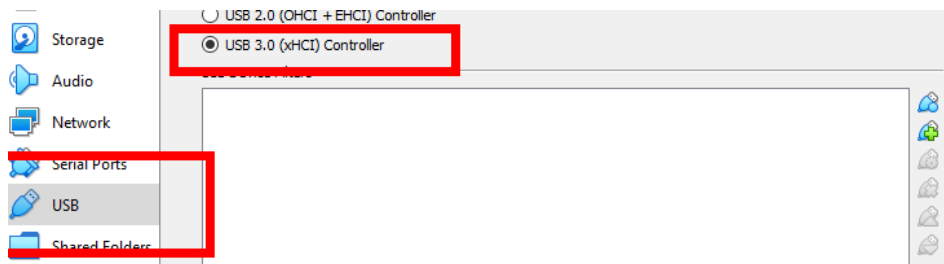
Insert the ISO, add Ubuntu ISO file to the *Storage Tree*. The ISO file will be treated as an optical drive by the VM.



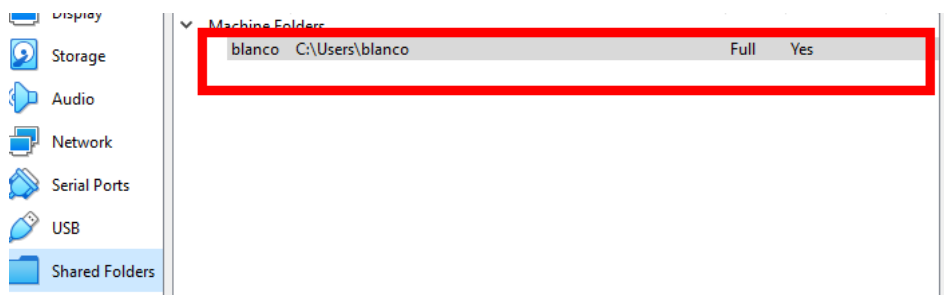
Set network adapter to Bridge adapter



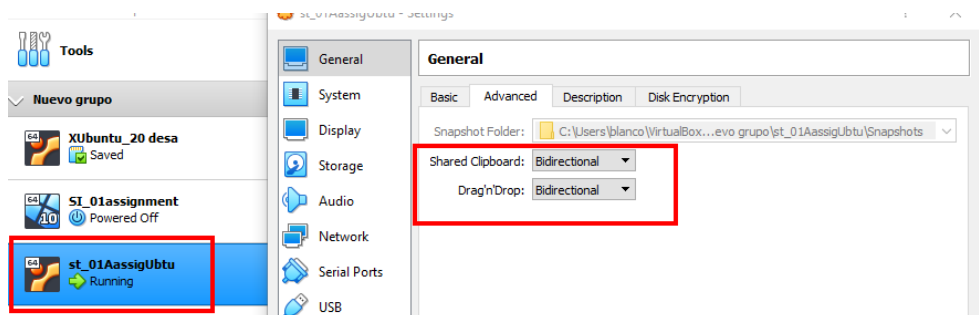
## Set USB controller



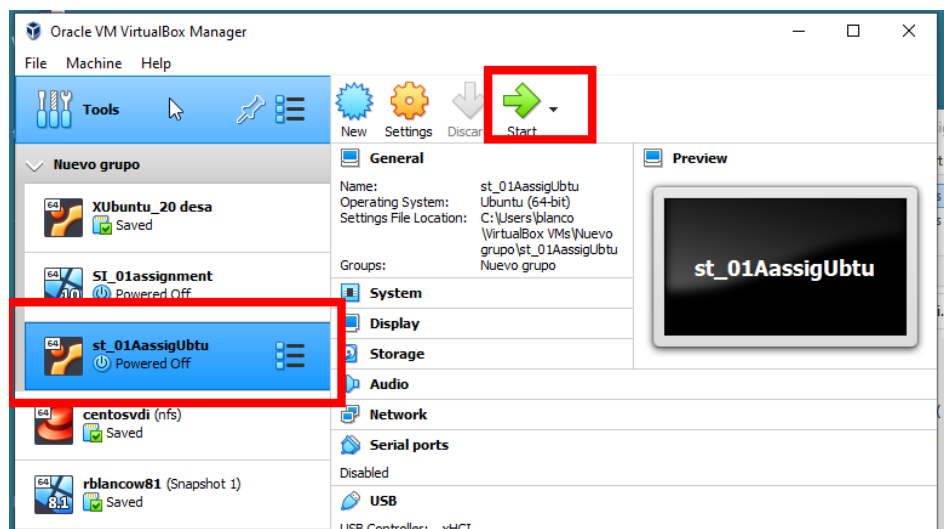
## Share a host's folder



## Copy / Drag folders and files Bidirectional

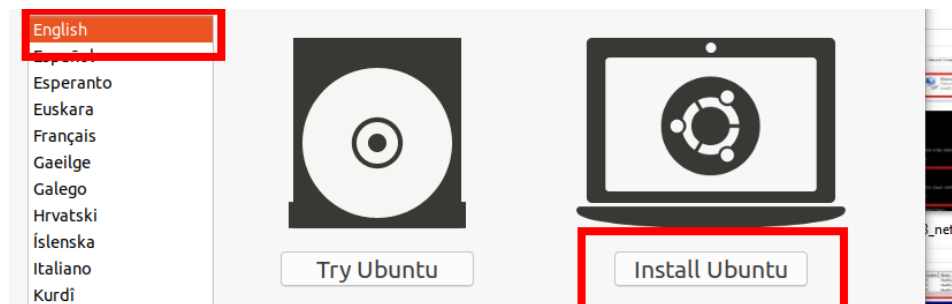


## Start the MV

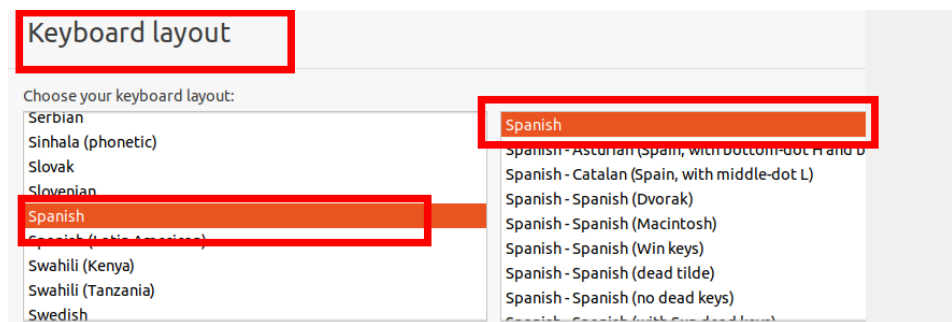




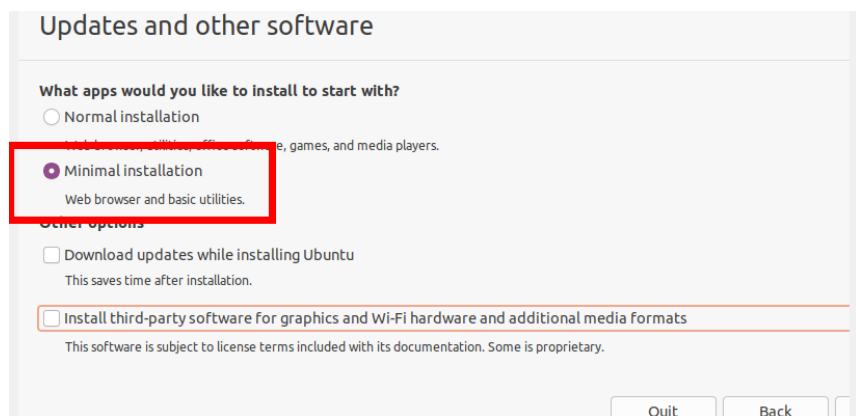
## Set language



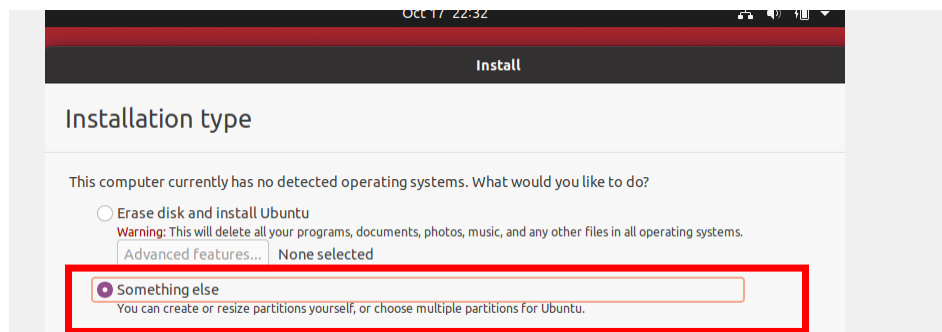
## Set keyboard layout to Spanish



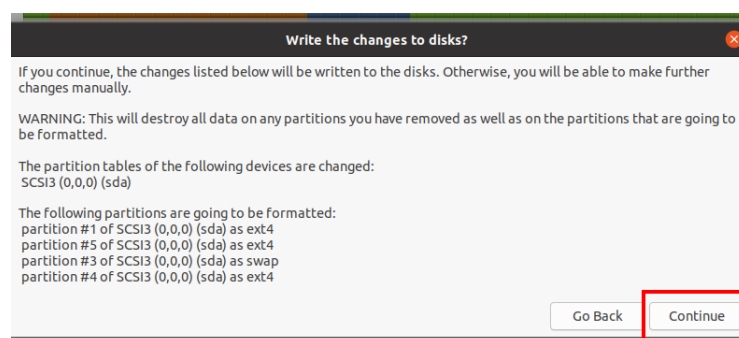
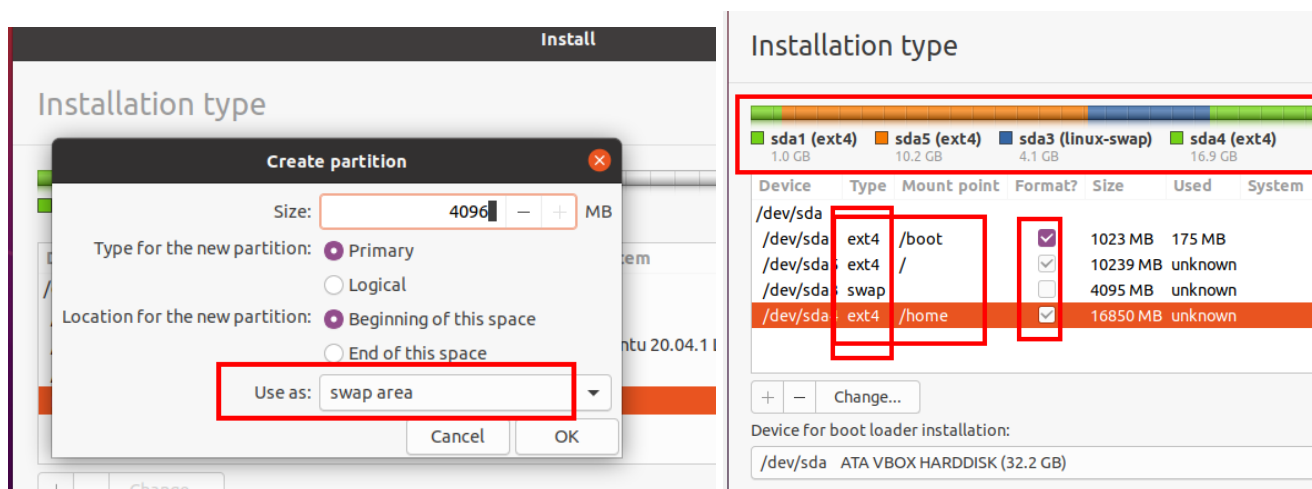
## Minimal installation



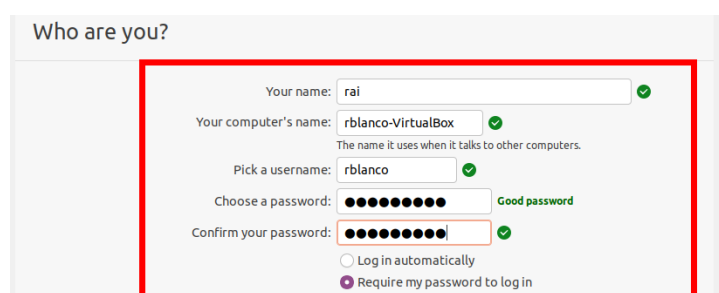
## Create partitions

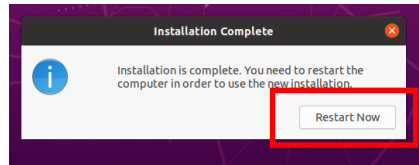


Four: / and Home (a separate swap partition is no longer recommended for most new Desktop users. Swap in a server is a little more complex; swap is recommended for some advanced uses (like non-ext file systems).

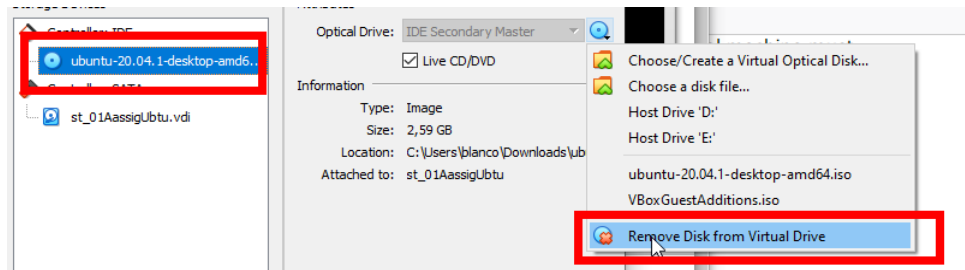


## Account settings and installation





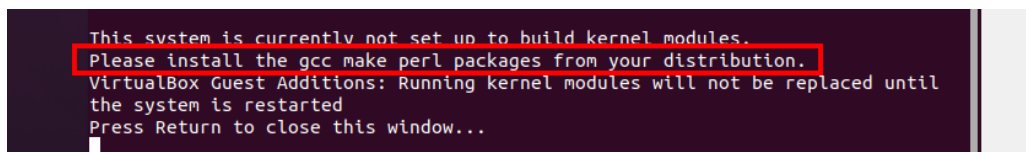
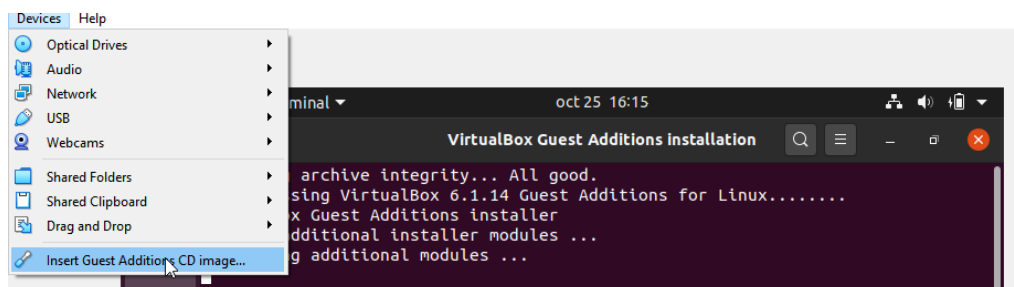
## Removing ISO before restarting



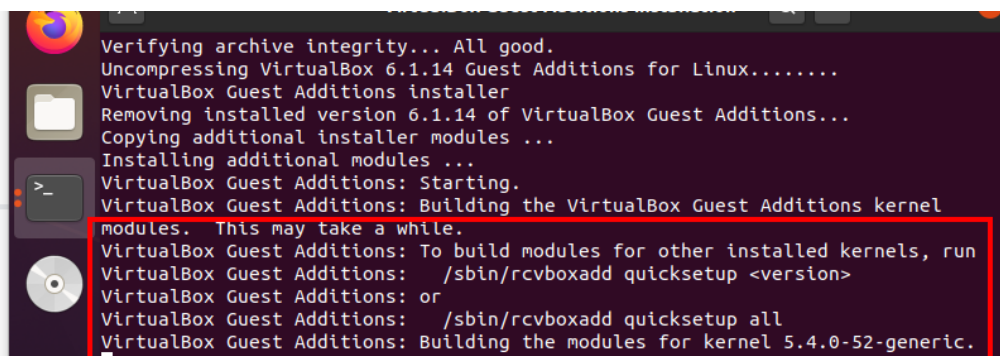
## Restart.

```
sudo apt-get update && upgrade -y
```

## Installing guest additions



```
sudo apt-get install build-essential gcc make perl dkms
```



## Checking shared folder and network adapter

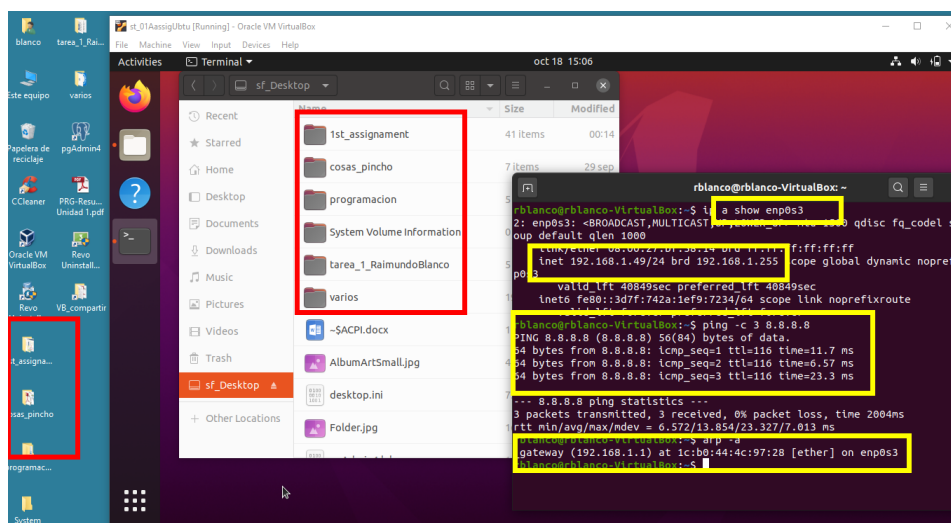
Only root and user who belong to vboxsf could access shared folder.

```
rblanco@SI01Ubnt:~$ groups rblanco
rblanco : rblanco adm cdrom sudo dip plugdev lpadmin lxd s
ambashare
rblanco@SI01Ubnt:~$ sudo usermod -a -G vboxsf rblanco
rblanco@SI01Ubnt:~$ groups rblanco
rblanco : rblanco adm cdrom sudo dip plugdev lpadmin lxd s
ambashare vboxsf
rblanco@SI01Ubnt:~$ ls -l /media/
total 12
drwxr-x---+ 2 root root 4096 oct 25 16:50 rblanco
drwxrwx--- 1 root vboxsf 8192 oct 24 11:25 sf_Desktop
rblanco@SI01Ubnt:~$
```

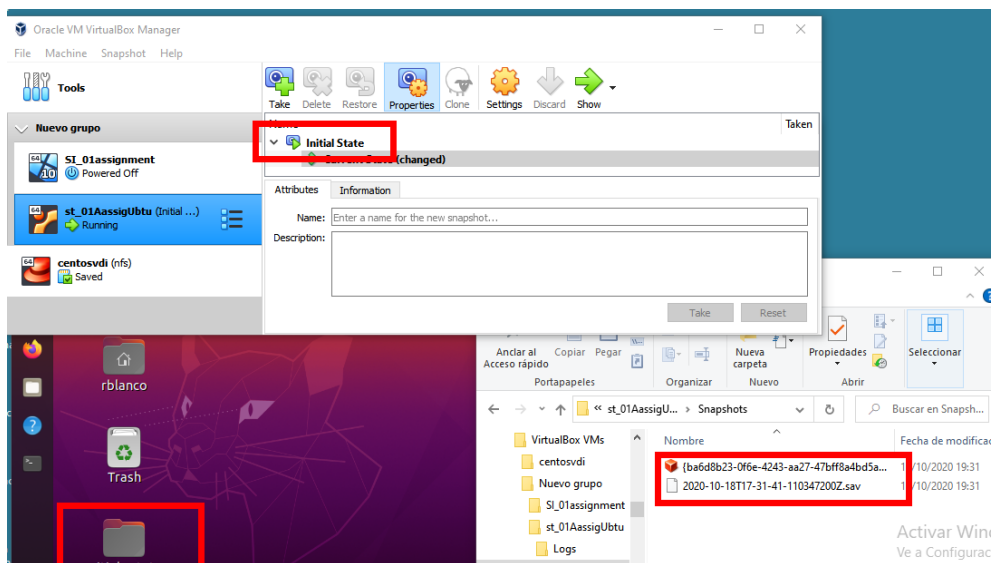
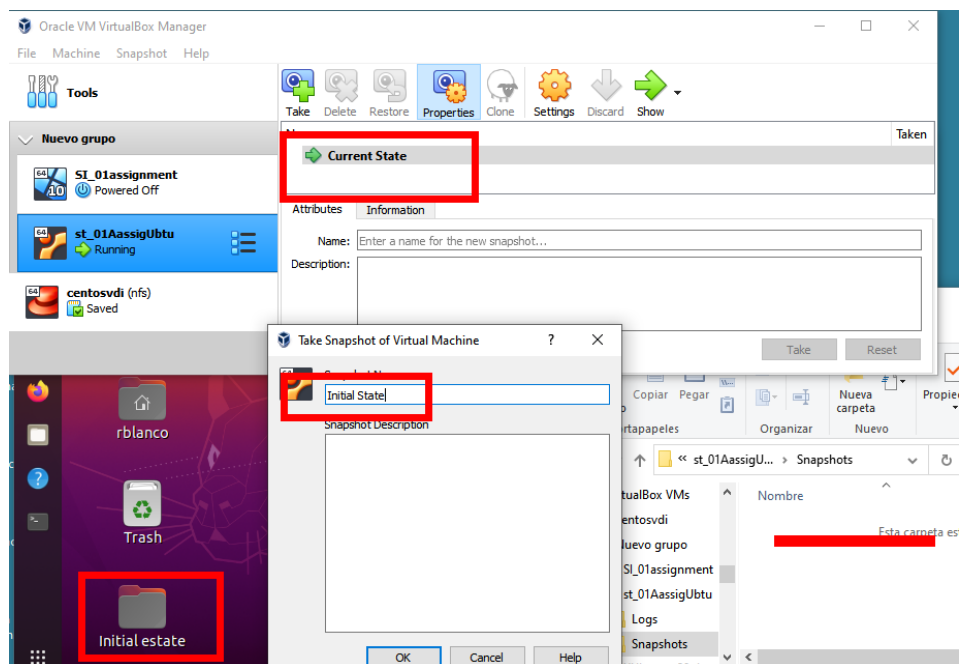
`sudo usermod -a -G vboxsf rblanco` # adding a user rblanco to vboxsf group

`(sudo userdel -g vboxsf rblanco)` # removing a user from a group

Logout and login

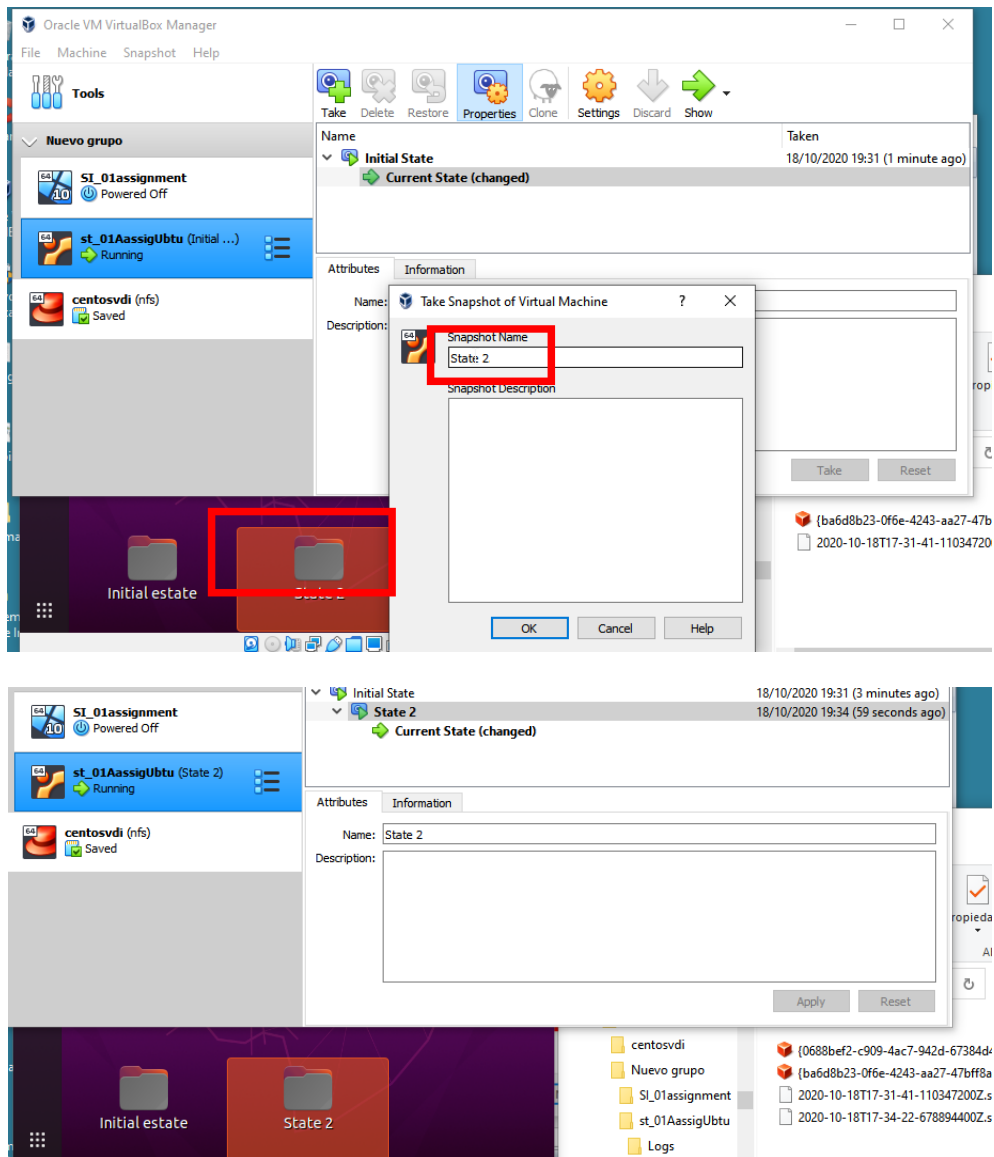


## Create the snapshots Initial state with a folder named initial state

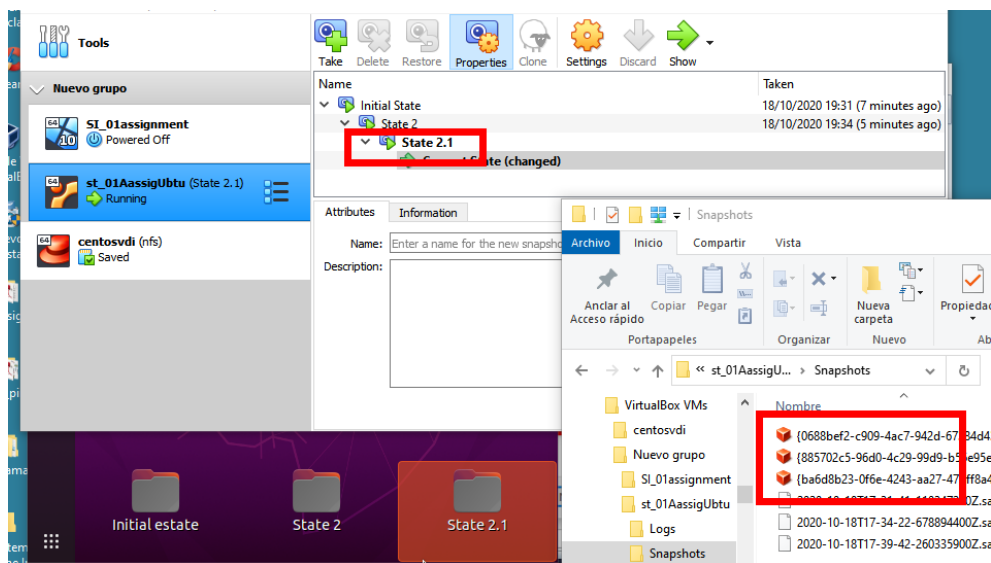




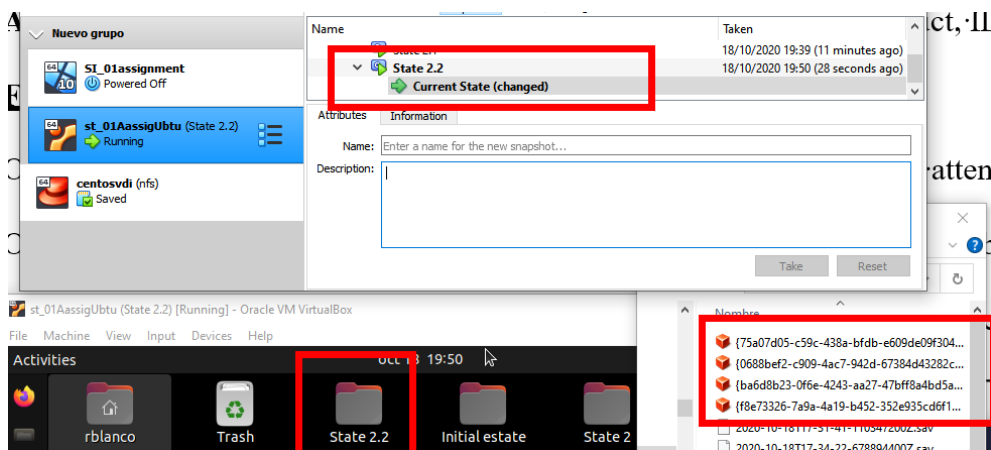
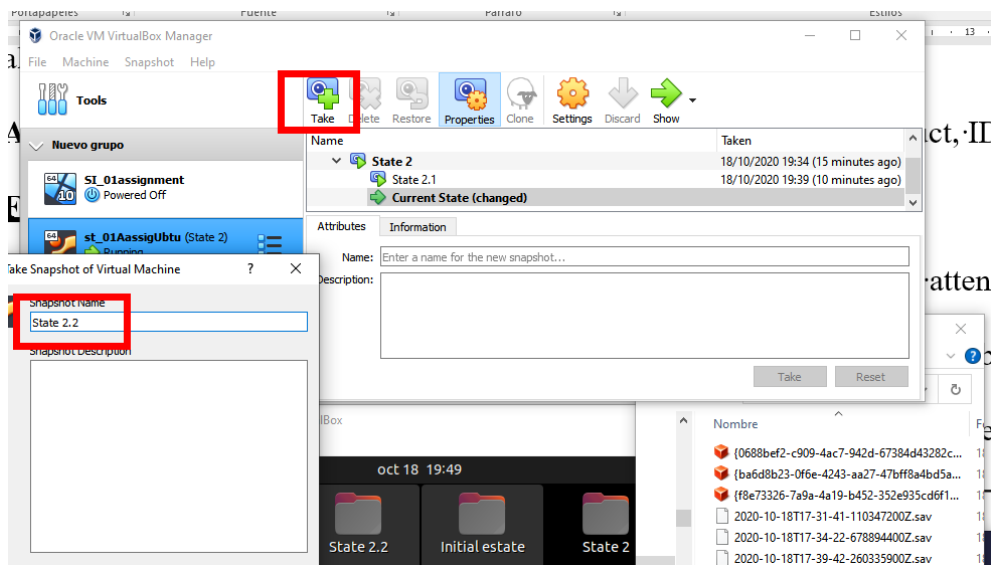
Create the snapshots State 2 with a folder named state 2



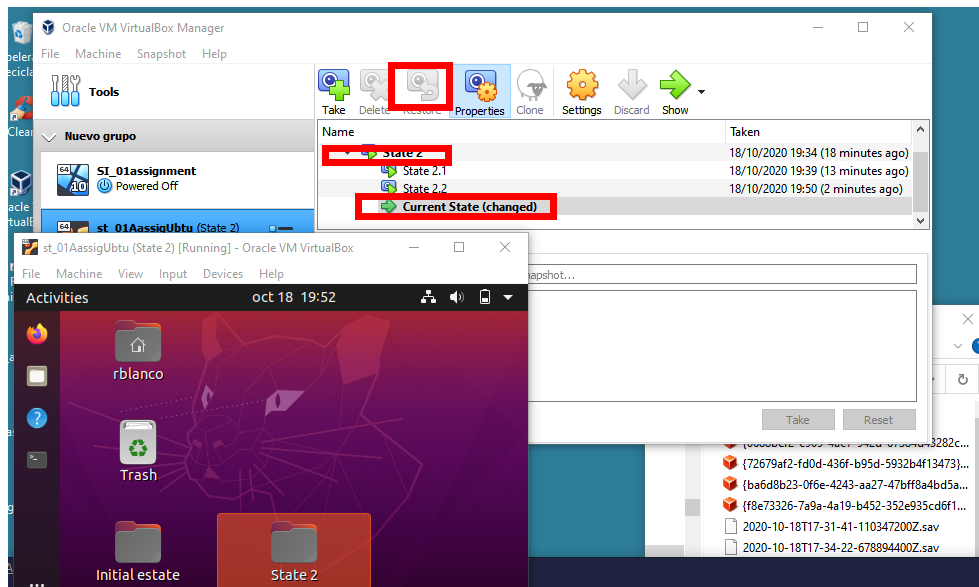
## Create the snapshot State 2.1 with a folder named state 2.1



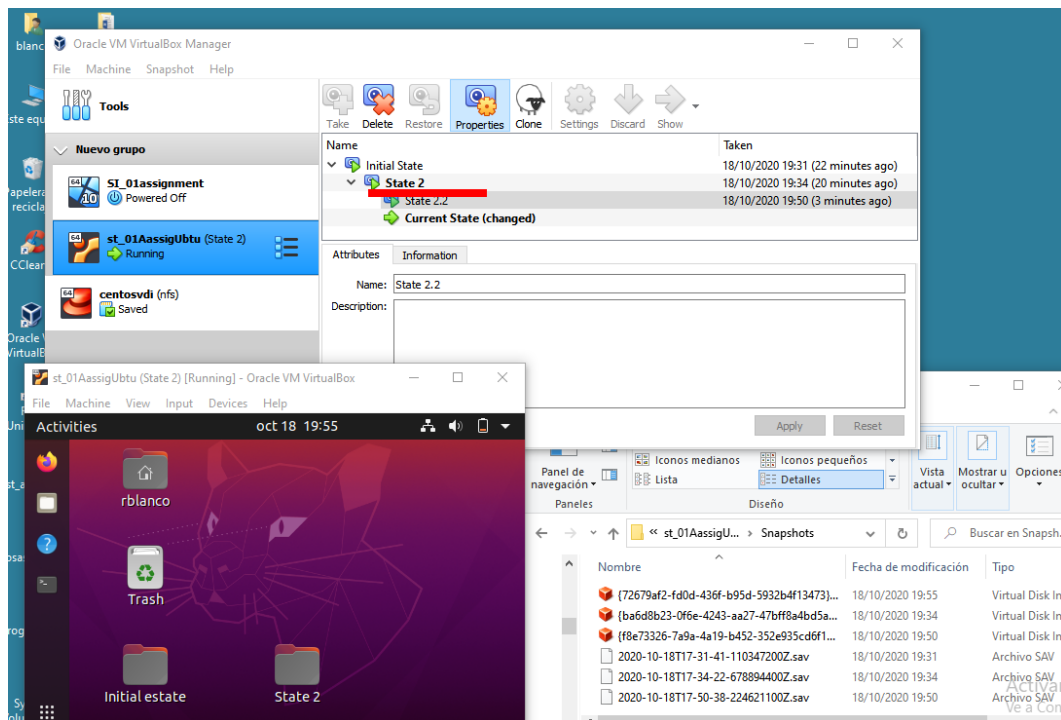
## Restore snapshot State 2 and create the snapshots State 2.2 with a folder named state 2.2



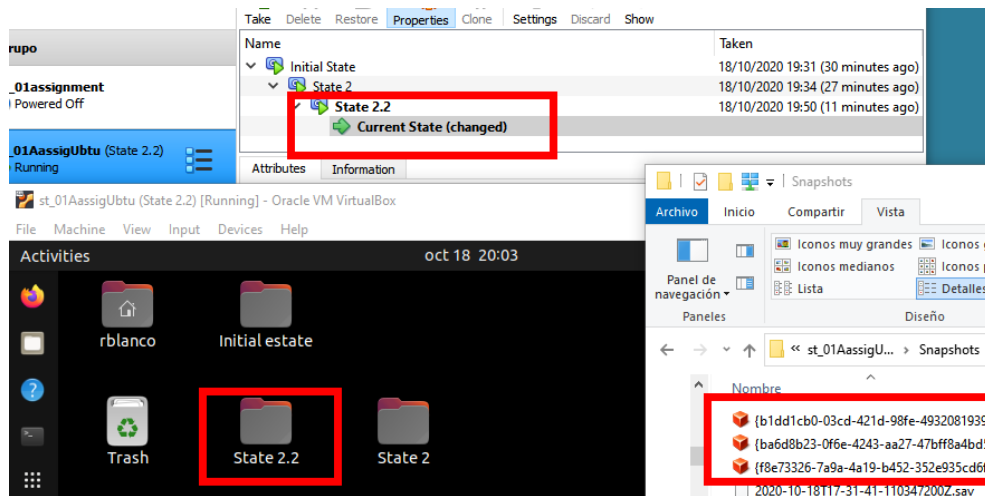
**Restore State 2 and delete State 1.**



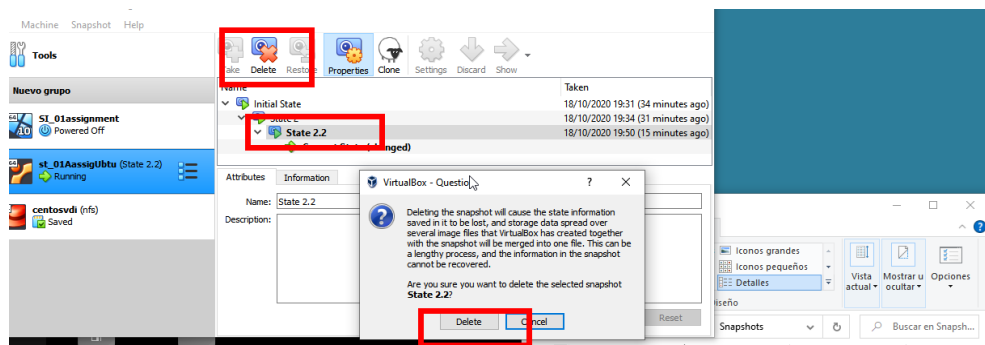
**Deleting State 2.1 cause loos data. The folder State 2.1 is not present**



## Restoring State 2.2



## Delete State 2.2



## Deleting State 2.1 cause the merge of State 2.2 's data in 2

