




KIT FOR HANDS-ON LAB

You can use:

- LINUX
 - WSL(Windows subsystem for Linux)
 - Ubuntu Virtual machine(Virtualbox)
- 

How to install Virtualbox and Ubuntu

If you want you can follow this video:

<https://www.youtube.com/watch?v=v1JVqd8M3Yc>

Or you can follow the step by step guide in the slides.





Download VirtualBox 7.0

Virtualbox

Go to:
<https://www.virtualbox.org/>



[About](#)
[Screenshots](#)
[Downloads](#)
[Documentation](#)
 [End-user docs](#)
 [Technical docs](#)
[Contribute](#)
[Community](#)

VirtualBox

[Pagina iniziale](#)

Download VirtualBox

Here you will find links to VirtualBox binaries and its source code.

VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

If you're looking for the latest VirtualBox 6.1 packages, see [VirtualBox 6.1 builds](#). Version 6.1 will remain supported until December 2023.

VirtualBox 7.0.10 platform packages

- [Windows hosts](#)
- [macOS / Intel hosts](#)
- [Linux distributions](#)
- [Solaris hosts](#)
- [Solaris 11 IPS hosts](#)

The binaries are released under the terms of the GPL version 3.

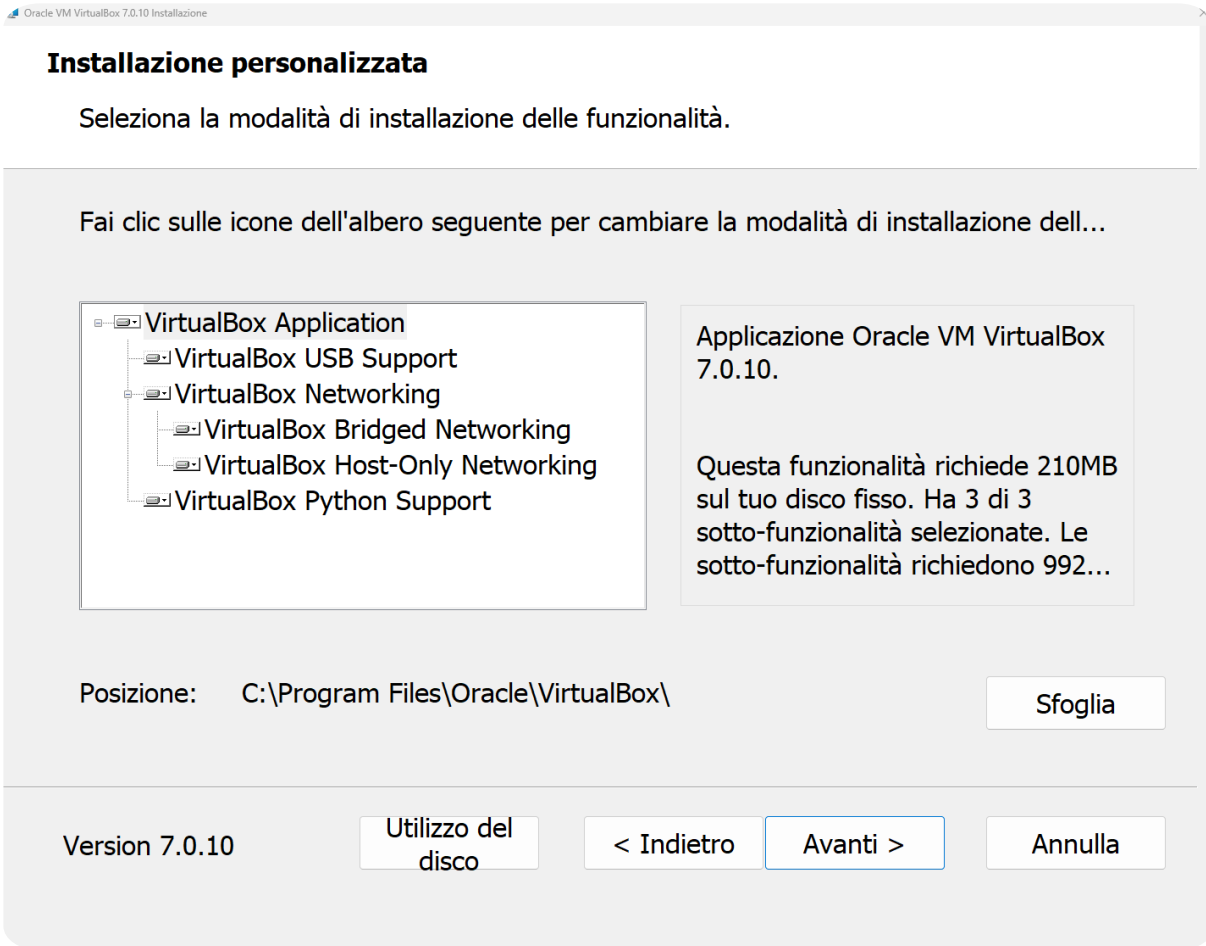
See the [changelog](#) for what has changed.

You might want to compare the checksums to verify the integrity of downloaded packages. *The SHA256 checksums should be favored as the MD5 algorithm must be treated as insecure!*

- [SHA256 checksums](#), [MD5 checksums](#)

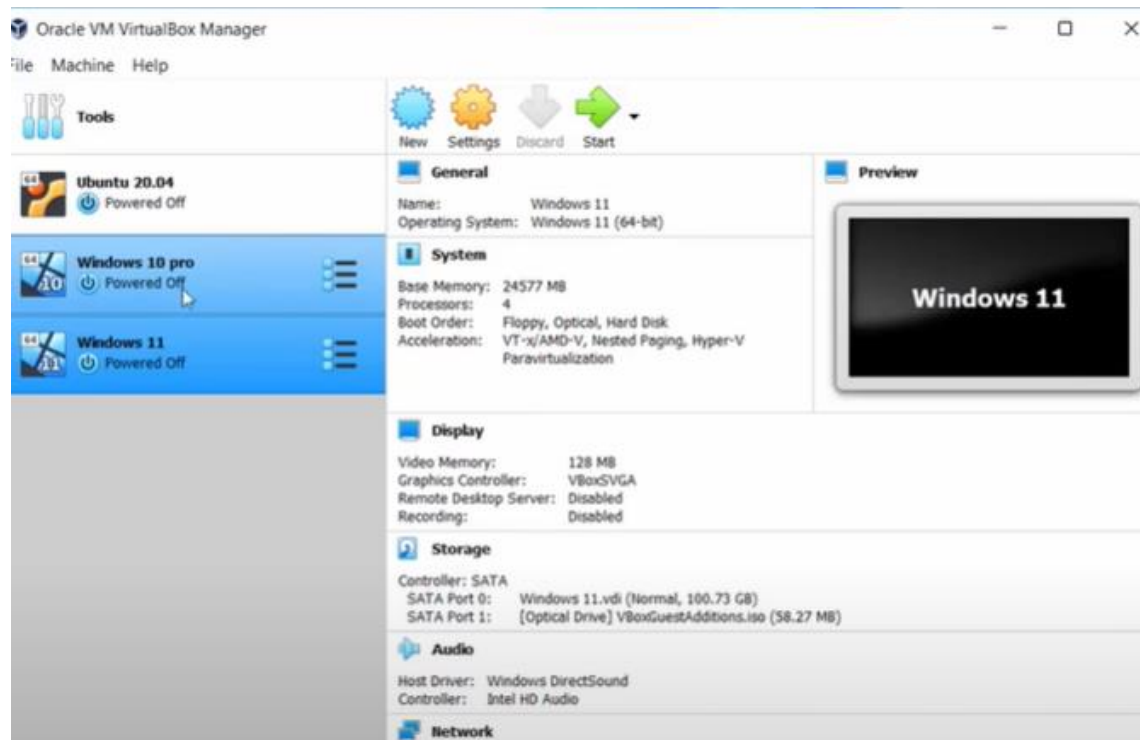
Note: After upgrading VirtualBox it is recommended to upgrade the guest additions as well.

- If you have Windows click on Windows hosts
- If you have macOS click on macOS/Intel hosts



- Open virtualbox.exe
- Follow the default configuration.

- After installation, virtualbox should appear similar to this.



Install ubuntu:

<https://www.ubuntu-it.org/download>

Scarica Ubuntu

Fai clic sul pulsante arancione per scaricare l'ultima versione di Ubuntu.
Dovrai creare un DVD o una **pennetta USB** per installarlo.

Le versioni non LTS sono supportate per nove mesi e garantiscono tutte le novità più recenti.
Le versioni LTS (long-term support) offrono invece aggiornamenti per cinque anni: l'ideale per chi ha bisogno di maggiore stabilità.

Configura il tuo download!

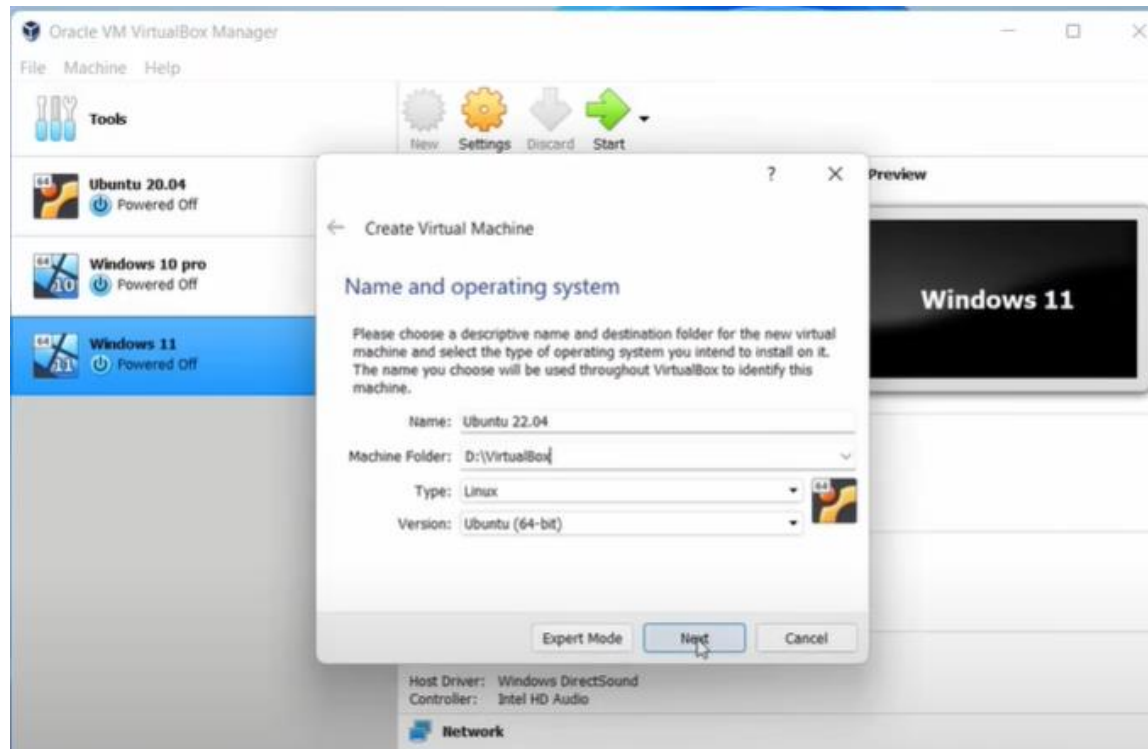
Ubuntu 22.04.3 LTS ▼

Desktop ▼

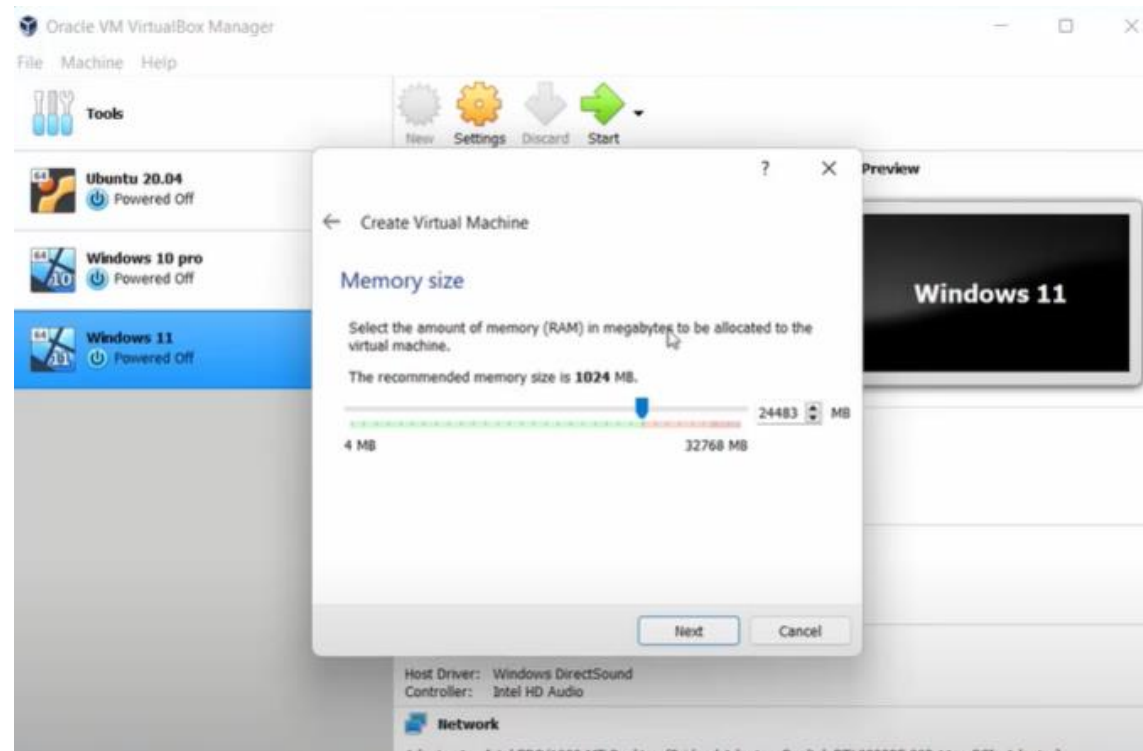
☐ Download tramite **torrent**

Avvia il download

Scarica la versione selezionata.

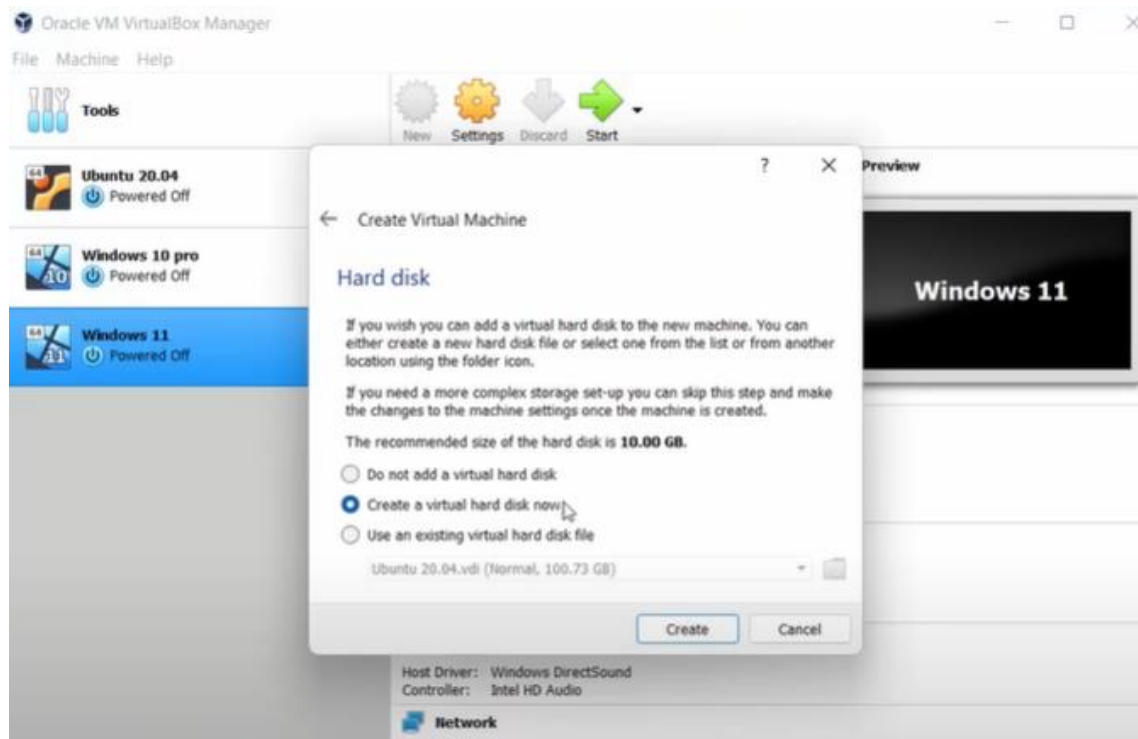


- Open virtualbox
- Click “New” button
- Name: “Ubuntu 22.04”
- Select folder
- Type: “Linux”
- Version: Ubuntu (64-bit)
- Then click on “next”

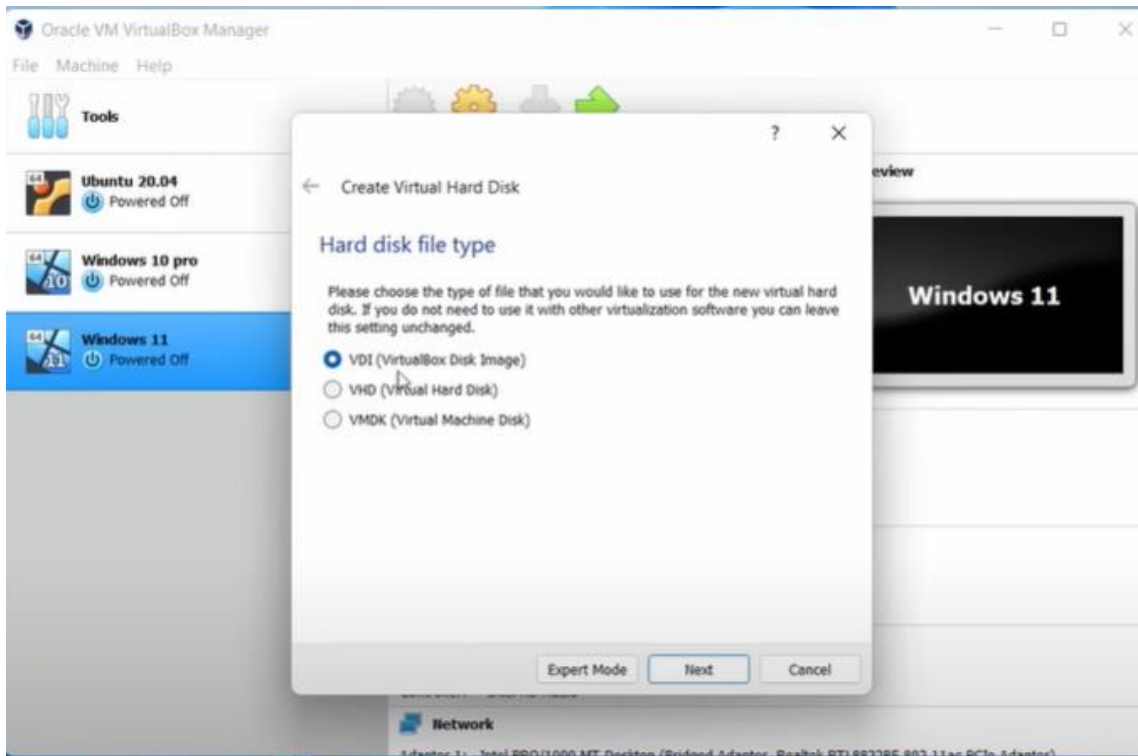


- 1024-4096 Mb should be enough
- click on "next"

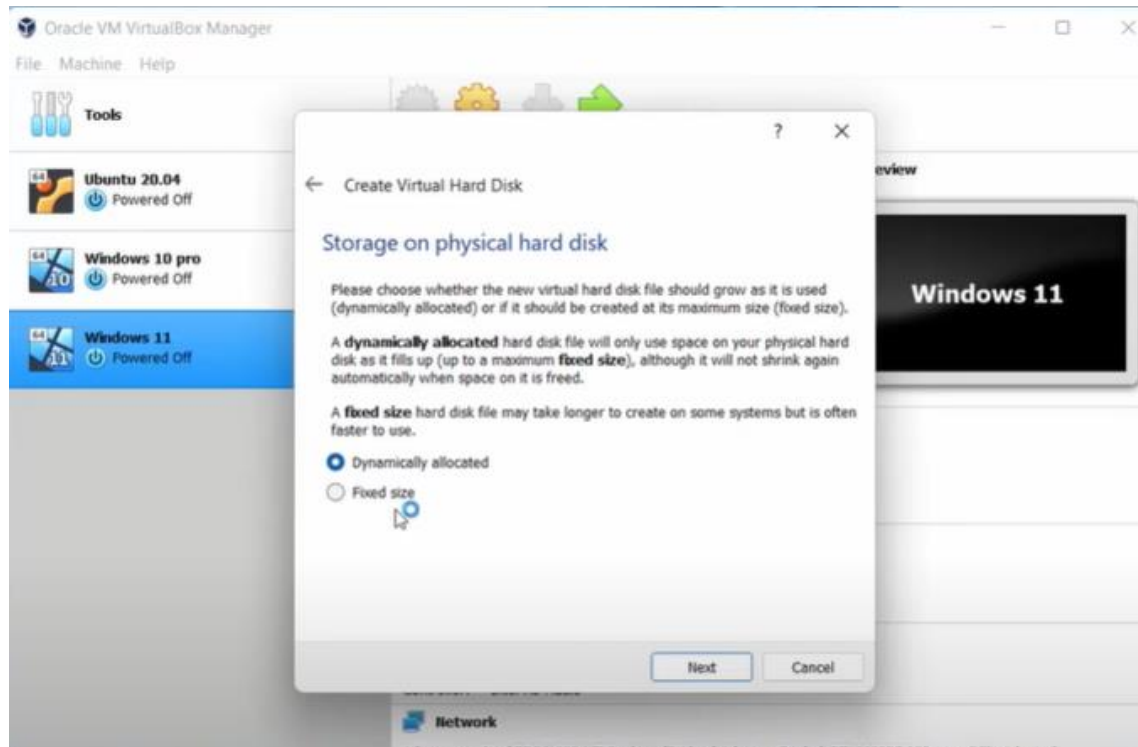
- Leave the default option and click "create"

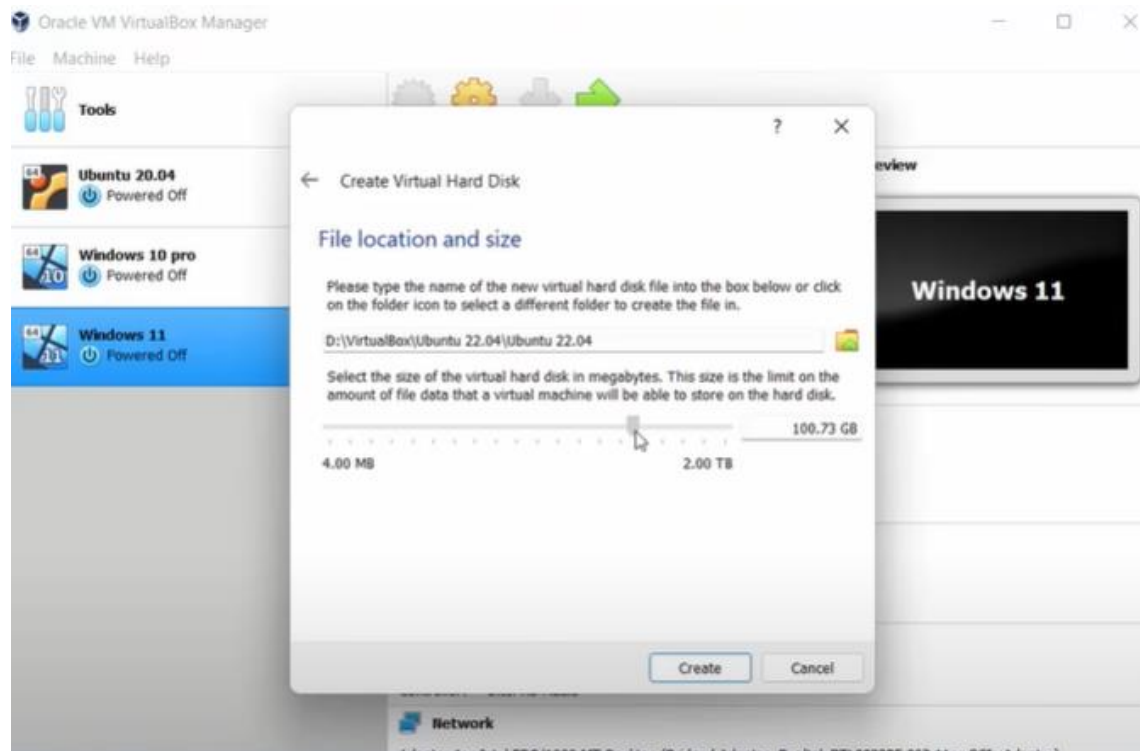


- Leave as default and click on “next”



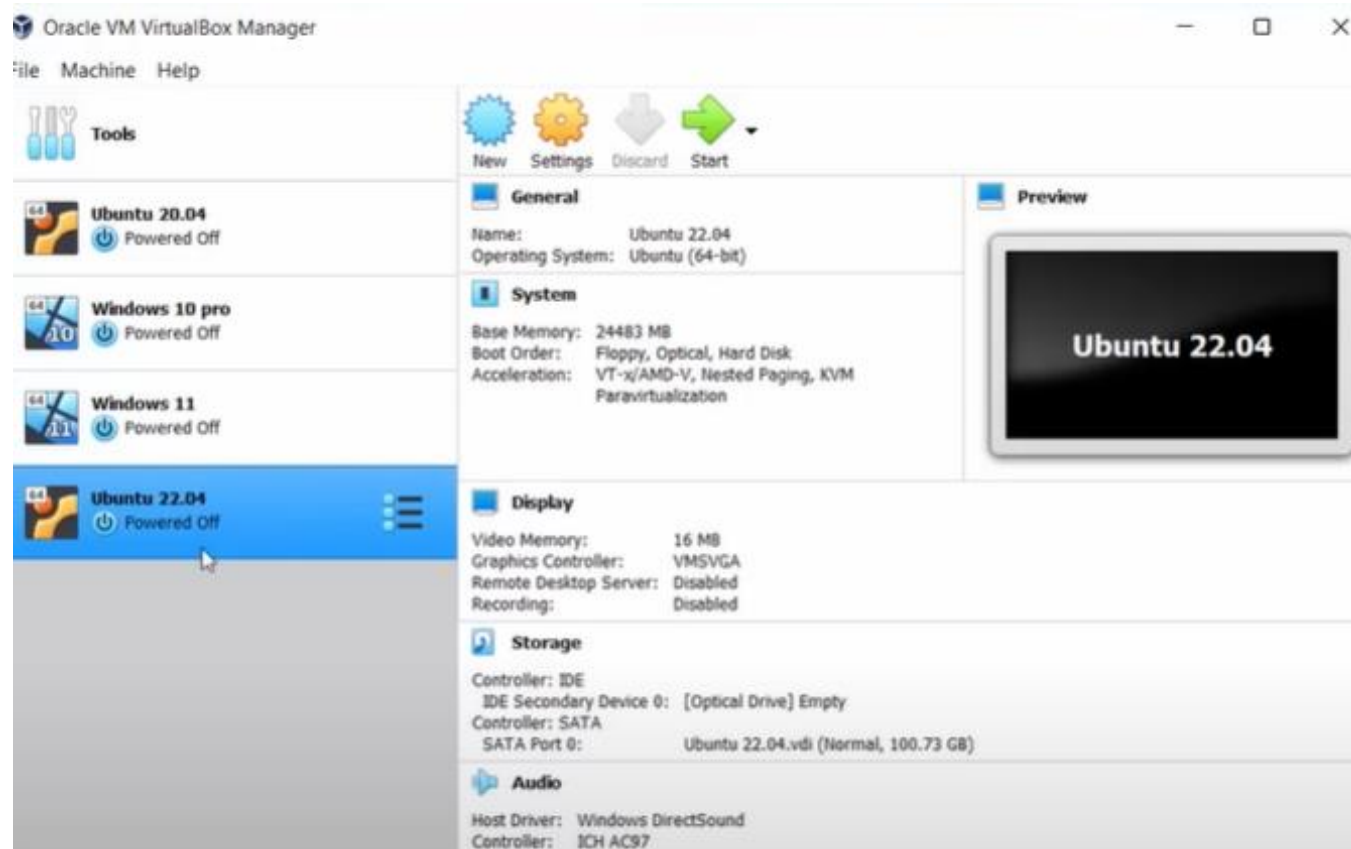
- Leave as default and click on «next»



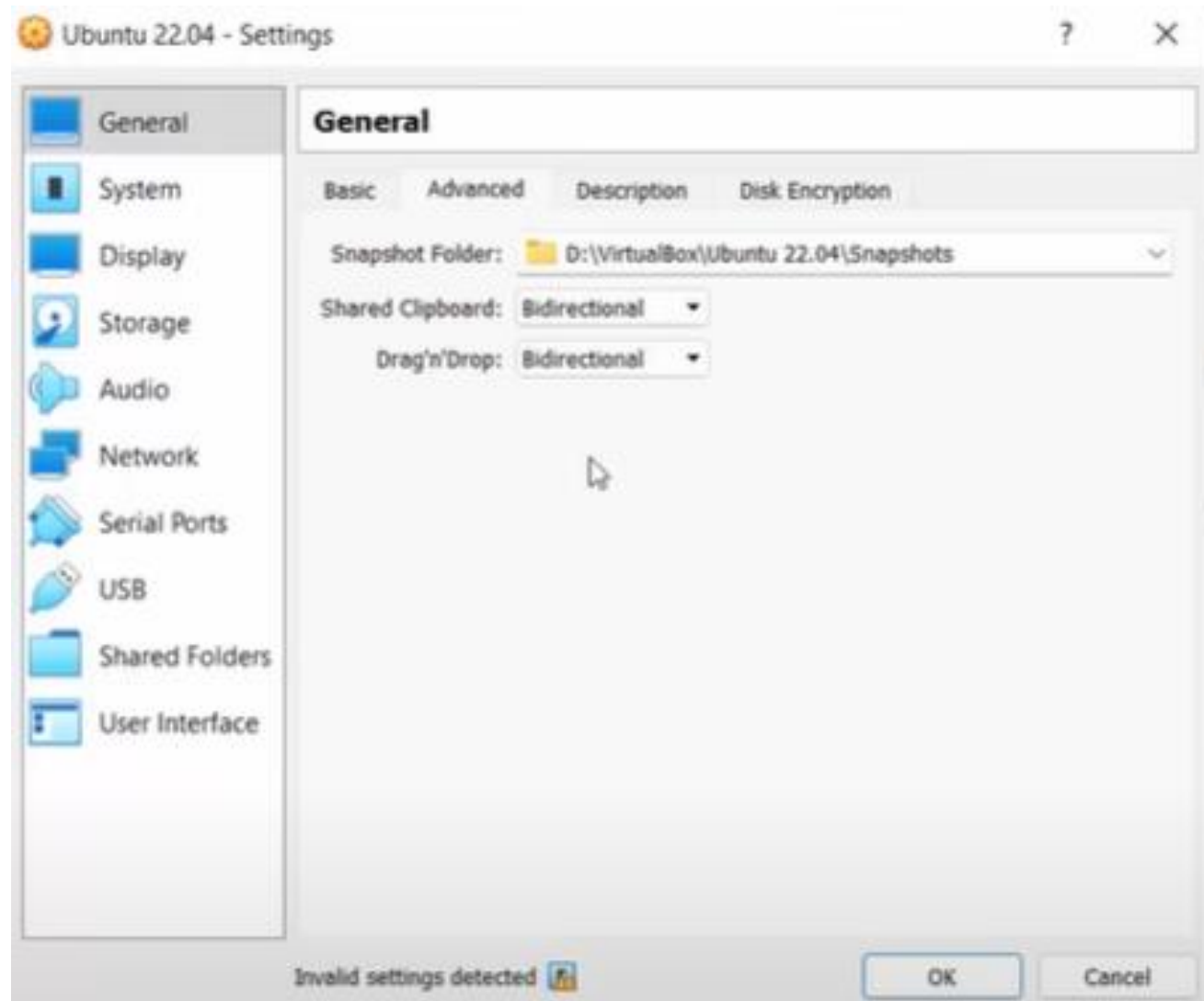


- Choose 10/20 Gb.
- select “create”

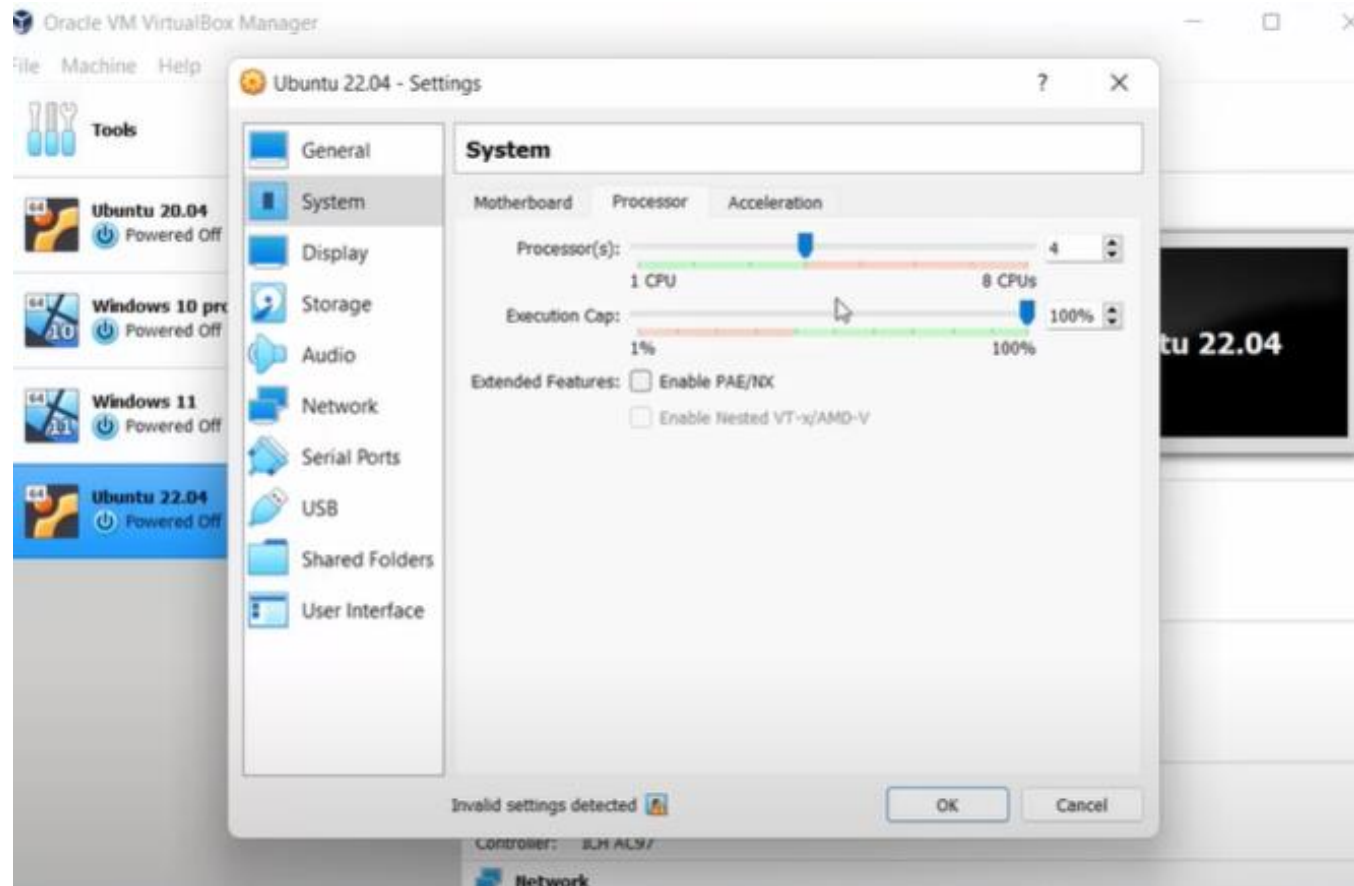
- You should see Ubuntu 22.04 on virtualbox now

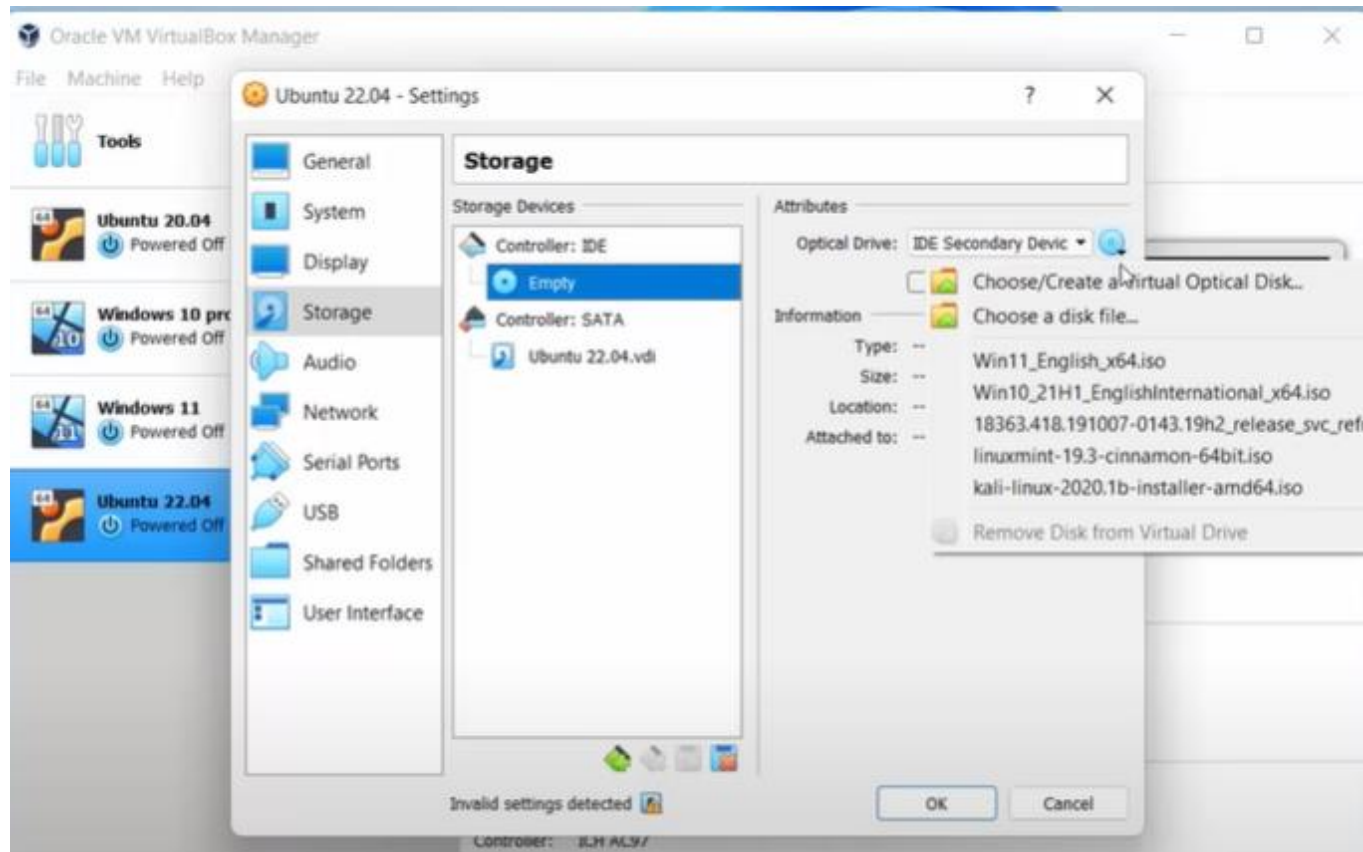


- Click on Settings
- Go to General
- Click advanced
- Select bidirectional



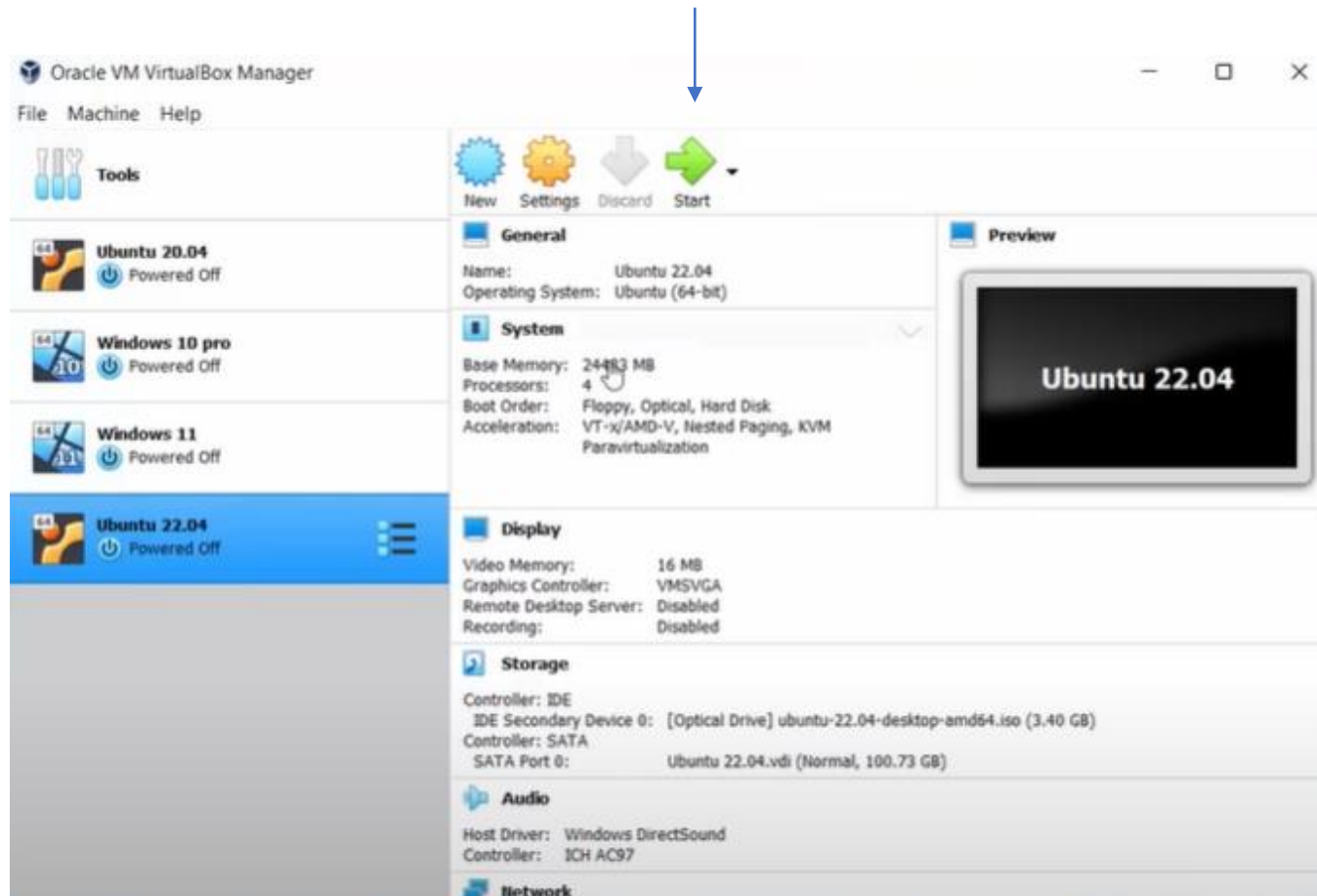
- Go to system
- Select processor
- 2/4 processor are enough



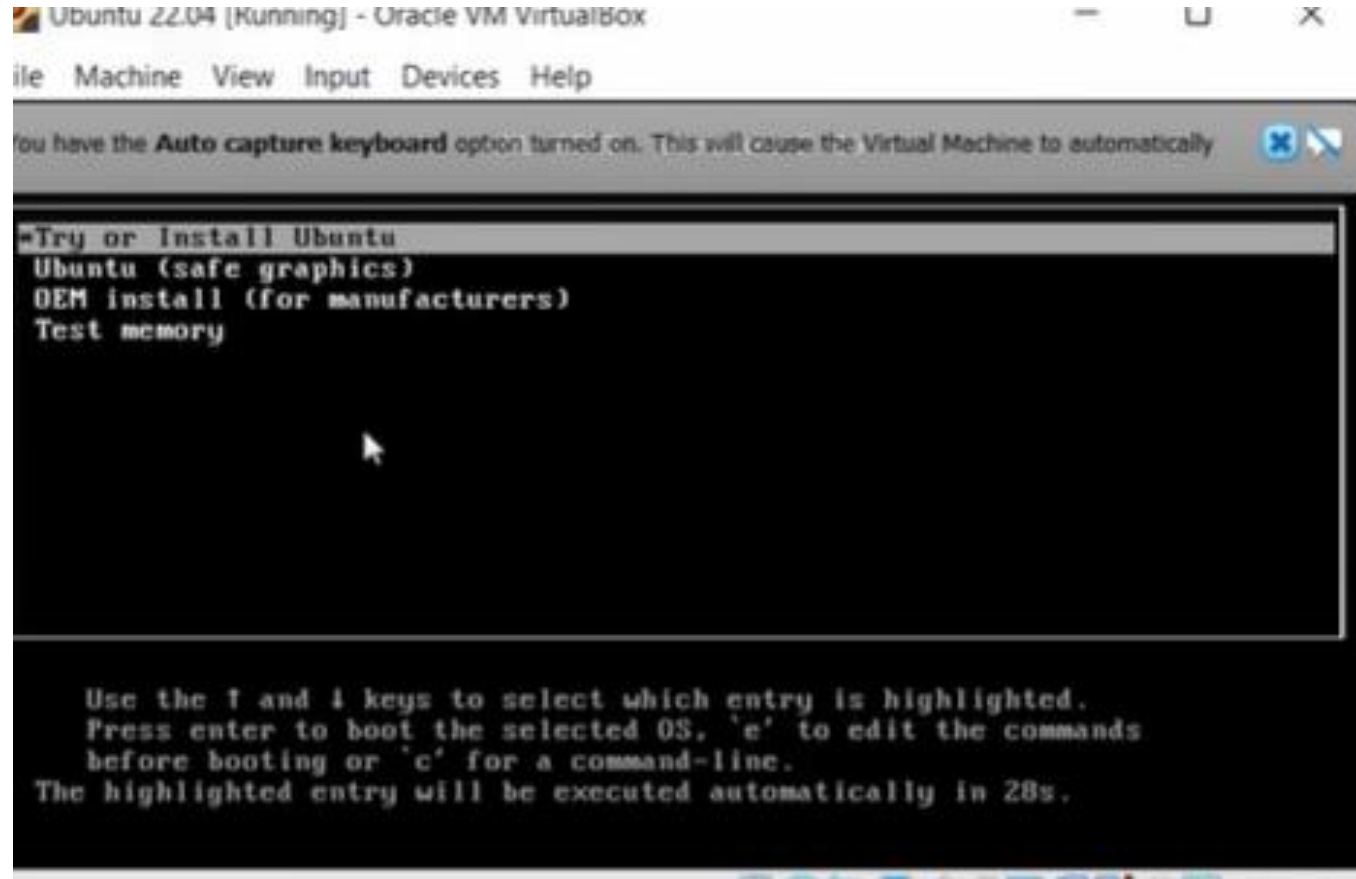


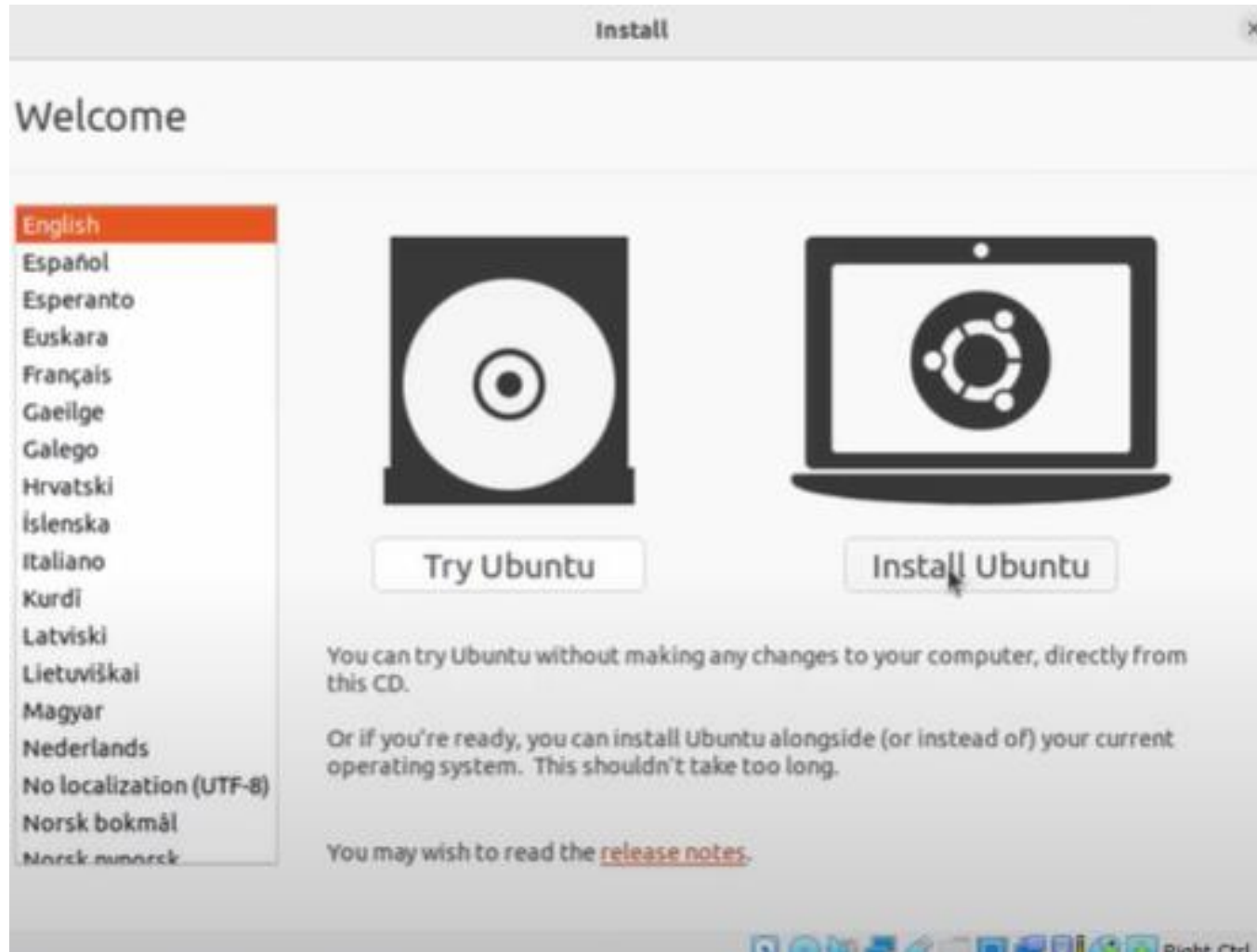
- Go to Storage
- Click on empty
- Click on the blu disk icon
- Click «choose» a disk file
- Select ubuntu.iso downloaded before
- Click on open
- Click on ok
- Close the settings

- Click on start



- Select “try or install” ubuntu
- Press enter

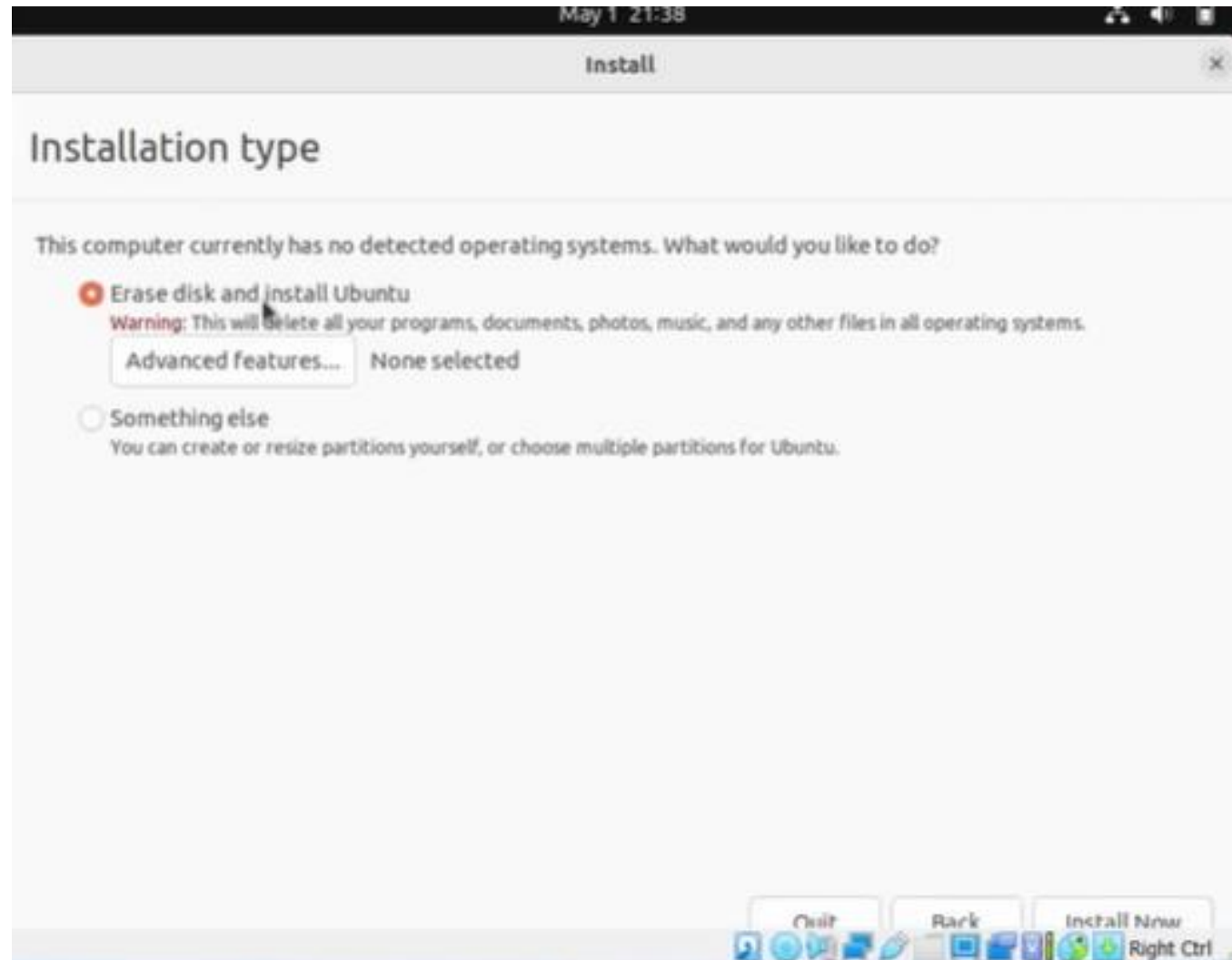




- Choose you language
- Click on install
- Select keyboard layout
- Press continue



- Select this option
- Continue



- Leave as it is
- Click on Install now

Install

Who are you?

Your name:

Your computer's name:
The name it uses when it talks to other computers.

Pick a username:

Choose a password:

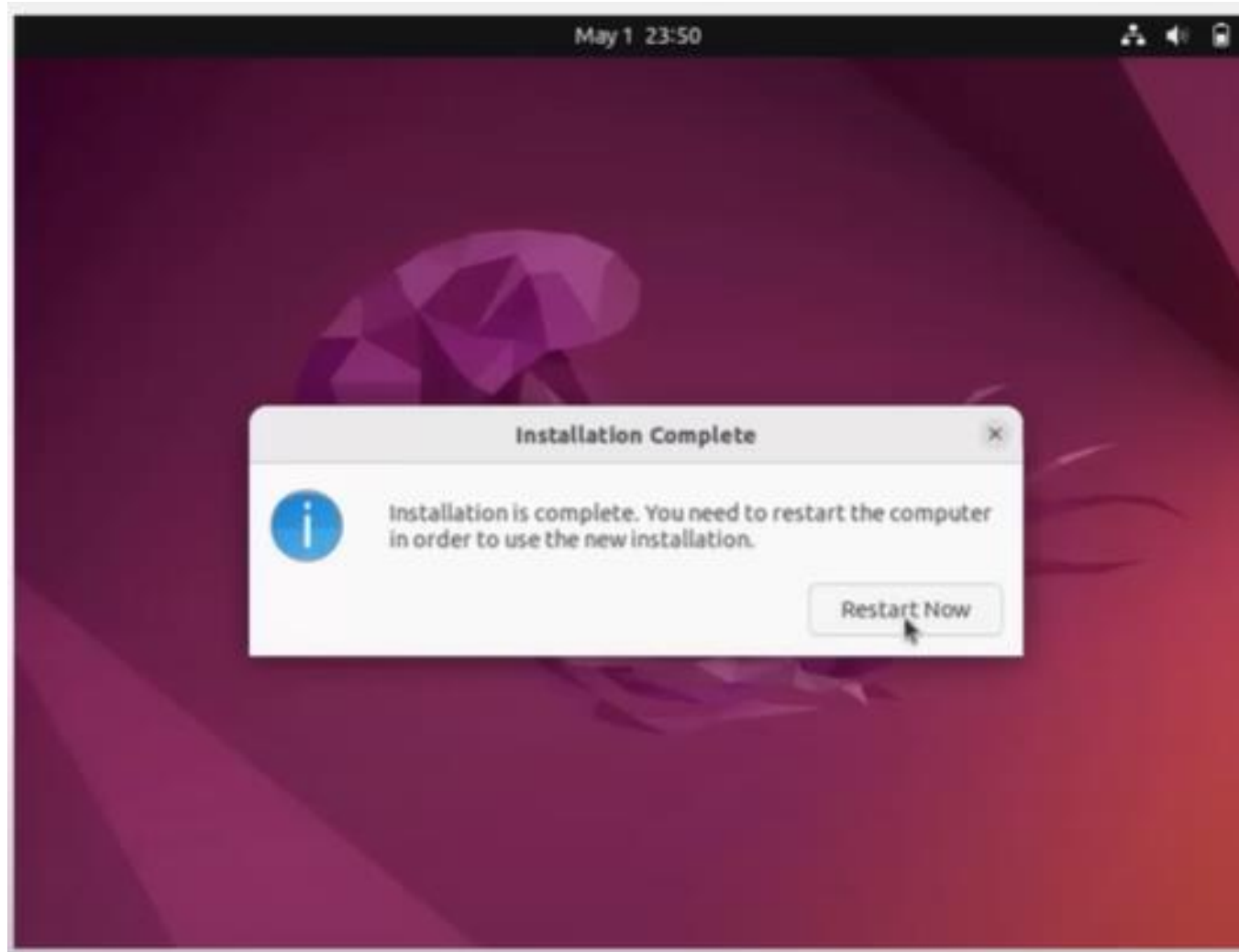
Confirm your password:

☐ Log in automatically

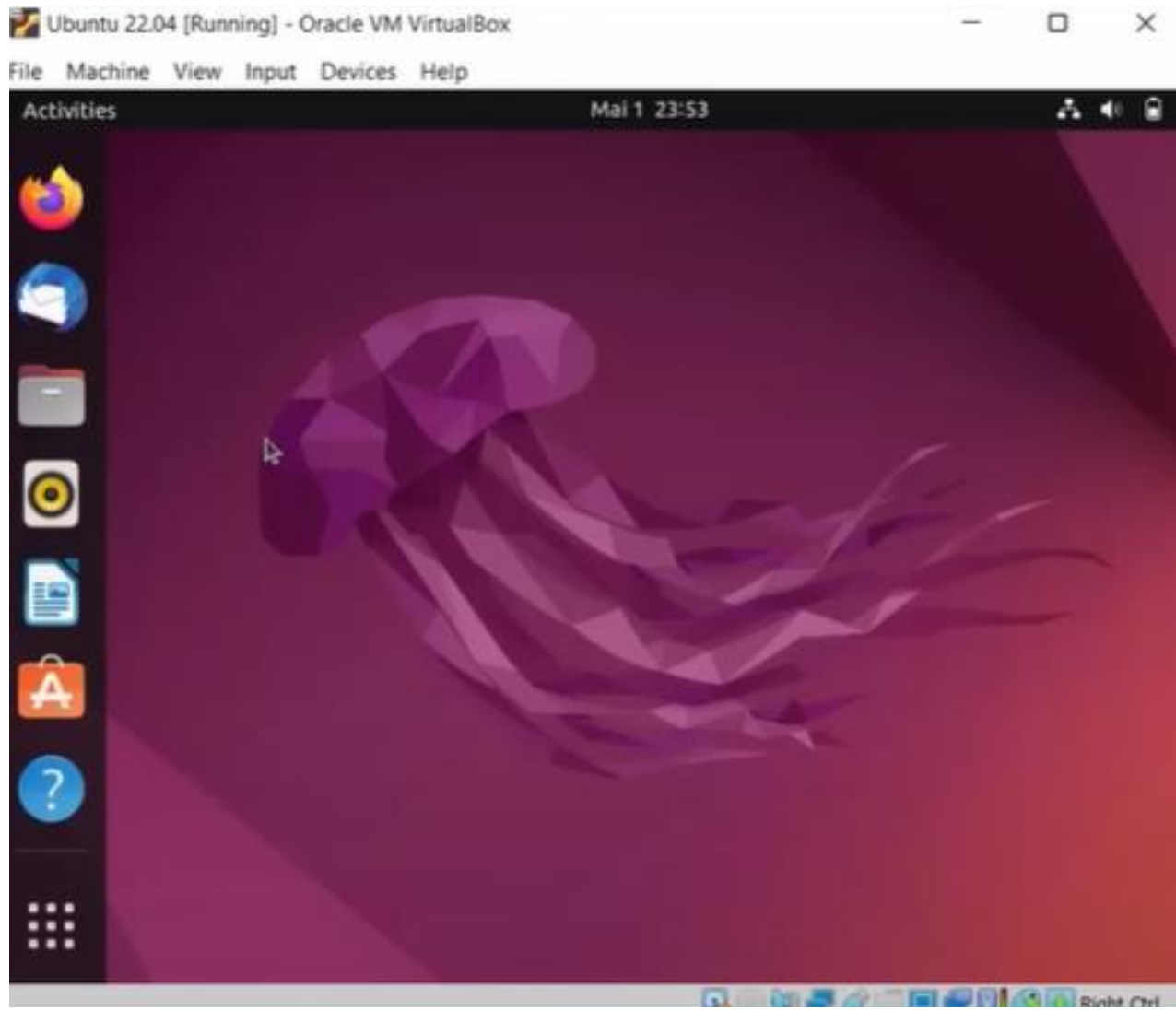
☒ Require my password to log in

☐ Use Active Directory
You'll enter domain and other details in the next step.

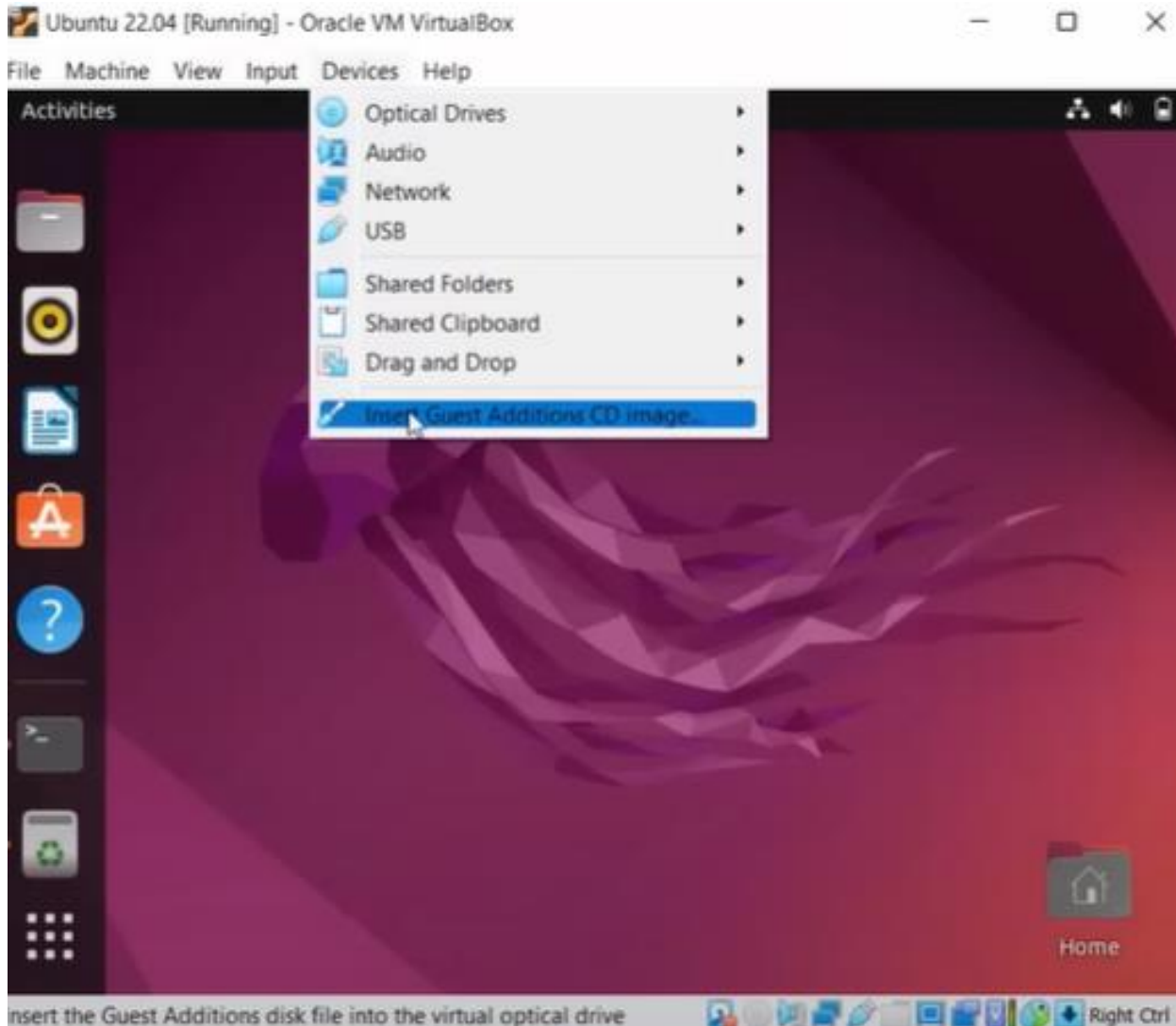
- Choose your name
- Choose your computer name
- Choose username
- Choose pw(use ubuntu for simplicity)
- Click continue
- Installation will start



- When installation finish, click on restart now.



- This should be your screen.

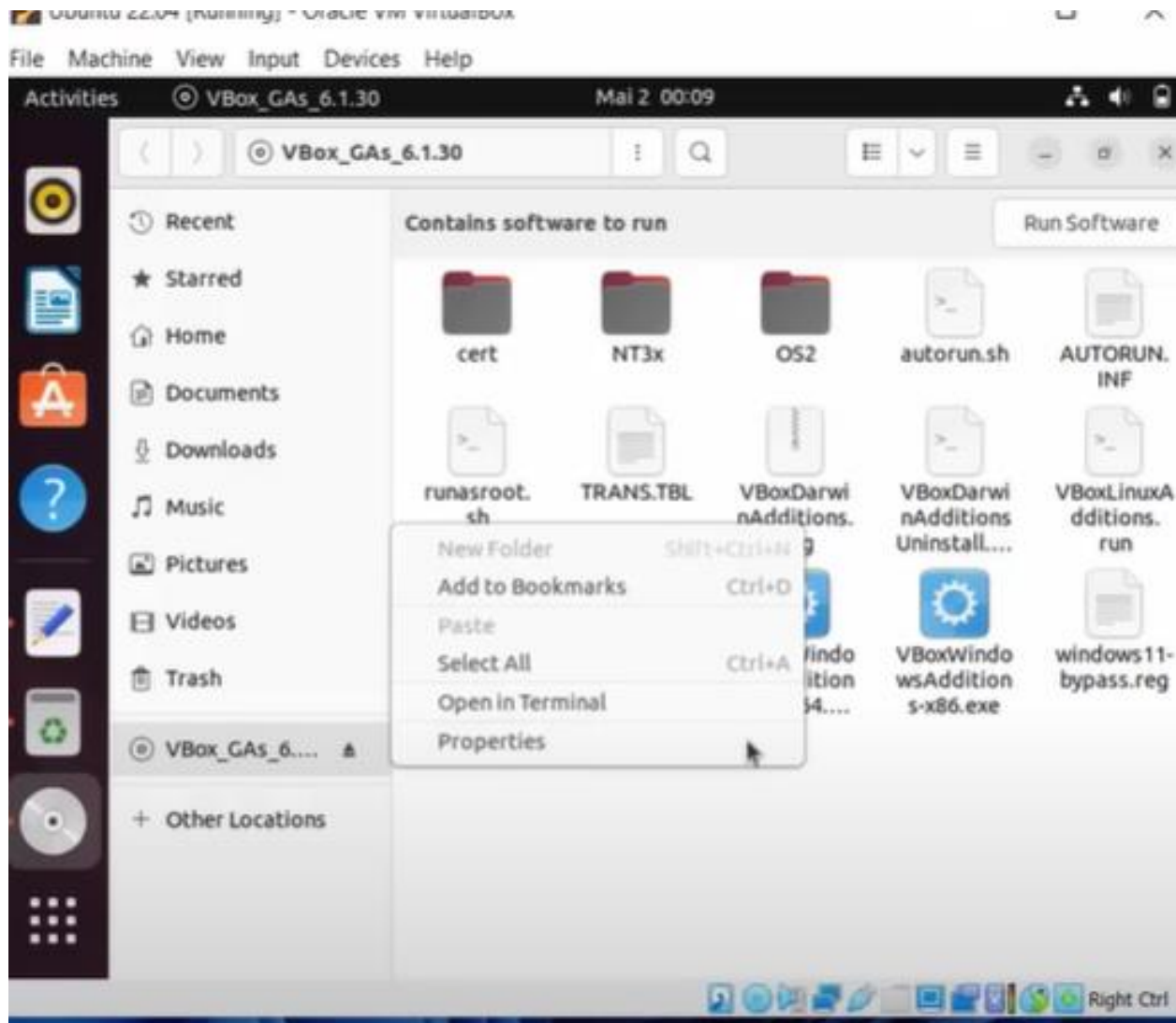


To install guest additions(useful to adjust screen width to full screen)

- Right click on the desktop
- Open a terminal
- Type: `sudo apt update`
- `sudo apt install build-essential dkms linux-headers-$(uname -r)`
- Then click on devices
- Click on insert guest addition cd image



- Now you should have this disk icon on the left
- Click on it



- Open a terminal inside the directory

```
codebind@codebind: /media/codebind/VBox_GAs_6.1.30$ ls
AUTORUN.INF  runasroot.sh          VBoxSolarisAdditions.pkg
autorun.sh   TRANS.TBL             VBoxWindowsAdditions-amd64.exe
cert         VBoxDarwinAdditions.pkg  VBoxWindowsAdditions.exe
NT3x        VBoxDarwinAdditionsUninstall.tool  VBoxWindowsAdditions-x86.exe
OS2         VBoxLinuxAdditions.run   windows11-bypass.reg
codebind@codebind: /media/codebind/VBox_GAs_6.1.30$ ./autorun.sh
```

- Type “ls” to see if autorun.sh is here
- Type ./autorun.sh
- When finished, restart your Ubuntu virtual machine
- **INSTALLATION COMPLETE**