

HOW TO BUILD A SIMPLE HOME LAB

A home lab is a personal, isolated IT environment where individuals can safely experiment with hardware and software for learning, personal projects, or career development. It can range from a single computer to a multi-server setup and is used to learn skills.

To create a home lab, a virtualization manager is needed.

Types of virtualization manager

1. Virtual box
2. VMware
3. Qemu
4. Hyper V
5. UTM

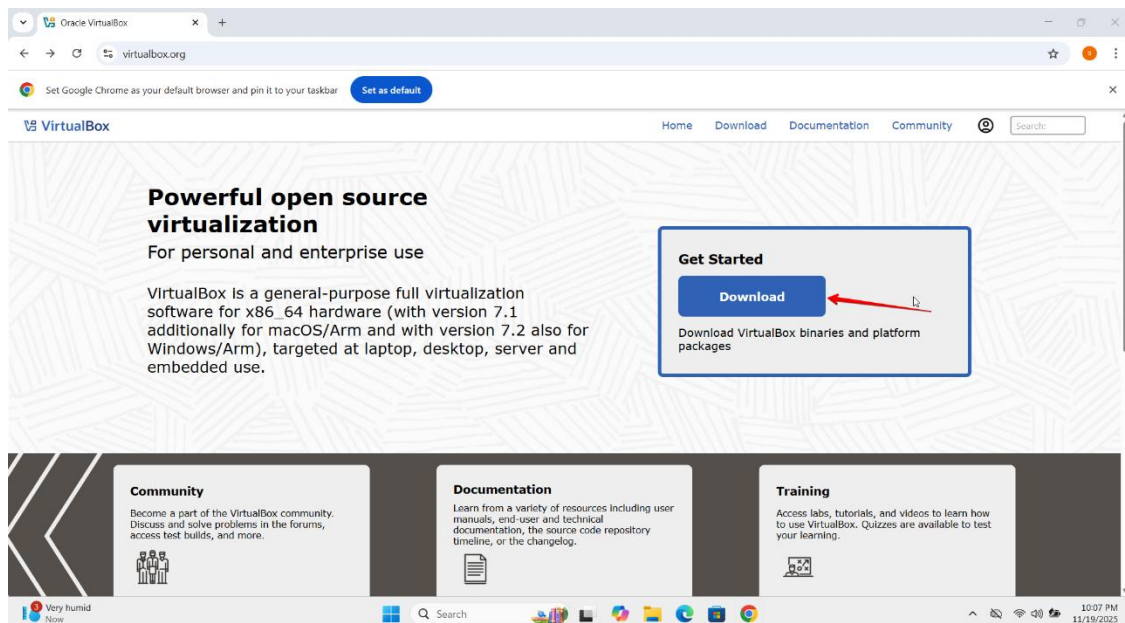
WHAT IS THE FUNCTION OF VIRTUALIZATION MANAGER

This serves as a house or more like a host to several virtual machines (guests)

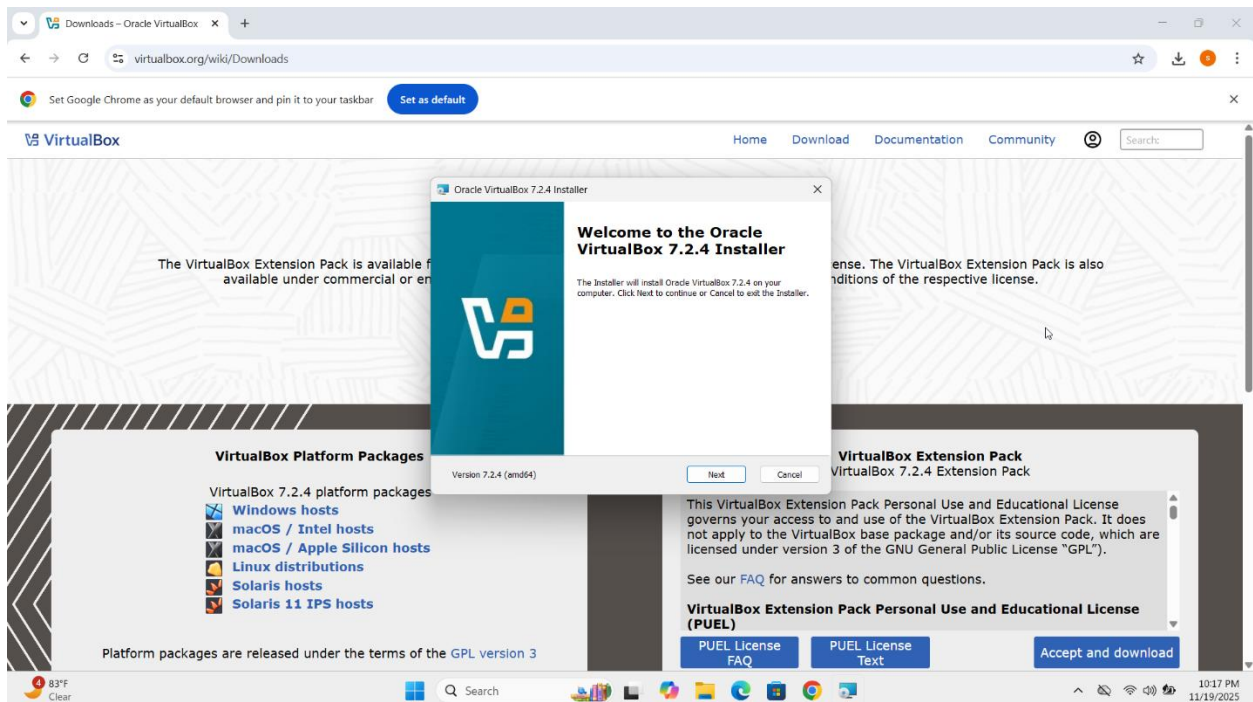
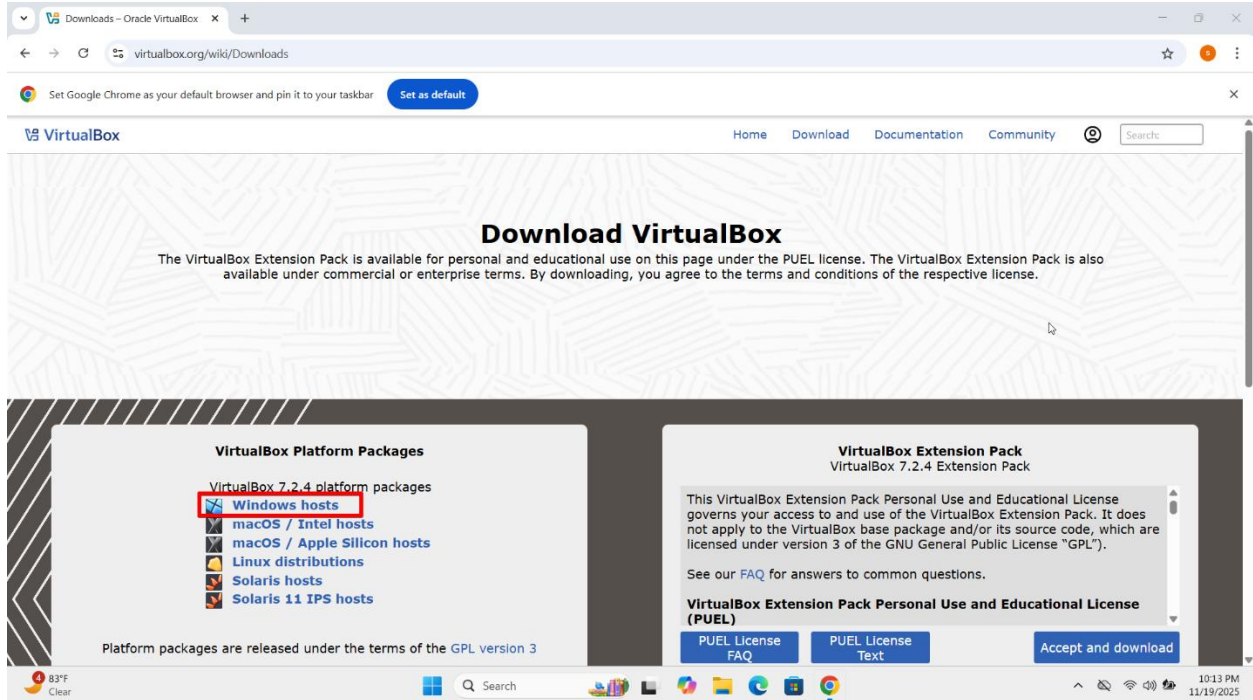
For this project, I will be using the Virtual box, so lets go.

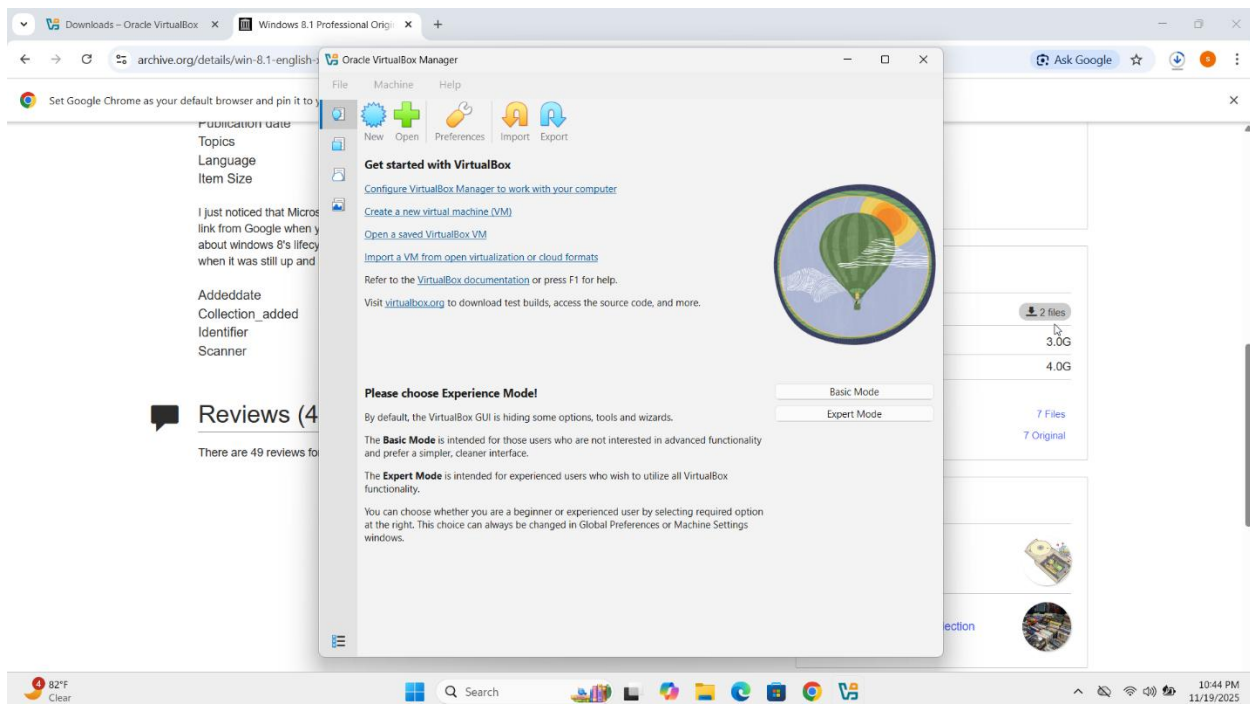
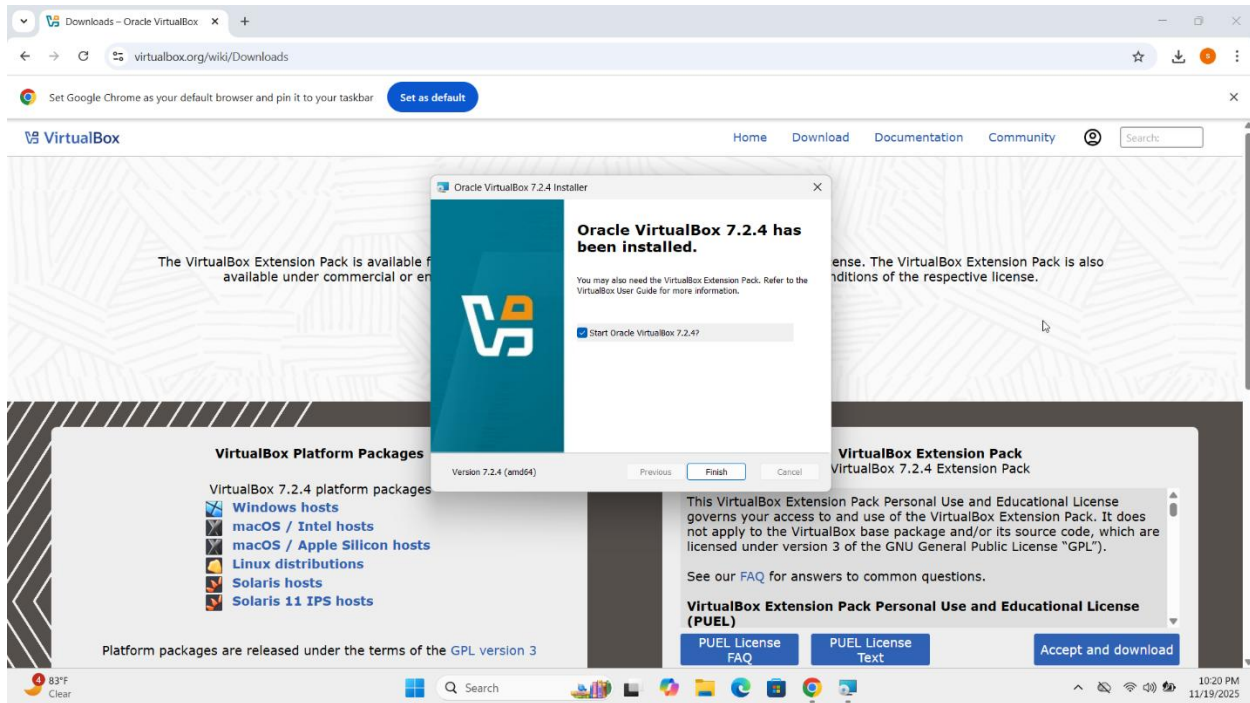
PROCESS

1. Download and Install the virtualization manager on your personal computer
Go to your browser and type in virtualbox.org



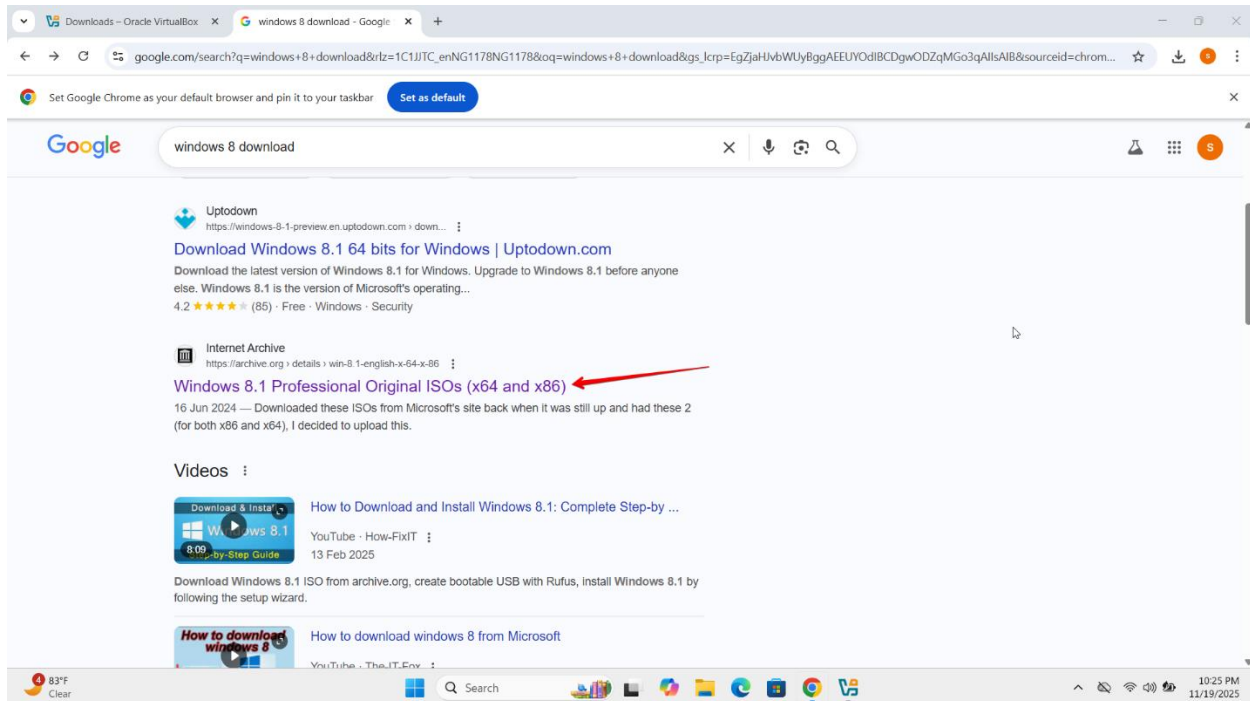
Then it takes you to the Windows host, Then click on that





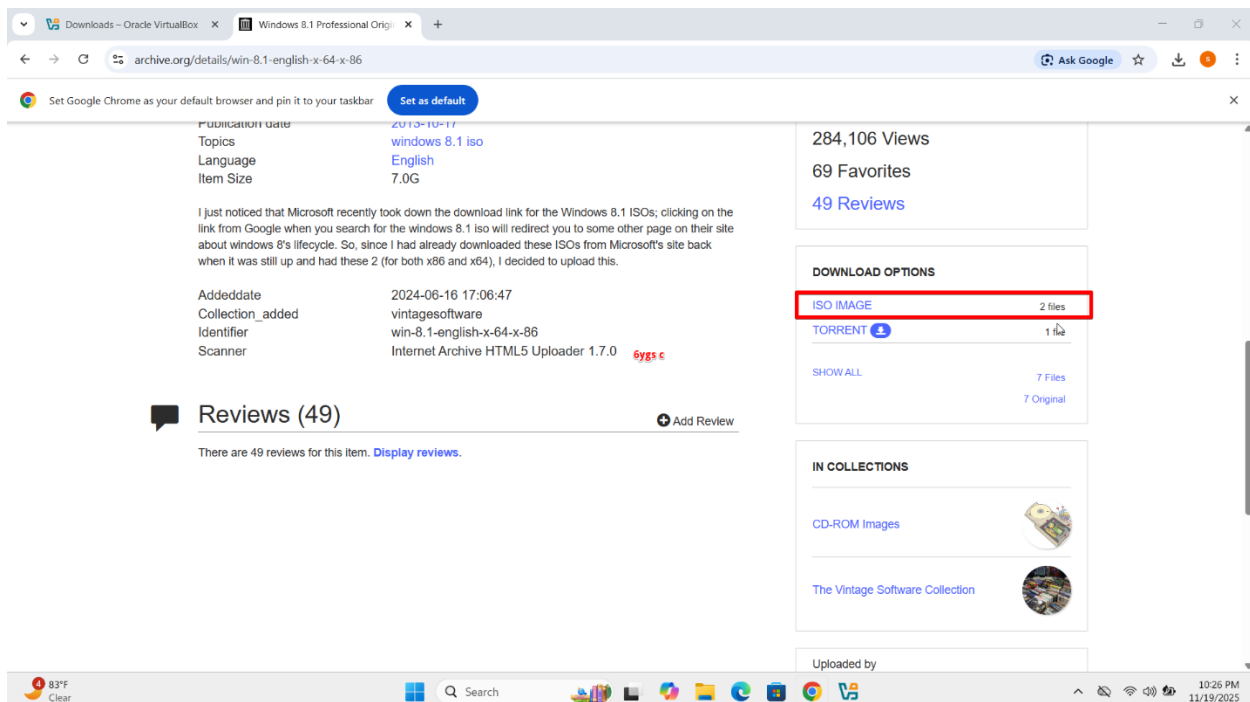
Next step is to download the ISO of the computer that will be on the Virtual manager which will function as a normal PC.

We shall be needing 2 windows 8 and 1 window server for this simple home lab. Go to your browser and type in windows 8 download

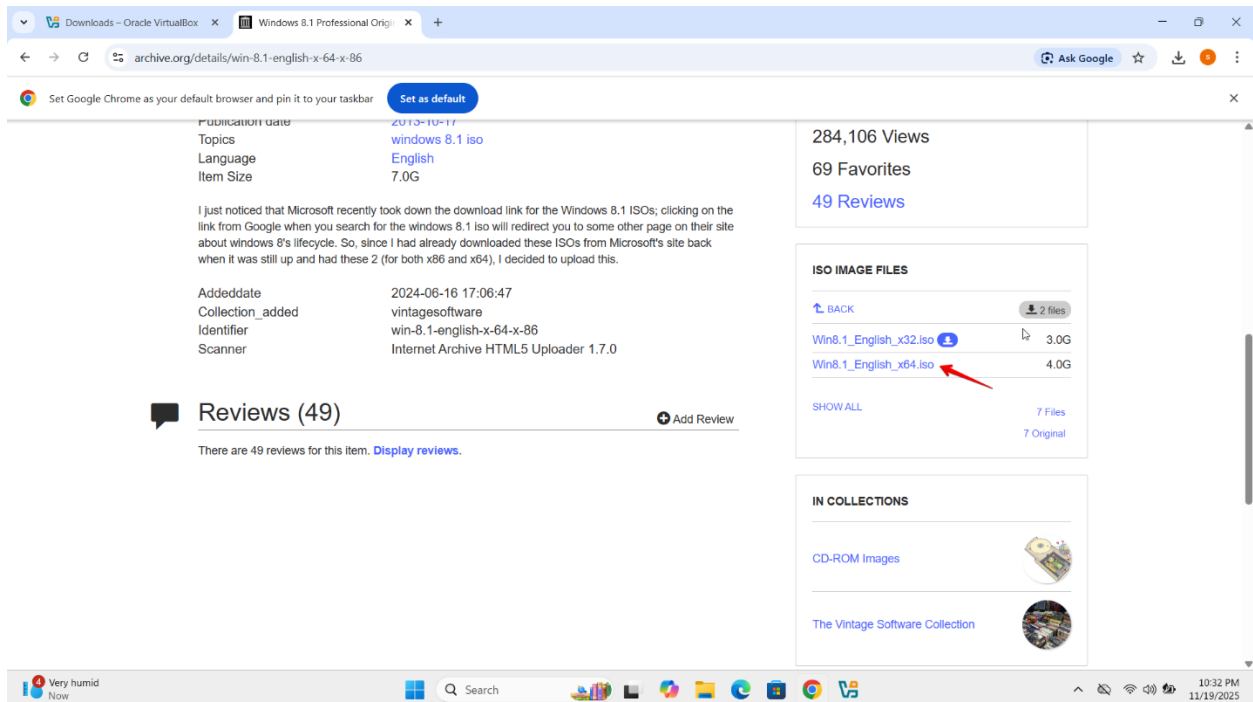


Click on the arrowed link; windows 8.1 professional original ISOs (x64 and x86)

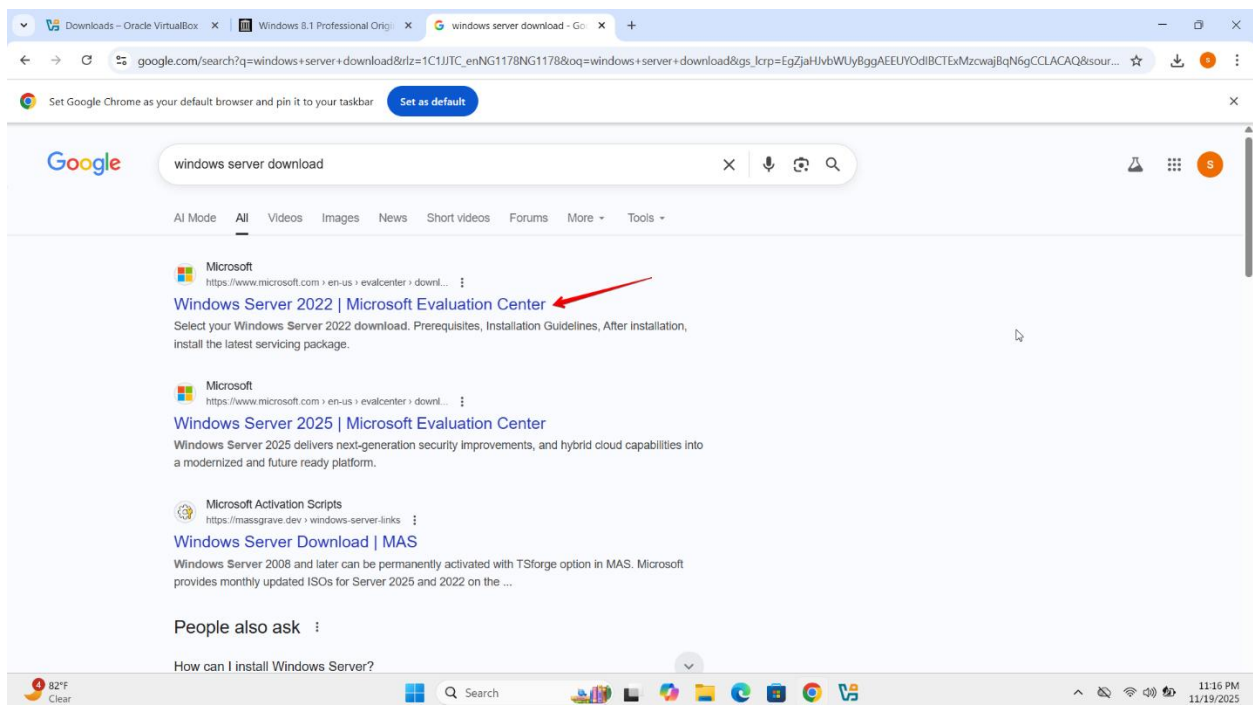
You will be taken to this page



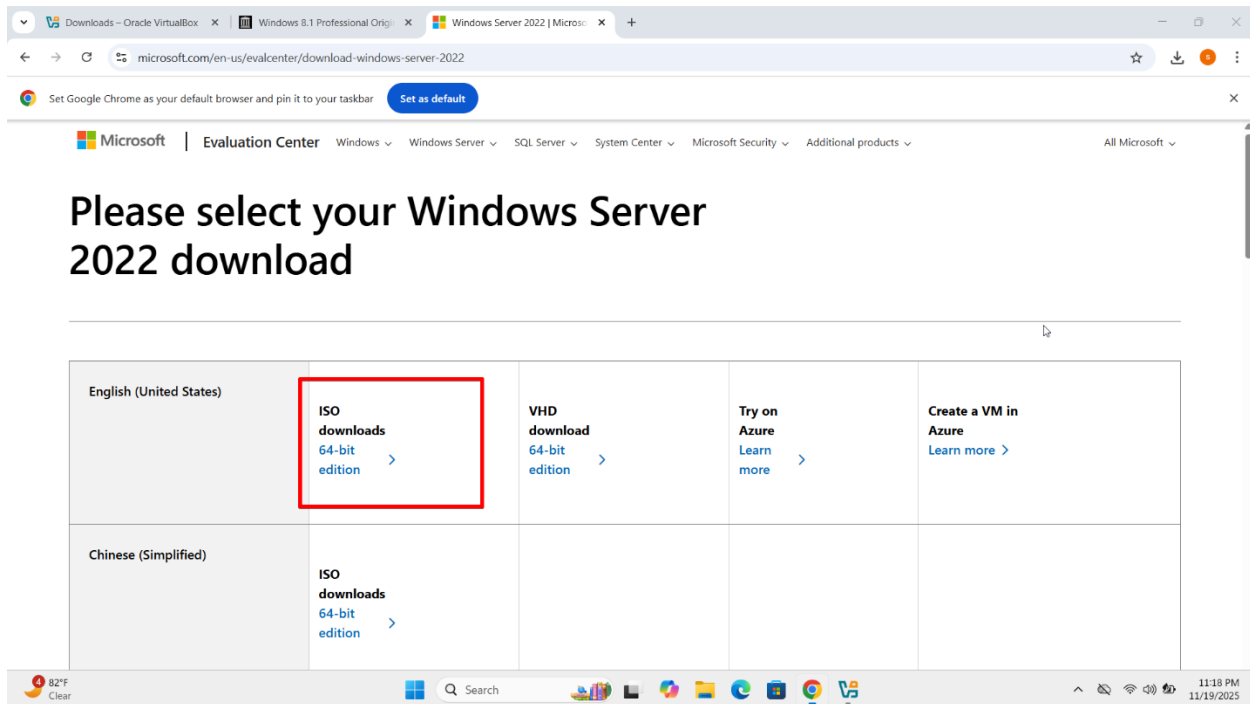
Then click on the ISO image and you will be taken to the next page, where you choose the x64.iso



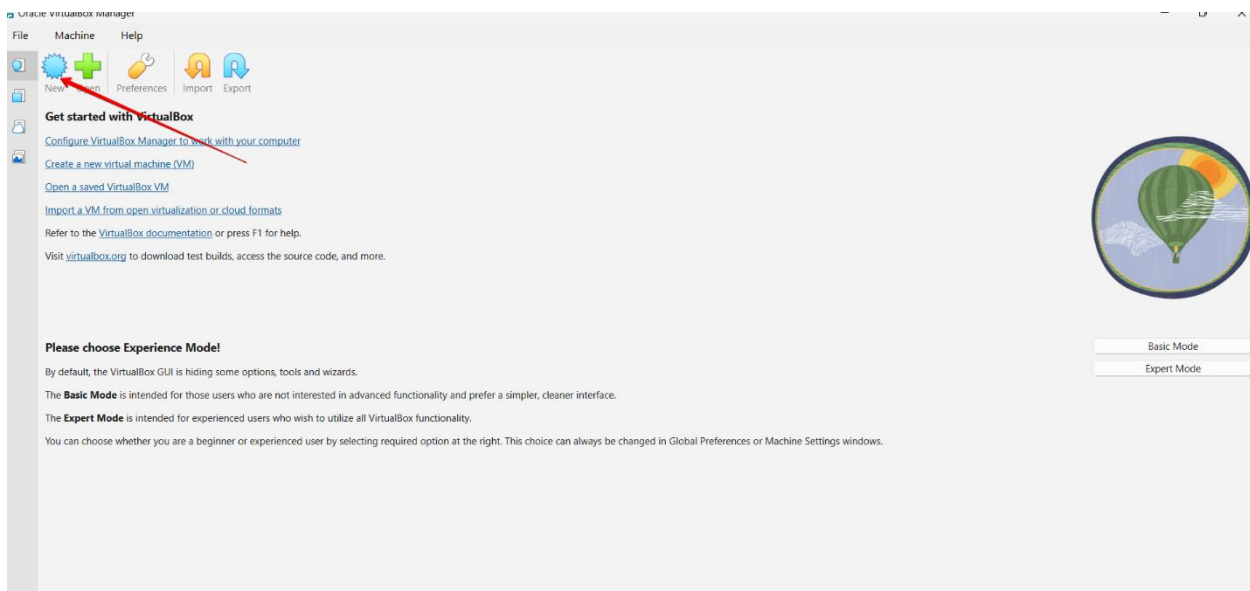
The next step is to download a windows server, now you go to the browser and type in download windows server download



Then you click on the windows server 2022 Microsoft Evaluation center
Then you will be taken to this page



Its time to start mounting the virtual machines unto the virtual box.

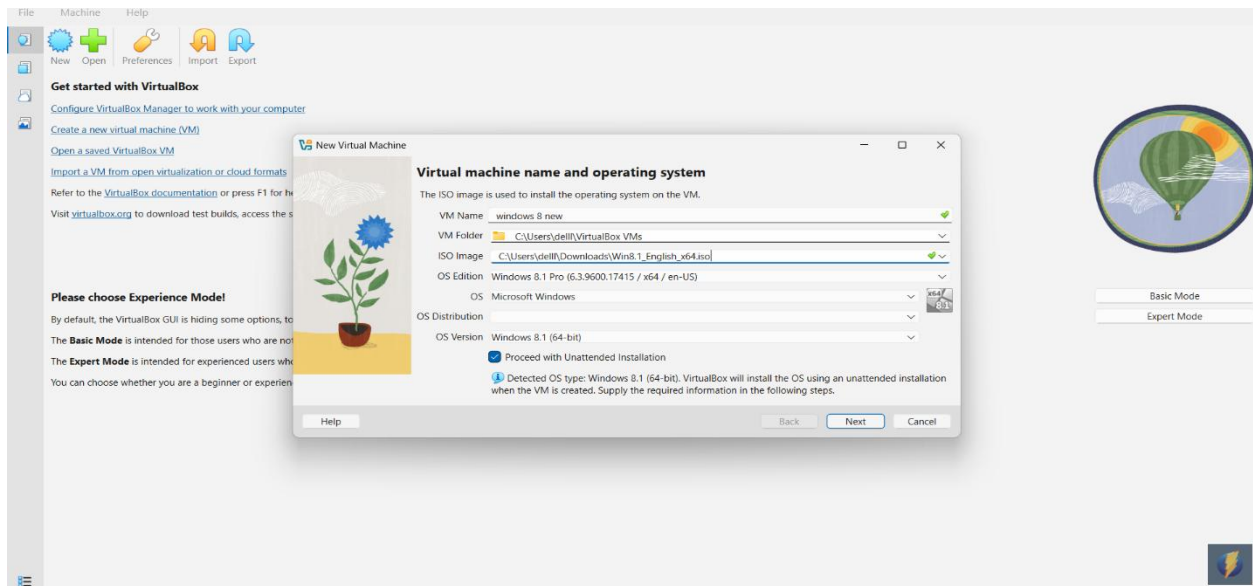


Click on the new button

Give the file a name.... Windows 8

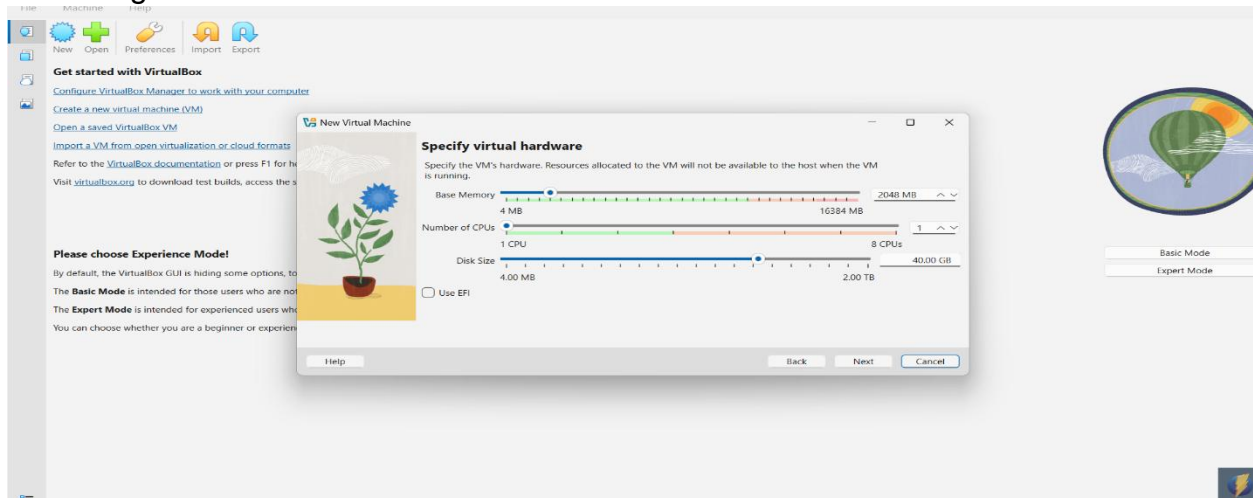
Uncheck the proceed with unattended installation

Click on Next

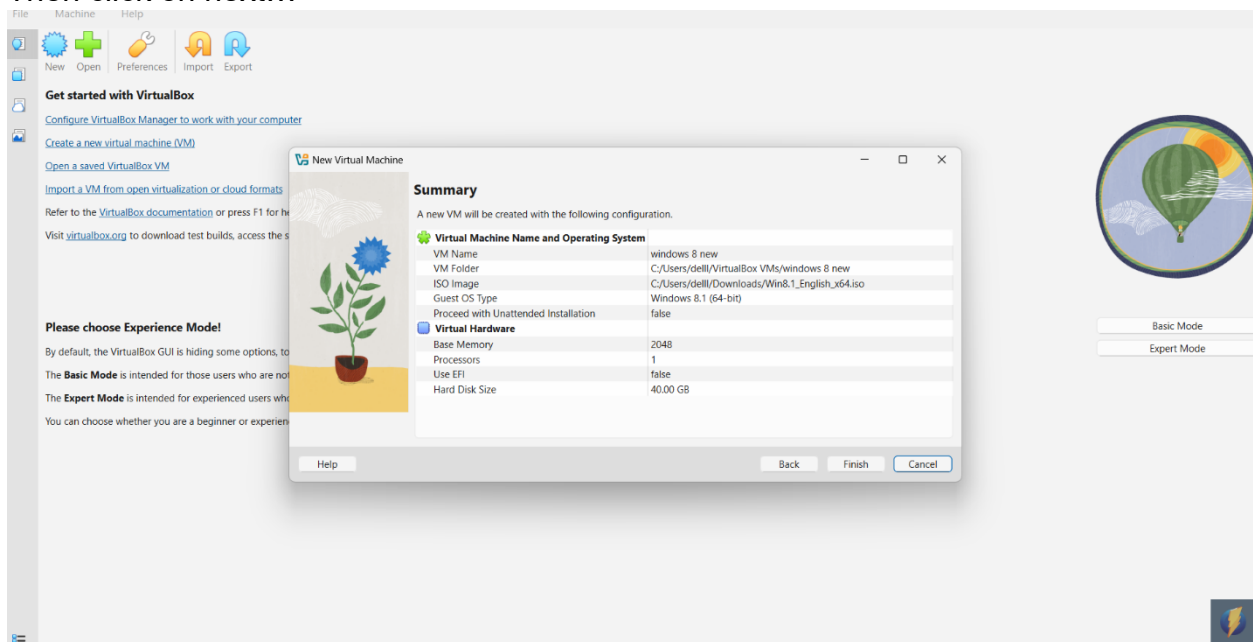


You will be taken to the next phase where you share the available space

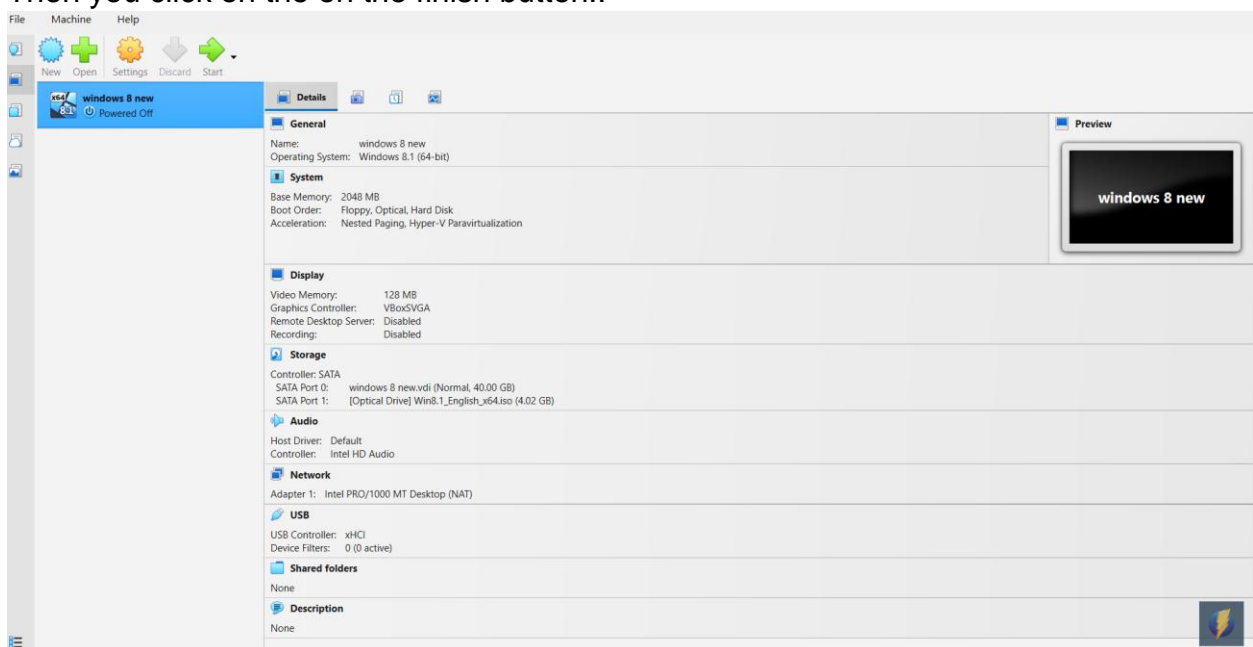
Note : Your main PC will be sharing equal half of your available memory space with the rest of the Virtual machines that you will be putting on the Virtual box, for example if your RAM is 16G RAM, then your PC will have to take 8 while other VMs will share the remaining 8.



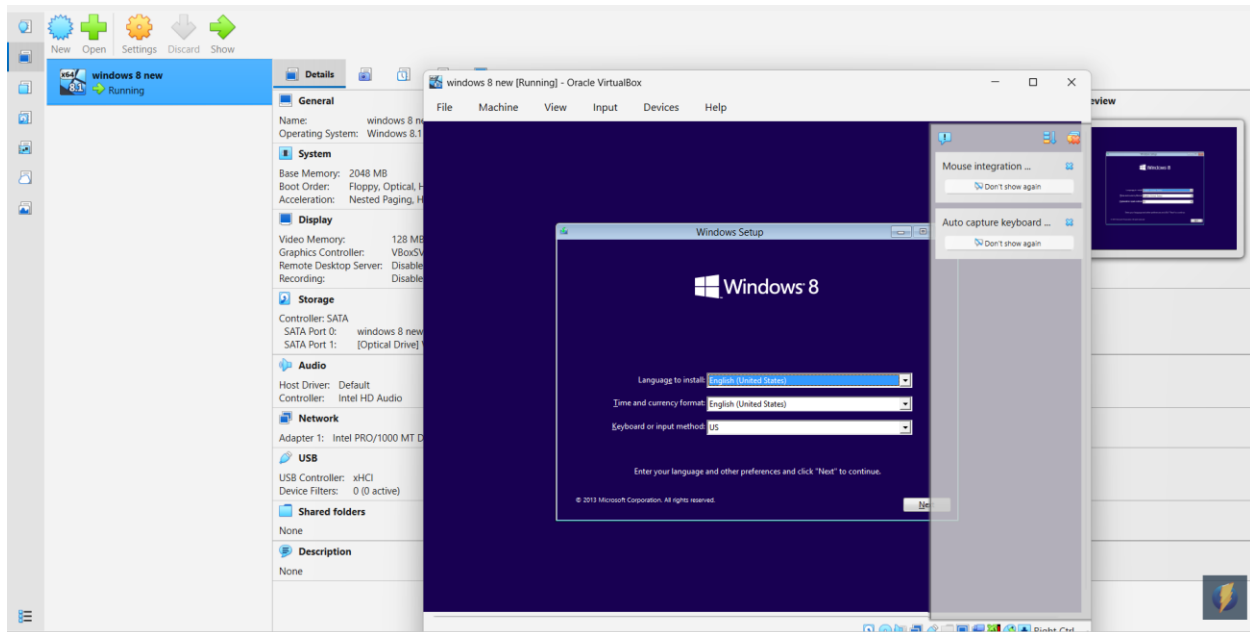
Then click on next...



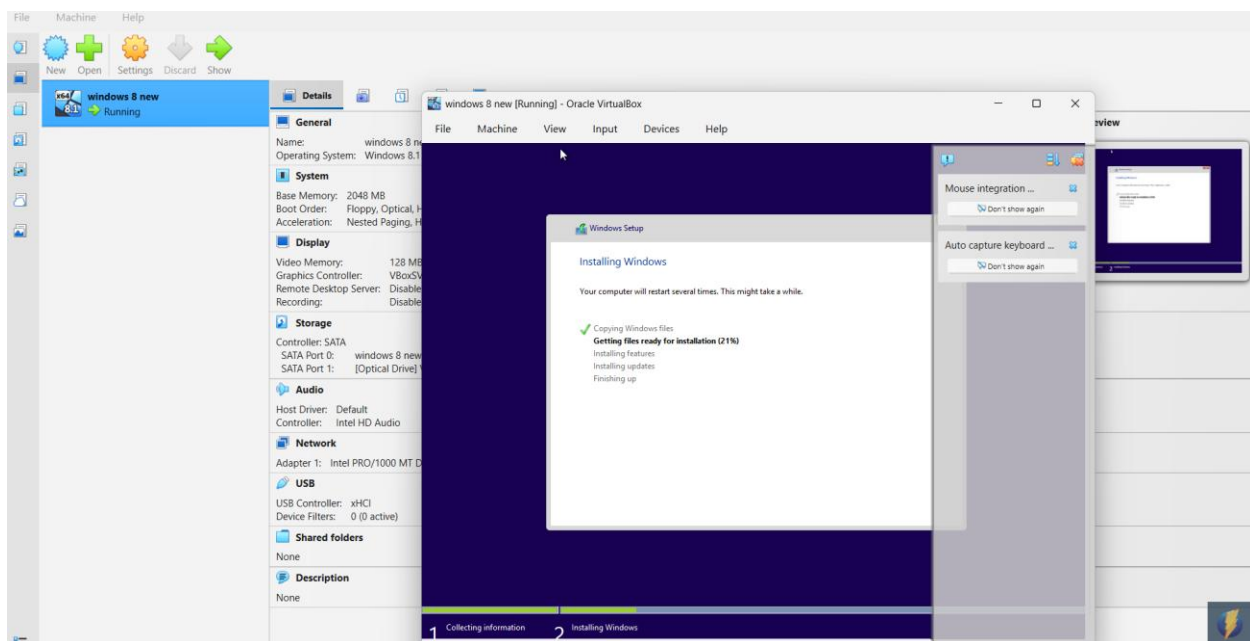
Then you click on the on the finish button..



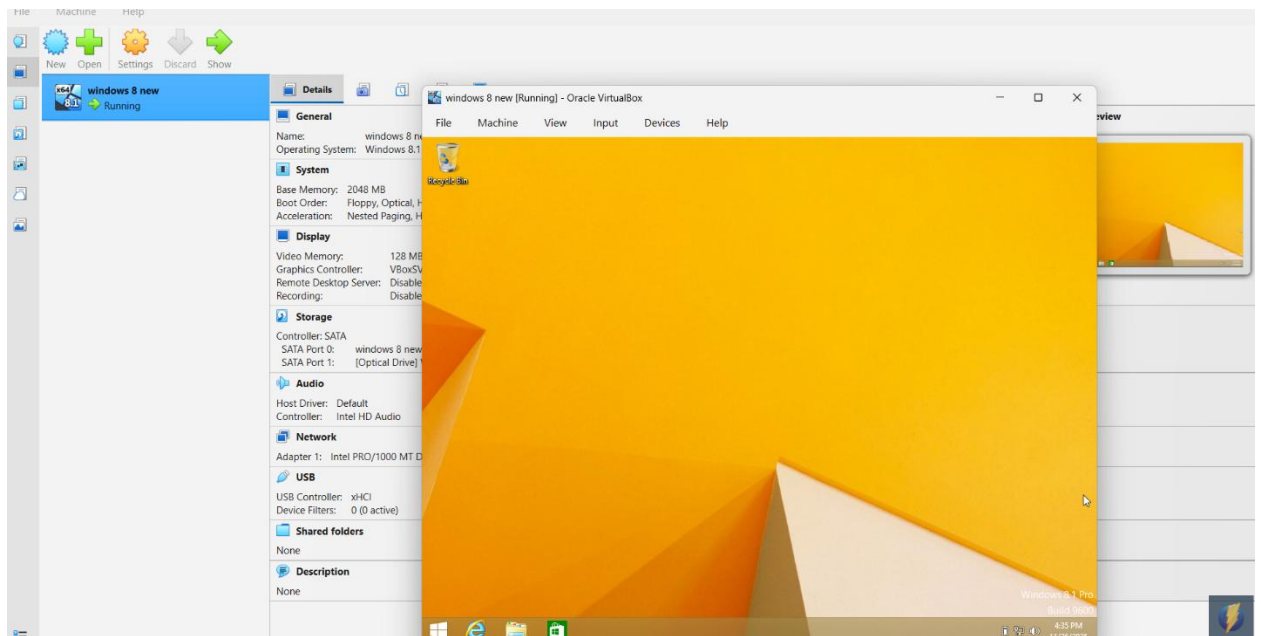
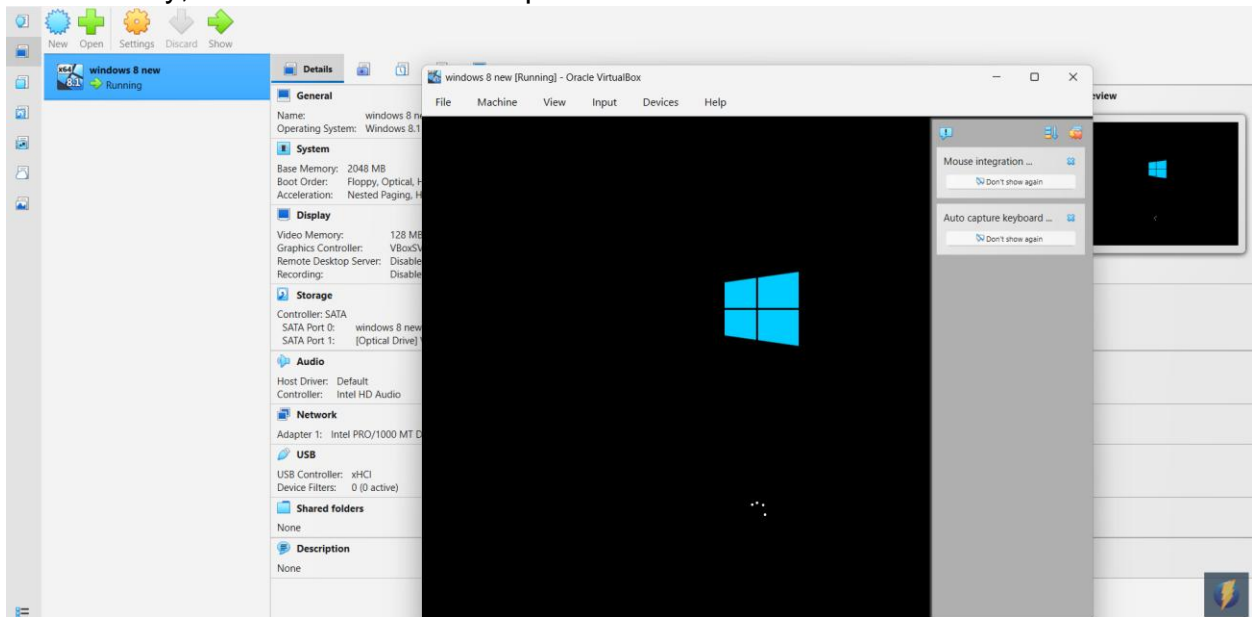
Then you will now click on start for the windows to run.



Then you click on Next then add the product key, product key can be gotten on line after which you will allow it to run



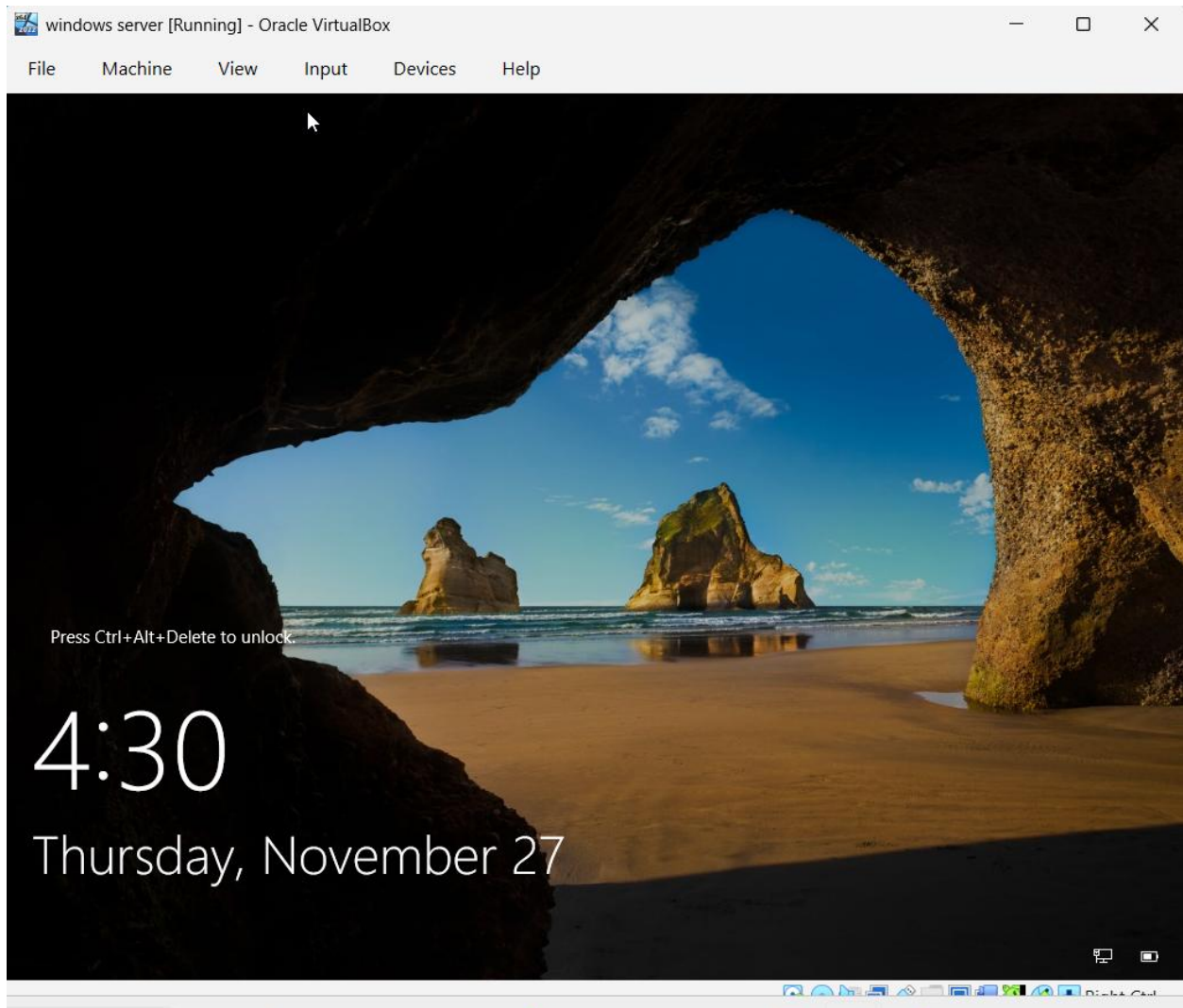
Then Finally, the virtual machine is up



With these few steps you can stay guided on you can get the first virtual machine installed and completed, for the second virtual machine (windows 8).

Phase 2 of this project is installation of the windows server which also takes through the same process, just like the way the windows 8 was installed.

This is how the window server looks like when completely installed.



So with these few steps, one can easily create a home lab without having to spend fortune, everything can be on your personal computer.

Thank you.