

# TRACK 101 LAB REPORT

## CREATION OF LAB (SETTING UP OF A VIRTUALBOX)

### OBJECTIVES

- Creation of a personal lab using VirtualBox.
- Install both Windows and Linux operating systems.
- Run the both the operating systems on virtual machine.
- Linux virtual machine have LAMP installed.

### INTRODUCTION

(Overview of various virtual box virtualization features and functionality)

(Create a multi virtual machine and multi network home lab)

A VirtualBox through research; is an open-source software used for virtualization of the computer architecture. It acts as a hypervisor, creating a virtual machine where the user can run another operating system.

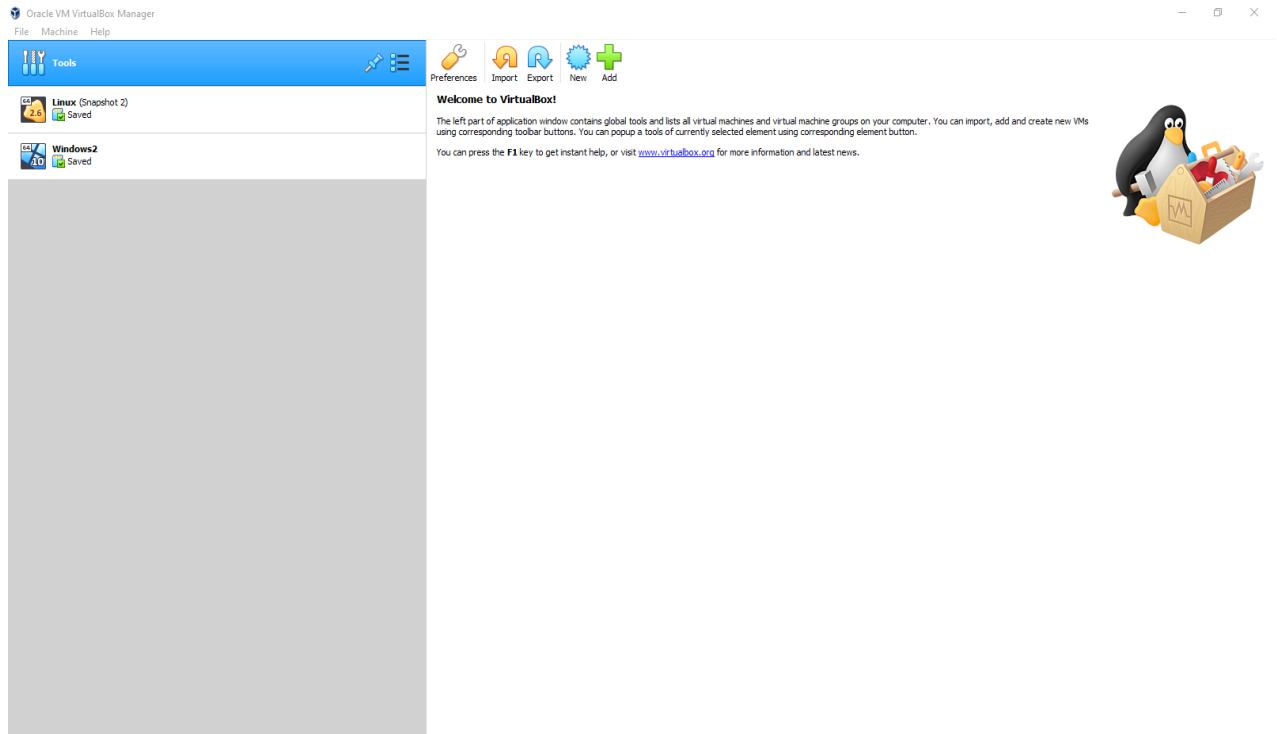
The operating system where a VirtualBox runs is called the host operating system in which for this case is Windows 10, and the two operating systems running in the virtual machine are known as guest OS.

Virtualization is basically, a computer within a computer where all the physical features of a computer are made to be virtual and are used to operate in the same manner.

In the oracle VirtualBox the following features of an operating system are virtualized the **hardware** resources such as the keyboard and mouse, also the audio input and output. The **applications, servers, networks** and **storage**.

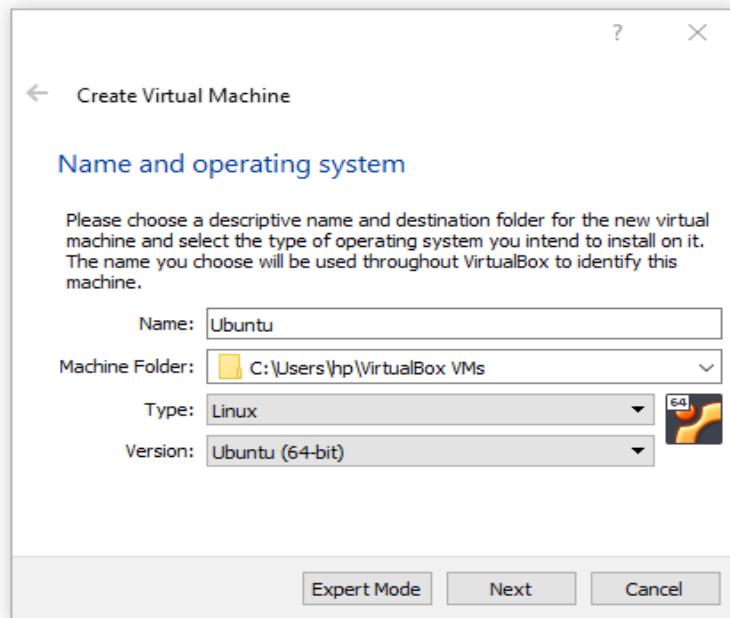
### PROCESS OF INSTALLING THE OPERATING SYSTEMS IN THE VIRTUAL MACHINE

Downloaded the oracle virtual box.

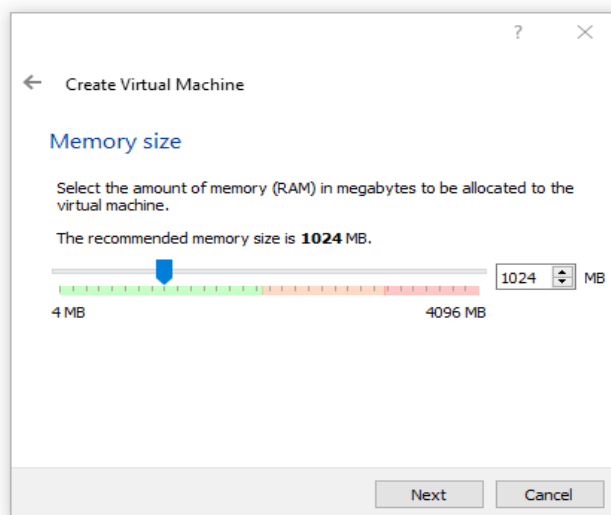


Once the virtual box was up and running, I started the process of downloading the ISO files from google chrome. The Windows ISO file and the Linux – Ubuntu ISO file and kept them in a folder.

On the virtual box on the Tools bar I created a new Virtual machine which prompted the window below;  
I named the virtual Machine and designated the version of operating system that I specifically wanted to put; in this case I named it Ubuntu 64 bit which is a Linux OS.

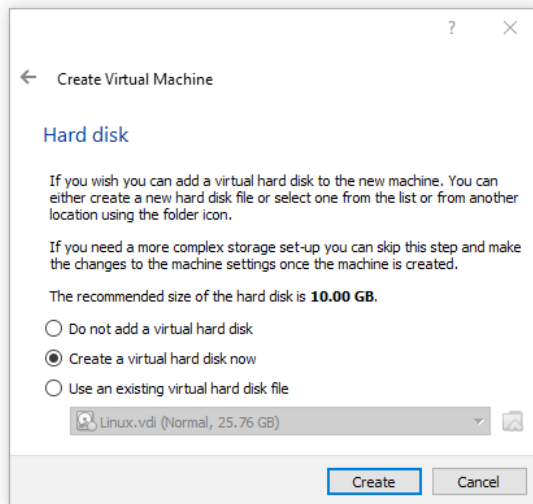


After adding the operating system, allocated the space of 1024GB as memory size.



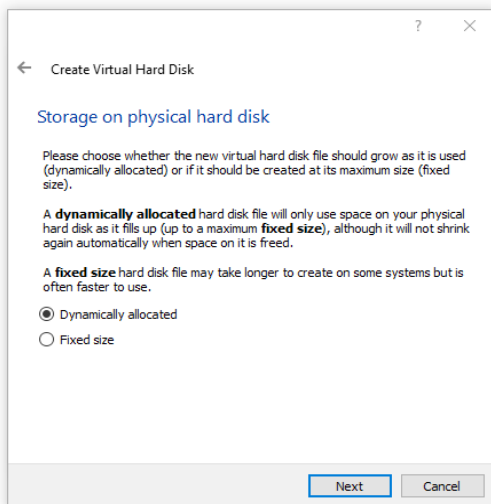
Created a virtual disk where the operating system would be kept.

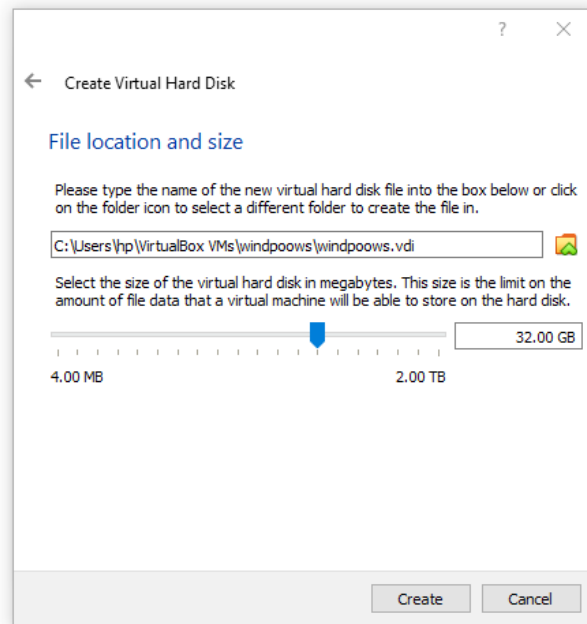
You can press the **F1** key to get instant help, or visit [www.virtualbox.org](http://www.virtualbox.org) for more information and latest news.



Have the Disk dynamically allocated.

You can press the **F1** key to get instant help, or visit [www.virtualbox.org](http://www.virtualbox.org) for more information and latest news.





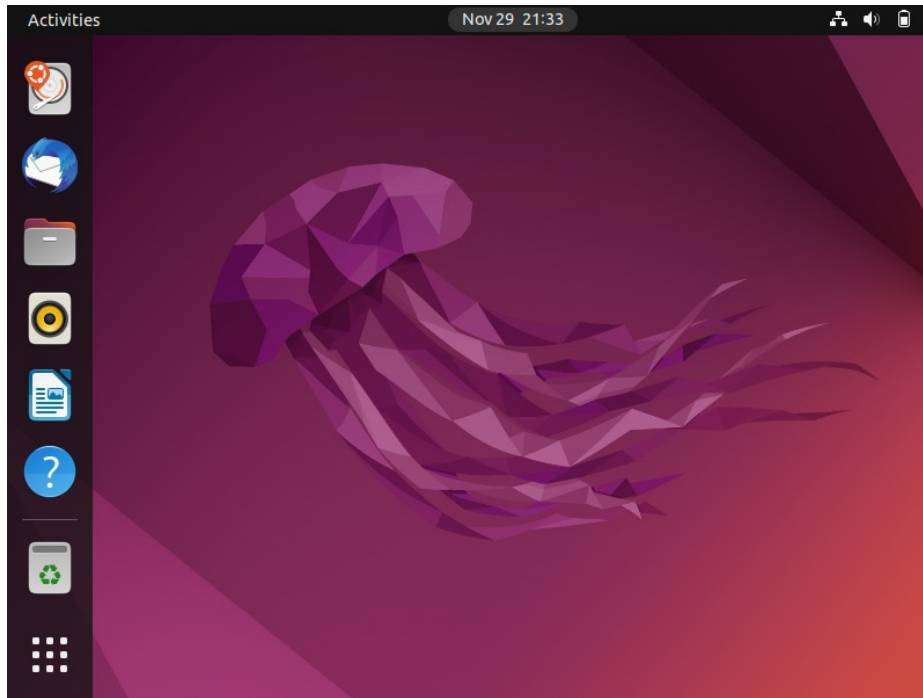
Allocated the amount of size as 32 GB and determined the file location in my pc.  
Installed the Ubuntu operating system and the the Windows operating system .

### CHALLENGES FACED

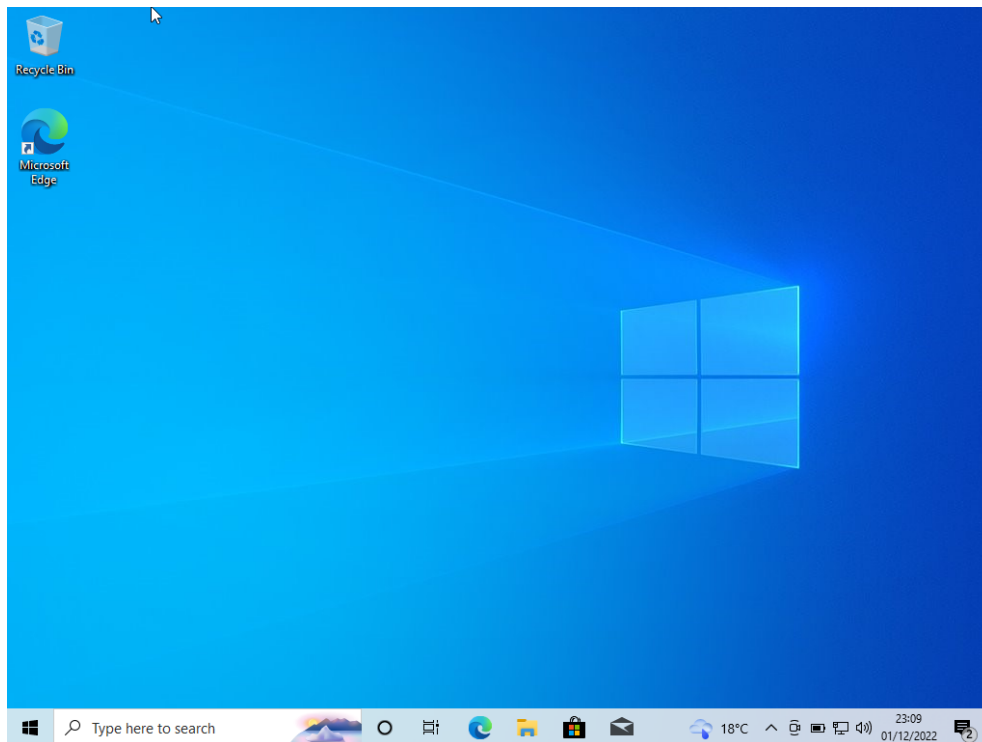
- The operating systems took a long time to set up and complete installation.
- Allocation of too much space to a virtual machine on several instances which lead to a warning on he virtual machine and was prompted to delete and allocate enough space.

### SOLUTIONS

- Allocated enough space for both virtual machines from my local machine.



## THE LINUX OPERSTING SYSTEM



## THE WINDOWS OPERATING SYSTEM