

VIRTUALIZATION

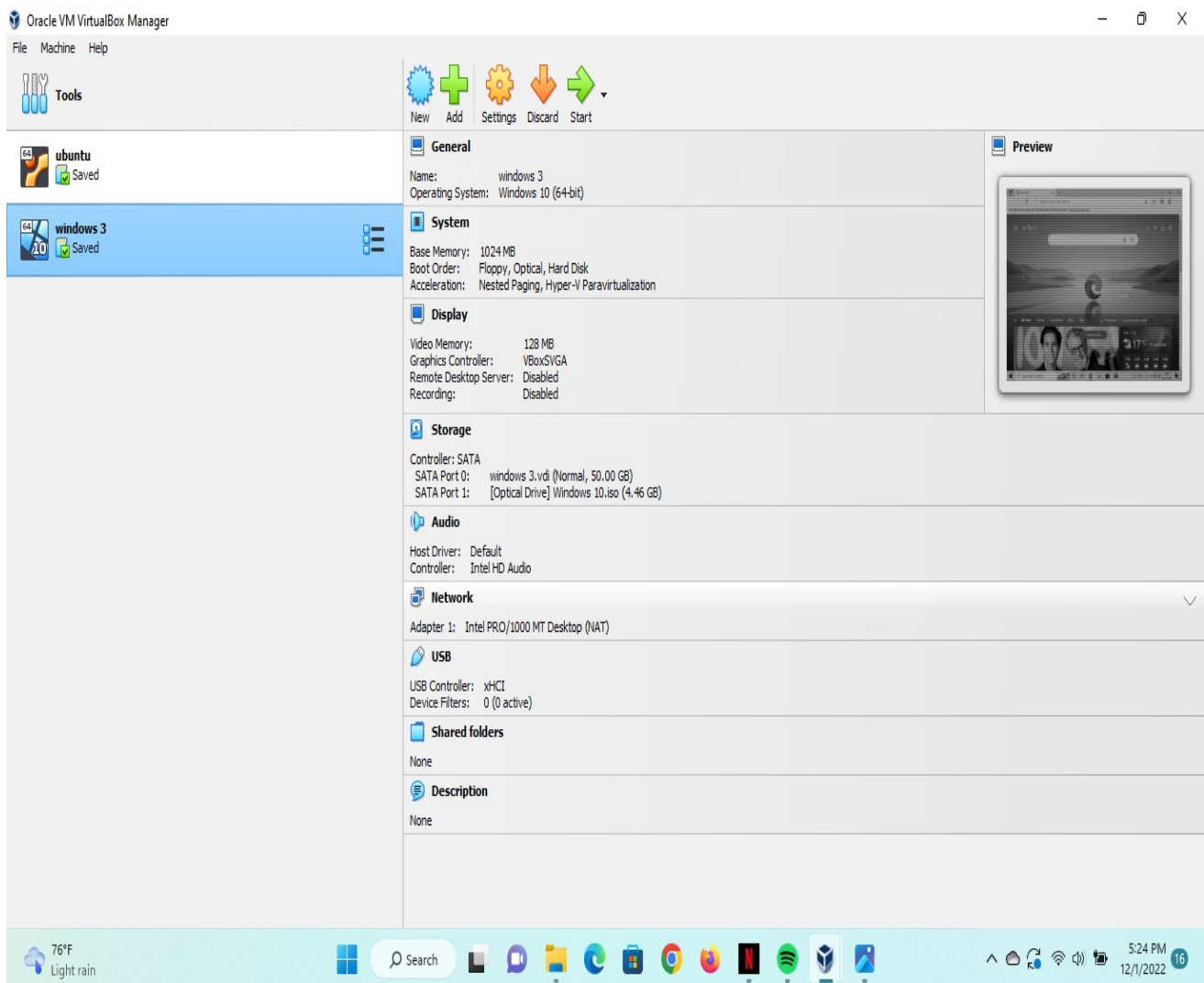
An overview

Virtualization relies on software to stimulate hardware and create a virtual computer system. This allows users to run more than one operating system on their device.

A virtual machine is an isolated software container with an operating system and applications inside that acts independently.

Creation of the virtual machines

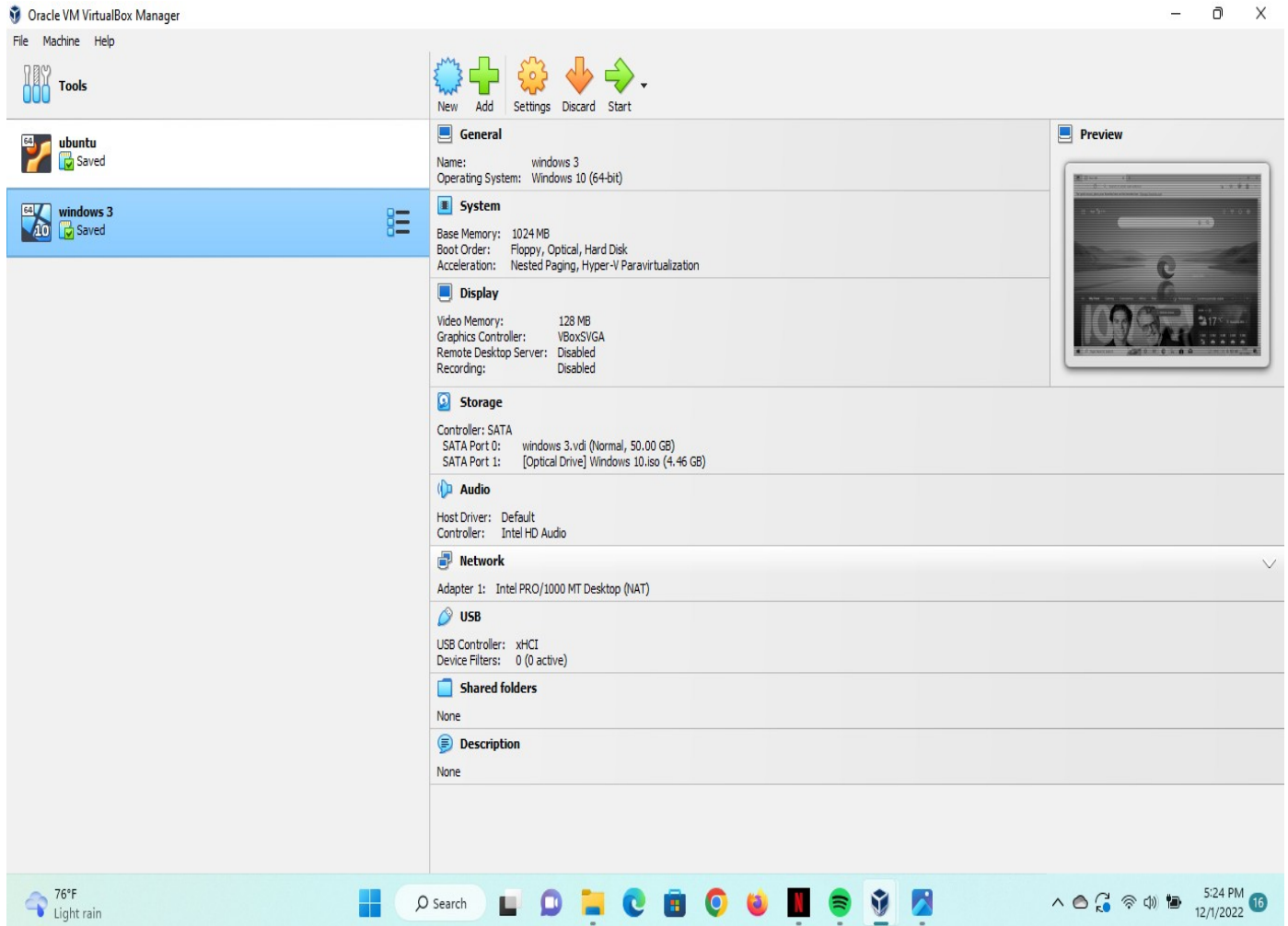
Oracle virtual box was employed in the creation of two virtual machines. The host runs on a windows 10 operating system.



Two virtual machines were created.

- Windows 10 virtual machine
- Ubuntu virtual machine

Windows 10 VIRTUAL MACHINE

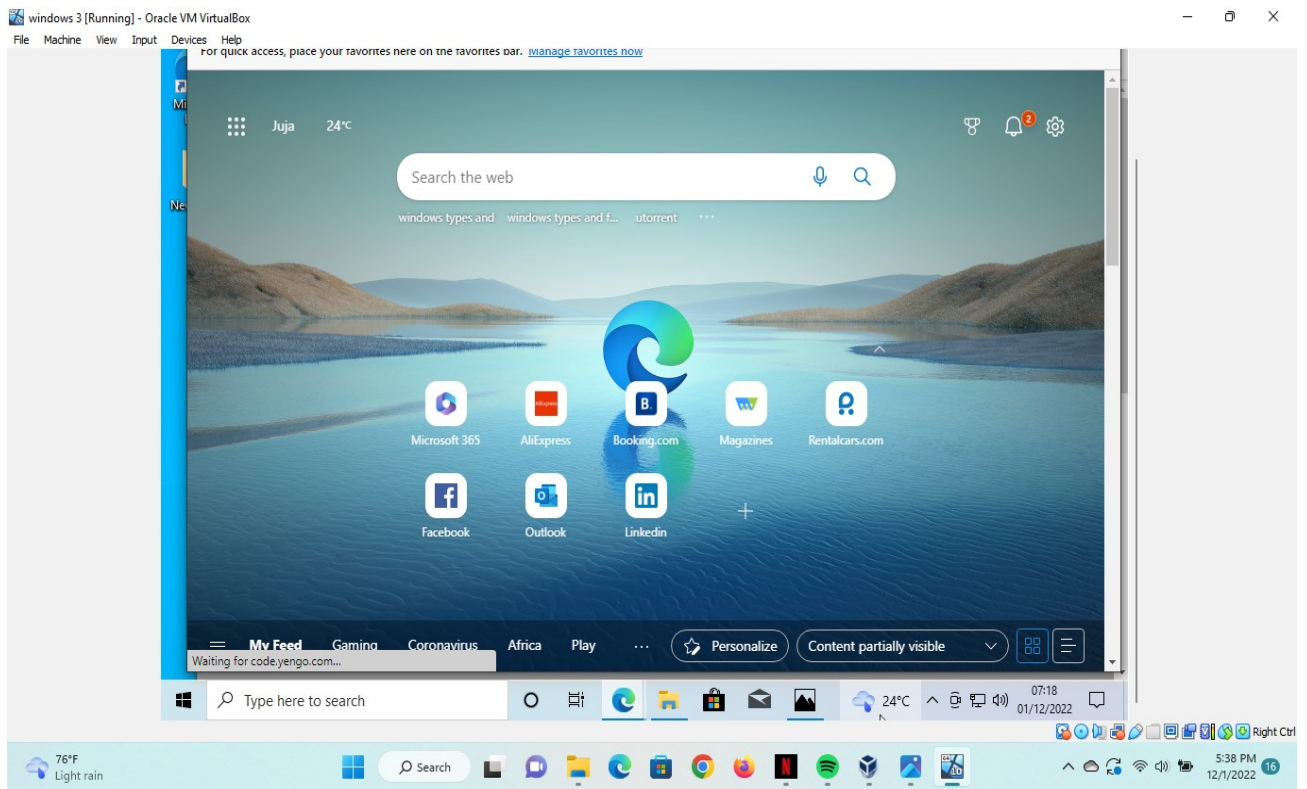
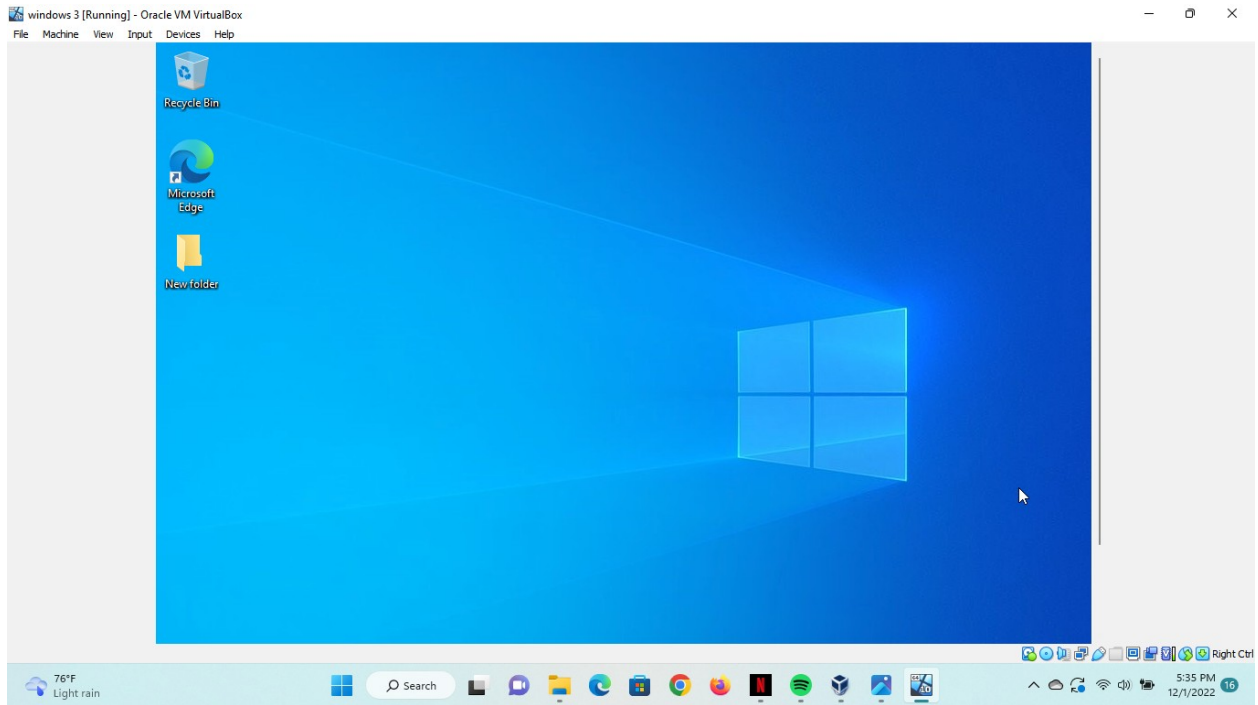


Under storage:

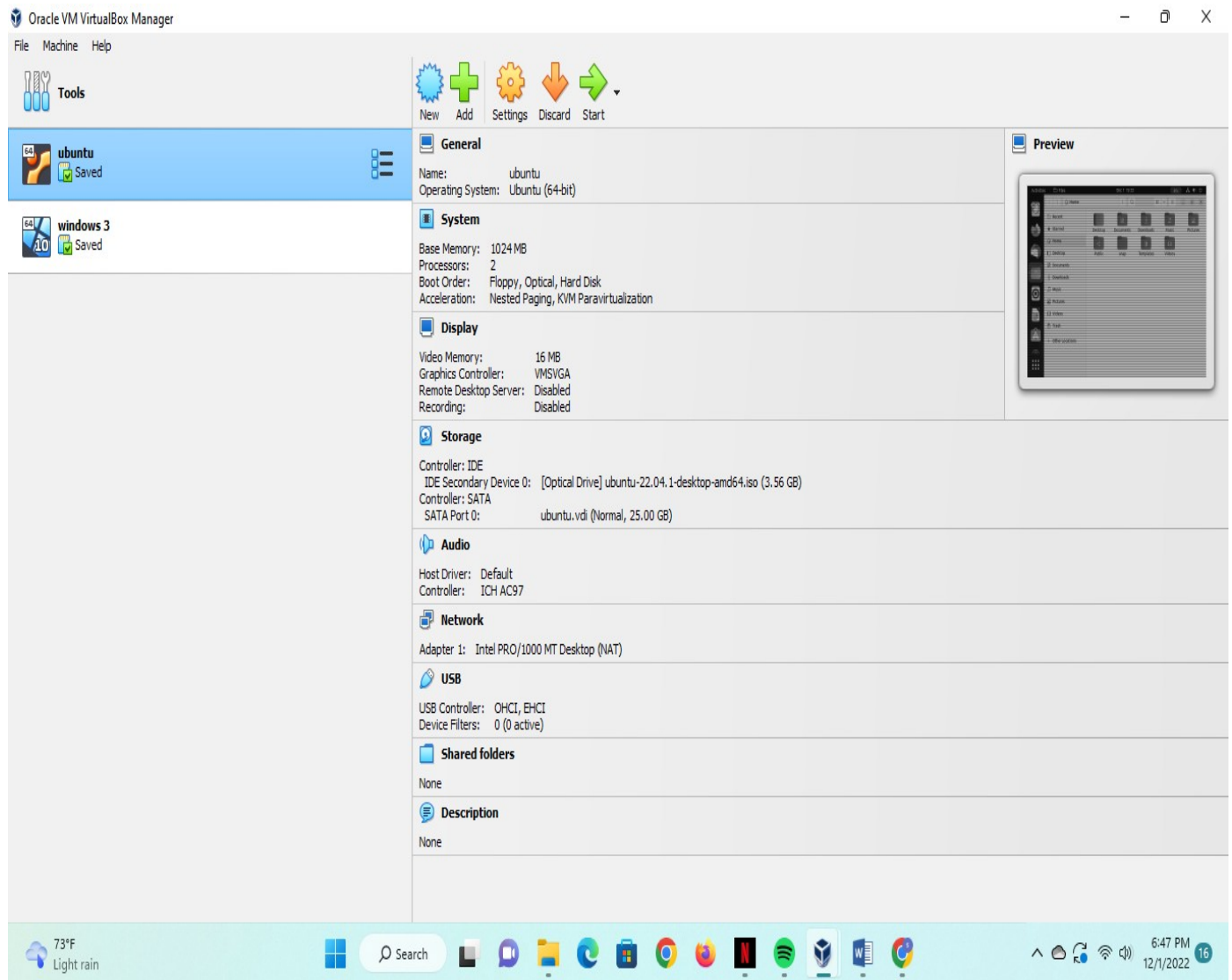
The windows 3 virtual machine is set up to take up 1.024 GB RAM with a storage of 50 GB and 1 CPU. It also contains an optical drive for windows10.iso to mirror the original windows operating system

Under Network:

Windows 3 is connected to the internet via NAT network to the network of the host computer.



UBUNTU VIRTUAL MACHINE



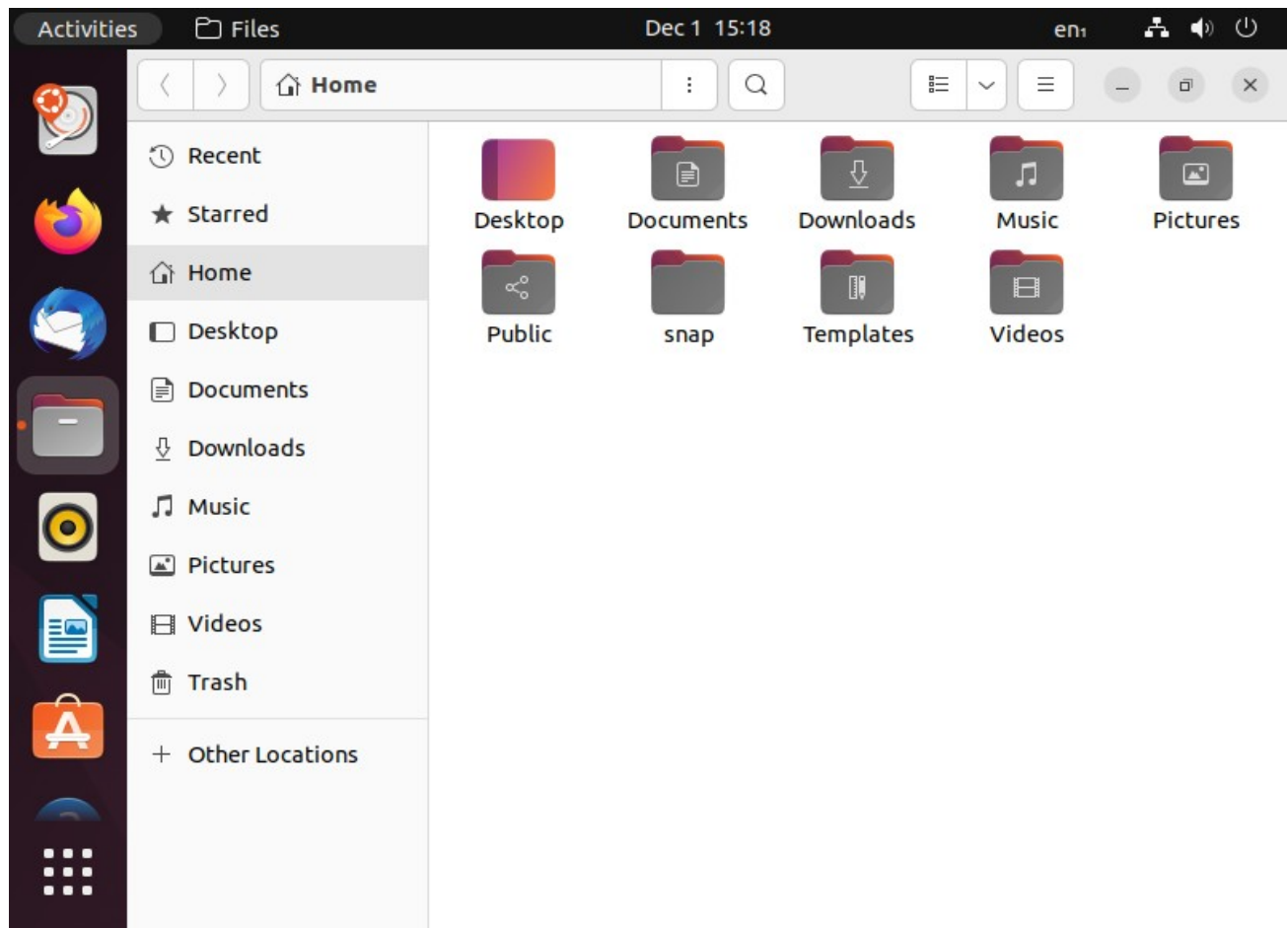
Created an Ubuntu virtual machine using Ubuntu (64 bit) OS.

Under storage;

The virtual machine took up 1.024 GB RAM and 25 GB storage. It contains an Ubuntu.iso image to mirror the Ubuntu operating system.

Under network;

The virtual machine is connected to the internet via NAT netwo9rk to the network of the host computer.



Installed a trial Ubuntu operating system for the VM and it seems to be working just as well.

Difficulties experienced

- My virtual machines were unable to run for a couple of tries but managed to enable virtualization on my operating system.
- The virtual machines slow down my laptop when they are actively running.
- I was unaware of the need to install iso images for the virtual machines to run properly which was quite time consuming to install
- Inability to network the two virtual machines.