**VM Ware Virtual Machine - Linux Installation**

1. Download the latest Ubuntu Desktop ISO file (Ubuntu 24.04 LTS) and store it on your file system:

<https://www.ubuntu.com/download/desktop>

1. If you are on a machine with MacOS, you might consider using a virtual machine for Windows with parallels.
2. Download and install VMWare from Senec MyApps. Or, download and install the latest version of the VMWare Workstation Player (Windows 64-bit). Install using the Wizard with default options:

<https://www.vmware.com/products/workstation-player/workstation-player-evaluation.html.html.html>

1. Run VM Ware. On VM Ware, click Player🡪File🡪New Virtual Machine or follow the Setup Wizard with default options. Install Ubuntu from the Installer disk image file (iso) by Browsing to your Ubuntu iso file.

* Follow the instructions. Note that your password will be required to log into your linux box.
* Split virtual disk into multiple files.

1. An alternative to VMWare is Oracle’s VirtualBox, which can be downloaded from:

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

1. For VirtualBox, install with the default options. Install Ubuntu from the Installer disk image file (iso) by Browsing to your Ubuntu iso file.

* Follow the instructions. Note that your password will be required to log into your linux box.
* For your network adapter, do not attach to NAT. Attach to a bridged network:

A computer screen shot of a network

Description automatically generated

1. Wait a while for the Virtual Machine to start up.
2. Click on your user name and provide the password to log in.
3. Run the software updater (it should run automatically). You may have to wait a while.
4. Open the terminal (right-click Open Terminal). Run in full screen mode.
5. You may have to perform another update: **$ sudo apt update**
6. Install gcc: **$ sudo apt install gcc**
7. Install g++: **$ sudo apt install g++**
8. Install the vim editor: **sudo apt install vim**
9. Install the make facility: **sudo apt install make**
10. Install ifconfig for network configuration: **sudo apt install net-tools**
11. Install the ssh server: **sudo apt install openssh-server**
12. You can transfer files between your Windows Desktop and your Virtual Machine via the WinSCP utility once your **openssh-server** has been installed.

* Get the IP address of your machine: **$ ifconfig**
* Run WinSCP and connect to this address as if it were a real machine.
* Transfer files back and forth between Windows and Linux