

## Setting up Linux Environment

Login from PUCIT Labs under PUCIT local network:

If you want to work on Linux Environment you have multiple ways. If you are sitting in PUCIT lab under PUCIT local network you can use multiple client softwares. From logging in using lab computers you have to follow the steps:

1. You must have secure shell (ssh) account for using client softwares installed on lab computers. We have ssh installed in our lab.
2. Start the ssh application on your desktop.
3. Give the ip **172.16.0.21** for machine which is providing you ssh service running in PUCIT.
4. Enter your roll number as user authentication after that don't change anything and move next.
5. Give your default password which will be given when your accounts will be created.
6. After successful login you have screen in front of you this is Linux bash where you can run commands of Linux.
7. File sharing through File Transfer Protocol will be explained later.

Login from your machines under PUCIT network:

If you are having you are having Ubuntu or any other Linux distribution installed on your machines you can make login to secure shell server from your machines as well.

1. Connect to the university local network and start your Linux distribution installed on your machines.
2. Start the terminal and run the following command:  

```
$ ssh username@172.16.0.21
```
3. Where the username will be your roll number and after this it will ask for your secure shell account password. Now you are connected to the ssh server of PUCIT.

# Installation of Guest OS on your host machines

First of all you need to install the **Virtualization Software** on your host machine. Following are few virtualization softwares:

- Virtual box ([http://filehippo.com/download\\_virtualbox/](http://filehippo.com/download_virtualbox/) )
- VMWare Player ([http://filehippo.com/download\\_vmware\\_player/](http://filehippo.com/download_vmware_player/) )
- Zen

We are going to use **VMWare** as our virtualization software because it is bit faster than Virtual Box and also have some more advantages over other softwares. You can download them from given links.

After downloading you have to follow following steps to install this on your systems:

**Step 1.** Run the setup by double clicking on it. It will show you installation window as shown below:

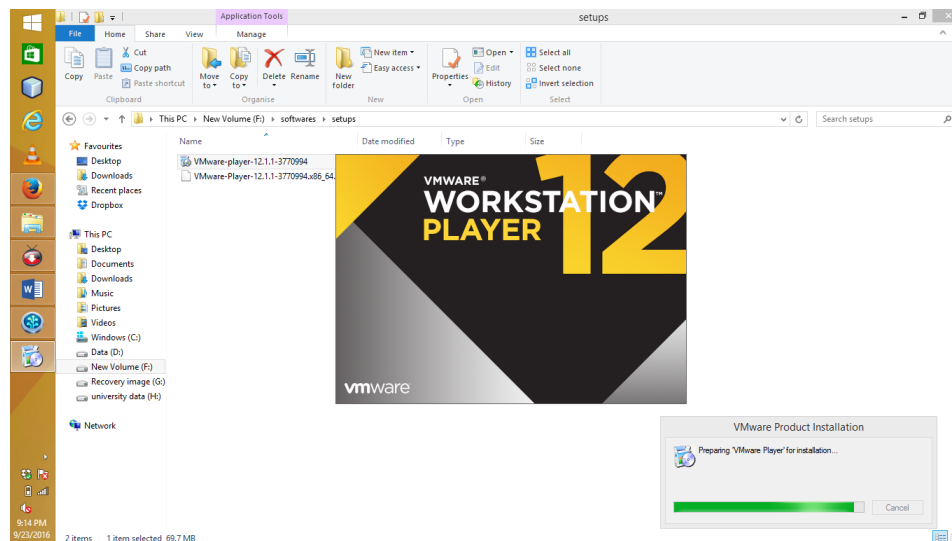


Fig 1.1

Step 2. Now installation process will start click **Next**.



Fig 1.2

Step 3. Mark the agreement **checkbox** and click **Next**.

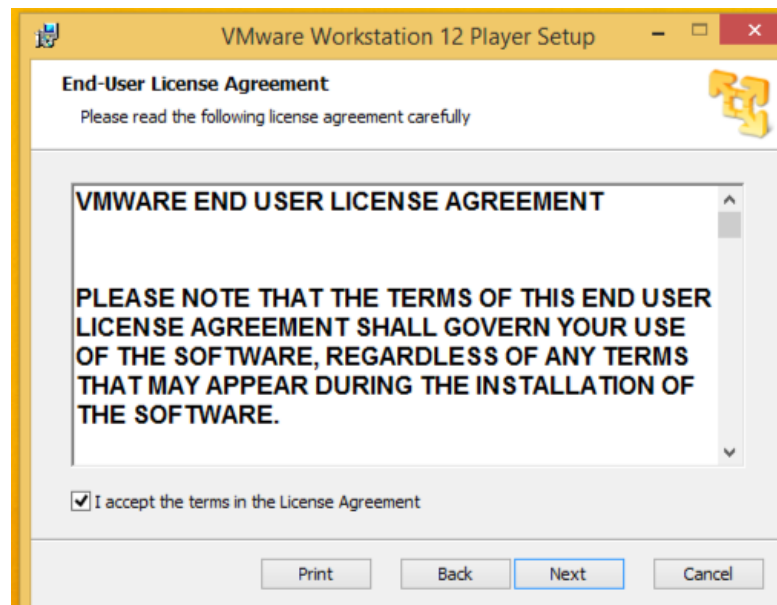
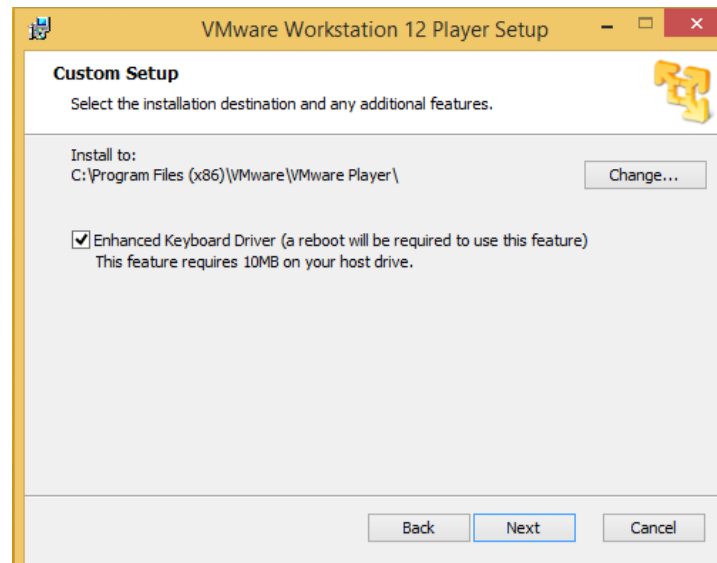


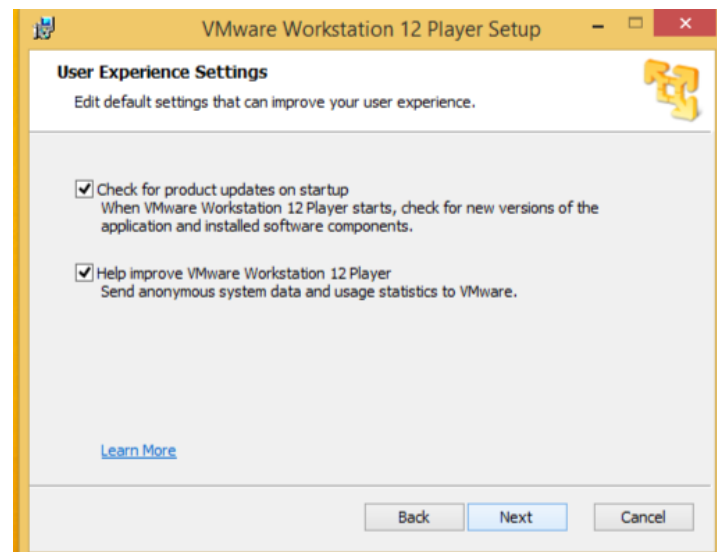
Fig 1.3

**Step 4.** Browse and choose the installation place. Mark the check box of option Enhance the Keyboard Driver and click **Next**.



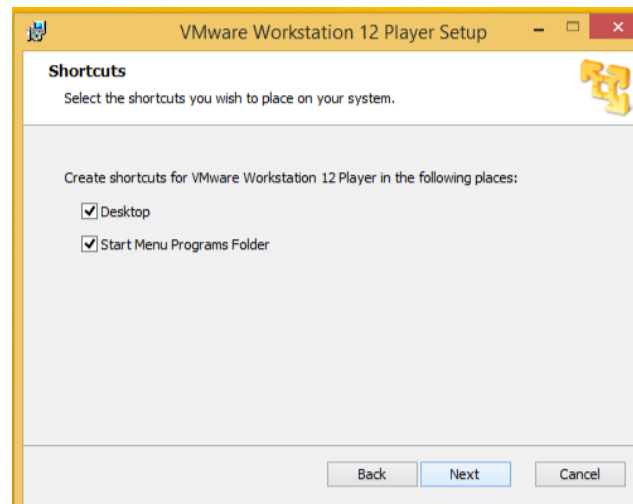
**Fig 1.4**

**Step 5.** Do not mark these two check boxes they are optional and click **Next**.



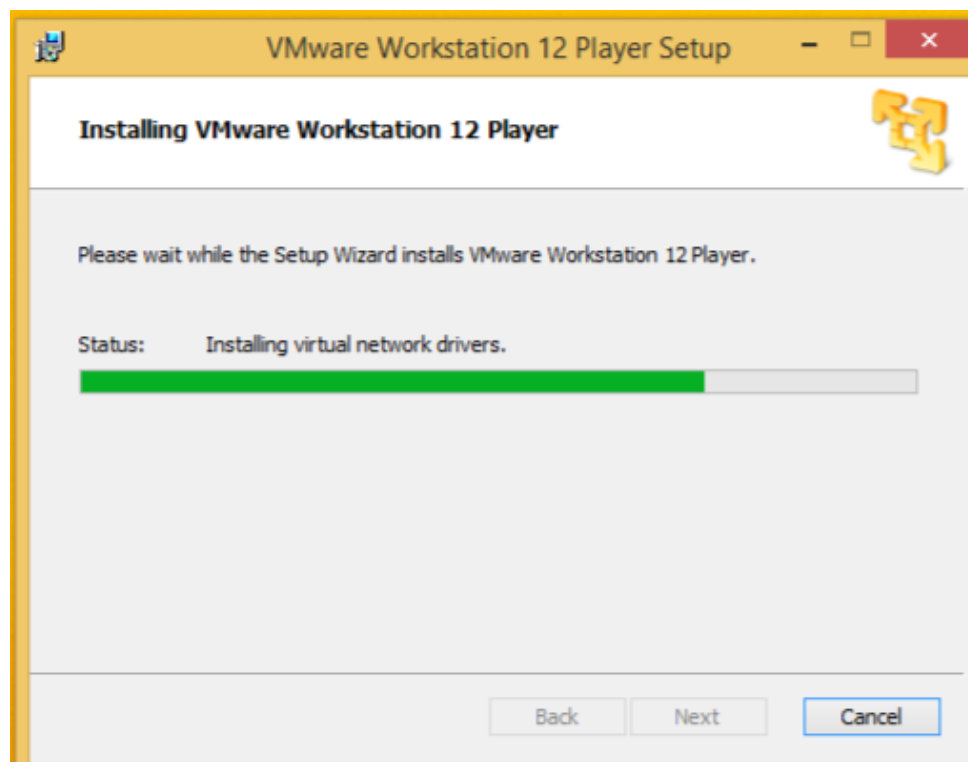
**Fig 1.5**

**Step 6.** Mark the Desktop and Start menu checkboxes and click **Next**.

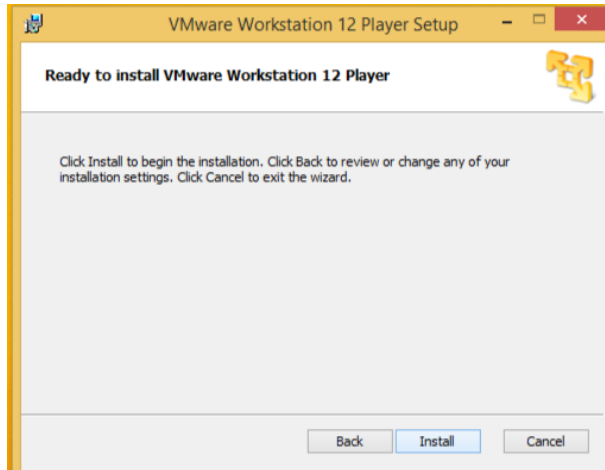


**Fig 1.6**

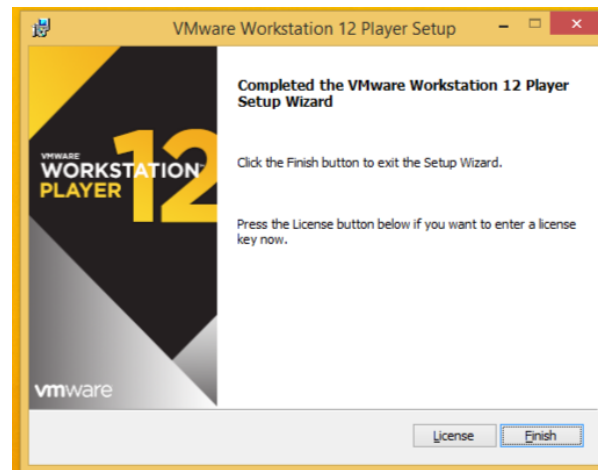
**Step 7.** Click **Install** and it will start the installation. This will take few minutes to complete and click **finish**.



**Fig 1.7**



**Fig 1.8**



**Fig 1.9**

**Step 8.** Now it will ask for use of VMWare so mark **non-commercial use** give your mail id and **Continue**.



**Fig 1.10**



**Fig 1.11**

Step 9. Finally it's installed now the screen will appear in front of you.

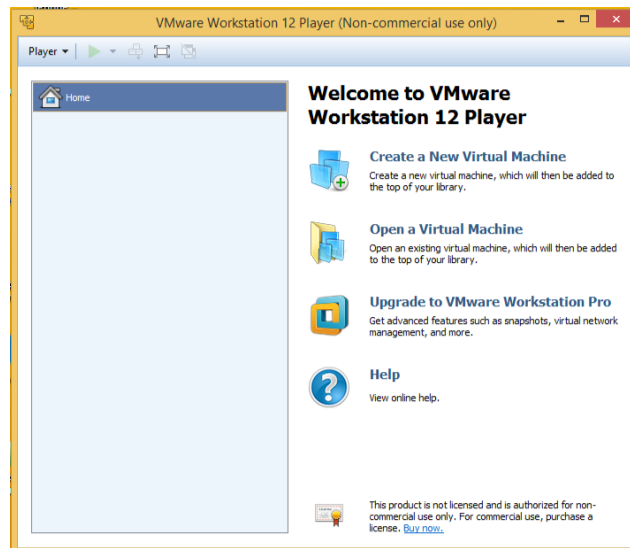


Fig 1.12

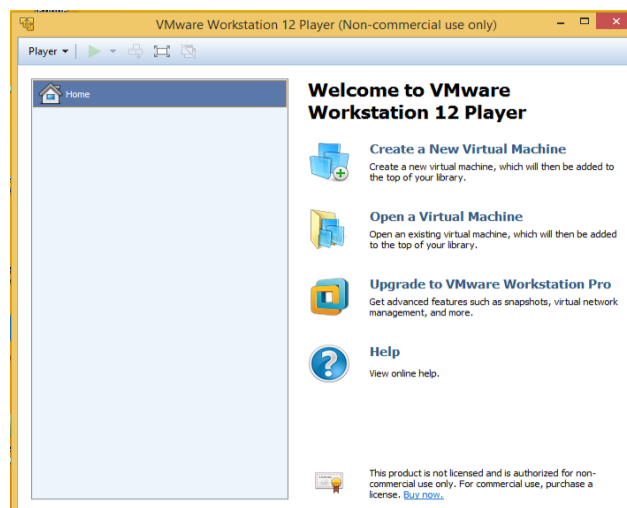
## Selecting, downloading and installing some Linux distribution on your guest machine

A Linux distribution is a collection of (usually open source) software on top of a Linux kernel. A distribution (or short, distro) can bundle server software, system management tools, documentation and many desktop applications in a central secure software repository. Here are some popular distributions:

- Redhat
- Ubuntu
- Debian
- CentOS
- Fedora
- Kali
- Linux Mint

You can download the distributions from given links. Right now we are going to install Ubuntu. For this you have to download the **.iso** file of Ubuntu and follow the steps:

**Step 1.** Start VMWare player and click on **Create New Virtual Machine**.



**Fig 1.13**



Step 2. Now select **Installer Disk Image File** and browse the location of your **.iso** file. It will automatically detect the guest operating system. Click **Next**.

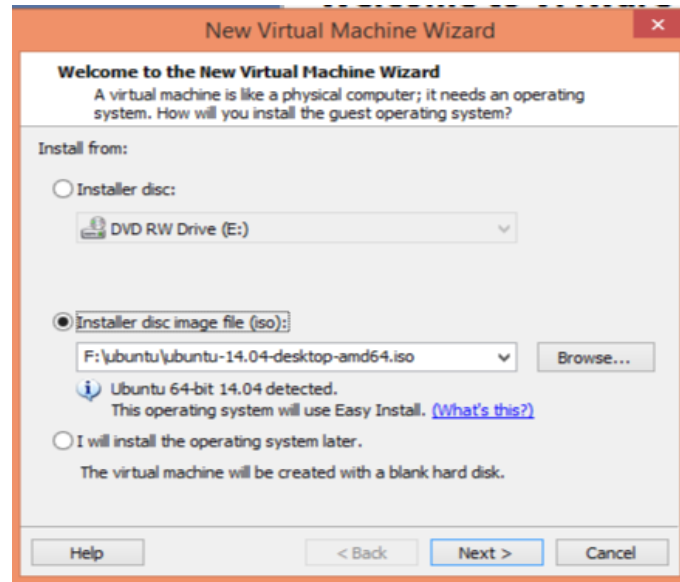


Fig 1.14

Step 3. Fill the required information on the form and move **Next**.

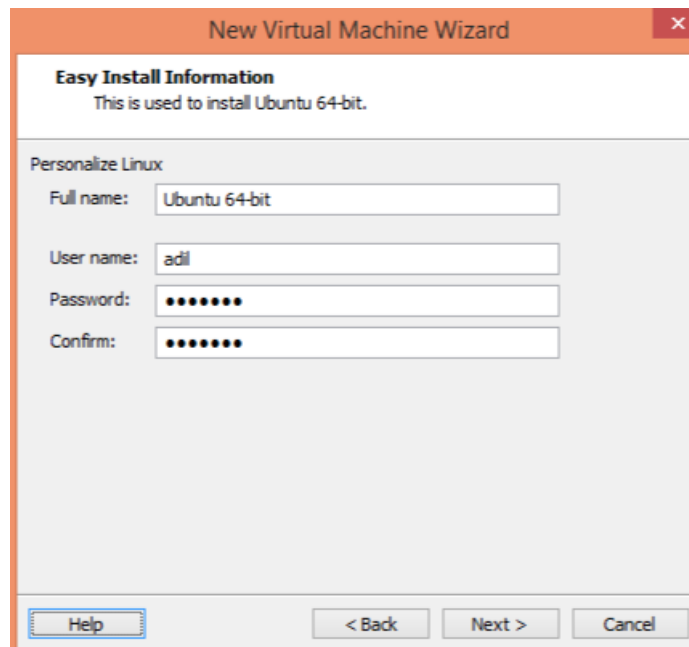


Fig 1.15

Step 4. Set the maximum disk size, make it to 5 GB or on your own choice. Now mark the first option **Store Virtual Disk as a Single File** and move **Next**.

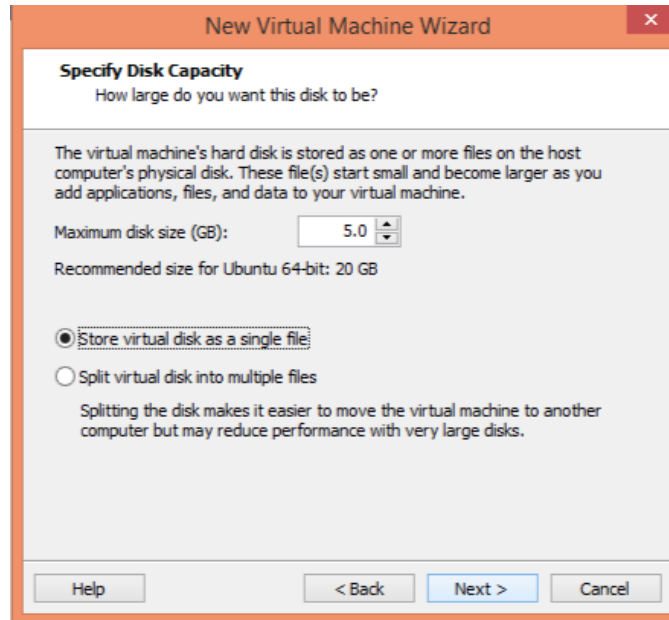


Fig 1.16

Step 5. It will show you the required information that you have selected. You can change this by clicking on **Customize Hardware** button.

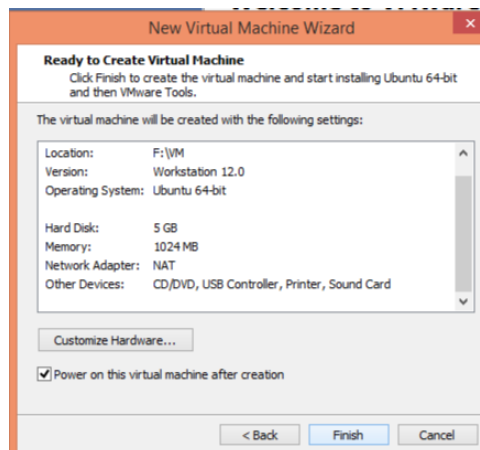


Fig 1.17

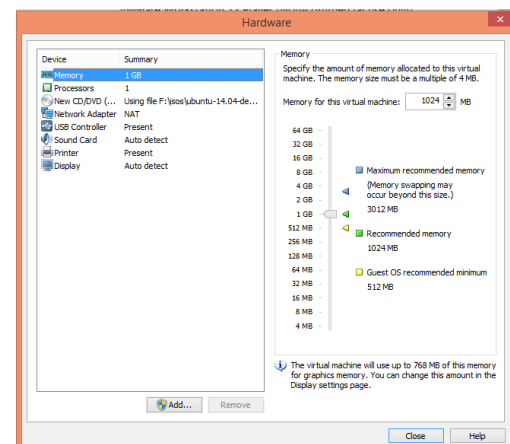
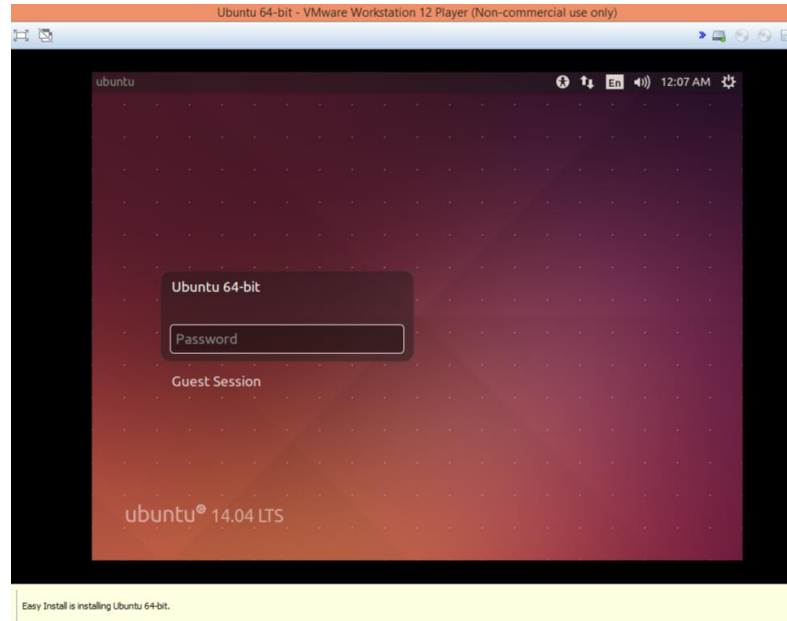


Fig 1.18

Step 6. Finally click **finish** to complete installation.

Step 7. After completing the installation it will take some time and start the Ubuntu and the screen will appear.



**Fig 1.19**