

Practical No-1

* Aim: Installation of Oracle Virtual Box (Virtual machine)

* Conclusion :

Thus, we have studied and complete explanation of working oracle VM VirtualBox successfully.

Practical No-1

- * Aim: Installation of Oracle Virtual Box (Virtual Machine)
- * Learning objective: To Learn and understand the concept of Oracle VM Virtual Box.

- * Theory:

Oracle VM VirtualBox is a cross-platform virtualization application. What does that mean? For one thing, it installs on your existing Intel or AMD-based computers, whether they are running Windows, Mac OSx, Linux, or Oracle Solaris Operating Systems (OSes). Secondly, it extends the capabilities of your existing computer so that it can run multiple OSes, inside multiple virtual machines, at the same time. As an example, you can run Windows and Linux on your Mac, run Windows Server 2016 on your Linux server, run Linux on your Windows PC, and so on, all alongside your existing applications. You can install and run as many virtual machines as you like.

To create a new virtual machine, you need to start VirtualBox. On the host where you installed Oracle VDI and VirtualBox, select the Applications menu on the desktop, then the System Tools menu, and then Oracle VM Virtual Box. Alternatively, you can run the VirtualBox command in a terminal.

Steps to Download & Install Oracle VM VirtualBox:

- 1) Open the VirtualBox website. Go to <https://www.virtualbox.org/>

- 2) Click download Virtual Box.
- 3) Open the Virtual Box EXE file. Go to the location to which the EXE file downloaded and double-click the file. Doing so will open the VirtualBox installation window.
- 4) Navigate through the installation prompts. Do the following:
 - Click Next on the first three pages.
 - Click Yes when prompted.
 - Click Install.
 - Click Yes when prompted.
- 5) Click Install when prompted. Doing so will allow VirtualBox to begin installing on your computer.
- 6) Click Finish when prompted. It's in the lower-right side of the window. Doing so will close the installation window and open Virtual Box. Now that you've installed and opened VirtualBox, you can create a virtual machine in order to run any PC.

Installation of UBUNTU in Oracle VM VirtualBox.

- 1) Open the Ubuntu website. Go to <https://www.ubuntu.com/download/desktop> in your computer's web browser. You can download the ubuntu disk image (also known as an ISO file) here.
- 2) Scroll down to the latest version of Ubuntu. You'll find it near the bottom of the page.
- 3) Click download.
- 4) Scroll down and click Not now, take me to the download. This link is in the bottom-left corner of the page.

- 5) Make sure that Ubuntu begins downloading. The Ubuntu ISO should begin downloading immediately, but if it doesn't, you can click the download now link at the top of the page. While the Ubuntu ISO downloads, you'll have plenty of time to set up your virtual machine in VirtualBox.
- 6) Open VirtualBox. Double-click (or click once on a Mac) the VirtualBox app icon.
- 7) Click New. It's a blue badge in the upper-left corner of the VirtualBox window. Doing so opens a pop-up menu.
- 8) Enter a name for your virtual machine. Type whatever you want to name your virtual machine (e.g., Ubuntu) into the "Name" text field that's near the top of the pop-up menu.
- 9) Select Linux as the "Type" value. Click the "Type" drop-down box, then click Linux in the resulting drop-down menu.
- 10) Select Ubuntu as the "Version" value. Ubuntu should be selected by default after you set the "Type" value to Linux, but if it isn't, click the "Version" drop-down box and click Ubuntu (64-bit) before proceeding.
- 11) Click Next. It's at the bottom of the menu.
- 12) Select an amount of RAM to use. Click and drag the slider left or right to decrease or increase the amount of RAM that VirtualBox will have available for your Ubuntu Virtual machine.
- 13) The ideal amount of RAM will automatically be selected when you get to this page.

- 14) Make sure not to increase the RAM into the red section of the slider; try to keep the slider in the green.
- 15) Click Next. It's ~~at~~ at the bottom of the menu.
- 16) Create your virtual machine's virtual hard drive. The virtual ~~hard drive~~ drive is a section of your computer's hard drive space which will be used to store your virtual machine's files and programs. Click Create, Click Next, Click Next.
- 17) Select an amount of space to use.
- 18) Click create
- 19) Make sure that your Ubuntu file is done downloading. Once the Ubuntu ISO finishes downloading, you can proceed with installing it to VirtualBox.
- 20) Double-click your virtual machine's name. It's on the left side of the VirtualBox window. Doing so will open a menu.
- 21) Click the folder-shaped icon. This icon is in the lower-right side of the menu. A new window in which you can select the Ubuntu ISO will open.
- 22) Select your Ubuntu ISO. Go to the folder into which the Ubuntu ISO file downloaded (e.g., desktop), then click the ISO file to select it.
- 23) Click open. It's in the bottom-right corner of the window. Doing so opens the Ubuntu ISO file in VirtualBox.
- 24) Click Start. This option is at the bottom of the menu. Ubuntu will begin running.

★ Conclusion :

Thus, we have studied and complete explanation of working Oracle VM VirtualBox successfully.

Viva- Questions :

1) What is Oracle VM virtualBox?

⇒ Oracle VM Virtual Box (formerly Sun VirtualBox, Sun xVM VirtualBox and Innotek VirtualBox) is a free and open-source hosted hypervisor for x86 virtualization, developed by Oracle Corporation. Created by Innotek, it was acquired by Sun Microsystems in 2008, which was in turn acquired by Oracle in 2010.

2) How to create a VM Virtual machine?

- ⇒ 1) Open Hyper-V Quick Create from the start menu.
- 2) Select an operating system or choose your own by using a local installation source.
 - a) If you want to use your own image to create the virtual machine, select Local Installation source.
 - b) Select Change Installation Source.
 - c) Pick the .iso or .vhd/x that you want to turn into a new virtual machine.
 - d) If the image is a Linux image, deselect the Secure Boot option.
 - 3) Select "Create Virtual Machine".