

Practical: 9

Aim: To learn installation of virtual machines in a system.

Introduction:

A virtual machine is a program you run on a computer that acts like it is a separate computer. It is basically a way to create a computer within a computer. A virtual machine runs in a window on the host computer and gives a user the same experience they would have if they were using a completely different computer. Virtual machines are sandboxed from the host computer. This means that nothing that runs on the virtual machine can impact the host computer.

Virtual Machine Programs

There are many different virtual machine programs you can use. Some options are Virtual Box (Windows, Linux, Mac OS X), VMware Player (Windows, Linux), VMware Fusion (Mac OS X) and Parallels Desktop (Mac OS X).

Virtual Box is one of the most popular virtual machine programs since it is free, open source, and available on all the popular operating systems. We'll show you how to set up a virtual machine using Virtual Box.

Setting up a Virtual Machine (Virtual Box)



Figure 9.1

Virtual Box is an open source Virtual Machine program from Oracle. It allows users to virtually install many operating systems on virtual drives, including Windows, BSD, Linux, Solaris, and more.

Since Virtual Box runs on Windows, Linux, and Mac, the process for setting up a virtual machine is pretty much the same in each operating system.

Start with downloading and installing Virtual Box. You can download it at this link:

Virtual Box

Downloads

You will also need to download an .iso file for the operating system that you want to run in your virtual machine. For instance, you can download a Windows 10 .iso file Once you have Virtual Box running, click the "New" button



Figure 9.2 Virtual box machine

Create a new virtual machine.

Next you will have to choose which OS you plan on installing. In the "Name" box, type the name of the OS you want to install. Virtual Box will guess the type and version based on the name you type in, but you can change these settings if you need to.

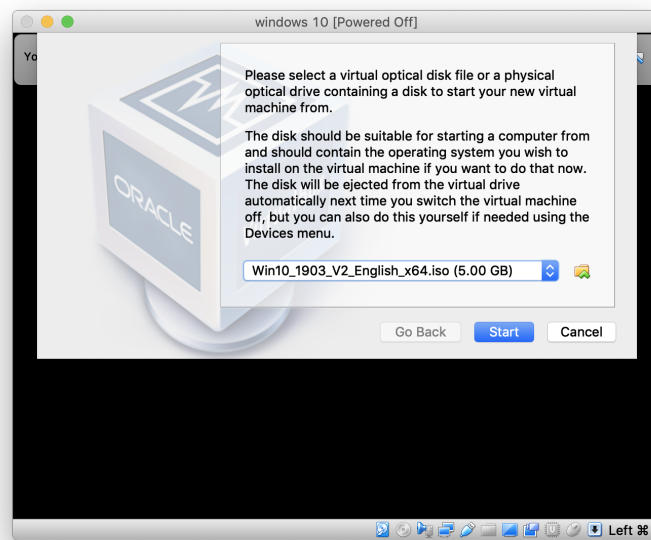


Figure 9.3 Install the operating system on the virtual machine

Your virtual machine will now load your selected operating system. The operating system may require some setup, but it will be the same setup that would be required if you had installed it on a standard computer.

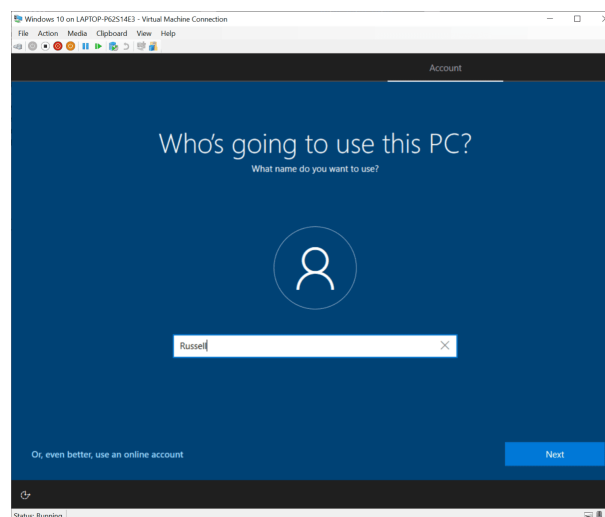


Figure 9.4 Windows 10 is successfully running inside a virtual machine.

Congratulations! You've run your first Virtual Machine in VirtualBox....