Lab Manual

Operating Systems

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# Week 1 – Installing Ubuntu

This week I learned that the Ubuntu Operating System is a Linux-based. I learned that Ubuntu is an open-source operating system, that not only provides the ‘Desktop’ operating system, but also a ‘Server’ operating system, which is also open-source.

I discovered that there are two versions of the ‘Desktop’ Operating System available for Ubuntu; the Long Term Support and then the latest development build. The Long Term Support (LTS) is a stable version, whereas the other is the unstable version.

I learned that VirtualBox is a Type-2 Hypervisor, or Virtual Machine Monitor (VMM). This is a piece of software that allows us to create, and manage Virtual Machines. VirtualBox is also the only, professional solution that is freely available to the general public.

I discovered that in a type-2 hypervisor, there is a host, and a client. The host will be the operating system being used to run the hypervisor, and the client will be the operating system(s) on the virtual machine(s) installed on the hypervisor. In our case the Host OS was Windows 10, and the client was Ubuntu 16.04.03 LTS (Long-term Support)

I learned how to create a virtual machine in VirtualBox. In this Lab’s case it was the Ubuntu operating system that I installed onto the virtual machine. Following the Lab notes, I learned how to allocate memory, primary and secondary, to the virtual machine upon the install.

I ascertained how to change the amount of memory being allocated, or other things such as: change the amount of processors to use, change the boot order to the virtual machine, adding secondary storage like a HDD, or after it had been installed; by shutting the VM down, and opening it’s settings.

I learned how to install the VirtualBox Guest Additions onto the Ubuntu client, which installs drivers and system applications that optimize it for better performance and usability.

# Week 2 – Using VI Text Editor