**Linux Installation using Virtual Box Manual**

Activity Output

In

**SA 101**

**System Administration and Maintenance**

Submitted to:

**GELIL DAVID S. GALANG**

Instructor

Submitted by:

Emmanuel Joshua A. Lemon

**Introduction**

Linux is the most widely used and well-known open source operating system. Linux is a piece of software that, as an operating system, takes requests from all other applications on a computer and sends them to the hardware in the background.

Numerous aspects of Linux are comparable to those of Windows, macOS (previously OS X), and iOS, among other operating systems. Linux has the same word processors, photo editors, video editors, and other software that you are accustomed to using as well as a graphical user interface as other operating systems. A lot of times, the creator of a piece of software makes a Linux version of the same program that you use on other operating systems. Essentially, you can utilize Linux on the off chance that you can utilize a PC or other electronic gadget.

**Objectives**

The target of the meeting of a framework chairman is that we can know about the various jobs that they play. the difficulties they face. the difficulties they face. in addition to how they overcame them.

Another great goal is to learn more about their industry, company, and other topics through the interview. Also, how they manage their respective companies' computer systems.

**Body**

Considering that you have already installed Oracle’s **VirtualBox** and downloaded your chosen **Linux OS** then you can proceed following the steps.

* **Step 1** – Open VirtualBox and then click the ‘**New’** button on the tabs.
* **Step 2** – Give it a name and specify where it should go. The type and version will change automatically based on the name you enter, but make sure the information matches the downloaded package before clicking Next.
* **Step 3** – Choose how much memory the virtual machine should have. click **Next**.
* **Step 4** – Choose whether to create a virtual hard disk, to use an existing virtual hard disk file, or to not add one.
* **Step 5** – Choose the file type for the new virtual hard disk. Sticking to the default may be the best option **VDI(VirtualBox Disk Image),** click **Next**
* **Step 6** – Decide whether to use Dynamically allocated or fixed size for your storage, click **‘Next’**
* **Step 7** – Specify the name and where to store the virtual hard disk. Choose the amount of data the VM Is allowed to store on the hard disk, click **Create.**
* **Step 8** – Click Start to begin installing.
* **Step 9**– Choose the path of where the iso file located.
* **Step 10** – A new VirtualBox VM should open with the Kali Welcome Screen after you click Start. Select Graphical Install.
* **Step 11** – Select a language- Choose the language you wish to use for the installation process and the installed system. English is selected for the current installation. Click the Continue button on each screen to move forward.
* **Step 12** – Select your location- This option is used to set your time zone, time format, etc.
* **Step 13** – Configure the keyboard- Select your keyboard layout.
* **Step 14** – Configure the network, enter a hostname for the system
* **Step 15** – Create a domain name- If you don’t use a domain in your network, you may leave this field empty
* **Step 16** – Set up users and passwords- Read the useful tips on this screen and enter the password for root
* **Step 17** – Configure the clock- Now you can select a precise time zone for your country.
* **Step 18** – Partition disks, select which disk you want to use for partitioning, and select the Scheme for partitioning, the wizard will give an overview of the configured partitions, continue by navigating to Finish partitioning and write changes to disk. Click Continue and confirm with Yes
* **Step 19** – The wizard should start installing Kali, while it does you can figure the package manager.
* **Step 20** – Install the GRUB boot loader on a hard disk. Select Yes and Continue then select a bootloader device.
* **Step 21** –When the installation of Kali Linux on VirtualBox is complete, you will see a notification message. Now you can reboot the virtual machine to boot the Kali Linux installed on the VirtualBox VM.

Based on the more experienced internet users. Adding an additional layer of indirection between the hardware and the application they want to run is the biggest drawback they can think of. Even though virtualization technology has advanced, applications running on a physical computer versus in a virtual machine still perform differently. The hardware, virtualization software, host operating system, and application requirements will all contribute to this variation.

On the other hand, there are a number of advantages to installing and running Linux in a virtual machine, including faster startup times, an isolated environment, the ability to clone it, the ability to test a wide range of operating system distributions, simplified backup and recovery, and the opportunity to gain knowledge of Linux and other IT concepts.

**Summary**

You won't need to restart a computer as often when using dual boot if multiple Operating Systems are operating simultaneously. Although the processes listed above are the ones that users typically follow, there are alternative ways to install Operating Systems in the virtual machine. One of these methods is importing the OS directly, as some users on the internet have indicated.

The Virtualization Technology was disabled and Hyper-V was enabled when I attempted to boot the Virtual Machine. Hyper-V has a history of interfering with Virtual Machines. Next, when trying to install Kali Linux, you should make sure that the Virtual Disk Image you allocate for storage has enough space. My own installation took a long time because I only allocated 8 GB, but when I set it to 50 GB, it went smoothly.