**ASSIGNMENT 2**

**LAB SETUP REPORT**

**Kali Linux & Metasploitable 2**

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**PRECISE OVERVIEW:**

The purpose of this report is to document the setup of a hacker lab, that includes the installation of **Kali Linux** and **Metasploitable 2** in VirtualBox machine.

**Kali Linux** (formerly known as Back Track Linux) is an open-source, **Debian-based Linux**distribution aimed at **advanced Penetration Testing** and **Security Auditing.** It contains several hundred tools targeted towards various information security tasks, such as Security Research, Computer Forensics and Reverse Engineering.

**Metasploitable 2** is an intentionally vulnerable **Ubuntu Linux virtual machine (VM)** designed for **penetration testing** and **security research**.

It was created to test the Metasploit Framework. It provides a secure environment to simulate attacks and test common vulnerabilities.

The report briefly provides steps to create the setup. “It is important to note that this lab is intended for educational and testing purposes only.”

**VIRTUALBOX INSTALLATION:**

Download **VirtualBox** from its official website (the link is given below) and install the **.exe** file**.**

[Downloads – Oracle VM VirtualBox](https://www.virtualbox.org/wiki/Downloads)

**KALI LINUX SETUP**

**DOWNLOADING KALI LINUX ISO:**

* Search Kali Linux in web browser and enter on its official website,
* Select the distribution that you want to install.
* Download the ISO image of the distribution from their websites.

[Get Kali | Kali Linux](https://www.kali.org/get-kali/#kali-platforms)

**To Create a New Virtual Machine:**

* Open VirtualBox.
* Click on the **"New".**
* Give the name to your Virtual Machine
* Select the desired type as **"Linux”** and choose the version as **“Debian 64”**.
* Specify the RAM memory that you want to assign to the virtual machine.
* Create a virtual hard disk.
* Choose the default options unless you have specific requirements.

**To Configure Virtual Machine Settings:**

* Select the virtual machine
* Click on **“Settings”.**
* In the **"System"** tab, ensure the boot order includes **"Optical"** before "Hard Disk".
* In the **"Storage"** tab, click on the empty disk next to "Controller: IDE" or "Controller: SATA".
* Click the disk icon and choose "Choose a disk file."
* Select the Kali ISO file from your directory.

**To Install Linux:**

* Start the virtual machine by clicking on **"Start"** button.
* The virtual machine will boot the Linux ISO which you have attached.
* After the machine booted up, select the option to install Linux
* Follow the on-screen instructions to complete the installation process.
* After installation, the virtual machine will restart.

**SCREENSHOTS:**

**A screenshot of a computer

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**METASPLOITABLE SETUP**

**To Download Metasploitable 2:**

* Download Metasploitable 2 from a trusted source.
* The file will be in **.VMDK** format, that is compatible with Virtual box.

[Metasploitable - Browse /Metasploitable2 at SourceForge.net](https://sourceforge.net/projects/metasploitable/files/Metasploitable2/)

**To Import Metasploitable 2 into VirtualBox:**

* Launch VirtualBox.
* Click on **"New"**.
* Enter the machine name.
* Select the desired type as **"Linux"** and version as **"Ubantu(32-bit)"**
* Click "Next" and specify the hardware configuration in default.
* In virtual hard disk settings, select **"Use an existing virtual hard disk file"** and select the file from your directory.
* Review the summary and click on **Finish.**

**To Configure Metasploitable 2 VM (if required):**

* Select the Metasploitable from the VirtualBox manager tab.
* Click on "Settings".
* Adjust settings, if necessary, but you may adjust based on your system resources.
* Click "OK" to save the settings.

**To Start Metasploitable 2 VM:**

* Select the Metasploitable 2 on your machine.
* Click on **“Start”** Button.
* Pre requisites checking process will done and show the meta Metasploitable login.

**SCREENSHOTS:**

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A computer screen shot of a computer

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A screenshot of a computer

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A computer screen shot of a black screen

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**CONCLUSION:**

The configuration of **Kali Linux** and **Metasploitable 2** has been successfully done.

The VirtualBox offers a secure and regulated setting for studying and using penetration testing methods.