Kali Linux VM

Kali Linux (see `https://www.kali.org/` for some further pointers) offers a number of network security tools. You may want to explore one or more of these tools as part of your coursework.

ETHICS REMINDER

Any information that you learn about vulnerabilties and attacks in this course are intended for your learning, in order to make you a better security practitioner. As part of this learning, the attacks you attempt must **only be attempted within the virtual environments for this course**. Any attempt to investigate vulnerabilities or attempt attacks outside of this environment could have **severe academic and legal consequences** for you. If you are in doubt, please ask me for assistance.

1 Lab Environment

In order to install the VM, **copy of the file** from my `Public` directory to your `/scratch/` drive as shown below:

```
# cp /home/mj8/Public/Kali-Linux-2016.2-vbox-amd64.ova /scratch/
```

1. **Before loading the `Kali` VM**, open `virtualbox` and change the "Default Machine Folder" to `/scratch/` (in short, you can change this option after selecting `File --> Preferences --> General`).
2. **Then, load the `Kali` VM** into `virtualbox` as follows:
   (a) Choose `File --> Import Appliance`
   (b) For `Appliance to Import`, find `/scratch/Kali-Linux-2016.2-vbox-amd64.ova` and click Next.
   (c) For `Appliance Settings`, select `Reinitialize the MAC address of all network cards` and then choose Import.
3. **After loading the VM, right-click** on the `Kali` VM in `virtualbox` to select `Settings`, and do the following:
   - Under `General-->Basic`, set the `Name` of the VM to whatever you wish.
   - Under `System --> Motherboard`, change the `Memory Size` from `2048MB` to `1024MB`.
   - Under `Network --> Adapter 1`, change the `Attached to:` setting from `NAT` to `NAT Network`. Note that you will only have the option for `NAT Network` if you followed the steps in Lab 1 to create this option in your personal `virtualbox` settings. If you don't have this option, look at the instructions from Lab 1 to create the `NAT Network` option in `virtualbox`.
   - Under `USB`, change from `USB 2.0` to `USB 1.1`.
4. **Create a clone** of your VM by right-clicking on the VM (remember that your VM MUST BE POWERED OFF WHEN CLONING) and choosing `Clone`. Also, don't forget to select `Reinitialize the MAC address of all network cards`, and choose the `Full Clone` option.

At the end of the above steps, you should have two `Kali` VMs installed in your `virtualbox`. Within your `Kali` VM, there are numerous tools available. Click on `Applications` in the top left corner, and you can see a listing of tools for activities such as Information Gathering, Vulnerability Analysis, Exploitation, etc. Explore some of these tools by opening them, reviewing associated documentation, etc.