COMPUTER SUBJECT: NETWORK SECURITY HACKING

TYPE: GROUP WORK

IDENTIFICATION: Metasploitable Installation/MICL

COPYRIGHT: *Michael Claudius*

LEVEL: INTERMEDIATE

DURATION: 30-60 minutes

SIZE: 30 lines!!

OBJECTIVE: Installing vunerable test-kit in VM on NATNetwork

REQUIREMENTS:

COMMANDS:

IDENTIFICATION: Metasploitable Installation/MICL

Prolog
You have successfully finalized the IT-Security course. You will like to investigate more!.

The Mission
You are to install Metasploitable on a NATNetwork.

Purpose
The purpose is to create an environment for Metsploit to attack Metsploitable.

Installation of Metasploitable
There are several ways of skinning a cat and that's also the case when installing SW.
The one given here is fast and simple. It falls in 3 steps:

- Download Metasploitable
- Install Metasploitable in Virtual Box
- Set up a NATNetwork test environment

Useful links

https://sourceforge.net/projects/metasploitable/files/Metasploitable2/

https://www.wikigain.com/download-install-metasploitable-in-virtualbox/

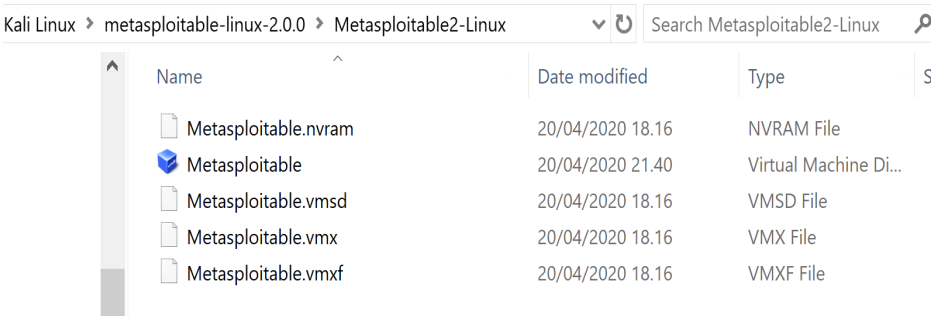
Download Metasploitable

Find Metasploitable 2 from SourceForge at:

https://sourceforge.net/projects/metasploitable/files/Metasploitable2/

Download the latest version to the folder where you already have Kali Linux.

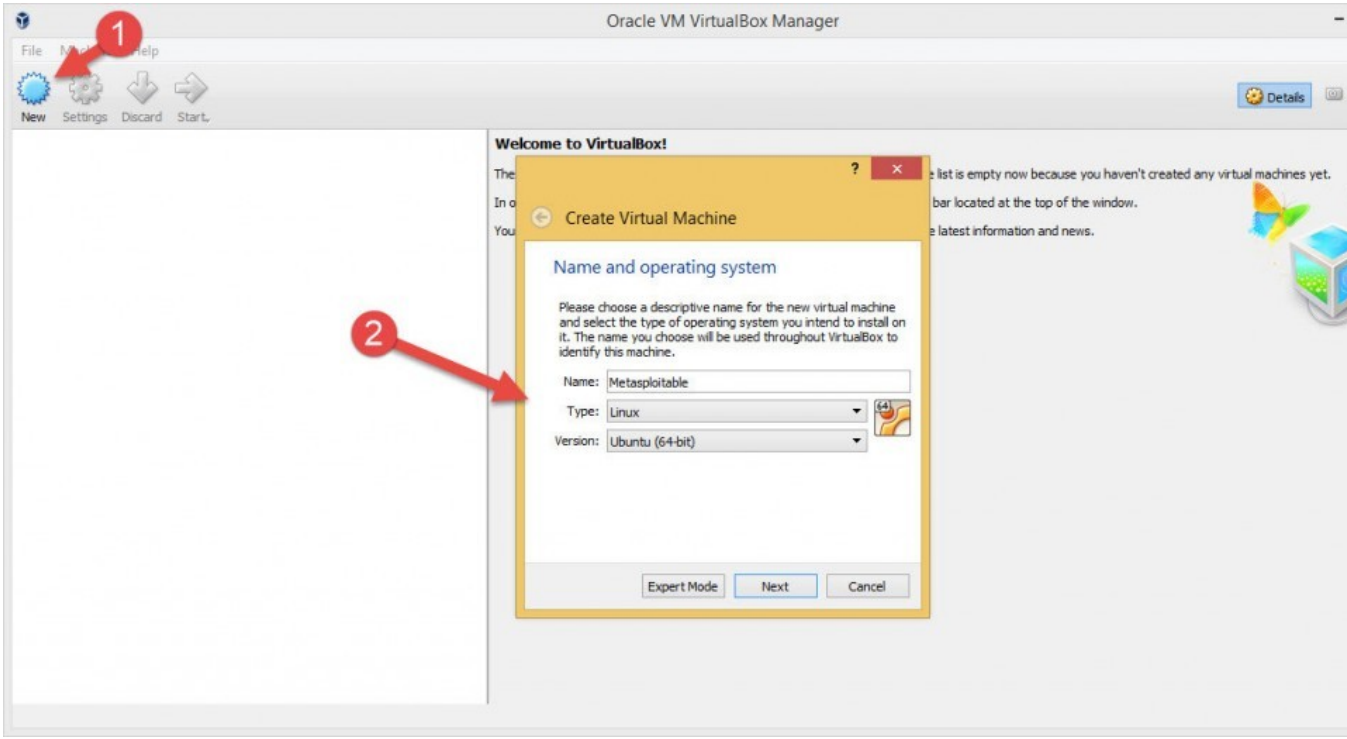
Unzip the file and notice the Metasploitable Virtualk Machine Directory and the .vmx files.



Installation of Metasploitable

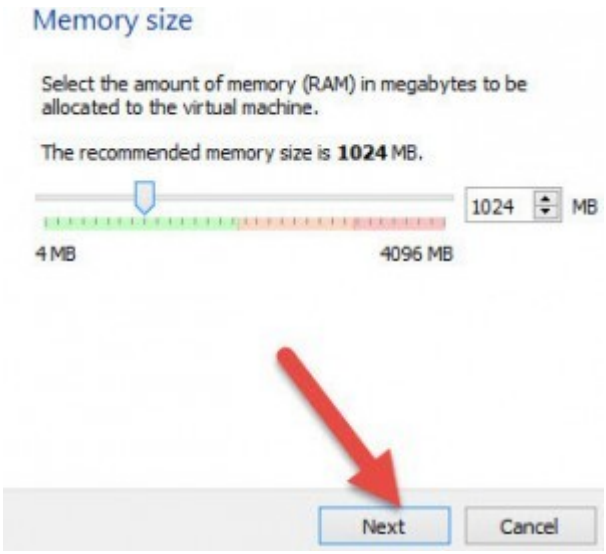
This relays heavily on https://www.wikigain.com/download-install-metasploitable-in-virtualbox/

1. Open the Virtual Box and click the new button on the top right side of your Virtual Box. On the first option, write Metasploitable and select Linux in the second option and click Next and go forward.



Click on a new button

2. After step 2, you will select the memory size (RAM). You can use it as a default or give some extra and Click on next then Create button.

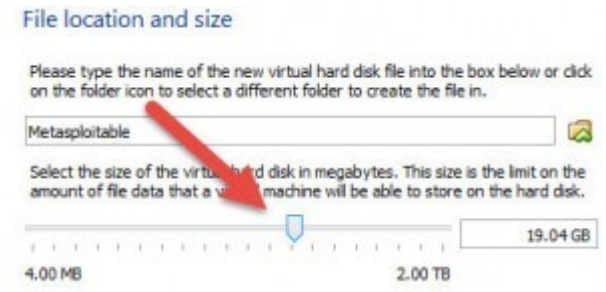


RAM Size

3. This step, you will select the type of your Hard disk, and it is VDI(Virtualbox Disk Image). After that, click on Next button and again click Next button.

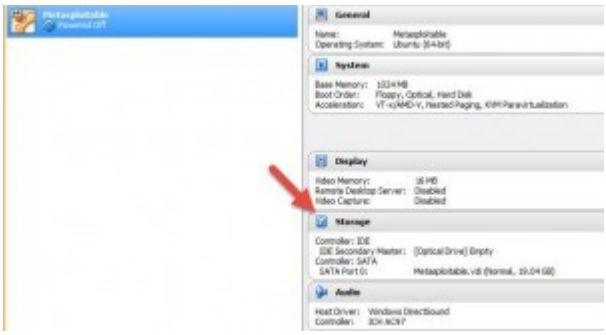
Select Hard disk type

4. Now you will select the size and location of your Virtual Machine.



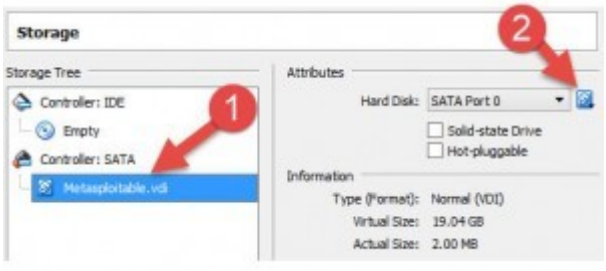
File Size and location

5. Now the settings are fixed up, and we have to select our downloaded OS, and for that, we must click on the *Storage* button as the picture below.



Click on the Storge

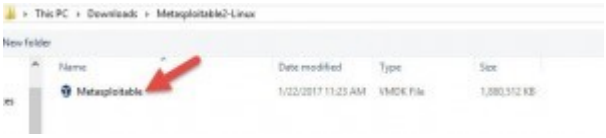
6. Click on the small hard disk on the top right of the dialogue box as the picture.



Select Metasploitable

And Choose “Virtual Disk”

7. Now go the directory where Metasploitable was downloaded and select that.

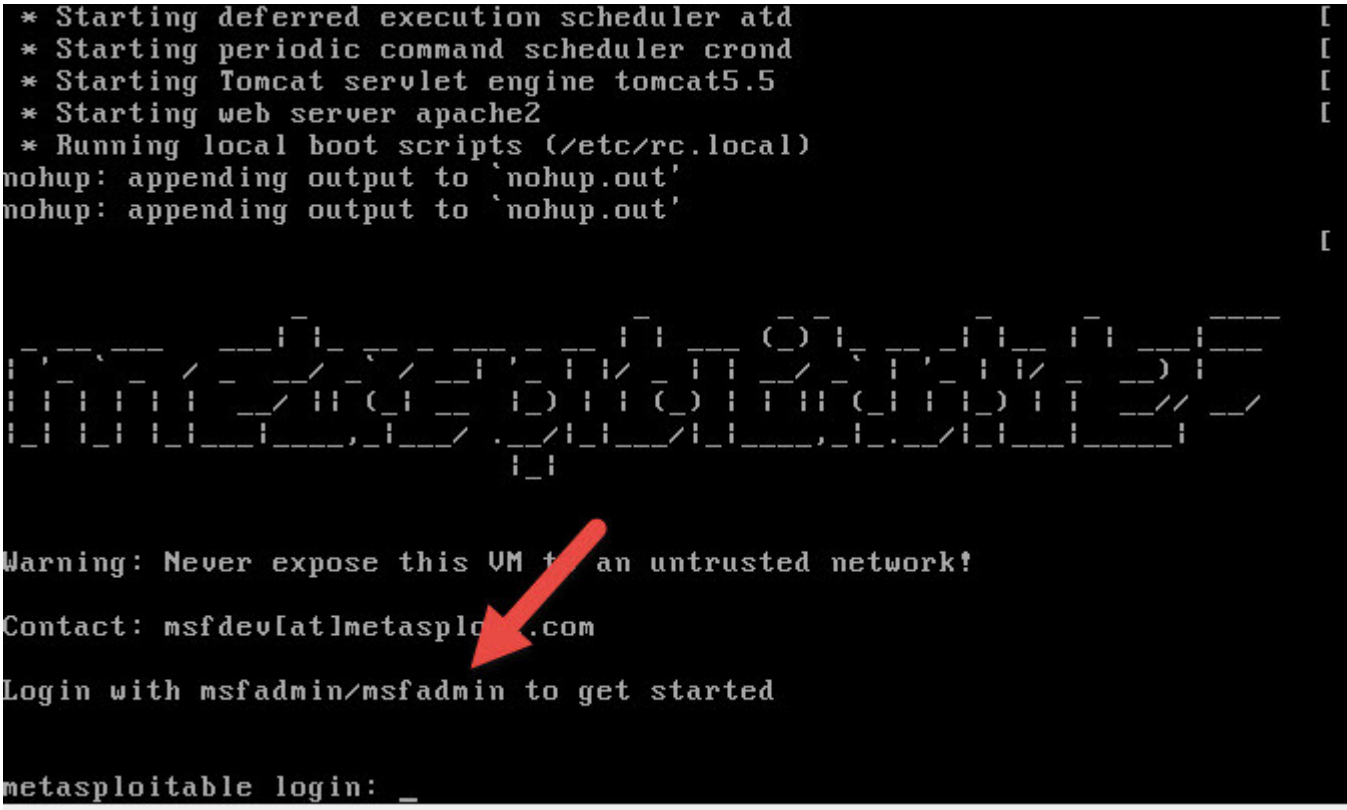


Select Metasploitable

8. It is finished, and you are ready to open. To open that click the start button on the top right of the Virtualbox.

Click on the Start button

Note: The password and the username of Metasploitable are both *msfadmin*. And You can shut down it by choosing “Power off” and if you got any question or problem, do not hesitate to share with Your class-mates.



Login with password

Isolating the test environment

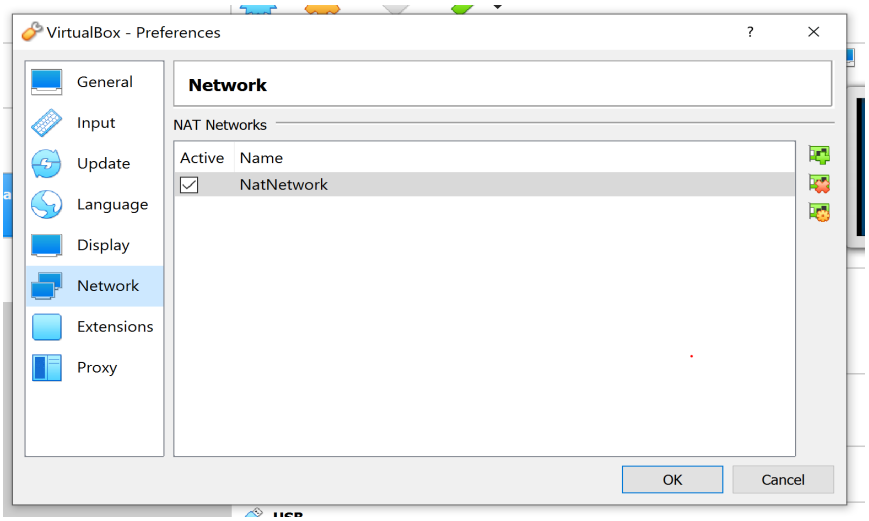
When performing these kinds of red-team tests, it is a good idea to isolate the VMs in a test network. This are to be done via VirtualBox.

Note: Alternatively; one could use a bridged NAT, but this opens up for other "potential hackers"

Never expose Metasploitable to an untrusted network, use NAT or Host-only mode!

1. Create your own NAT network.

In the Virtual Box Choose: File > Preferences > Network



Click the small green button to "Add new NAT Network"

Click OK.

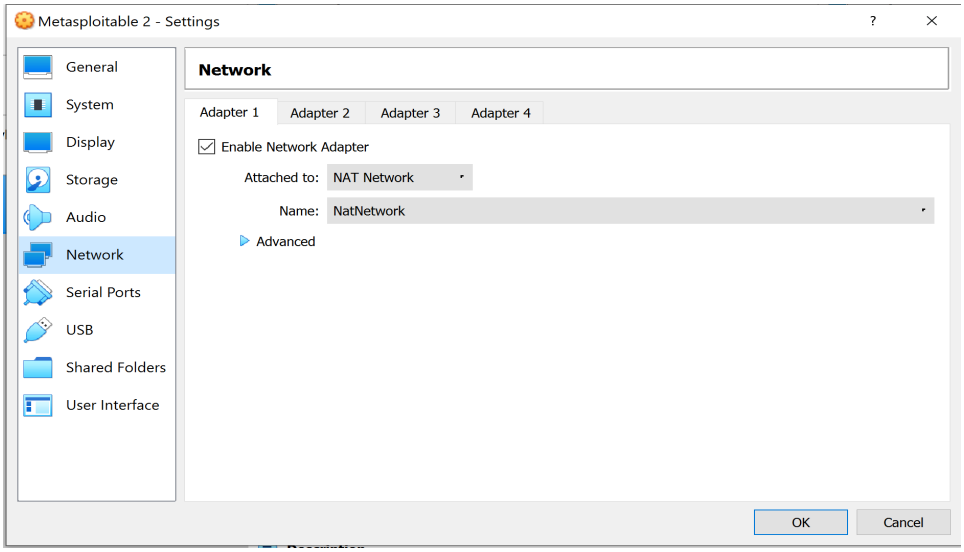
2. Moving VM's to NAT network

Make sure both of your VM systems (Kali and Metasploitable) are powered off and then highlight one of the machines.

Right click on one of the machines, or use the tool-line and Choose "Settings"

Choose: Network -> NAT-Network

Under Name: Choose the available NATNetwork



Do the same for the other machine.

3. Ping the VM's

Check out that your VM's are on the same network

Start both Kali and Metasploitable

Use ifconfig to find the IP-addresses of both machines.

Mine were Metasploitable (10.0.2.4) and Kali (10.0.2.15)

Note: If you are using 2020 version remember to use
sudo ifconfig or ip a or ip addr
instead

Now from Kali ping the Metaspoitable.

ping 10.0.2.4

Stop ping by use of

Ctrl c

Then from Metasploitable ping Kali.

***Congratulation**: Next step is to attack/exploit Metasploitable.*