

Build Instructions:

Step 1:

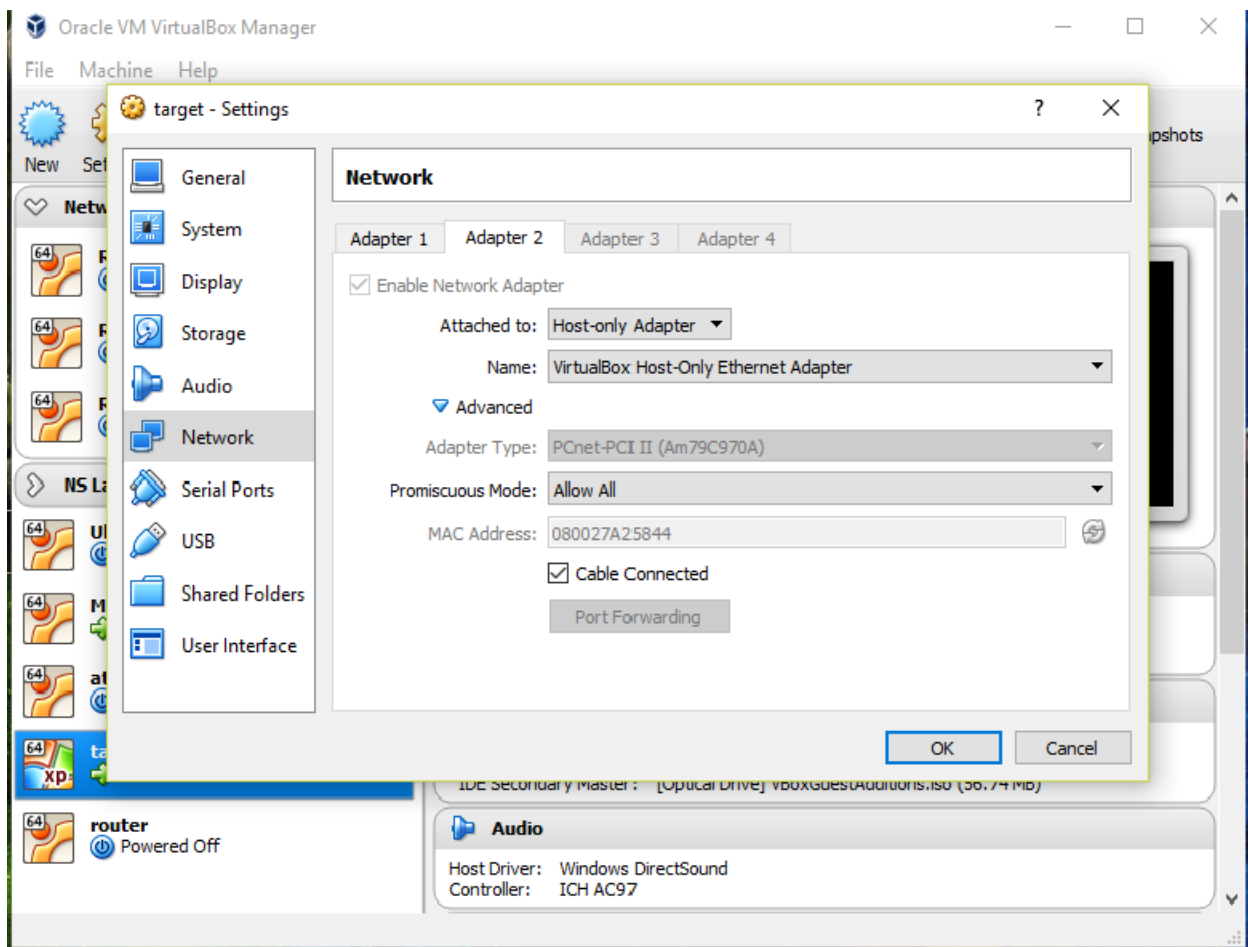
Download & Install VirtualBox from the link (<https://www.virtualbox.org/wiki/Downloads>). Here, I have considered Windows 10 as Host Machine.

Step 2:

Download & Install Windows XP Service Pack 2 (Target OS) & Ubuntu 16.04 LTS (Attacker OS) image files on VirtualBox.

Step 3:

Change the Network Settings in VirtualBox for each VM (Windows & Ubuntu) so that they can talk to each other. In the **Settings > Network > Adapter 2** make the changes as shown below:



And, Turn Off the Firewall Settings in the Target VM.

Step 4:

Install Intel Network adapters and Xampp Apache Server in the Target OS i.e. Windows XP & also update the Ubuntu system along with the installation of hping3 tool with the commands as shown below:

```
sudo apt-get update && sudo apt-get install hping3
```

Step 5:

Copy the source code in the home directory and run it using the terminal (Shortcut: Alt+Ctrl+T) with IP address of the Target Guest OS as shown below:

```
sudo python task.py <IP_Address>
```

For example, here, I have executed as below:

```
sudo python task.py 192.168.56.102
```

- You will get the output something like this:

```
lohit@lohit-VirtualBox:~$ python test5.py 192.168.56.102
-> Response time for connecting http://192.168.56.102/xampp/ is 0.1174 seconds
#####
** The System is >Not< Vulnerable at present**
#####
-> Starting LAND Attack i.e. flooding TCP SYN packets to the target
using enp0s8, addr: 192.168.56.103, MTU: 1500
HPING 192.168.56.102 (enp0s8 192.168.56.102): S set, 40 headers + 120 data bytes
hping in flood mode, no replies will be shown
-> Response time for connecting http://192.168.56.102/xampp/ is 9.2758 seconds
#####
** The System is ^Vulnerable^ to the LAND Attack practised **
#####
^CTouchback (next request call test):
```

Solutions to some problems that I have faced:

- If you are not able to access the internet from the Windows VM then make a shared folder from the VirtualBox & then download the Intel Network adapter from the Host OS
- If you are not able to access any other web page other than MSN, then download another browser(This is mainly because of the firewall problems)