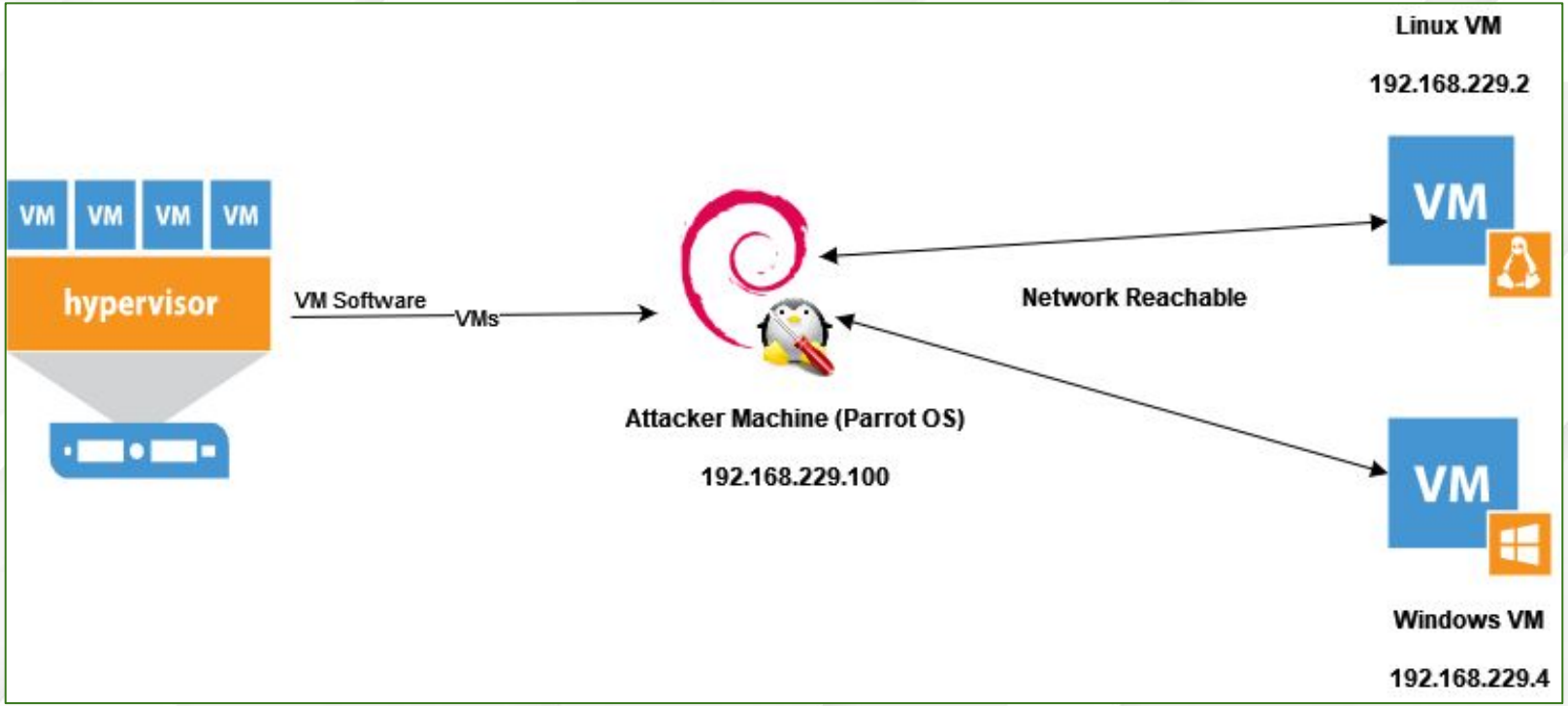
CWL
CyberWarFare Labs

INFRASTRUCTURE SETUP
MODULE - 2

2. INFRASTRUCTURE SETUP

Lab 1 : Setup Virtual Environment as per platform

2.1 Lab Architecture Overview



INFO : **8 GB RAM** with **512GB HDD / SSD** would be good. We will not be running all the machines simultaneously

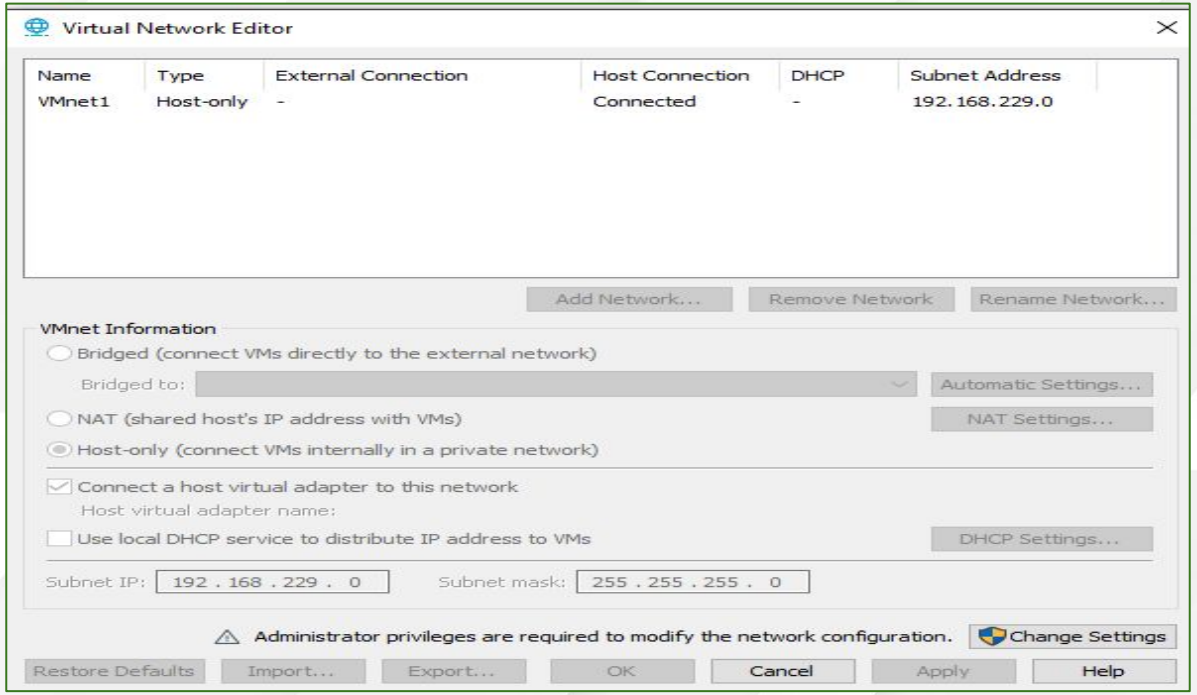
Lab 2 : Download ISOs & Installation

- Parrot OS [https://www.parrotsec.org/download/]
- Windows 10 Evaluation [https://www.microsoft.com/en-in/evalcenter/download-windows-10-enterprise]
- Metasploitable Machine [https://sourceforge.net/projects/metasploitable/files/Metasploitable2/metasploitable-linux-2.0.0.zip/download]

Lab 3 : Lab Network Configuration

Step 1 : Network Configuration in workstation

Create Network Adapter in VMWare Workstation with the IP Range (int n/w) : **192.168.229.0/24**



Lab 4 : Configure IP Address in Machines

Step 2 : Parrot OS Setup

Add 2 adapters - Bridge Network & int n/w **[192.168.229.100]**

Make sure that there is an active internet with bridge network and internal network connectivity.

Step 3 : Metasploitable Network Configuration

Add 1 adapter - int n/w [192.168.229.2]

Set the static IP address by editing in the following file "/**etc/network/interfaces**"

```
  GNU nano 2.0.7         File: /etc/network/interfaces

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
address 192.168.229.2
netmask 255.255.255.0
gateway 192.168.229.1

                        [ Read 14 lines ]
^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

➤ Restart the Network Service & check static IP allotment

```
root@metasploitable:~# /etc/init.d/networking restart
 * Reconfiguring network interfaces...                               [ OK ]
root@metasploitable:~#
```

```
root@metasploitable:~# ifconfig  eth0
eth0      Link encap:Ethernet  HWaddr 00:0c:29:1a:83:50
          inet addr:192.168.229.2  Bcast:192.168.229.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe1a:8350/64 Scope:Link
```

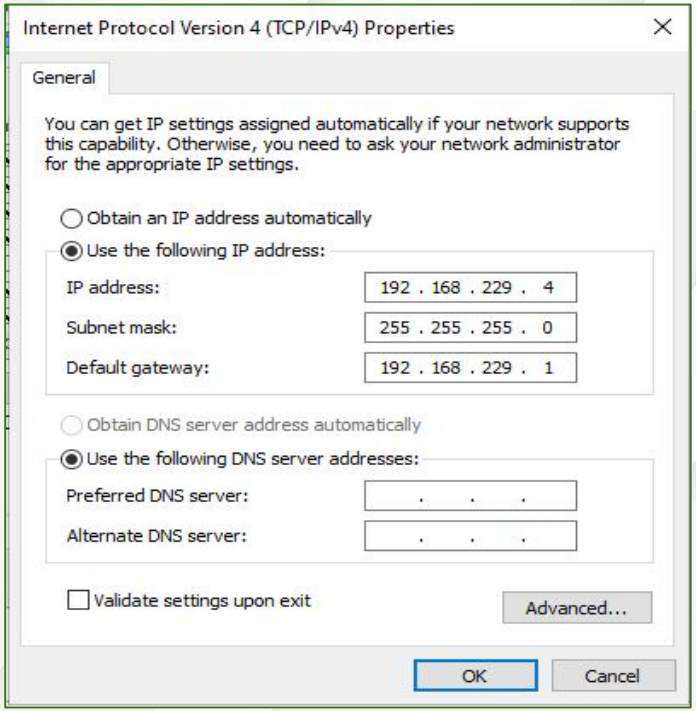
Step 4 : Windows 10 network configuration Setup

Add 1 adapter - **int n/w [192.168.229.4]**

Login as "**Local Administrator**" and open the following settings:

Control Panel > Network and Internet > Network and Sharing Center > ethernet0 > Properties

Set the following IP address:



Check the IP address:

```
C:\Users\employee>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet0:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::709f:56df:adaa:1205%12
   IPv4 Address. . . . . . . . . . . : 192.168.229.4
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.229.1
```

NOTE : Make sure that we can ping **“Metasploitable 2”** & **Parrot OS**

```
C:\Users\employee>ping 192.168.229.10

Pinging 192.168.229.10 with 32 bytes of data:
Reply from 192.168.229.10: bytes=32 time<1ms TTL=64
Reply from 192.168.229.10: bytes=32 time<1ms TTL=64
Reply from 192.168.229.10: bytes=32 time<1ms TTL=64
Reply from 192.168.229.10: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.229.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Check the following:

- Network Connectivity between every machines
- Internet Connectivity in Parrot OS
- Windows Host Firewall will be enabled restricting accessibility. Turn it "**OFF**" for the sake of the next exercises.

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Thank You

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