Amir Mansha Lab #4 CYSE 425

3.5

```
Terminal-student@kali:~

File Edit View Terminal Tabs Help

amansha@gmu.edu:~$host kali.example.com
kali.example.com.v3-d3d03734-58c6-449b-a2c5-25dc8e368515.us-east-1.cyberrange.in
ternal has address 10.1.123.15
amansha@gmu.edu:~$host target.example.com
target.example.com.v3-d3d03734-58c6-449b-a2c5-25dc8e368515.us-east-1.cyberrange.
internal has address 10.1.116.236
amansha@gmu.edu:~$
```

Ip address for Kali: 10.1.123.15
Ip address for target: 10.1.116.236

4.1

```
Terminal-student@kali:~

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amansha@gmu.edu:~$nmap -Pn kali.example.com

Starting Nmap 7.80 ( https://nmap.org ) at 2021-10-14 19:26 UTC

Nmap scan report for kali.example.com (10.1.123.15)

Host is up (0.00011s latency).

rDNS record for 10.1.123.15: ip-10-1-123-15.ec2.internal

Not shown: 998 closed ports

PORT STATE SERVICE

22/tcp open ssh

3389/tcp open ms-wbt-server

Nmap done: 1 IP address (1 host up) scanned in 0.09 seconds

amansha@gmu.edu:~$
```

Port 22 and 3389 are exposed on kali machine.

```
Terminal-student@kali:~

File Edit View Terminal Tabs Help

amansha@gmu.edu:~$nmap -Pn target.example.com

Starting Nmap 7.80 ( https://nmap.org ) at 2021-10-14 19:29 UTC

Nmap scan report for target.example.com (10.1.116.236)

Host is up (0.0014s latency).

rDNS record for 10.1.116.236: ip-10-1-116-236.ec2.internal

Not shown: 999 filtered ports

PORT STATE SERVICE

3389/tcp open ms-wbt-server

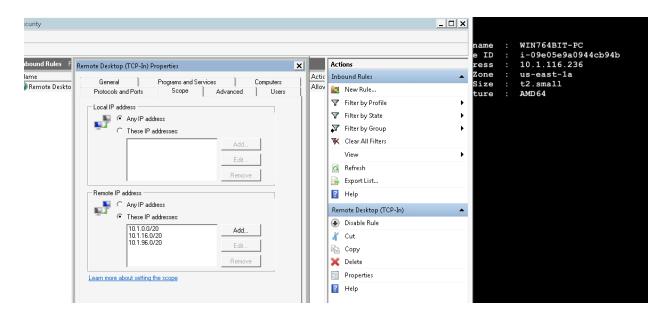
Nmap done: 1 IP address (1 host up) scanned in 6.57 seconds

amansha@gmu.edu:~$
```

Port # 3389 is still exposed in windows target machine

```
amansha@gmu.edu:~$nmap -Pn target.example.com
Starting Nmap 7.80 ( https://nmap.org ) at 2021-10-14 19:31 UTC
Nmap scan report for target.example.com (10.1.116.236)
Host is up (0.00089s latency).
rDNS record for 10.1.116.236: ip-10-1-116-236.ec2.internal
Not shown: 992 filtered ports
         STATE SERVICE
PORT
135/tcp open msrpc
139/tcp open netbios-ssn
445/tcp open microsoft-ds
554/tcp open rtsp
2869/tcp open icslap
3389/tcp open ms-wbt-server
5357/tcp open wsdapi
10243/tcp open unknown
Nmap done: 1 IP address (1 host up) scanned in 4.46 seconds
amansha@gmu.edu:~$
```

The ports in the above screenshot are now open after I switched to the Home network mode.



I added these IP addresses under Remote IP address in firewall settings.

4.4

```
Terminal - student@kali: ~
                                                                              □ X
File Edit View Terminal Tabs Help
amansha@gmu.edu:~$ nmap -Pn target.example.com
Starting Nmap 7.80 ( https://nmap.org ) at 2021-10-14 19:35 UTC
Nmap scan report for target.example.com (10.1.116.236)
Host is up.
rDNS record for 10.1.116.236: ip-10-1-116-236.ec2.internal
All 1000 scanned ports on target.example.com (10.1.116.236) are filtered
Nmap done: 1 IP address (1 host up) scanned in 201.34 seconds
amansha@gmu.edu:~$nmap -Pn -max-rtt-timeout 100ms target.example.com
Starting Nmap 7.80 ( https://nmap.org ) at 2021-10-14 19:41 UTC
Failed to resolve "-max-rtt-timeout".
Failed to resolve "100ms".
Nmap scan report for target.example.com (10.1.116.236)
Host is up.
rDNS record for 10.1.116.236: ip-10-1-116-236.ec2.internal
All 1000 scanned ports on target.example.com (10.1.116.236) are filtered
Nmap done: 1 IP address (1 host up) scanned in 201.39 seconds
amansha@gmu.edu:~$
```

The scan showed that all 1000 scanned ports on the target machine are filtered. And 1 IP address is scanned.

It took 201.34 seconds for nmap to scan and the 100ms scan 201.39 seconds.

Class Discussion:

If I was a hacker, I would utilize the port scan knowledge to my advantage by scanning what ports are open and listening to find vulnerable systems. If I was a defender, I would enable firewall so only chosen ports go through.

The pros are that that incoming threats cannot go through the 3389 port since it is remote desktop protocol. The con is that now you can RDP into the port since it is closed.

Network cannot be trustworthy. If someone scan your ports and find a system vulnerable then your LAN is compromised.