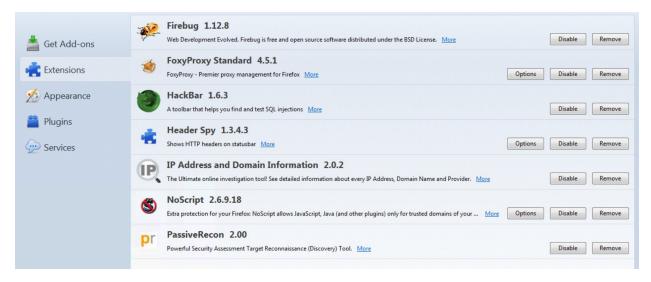
Documentation

Information Gathering

3.1 Passive Reconnaissance

Tools/Add-ons

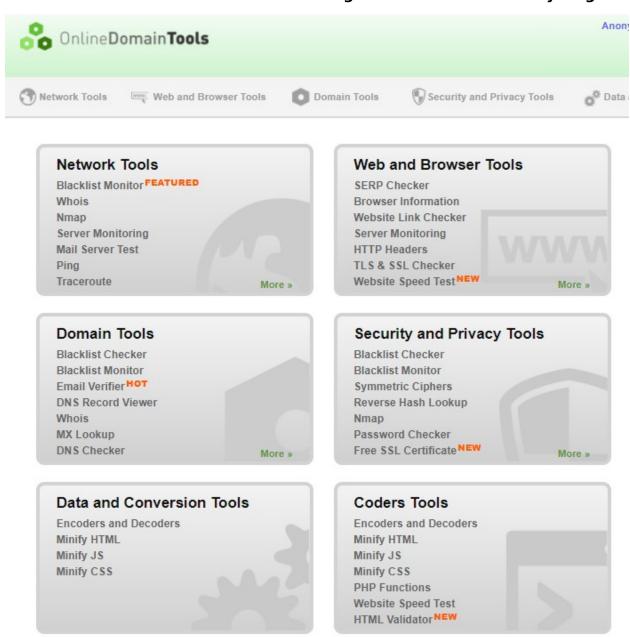


I clicked on "More" link for each Firefox extension to see how it might be useful during a Pen Test but didn't find showIP 2.0. And couldn't install it from online either because of no internet connections

At some point after looking at the add-ons, I have disable the Hackbar toolbar.



2. From my own computer, I visited to this URL http://online-domain-tools.com to see some of the fee tools available to gather information on my targets.



3. Using Nslookup

CPEH-LinuxAttack

```
Places ▼

    Terminal ▼

                                                                    Thu 18:19
 Applications ▼
                                                                   root@kali: ~
File Edit View Search Terminal Help
root@kali:~# nslookup
> set timeout=10
> google.com
> goog ...
Server: 8.8.8.8#53
Non-authoritative answer:
Name: google.com
Address: 172.217.6.14
> yahoo.com
Server:
          8.8.8.8#53
Address:
Non-authoritative answer:
Name: yahoo.com
Address: 98.138.252.38
Name: yahoo.com
Address: 206.190.39.42
Name: yahoo.com
Address: 98.139.180.180
> twitter.com
Server: 8.8.8.8
Address:
              8.8.8.8#53
Non-authoritative answer:
Name: twitter.com
Address: 104.244.42.65
Name: twitter.com
Address: 104.244.42.129
> set type=MX
> box.com
              8.8.8.8
Server:
Server: 8.8.8.8
Address: 8.8.8.8#53
Non-authoritative answer:
box.com mail exchanger = 30 ASPMX3.GOOGLEMAIL.com.
box.com mail exchanger = 20 ALT2.ASPMX.L.GOOGLE.com.
box.com mail exchanger = 10 ASPMX.L.GOOGLE.com.
box.com mail exchanger = 30 ASPMX2.GOOGLEMAIL.com.
box.com mail exchanger = 20 ALT1.ASPMX.L.GOOGLE.com.
```

Authoritative answers can be found from:
> set type=ANY
> FQDN
Server: 8.8.8.8
Address: 8.8.8.8#53

** server can't find FQDN: NXDOMAIN
> exit

root@kali:~#

3.2 Google Queries

1. Gather information from Aegon

I. Members of the Executive Board of AEGON N.V. and AEGON USA

Alexander R. Wynaendts

CEO and Chairman of the Executive and Management Board

Alex joined Aegon in 1997 and was appointed as a member of Aegon's Executive Board in 2003

Matthew J. Rider

CFO and member of the Executive Board

Was appointed on May 19, 2017.

https://www.aegon.com/en/Home/Investors/News-releases/2016/aegon-to-appoint-matthew-rider-as-cfo/

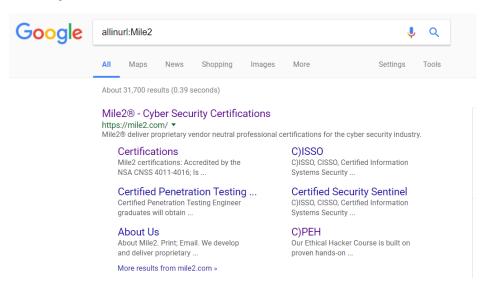
- II. Educational Background of the CEO
 - Ecole Superieure D'electricite Graduated, 1984
 - Paris Sorbonne University Graduated, Economics, 1983

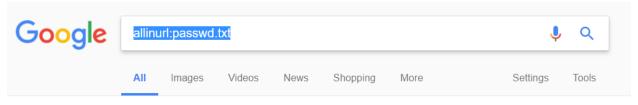
III. Find out the office location, telephone and name of the CEO.

Alexander R. Wynaendts, CEO



2. Practice utilizing the following Google Queries (screenshots are shown below)





About 6,900 results (0.33 seconds)

aima-data/passwd.txt at master · aimacode/aima-data · GitHub

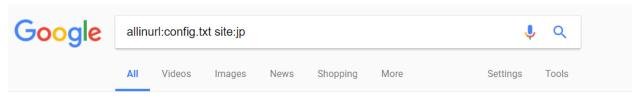
https://github.com/aimacode/aima-data/blob/master/MAN/passwd.txt ▼ aima-data - Data files to accompany the algorithms from Norvig And Russell's "Artificial Intelligence - A Modern Approach"

wolfssh/passwd.txt at master · wolfSSL/wolfssh · GitHub

https://github.com/wolfSSL/wolfssh/blob/master/keys/passwd.txt ▼ wolfSSL SSH. Contribute to wolfssh development by creating an account on GitHub.

downlink-game-containers/passwd.txt at master · DiUS/downlink ...

https://github.com/DiUS/downlink-game-containers/blob/master/level1/passwd.txt ▼ Game containers for the downlink game. Contribute to downlink-game-containers development by creating an account on GitHub.



About 527 results (0.29 seconds)

Downloading File /config.txt - OpenFootie - OSDN

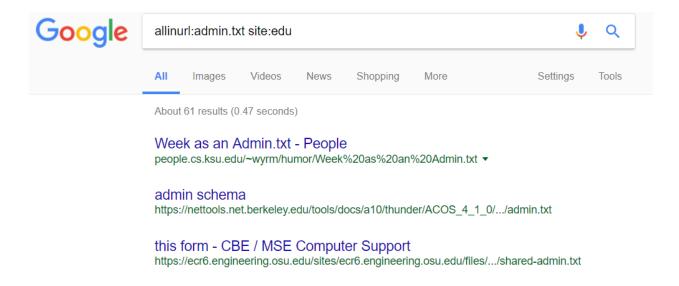
en.osdn.jp/projects/sfnet_openfootie/downloads/config.txt/ ▼

Free download page for Project OpenFootie's config.txt. A text-based soccer match generation engine. Reproduces the match with statistics and report. To be used as a library by integrating with 'host' applications. Download 'desktop' version or try i...

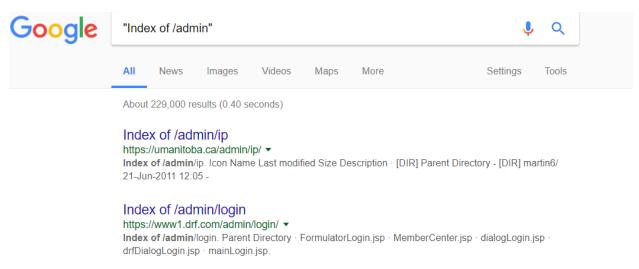
\$MAIL_TO = 'aaaa@****.co.jp'; \$MAIL_FROM = 'aaaa@****.co.jp ... www.maejima-ic.co.jp/mobile/config.txt

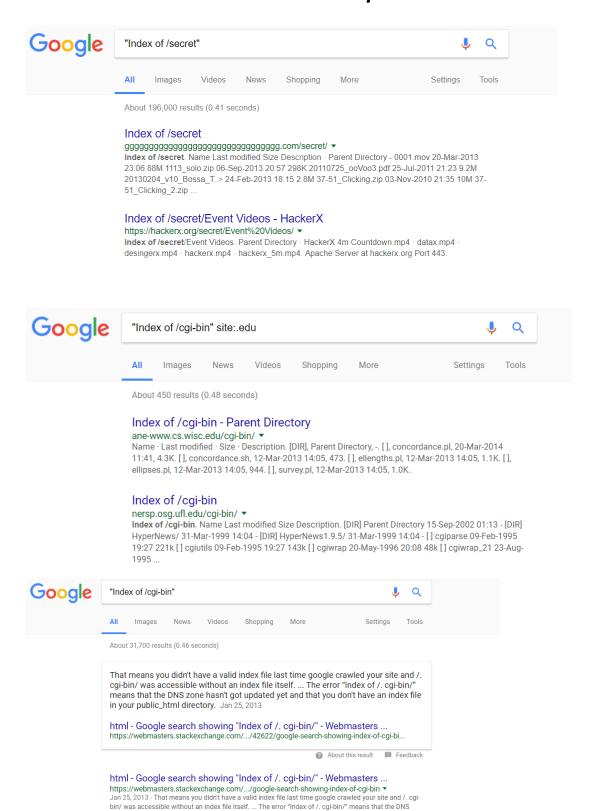
Raspberry Pi/Fedora/25/config.txt - Beer's_wiki - Dip.jp

https://beer.dip.jp/wiki/index.php/Raspberry_Pi/.../25/config.txt ▼ Translate this page
Dec 24, 2016 - 場所. arm-image-installerでインストールした場合、以下のように4つのパーティション
が作成されます。 [root@localhost ~]# cat /proc/partitions major minor #blocks name 179 0 30318592
mmcblk0 179 1 29696 mmcblk0p1 179 2 499712 mmcblk0p2 179 3 499712 mmcblk0p3 179 4
29243294 mmcblk0p4.



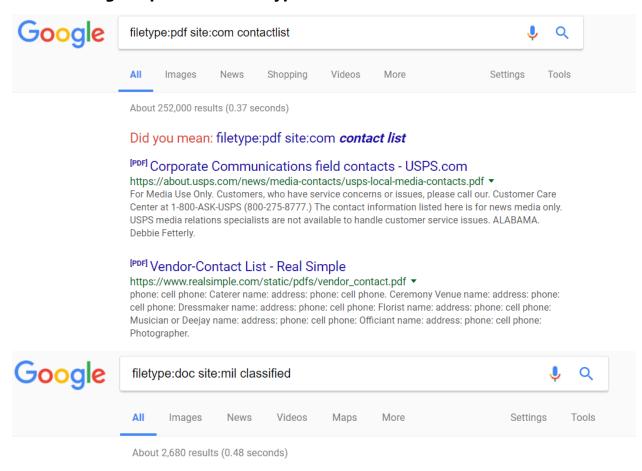
3. Practicing index browsing enabled directories (Screenshots are below)





zone hasn't got updated yet and that you don't have an index file in your public_html directory.

4. Searching for particular file types



loocl classified information access authorization (5521) - Marine Forces ...

www.marforres.marines.mil/Portals/116/Docs/Security/FORM%205521.doc ▼ INSTRUCTIONS. This form is used to initiate and document an individual's authorization to handle classified information at Marine Forces Reserve. ACCESS IS NOT AUTHORIZED UNTIL PART B IS APPROVED. If applicable an E-QIP will be completed.

[DOC] Verbal Attestation of Understanding

www.mcieast.marines.mil/.../33/.../Verbal%20Attestation%20of%20Understanding.do... ▼
THE RESPONSIBILITIES ASSOCIATED WITH BEING GRANTED ACCESS TO CLASSIFIED NATIONAL
SECURITY INFORMATION. I AM AWARE OF MY OBLIGATION TO PROTECT CLASSIFIED NATIONAL
SECURITY INFORMATION THROUGH PROPER SAFEGUARDING AND LIMITING ACCESS TO
INDIVIDUALS ...

3.3 Active Reconnaissance

1. Open a bash shell and run the different commands against one of your Windows VMs

```
File Edit View Search Terminal Help
root@kali:~# nmap -sP 192.168.2.12
Starting Nmap 7.50 (https://nmap.org) at 2018-02-01 18:38 EST
Nmap scan report for 192.168.2.12
Host is up (0.00052s latency).
MAC Address: 00:50:56:01:3C:E3 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 0.34 seconds
root@kali:~# nmap -sT 192.168.2.12
Starting Nmap 7.50 (https://nmap.org) at 2018-02-01 18:38 EST
Nmap scan report for 192.168.2.12
Host is up (0.00027s latency).
Not shown: 991 closed ports
PORT
        STATE SERVICE
135/tcp open msrpc
139/tcp open netbios-ssn
445/tcp open microsoft-ds
49152/tcp open unknown
49153/tcp open unknown
49154/tcp open unknown
49155/tcp open unknown
49156/tcp open unknown
49159/tcp open unknown
MAC Address: 00:50:56:01:3C:E3 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 2.48 seconds
root@kali:~# nmap -sS 192.168.2.12
```

```
Starting Nmap 7.50 ( https://nmap.org ) at 2018-02-01 18:39 EST
Nmap scan report for 192.168.2.12
Host is up (0.00037s latency).
Not shown: 991 closed ports
             STATE SERVICE
PORT
135/tcp open msrpc
139/tcp open netbios-ssn
445/tcp open microsoft-ds
49152/tcp open unknown
49153/tcp open unknown
49154/tcp open unknown
49155/tcp open unknown
49156/tcp open unknown
49159/tcp open unknown
MAC Address: 00:50:56:01:3C:E3 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 53.62 seconds
root@kali:~# nmap -sV 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-02-01 18:41 EST
Nmap scan report for 192.168.2.12
Host is up (0.00033s latency).
Not shown: 991 closed ports
             STATE SERVICE
PORT
                                                VERSTON
135/tcp open msrpc Microsoft Windows RPC
139/tcp open netbios-ssn Microsoft Windows netbios-ssn
445/tcp open microsoft-ds Microsoft Windows 7 - 10 microsoft-ds (workgroup: WORKGROUP)
49152/tcp open msrpc Microsoft Windows RPC
49153/tcp open msrpc Microsoft Windows RPC
49154/tcp open msrpc Microsoft Windows RPC
49155/tcp open msrpc Microsoft Windows RPC
49156/tcp open msrpc Microsoft Windows RPC
49159/tcp open msrpc Microsoft Windows RPC
49159/tcp open msrpc Microsoft Windows RPC
49159/tcp open msrpc
                                                Microsoft Windows RPC
MAC Address: 00:50:56:01:3C:E3 (VMware)
Service Info: Host: WIN-CQR3UEPCPMH; OS: Windows; CPE: cpe:/o:microsoft:windows
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 119.73 seconds
 root@kali:~# nmap -0 192.168.2.12
 Starting Nmap 7.50 ( https://nmap.org ) at 2018-02-01 18:45 EST
Starting Nmap 7.50 (https://nmap
Nmap scan report for 192.168.2.12
Host is up (0.00037s latency).
Not shown: 991 closed ports
PORT STATE SERVICE
135/tcp open msrpc
 139/tcp open netbios-ssn
445/tcp open microsoft-ds
49152/tcp open unknown
49153/tcp open unknown
 49154/tcp open unknown
49155/tcp open unknown
 49156/tcp open unknown
 49159/tcp open unknown
 MAC Address: 00:50:56:01:3C:E3 (VMware)
 Device type: general purpose|media device
Device type: general purpose|media device
Running: Microsoft Windows 2008|10|7|8.1, Microsoft embedded

OS CPE: cpe:/o:microsoft:windows_server_2008::sp2 cpe:/o:microsoft:windows_10 cpe:/h:microsoft:xbox_one cpe:/o:microsoft:windows_7::- cpe:/o
:microsoft:windows_7::sp1 cpe:/o:microsoft:windows_8 cpe:/o:microsoft:windows_8.1

OS details: Microsoft Windows Server 2008 SP2 or Windows 10 or Xbox One, Microsoft Windows 7 SP0 - SP1, Windows Server 2008 SP1, Windows Server 2008 R2, Windows 8, or Windows 8.1 Update 1
 Network Distance: 1 hop
 OS detection performed. Please report any incorrect results at https://nmap.org/submit/ . Nmap done: 1 IP address (1 host up) scanned in 65.36 seconds
 root@kali:~#
```

```
0 0
                                      root@kali: ~
File Edit View Search Terminal Help
root@kali:~# nmap -sP 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:00 EST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 0.46 seconds
root@kali:~#
                                                                            0
                                                                                  0
                                      root@kali: ~
File Edit View Search Terminal Help
root@kali:~# nmap -sT 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:02 EST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 0.53 seconds
root@kali:~# nmap -Pn 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:03 EST
Nmap done: 1 IP address (0 hosts up) scanned in 0.52 seconds
root@kali:~#
File Edit View Search Terminal Help
root@kali:~# nmap -sS 192.168.2.12
Starting Nmap 7.50 (https://nmap.org) at 2018-01-27 22:04 EST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 0.51 seconds
root@kali:~#
File Edit View Search Terminal Help
root@kali:~# nmap -0 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:06 EST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 0.84 seconds
root@kali:~#
root@kali:~# nmap -sU 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:07 EST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 0.51 seconds
root@kali:~#
root@kali:~# nmap -sV -sS -P0 -f -T 2 192.168.2.12
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:08 EST
Nmap done: 1 IP address (0 hosts up) scanned in 1.66 seconds
root@kali:~#
```

```
root@kali:~# nmap -sU 192.168.2.11
Starting Nmap 7.50 ( https://nmap.org ) at 2018-02-01 19:06 EST
Nmap scan report for 192.168.2.11
Host is up (0.00065s latency).
Not shown: 990 closed ports
PORT
        STATE
                      SERVICE
123/udp open|filtered ntp
135/udp open
                     msrpc
137/udp open
                     netbios-ns
138/udp open|filtered netbios-dgm
445/udp open|filtered microsoft-ds
500/udp open|filtered isakmp
1028/udp open|filtered ms-lsa
1031/udp open
3456/udp open|filtered IISrpc-or-vat
4500/udp open|filtered nat-t-ike
MAC Address: 00:50:56:01:37:30 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 3.43 seconds
```

b. For the following scans, you will need to attack a UNIX box that has been setup by your instructor. Please record the IP address of the UNIX box here. 1. $\underline{192.168.2.15}$

```
root@kali:~# nmap -sF 192.168.2.15
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:18 EST
Nmap scan report for 192.168.2.15
Host is up (0.00062s latency).
Not shown: 987 closed ports
PORT
       STATE
                      SERVICE
21/tcp open|filtered ftp
22/tcp open|filtered ssh
53/tcp open|filtered domain
80/tcp open|filtered http
110/tcp open|filtered pop3
111/tcp open|filtered rpcbind
139/tcp open|filtered netbios-ssn
143/tcp open|filtered imap
445/tcp open|filtered microsoft-ds
901/tcp open|filtered samba-swat
993/tcp open|filtered imaps
995/tcp open|filtered pop3s
8080/tcp open|filtered http-proxy
MAC Address: 00:50:56:01:3C:E5 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 95.66 seconds
root@kali:~#
```

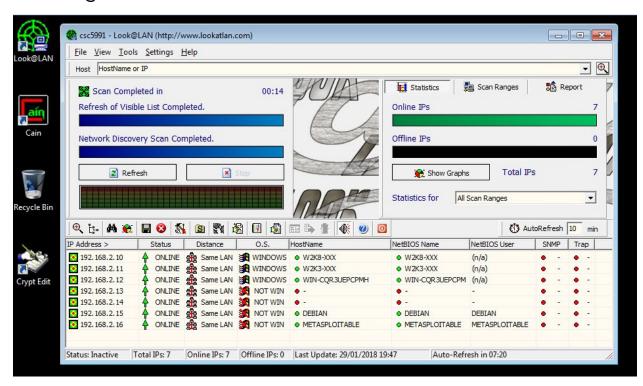
```
0 0
                                       root@kali: ~
 File Edit View Search Terminal Help
root@kali:~# nmap -sX 192.168.2.15
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:43 EST
Nmap scan report for 192.168.2.15
Host is up (0.00057s latency).
Not shown: 987 closed ports
PORT STATE
                      SERVICE
21/tcp open|filtered ftp
22/tcp open|filtered ssh
53/tcp open|filtered domain
80/tcp open|filtered http
110/tcp open|filtered pop3
111/tcp open|filtered rpcbind
139/tcp open|filtered netbios-ssn
143/tcp open|filtered imap
445/tcp open|filtered microsoft-ds
901/tcp open|filtered samba-swat
993/tcp open|filtered imaps
995/tcp open|filtered pop3s
8080/tcp open|filtered http-proxy
MAC Address: 00:50:56:01:3C:E5 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 94.61 seconds
root@kali:~#
```

```
root@kali:~# nmap -sN 192.168.2.15
Starting Nmap 7.50 ( https://nmap.org ) at 2018-01-27 22:46 EST
Nmap scan report for 192.168.2.15
Host is up (0.00055s latency).
Not shown: 987 closed ports
                      SERVICE
PORT
        STATE
21/tcp open|filtered ftp
22/tcp open|filtered ssh
53/tcp open|filtered domain
80/tcp open|filtered http
110/tcp open|filtered pop3
111/tcp open|filtered rpcbind
139/tcp open|filtered netbios-ssn
143/tcp open|filtered imap
445/tcp open|filtered microsoft-ds
901/tcp open|filtered samba-swat
993/tcp open|filtered imaps
995/tcp open|filtered pop3s
8080/tcp open|filtered http-proxy
MAC Address: 00:50:56:01:3C:E5 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 95.43 seconds
root@kali:~#
```

```
root@kali:~# ls
139.txt Documents Music Pictures Templates
Desktop Downloads Nessus-6.10.9-debian6_amd64.deb Public Videos
```

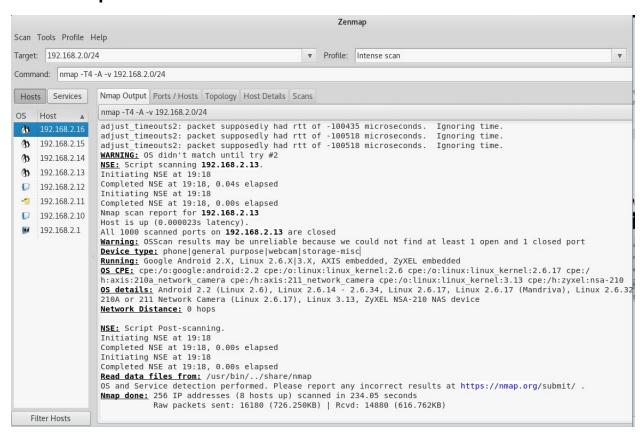
```
root@kali: ~
                                                                      0 0 0
File Edit View Search Terminal Help
root@kali:~# cat 139.txt
# Nmap 7.50 scan initiated Sat Jan 27 23:29:29 2018 as: nmap -sV -v -p 139 -oG 1
39.txt 192.168.2.0/16
# Ports scanned: TCP(1;139) UDP(0;) SCTP(0;) PROTOCOLS(0;)
Host: 192.168.0.0 () Status: Down
                    Status: Down
Status: Down
Host: 192.168.0.2 ()
Host: 192.168.0.3 ()
Host: 192.168.0.4 () Status: Down
Host: 192.168.0.5 () Status: Down
Host: 192.168.0.6 () Status: Down
Host: 192.168.0.7 () Status: Down
Host: 192.168.0.8 () Status: Down
Host: 192.168.0.9 () Status: Down
Host: 192.168.0.10 () Status: Down
Host: 192.168.0.11 () Status: Down
Host: 192.168.0.12 () Status: Down
Host: 192.168.0.13 () Status: Down
Host: 192.168.0.14 () Status: Down
Host: 192.168.0.15 () Status: Down
Host: 192.168.0.16 () Status: Down
Host: 192.168.0.17 () Status: Down
Host: 192.168.0.18 () Status: Down
Host: 192.168.0.19 () Status: Down
Host: 192.168.0.20 () Status: Down
```

3.5 Look@LAN





3.6 Zenmap



3.7 Hping3

- i. Take note of the following options: -c, -S, -p, -2 and -F
 - -c

 −count packet count
 - -S □ -baseport base source port
 - -p □ -destport [+][+] <port> destination port (default 0) ctrl+z inc/dec
 - -2 □ -udp UDP mode

b. Half-open SYN Scan

```
root@kali:~# hping3 -S 192.168.0.15 -p 80 -c 1
HPING 192.168.0.15 (eth0 192.168.0.15): S set, 40 headers + 0 data bytes
len=46 ip=192.168.0.15 ttl=63 DF id=22930 sport=80 flags=SA seq=0 win=65228 rtt=6.6 ms
--- 192.168.0.15 hping statistic ---
1 packets transmitted, 1 packets received, 0% packet loss
round-trip min/avg/max = 6.6/6.6/6.6 ms
```

c. UDP Scan (target windows computer)

```
root@kali: ~

File Edit View Search Terminal Help

root@kali: ~# hping3 -2 192.168.2.12 -p 139 -c 1

HPING 192.168.2.12 (eth0 192.168.2.12): udp mode set, 28 headers + 0 data bytes

ICMP Port Unreachable from ip=192.168.2.12 name=UNKNOWN

status=0 port=2427 seq=0

--- 192.168.2.12 hping statistic ---
1 packets transmitted, 1 packets received, 0% packet loss

round-trip min/avg/max = 26.8/26.8/26.8 ms

root@kali: ~# 

d FIN Scap (used against Dobian)
```

d. FIN Scan (used against Debian)

```
root@kali:~# hping3 -F 192.168.2.15 -p 6000 -c 1
HPING 192.168.2.15 (eth0 192.168.2.15): F set, 40 headers + 0 data bytes
len=46 ip=192.168.2.15 ttl=64 DF id=62111 sport=6000 flags=RA seq=0 win=0 rtt=7.9 ms
--- 192.168.2.15 hping statistic ---
1 packets transmitted, 1 packets received, 0% packet loss
round-trip min/avg/max = 7.9/7.9/7.9 ms
root@kali:~#
```

Vulnerabilities

No vulnerabilities discovered in this lab.