6. Block Facebook on IPTables

[root@localhost ~]# host facebook.com

facebook.com has address 157.240.24.35

facebook.com has IPv6 address 2a03:2880:f10c:283:face:b00c:0:25de

facebook.com mail is handled by 10 smtpin.vvv.facebook.com.

7. Whois

[root@localhost ~]# whois 157.240.24.35 | grep CIDR CIDR: 157.240.0.0/16 [root@localhost ~]# whois 157.240.24.35 [Querying whois.arin.net] [whois.arin.net]

#

ARIN WHOIS data and services are subject to the Terms of Use # available at: https://www.arin.net/resources/registry/whois/tou/

If you see inaccuracies in the results, please report at

https://www.arin.net/resources/registry/whois/inaccuracy_reporting/

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NetRange: 157.240.0.0 - 157.240.255.255 CIDR: 157.240.0.0/16

NetName: THEFA-3 NetHandle: NET-157-240-0-0-1

Parent: NET157 (NET-157-0-0-0-0)

NetType: Direct Assignment OriginAS:

Organization: Facebook, Inc. (THEFA-3) RegDate: 2015-05-14

Updated: 2015-05-14

Ref: https://rdap.arin.net/registry/ip/157.240.0.0

OrgName: Facebook, Inc. OrgId: THEFA-3

Address: 1601

Willow Rd. City: Menlo Park StateProv: CA

PostalCode: 94025

Country: US

RegDate: 2004-08-11

Updated: 2012-04-17

Ref: https://rdap.arin.net/registry/entity/THEFA-3

OrgTechHandle: OPERA82-ARIN

OrgTechName: Operations

OrgTechPhone: +1-650-543-4800

OrgTechEmail: domain@facebook.com

OrgTechRef: https://rdap.arin.net/registry/entity/OPERA82-ARIN

OrgAbuseHandle: OPERA82-ARIN

OrgAbuseName: Operations

OrgAbusePhone: +1-650-543-4800

OrgAbuseEmail: domain@facebook.com

OrgAbuseRef: https://rdap.arin.net/registry/entity/OPERA82-ARIN

#

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available at: https://www.arin.net/resources/registry/whois/tou/#

If you see inaccuracies in the results, please report at

https://www.arin.net/resources/registry/whois/inaccuracy_reporting/

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```
[root@localhost ~]# iptables -A OUTPUT -p tcp -d 157.240.0.0/16 -j DROP
```

Open browser and check whether http://facebook.com is accessible

To allow facebook use -D instead of -A option

```
[root@localhost ~]# iptables -D OUTPUT -p tcp -d 157.240.0.0/16 -j DROP
```

8. Block Access to your system from specific MAC Address(say 0F:22:1E:00:02:30)

```
[root@localhost ~]# iptables -A INPUT -m mac --mac-source 0F:22:1E:00:02:30 -j DROP
```

9. Save IPtables rules to a file

```
[root@localhost ~]# iptables-save > ~/iptables.rules
[root@localhost ~]# vi iptables.rules
```

10. Restrict number of concurrent connections to a Server(Here restrict to 3 connections only)

[root@localhost ~]# iptables -A INPUT -p tcp --syn --dport 22 -m connlimit --connlimit-above 3 -j REJECT

11. Disable outgoing mails through IPtables

[root@localhost ~]# iptables -A OUTPUT -p tcp --dport 25 -j REJECT

12. Flush IPtables Firewall chains or rules

[root@localhost ~]# iptables -F

RESULT:

This lab provided a basic understanding of iptables installation and configuration by experimenting with different rules and options, you can gain practical skills in managing network security using iptables

MITM ATTACK WITH ETTERCAP

EXP.NO: 12 **DATE:08-04-2025**

AIM:

To initiate a MITM attack using ICMP redirect with Ettercap tool.

ALGORITHM:

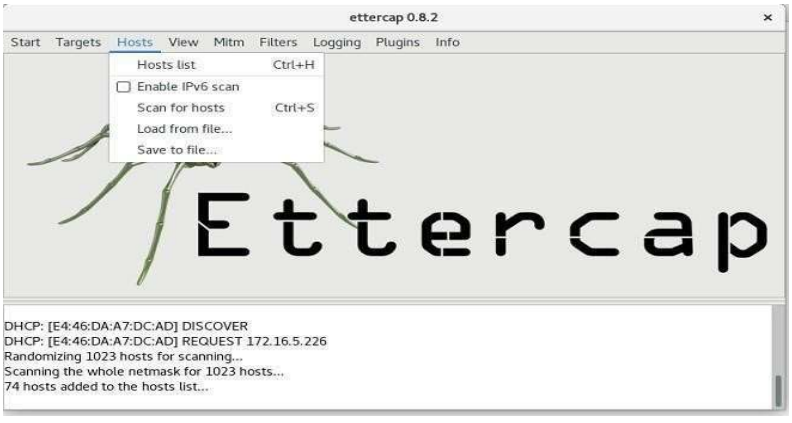
1. Install ettercap if not done already using the
   command- dnf install ettercap
2. Open etter.conf file and change the values of ec_uid and ec_gid to zero from default. vi
   /etc/ettercap/etter.conf
3. Next start ettercap in
   GTK ettercap -G
4. Click sniff, followed by unified sniffing.
5. Select the interface connected to the network.
6. Next ettercap should load into attack mode by clicking Hosts followed by Scan for Hosts
7. Click Host List and choose the IP address for ICMP redirect
8. Now all traffic to that particular IP address is redirected to some other IP address.
9. Click MITM and followed by Stop to close the attack.

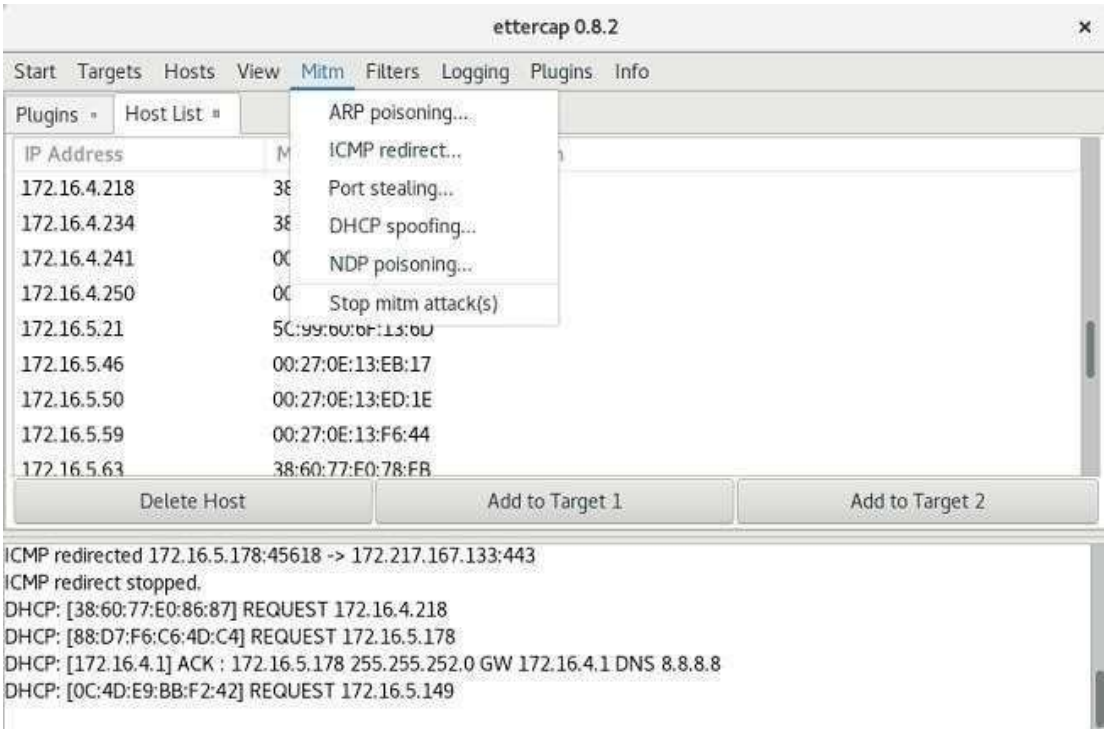
OUTPUT:

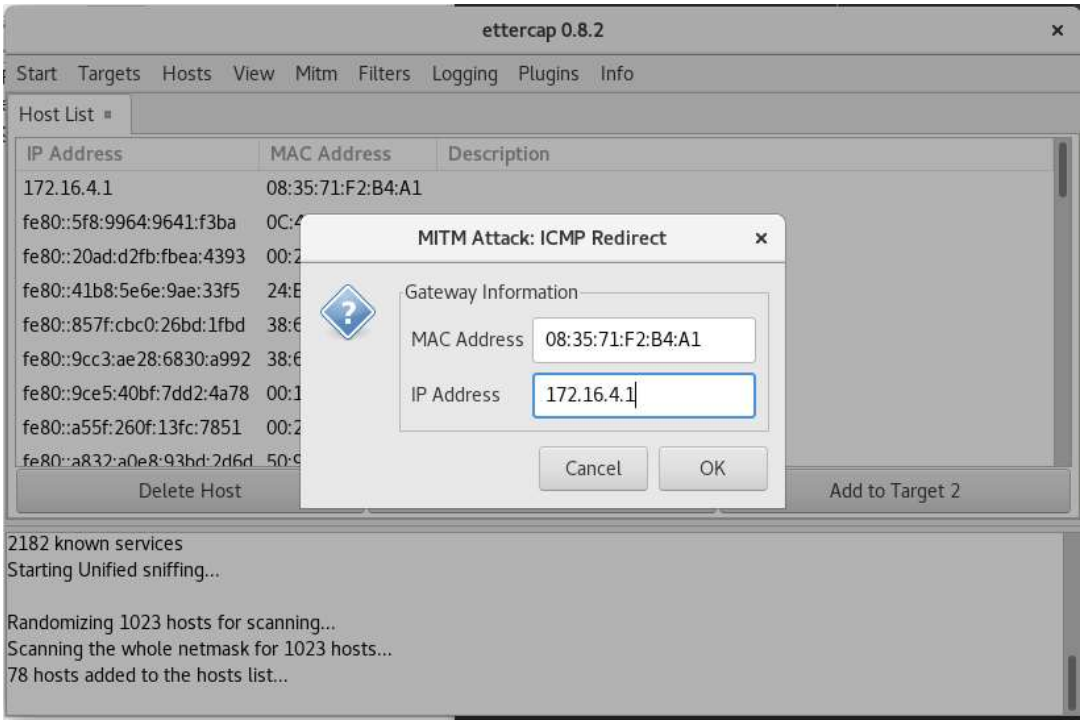
[root@localhost security lab]# dnf install ettercap

[root@localhost security lab]# vi /etc/ettercap/etter.conf

[root@localhost security lab]# ettercap –G




ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Plugins
Host List
ARP poisoning...
ICMP redirect...
Port stealing...
DHCP spoofing...
NDP poisoning...
Stop mitm attack(s)
IP Address
172.16.4.218
172.16.4.234
172.16.4.241
172.16.4.250
172.16.5.21
172.16.5.46 00:27:0E:13:EB:17
172.16.5.50 00:27:0E:13:ED:1E
172.16.5.59 00:27:0E:13:F6:44
Delete Host
Add to Target 1
Add to Target 2
ICMP redirected 172.16.5.178:45618 -> 172.217.167.133:443
ICMP redirect stopped.
DHCP: [38:60:77:E0:86:87] REQUEST 172.16.4.218
DHCP: [88:D7:F6:C6:4D:C4] REQUEST 172.16.5.178
DHCP: [172.16.4.1] ACK : 172.16.5.178 255.255.252.0 GW 172.16.4.1 DNS 8.8.8.8
DHCP: [0C:4D:E9:BB:F2:42] REQUEST 172.16.5.149


ettercap 0.8.2
Start Targets Hosts View Mitm Filters Logging Plugins Info
Host List
IP Address
MAC Address
Description
172.16.4.1 08:35:71:F2:B4:A1
fe80::5f8:9964:9641:f3ba
fe80::20ad:d2fb:fbea:4393
fe80::41b8:5e6e:9ae:33f5
fe80::857f:cbc0:26bd:1fbd
fe80::9cc3:ae28:6830:a992
fe80::9ce5:40bf:7dd2:4a78
fe80::a55f:260f:13fc:7851
MITM Attack: ICMP Redirect
Gateway Information
MAC Address 08:35:71:F2:B4:A1
IP Address 172.16.4.1
Cancel
OK
Delete Host
Add to Target 2
2182 known services
Starting Unified sniffing...
Randomizing 1023 hosts for scanning...
Scanning the whole netmask for 1023 hosts...
78 hosts added to the hosts list...