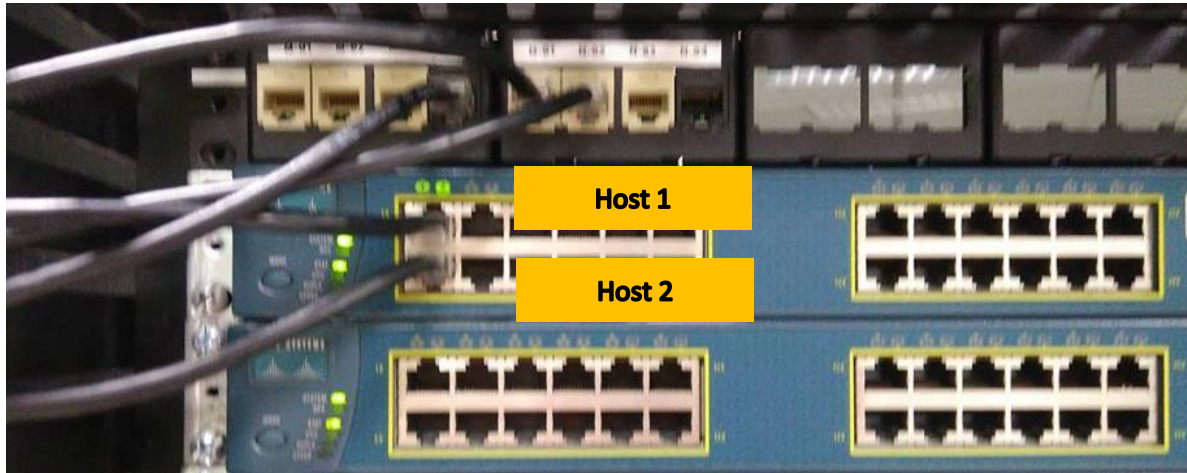


Práctica de Laboratorio #3

1. Foto de la topología armada:



2. Mac address table:

```
redes - HyperTerminal
File Edit View Call Transfer Help

All 0012.d9e3.a209 STATIC CPU
All 0012.d9e3.a20a STATIC CPU
All 0012.d9e3.a20b STATIC CPU
All 0012.d9e3.a20c STATIC CPU
All 0012.d9e3.a20d STATIC CPU
All 0012.d9e3.a20e STATIC CPU
All 0012.d9e3.a20f STATIC CPU
All 0012.d9e3.a210 STATIC CPU
All 0012.d9e3.a211 STATIC CPU

Switch#sh port-security
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security Action
          (Count)          (Count)          (Count)
-----
Fa0/2          1          0          0          Shutdown

Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#_

Connected 00:47:05 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

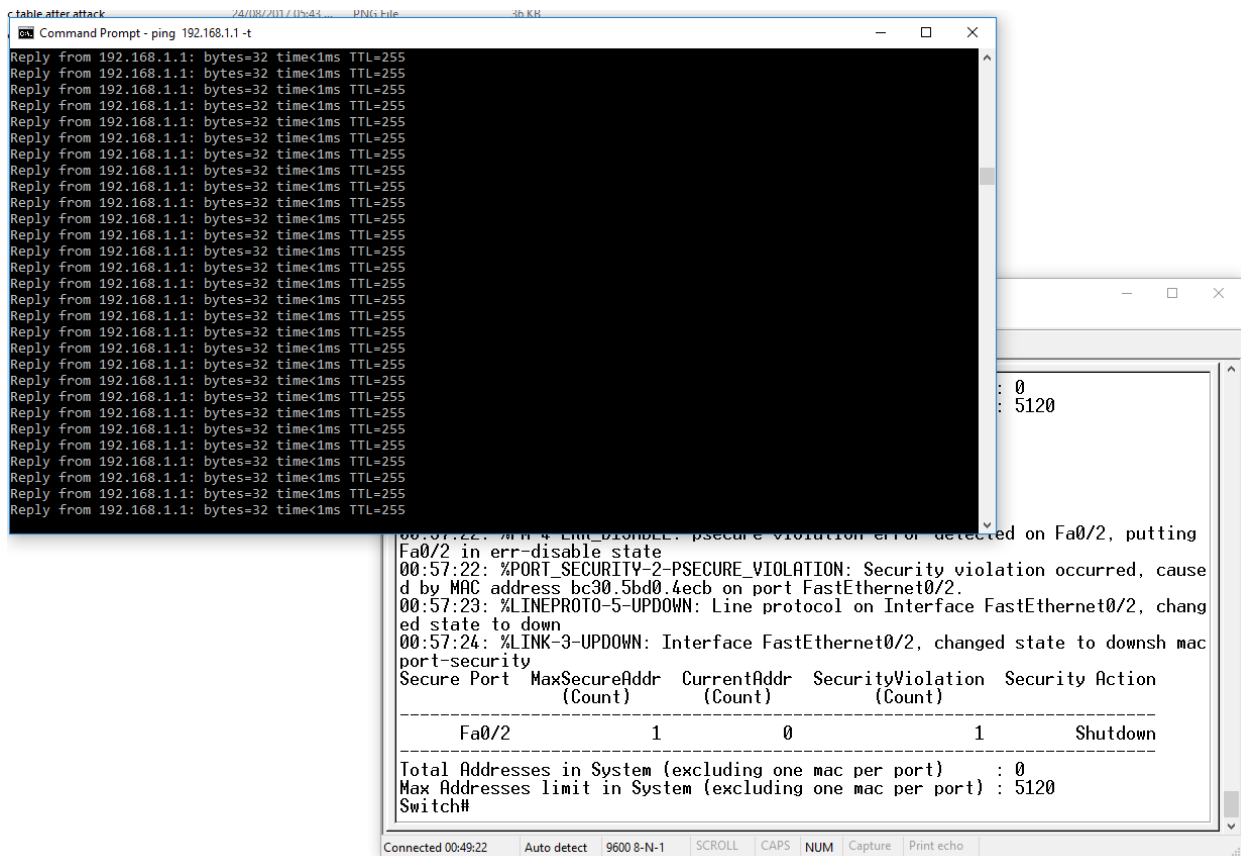
3. Ataque desde Kali Linux:

```
Applications Places Terminal Thu 18:56
root@redes-03: ~
File Edit View Search Terminal Help

64 bytes from 192.168.1.1: icmp_seq=67 ttl=255 time=0.469 ms
64 bytes from 192.168.1.1: icmp_seq=68 ttl=255 time=0.515 ms
64 bytes from 192.168.1.1: icmp_seq=69 ttl=255 time=0.522 ms
64 bytes from 192.168.1.1: icmp_seq=70 ttl=255 time=0.470 ms
64 bytes from 192.168.1.1: icmp_seq=71 ttl=255 time=0.514 ms
64 bytes from 192.168.1.1: icmp_seq=72 ttl=255 time=0.517 ms
64 bytes from 192.168.1.1: icmp_seq=73 ttl=255 time=0.471 ms
64 bytes from 192.168.1.1: icmp_seq=74 ttl=255 time=0.518 ms
64 bytes from 192.168.1.1: icmp_seq=75 ttl=255 time=0.515 ms
64 bytes from 192.168.1.1: icmp_seq=76 ttl=255 time=0.520 ms
64 bytes from 192.168.1.1: icmp_seq=77 ttl=255 time=0.512 ms
64 bytes from 192.168.1.1: icmp_seq=78 ttl=255 time=0.522 ms
64 bytes from 192.168.1.1: icmp_seq=79 ttl=255 time=0.531 ms
64 bytes from 192.168.1.1: icmp_seq=80 ttl=255 time=0.521 ms
64 bytes from 192.168.1.1: icmp_seq=81 ttl=255 time=0.525 ms
64 bytes from 192.168.1.1: icmp_seq=82 ttl=255 time=0.525 ms
64 bytes from 192.168.1.1: icmp_seq=83 ttl=255 time=0.525 ms
64 bytes from 192.168.1.1: icmp_seq=84 ttl=255 time=0.519 ms
64 bytes from 192.168.1.1: icmp_seq=85 ttl=255 time=0.521 ms
64 bytes from 192.168.1.1: icmp_seq=86 ttl=255 time=0.515 ms
ping: sendmsg: Network is unreachable
ping: sendmsg: Network is unreachable
ping: sendmsg: Network is unreachable

=4078 seq=30 IP [ttl=64 id=41757 iplen=28 ]
SENT (5.9302s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=31 IP [ttl=64 id=41757 iplen=28 ]
SENT (6.1302s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=32 IP [ttl=64 id=41757 iplen=28 ]
SENT (6.3305s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=32 IP [ttl=64 id=41757 iplen=28 ]
SENT (6.5306s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=34 IP [ttl=64 id=41757 iplen=28 ]
SENT (6.7306s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=35 IP [ttl=64 id=41757 iplen=28 ]
SENT (6.9306s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=36 IP [ttl=64 id=41757 iplen=28 ]
SENT (7.1306s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=37 IP [ttl=64 id=41757 iplen=28 ]
SENT (7.3309s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=37 IP [ttl=64 id=41757 iplen=28 ]
SENT (7.5310s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=39 IP [ttl=64 id=41757 iplen=28 ]
SENT (7.7310s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=40 IP [ttl=64 id=41757 iplen=28 ]
SENT (7.9310s) ICMP [192.168.1.11 > 192.168.1.10 Echo request (type=8/code=0) id
=4078 seq=41 IP [ttl=64 id=41757 iplen=28 ]
```

4. Host 1 no pierde conectividad:



5. Resumen de port security (shutdown, restrict y protect):

Shutdown:

```
redes - HyperTerminal
File Edit View Call Transfer Help
Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#
00:57:22: %PM-4-ERR_DISABLE: psecure-violation error detected on Fa0/2, putting
Fa0/2 in err-disable state
00:57:22: %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, cause
d by MAC address bc30.5bd0.4ecb on port FastEthernet0/2.
00:57:23: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, chang
ed state to down
00:57:24: %LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to downsh mac
port-security
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security Action
(Count) (Count) (Count)
-----
Fa0/2 1 0 1 Shutdown
-----
Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#_
Connected 00:49:02 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

Restrict:

```
redes - HyperTerminal
File Edit View Call Transfer Help
01:01:08: %LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to upsh port-
port-security
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security Action
(Count) (Count) (Count)
-----
Fa0/2 1 0 0 Restrict
-----
Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#
01:01:43: %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, cause
d by MAC address bc30.5bd0.4ecb on port FastEthernet0/2.sh port-security
01:01:48: %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, cause
d by MAC address bc30.5bd0.4ecb on port FastEthernet0/2.
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security Action
(Count) (Count) (Count)
-----
Fa0/2 1 1 35 Restrict
-----
Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#
01:01:53: %PORT_SECURITY-2-PSECURE_VIOLATION: Security violation occurred, cause
d by MAC address bc30.5bd0.4ecb on port FastEthernet0/2._
Connected 00:52:51 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

Protect:

```
redes - HyperTerminal
File Edit View Call Transfer Help
[Icons]

Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security Action
              (Count)        (Count)        (Count)
-----
Fa0/2         1          1              0              Protect

Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#sh port-security
Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security Action
              (Count)        (Count)        (Count)
-----
Fa0/2         1          1              0              Protect

Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#sh port-security
Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security Action
              (Count)        (Count)        (Count)
-----
Fa0/2         1          1              0              Protect

Total Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 5120
Switch#_

Connected 00:56:16  Auto detect  9600 8-N-1  SCROLL  CAPS  NUM  Capture  Print echo
```