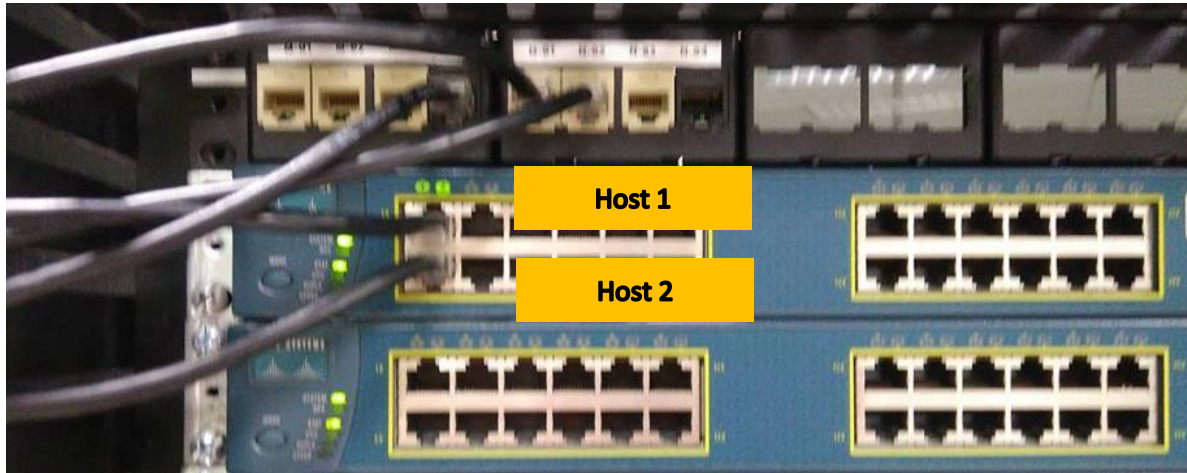


## Práctica de Laboratorio #2

1. Foto de la topología armada:



2. Mac address table antes y después del ataque:

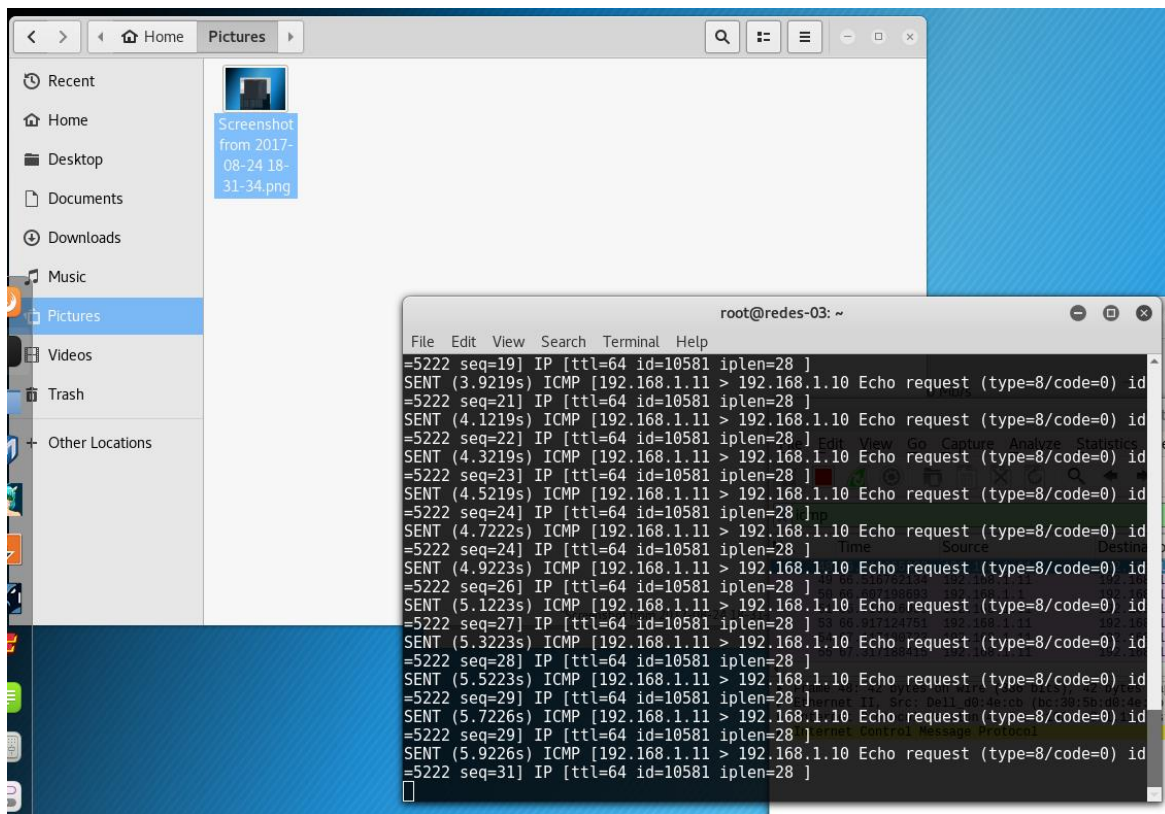
Antes:

```
redes - HyperTerminal
File Edit View Call Transfer Help
[Icons]
All 0180.c200.000c STATIC CPU
All 0180.c200.000d STATIC CPU
All 0180.c200.000e STATIC CPU
All 0180.c200.000f STATIC CPU
All 0180.c200.0010 STATIC CPU
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
Total Mac Addresses for this criterion: 48
Switch#show mac address-table | i dynamic
Switch#show mac address-table | i DYNAMIC
1 bc30.5be5.091b DYNAMIC Fa0/2
Switch#show mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.091b DYNAMIC Fa0/2
Switch#
Switch#show mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.091b DYNAMIC Fa0/2
Switch#show mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.091b DYNAMIC Fa0/2
Switch#show mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.091b DYNAMIC Fa0/2
Switch#_
Connected 00:06:14 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

Después:

```
redes - HyperTerminal
File Edit View Call Transfer Help
[Icons]
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
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/1
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/2
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/2
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#sh mac address-table | i DYNAMIC
1 bc30.5bd0.4ecb DYNAMIC Fa0/2
1 bc30.5be5.0916 DYNAMIC Fa0/2
Switch#_
Connected 00:34:01 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo
```

### 3. Ataque desde Kali Linux:



4. Host 1 pierde conectividad:

```
CA: Command Prompt - ping 192.168.1.1 -t
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Request timed out.
Request timed out.
Request timed out.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.10: Destination host unreachable.
Reply from 192.168.1.1: bytes=32 time=998ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Request timed out.
Request timed out.
Request timed out.
```

##### 5. Monitoreo desde WireShark:

\*eth0

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

icmp Expression...

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000000	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=46/11776, ttl=64 (no resp.
2	0.200018480	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=47/12032, ttl=64 (no resp.
3	0.400287983	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=47/12032, ttl=64 (no resp.
4	0.600340563	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=49/12544, ttl=64 (no resp.
6	0.800354941	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=50/12800, ttl=64 (no resp.
7	1.000364004	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=51/13056, ttl=64 (no resp.
8	1.040960800	192.168.1.1	192.168.1.10	ICMP	74	Echo (ping) reply id=0x0001, seq=1340/15365, ttl=255
9	1.200372361	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=52/13312, ttl=64 (no resp.
10	1.400703253	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=52/13312, ttl=64 (no resp.
11	1.600766974	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=54/13824, ttl=64 (no resp.
12	1.800777220	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=55/14080, ttl=64 (no resp.
13	2.000785579	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=56/14336, ttl=64 (no resp.
14	2.200795927	192.168.1.11	192.168.1.10	ICMP	42	Echo (ping) request id=0x8e47, seq=57/14592, ttl=64 (no resp.

Frame 1: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface 0

Ethernet II, Src: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb), Dst: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb)

- Destination: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb)
  - Address: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb)
    - .... 0. .... = LG bit: Globally unique address (factory default)
    - .... 0. .... = IG bit: Individual address (unicast)
- Source: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb)
  - Address: Dell\_d0:4e:cb (bc:30:5b:d0:4e:cb)
    - .... 0. .... = LG bit: Globally unique address (factory default)
    - .... 0. .... = IG bit: Individual address (unicast)
  - Type: IPv4 (0x0800)
- Internet Protocol Version 4, Src: 192.168.1.11, Dst: 192.168.1.10
  - 0100 .... = Version: 4
  - .... 0101 = Header Length: 20 bytes (5)
  - Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

```

0000 bc 30 5b d0 4e cb 30 5b d0 4e cb 08 00 45 00  .0[N..0[N...E.
0010 00 1c 8b d3 00 00 40 01 6b a8 c0 a8 01 0b c0 a8  ....0.K.....
0020 01 0a 08 00 69 8a 8e 47 00 2e                ....i..G..

```

Fragment offset (13 bits) (ip.frag\_offset), 2 bytes

Packets: 162 · Displayed: 118 (72.8%) Profile: Default