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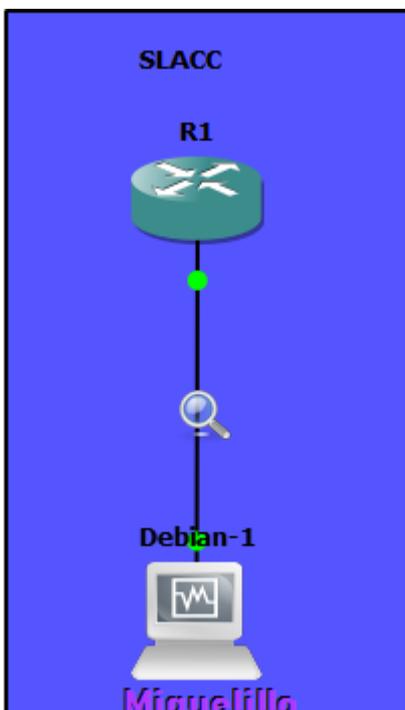
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## Ejercicio 1

a) de dirección IPv6 sin estado (SLAAC)

Solución:

Escenario



Abrimos la consola, configuramos la dirección IPv6, configuramos los flags activamos el enrutamiento unicast.

```

R1#config t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface FastEthernet 0/0
R1(config-if)#ipv6 address 2001:db8:CAFE:30::1/64
R1(config-if)#no shutdown
R1(config-if)#no ipv6 nd managed-config-flag
R1(config-if)#no ipv6 nd other-config-flag
R1(config-if)#exit
R1(config)#ipv6 unicast-routing
R1(config)#do wr
Warning: Attempting to overwrite an MVRAM configuration previously written
by a different version of the system image.
Overwrite the previous MVRAM configuration?[confirm]
Building configuration...
[OK]
  
```

Captura paquetes

Debian-1 Ethernet0 to R1 FastEthernet0/0

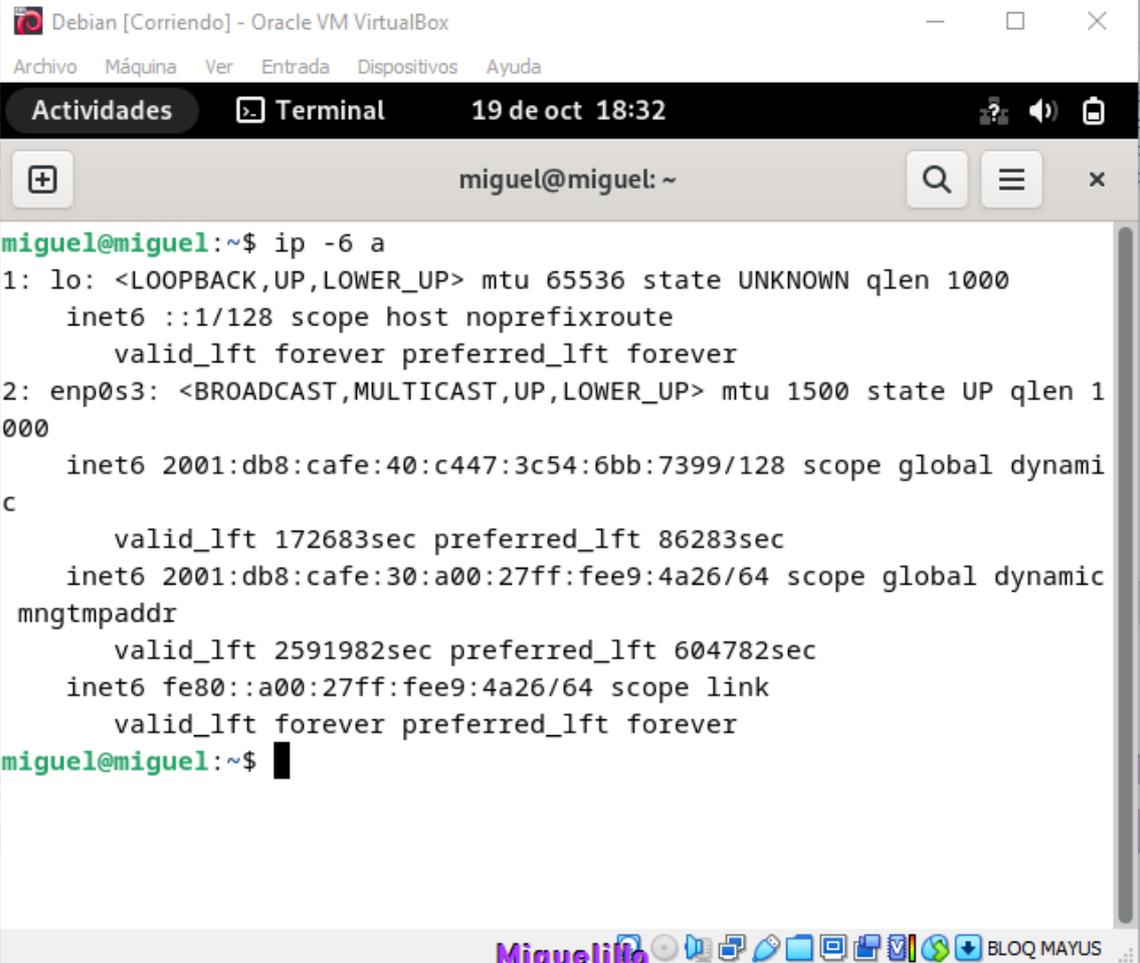
Archivo Edición Visualización Ir Captura Analizar Estadísticas Telefonía Wireless Herramientas Ayuda

dhcipv6

No.	Time	Source	Destination	Protocol	Length	Info
260	75.855939	fe80::a00:27ff:fee9... ff02::1:2	ff02::1:2	DHCPv6	146	Confirm XID: 0xa851a4 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399
261	76.936781	fe80::a00:27ff:fee9... ff02::1:2	ff02::1:2	DHCPv6	146	Confirm XID: 0xa851a4 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399
284	79.017719	fe80::a00:27ff:fee9... ff02::1:2	ff02::1:2	DHCPv6	146	Confirm XID: 0xa851a4 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399
286	83.107663	fe80::a00:27ff:fee9... ff02::1:2	ff02::1:2	DHCPv6	146	Confirm XID: 0xa851a4 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399

Miguelillo

## Cliente Debian

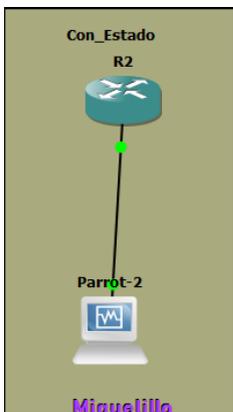


```
Debian [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Actividades Terminal 19 de oct 18:32
miguel@miguel: ~
miguel@miguel:~$ ip -6 a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 state UNKNOWN qlen 1000
   inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 state UP qlen 1000
   inet6 2001:db8:cafe:40:c447:3c54:6bb:7399/128 scope global dynamic
       valid_lft 172683sec preferred_lft 86283sec
   inet6 2001:db8:cafe:30:a00:27ff:fee9:4a26/64 scope global dynamic
       mngtmpaddr
       valid_lft 2591982sec preferred_lft 604782sec
   inet6 fe80::a00:27ff:fee9:4a26/64 scope link
       valid_lft forever preferred_lft forever
miguel@miguel:~$
```

b) de dirección IPv6 con estado

Solución:

Escenario



Configuración del router, configuramos el pool con el DNS y la dirección de red, configuramos la IP, los flags e indicamos el dhcp

```

R2#config t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#no ipv6 unicast-routing
R2(config)#ipv6 dhcp pool CONESTADO
R2(config-dhcpv6)#address prefix 2001:db8:CAFE:40::/64
R2(config-dhcpv6)#dns-server 2001:db8:CAFE:40::1/64
^
% Invalid input detected at '^' marker.

R2(config-dhcpv6)#exit
R2(config)#interface FastEthernet 0/0
R2(config-if)#ipv6 address 2001:db8:CAFE:40::1/64
R2(config-if)#no shutdown
R2(config-if)#ipv6 nd managed-config-flag
R2(config-if)#ipv6 dhcp server CONESTADO
R2(config-if)#exit
R2(config)#do wr

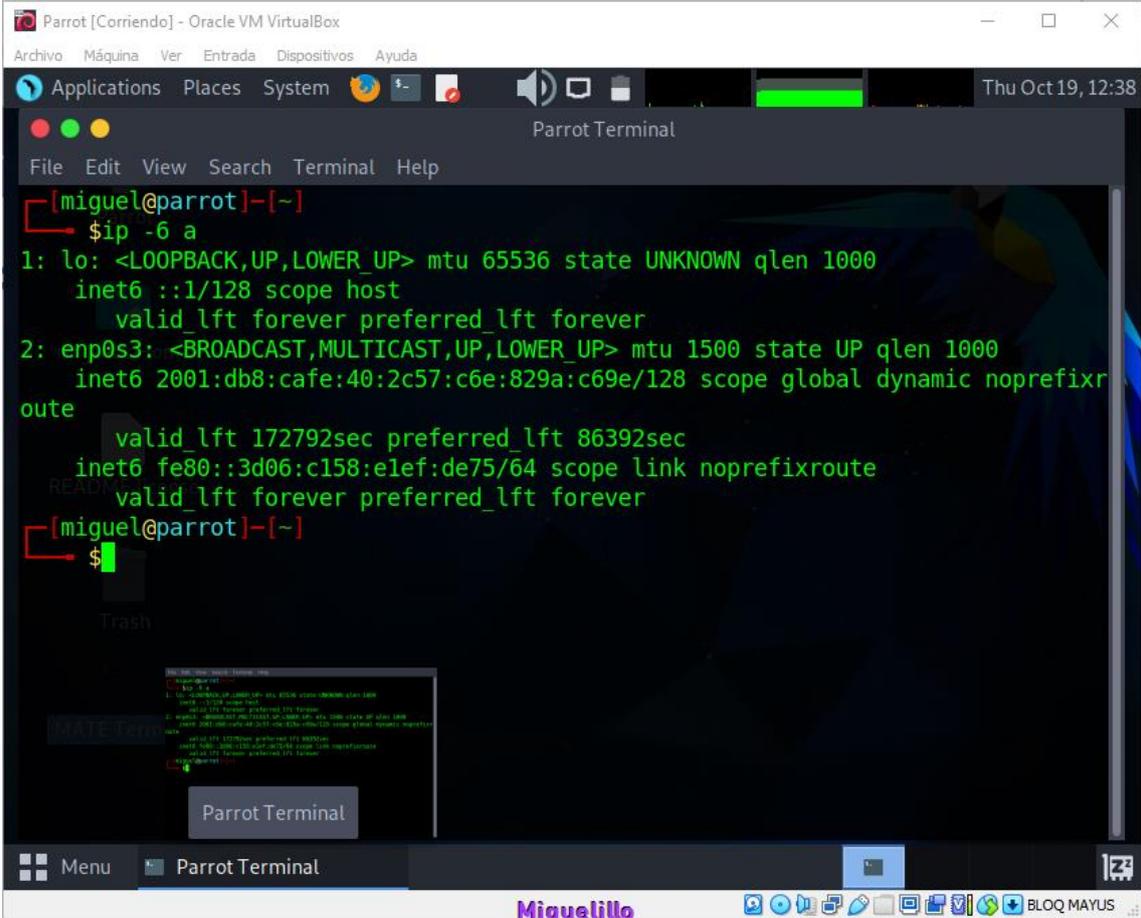
R2(config-dhcpv6)#dns-server 2001:db8:CAFE:40::1
R2(config-dhcpv6)#exit
    
```

Captura Trafico

Wireshark capture window showing traffic on interface R2 FastEthernet0/0 to Debian-1 Ethernet0. The filter is 'dhcpv6'. The table below shows the captured packets:

No.	Time	Source	Destination	Protocol	Length	Info
67	123.403785	fe80::a00:27ff:fee9...	ff02::1:2	DHCPv6	146	Confirm XID: 0x4c6098 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:50:100::200
70	123.432985	fe80::c802:dff:fe14...	fe80::a00:27ff:fee9...	DHCPv6	114	Reply XID: 0x4c6098 CID: 000100012cb90de4080027e94a26
71	123.505039	fe80::a00:27ff:fee9...	ff02::1:2	DHCPv6	118	Solicit XID: 0x0e35c4 CID: 000100012cb90de4080027e94a26
72	123.516495	fe80::c802:dff:fe14...	fe80::a00:27ff:fee9...	DHCPv6	142	Advertise XID: 0x0e35c4 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399
73	124.545664	fe80::a00:27ff:fee9...	ff02::1:2	DHCPv6	160	Request XID: 0xe4b675 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399
74	124.550975	fe80::c802:dff:fe14...	fe80::a00:27ff:fee9...	DHCPv6	142	Reply XID: 0xe4b675 CID: 000100012cb90de4080027e94a26 IAA: 2001:db8:cafe:40:c447:3c54:6bb:7399

## Cliente Parrot



```
Parrot [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Applications Places System
Parrot Terminal
File Edit View Search Terminal Help
[miguel@parrot]~$ ip -6 a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 state UNKNOWN qlen 1000
   inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 state UP qlen 1000
   inet6 2001:db8:cafe:40:2c57:c6e:829a:c69e/128 scope global dynamic noprefixroute
       valid_lft 172792sec preferred_lft 86392sec
   inet6 fe80::3d06:c158:ef:de75/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
[miguel@parrot]~$
```

Trash

Parrot Terminal

Menu Parrot Terminal

Miguelillo

BLOQ MAYUS