

UNIVERSIDAD DON BOSCO
Facultad de Ingeniería Escuela de Computación
Redes de Comunicación. REC404



Grupo 02L

Proyecto de Catedra.

Integrantes:

Apellidos	Nombres	Carnet
Baires Rivera,	Jocelyn Guadalupe	BR200378
Benitez Reyes,	Rudis Eduardo	BR202466
Chacón Erroa,	Wilber Francisco	CE211044
Cortez Ramírez,	Eduardo Andrés	CR210957
Figueroa Castro,	Luis Arturo	FC210980

DOCENTE:

Ing. Aida Lissette Quintanilla Hernández

FECHA DE ENTREGA:

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Comandos	Nombre del Router: RA
<p>Show running-config</p>	<pre> hostname RA ! ! ! enable secret 5 \$1\$mERr\$BbVvL4lTtsWlp0qNz1V9F/ ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef ! ipv6 dhcp pool LAN2C1 prefix-delegation pool LAN2C1-prefijo ! ipv6 local pool LAN2C1-prefijo 2001:D:4::/64 64 spanning-tree mode pvst ! ! ! ! ! ! interface FastEthernet0/0 description Red LAN 1 Cliente 1 no ip address duplex auto speed auto ipv6 address 2001:D:1::/64 eui-64 ipv6 rip Clientel enable ipv6 enable ! interface FastEthernet0/1 description Red LAN 2 Cliente 1 no ip address duplex auto speed auto ipv6 address 2001:D:4:0:201:97FF:FE28:C529/64 ipv6 rip Clientel enable ipv6 enable ipv6 dhcp server LAN2C1 ! interface Serial0/0/0 no ip address ipv6 address FE80::2 link-local ipv6 rip Clientel enable ipv6 enable clock rate 125000 ! interface Serial0/0/1 no ip address ipv6 address 2001:D::3/126 ipv6 rip Clientel enable ipv6 enable clock rate 125000 ! </pre>

```

interface Serial0/0/1
  no ip address
  ipv6 address 2001:D::3/126
  ipv6 rip Clientel enable
  ipv6 enable
  clock rate 125000
!
interface Vlan1
  no ip address
  shutdown
!
ipv6 router rip Clientel
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
banner motd ^CAcceso Restringido a router(RA).Identifquese con
con usuario y contraseya para poder acceder.^C
line con 0
  password RA2022
  login
!
line aux 0
!
line vty 0 4
  password RA2230
  login
!
!
!
end

```

<p>Show ipv6 route</p>	<pre> IPv6 Routing Table - 19 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external C 2001:D::/126 [0/0] via ::, Serial0/0/1 L 2001:D::3/128 [0/0] via ::, Serial0/0/1 R 2001:D::4/126 [120/2] via FE80::201:C7FF:FE51:2801, Serial0/0/1 C 2001:D:1::/64 [0/0] via ::, FastEthernet0/0 L 2001:D:1:0:20B:BEFF:FECE:4E01/128 [0/0] via ::, FastEthernet0/0 C 2001:D:4::/64 [0/0] via ::, FastEthernet0/1 L 2001:D:4:0:201:97FF:FE28:C529/128 [0/0] via ::, FastEthernet0/1 R 2001:D:8::/64 [120/2] via FE80::1, Serial0/0/0 R 2004:3::/126 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2004:3::4/126 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2004:3::A:40:0/108 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2004:3::A:C0:0/112 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2005::20/126 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2006::20/126 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2008:0:A::/126 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2008:0:A:8::/64 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 R 2008:0:A:C::/64 [120/1] via FE80::201:C7FF:FE51:2801, Serial0/0/1 L FF00::/8 [0/0] via ::, Null0 </pre>
<p>Show ipv6 interfaces brief</p>	<pre> FastEthernet0/0 [up/up] FE80::20B:BEFF:FECE:4E01 2001:D:1:0:20B:BEFF:FECE:4E01 FastEthernet0/1 [up/up] FE80::20B:BEFF:FECE:4E02 2001:D:4:0:201:97FF:FE28:C529 Serial0/0/0 [up/up] FE80::2 Serial0/0/1 [up/up] FE80::20B:BEFF:FECE:4E01 2001:D::3 Vlan1 [administratively down/down] </pre>
<p>Show ipv6 protocols</p>	<pre> IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "rip Clientel" Interfaces: FastEthernet0/0 FastEthernet0/1 Serial0/0/0 Serial0/0/1 Redistribution: None </pre>

Comandos	Nombre del Router: RB
<p>Show running-config</p>	<pre> Current configuration : 1112 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname RB ! ! ! enable secret 5 \$l\$mERr\$8wasEvbWOzlcDCiQxLVp5l ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef spanning-tree mode pvst ! ! ! ! ! ! interface FastEthernet0/0 description Red LAN 2 Cliente 1 no ip address duplex auto speed auto ipv6 address FE80::1 link-local ipv6 address 2001:D:8::1/64 ipv6 rip Clientel enable ipv6 enable ! interface FastEthernet0/1 no ip address duplex auto speed auto shutdown ! interface Serial0/0/0 no ip address ipv6 address FE80::1 link-local ipv6 rip Clientel enable ipv6 enable ! interface Serial0/0/1 no ip address clock rate 2000000 shutdown ! interface Vlan1 no ip address shutdown ! ipv6 router rip Clientel ! </pre>

```
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
banner motd ^CAcceso Restringido a router(RB).Identifquese con usuario y contraseya para
poder acceder^C
!
!
!
!
line con 0
password RB2322
login
!
line aux 0
!
line vty 0 4
password RB2340
login
!
!
!
end
```

<p>Show ipv6 route</p>	<pre>IPv6 Routing Table - 17 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external R 2001:D::/126 [120/16] via FE80::2, Serial0/0/0 R 2001:D::4/126 [120/16] via FE80::2, Serial0/0/0 R 2001:D:1::/64 [120/16] via FE80::2, Serial0/0/0 R 2001:D:4::/64 [120/16] via FE80::2, Serial0/0/0 C 2001:D:8::/64 [0/0] via ::, FastEthernet0/0 L 2001:D:8::1/128 [0/0] via ::, FastEthernet0/0 R 2004:3::/126 [120/16] via FE80::2, Serial0/0/0 R 2004:3::4/126 [120/16] via FE80::2, Serial0/0/0 R 2004:3::A:40:0/108 [120/16] via FE80::2, Serial0/0/0 R 2004:3::A:C0:0/112 [120/16] via FE80::2, Serial0/0/0 R 2005::20/126 [120/16] via FE80::2, Serial0/0/0 R 2006::20/126 [120/16] via FE80::2, Serial0/0/0 R 2008:0:A::/126 [120/16] via FE80::2, Serial0/0/0 R 2008:0:A:8::/64 [120/16] via FE80::2, Serial0/0/0 R 2008:0:A:C::/64 [120/16] via FE80::2, Serial0/0/0 R 2008:0:A:E::/64 [120/16] via FE80::2, Serial0/0/0 L FF00::/8 [0/0] via ::, Null0</pre>
<p>Show ipv6 interfaces brief</p>	<pre>FastEthernet0/0 [up/up] FE80::1 2001:D:8::1 FastEthernet0/1 [administratively down/down] Serial0/0/0 [up/up] FE80::1 Serial0/0/1 [administratively down/down] Vlan1 [administratively down/down]</pre>
<p>Show ipv6 protocols</p>	<pre>IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "rip Clientel" Interfaces: FastEthernet0/0 Serial0/0/0 Redistribution: None</pre>

Comandos	Nombre del Router: R1
<p>Show running-config</p>	<pre> Current configuration : 1186 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname R1 ! ! ! enable secret 5 \$l\$mERr\$t/3JlBL3t5LjEqVh09UaE1 ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef spanning-tree mode pvst ! ! ! ! ! interface FastEthernet0/0 description Red LAN 1 Cliente 2 no ip address duplex auto speed auto ipv6 address FE80::1 link-local ipv6 address 2008:0:A:E::1/64 ipv6 enable ipv6 ospf 1 area 0 ! interface FastEthernet0/1 no ip address duplex auto speed auto shutdown ! interface Serial0/0/0 no ip address ipv6 address FE80::3 link-local ipv6 enable ipv6 ospf 1 area 0 clock rate 125000 ! interface Serial0/0/1 no ip address ipv6 address 2008:0:A::3/126 ipv6 enable ipv6 ospf 1 area 0 ! interface Vlan1 no ip address shutdown ! </pre>


```

!
ipv6 router ospf 1
  router-id 1.1.1.1
  log-adjacency-changes
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
banner motd ^CAcceso Restringido a router(R1).Identifquese con usuario y contraseya para
poder acceder^C
!
!
!
line con 0
  password R1457
  login
!
line aux 0
!
line vty 0 4
  password R1034
  login
!
!
!
end

```

<p>Show ipv6 route</p>	<pre>IPv6 Routing Table - 18 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external OE2 2001:D::/126 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2001:D:1::/64 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2001:D:4::/64 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2001:D:8::/64 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2004:3::/126 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2004:3::4/126 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2004:3::A:40:0/108 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2004:3::A:C0:0/112 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2005::20/126 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 OE2 2006::20/126 [110/20] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 C 2008:0:A::/126 [0/0] via ::, Serial0/0/1 L 2008:0:A::3/128 [0/0] via ::, Serial0/0/1 O 2008:0:A::4/126 [110/128] via FE80::209:7CFF:FED4:1D01, Serial0/0/1 O 2008:0:A:8::/64 [110/65] via FE80::4, Serial0/0/0 O 2008:0:A:C::/64 [110/65] via FE80::4, Serial0/0/0 C 2008:0:A:E::/64 [0/0] via ::, FastEthernet0/0 L 2008:0:A:E::1/128 [0/0] via ::, Null0</pre>
<p>Show ipv6 interfaces brief</p>	<pre>FastEthernet0/0 [up/up] FE80::1 2008:0:A:E::1 FastEthernet0/1 [administratively down/down] Serial0/0/0 [up/up] FE80::3 Serial0/0/1 [up/up] FE80::20C:85FF:FE2A:B101 2008:0:A::3 Vlan1 [administratively down/down]</pre>
<p>Show ipv6 protocols</p>	<pre>IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "ospf 1" Interfaces (Area 0) FastEthernet0/0 Serial0/0/1 Serial0/0/0 Redistribution: None</pre>

Show ipv6 OSPF neighbors

Neighbor ID	Pri	State	Dead Time	Interface ID	Interface
2.2.2.2	0	FULL/ -	00:00:34	3	Serial0/0/0
3.3.3.3	0	FULL/ -	00:00:34	4	Serial0/0/1

Comandos	Nombre del Router: R2
<p>Show running-config</p>	<pre> Building configuration... Current configuration : 1333 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname R2 ! ! ! enable secret 5 \$l\$mERr\$7HIazJh3xaRpf4cQng5Nh0 ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef ! ipv6 dhcp pool LAN2C2 prefix-delegation pool LAN2C2-prefijo ! ipv6 local pool LAN2C2-prefijo 2008:0:A:C::/64 64 ! spanning-tree mode pvst ! ! ! ! ! interface FastEthernet0/0 description Red LAN 2 Cliente 2 no ip address duplex auto speed auto ipv6 address 2008:0:A:C:201:97FF:FE28:C529/64 ipv6 enable ipv6 ospf 1 area 0 ipv6 dhcp server LAN2C2 ! interface FastEthernet0/1 description Red LAN 3 Cliente 2 no ip address duplex auto speed auto ipv6 address 2008:0:A:8::/64 eui-64 ipv6 enable ipv6 ospf 1 area 0 </pre>

```

!
interface Serial0/0/0
  no ip address
  ipv6 address FE80::4 link-local
  ipv6 enable
  ipv6 ospf 1 area 0
!
interface Serial0/0/1
  no ip address
  clock rate 2000000
  shutdown
!
interface Vlan1
  no ip address
  shutdown
!
ipv6 router ospf 1
  router-id 2.2.2.2
  log-adjacency-changes
!
ip classless
!
ip flow-export version 9
!
!
!
banner motd ^CAcceso Restringido a router(R2).Identifquese con
con usuario y contraseya para poder acceder^C
!
!
!
!
line con 0
  password R2456
  login
!
line aux 0
!
line vty 0 4
  password R2464
  login
!
!
!
end

```

<p>Show ipv6 route</p>	<pre> IPv6 Routing Table - 18 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external OE2 2001:D::/126 [110/20] via FE80::3, Serial0/0/0 OE2 2001:D:1::/64 [110/20] via FE80::3, Serial0/0/0 OE2 2001:D:4::/64 [110/20] via FE80::3, Serial0/0/0 OE2 2001:D:8::/64 [110/20] via FE80::3, Serial0/0/0 OE2 2004:3::/126 [110/20] via FE80::3, Serial0/0/0 OE2 2004:3::4/126 [110/20] via FE80::3, Serial0/0/0 OE2 2004:3::A:40:0/108 [110/20] via FE80::3, Serial0/0/0 OE2 2004:3::A:C0:0/112 [110/20] via FE80::3, Serial0/0/0 OE2 2005::20/126 [110/20] via FE80::3, Serial0/0/0 OE2 2006::20/126 [110/20] via FE80::3, Serial0/0/0 O 2008:0:A::/126 [110/128] via FE80::3, Serial0/0/0 O 2008:0:A::4/126 [110/192] via FE80::3, Serial0/0/0 C 2008:0:A:8::/64 [0/0] via ::, FastEthernet0/1 L 2008:0:A:8:2E0:B0FF:FE3A:4702/128 [0/0] via ::, FastEthernet0/1 C 2008:0:A:C::/64 [0/0] via ::, FastEthernet0/0 L 2008:0:A:C:201:97FF:FE28:C529/128 [0/0] via ::, FastEthernet0/0 O 2008:0:A:E::/64 [110/65] </pre>
<p>Show ipv6 interfaces brief</p>	<pre> FastEthernet0/0 [up/up] FE80::2E0:B0FF:FE3A:4701 2008:0:A:C:201:97FF:FE28:C529 FastEthernet0/1 [up/up] FE80::2E0:B0FF:FE3A:4702 2008:0:A:8:2E0:B0FF:FE3A:4702 Serial0/0/0 [up/up] FE80::4 Serial0/0/1 [administratively down/down] Vlan1 [administratively down/down] </pre>
<p>Show ipv6 protocols</p>	<pre> IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "ospf 1" Interfaces (Area 0) FastEthernet0/0 FastEthernet0/1 Serial0/0/0 Redistribution: None </pre>

Show ipv6 OSPF neighbors

Neighbor ID	Pri	State	Dead Time	Interface ID	Interface
1.1.1.1	0	FULL/ -	00:00:33	3	Serial0/0/0

Comandos	Nombre del Router: RX
<p>Show running-config</p>	<pre> Building configuration... Current configuration : 1235 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname RX ! ! ! enable secret 5 \$l\$mERr\$dXvSzQatVfEPfhjnk7vbN. ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef ! spanning-tree mode pvst ! ! ! ! ! interface FastEthernet0/0 description Red LAN 1 Cliente 3 no ip address duplex auto speed auto ipv6 address FE80::1 link-local ipv6 address 2004:3::A:40:1/108 ipv6 eigrp 1 ipv6 enable ! interface FastEthernet0/1 description Red LAN 2 Cliente 3 no ip address duplex auto speed auto ipv6 address FE80::1 link-local ipv6 address 2004:3::A:C0:1/112 ipv6 eigrp 1 ipv6 enable ! interface Serial0/0/0 no ip address clock rate 2000000 shutdown ! interface Serial0/0/1 no ip address ipv6 address 2004:3::4/126 ipv6 eigrp 1 ipv6 enable </pre>


```

!
interface Vlan1
  no ip address
  shutdown
!
ipv6 router eigrp 1
  eigrp router-id 1.1.1.1
  no shutdown
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
banner motd ^CAcceso Restringido a router(RX).Identifquese con
con usuario y contraseya para poder acceder^C
!
!
!
!
line con 0
  password RX4145
  login
!
line aux 0
!
line vty 0 4
  password RX4593
  login
!
!
!
end

```

Show ipv6 route

```
IPv6 Routing Table - 18 entries
Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP
       U - Per-user Static route, M - MIPv6
       I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary
       O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2
       ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
       D - EIGRP, EX - EIGRP external
EX 2001:D::/126 [170/3609600]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2001:D:1::/64 [170/3609600]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2001:D:4::/64 [170/3609600]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2001:D:8::/64 [170/3609600]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
D 2004:3::/126 [90/2681856]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
C 2004:3::4/126 [0/0]
    via ::, Serial0/0/1
L 2004:3::4/128 [0/0]
    via ::, Serial0/0/1
C 2004:3::A:40:0/108 [0/0]
    via ::, FastEthernet0/0
L 2004:3::A:40:1/128 [0/0]
    via ::, FastEthernet0/0
C 2004:3::A:C0:0/112 [0/0]
    via ::, FastEthernet0/1
L 2004:3::A:C0:1/128 [0/0]
    via ::, FastEthernet0/1
D 2005::20/126 [90/3193856]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
D 2006::20/126 [90/2681856]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2008:0:A::/126 [170/4098560]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2008:0:A:8::/64 [170/4098560]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2008:0:A:C::/64 [170/4098560]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
EX 2008:0:A:E::/64 [170/4098560]
    via FE80::240:BFF:FEA8:AB01, Serial0/0/1
L FF00::/8 [0/0]
    via ::, Null0
```

Show ipv6 interfaces brief

```
FastEthernet0/0          [up/up]
    FE80::1
    2004:3::A:40:1
FastEthernet0/1          [up/up]
    FE80::1
    2004:3::A:C0:1
Serial0/0/0               [administratively down/down]
Serial0/0/1               [up/up]
    FE80::201:C9FF:FEC0:3D01
    2004:3::4
Vlan1                     [administratively down/down]
```

Show ipv6 protocols	<pre>IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "eigrp 1" EIGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0 EIGRP maximum hopcount 100 EIGRP maximum metric variance 1 Interfaces: FastEthernet0/0 FastEthernet0/1 Serial0/0/1 Redistributing: eigrp 1 Maximum path: 16 Distance: internal 90 external 170</pre>
Show ipv6 EIGRP neighbors	<pre>IPv6-EIGRP neighbors for process 1 H Address Interface Hold Uptime SRTT RTO Q Seq (sec) (ms) Cnt Num 0 Link-local address: Se0/0/1 13 00:34:44 40 1000 0 27 FE80::240:BFF:FEA8:AB01</pre>

Comandos	Nombre del Router: ISP1
<p>Show running-config</p>	<pre> Building configuration... Current configuration : 1348 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname ISP1 ! ! ! enable secret 5 \$1\$mERr\$MNKA4TLy2jpAEICSvb1P8. ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef ! spanning-tree mode pvst ! ! ! ! ! ! interface FastEthernet0/0 no ip address duplex auto speed auto shutdown ! interface FastEthernet0/1 no ip address duplex auto speed auto shutdown ! interface Serial0/0/0 no ip address ipv6 address 2006::21/126 ipv6 eigrp 1 ipv6 enable clock rate 125000 ! interface Serial0/0/1 no ip address ipv6 address 2001:D::4/126 ipv6 rip CLIENTE1 enable ipv6 enable ! </pre>

```

interface Serial0/1/0
no ip address
ipv6 address 2005::21/126
ipv6 eigrp 1
ipv6 enable
clock rate 125000
!
interface Serial0/1/1
no ip address
clock rate 2000000
shutdown
!
interface Vlan1
no ip address
shutdown
!
ipv6 router eigrp 1
eigrp router-id 6.6.6.6
no shutdown
redistribute rip CLIENTE1 metric 1000 10 255 1 1500
!
ipv6 router rip CLIENTE1
redistribute eigrp 1 metric 1
!
ip classless
!
ip flow-export version 9
!
!
!
banner motd ^CAcceso Restringido a router(ISP1).Identifquese con
con usuario y contrasea para poder acceder.^C
!
!
!
!
line con 0
password ISP1225
login
!
line aux 0
!
line vty 0 4
password ISP1995
login
!
!
end

```

<p>Show ipv6 route</p>	<pre> IPv6 Routing Table - 19 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external R 2001:D::/126 [120/2] via FE80::20B:BEFF:FECE:4E01, Serial0/0/1 C 2001:D::4/126 [0/0] via ::, Serial0/0/1 L 2001:D::4/128 [0/0] via ::, Serial0/0/1 R 2001:D:1::/64 [120/2] via FE80::20B:BEFF:FECE:4E01, Serial0/0/1 R 2001:D:4::/64 [120/2] via FE80::20B:BEFF:FECE:4E01, Serial0/0/1 R 2001:D:8::/64 [120/3] via FE80::20B:BEFF:FECE:4E01, Serial0/0/1 D 2004:3::/126 [90/2681856] via FE80::240:BFF:FEA8:AB01, Serial0/0/0 D 2004:3::4/126 [90/3193856] via FE80::240:BFF:FEA8:AB01, Serial0/0/0 D 2004:3::A:40:0/108 [90/2684416] via FE80::240:BFF:FEA8:AB01, Serial0/0/0 D 2004:3::A:C0:0/112 [90/2684416] via FE80::240:BFF:FEA8:AB01, Serial0/0/0 C 2005::20/126 [0/0] via ::, Serial0/1/0 L 2005::21/128 [0/0] via ::, Serial0/1/0 C 2006::20/126 [0/0] via ::, Serial0/0/0 L 2006::21/128 [0/0] via ::, Serial0/0/0 EX 2008:0:A::/126 [170/3074560] via FE80::209:7CFF:FED4:1D01, Serial0/1/0 EX 2008:0:A:8::/64 [170/3074560] via FE80::209:7CFF:FED4:1D01, Serial0/1/0 EX 2008:0:A:C::/64 [170/3074560] via FE80::209:7CFF:FED4:1D01, Serial0/1/0 EX 2008:0:A:E::/64 [170/3074560] via FE80::209:7CFF:FED4:1D01, Serial0/1/0 L FF00::/8 [0/0] via ::, Null0 </pre>
<p>Show ipv6 interfaces brief</p>	<pre> FastEthernet0/0 [administratively down/down] FastEthernet0/1 [administratively down/down] Serial0/0/0 [up/up] FE80::201:C7FF:FE51:2801 2006::21 Serial0/0/1 [up/up] FE80::201:C7FF:FE51:2801 2001:D::4 Serial0/1/0 [up/up] FE80::201:C7FF:FE51:2801 2005::21 Serial0/1/1 [administratively down/down] Vlan1 [administratively down/down] </pre>

Show ipv6 protocols	<pre>IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "rip CLIENTE1" Interfaces: Serial0/0/1 Redistribution: eigrp 1with metric 1 IPv6 Routing Protocol is "eigrp 1" EIGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0 EIGRP maximum hopcount 100 EIGRP maximum metric variance 1 Interfaces: Serial0/0/0 Serial0/1/0 Redistributing: eigrp 1, rip Maximum path: 16 Distance: internal 90 external 170</pre>
Show ipv6 EIGRP neighbors	<pre>IPv6-EIGRP neighbors for process 1 H Address Interface Hold Uptime SRTT RTO Q Seq (sec) (ms) Cnt Num 0 Link-local address: Se0/1/0 14 00:44:16 40 1000 0 23 FE80::209:7CFF:FED4:1D01 1 Link-local address: Se0/0/0 12 00:44:13 40 1000 0 28 FE80::240:BFF:FEA8:AB01</pre>

Comandos	Nombre del Router: ISP2
<p>Show running-config</p>	<pre> Building configuration... Current configuration : 1334 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname ISP2 ! ! ! enable secret 5 \$l\$mERr\$LkJtyxBtm.2oZEUSVbbMS/ ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef ! spanning-tree mode pvst ! ! ! ! ! ! interface FastEthernet0/0 no ip address duplex auto speed auto shutdown ! interface FastEthernet0/1 no ip address duplex auto speed auto shutdown ! interface Serial0/0/0 no ip address clock rate 2000000 shutdown ! interface Serial0/0/1 no ip address ipv6 address 2008:0:A::4/126 ipv6 enable ipv6 ospf 1 area 0 clock rate 125000 ! interface Serial0/1/0 no ip address ipv6 address 2005::22/126 ipv6 eigrp 1 ipv6 enable ! interface Serial0/1/1 no ip address </pre>


```

clock rate 2000000
shutdown
!
interface Vlan1
no ip address
shutdown
!
ipv6 router ospf 1
router-id 3.3.3.3
log-adjacency-changes
redistribute eigrp 1
!
ipv6 router eigrp 1
eigrp router-id 4.4.4.4
no shutdown
redistribute ospf 1 metric 1000 10 255 1 1500
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
banner motd ^CAcceso Restringido a router(ISP2).Identifquese con
con usuario y contraseya para poder acceder.^C
!
!
!
line con 0
password ISP2022
login
!
line aux 0
!
line vty 0 4
password ISP2567
login
!
!
!
end

```

Show ipv6 route

```
IPv6 Routing Table - 18 entries
Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP
       U - Per-user Static route, M - MIPv6
       I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary
       O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2
       ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
       D - EIGRP, EX - EIGRP external
EX 2001:D::/126 [170/3097600]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
EX 2001:D:1::/64 [170/3097600]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
EX 2001:D:4::/64 [170/3097600]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
EX 2001:D:8::/64 [170/3097600]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
D 2004:3::/126 [90/3193856]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
D 2004:3::4/126 [90/3705856]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
D 2004:3::A:40:0/108 [90/3196416]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
D 2004:3::A:C0:0/112 [90/3196416]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
C 2005::20/126 [0/0]
    via ::, Serial0/1/0
L 2005::22/128 [0/0]
    via ::, Serial0/1/0
D 2006::20/126 [90/2681856]
    via FE80::201:C7FF:FE51:2801, Serial0/1/0
O 2008:0:A::/126 [110/128]
    via FE80::20C:85FF:FE2A:B101, Serial0/0/1
C 2008:0:A::4/126 [0/0]
    via ::, Serial0/0/1
L 2008:0:A::4/128 [0/0]
    via ::, Serial0/0/1
O 2008:0:A:8::/64 [110/129]
    via FE80::20C:85FF:FE2A:B101, Serial0/0/1
O 2008:0:A:C::/64 [110/129]
    via FE80::20C:85FF:FE2A:B101, Serial0/0/1
L FF00::/8 [0/0]
    via ::, Null0
```

Show ipv6 interfaces brief

```
FastEthernet0/0          [administratively down/down]
FastEthernet0/1          [administratively down/down]
Serial0/0/0              [administratively down/down]
Serial0/0/1              [up/up]
    FE80::209:7CFF:FED4:1D01
    2008:0:A::4
Serial0/1/0              [up/up]
    FE80::209:7CFF:FED4:1D01
    2005::22
Serial0/1/1              [administratively down/down]
Vlan1                    [administratively down/down]
```

Show ipv6 protocols	<pre>IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "eigrp 1" EIGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0 EIGRP maximum hopcount 100 EIGRP maximum metric variance 1 Interfaces: Serial0/1/0 Redistributing: eigrp 1, ospf 1 Maximum path: 16 Distance: internal 90 external 170 IPv6 Routing Protocol is "ospf 1" Interfaces (Area 0) Serial0/0/1 Redistribution: Redistributing protocol</pre>
Show ipv6 EIGRP neighbors	<pre>H Address Interface Hold Uptime SRTT RTO Q Seq (sec) (ms) 0 Link-local address: Se0/1/0 12 00:50:38 40 1000 0 468 FE80::201:C7FF:FE51:2801</pre>

Comandos	Nombre del Router: ISP3
<p>Show running-config</p>	<pre> Building configuration... Current configuration : 1040 bytes ! version 12.4 no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption ! hostname ISP3 ! ! ! enable secret 5 \$l\$mERr\$.kUrz6hXXStDee/FatCDyl ! ! ! ! ! ! no ip cef ipv6 unicast-routing ! no ipv6 cef spanning-tree mode pvst ! ! ! ! ! ! interface FastEthernet0/0 no ip address duplex auto speed auto shutdown ! interface FastEthernet0/1 no ip address duplex auto speed auto shutdown ! interface Serial0/0/0 no ip address ipv6 address 2006::22/126 ipv6 eigrp 1 ipv6 enable ! interface Serial0/0/1 no ip address ipv6 address 2004:3::3/126 ipv6 eigrp 1 ipv6 enable clock rate 125000 ! interface Vlan1 no ip address shutdown ! </pre>

```
ipv6 router eigrp 1
  eigrp router-id 5.5.5.5
  no shutdown
!
ip classless
!
ip flow-export version 9
!
!
!
banner motd ^CAcceso Restringido a router(ISP3).Identifquese
con usuario y contraseya para poder acceder.^C
!
!
!
line con 0
  password ISP2022
  login
!
line aux 0
!
line vty 0 4
  password ISP2567
  login
!
!
!
end
```

<p>Show ipv6 route</p>	<pre> IPv6 Routing Table - 17 entries Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP U - Per-user Static route, M - MIPv6 I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2 ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2 D - EIGRP, EX - EIGRP external EX 2001:D::/126 [170/3097600] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2001:D:1::/64 [170/3097600] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2001:D:4::/64 [170/3097600] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2001:D:8::/64 [170/3097600] via FE80::201:C7FF:FE51:2801, Serial0/0/0 C 2004:3::/126 [0/0] via ::, Serial0/0/1 L 2004:3::3/128 [0/0] via ::, Serial0/0/1 D 2004:3::4/126 [90/2681856] via FE80::201:C9FF:FEC0:3D01, Serial0/0/1 D 2004:3::A:40:0/108 [90/2172416] via FE80::201:C9FF:FEC0:3D01, Serial0/0/1 D 2004:3::A:C0:0/112 [90/2172416] via FE80::201:C9FF:FEC0:3D01, Serial0/0/1 D 2005::20/126 [90/2681856] via FE80::201:C7FF:FE51:2801, Serial0/0/0 C 2006::20/126 [0/0] via ::, Serial0/0/0 L 2006::22/128 [0/0] via ::, Serial0/0/0 EX 2008:0:A::/126 [170/3586560] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2008:0:A:8::/64 [170/3586560] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2008:0:A:C::/64 [170/3586560] via FE80::201:C7FF:FE51:2801, Serial0/0/0 EX 2008:0:A:E::/64 [170/3586560] via FE80::201:C7FF:FE51:2801, Serial0/0/0 L FF00::/8 [0/0] </pre>
<p>Show ipv6 interfaces brief</p>	<pre> FastEthernet0/0 [administratively down/down] FastEthernet0/1 [administratively down/down] Serial0/0/0 [up/up] FE80::240:BFF:FEA8:AB01 2006::22 Serial0/0/1 [up/up] FE80::240:BFF:FEA8:AB01 2004:3::3 Vlan1 [administratively down/down] </pre>
<p>Show ipv6 protocols</p>	<pre> IPv6 Routing Protocol is "connected" IPv6 Routing Protocol is "static" IPv6 Routing Protocol is "eigrp 1" EIGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0 EIGRP maximum hopcount 100 EIGRP maximum metric variance 1 Interfaces: Serial0/0/0 Serial0/0/1 Redistributing: eigrp 1 Maximum path: 16 Distance: internal 90 external 170 </pre>

<div>Show ipv6 EIGRP neighbors</div>	IPv6-EIGRP neighbors for process 1								
	H	Address	Interface	Hold (sec)	Uptime	SRTT (ms)	RTT	Q Cnt	Seq Num
	0	Link-local address: FE80::201:C9FF:FEC0:3D01	Se0/0/1	13	00:54:38	40	1000	0	23
	1	Link-local address: FE80::201:C7FF:FE51:2801	Se0/0/0	12	00:54:35	40	1000	0	500

Seguridad básica de cada router.

Tabla 1.

Ciente1:

Hostname	RA	RB
Contraseña Modo Privilegiado	RA2130	RB2230
Contraseña consola 0 4	RA2022	RB2322
Contraseña vty 0 4	RA2230	RB2340

Banner:

- Acceso Restringido a router(RA).Identifíquese con usuario y contraseña para poder acceder
- Acceso Restringido a router(RB).Identifíquese con usuario y contraseña para poder acceder

Tabla 2.

Ciente2:

Hostname	R1	R2
Contraseña Modo Privilegiado	R1236	R2354
Contraseña consola 0 4	R1457	R2456
Contraseña vty 0 4	R1034	R2464

Banner:

- Acceso Restringido a router(R1).Identifíquese con usuario y contraseña para poder acceder
- Acceso Restringido a router(R2).Identifíquese con usuario y contraseña para poder acceder

Tabla 3.

Ciente3:

Hostname	Rx
Contraseña Modo Privilegiado	RX4044
Contraseña consola 0 4	RX4145
Contraseña vty 0 4	RX4593

Banner:

- Acceso Restringido a router(RX).Identifíquese con usuario y contraseña para poder acceder

Tabla de Proveedor

Hostname	ISP1	ISP2	ISP3
Contraseña Modo Privilegiado	ISP1234	ISP2345	ISP3203
Contraseña consola 0 4	ISP1225	ISP2022	ISP2022
Contraseña vty 0 4	ISP1995	ISP2567	ISP2567

Banner:

- Acceso Restringido a router(ISP1).Identifíquese con usuario y contraseña para poder acceder.
- Acceso Restringido a router(ISP2).Identifíquese con usuario y contraseña para poder acceder.
- Acceso Restringido a router(ISP3).Identifíquese con usuario y contraseña para poder acceder.