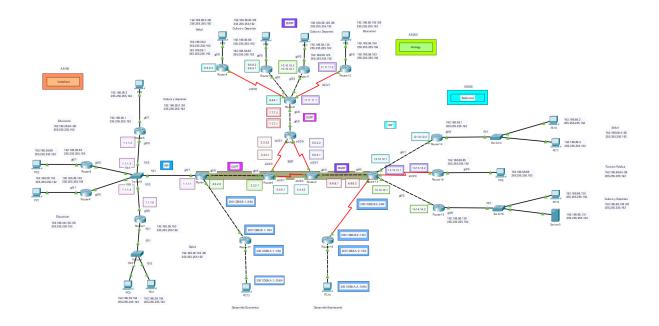


# **Redes 2 Practica 2**

# **TOPOLOGIA**



# R0

```
//// LEVANTAR PUERTOS ////

int s0/3/0
no shutdown
ip address 3.3.3.1 255.255.255.0

int s0/3/1
no shutdown
ip address 4.4.4.1 255.255.255.0

int g0/0
no shutdown
ip address 2.2.2.1 255.255.255.0
```

```
//// ENRUTAMIENTO BGP ////
router bgp 100
network 3.3.3.0 mask 255.255.255.0
network 4.4.4.0 mask 255.255.255.0
neighbor 3.3.3.2 remote-as 200
neighbor 4.4.4.2 remote-as 300
network 1.1.1.1 mask 255.255.255.0
network 192.168.26.0 mask 255.255.255.192
network 192.168.26.64 mask 255.255.255.192
network 192.168.26.128 mask 255.255.255.192
network 192.168.26.192 mask 255.255.255.192
//// ENRUTAMIENTO OSPF ////
router ospf 200
network 2.2.2.0 0.0.0.255 area 0
//// REDISTRIBUCION ////
router ospf 200
redistribute bgp 100 metric 1 subnets
router bgp 100
redistribute ospf 200
```

```
//// LEVANTAR PUERTOS ////
int s0/3/0
no shutdown
ip address 5.5.5.2 255.255.255.0
int s0/3/1
no shutdown
ip address 3.3.3.2 255.255.255.0
int g0/0
no shutdown
ip address 7.7.7.1 255.255.255.0
//// ENRUTAMIENTO BGP ////
router bgp 200
network 3.3.3.0 mask 255.255.255.0
network 5.5.5.0 mask 255.255.255.0
neighbor 3.3.3.1 remote-as 100
neighbor 5.5.5.1 remote-as 300
network 8.8.8.0 mask 255.255.255.0
```

```
network 9.9.9.0 mask 255.255.255.0
network 10.10.10.0 mask 255.255.255.0
network 11.11.11.0 mask 255.255.255.0
network 192.168.56.0 mask 255.255.255.192
network 192.168.56.64 mask 255.255.255.192
network 192.168.56.128 mask 255.255.255.192
network 192.168.56.129 mask 255.255.255.192
network 192.168.56.192 mask 255.255.255.192

//// ENRUTAMIENTO OSPF ////
router ospf 300
network 7.7.7.0 0.0.0.255 area 0

//// REDISTRIBUCION ////
router ospf 300
redistribute bgp 200 metric 1 subnets

router bgp 200
redistribute ospf 300
```

```
//// LEVANTAR PUERTOS ////
int s0/3/0
no shutdown
ip address 4.4.4.2 255.255.255.0
int s0/3/1
no shutdown
ip address 5.5.5.1 255.255.255.0
int g0/0
no shutdown
ip address 6.6.6.1 255.255.255.0
//// ENRUTAMIENTO BGP ////
router bgp 300
network 4.4.4.0 mask 255.255.255.0
network 5.5.5.0 mask 255.255.255.0
neighbor 4.4.4.1 remote-as 100
neighbor 5.5.5.2 remote-as 200
network 12.12.12.0 mask 255.255.255.0
network 13.13.13.0 mask 255.255.255.0
network 14.14.14.0 mask 255.255.255.0
network 192.168.86.0 mask 255.255.255.192
network 192.168.86.64 mask 255.255.255.192
network 192.168.86.128 mask 255.255.255.192
```

```
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 6.6.6.0 0.0.0.255
no auto-summary

//// REDISTRIBUCION ////
router bgp 300
redistribute eigrp 100

router eigrp 100
redistribute bgp 300 metric 1 1 1 1 1
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 2.2.2.2 255.255.255.0
int g0/1
no shutdown
ip address 1.1.1.1 255.255.255.0
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 1.1.1.0
no auto-summary
//// ENRUTAMIENTO OSPF ////
router ospf 100
network 2.2.2.0 0.0.0.255 area 0
//// REDISTRIBUCION ////
router rip
redistribute ospf 100 metric 15
router ospf 100
redistribute rip subnets
/// IP6 ///
ipv6 unicast-routing
ipv6 router rip redv6
int g0/2
ipv6 address 2001:DB8:B:1::2/64
ipv6 rip redv6 enable
no shutdown
```

```
int Tunnel0
ipv6 address 3000::1/112
ipv6 rip redv6 enable
tunnel source g0/0
tunnel destination 6.6.6.2
tunnel mode ipv6ip
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 1.1.1.4 255.255.255.0
int g0/1
no shutdown
ip address 192.168.26.129 255.255.255.192
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 1.1.1.0
network 192.168.26.128
no auto-summary
//// ACCESS LIST ////
access-list 101 permit ip 192.168.26.128 0.0.0.63 192.168.26.192 0.0.0.63
access-list 101 permit ip 192.168.26.128 0.0.0.63 192.168.56.0 0.0.0.63
access-list 101 permit ip 192.168.26.128 0.0.0.63 192.168.86.0 0.0.0.63
access-list 101 permit ip 192.168.26.128 0.0.0.63 192.168.86.64 0.0.0.63
access-list 101 deny ip any any
access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo
access-list 102 permit icmp any any echo-reply
access-list 102 deny ip any any
int g0/1
ip access-group 101 in
ip access-group 102 out
```

#### **R5**

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 1.1.1.2 255.255.255.0
int g0/1
no shutdown
ip address 192.168.26.1 255.255.255.192
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 1.1.1.0
network 192.168.26.0
no auto-summary
//// ACCESS LIST ////
access-list 1 permit 192.168.86.64 0.0.0.63
access-list 1 deny any
access-list 101 permit icmp any any echo-reply
access-list 101 deny ip any any
int g0/1
ip access-group 1 out
ip access-group 101 in
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 1.1.1.3 255.255.255.0

int g0/1
no shutdown
ip address 192.168.26.65 255.255.255.192

//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 1.1.1.0
network 192.168.26.64
no auto-summary
//// ACCESS LIST ////
```

```
access-list 101 permit ip 192.168.26.64 0.0.0.63 192.168.26.192 0.0.0.63 access-list 101 permit ip 192.168.26.64 0.0.0.63 192.168.56.0 0.0.0.63 access-list 101 permit ip 192.168.26.64 0.0.0.63 192.168.86.0 0.0.0.63 access-list 101 permit ip 192.168.26.64 0.0.0.63 192.168.86.64 0.0.0.63 access-list 101 deny ip any any

access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo access-list 102 permit icmp any any echo-reply access-list 102 deny ip any any

int g0/1
ip access-group 101 in
ip access-group 102 out
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 1.1.1.5 255.255.255.0
int g0/1
no shutdown
ip address 192.168.26.193 255.255.255.192
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 1.1.1.0
network 192.168.26.192
no auto-summary
//// ACCESS LIST ////
access-list 101 permit ip 192.168.26.192 0.0.0.63 192.168.86.64 0.0.0.63
access-list 101 permit ip 192.168.26.192 0.0.0.63 192.168.26.64 0.0.0.63
access-list 101 permit ip 192.168.26.192 0.0.0.63 192.168.26.128 0.0.0.63
access-list 101 permit ip 192.168.26.192 0.0.0.63 192.168.26.192 0.0.0.63
access-list 101 deny ip any any
access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.128 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.192 0.0.0.63 any echo
access-list 102 permit icmp any any echo-reply
access-list 102 deny ip any any
int g0/1
```

```
ip access-group 101 in
ip access-group 102 out
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 7.7.7.2 255.255.255.0
int s0/3/0
no shutdown
ip address 8.8.8.1 255.255.255.0
int g0/1
no shutdown
ip address 9.9.9.1 255.255.255.0
int g0/2
no shutdown
ip address 10.10.10.1 255.255.255.0
int s0/3/1
no shutdown
ip address 11.11.11.1 255.255.255.0
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 8.8.8.0 0.0.0.255
network 9.9.9.0 0.0.0.255
network 10.10.10.0 0.0.0.255
network 11.11.11.0 0.0.0.255
no auto-summary
//// ENRUTAMIENTO OSPF ////
router ospf 400
network 7.7.7.0 0.0.0.255 area 0
//// REDISTRIBUCION ////
router eigrp 100
redistribute ospf 400 metric 255 1 1 1 1
router ospf 400
redistribute eigrp 100 metric 1 subnets
```

#### R9

```
//// LEVANTAR PUERTOS ////
int s0/3/0
no shutdown
ip address 8.8.8.2 255.255.255.0
int g0/0
no shutdown
ip address 192.168.56.1 255.255.255.192
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 8.8.8.0 0.0.0.255
network 192.168.56.0 0.0.0.63
no auto-summary
//// ACCESS LIST ////
access-list 101 permit ip 192.168.56.0 0.0.0.63 192.168.86.64 0.0.0.63
access-list 101 permit ip 192.168.56.0 0.0.0.63 192.168.26.64 0.0.0.63
access-list 101 permit ip 192.168.56.0 0.0.0.63 192.168.26.128 0.0.0.63
access-list 101 permit ip 192.168.56.0 0.0.0.63 192.168.26.192 0.0.0.63
access-list 101 deny ip any any
access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.128 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.192 0.0.0.63 any echo
access-list 102 permit icmp any any echo-reply
access-list 102 deny ip any any
int g0/0
ip access-group 101 in
ip access-group 102 out
```

```
/// LEVANTAR PUERTOS ///

int g0/1
no shutdown
ip address 9.9.9.2 255.255.255.0

int g0/0
no shutdown
ip address 192.168.56.65 255.255.255.192

//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 9.9.9.0 0.0.0.255
```

```
network 192.168.56.64 0.0.0.63
no auto-summary

//// ACCESS LIST ////
access-list 1 permit 192.168.86.64 0.0.0.63
access-list 1 deny any
access-list 101 permit icmp any any echo-reply
access-list 101 deny ip any any

int g0/0
ip access-group 1 out
ip access-group 101 in
```

```
-----R11-----
//// LEVANTAR PUERTOS ////
int g0/2
no shutdown
ip address 10.10.10.2 255.255.255.0
int g0/0
no shutdown
ip address 192.168.56.129 255.255.255.192
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 10.10.10.0 0.0.0.255
network 192.168.56.128 0.0.0.63
no auto-summary
//// ACCESS LIST ////
access-list 1 permit 192.168.86.64 0.0.0.63
access-list 1 deny any
access-list 101 permit icmp any any echo-reply
access-list 101 deny ip any any
int g0/0
ip access-group 1 out
ip access-group 101 in
```

## **R12**

```
//// LEVANTAR PUERTOS ////
```

```
int s0/3/1
no shutdown
ip address 11.11.11.2 255.255.255.0
int g0/0
no shutdown
ip address 192.168.56.193 255.255.255.192
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 11.11.11.0 0.0.0.255
network 192.168.56.192 0.0.0.63
no auto-summary
//// ACCESS LIST ////
access-list 101 permit ip 192.168.56.192 0.0.0.63 192.168.26.192 0.0.0.63
access-list 101 permit ip 192.168.56.192 0.0.0.63 192.168.56.0 0.0.0.63
access-list 101 permit ip 192.168.56.192 0.0.0.63 192.168.86.0 0.0.0.63
access-list 101 permit ip 192.168.56.192 0.0.0.63 192.168.86.64 0.0.0.63
access-list 101 deny ip any any
access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo
access-list 102 permit icmp any any echo-reply
access-list 102 deny ip any any
int g0/0
ip access-group 101 in
ip access-group 102 out
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 6.6.6.2 255.255.255.0

int g0/1
no shutdown
ip address 12.12.12.1 255.255.255.0

int g0/2
no shutdown
ip address 14.14.14.1 255.255.255.0

int s0/3/0
no shutdown
ip address 13.13.13.1 255.255.255.0

//// ENRUTAMIENTO RIP ////
router rip
```

```
default-information originate
version 2
network 12.12.12.0
network 13.13.13.0
network 14.14.14.0
no auto-summary
//// ENRUTAMIENTO EIGRP ////
router eigrp 100
network 6.6.6.0 0.0.0.255
no auto-summary
//// REDISTRIBUCION ////
router eigrp 100
redistribute rip metric 255 1 1 1 1
router rip
redistribute eigrp 100 metric 15
/// IP6 ///
ipv6 unicast-routing
ipv6 router rip redv6
int s0/3/1
ipv6 address 2001:DB8:B:2::2/64
ipv6 rip redv6 enable
no shutdown
int Tunnel0
ipv6 address 3000::2/112
ipv6 rip redv6 enable
tunnel source g0/0
tunnel destination 2.2.2.2
tunnel mode ipv6ip
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 192.168.86.1 255.255.255.192

int g0/1
no shutdown
ip address 12.12.12.2 255.255.255.0

//// ENRUTAMIENTO RIP ////
router rip
default-information originate
```

```
version 2
network 12.12.12.0
network 192.168.86.0
no auto-summary
//// ACCESS LIST ////
access-list 101 permit ip 192.168.86.0 0.0.0.63 192.168.86.64 0.0.0.63
access-list 101 permit ip 192.168.86.0 0.0.0.63 192.168.26.64 0.0.0.63
access-list 101 permit ip 192.168.86.0 0.0.0.63 192.168.26.128 0.0.0.63
access-list 101 permit ip 192.168.86.0 0.0.0.63 192.168.26.192 0.0.0.63
access-list 101 deny ip any any
access-list 102 permit icmp 192.168.86.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.64 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.128 0.0.0.63 any echo
access-list 102 permit icmp 192.168.26.192 0.0.0.63 any echo
access-list 102 permit icmp any any echo-reply
access-list 102 deny ip any any
int g0/0
ip access-group 101 in
ip access-group 102 out
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 192.168.86.129 255.255.255.192
int g0/2
no shutdown
ip address 14.14.14.2 255.255.255.0
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 14.14.14.0
network 192.168.86.128
no auto-summary
//// ACCESS LIST ////
access-list 1 permit 192.168.86.64 0.0.0.63
access-list 1 deny any
access-list 101 permit icmp any any echo-reply
access-list 101 deny ip any any
int g0/0
```

```
ip access-group 1 out
ip access-group 101 in
```

```
//// LEVANTAR PUERTOS ////
int g0/0
no shutdown
ip address 192.168.86.65 255.255.255.192
int s0/3/0
no shutdown
ip address 13.13.13.2 255.255.255.0
//// ENRUTAMIENTO RIP ////
router rip
default-information originate
version 2
network 13.13.13.0
network 192.168.86.64
no auto-summary
//// ACCESS LIST ////
access-list 101 permit icmp any any echo-reply
int g0/0
ip access-group 101 out
```

## **R17**

```
/// IP6 ///
ipv6 unicast-routing
ipv6 router rip redv6

int g0/0
ipv6 address 2001:DB8:B:1::1/64
ipv6 rip redv6 enable
no shutdown

int g0/1
ipv6 address 2001:DB8:A:1::1/64
ipv6 rip redv6 enable
no shutdown

//// ACCESS LIST ////
access-list 101 permit icmp any any echo-reply
```

```
int g0/1
ip access-group 101 out
```

```
/// IP6 ///
ipv6 unicast-routing
ipv6 router rip redv6

int s0/3/0
ipv6 address 2001:DB8:B:2::1/64
ipv6 rip redv6 enable
no shutdown

int g0/0
ipv6 address 2001:DB8:A:2::1/64
ipv6 rip redv6 enable
no shutdown
```