Castillo Martínez Leonel Jafet

# Ruteo RIP

| ESPECIFICACIÓN |
| --- |
| **Dirección IP de la subred: 220.15.0.0/27** |
| **Máscara de subred: 255.255.255.224** |
| **Cantidad de host utilizables por la subred: 30** |
| **Primera dirección del host: 220.15.0.1** |
| **Última dirección de host: 220.15.0.30** |

| ESPECIFICACIÓN |
| --- |
| **Dirección IP de la subred: 112.168.15.0/26** |
| **Máscara de subred: 255.255.255.192** |
| **Cantidad de host utilizables por la subred: 62** |
| **Primera dirección del host: 112.168.15.1** |
| **Última dirección de host: 112.168.15.62** |

| ESPECIFICACIÓN |
| --- |
| **Dirección IP de la subred: 119.15.0.0/25** |
| **Máscara de subred: 255.255.255.128** |
| **Cantidad de host utilizables por la subred: 126** |
| **Primera dirección del host: 119.15.0.1** |
| **Última dirección de host: 119.15.0.126** |

| ESPECIFICACIÓN |
| --- |
| **Dirección IP de la subred: 110.15.0.0/23** |
| **Máscara de subred: 255.255.254.0** |
| **Cantidad de host utilizables por la subred: 510** |
| **Primera dirección del host: 110.15.0.1** |
| **Última dirección de host: 110.15.1.10** |

Tabla de direccionamiento, la cual debe contener la siguiente información por cada dispositivo conectado en la topología:

| Dispositivo | Interfaz | Dirección IP | Máscara de Subred | Gateway por defecto |
| --- | --- | --- | --- | --- |
| R1 | Se/0/1/0 | 1.2.3.1 | 255.255.255.252 | —— |
|  | Se0/1/1 | 4.5.6.1 | 255.255.255.252 | —— |
|  | Fa0/0 | 220.15.0.30 | 255.255.255.224 | —— |
| R2 | Se0/0/0 | 1.4.2.1 | 255.255.255.252 | —— |
|  | Se0/1/0 | 4.5.6.2 | 255.255.255.252 | —— |
|  | Se0/1/1 | 1.2.4.1 | 255.255.255.252 | —— |
|  | Fa0/0 | 112.168.15.62 | 255.255.255.192 | —— |
| R3 | Se0/0/0 | 1.4.2.2 | 255.255.255.252 | —— |
|  | Se0/1/0 | 1.2.3.2 | 255.255.255.252 | —— |
|  | Se0/1/1 | 1.3.6.1 | 255.255.255.252 | —— |
|  | Fa0/0 | 119.15.0.126 | 255.255.255.128 | —— |
| R4 | Se0/1/0 | 1.3.6.2 | 255.255.255.252 | —— |
|  | Se0/1/1 | 1.2.4.2 | 255.255.255.252 | —— |
|  | Fa0/0 | 110.15.1.10 | 255.255.254.0 | —— |
| PC0 | NIC | 220.15.0.1 | 255.255.255.224 | 220.15.0.30 |
| PC1 | NIC | 220.15.0.2 | 255.255.255.224 | 220.15.0.30 |
| PC2 | NIC | 112.168.15.1 | 255.255.255.192 | 112.168.15.62 |
| PC3 | NIC | 112.168.15.2 | 255.255.255.192 | 112.168.15.62 |
| PC4 | NIC | 119.15.0.1 | 255.255.255.128 | 119.15.0.126 |
| PC5 | NIC | 119.15.0.2 | 255.255.255.128 | 119.15.0.126 |
| PC6 | NIC | 110.15.0.1 | 255.255.254.0 | 110.15.1.10 |
| PC7 | NIC | 110.15.0.2 | 255.255.254.0 | 110.15.1.10 |

Tabla de ruteo para cada uno de los ruteadores, con el siguiente formato:

Castillo Martínez Leonel Jafet

| Origen | Máscara | Dirección de red | Dirección de Próximo Salto | Interfaz de salida |
|--------|---------|------------------|----------------------------|--------------------|
| R1 | 255.255.255.252 | 1.2.3.0 | —— | Se0/1/0 |
| | 255.255.255.252 | 1.2.4.0 | 4.5.6.2 | Se0/1/1 |
| | 255.255.255.252 | 1.3.6.0 | 1.2.3.2 | Se0/1/0 |
| | 255.255.255.252 | 1.4.2.0 | 4.5.6.2 | Se0/1/1 |
| | | | 1.2.3.2 | Se0/1/0 |
| | 255.255.255.252 | 4.5.6.0 | —— | Se/0/1/1 |
| | 255.255.254.0 | 110.15.0.0 | 4.5.6.2 | Se0/1/1 |
| | | | 1.2.3.2 | Se0/1/0 |
| | 255.255.255.192 | 112.168.15.0 | 4.5.6.2 | Se0/1/1 |
| | 255.255.255.128 | 119.15.0.0 | 1.2.3.2 | Se0/1/0 |
| | 255.255.255.224 | 220.15.0.0 | —— | Fa0/0 |
| R2 | 255.255.255.252 | 1.2.3.0 | 4.5.6.1 | Se0/1/0 |
| | 255.255.255.252 | 1.2.4.0 | —— | Se0/1/1 |
| | 255.255.255.252 | 1.3.6.0 | 1.2.4.2 | Se0/1/1 |
| | 255.255.255.252 | 1.4.2.0 | —— | Se0/0/0 |
| | 255.255.255.252 | 4.5.6.0 | —— | Se0/1/0 |
| | 255.255.254.0 | 110.15.0.0 | 1.2.4.2 | Se0/1/1 |
| | 255.255.255.192 | 112.168.15.0 | —— | Fa0/0 |
| | 255.255.255.128 | 119.15.0.0 | 1.4.2.2 | Se0/0/0 |
| | 255.255.255.224 | 220.15.0.0 | 4.5.6.1 | Se0/1/0 |
| R3 | 255.255.255.252 | 1.2.3.0 | —— | Se0/1/0 |
| | 255.255.255.252 | 1.2.4.0 | 1.3.6.2 | Se0/1/1 |
| | 255.255.255.252 | 1.3.6.0 | —— | Se0/1/1 |
| | 255.255.255.252 | 1.4.2.0 | —— | Se0/0/0 |
| | 255.255.255.252 | 4.5.6.0 | 1.2.3.1 | Se0/1/0 |
| | 255.255.254.0 | 110.15.0.0 | 1.3.6.2 | Se0/1/1 |
| | 255.255.255.192 | 112.168.15.0 | 1.4.2.1 | Se0/0/0 |
| | 255.255.255.128 | 119.15.0.0 | —— | Fa0/0 |
| | 255.255.255.224 | 220.15.0.0 | 1.2.3.1 | Se0/1/0 |
| R4 | 255.255.255.252 | 1.2.3.0 | 1.3.6.1 | Se0/1/0 |
| | 255.255.255.252 | 1.2.4.0 | —— | Se0/1/1 |
| | 255.255.255.252 | 1.3.6.0 | —— | Se0/1/0 |
| | 255.255.255.252 | 1.4.2.0 | 1.2.4.1 | Se0/1/1 |
| | 255.255.255.252 | | 1.3.6.1 | Se0/1/0 |
| | 255.255.255.252 | 4.5.6.0 | 1.2.4.1 | Se0/1/1 |
| | 255.255.254.0 | 110.15.0.0 | —— | Fa0/0 |
| | 255.255.255.192 | 112.168.15.0 | 1.2.4.1 | Se0/1/1 |
| | 255.255.255.128 | 119.15.0.0 | 1.3.6.1 | Se0/1/0 |
| | 255.255.255.224 | 220.15.0.0 | 1.2.4.1 | Se0/1/1 |
| | 255.255.255.224 | | 1.3.6.1 | Se0/1/0 |

Castillo Martínez Leonel Jafet

```
R1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     1.0.0.0/30 is subnetted, 4 subnets
C       1.2.3.0 is directly connected, Serial0/1/0
R       1.2.4.0 [120/1] via 4.5.6.2, 00:00:16, Serial0/1/1
R       1.3.6.0 [120/1] via 1.2.3.2, 00:00:18, Serial0/1/0
R       1.4.2.0 [120/1] via 4.5.6.2, 00:00:16, Serial0/1/1
                [120/1] via 1.2.3.2, 00:00:18, Serial0/1/0
     4.0.0.0/30 is subnetted, 1 subnets
C       4.5.6.0 is directly connected, Serial0/1/1
     110.0.0.0/23 is subnetted, 1 subnets
R       110.15.0.0 [120/2] via 4.5.6.2, 00:00:16, Serial0/1/1
                   [120/2] via 1.2.3.2, 00:00:18, Serial0/1/0
     112.0.0.0/26 is subnetted, 1 subnets
R       112.168.15.0 [120/1] via 4.5.6.2, 00:00:16, Serial0/1/1
     119.0.0.0/25 is subnetted, 1 subnets
R       119.15.0.0 [120/1] via 1.2.3.2, 00:00:18, Serial0/1/0
     220.15.0.0/27 is subnetted, 1 subnets
C       220.15.0.0 is directly connected, FastEthernet0/0

R1#
```

```
R2#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     1.0.0.0/30 is subnetted, 4 subnets
R       1.2.3.0 [120/1] via 4.5.6.1, 00:00:13, Serial0/1/0
C       1.2.4.0 is directly connected, Serial0/1/1
R       1.3.6.0 [120/1] via 1.2.4.2, 00:00:13, Serial0/1/1
C       1.4.2.0 is directly connected, Serial0/0/0
     4.0.0.0/30 is subnetted, 1 subnets
C       4.5.6.0 is directly connected, Serial0/1/0
     110.0.0.0/23 is subnetted, 1 subnets
R       110.15.0.0 [120/1] via 1.2.4.2, 00:00:13, Serial0/1/1
     112.0.0.0/26 is subnetted, 1 subnets
C       112.168.15.0 is directly connected, FastEthernet0/0
     119.0.0.0/25 is subnetted, 1 subnets
R       119.15.0.0 [120/1] via 1.4.2.2, 00:00:17, Serial0/0/0
     220.15.0.0/27 is subnetted, 1 subnets
R       220.15.0.0 [120/1] via 4.5.6.1, 00:00:13, Serial0/1/0

R2#
```

```
R3#show ip ro
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     1.0.0.0/30 is subnetted, 4 subnets
C       1.2.3.0 is directly connected, Serial0/1/0
R       1.2.4.0 [120/1] via 1.3.6.2, 00:00:08, Serial0/1/1
C       1.3.6.0 is directly connected, Serial0/1/1
C       1.4.2.0 is directly connected, Serial0/0/0
     4.0.0.0/30 is subnetted, 1 subnets
R       4.5.6.0 [120/1] via 1.2.3.1, 00:00:06, Serial0/1/0
     110.0.0.0/23 is subnetted, 1 subnets
R       110.15.0.0 [120/1] via 1.3.6.2, 00:00:08, Serial0/1/1
     112.0.0.0/26 is subnetted, 1 subnets
R       112.168.15.0 [120/1] via 1.4.2.1, 00:00:06, Serial0/0/0
     119.0.0.0/25 is subnetted, 1 subnets
C       119.15.0.0 is directly connected, FastEthernet0/0
     220.15.0.0/27 is subnetted, 1 subnets
R       220.15.0.0 [120/1] via 1.2.3.1, 00:00:06, Serial0/1/0

R3#
```

```
R4#show ip ro
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     1.0.0.0/30 is subnetted, 4 subnets
R       1.2.3.0 [120/1] via 1.3.6.1, 00:00:22, Serial0/1/0
C       1.2.4.0 is directly connected, Serial0/1/1
C       1.3.6.0 is directly connected, Serial0/1/0
R       1.4.2.0 [120/1] via 1.2.4.1, 00:00:27, Serial0/1/1
                [120/1] via 1.3.6.1, 00:00:22, Serial0/1/0
     4.0.0.0/30 is subnetted, 1 subnets
R       4.5.6.0 [120/1] via 1.2.4.1, 00:00:27, Serial0/1/1
     110.0.0.0/23 is subnetted, 1 subnets
C       110.15.0.0 is directly connected, FastEthernet0/0
     112.0.0.0/26 is subnetted, 1 subnets
R       112.168.15.0 [120/1] via 1.2.4.1, 00:00:27, Serial0/1/1
     119.0.0.0/25 is subnetted, 1 subnets
R       119.15.0.0 [120/1] via 1.3.6.1, 00:00:22, Serial0/1/0
     220.15.0.0/27 is subnetted, 1 subnets
R       220.15.0.0 [120/2] via 1.2.4.1, 00:00:27, Serial0/1/1
                [120/2] via 1.3.6.1, 00:00:22, Serial0/1/0

R4#
```