

Packet Tracer: Configuración de RIPv2

Configuración

Pasos:

1. Configuramos el router 1
 - a. Creamos una ruta predeterminada para que el tráfico salga por la interfaz serial 0/0/1 con el comando `ip route 0.0.0.0 0.0.0.0 s0/0/1`
 - b. Entramos al modo configuracion de RIP con `router rip, version 2` y no `auto-summary`
 - c. Configuramos RIP para las redes que se conectan al router con `network 192.168.1.0` y `network 192.168.2.0`
 - d. Pasivamos la interfaz gigabitEthernet0/0 con `passive-interface g0/0`
 - e. Anunciamos la ruta predeterminada a los otros router con `default-information originate`
2. y 3. Se repiten los pasos 1b a 1d pero para los routers 2 y 3. Al router 2 se le anuncian las redes 192.168.2.0, 192.168.3.0 y 192.168.4.0. Al router 3 se le anuncian las 192.168.4.0 y 192.168.5.0. A ambos se les pasiva la interfaz g0/0.

Verificación

1. Tablas de routing
 - a. El comando para mostrar la tabla es `show ip route`. Lo ejecutamos sobre el router 1:

```
Gateway of last resort is 0.0.0.0 to network 0.0.0.0
```

```
192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
```

```
  C 192.168.1.0/24 is directly connected, GigabitEthernet0/0
```

```
  L 192.168.1.1/32 is directly connected, GigabitEthernet0/0
```

```
192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
```

```
  C 192.168.2.0/24 is directly connected, Serial0/0/0
```

```
  L 192.168.2.1/32 is directly connected, Serial0/0/0
```

```
  R 192.168.3.0/24 [120/1] via 192.168.2.2, 00:00:09, Serial0/0/0
```

```
  R 192.168.4.0/24 [120/1] via 192.168.2.2, 00:00:09, Serial0/0/0
```

```
  R 192.168.5.0/24 [120/2] via 192.168.2.2, 00:00:09, Serial0/0/0
```

```
209.165.200.0/24 is variably subnetted, 2 subnets, 2 masks
```

```
  C 209.165.200.224/30 is directly connected, Serial0/0/1
```

```
  L 209.165.200.225/32 is directly connected, Serial0/0/1
```

```
S* 0.0.0.0/0 is directly connected, Serial0/0/1
```

- b. Router 2

```
Gateway of last resort is 192.168.2.1 to network 0.0.0.0
```

```

R 192.168.1.0/24 [120/1] via 192.168.2.1, 00:00:16, Serial0/0/0
192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.2.0/24 is directly connected, Serial0/0/0
L 192.168.2.2/32 is directly connected, Serial0/0/0
192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.3.0/24 is directly connected, GigabitEthernet0/0
L 192.168.3.1/32 is directly connected, GigabitEthernet0/0
192.168.4.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.4.0/24 is directly connected, Serial0/0/1
L 192.168.4.2/32 is directly connected, Serial0/0/1
R 192.168.5.0/24 [120/1] via 192.168.4.1, 00:00:17, Serial0/0/1
R* 0.0.0.0/0 [120/1] via 192.168.2.1, 00:00:16, Serial0/0/0

```

Router 3

Gateway of last resort is 192.168.4.2 to network 0.0.0.0

```

R    192.168.1.0/24 [120/2] via 192.168.4.2, 00:00:24, Serial0/0/1
R    192.168.2.0/24 [120/1] via 192.168.4.2, 00:00:24, Serial0/0/1
R    192.168.3.0/24 [120/1] via 192.168.4.2, 00:00:24, Serial0/0/1
    192.168.4.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.4.0/24 is directly connected, Serial0/0/1
L    192.168.4.1/32 is directly connected, Serial0/0/1
    192.168.5.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.5.0/24 is directly connected, GigabitEthernet0/0
L    192.168.5.1/32 is directly connected, GigabitEthernet0/0
R*   0.0.0.0/0 [120/2] via 192.168.4.2, 00:00:24, Serial0/0/1

```

2. Usamos el comando ping desde cada terminal para verificar la conectividad.

Ejemplo: desde PC1 al servidor web

```
C:\>ping 64.100.0.10
```

Pinging 64.100.0.10 with 32 bytes of data:

```

Reply from 64.100.0.10: bytes=32 time=1ms TTL=126
Reply from 64.100.0.10: bytes=32 time=13ms TTL=126
Reply from 64.100.0.10: bytes=32 time=12ms TTL=126
Reply from 64.100.0.10: bytes=32 time=11ms TTL=126

```

Ping statistics for 64.100.0.10:

```

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 1ms, Maximum = 13ms, Average = 9ms

```