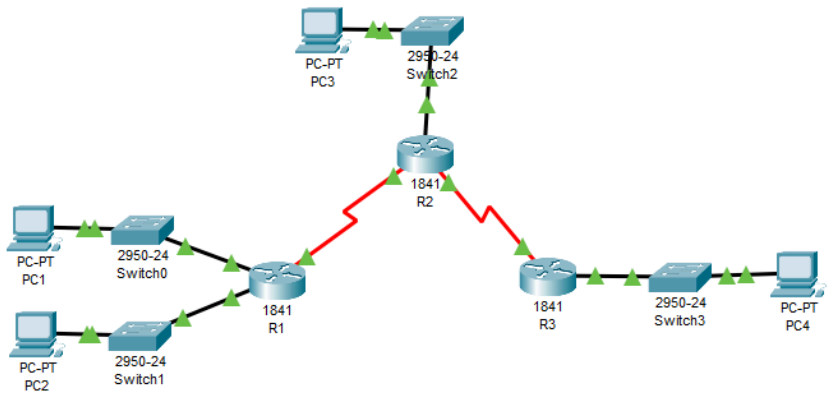
Aarón Josué Meza Torres B74787

RIP

Tarea 1: Cablear la red

Paso 1: Cablear la red utilizando el cuadro y los dispositivos existentes en la actividad.



Tarea 2: Cargar los routers con los scripts provistos

Paso 1: Cargar el script en R1

```
Router#conf
Router#configure
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#!
Router(config)#
Router(config)#hostname R1
R1(config)#
R1(config)#!
R1(config)#
R1(config)#!
R1(config)#
R1(config)#!
R1(config)#
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#ip address 172.30.1.1 255.255.255.0
R1(config-if)#
R1(config-if)#duplex auto
R1(config-if)#
R1(config-if)#speed auto
R1(config-if)#
R1(config-if)#no shutdown

R1(config-if)#
R1(config-if)#!
R1(config-if)#
R1(config-if)#interface FastEthernet0/1
R1(config-if)#
R1(config-if)#ip address 172.30.2.1 255.255.255.0
R1(config-if)#
R1(config-if)#duplex auto
R1(config-if)#
R1(config-if)#speed auto
R1(config-if)#
R1(config-if)#no shutdown
```

```
R1(config-if)#
R1(config-if)#!
R1(config-if)#
R1(config-if)#interface Serial0/0/0
R1(config-if)#
R1(config-if)#ip address 209.165.200.230 255.255.255.252
R1(config-if)#
R1(config-if)#clock rate 64000
This command applies only to DCE interfaces
R1(config-if)#
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
R1(config-if)#
R1(config-if)#!
R1(config-if)#
R1(config-if)#router rip
R1(config-router)#
R1(config-router)#passive-interface FastEthernet0/0
R1(config-router)#
R1(config-router)#passive-interface FastEthernet0/1
R1(config-router)#
R1(config-router)#network 172.30.0.0
R1(config-router)#
R1(config-router)#network 209.165.200.0
R1(config-router)#
R1(config-router)#!
R1(config-router)#
R1(config-router)#line con 0
R1(config-line)#
R1(config-line)#line vty 0 4
R1(config-line)#
R1(config-line)#login
```

```
% Login disabled on line 194, until 'password' is set
% Login disabled on line 195, until 'password' is set
% Login disabled on line 196, until 'password' is set
% Login disabled on line 197, until 'password' is set
% Login disabled on line 198, until 'password' is set
R1(config-line)#
R1(config-line)#!
R1(config-line)#
R1(config-line)#end
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

Paso 2: Cargar el script en R2

```
R2>enable
R2#configu
R2#configure
R2#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R2(config)#!
R2(config)#
R2(config)#hostname R2
R2(config)#
R2(config)#!
R2(config)#
R2(config)#!
R2(config)#
R2(config)#!
R2(config)#
R2(config)#interface FastEthernet0/0
R2(config-if)#
R2(config-if)#ip address 10.1.0.1 255.255.0.0
R2(config-if)#
R2(config-if)#duplex auto
R2(config-if)#
R2(config-if)#speed auto
R2(config-if)#
R2(config-if)#no shutdown

R2(config-if)#
R2(config-if)#!
R2(config-if)#
R2(config-if)#interface Serial0/0/0
R2(config-if)#
R2(config-if)#ip address 209.165.200.229 255.255.255.252
R2(config-if)#
R2(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
R2(config-if)#
R2(config-if)#!
R2(config-if)#
R2(config-if)#interface Serial0/0/1
R2(config-if)#
R2(config-if)#ip address 209.165.200.233 255.255.255.252
R2(config-if)#
R2(config-if)#clock rate 64000
R2(config-if)#
R2(config-if)#no shutdown

R2(config-if)#
R2(config-if)#!
R2(config-if)#
R2(config-if)#router rip
R2(config-router)#
R2(config-router)#passive-interface FastEthernet0/0
R2(config-router)#
R2(config-router)#network 10.0.0.0
R2(config-router)#
R2(config-router)#network 209.165.200.0
R2(config-router)#
R2(config-router)#!
R2(config-router)#
R2(config-router)#line con 0
R2(config-line)#
R2(config-line)#line vty 0 4
R2(config-line)#
R2(config-line)#login
% Login disabled on line 194, until 'password' is set
% Login disabled on line 195, until 'password' is set
% Login disabled on line 196, until 'password' is set
% Login disabled on line 197, until 'password' is set

R2(config-line)#
R2(config-line)#!
R2(config-line)#
R2(config-line)#end
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up
```

Paso 3: Cargar el script en R3

```
R3>enable
R3#conf
R3#configure q
R3#configure
R3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#  !
R3(config)#
R3(config)#hostname R3
R3(config)#
R3(config)#!
R3(config)#
R3(config)#!
R3(config)#
R3(config)#!
R3(config)#
R3(config)#interface FastEthernet0/0
R3(config-if)#
R3(config-if)#ip address 172.30.100.1 255.255.255.0
R3(config-if)#
R3(config-if)#duplex auto
R3(config-if)#
R3(config-if)#speed auto
R3(config-if)#
R3(config-if)#no shutdown

R3(config-if)#
R3(config-if)#!
R3(config-if)#
R3(config-if)#interface Serial0/0/1
R3(config-if)#
R3(config-if)#ip address 209.165.200.234 255.255.255.252
R3(config-if)#
R3(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to down
R3(config-if)#
R3(config-if)#!
R3(config-if)#
R3(config-if)#interface Loopback0

R3(config-if)#
R3(config-if)#ip address 172.30.110.1 255.255.255.0
R3(config-if)#
R3(config-if)#!
R3(config-if)#
R3(config-if)#interface Loopback1

R3(config-if)#
R3(config-if)#ip address 172.30.200.17 255.255.255.240
R3(config-if)#
R3(config-if)#!
R3(config-if)#
R3(config-if)#interface Loopback2

R3(config-if)#
R3(config-if)#ip address 172.30.200.33 255.255.255.240
R3(config-if)#
R3(config-if)#!
R3(config-if)#
R3(config-if)#router rip
R3(config-router)#
R3(config-router)#passive-interface FastEthernet0/0
R3(config-router)#
R3(config-router)#network 172.30.0.0
R3(config-router)#
R3(config-router)#network 209.165.200.0
R3(config-router)#
R3(config-router)#!
R3(config-router)#
```

```
R2(config-router)#network 209.165.200.0
R2(config-router)#
R2(config-router)#!
R2(config-router)#
R2(config-router)#line con 0
R2(config-line)#
R2(config-line)#line vty 0 4
R2(config-line)#
R2(config-line)#login
% Login disabled on line 194, until 'password' is set
% Login disabled on line 195, until 'password' is set
% Login disabled on line 196, until 'password' is set
% Login disabled on line 197, until 'password' is set
% Login disabled on line 198, until 'password' is set
R2(config-line)#
R2(config-line)#!
R2(config-line)#
R2(config-line)#end
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up
```

Tarea 3: Examinar el estado actual de la red

Paso 1: Verificar que ambos enlaces seriales están activos

El estatus de los dos enlaces seriales pueden verificarse rápidamente utilizando **show ip interface brief** en la terminal de R2. Ambas interfaces seriales deberían mostrar su estado y protocolo como activos.

```
R2#show ip interface brief
Interface              IP-Address      OK? Method Status                Protocol
FastEthernet0/0        10.1.0.1        YES manual up                    up
FastEthernet0/1        unassigned      YES unset  administratively down down
Serial0/0/0            209.165.200.229 YES manual up                    up
Serial0/0/1            209.165.200.233 YES manual up                    up
Vlan1                  unassigned      YES unset  administratively down down
R2#
```

Paso 2: Verificar la conectividad desde R2 a los hosts en las lan R1 y R3.

```
R2#ping 172.30.1.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.30.1.10, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

R2#ping 172.30.100.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.30.100.10, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

R2#
```

Se intenta hacer la conexión pero ningún paquete se entrega a la PC1 ni a la PC4 desde el router R2.

Paso 3: Verificar la conectividad entre las PC's

Ping de PC1 a PC2

```
C:\>ping 172.30.2.10

Pinging 172.30.2.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.30.2.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Ping de PC1 a PC3

```
C:\>ping 10.1.0.10

Pinging 10.1.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.1.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC1 a PC4

```
C:\>ping 172.30.100.10

Pinging 172.30.100.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.30.100.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC4 a PC2

```
C:\>ping 172.30.2.10

Pinging 172.30.2.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.30.2.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC4 a PC3

```
C:\>ping 10.1.0.10

Pinging 10.1.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.1.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Como se puede observar, ninguno de los pings realizados desde la PC1 y la PC4 hacia las demás PC’s fue exitoso.

Paso 4: Ver la tabla de enrutamiento de R2

```
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

     10.0.0.0/16 is subnetted, 1 subnets
C       10.1.0.0 is directly connected, FastEthernet0/0
R    172.30.0.0/16 [120/1] via 209.165.200.234, 00:00:07, Serial0/0/1
                   [120/1] via 209.165.200.230, 00:00:15, Serial0/0/0
     209.165.200.0/30 is subnetted, 2 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
C       209.165.200.232 is directly connected, Serial0/0/1
```

Paso 5: Ver la tabla de enrutamiento de R1

```
R1>enable
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

     172.30.0.0/24 is subnetted, 2 subnets
C       172.30.1.0 is directly connected, FastEthernet0/0
C       172.30.2.0 is directly connected, FastEthernet0/1
     209.165.200.0/30 is subnetted, 1 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
```

Paso 6: Ver la tabla de enrutamiento de R3

```
R3>enable
R3#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

     172.30.0.0/16 is variably subnetted, 4 subnets, 2 masks
C       172.30.100.0/24 is directly connected, FastEthernet0/0
C       172.30.110.0/24 is directly connected, Loopback0
C       172.30.200.16/28 is directly connected, Loopback1
C       172.30.200.32/28 is directly connected, Loopback2
     209.165.200.0/30 is subnetted, 1 subnets
C       209.165.200.232 is directly connected, Serial0/0/1
```

Paso 7: Examinar los paquetes RIPv1 que son recibidos por R2

```
RIP: received v1 update from 209.165.200.230 on Serial0/0/0
     172.30.0.0 in 1 hops
RIP: received v1 update from 209.165.200.234 on Serial0/0/1
     172.30.0.0 in 1 hops
```

Tarea 4: Configurar RIP versión 2

Paso 1: Usar el comando version 2 para habilitar RIP versión 2 en cada router.

```
R2#conf
R2#configure
R2#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R2(config)#router rip
R2(config-router)#version 2
R2(config-router)#
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#
```

```
R3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#router rip
R3(config-router)#version 2
R3(config-router)#
```

En las imágenes anteriores se muestra la configuración de RIPv2 en cada router.

Paso 2: Verificar que RIPv2 se está ejecutando en los routers.

R3:

```
R3#debug ip rip
RIP protocol debugging is on
R3#RIP: sending  v2 update to 224.0.0.9 via Loopback0 (172.30.110.1)
RIP: build update entries
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback1 (172.30.200.17)
RIP: build update entries
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback2 (172.30.200.33)
RIP: build update entries
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.234)
RIP: build update entries
      172.30.0.0/16 via 0.0.0.0, metric 1, tag 0


R3#show ip protocols
Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 27 seconds
Invalid after 180 seconds, hold down 180, flushed after 240
Outgoing update filter list for all interfaces is not set
Incoming update filter list for all interfaces is not set
Redistributing: rip
Default version control: send version 2, receive 2
  Interface             Send  Recv  Triggered RIP  Key-chain
  Loopback0             22
  Loopback1             22
  Loopback2             22
  Serial0/0/1           22
Automatic network summarization is in effect
Maximum path: 4
Routing for Networks:
           172.30.0.0
           209.165.200.0
Passive Interface(s):
           FastEthernet0/0
Routing Information Sources:
           Gateway         Distance      Last Update
Distance: (default is 120)
R3#
```

```
router rip
 version 2
 passive-interface FastEthernet0/0
 network 172.30.0.0
 network 209.165.200.0
```

R2:

```
R2#debug ip rip
RIP protocol debugging is on
R2#RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.233)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.229)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0

R2#undebug all
All possible debugging has been turned off
```

```
R2#show ip protocols
Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 23 seconds
Invalid after 180 seconds, hold down 180, flushed after 240
Outgoing update filter list for all interfaces is not set
Incoming update filter list for all interfaces is not set
Redistributing: rip
Default version control: send version 2, receive 2
  Interface             Send  Recv  Triggered RIP  Key-chain
  Serial0/0/1           22
  Serial0/0/0           22
Automatic network summarization is in effect
Maximum path: 4
Routing for Networks:
           10.0.0.0
           209.165.200.0
Passive Interface(s):
           FastEthernet0/0
Routing Information Sources:
           Gateway         Distance      Last Update
Distance: (default is 120)
```

```
router rip
 version 2
 passive-interface FastEthernet0/0
 network 10.0.0.0
 network 209.165.200.0
!
```

R1:

```
R1#debug ip rip
RIP protocol debugging is on
R1#RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.230)
RIP: build update entries
      172.30.0.0/16 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.230)
RIP: build update entries
      172.30.0.0/16 via 0.0.0.0, metric 1, tag 0
```

```
R1#show ip protocols
Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 16 seconds
Invalid after 180 seconds, hold down 180, flushed after 240
Outgoing update filter list for all interfaces is not set
Incoming update filter list for all interfaces is not set
Redistributing: rip
Default version control: send version 2, receive 2
  Interface             Send  Recv  Triggered RIP  Key-chain
  Serial0/0/0           22
Automatic network summarization is in effect
Maximum path: 4
Routing for Networks:
            172.30.0.0
            209.165.200.0
Passive Interface(s):
            FastEthernet0/0
            FastEthernet0/1
Routing Information Sources:
            Gateway         Distance      Last Update
Distance: (default is 120)
```

```
router rip
 version 2
 passive-interface FastEthernet0/0
 passive-interface FastEthernet0/1
 network 172.30.0.0
 network 209.165.200.0
```

Tarea 5: Examinar el resumen automático de rutas.

Paso 1: Utilizar el comando version 2 para habilitar la versión 2 en cada router.

R1:

```
R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#
```

```
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

R    10.0.0.0/8 [120/1] via 209.165.200.229, 00:00:08, Serial0/0/0
     172.30.0.0/16 is variably subnetted, 3 subnets, 2 masks
R       172.30.0.0/16 is possibly down, routing via 209.165.200.229, Serial0/0/0
C       172.30.1.0/24 is directly connected, FastEthernet0/0
C       172.30.2.0/24 is directly connected, FastEthernet0/1
     209.165.200.0/30 is subnetted, 2 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
R       209.165.200.232 [120/1] via 209.165.200.229, 00:00:08, Serial0/0/0

R1#
```

```
R1#debug ip rip
RIP protocol debugging is on
R1#RIP: received v2 update from 209.165.200.229 on Serial0/0/0
      10.0.0.0/8 via 0.0.0.0 in 1 hops
      209.165.200.232/30 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.230)
RIP: build update entries
      172.30.0.0/16 via 0.0.0.0, metric 1, tag 0
```

R2:

```
R2(config)#router rip
R2(config-router)#version 2
R2(config-router)#
```

```
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

     10.0.0.0/16 is subnetted, 1 subnets
C       10.1.0.0 is directly connected, FastEthernet0/0
R    172.30.0.0/16 [120/1] via 209.165.200.234, 00:00:17, Serial0/0/1
                   [120/1] via 209.165.200.230, 00:00:07, Serial0/0/0
     209.165.200.0/30 is subnetted, 2 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
C       209.165.200.232 is directly connected, Serial0/0/1
```

```
R2#debug ip rip
RIP protocol debugging is on
R2#RIP: received v2 update from 209.165.200.234 on Serial0/0/1
      172.30.0.0/16 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.229)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.233)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 1, tag 0
RIP: received v2 update from 209.165.200.230 on Serial0/0/0
      172.30.0.0/16 via 0.0.0.0 in 1 hops
RIP: received v2 update from 209.165.200.234 on Serial0/0/1
      172.30.0.0/16 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.229)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.233)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 1, tag 0
undebug allRIP: received v2 update from 209.165.200.230 on Serial0/0/0
      172.30.0.0/16 via 0.0.0.0 in 1 hops

All possible debugging has been turned off
```

R3:

```
R3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#router rip
R3(config-router)#version 2
R3(config-router)#
```

```
R3#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

R    10.0.0.0/8 [120/1] via 209.165.200.233, 00:00:27, Serial0/0/1
     172.30.0.0/16 is variably subnetted, 4 subnets, 2 masks
C       172.30.100.0/24 is directly connected, FastEthernet0/0
C       172.30.110.0/24 is directly connected, Loopback0
C       172.30.200.16/28 is directly connected, Loopback1
C       172.30.200.32/28 is directly connected, Loopback2
     209.165.200.0/30 is subnetted, 2 subnets
R       209.165.200.228 [120/1] via 209.165.200.233, 00:00:27, Serial0/0/1
C       209.165.200.232 is directly connected, Serial0/0/1
```

```
R3#debug ip rip
RIP protocol debugging is on
R3#RIP: sending  v2 update to 224.0.0.9 via Loopback0 (172.30.110.1)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 2, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback1 (172.30.200.17)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 2, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback2 (172.30.200.33)
RIP: build update entries
      10.0.0.0/8 via 0.0.0.0, metric 2, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.0/24 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.234)
RIP: build update entries
      172.30.0.0/16 via 0.0.0.0, metric 1, tag 0
RIP: received v2 update from 209.165.200.233 on Serial0/0/1
      10.0.0.0/8 via 0.0.0.0 in 1 hops
      209.165.200.228/30 via 0.0.0.0 in 1 hops
undebug all
All possible debugging has been turned off
```

¿Qué entradas se incluyen en las actualizaciones RIP enviadas desde R3?

Desde R3 se envían las siguientes actualizaciones:

- 10.0.0.0/8
- 172.30.0.0/16 (con métrica 16, lo que indica que no es alcanzable)
- 172.30.100.0/24
- 172.30.110.0/24
- 172.30.200.16/28
- 172.30.200.32/28
- 209.165.200.0/24

En R2, ¿qué rutas se encuentran en las actualizaciones RIP que se reciben desde R3?

Las ruta encontrada en las actualizaciones son:

- 172.30.0.0/16

Esto indica que R3 solo envía la ruta resumida 172.30.0.0/16 a R2, sin incluir sus subredes.

¿Por qué R3 no está enviando las subredes 172.30.0.0, sino solo la ruta resumida?

R3 no envía las subredes porque el resumen automático está habilitado en el RIP, lo que hace que se resuman las subredes a una sola entrada.

Tarea 6: Desactivar el resumen automático

El comando "no auto-summary" se utiliza para desactivar el resumen automático en RIPv2. Desactivar el resumen automático en todos los routers. Los routers ya no resumirán rutas en los límites principales de la red.

```
R1#configur terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#router rip
R1(config-router)#no aut
R1(config-router)#no auto-summary
R1(config-router)#
```

```
R2(config)#router rip
R2(config-router)#no au
R2(config-router)#no auto-summary
R2(config-router)#
```

```
R3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#router rip
R3(config-router)#no au
R3(config-router)#no auto-summary
R3(config-router)#
```

Tarea 7: Examine las tablas de enrutamiento

R1:

```
R1>enable
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

     10.0.0.0/16 is subnetted, 1 subnets
R       10.1.0.0 [120/1] via 209.165.200.229, 00:00:00, Serial0/0/0
     172.30.0.0/16 is variably subnetted, 6 subnets, 2 masks
C       172.30.1.0/24 is directly connected, FastEthernet0/0
C       172.30.2.0/24 is directly connected, FastEthernet0/1
R       172.30.100.0/24 [120/2] via 209.165.200.229, 00:00:00, Serial0/0/0
R       172.30.110.0/24 [120/2] via 209.165.200.229, 00:00:00, Serial0/0/0
R       172.30.200.16/28 [120/2] via 209.165.200.229, 00:00:00, Serial0/0/0
R       172.30.200.32/28 [120/2] via 209.165.200.229, 00:00:00, Serial0/0/0
     209.165.200.0/30 is subnetted, 2 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
R       209.165.200.232 [120/1] via 209.165.200.229, 00:00:00, Serial0/0/0
```

```
R1#debug ip r1
RIP protocol debugging is on
R1#debug ip rip
RIP protocol debugging is on
R1#RIP: received v2 update from 209.165.200.229 on Serial0/0/0
      10.1.0.0/16 via 0.0.0.0 in 1 hops
      172.30.100.0/24 via 0.0.0.0 in 2 hops
      172.30.110.0/24 via 0.0.0.0 in 2 hops
      172.30.200.16/28 via 0.0.0.0 in 2 hops
      172.30.200.32/28 via 0.0.0.0 in 2 hops
      209.165.200.232/30 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.230)
RIP: build update entries
      172.30.1.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 1, tag 0

R1#RIP: received v2 update from 209.165.200.229 on Serial0/0/0
      10.1.0.0/16 via 0.0.0.0 in 1 hops
      172.30.100.0/24 via 0.0.0.0 in 2 hops
      172.30.110.0/24 via 0.0.0.0 in 2 hops
      172.30.200.16/28 via 0.0.0.0 in 2 hops
      172.30.200.32/28 via 0.0.0.0 in 2 hops
      209.165.200.232/30 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.230)
RIP: build update entries
      172.30.1.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 1, tag 0
```

R2:

```
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

     10.0.0.0/16 is subnetted, 1 subnets
C       10.1.0.0 is directly connected, FastEthernet0/0
     172.30.0.0/16 is variably subnetted, 6 subnets, 2 masks
R       172.30.1.0/24 [120/1] via 209.165.200.230, 00:00:24, Serial0/0/0
R       172.30.2.0/24 [120/1] via 209.165.200.230, 00:00:24, Serial0/0/0
R       172.30.100.0/24 [120/1] via 209.165.200.234, 00:00:22, Serial0/0/1
R       172.30.110.0/24 [120/1] via 209.165.200.234, 00:00:22, Serial0/0/1
R       172.30.200.16/28 [120/1] via 209.165.200.234, 00:00:22, Serial0/0/1
R       172.30.200.32/28 [120/1] via 209.165.200.234, 00:00:22, Serial0/0/1
     209.165.200.0/30 is subnetted, 2 subnets
C       209.165.200.228 is directly connected, Serial0/0/0
C       209.165.200.232 is directly connected, Serial0/0/1
```

```
R2>enable
R2#debug ip rip
RIP protocol debugging is on
R2#RIP: received v2 update from 209.165.200.230 on Serial0/0/0
      172.30.1.0/24 via 0.0.0.0 in 1 hops
      172.30.2.0/24 via 0.0.0.0 in 1 hops
RIP: received v2 update from 209.165.200.234 on Serial0/0/1
      172.30.100.0/24 via 0.0.0.0 in 1 hops
      172.30.110.0/24 via 0.0.0.0 in 1 hops
      172.30.200.16/28 via 0.0.0.0 in 1 hops
      172.30.200.32/28 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.229)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 1, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 2, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 2, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 2, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 2, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.233)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 1, tag 0
      172.30.1.0/24 via 0.0.0.0, metric 2, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 2, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 1, tag 0

R2#RIP: received v2 update from 209.165.200.230 on Serial0/0/0
      172.30.1.0/24 via 0.0.0.0 in 1 hops
      172.30.2.0/24 via 0.0.0.0 in 1 hops
RIP: received v2 update from 209.165.200.234 on Serial0/0/1
      172.30.100.0/24 via 0.0.0.0 in 1 hops
      172.30.110.0/24 via 0.0.0.0 in 1 hops
      172.30.200.16/28 via 0.0.0.0 in 1 hops
      172.30.200.32/28 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/0 (209.165.200.229)
RIP: build update entries
```

R3:

```
R3>
R3>enable
R3#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

     10.0.0.0/16 is subnetted, 1 subnets
R       10.1.0.0 [120/1] via 209.165.200.233, 00:00:15, Serial0/0/1
     172.30.0.0/16 is variably subnetted, 6 subnets, 2 masks
R       172.30.1.0/24 [120/2] via 209.165.200.233, 00:00:15, Serial0/0/1
R       172.30.2.0/24 [120/2] via 209.165.200.233, 00:00:15, Serial0/0/1
C       172.30.100.0/24 is directly connected, FastEthernet0/0
C       172.30.110.0/24 is directly connected, Loopback0
C       172.30.200.16/28 is directly connected, Loopback1
C       172.30.200.32/28 is directly connected, Loopback2
     209.165.200.0/30 is subnetted, 2 subnets
R       209.165.200.228 [120/1] via 209.165.200.233, 00:00:15, Serial0/0/1
C       209.165.200.232 is directly connected, Serial0/0/1
```

```
R3#
R3#debug ip rip
RIP protocol debugging is on
R3#RIP: received v2 update from 209.165.200.233 on Serial0/0/1
      10.1.0.0/16 via 0.0.0.0 in 1 hops
      172.30.1.0/24 via 0.0.0.0 in 2 hops
      172.30.2.0/24 via 0.0.0.0 in 2 hops
      209.165.200.228/30 via 0.0.0.0 in 1 hops
RIP: sending  v2 update to 224.0.0.9 via Loopback0 (172.30.110.1)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 2, tag 0
      172.30.1.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 2, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback1 (172.30.200.17)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 2, tag 0
      172.30.1.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 2, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
```

```
RIP: sending  v2 update to 224.0.0.9 via Loopback1 (172.30.200.17)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 2, tag 0
      172.30.1.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 2, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Loopback2 (172.30.200.33)
RIP: build update entries
      10.1.0.0/16 via 0.0.0.0, metric 2, tag 0
      172.30.1.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.2.0/24 via 0.0.0.0, metric 3, tag 0
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      209.165.200.228/30 via 0.0.0.0, metric 2, tag 0
      209.165.200.232/30 via 0.0.0.0, metric 1, tag 0
RIP: sending  v2 update to 224.0.0.9 via Serial0/0/1 (209.165.200.234)
RIP: build update entries
      172.30.100.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.110.0/24 via 0.0.0.0, metric 1, tag 0
      172.30.200.16/28 via 0.0.0.0, metric 1, tag 0
      172.30.200.32/28 via 0.0.0.0, metric 1, tag 0
```

¿Qué entradas se incluyen en las actualizaciones RIP enviadas desde R1?

R1 incluye en sus actualizaciones todas las redes que conoce y no están directamente conectadas. En R1 se anuncian:

- 172.30.1.0/24 (conectada directamente)
- 172.30.2.0/24 (conectada directamente)
- 172.30.100.0/24
- 172.30.110.0/24
- 172.30.200.16/28
- 172.30.200.32/28

En R2, ¿qué rutas se encuentran en las actualizaciones RIP recibidas desde R1?

- 172.30.1.0/24
- 172.30.2.0/24
- 172.30.100.0/24
- 172.30.110.0/24
- 172.30.200.16/28
- 172.30.200.32/28
- 10.0.0.0/8
- 10.1.0.0/16

¿Ahora se incluyen las máscaras de subred en las actualizaciones de enrutamiento?

Sí, ahora sí se incluyen las máscaras de subred. Por ejemplo, en las siguientes entradas se pueden observar las máscaras de subred:

- 172.30.200.16/28
- 172.30.200.32/28
- 10.1.0.0/16

Tarea 8: Verificar la conectividad de la red

Paso 1: Verificar la conexión entre R2 y las PC's

```
R2#ping 172.30.1.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.30.1.10, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)
```

```
R2#ping 172.30.100.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.30.100.10, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)
```

Como se puede ver en las imágenes anteriores, el ping a la PC1 y PC4 sigue sin ser exitoso ya que ningún paquete es recibido.

Paso 2: Verificar la conexión entre las PC´s

Ping de PC1 a PC2

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.30.2.10

Pinging 172.30.2.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.
```

Ping de PC1 a PC3

```
Pinging 10.1.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.1.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC1 a PC4

```
Pinging 172.30.100.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.30.100.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC4 a PC2

```
Pinging 172.30.2.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.30.2.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping de PC4 a PC3

```
Pinging 10.1.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.1.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Como se puede observar en las imágenes anteriores, sigue sin ser exitoso los pings realizados desde PC1 y PC4 a las otras PC's.

Evidencia de Ejercicio completado

Assessment Items	Status	Points	Component(s)	Feedback
Network				
PC1		0	Other	
Ports		0	Other	
FastEthernet0		0	Other	
Link to Switch0		0	Other	
✔ Type	Correct	1	Other	
PC2		0	Other	
Ports		0	Other	
FastEthernet0		0	Other	
Link to Switch1		0	Other	
✔ Type	Correct	1	Other	
PC3		0	Other	
Ports		0	Other	
FastEthernet0		0	Other	
Link to Switch2		0	Other	
✔ Type	Correct	1	Other	
PC4		0	Other	
Ports		0	Other	
FastEthernet0		0	Other	
Link to Switch3		0	Other	
✔ Type	Correct	1	Other	
R1				
Ports				
FastEthernet0/0		0	Other	
Link to Switch0		0	Other	
✔ Type	Correct	1	Other	
FastEthernet0/1		0	Other	
Link to Switch1		0	Other	
✔ Type	Correct	1	Other	
Serial0/0/0				
Link to R2				
✔ Connects to Serial0/0/0	Correct	1	Other	
✔ Type	Correct	1	Other	
RIP				
✔ Auto Summary	Correct	1	Routing	
✔ Version	Correct	1	Routing	
R2				
Ports				
FastEthernet0/0		0	Other	
Link to Switch2		0	Other	
✔ Type	Correct	1	Other	
Serial0/0/0				
Link to R1				
✔ Connects to Serial0/0/0	Correct	1	Other	
✔ Type	Correct	1	Other	
Serial0/0/1				
Link to R3				
✔ Connects to Serial0/0/1	Correct	1	Other	
✔ Type	Correct	1	Other	
RIP				
✔ Auto Summary	Correct	1	Routing	
✔ Version	Correct	1	Routing	

Assessment Items	Status	Points	Component(s)	Feedbac
FastEthernet0		0	Other	
Link to Switch2		0	Other	
Type	Correct	1	Other	
PC4		0	Other	
Ports		0	Other	
FastEthernet0		0	Other	
Link to Switch3		0	Other	
Type	Correct	1	Other	
R1				
Ports				
FastEthernet0/0		0	Other	
Link to Switch0		0	Other	
Type	Correct	1	Other	
FastEthernet0/1		0	Other	
Link to Switch1		0	Other	
Type	Correct	1	Other	
Serial0/0/0				
Link to R2				
Connects to Serial0/0/0	Correct	1	Other	
Type	Correct	1	Other	
RIP				
Auto Summary	Correct	1	Routing	
Version	Correct	1	Routing	
R2				
Ports				
FastEthernet0/0		0	Other	
Link to Switch2		0	Other	
Type	Correct	1	Other	
Serial0/0/0				
Link to R1				
Connects to Serial0/0/0	Correct	1	Other	
Type	Correct	1	Other	
Serial0/0/1				
Link to R3				
Connects to Serial0/0/1	Correct	1	Other	
Type	Correct	1	Other	
RIP				
Auto Summary	Correct	1	Routing	
Version	Correct	1	Routing	
R3				
Ports				
FastEthernet0/0		0	Other	
Link to Switch3		0	Other	
Type	Correct	1	Other	
Serial0/0/1				
Link to R2				
Connects to Serial0/0/1	Correct	1	Other	
Type	Correct	1	Other	
RIP				
Auto Summary	Correct	1	Routing	
Version	Correct	1	Routing	