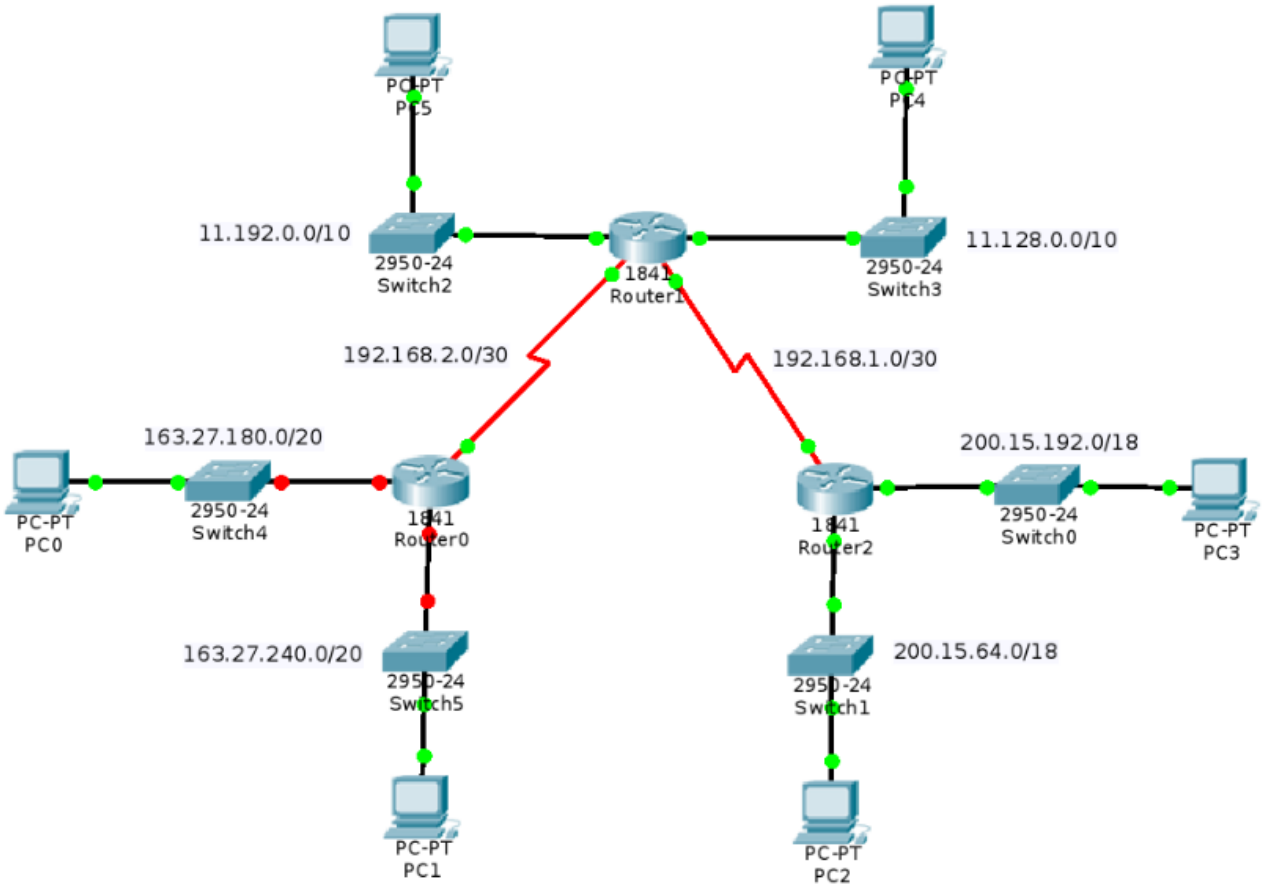
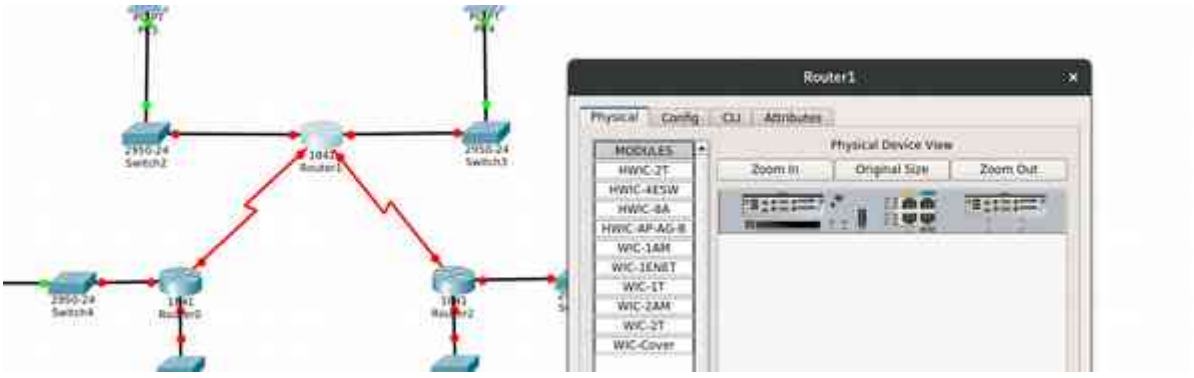
Configureu amb el Packet Tracer la següent xarxa, utilitzant enrutament dinàmic:



Atenció! Errata: 163.27.176/20 (xarxa del PC0)

Per fer-ho, tingueu en compte els següents requisits:

- Configureu els tres routers 1841 per tal que puguin tenir dos ports serial



- Configureu les interfícies de cada router

Dispositiu	Interface	Direcció IP / Mascara
Router 0	FastEthernet 0/0	163.27.180.1 / 255.255.240.0
Router 0	FastEthernet 0/1	163.27.240.1 / 255.255.240.0
Router 0	Serial 0/0/0	192.168.2.1 / 255.255.255.252

Router>enable

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#inter

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/0

Router(config-if)#ip address 163.27.180.1 255.255.240.0

Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

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

Router(config-if)#exit

Router(config)#inter

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/1

Router(config-if)#ip address 163.27.240.1 255.255.240.0

Router(config-if)#no shutdown

Router(config-if)#

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

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

Router(config)#interface Serial 0/0/0

Router(config-if)#ip address 192.168.2.1 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#clock rate 19200

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

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

Router 1	FastEthernet 0/0	11.192.0.1 / 255.192.0.0
Router 1	FastEthernet 0/1	11.128.0.1 / 255.192.0
Router 1	Serial 0/0/0	192.168.2.2 / 255.255.255.252
Router 1	Serial 0/0/0	192.168.1.2 / 255.255.255.252

Router>enable

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/0

Router(config-if)#ip address 11.192.0.1 255.192.0.0

Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

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

Router(config-if)#exit

Router(config)#inter

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/1

Router(config-if)#ip address 11.128.0.1 255.192.0.0

Router(config-if)#no shutdown

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

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

Router(config-if)#exit

Router(config)#inter

Router(config)#interface Se

Router(config)#interface Serial 0/0/0

Router(config-if)#ip address 192.168.2.2 255.255.255.252

Router(config-if)#no shutdown

Router(config-if)#

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

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

Router(config-if)#exit

Router(config)#inter

Router(config)#interface Se

Router(config)#interface Serial 0/0/1

Router(config-if)#ip address 192.168.1.2 255.255.255.252

Router(config-if)#no shutdown

%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

Router 2	FastEthernet 0/0	200.15.192.0 / 255.255.192.0
Router 2	FastEthernet 0/1	200.15.64.0 / 255.255.192.0
Router 2	Serial 0/0/0	192.168.1.1 / 255.255.255.252

Router>enable

Router#configure terminal

```
Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#inter

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/0

Router(config-if)#ip address 200.15.192.1 255.255.192.0

Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

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

Router(config-if)#exit

Router(config)#interface Fa

Router(config)#interface FastEthernet 0/1

Router(config-if)#ip address 200.15.64.1 255.255.192.0

Router(config-if)#no shutdown

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

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

Router(config-if)#exit

Router(config)#inter

Router(config)#interface Se

Router(config)#interface Serial 0

Router(config)#interface Serial 0/0/0

Router(config-if)#ip address 192.168.1.1 255.255.255.252

Router(config-if)#no shutdown

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

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

- Configureu el servei DHCP per a les xarxes LAN

Router0 - FastEthernet0/0

Router>enable

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL1

Router(dhcp-config)#network 163.27.180.0 255.255.240.0

Router(dhcp-config)#default-router 163.27.180.1

Router(dhcp-config)#ip dhcp excluded-address 163.27.180.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router0 - FastEthernet0/1

Router>enable

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL2

Router(dhcp-config)#network 163.27.240.0 255.255.240.0

Router(dhcp-config)#default-router 163.27.240.1

Router(dhcp-config)#ip dhcp excluded-address 163.27.240.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router1 - FastEthernet0/0

Router>enable

Router#conf

Router#configure

Configuring from terminal, memory, or network [terminal]?

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL3

Router(dhcp-config)#network 11.192.0.0 255.192.0.0

Router(dhcp-config)#default-router 11.192.0.1

Router(dhcp-config)#ip dhcp excluded-address 11.192.0.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router1 - FastEthernet0/1

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip dhcp pool POOL4

Router(dhcp-config)#network 11.128.0.0 255.192.0.0

Router(dhcp-config)#default-router 11.128.0.1

Router(dhcp-config)#ip dhcp excluded-address 11.128.0.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router2 - FastEthernet0/0

Router>enable

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL5

Router(dhcp-config)#network 200.15.192.0 255.255.192.0

Router(dhcp-config)#default-router 200.15.192.1

Router(dhcp-config)#ip dhcp excluded-address 200.15.192.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router2 - FastEthernet0/1

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#ip dhcp pool POOL6

Router(dhcp-config)#network 200.15.64.0 255.255.192.0

```
Router(dhcp-config)#default-router 200.15.64.1

Router(dhcp-config)#ip dhcp excluded-address 200.15.64.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#
```

- Configureu l'enrutament dinàmic amb RIP de forma que no envïi actualitzacions a les LAN finals

```
passive-interface FasthEthernet 0/0

passive-interface FastEthernet0/1

Així a les 3 xarxes connectats als routers
```

- Utilitzeu primer RIPv1, i després, RIPv2

```
Router0

Router>enable

Router#configure terminal

Router#debug ip rip

RIP protocol debugging is on

Router#configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#router rip

Router(config-router)#network 11.192.0.0

Router(config-router)#network 11.128.0.0

Router(config-router)#network 200.15.192.0

Router(config-router)#network 200.15.64.0

Router(config)#exit
```

```
Router#

%SYS-5-CONFIG_I: Configured from console by console


Router#show ip rip database

Router#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


     163.27.0.0/20 is subnetted, 2 subnets

C       163.27.176.0 is directly connected, FastEthernet0/0

C       163.27.240.0 is directly connected, FastEthernet0/1

     192.168.2.0/30 is subnetted, 1 subnets

C       192.168.2.0 is directly connected, Serial0/0/0


Router#show ip protocol

Routing Protocol is "rip"

Sending updates every 30 seconds, next due in 5 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 1**, receive any version

Interface Send Recv Triggered RIP Key-chain

Automatic network summarization is in effect

Maximum path: 4

Routing for Networks:

11.0.0.0

200.15.64.0

200.15.192.0

Passive Interface(s):

FastEthernet0/0
FastEthernet0/1

Routing Information Sources:

Gateway Distance Last Update

Distance: (default is 120)

Router#

ROUTER0 V2 RIP

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#debug ip rip
RIP protocol debugging is on
Router#conf
Router#configure ter
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#router rip

```
Router(config-router)#version 2
Router(config-router)#network 11.192.0.0
Router(config-router)#network 11.128.0.0
Router(config-router)#network 200.15.192.0
Router(config-router)#network 200.15.64.0
Router(config-router)#no auto-s
Router(config-router)#no auto-summary
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console


Router#
```

Router1

```
Router>enable

Router#debug ip rip

RIP protocol debugging is on

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#router rip

Router(config-router)#network 163.27.180.0

Router(config-router)#network 163.27.240.0

Router(config-router)#network 200.15.192.0

Router(config-router)#network 200.15.64.0

Router(config-router)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#show ip rip database

Router#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


     11.0.0.0/10 is subnetted, 2 subnets
C       11.128.0.0 is directly connected, FastEthernet0/1
C       11.192.0.0 is directly connected, FastEthernet0/0
     192.168.1.0/30 is subnetted, 1 subnets
C       192.168.1.0 is directly connected, Serial0/0/1
     192.168.2.0/30 is subnetted, 1 subnets
C       192.168.2.0 is directly connected, Serial0/0/0


Router#show ip protocol

Routing Protocol is "rip"

Sending updates every 30 seconds, next due in 4 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 1, receive any version

Interface Send Recv Triggered RIP Key-chain

Automatic network summarization is in effect

Maximum path: 4

Routing for Networks:

163.27.0.0

200.15.64.0

200.15.192.0

Passive Interface(s):

FastEthernet0/0
FastEthernet0/1

Routing Information Sources:

Gateway Distance Last Update

Distance: (default is 120)

Router#

ROUTER1 V2 RIP

Router#

%SYS-5-CONFIG_I: Configured from console by console
debug
% Incomplete command.
Router#debug ip rip
RIP protocol debugging is on
Router#conf
Router#configure ter
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2

```
Router(config-router)#network 163.27.180.0
Router(config-router)#network 163.27.240.0
Router(config-router)#network 200.15.192.0
Router(config-router)#network 200.15.64.0
Router(config-router)#no auto-s
Router(config-router)#no auto-summary
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console


Router#
```

Router2

```
Router>enable

Router#debug ip rip

RIP protocol debugging is on

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#router rip

Router(config-router)#network 11.128.0.0

Router(config-router)#network 11.192.0.0

Router(config-router)#network 163.27.180.0

Router(config-router)#exit

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#show ip rip database

Router#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


     192.168.1.0/30 is subnetted, 1 subnets
C       192.168.1.0 is directly connected, Serial0/0/0
C    200.15.64.0/18 is directly connected, FastEthernet0/1
C    200.15.192.0/18 is directly connected, FastEthernet0/0


Router#show ip protocol
Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 25 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 1, receive any version
  Interface          Send  Recv  Triggered RIP  Key-chain
```

Automatic network summarization is in effect

Maximum path: 4

Routing for Networks:

11.0.0.0

163.27.0.0

Passive Interface(s):

FastEthernet0/0
FastEthernet0/1

Routing Information Sources:

Gateway Distance Last Update

Distance: (default is 120)

Router#

ROUTER2 V2 RIP

Router#

%SYS-5-CONFIG_I: Configured from console by console

Router#debug ip rip
RIP protocol debugging is on
Router#conf
Router#configure ter
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 163.27.180.0
Router(config-router)#network 163.27.240.0
Router(config-router)#network 11.192.0.0
Router(config-router)#network 11.128.0.0
Router(config-router)#no auto
Router(config-router)#no auto-summary

```
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console


Router#
```

Responeu a les següents preguntes:

1. Enganxa les línies que has utilitzat per configurar el servei DHCP al Router0

Router0 - FastEthernet0/0

```
Router>enable

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL1

Router(dhcp-config)#network 163.27.180.0 255.255.240.0

Router(dhcp-config)#default-router 163.27.180.1

Router(dhcp-config)#ip dhcp excluded-address 163.27.180.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console
```

Router0 - FastEthernet0/1

```
Router>enable
```

Router#conf

Router#configure ter

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#service dhcp

Router(config)#ip dhcp pool POOL2

Router(dhcp-config)#network 163.27.240.0 255.255.240.0

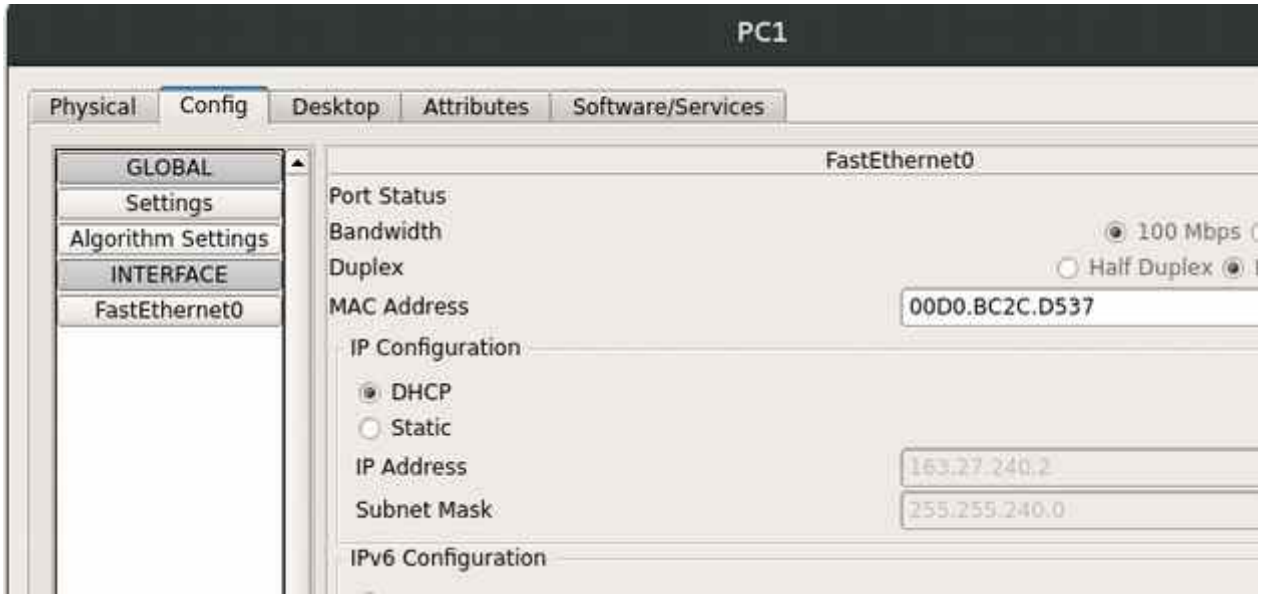
Router(dhcp-config)#default-router 163.27.240.1

Router(dhcp-config)#ip dhcp excluded-address 163.27.240.1

Router(config)#exit

Router#

%SYS-5-CONFIG_I: Configured from console by console



2. Quina instrucció has utilitzat per no enviar actualitzacions a les LAN finals?

Router (config-router)# passive-interface *Interficie_local*

3. Enganxa les taules d'enrutament dels 3 routers per RIPv1

Router0

Router#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

163.27.0.0/20 is subnetted, 2 subnets
C 163.27.176.0 is directly connected, FastEthernet0/0
C 163.27.240.0 is directly connected, FastEthernet0/1
192.168.2.0/30 is subnetted, 1 subnets
C 192.168.2.0 is directly connected, Serial0/0/0

Router#

Router1

Router#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

11.0.0.0/10 is subnetted, 2 subnets
C 11.128.0.0 is directly connected, FastEthernet0/1
C 11.192.0.0 is directly connected, FastEthernet0/0
192.168.1.0/30 is subnetted, 1 subnets
C 192.168.1.0 is directly connected, Serial0/0/1
192.168.2.0/30 is subnetted, 1 subnets
C 192.168.2.0 is directly connected, Serial0/0/0

Router#

Router2

Router#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

192.168.1.0/30 is subnetted, 1 subnets
C 192.168.1.0 is directly connected, Serial0/0/0
C 200.15.64.0/18 is directly connected, FastEthernet0/1
C 200.15.192.0/18 is directly connected, FastEthernet0/0

Router#

4. Enganxa les bases de dades d'enrutament dinàmic dells 3 routers per RIPv1

Router0

Router>enable

Router#show ip rip database
163.27.176.0/20 auto-summary
163.27.176.0/20 directly connected, FastEthernet0/0
163.27.240.0/20 auto-summary
163.27.240.0/20 directly connected, FastEthernet0/1

Router1

Router#show ip rip database

11.128.0.0/10 auto-summary
11.128.0.0/10 directly connected, FastEthernet0/1
11.192.0.0/10 auto-summary
11.192.0.0/10 directly connected, FastEthernet0/0

Router2

Router#show ip rip database

200.15.64.0/18 auto-summary
200.15.64.0/18 directly connected, FastEthernet0/1
200.15.192.0/18 auto-summary
200.15.192.0/18 directly connected, FastEthernet0/0
Router#

5. Enganxa les taules d'enrutament dels 3 routers per RIPv2

Router0

Router#show ip protocol

Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 22 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
Automatic network summarization is not in effect
Maximum path: 4
Routing for Networks:
11.0.0.0
163.27.0.0
200.15.64.0
200.15.192.0
Passive Interface(s):
FastEthernet0/0
FastEthernet0/1
Routing Information Sources:
Gateway Distance Last Update
Distance: (default is 120)

Router1

Router#show ip protocol

Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 22 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
Automatic network summarization is not in effect
Maximum path: 4
Routing for Networks:
11.0.0.0
163.27.0.0
200.15.64.0
200.15.192.0
Passive Interface(s):
FastEthernet0/0
FastEthernet0/1
Routing Information Sources:
Gateway Distance Last Update

Distance: (default is 120)

Router2

Router#show ip protocol

Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 0 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
Automatic network summarization is not in effect
Maximum path: 4
Routing for Networks:
11.0.0.0
163.27.0.0
200.15.64.0
200.15.192.0
Passive Interface(s):
FastEthernet0/0
FastEthernet0/1
Routing Information Sources:
Gateway Distance Last Update
Distance: (default is 120)
Router#

6. Enganxa les bases de dades d'enrutament dinàmic dells 3 routers per RIPv2

Router0

Router>enable

Router#show ip rip database
163.27.176.0/20 auto-summary
163.27.176.0/20 directly connected, FastEthernet0/0
163.27.240.0/20 auto-summary
163.27.240.0/20 directly connected, FastEthernet0/1

Router1

Router#show ip rip database

11.128.0.0/10 auto-summary
11.128.0.0/10 directly connected, FastEthernet0/1
11.192.0.0/10 auto-summary
11.192.0.0/10 directly connected, FastEthernet0/0

Router2

Router#show ip rip database

200.15.64.0/18 auto-summary
200.15.64.0/18 directly connected, FastEthernet0/1
200.15.192.0/18 auto-summary
200.15.192.0/18 directly connected, FastEthernet0/0
Router#

7. Quina és la diferència principal entre RIPv1 i RIPv2? Demostra aquesta diferència a través d'un exemple de les taules d'enrutament.

RIPv1: La versión 1 del protocolo de enrutamiento RIP es "con clase", es decir que no soporta subredes, VLSM ni CIDR, no posee mecanismos de autenticación y no realiza actualizaciones desencadenadas por eventos. Todas estas limitaciones hicieron que con el paso del tiempo y las nuevas necesidades cayera en desuso.

- Protocolo de enrutamiento Classful
- Basado en el algoritmo Bellman-Ford
- Redes de tamaño moderado
- Basado en el protocolo UDP. Usa el puerto 250

RIPv2: La versión 2 del protocolo de enrutamiento RIP es "sin clase", soporta subredes, VLSM, CIDR, resumen de rutas, posee mecanismos de autenticación mediante texto plano o codificación MD5, realiza actualizaciones desencadenadas por eventos.

- 15 saltos

- Mecanismo de autenticación
- Basado en algoritmo Bellmand-Ford
- Redes de tamaño pequeño
- Protocol de enrutamiento Classless(Admite VLSM)