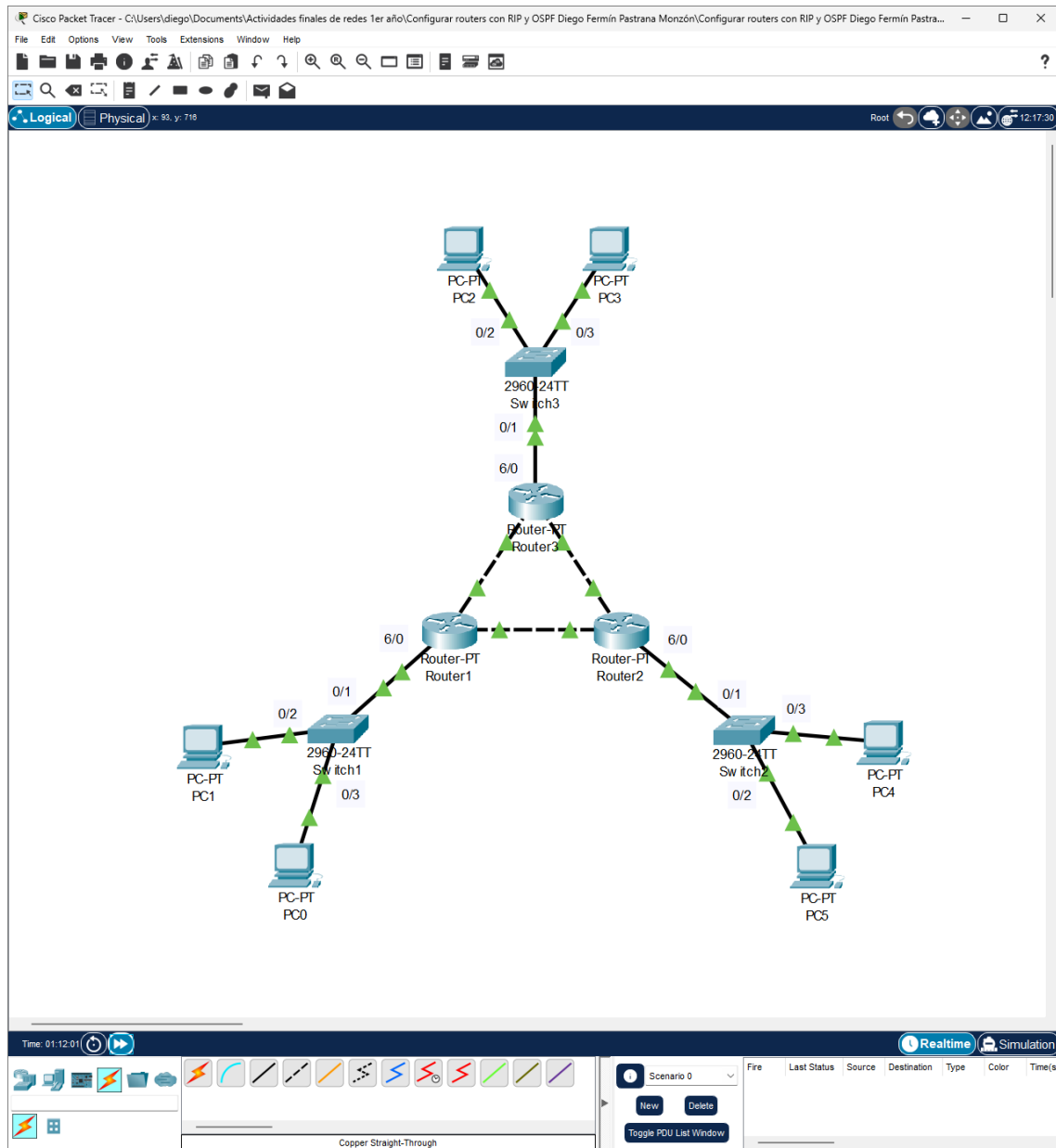


Configurar routers con RIP y OSPF



Router 1:

Router1

Physical
Config
CLI
Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0
FastEthernet6/0

FastEthernet0/0

FastEthernet0/0

Port Status
Bandwidth
Duplex
MAC Address
IP Configuration
IPv4 Address
Subnet Mask
Tx Ring Limit

☒ On
☐ 100 Mbps
☐ 10 Mbps
☒ Auto
☐ Half Duplex
☒ Full Duplex
☒ Auto

00E0.F7C2.6E4E

192.168.1.1
255.255.255.0

10

Equivalent IOS Commands

```

Press RETURN to get started!

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#
    
```

☐ Top

Router1

Physical
Config
CLI
Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0
FastEthernet6/0

FastEthernet1/0

FastEthernet1/0

Port Status
Bandwidth
Duplex
MAC Address
IP Configuration
IPv4 Address
Subnet Mask
Tx Ring Limit

☒ On
☐ 100 Mbps
☐ 10 Mbps
☒ Auto
☐ Half Duplex
☒ Full Duplex
☒ Auto

0006.2A62.A499

10.0.0.1
255.255.255.252

10

Equivalent IOS Commands

```

Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#ip address 10.0.0.1 255.255.255.252
Router(config-if)#ip address 10.0.0.1 255.255.255.252
Router(config-if)#
    
```

☐ Top

The screenshot shows the configuration window for Router1, specifically for the FastEthernet6/0 interface. The left sidebar has a tree view with 'GLOBAL' (Settings, Algorithm Settings), 'ROUTING' (Static, RIP), and 'INTERFACE' (FastEthernet0/0, FastEthernet1/0, Serial2/0, Serial3/0, FastEthernet4/0, FastEthernet5/0, and FastEthernet6/0). The 'FastEthernet6/0' interface is selected. The main panel shows the following settings: Port Status is 'On'; Bandwidth is 'Auto'; Duplex is 'Full Duplex'; MAC Address is '0001.C7CA.734E'; IP Configuration shows IPv4 Address '10.0.0.5' and Subnet Mask '255.255.255.252'; and Tx Ring Limit is '10'. Below the settings, the 'Equivalent IOS Commands' section displays the following commands:

```
Router(config)#ip address 10.0.0.1 255.255.255.255
Router(config-if)#ip address 10.0.0.1 255.255.255.252
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet4/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet5/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 10.0.0.5 255.255.255.252
Router(config-if)#ip address 10.0.0.5 255.255.255.252
Router(config-if)#
```

A 'Top' button is located at the bottom left of the window.

Router 2:

The screenshot shows the configuration window for Router2, specifically for the FastEthernet0/0 interface. The left sidebar has a tree view with 'GLOBAL' (Settings, Algorithm Settings), 'ROUTING' (Static, RIP), and 'INTERFACE' (FastEthernet0/0, FastEthernet1/0, Serial2/0, Serial3/0, FastEthernet4/0, FastEthernet5/0, and FastEthernet6/0). The 'FastEthernet0/0' interface is selected. The main panel shows the following settings: Port Status is 'On'; Bandwidth is 'Auto'; Duplex is 'Full Duplex'; MAC Address is '000A.F31C.8D6A'; IP Configuration shows IPv4 Address '192.168.2.1' and Subnet Mask '255.255.255.0'; and Tx Ring Limit is '10'. Below the settings, the 'Equivalent IOS Commands' section displays the following commands:

```
Press RETURN to get started!

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#
```

A 'Top' button is located at the bottom left of the window.

Router2

Physical Config CLI Attributes

GLOBAL
 Settings
 Algorithm Settings
ROUTING
 Static
 RIP
INTERFACE
 FastEthernet0/0
FastEthernet1/0
 Serial2/0
 Serial3/0
 FastEthernet4/0
 FastEthernet5/0
 FastEthernet6/0

FastEthernet1/0
 Port Status ☒ On
 Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
 Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto
 MAC Address 0090.2BD8.681B
 IP Configuration
 IPv4 Address 10.0.0.2
 Subnet Mask 255.255.255.252
 Tx Ring Limit 10

Equivalent IOS Commands

```

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.2 255.0.0.0
Router(config-if)#ip address 10.0.0.2 255.255.255.252
Router(config-if)#
    
```

☐ Top

Router2

Physical Config CLI Attributes

GLOBAL
 Settings
 Algorithm Settings
ROUTING
 Static
 RIP
INTERFACE
 FastEthernet0/0
 FastEthernet1/0
 Serial2/0
 Serial3/0
 FastEthernet4/0
 FastEthernet5/0
FastEthernet6/0

FastEthernet6/0
 Port Status ☒ On
 Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto
 Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto
 MAC Address 00D0.5843.5E77
 IP Configuration
 IPv4 Address 10.0.0.9
 Subnet Mask 255.255.255.252
 Tx Ring Limit 10

Equivalent IOS Commands

```

Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.2 255.0.0.0
Router(config-if)#ip address 10.0.0.2 255.255.255.252
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 255.255.255.252
% Incomplete command.
Router(config-if)#ip address 10.0.0.9 255.255.255.252
Router(config-if)#
    
```

☐ Top

Router 3:

Router3

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet6/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00D0.5888.381A

IP Configuration

IPv4 Address 192.168.3.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```

Press RETURN to get started!

Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.3.1 255.255.255.0
Router(config-if)#
  
```

☐ Top

Router3

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet6/0

FastEthernet1/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.423B.2E4C

IP Configuration

IPv4 Address 10.0.0.6

Subnet Mask 255.255.255.252

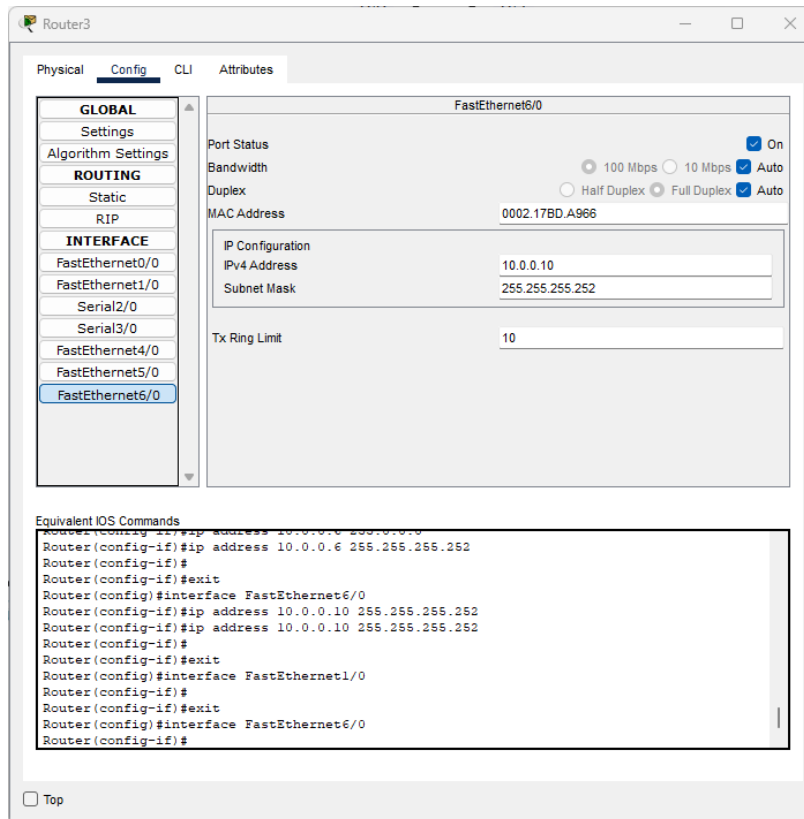
Tx Ring Limit 10

Equivalent IOS Commands

```

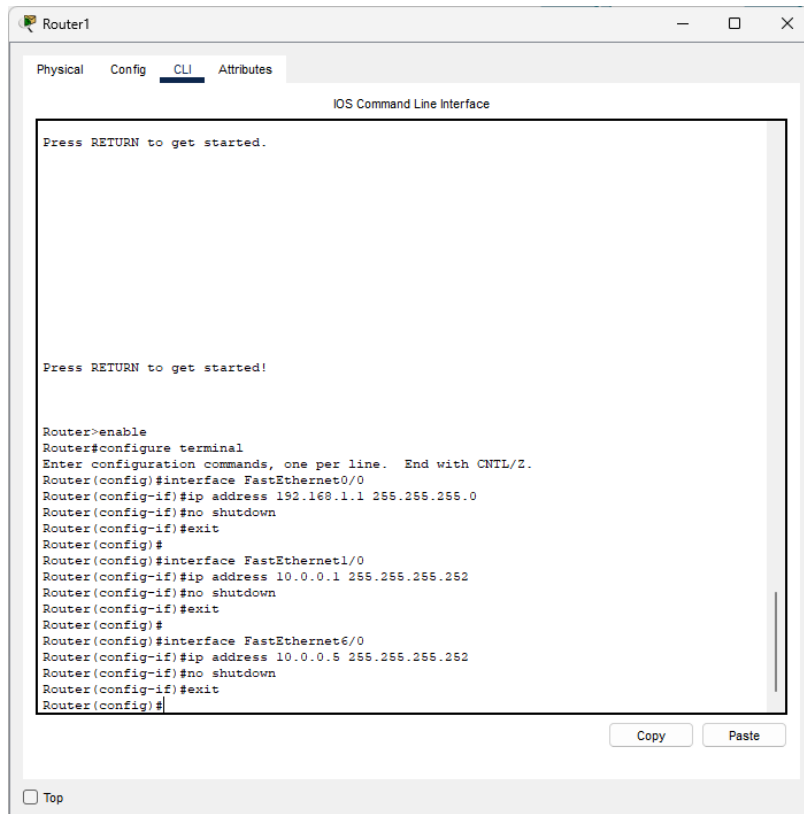
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.6 255.0.0.0
Router(config-if)#ip address 10.0.0.6 255.255.255.252
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 10.0.0.10 255.255.255.252
Router(config-if)#ip address 10.0.0.10 255.255.255.252
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
  
```

☐ Top

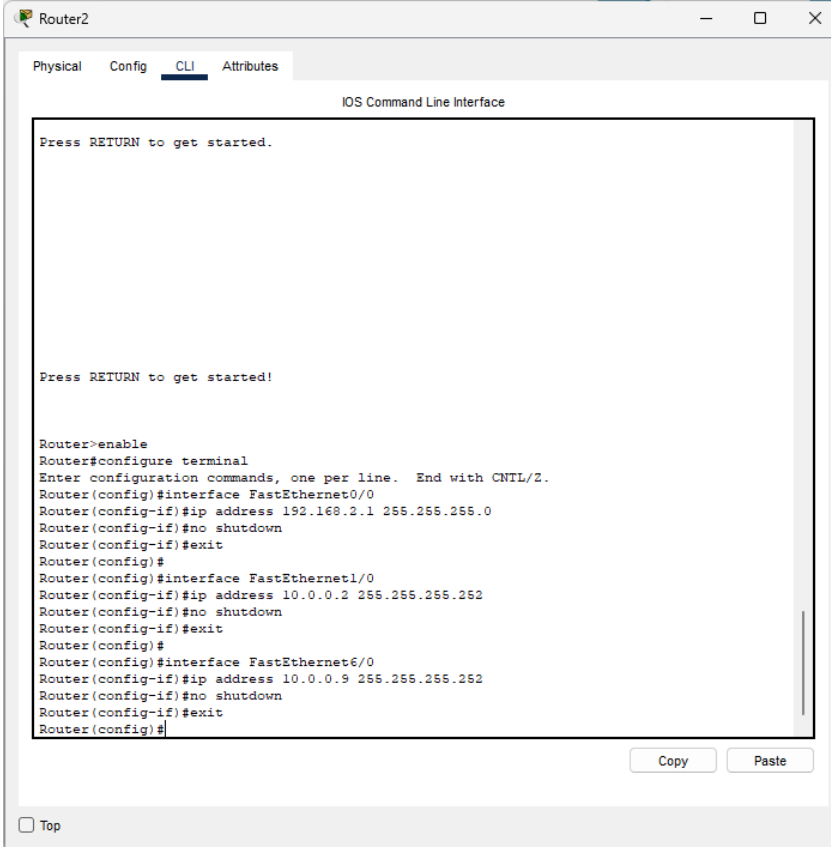


Configurar interfaces

Router 1:



Router 2:



The screenshot shows the CLI window for Router2. The window has tabs for Physical, Config, CLI (selected), and Attributes. The main area displays the IOS Command Line Interface. The text inside the window is as follows:

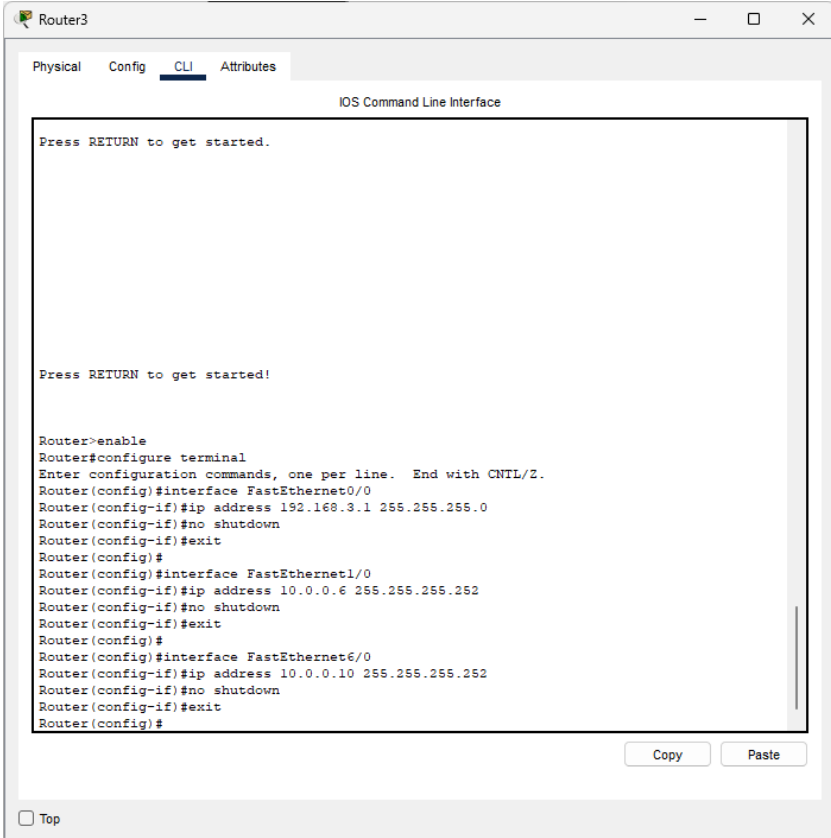
```
Press RETURN to get started.

Press RETURN to get started!

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.2 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 10.0.0.9 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```

At the bottom right of the CLI window, there are 'Copy' and 'Paste' buttons. At the bottom left, there is a 'Top' button.

Router 3:



The screenshot shows the CLI window for Router3. The window has tabs for Physical, Config, CLI (selected), and Attributes. The main area displays the IOS Command Line Interface. The text inside the window is as follows:

```
Press RETURN to get started.

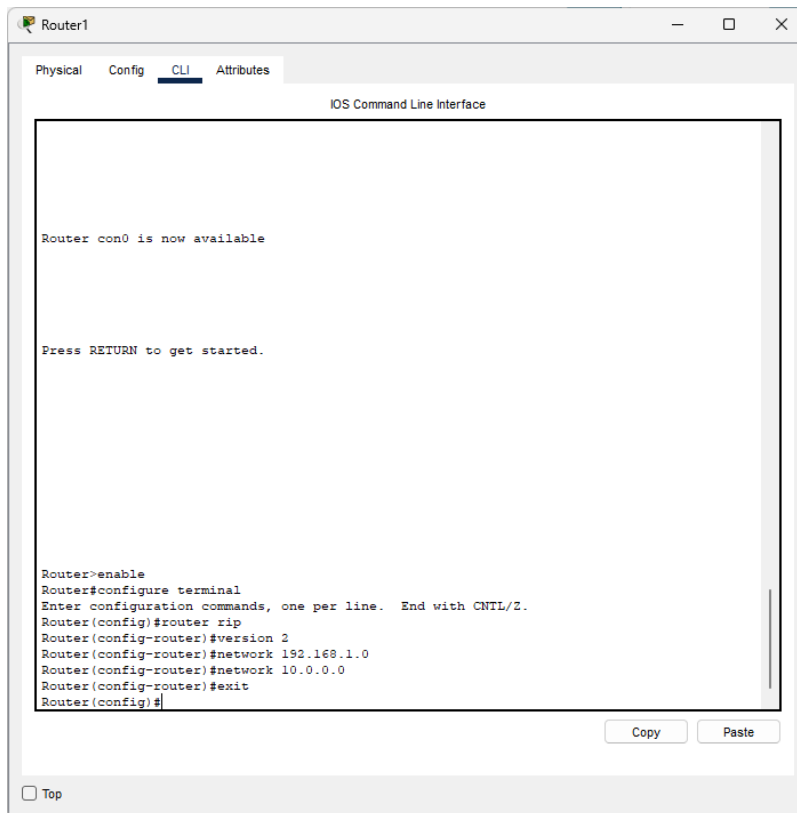
Press RETURN to get started!

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.3.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 10.0.0.6 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
Router(config)#interface FastEthernet6/0
Router(config-if)#ip address 10.0.0.10 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```

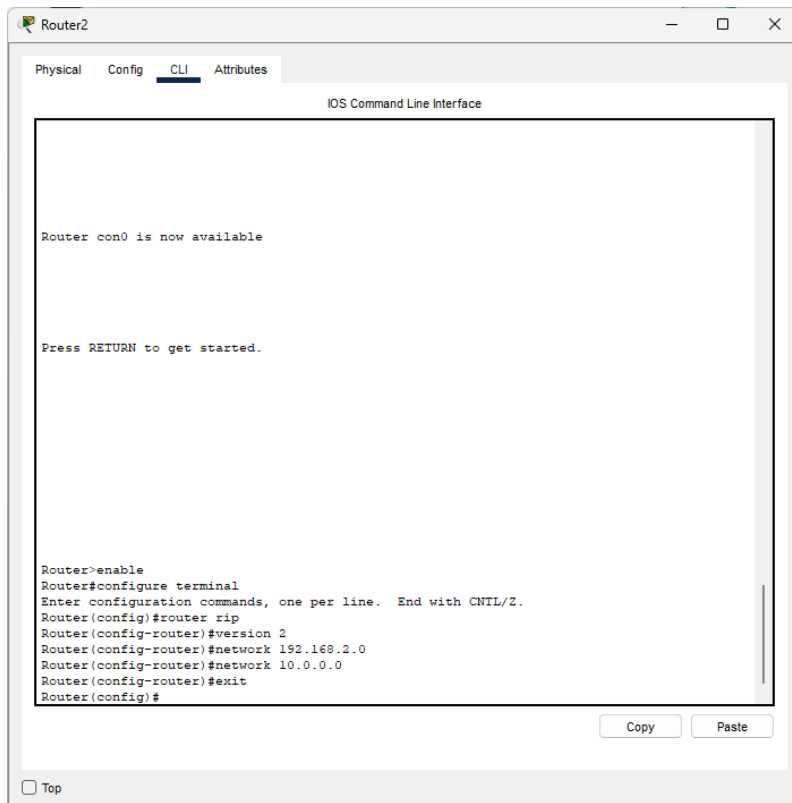
At the bottom right of the CLI window, there are 'Copy' and 'Paste' buttons. At the bottom left, there is a 'Top' button.

Configurar interfaces

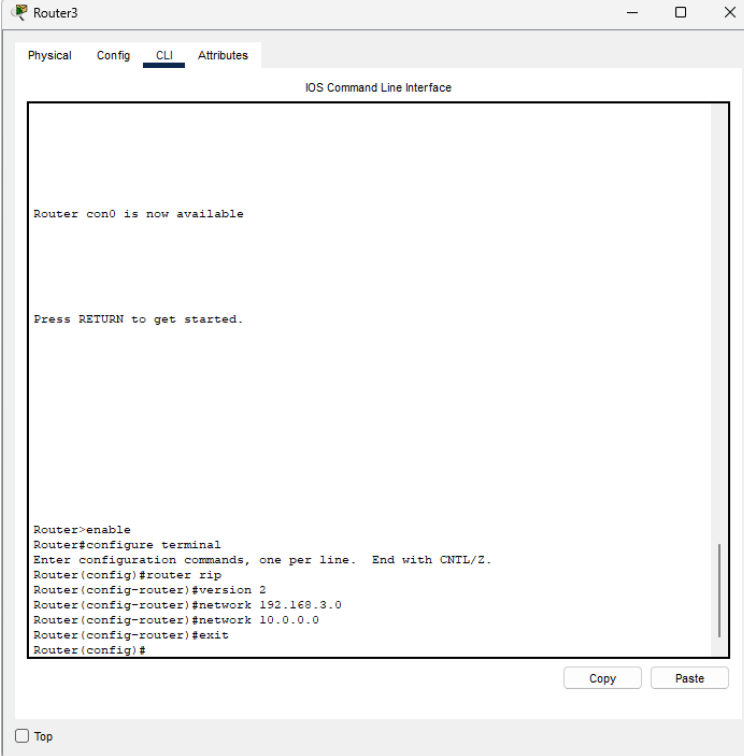
Router 1:



Router 2:



Router 3:



The screenshot shows the CLI window for Router3. The 'CLI' tab is selected. The text inside the terminal window is as follows:

```
Router con0 is now available

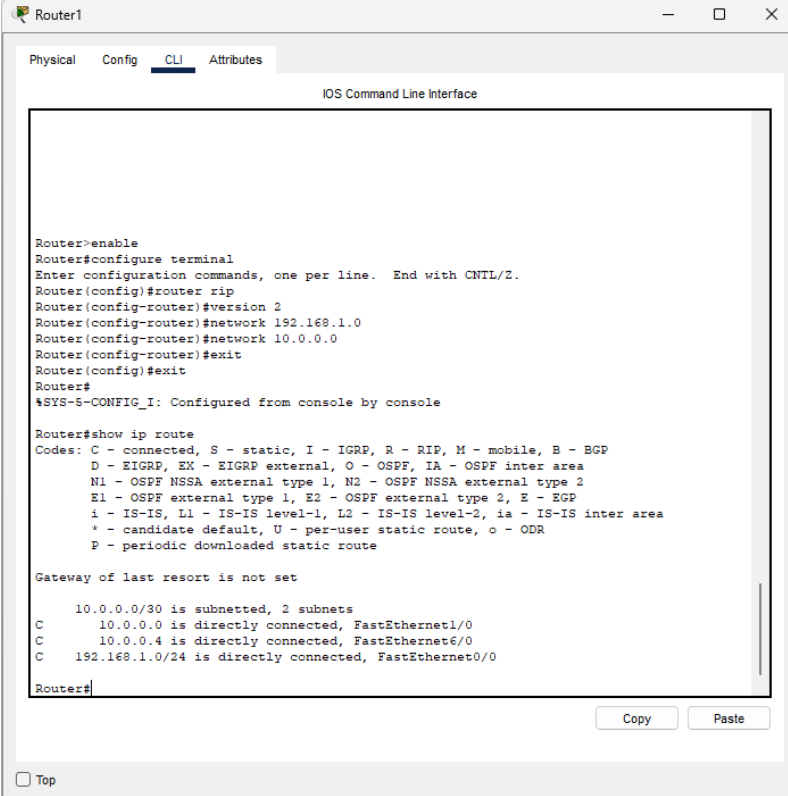
Press RETURN to get started.

Router>enable
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 192.168.3.0
Router(config-router)#network 10.0.0.0
Router(config-router)#exit
Router(config)#
```

At the bottom of the terminal window, there are 'Copy' and 'Paste' buttons. Below the terminal window, there is a 'Top' button.

Verificación

Router 1:



The screenshot shows the CLI window for Router1. The 'CLI' tab is selected. The text inside the terminal window is as follows:

```
Router>enable
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 192.168.1.0
Router(config-router)#network 10.0.0.0
Router(config-router)#exit
Router(config)#exit
Router#
*SYS-5-CONFIG_I: Configured from console by console

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

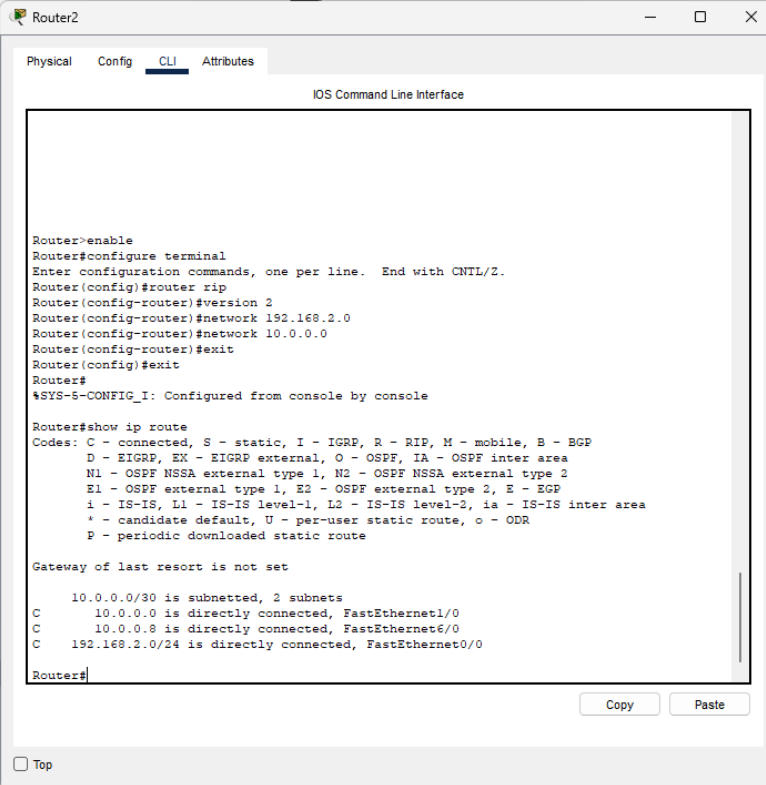
Gateway of last resort is not set

  10.0.0.0/30 is subnetted, 2 subnets
C       10.0.0.0 is directly connected, FastEthernet1/0
C       10.0.0.4 is directly connected, FastEthernet6/0
C       192.168.1.0/24 is directly connected, FastEthernet0/0

Router#
```

At the bottom of the terminal window, there are 'Copy' and 'Paste' buttons. Below the terminal window, there is a 'Top' button.

Router 2:



The screenshot shows the CLI of Router2. The user has entered the following commands: `enable`, `configure terminal`, `router rip`, `version 2`, `network 192.168.2.0`, `network 10.0.0.0`, and `exit`. The output of `show ip route` shows the routing table with codes for various protocols and a list of connected networks: `10.0.0.0/30` is subnetted into `10.0.0.0` and `10.0.0.8`, and `192.168.2.0/24` is directly connected.

```
Router2
Physical Config CLI Attributes
IOS Command Line Interface

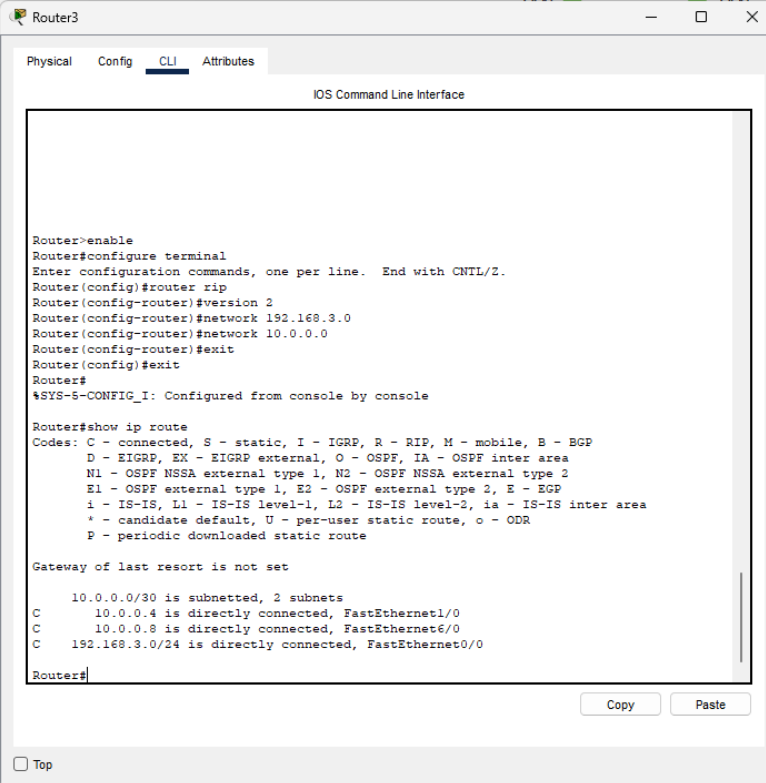
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.2.0
Router(config-router)#network 10.0.0.0
Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

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

    10.0.0.0/30 is subnetted, 2 subnets
C      10.0.0.0 is directly connected, FastEthernet1/0
C      10.0.0.8 is directly connected, FastEthernet6/0
C     192.168.2.0/24 is directly connected, FastEthernet0/0
Router#
```

Router 3:



The screenshot shows the CLI of Router3. The user has entered the following commands: `enable`, `configure terminal`, `router rip`, `version 2`, `network 192.168.3.0`, `network 10.0.0.0`, and `exit`. The output of `show ip route` shows the routing table with codes for various protocols and a list of connected networks: `10.0.0.0/30` is subnetted into `10.0.0.4` and `10.0.0.8`, and `192.168.3.0/24` is directly connected.

```
Router3
Physical Config CLI Attributes
IOS Command Line Interface

Router>enable
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 192.168.3.0
Router(config-router)#network 10.0.0.0
Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

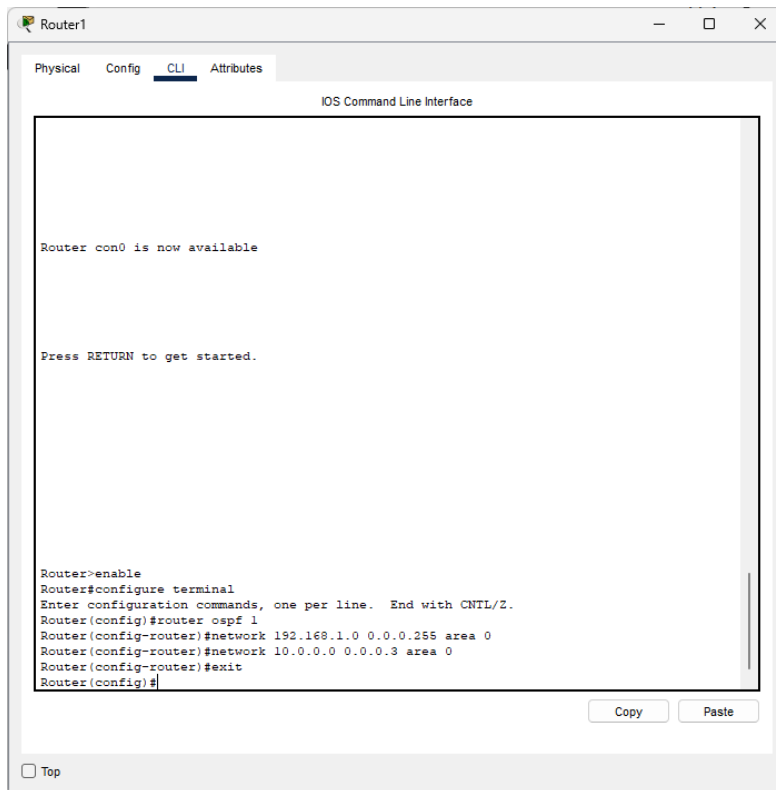
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       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

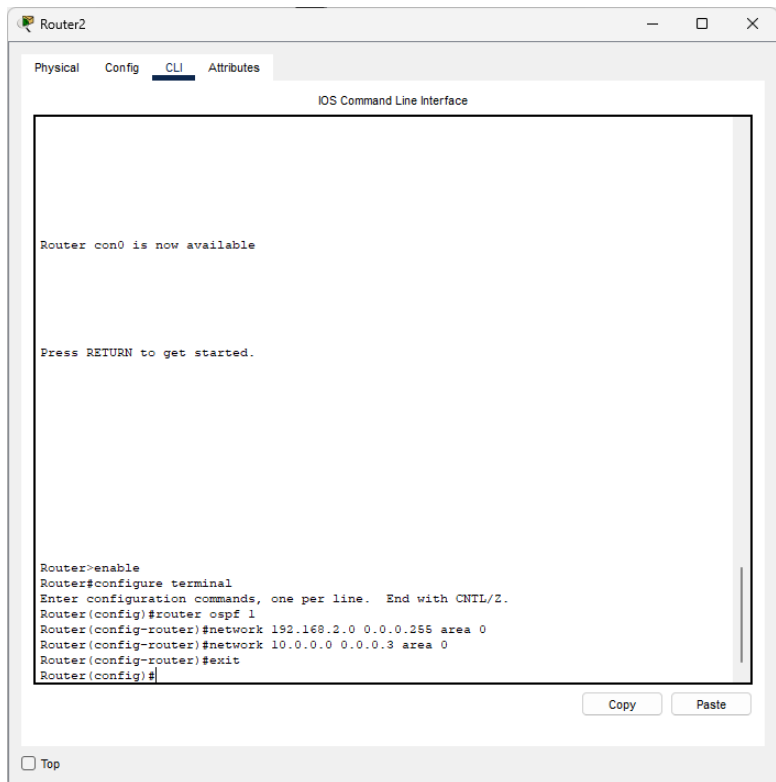
    10.0.0.0/30 is subnetted, 2 subnets
C      10.0.0.4 is directly connected, FastEthernet1/0
C      10.0.0.8 is directly connected, FastEthernet6/0
C     192.168.3.0/24 is directly connected, FastEthernet0/0
Router#
```

Configurar OSPF

Router 1:



Router 2:



Router 3:

