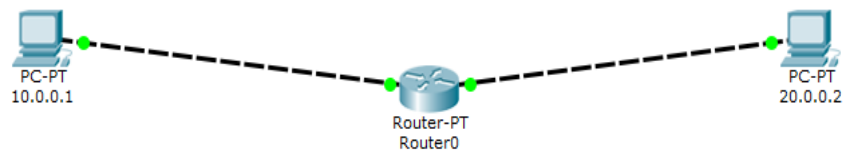
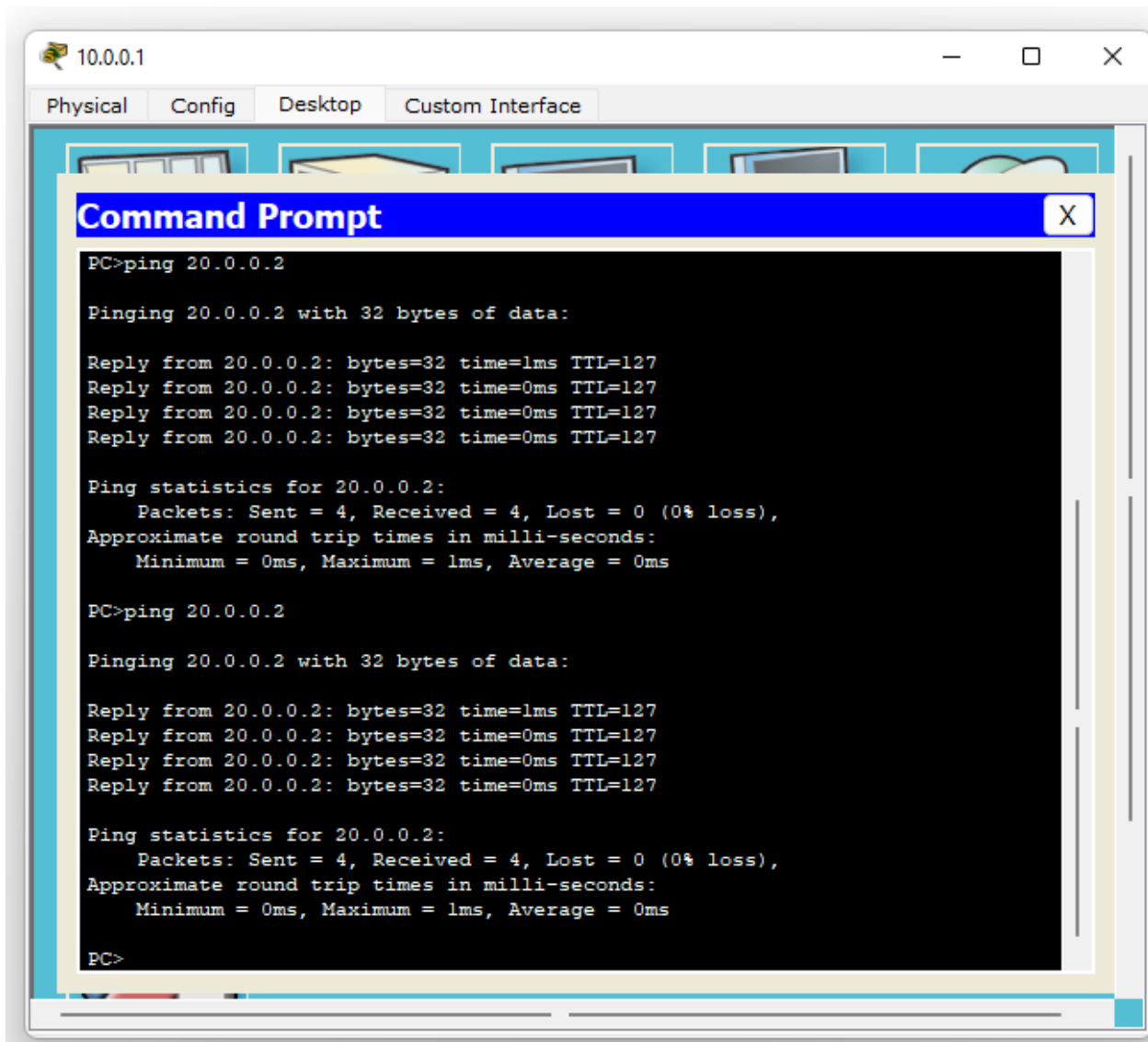


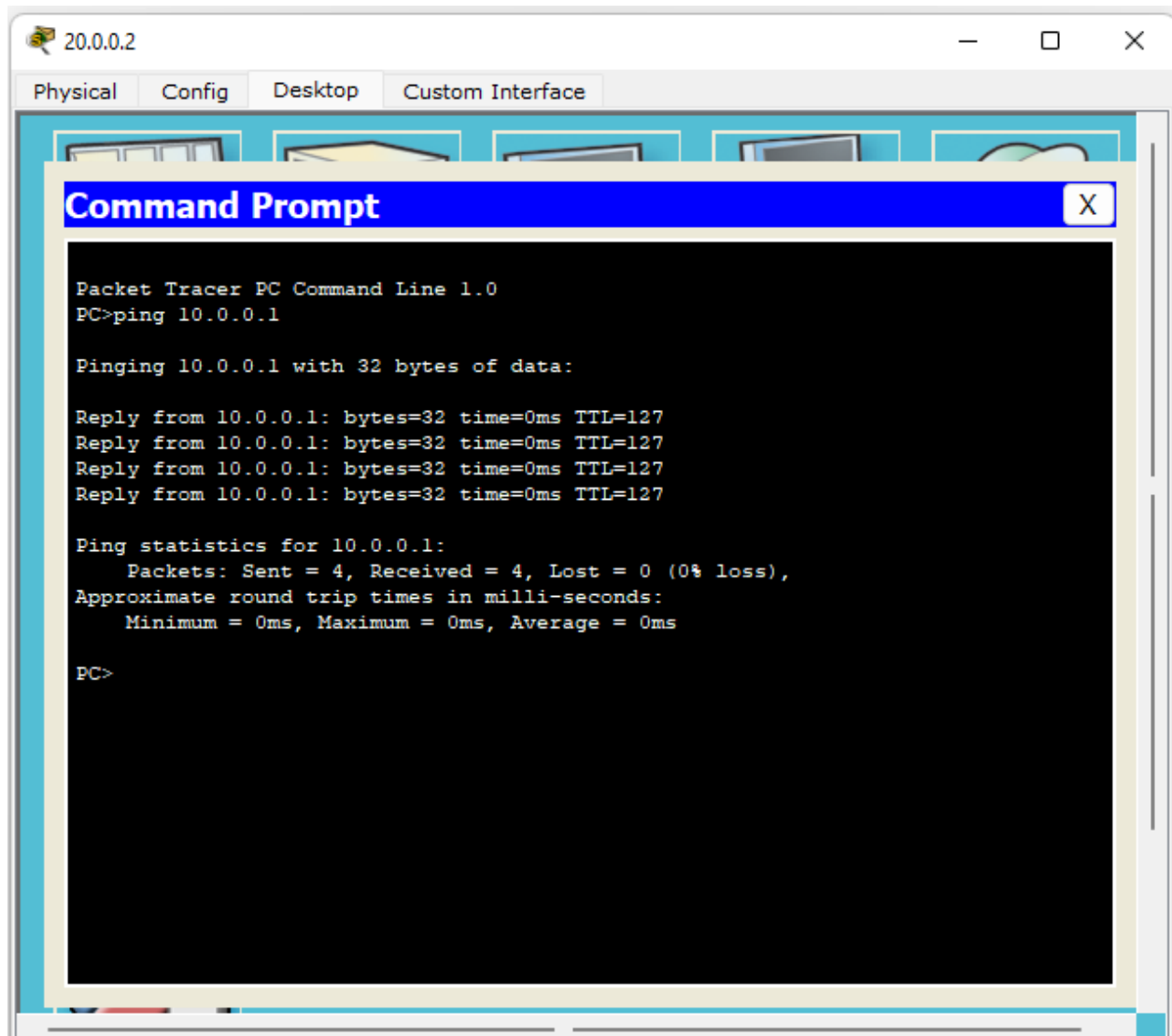
Title: Configure IP address to routers in packet tracer. Explore the following messages: ping responses, destination unreachable, request timed out, reply



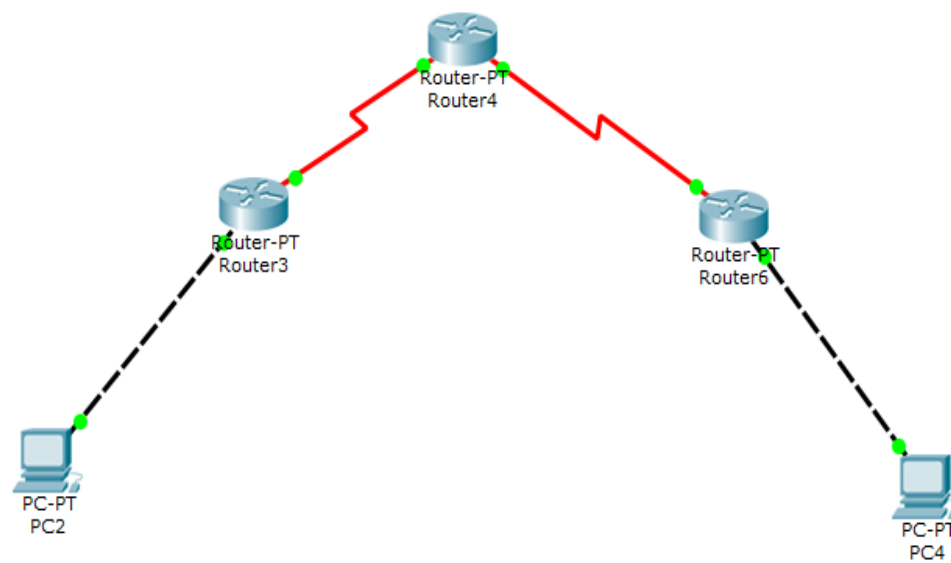
Topology with single router

Pinging PC2 from PC1



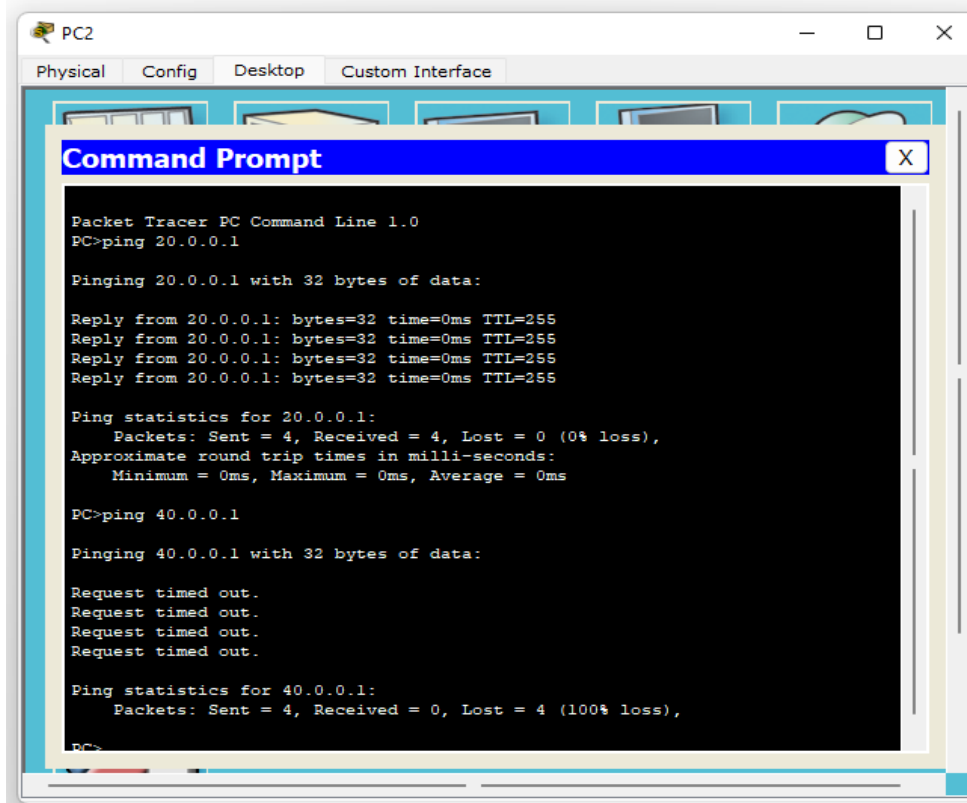


Pinging PC1 from PC2

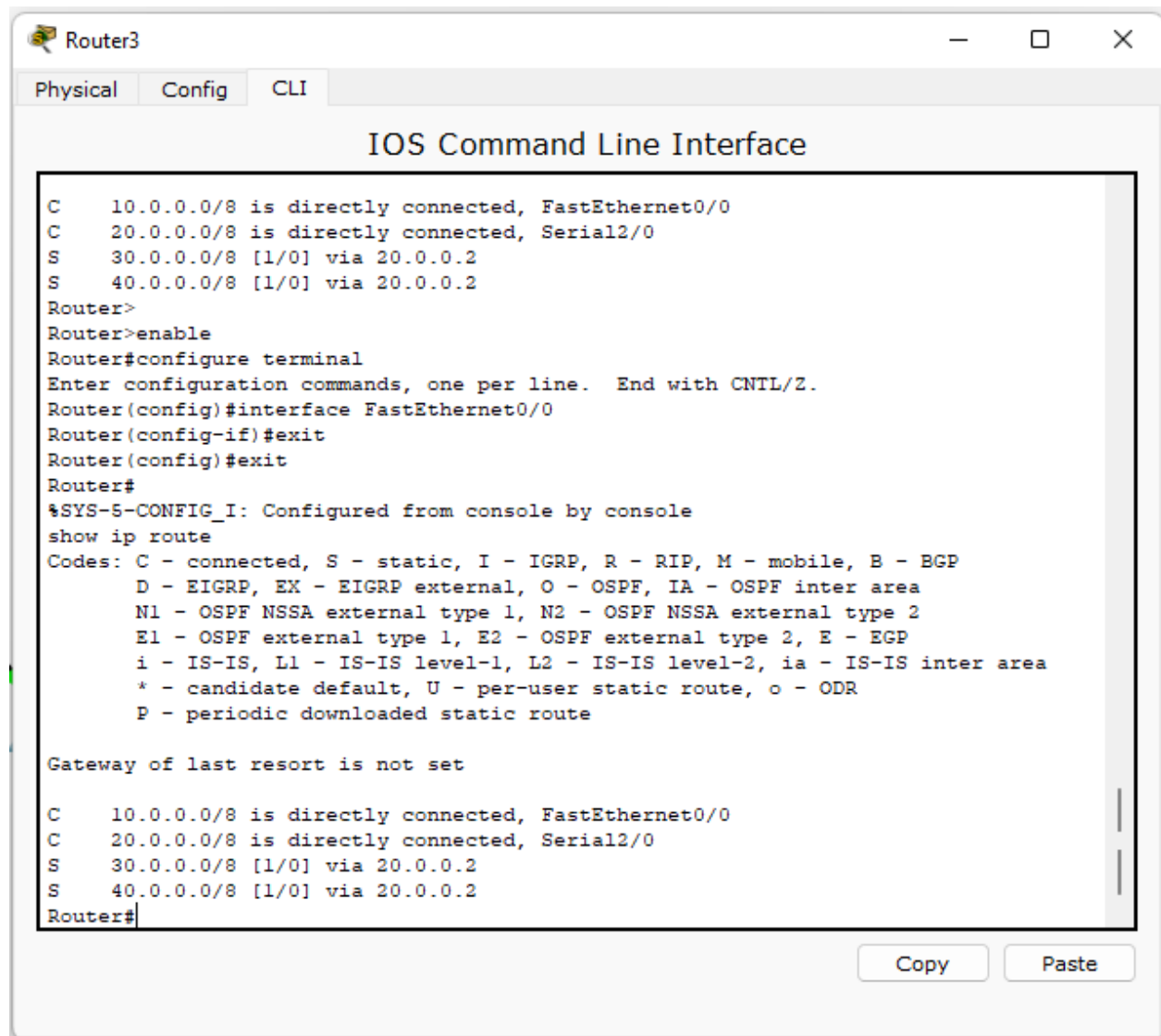


Topology with 3 Routers

Pinging end device in different network before setting IP route



## IP route for all routers



The screenshot shows a Cisco Router3 CLI window with the following content:

```
Router3
Physical Config CLI
IOS Command Line Interface

C 10.0.0.0/8 is directly connected, FastEthernet0/0
C 20.0.0.0/8 is directly connected, Serial12/0
S 30.0.0.0/8 [1/0] via 20.0.0.2
S 40.0.0.0/8 [1/0] via 20.0.0.2
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
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

C 10.0.0.0/8 is directly connected, FastEthernet0/0
C 20.0.0.0/8 is directly connected, Serial12/0
S 30.0.0.0/8 [1/0] via 20.0.0.2
S 40.0.0.0/8 [1/0] via 20.0.0.2
Router#
```

Copy Paste

## IOS Command Line Interface

Press RETURN to get started.

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

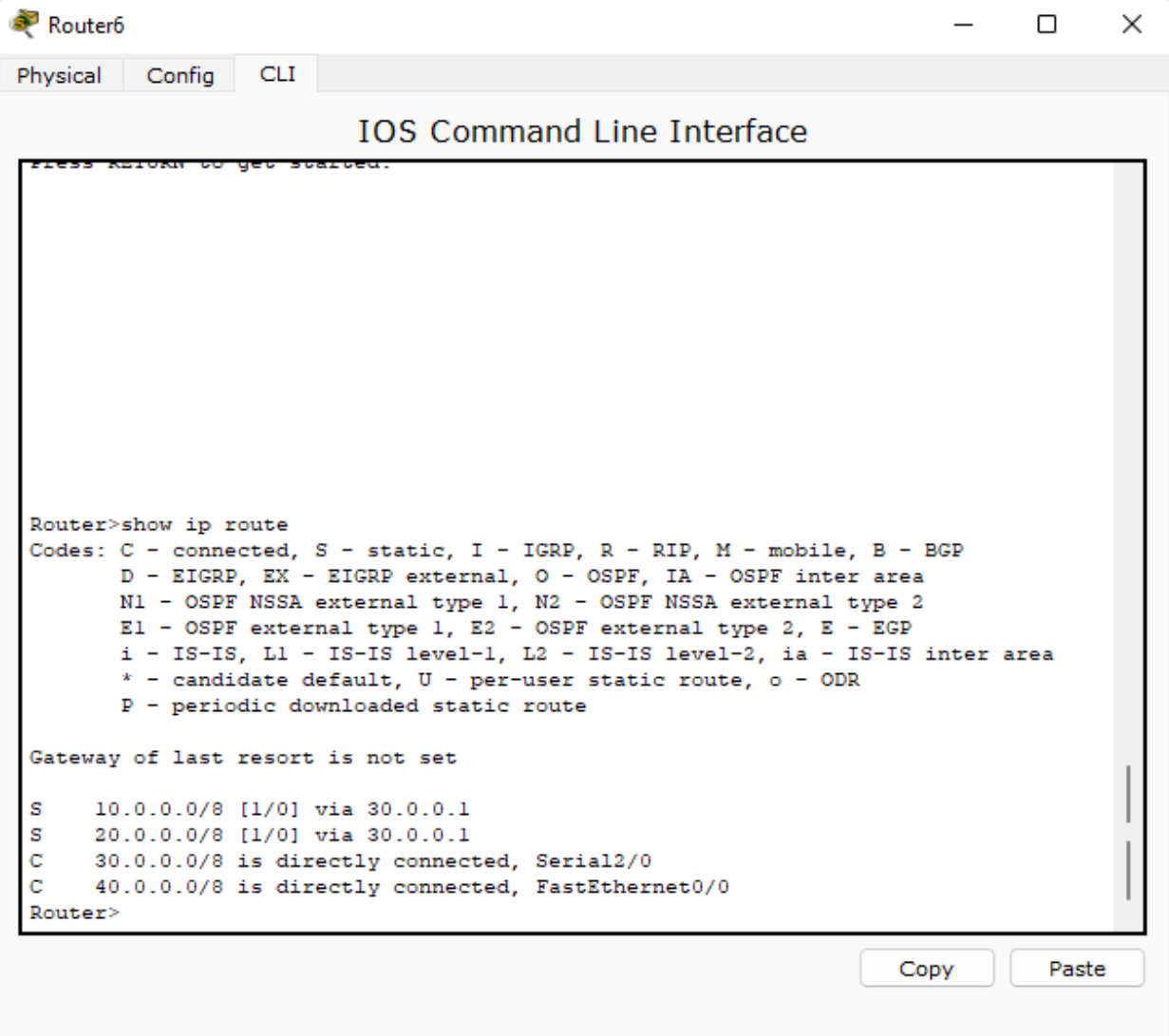
Gateway of last resort is not set

S 10.0.0.0/8 [1/0] via 20.0.0.1  
C 20.0.0.0/8 is directly connected, Serial2/0  
C 30.0.0.0/8 is directly connected, Serial3/0  
S 40.0.0.0/8 [1/0] via 30.0.0.2

Router>

Copy

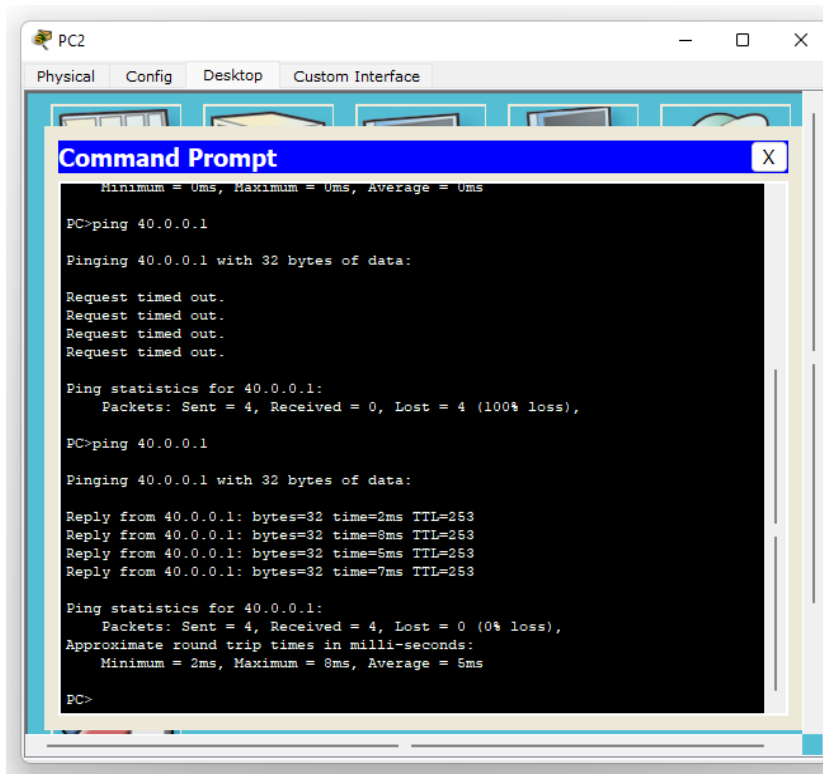
Paste





After setting IP route

Pinging PC4 from PC2



The screenshot shows a Packet Tracer PC window for PC2. The Command Prompt is open, displaying the results of a ping command to 40.0.0.1. The first attempt shows four 'Request timed out' messages. The second attempt shows four successful replies with round trip times of 2ms, 8ms, 5ms, and 7ms, and a 0% loss rate.

```
PC2
Physical Config Desktop Custom Interface

Command Prompt
Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

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

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>ping 40.0.0.1

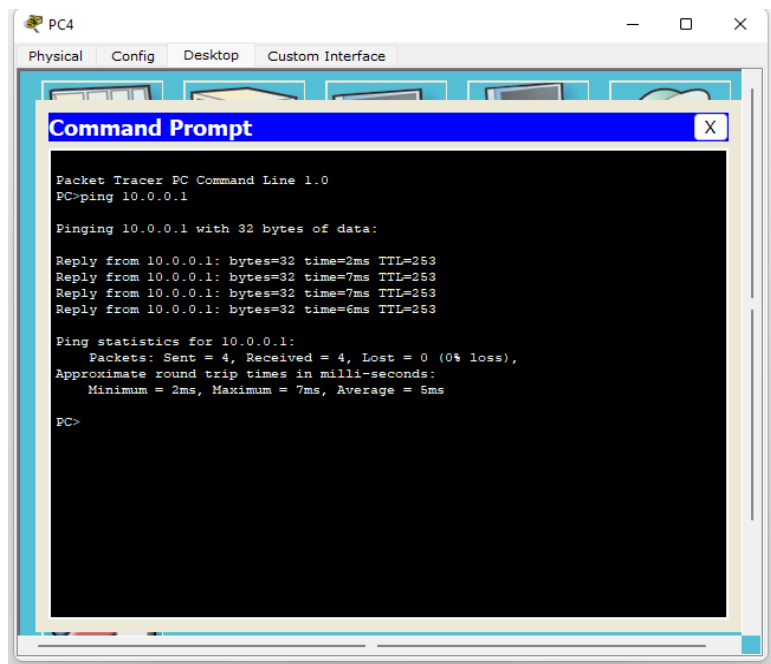
Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes=32 time=2ms TTL=253
Reply from 40.0.0.1: bytes=32 time=8ms TTL=253
Reply from 40.0.0.1: bytes=32 time=5ms TTL=253
Reply from 40.0.0.1: bytes=32 time=7ms TTL=253

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 8ms, Average = 5ms

PC>
```

Pinging PC2 from PC4



The screenshot shows a Packet Tracer PC window for PC4. The Command Prompt is open, displaying the results of a ping command to 10.0.0.1. The output shows four successful replies with round trip times of 2ms, 7ms, 7ms, and 6ms, and a 0% loss rate.

```
PC4
Physical Config Desktop Custom Interface

Command Prompt
Packet Tracer PC Command Line 1.0

PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes=32 time=2ms TTL=253
Reply from 10.0.0.1: bytes=32 time=7ms TTL=253
Reply from 10.0.0.1: bytes=32 time=7ms TTL=253
Reply from 10.0.0.1: bytes=32 time=6ms TTL=253

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 7ms, Average = 5ms

PC>
```