

Topology of one router

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #interface fa0/0
Router(config-if) #ip address 10.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
exit
Router(config) #interface fal/0
Router(config-if) #ip address 20.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
exit
Router(config)#
```

CLI for one router

```
Physical Config Desktop Custom Interface

Command Prompt

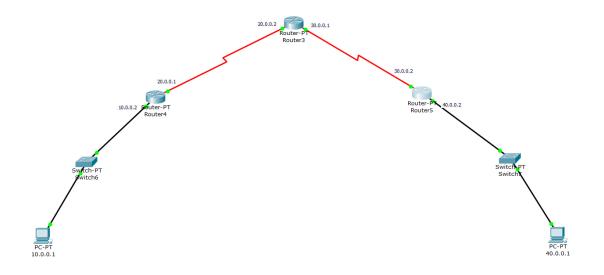
Request timed out.
Reply from 20.0.0.1: bytes=32 time=1ms TTL=127
Reply from 20.0.0.1: bytes=32 time=0ms TTL=127
Reply from 20.0.0.1: bytes=32 time=0ms TTL=127
Ping statistics for 20.0.0.1:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data:
Reply from 20.0.0.1: bytes=32 time=1ms TTL=127
Reply from 20.0.0.1: bytes=32 time=0ms TTL=
```

Ping for one router (successful)

Screenshots for 3 routers connected together



Topology for 3 routers connected together

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #interface fa0/0
Router(config-if) #ip address 10.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%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 se2/0
Router(config-if) #ip address 20.0.0.1 255.0.0.0
Router(config-if) #no shutdown
%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if) #exit
Router(config)#
```

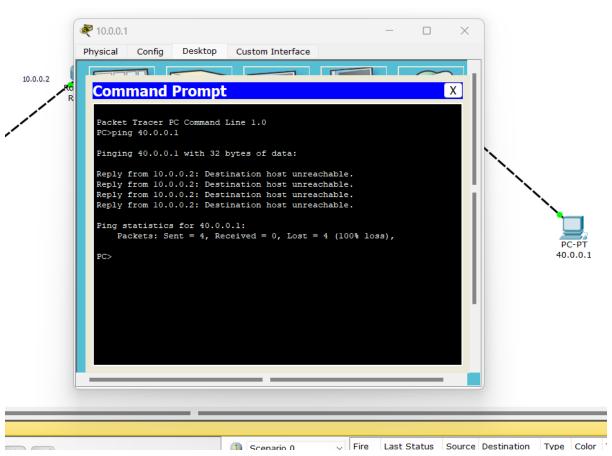
CLI for router7

```
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #interface se2/0
Router(config-if) #ip address 20.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
Router(config-if)#exit
Router(config) #interface se3/0
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config-if) #ip address 30.0.0.1 255.0.0.0
Router(config-if) #no shutdown
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router (config-if) #exi
Router (config) #
```

CLI for router8

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #interface se3/0
Router(config-if) #ip address 30.0.0.1 255.0.0.0
Router(config-if) #ip address 30.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
Router(config) #interface fa0/0
Router(config-if)#ip
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
% Incomplete command.
Router(config-if) #ip address 40.0.0.2 255.0.0.0
Router(config-if) #no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
exit
Router(config)#
```

CLI for router9



Ping for three routers (unsuccessful)