

PC0

Physical

Config

Desktop

Programming

Attributes

IP Configuration

Interface

FastEthernet0

IP Configuration

DHCP

Static

IPv4 Address

172.16.20.10

Subnet Mask

255.255.255.0

Default Gateway

172.16.20.1

DNS Server

0.0.0.0

IPv6 Configuration

PC1

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

DHCP

Static

IPv4 Address172.19.20.10

Subnet Mask255.255.255.0

Default Gateway172.19.20.1

DNS Server0.0.0.0

IPv6 Configuration

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 172.16.20.1 255.255.255.0
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)#exit
```

```
Router#en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fastEthernet 0/1
Router(config-if)#ip address 172.17.20.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG: I: Configured from console by console
```

```
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router eigrp 10
Router(config-router)#network 172.16.20.0 0.0.0.255
Router(config-router)#network 172.17.20.0 0.0.0.255
Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
```

Router#

Router#conf

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

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

Router(config)#interface fastEthernet 0/0

Router(config-if)#ip address 172.17.20.2 255.255.255.0

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)#exit

Router#

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

Router#conf

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

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

Router(config)#interface fastEthernet 0/1

Router(config-if)#ip address 172.18.20.1 255.255.255.0

Router(config-if)#no shutdown

Router(config-if)#

Gateway of last resort is not set

172.17.0.0/24 is subnetted, 1 subnets

C 172.17.20.0 is directly connected, FastEthernet0/0

172.18.0.0/24 is subnetted, 1 subnets

C 172.18.20.0 is directly connected, FastEthernet0/1

Router#

Router#conf

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

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

Router(config)#network 172.17.20.0 0.0.0.255

^

% Invalid input detected at '^' marker.

Router(config)#router eigrp 10

Router(config-router)#network 172.17.20.0 0.0.0.255

Router(config-router)#

%DUAL-5-NBRCHANGE: IP-EIGRP 10: Neighbor 172.17.20.1
(FastEthernet0/0) is up: new adjacency

Router(config-router)#network 172.18.20.0 0.0.0.255

Router(config-router)#exit

Router(config)#exit

Router#

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

wr

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 172.18.20.2 255.255.255.0
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)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fastEthernet 0/1
Router(config-if)#ip address 172.19.20.1 255.255.255.0
Router(config-if)#no shutdown
```



```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router eigrp 10
Router(config-router)#network 172.18.20.0 0.0.0.255
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 10: Neighbor 172.18.20.1
(FastEthernet0/0) is up: new adjacency

Router(config-router)#network 172.19.20.0 0.0.0.255
Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
wr
Building configuration...
[OK]
```

```
C:\>ping 172.19.20.10
```

```
Pinging 172.19.20.10 with 32 bytes of data:
```

```
Reply from 172.19.20.10: bytes=32 time<1ms TTL=125
```

```
Reply from 172.19.20.10: bytes=32 time<1ms TTL=125
```

```
Reply from 172.19.20.10: bytes=32 time<1ms TTL=125
```

```
Reply from 172.19.20.10: bytes=32 time<1ms TTL=125
```

```
Ping statistics for 172.19.20.10:
```

```
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

```
Approximate round trip times in milli-seconds:
```

```
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
C:\>tracert 172.19.20.10
```

```
Tracing route to 172.19.20.10 over a maximum of 30 hops:
```

1	0 ms	0 ms	0 ms	172.16.20.1
2	0 ms	0 ms	0 ms	172.17.20.2
3	0 ms	0 ms	0 ms	172.18.20.2
4	0 ms	0 ms	0 ms	172.19.20.10

```
Trace complete.
```