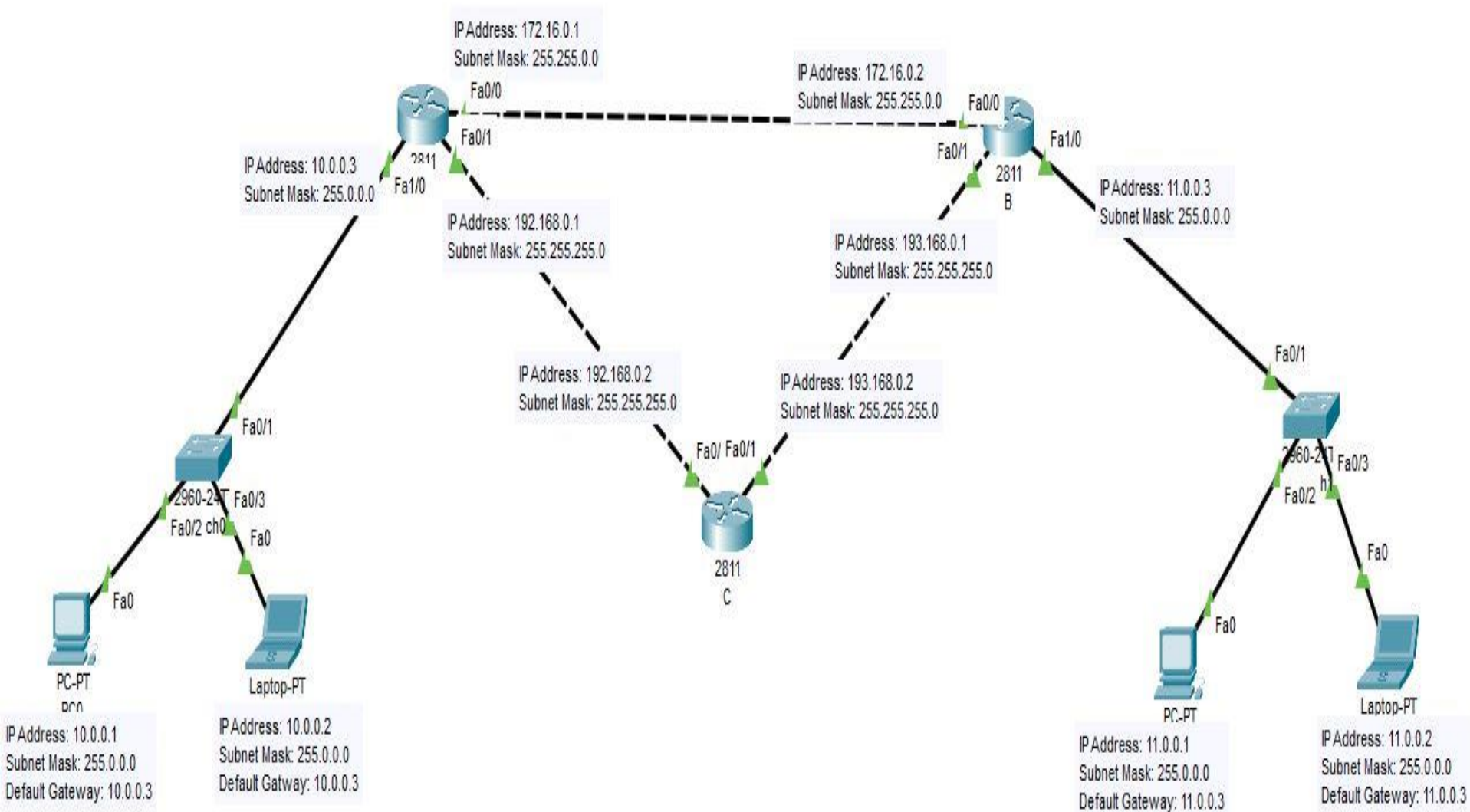


# Static Routing

- Example: 1
- PATH = Network 10.0.0.0 -> Router A -> Router B -> Network 11.0.0.0



# Router A configuration

- --- System Configuration Dialog ---
- Would you like to enter the initial configuration dialog? [yes/no]: no
- Press RETURN to get started!
- Router>enable
- Router#configure terminal
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#hostname A
- A(config)#interface fa1/0
- A(config-if)#ip address 10.0.0.3 255.0.0.0
- A(config-if)#no shutdown
- A(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

- A(config)#interface fa0/0
- A(config-if)#ip address 172.16.0.1 255.255.0.0
- A(config-if)#no shutdown
- A(config-if)#
- %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
- A(config-if)#interface fa0/1
- A(config-if)#ip address 192.168.0.1 255.255.255.0
- A(config-if)#no shutdown
- A(config-if)#
- %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
- A(config-if)#exit
- A(config)#ip route 11.0.0.0 255.0.0.0 172.16.0.2
- A(config)#

# Router B configuration

- --- System Configuration Dialog ---
- Would you like to enter the initial configuration dialog? [yes/no]: no
- Press RETURN to get started!
- Router>enable
- Router#configure terminal
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#hostname B
- B(config)#
- B(config)#
- B(config)#
- B(config)#interface fa0/0
- B(config-if)#ip address 172.16.0.2 255.255.0.0
- B(config-if)#no shutdown
- B(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

- B(config-if)#
- B(config-if)#
- B(config-if)#interface fa1/0
- B(config-if)#ip address 11.0.0.3 255.0.0.0
- B(config-if)#no shutdown
- B(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
- B(config)#interface fa0/1
- B(config-if)#ip address 193.168.0.1 255.255.255.0
- B(config-if)#no shutdown
- B(config-if)#
- %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
- B(config-if)#exit
- B(config)#ip route 10.0.0.0 255.0.0.0 172.16.0.1
- B(config)#

# Router C configuration

- --- System Configuration Dialog ---
- Would you like to enter the initial configuration dialog? [yes/no]: no
- Press RETURN to get started!
- Router>
- Router>
- Router>enable
- Router#configure terminal
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#hostname C
- C(config)#interface fa0/0
- C(config-if)#ip address 192.168.0.2 255.255.255.0
- C(config-if)#no shutdown
- C(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
- C(config-if)#interface fa0/1
- C(config-if)#ip address 193.168.0.2 255.255.255.0
- C(config-if)#no shutdown
- C(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



- Example: 2
- PATH = Network 10.0.0.0 -> Router A -> ->  
Router C -> Router B -> Network 11.0.0.0

# Static routing commands on each router for example 2

- A(config)#ip route 11.0.0.0 255.0.0.0 192.168.0.2
- A(config)#
- B(config)#ip route 10.0.0.0 255.0.0.0 193.168.0.2
- B(config)#

- C(config)#ip route 11.0.0.0 255.0.0.0  
193.168.0.1
- C(config)#ip route 10.0.0.0 255.0.0.0  
192.168.0.1
- C(config)#

```
C:\>ping 11.0.0.1
```

```
Pinging 11.0.0.1 with 32 bytes of data:
```

```
Reply from 11.0.0.1: bytes=32 time<1ms TTL=125
```

```
Reply from 11.0.0.1: bytes=32 time=12ms TTL=125
```

```
Reply from 11.0.0.1: bytes=32 time=11ms TTL=125
```

```
Reply from 11.0.0.1: bytes=32 time=11ms TTL=125
```

```
Ping statistics for 11.0.0.1:
```

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

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

```
    Minimum = 0ms, Maximum = 12ms, Average = 8ms
```

```
C:\>tracert 11.0.0.1
```

```
Tracing route to 11.0.0.1 over a maximum of 30 hops:
```

1	0 ms	0 ms	0 ms	10.0.0.3
2	0 ms	0 ms	0 ms	192.168.0.2
3	0 ms	0 ms	11 ms	193.168.0.1
4	0 ms	0 ms	0 ms	11.0.0.1

```
Trace complete.
```