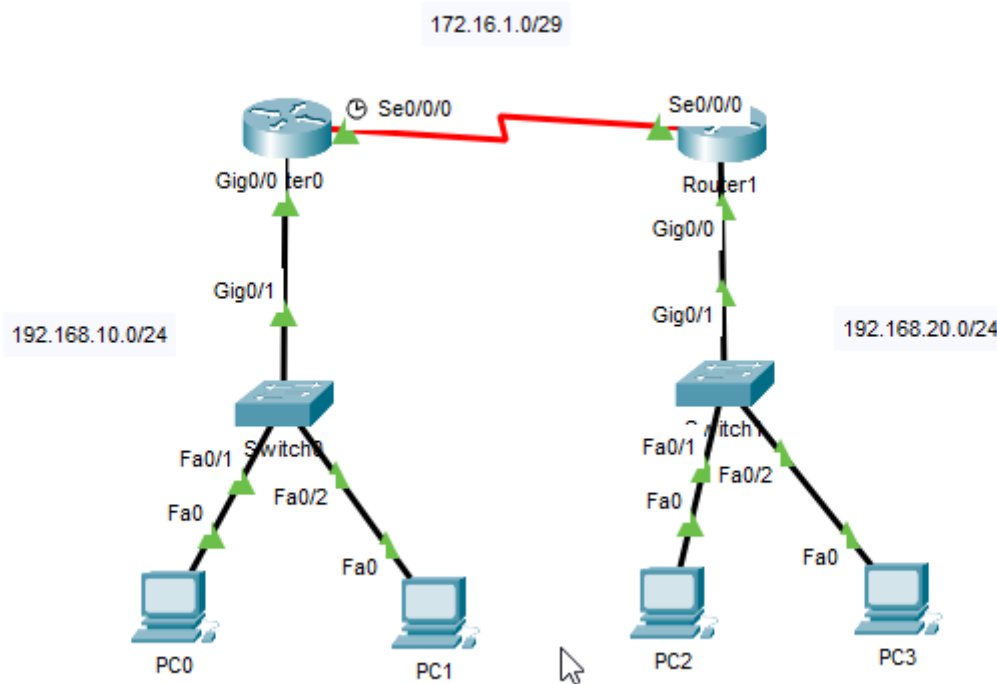


Cisco IOS RIPv2 Protocol

Network Topology



Router0 Configuration Commands

```
Router0>enable
Router0#configure terminal
Router0(config)#interface serial 0/0/0
Router0(config-if)#ip address 172.16.1.1 255.255.255.248
Router0(config-if)#no shutdown
Router0(config-if)#interface gigabitEthernet 0/0
Router0(config-if)#ip address 192.168.10.1 255.255.255.0
Router0(config-if)#no shutdown
Router0(config-if)#exit
Router0(config)#router rip
Router0(config-router)#version 2
Router0(config-router)#network 192.168.10.0
Router0(config-router)#network 172.16.1.0
Router1(config-router)#no auto-summary
Router0(config-router)#end
```

Router1 Configuration Commands

```
Router1>enable
Router1#configure terminal
Router1(config)#interface serial 0/0/0
Router1(config-if)#ip address 172.16.1.2 255.255.255.248
Router1(config-if)#no shutdown
Router1(config-if)#interface gigabitEthernet 0/0
Router1(config-if)#ip address 192.168.20.1 255.255.255.0
Router1(config-if)#no shutdown
Router1(config-if)#exit
Router1(config)#router rip
Router1(config-router)#version 2
Router1(config-router)#network 192.168.20.0
Router1(config-router)#network 172.16.1.0
Router1(config-router)#no auto-summary
Router1(config-router)#end
```

Verify RIPv2 Configuration

Router0#show ip route

```
Router0#show ip route
Codes: L - local, C - connected, S - static, 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

    172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C       172.16.1.0/29 is directly connected, Serial0/0/0
L       172.16.1.1/32 is directly connected, Serial0/0/0
    192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.10.0/24 is directly connected, GigabitEthernet0/0
L       192.168.10.1/32 is directly connected, GigabitEthernet0/0
R       192.168.20.0/24 [120/1] via 172.16.1.2, 00:00:21, Serial0/0/0
```

Router0#show ip rip database

```
Router0#show ip rip database
172.16.1.0/29      auto-summary
172.16.1.0/29      directly connected, Serial0/0/0
192.168.10.0/24    auto-summary
192.168.10.0/24    directly connected, GigabitEthernet0/0
192.168.20.0/24    auto-summary
192.168.20.0/24
    [1] via 172.16.1.2, 00:00:01, Serial0/0/0
```

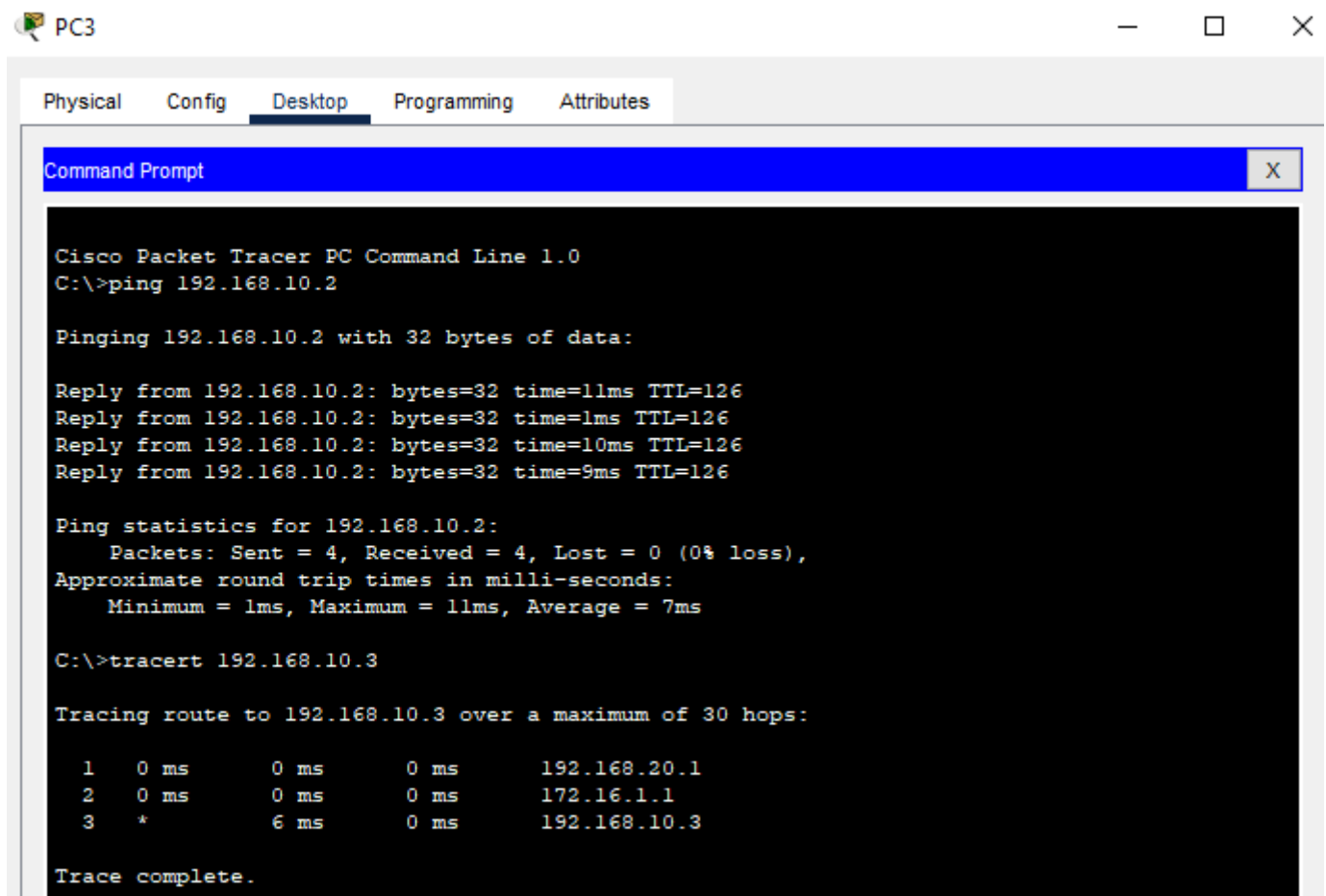
Router0#show ip protocols

```

Router0#show ip protocols
Routing Protocol is "rip"
Sending updates every 30 seconds, next due in 18 seconds
Invalid after 180 seconds, hold down 180, flushed after 240
Outgoing update filter list for all interfaces is not set
Incoming update filter list for all interfaces is not set
Redistributing: rip
Default version control: send version 2, receive 2
  Interface          Send Recv Triggered RIP Key-chain
GigabitEthernet0/0    22
Serial0/0/0           22
Automatic network summarization is not in effect
Maximum path: 4
Routing for Networks:
  172.16.0.0
  192.168.10.0
Passive Interface(s):
Routing Information Sources:
  Gateway         Distance      Last Update
  172.16.1.2      120           00:00:13
Distance: (default is 120)

```

Ping and Tracert Check



Cisco Packet Tracer File

[net18 ripv2.pkt](#)

Revision #1

Created 9 January 2023 03:51:10 by Glen Taylor

Updated 24 January 2023 22:45:52 by Glen Taylor