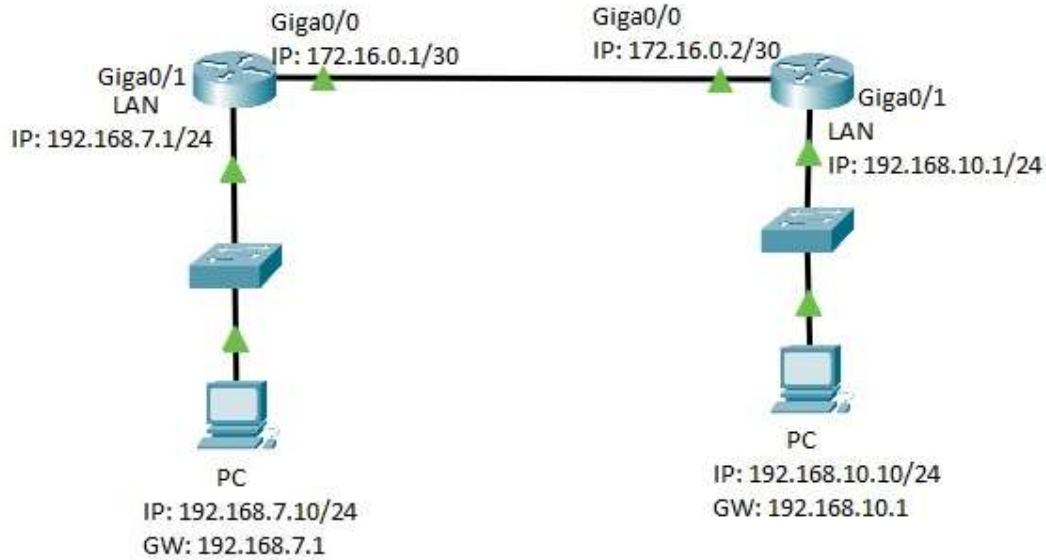


## Verify EIGRP (BEIGRP)



### Router 1 Configuration

```
interface Loopback1
ip address 1.1.1.1 255.255.255.255
!
interface GigaEthernet0/0
ip address 172.16.0.1 255.255.255.252
!
interface GigaEthernet0/1
ip address 192.168.7.1 255.255.255.0
!
router beigrp 100
network 172.16.0.0 255.255.255.252
network 192.168.7.0 255.255.255.0
network 1.1.1.1 255.255.255.255
!
```

### Router 2 Configuration

```
interface Loopback2
ip address 2.2.2.2 255.255.255.255
!
interface GigaEthernet0/0
ip address 172.16.0.2 255.255.255.252
!
interface GigaEthernet0/1
ip address 192.168.10.1 255.255.255.0
!
router beigrp 100
network 192.168.10.0 255.255.255.0
```

network 2.2.2.2 255.255.255.255  
network 172.16.0.0 255.255.255.252

### Router 1

```
Router_1#  
Router_1#show ip route  
route -- Show route table  
Router_1#show ip route  
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected  
D - EIGRP, EX - external EIGRP, O - OSPF, OIA - OSPF inter area  
ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2  
OE1 - OSPF external type 1, OE2 - OSPF external type 2, L - Local  
DHCP - DHCP type, L1 - IS-IS level-1, L2 - IS-IS level-2  
IA - ISIS inter-level, I - IPSEC type  
VRF ID: 0  
C 1.1.1.1/32 is directly connected, Loopback1  
D 2.0.0.0/8 [90,15616] via 172.16.0.2 (on GigaEthernet0/0)  
C 172.16.0.0/30 is directly connected, GigaEthernet0/0  
C 192.168.7.0/24 is directly connected, GigaEthernet0/1  
D 192.168.10.0/24 [90,3072] via 172.16.0.2 (on GigaEthernet0/0)  
Router_1#  
Router_1#  
Router_1#show ip beigrp neighbors  
Information of BEIGRP neighbors with AS 100  
Address interface hold uptime _Q_cnt Seq  
172.16.0.2 GigaEthernet0/0/1 00:02:29 0 4(0)  
Router_1#  
Router_1#show ip beigrp pro  
Router_1#show ip beigrp protocols  
Protocol Information of BEIGRP with AS 100:  
Router-id 1.1.1.1  
Metric Weight: K1=1, K2=0, K3=1, K4=0, K5=0.  
Redistributing:  
Automatic network summarization is enable.  
Active-time: 3(minutes)  
Routing for Networks:  
172.16.0.0/30  
192.168.7.0/24  
1.1.1.1/32  
Distance: internal 90, external 170  
Active Route:  
Router_1#
```

### Router 2

```
Router_2#  
Router_2#show ip route  
route -- Show route table  
Router_2#show ip route  
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected  
D - EIGRP, EX - external EIGRP, O - OSPF, OIA - OSPF inter area  
ON1 - OSPF NSSA external type 1, ON2 - OSPF NSSA external type 2  
OE1 - OSPF external type 1, OE2 - OSPF external type 2, L - Local  
DHCP - DHCP type, L1 - IS-IS level-1, L2 - IS-IS level-2  
IA - ISIS inter-level, I - IPSEC type  
VRF ID: 0  
D 1.0.0.0/8 [90,15616] via 172.16.0.1 (on GigaEthernet0/0)  
C 2.2.2.2/32 is directly connected, Loopback2  
C 172.16.0.0/30 is directly connected, GigaEthernet0/0  
D 192.168.7.0/24 [90,3072] via 172.16.0.1 (on GigaEthernet0/0)  
D 192.168.10.0/24 is directly connected, GigaEthernet0/1  
Router_2#  
Router_2#show ip beigrp n  
Router_2#show ip beigrp neighbors  
Information of BEIGRP neighbors with AS 100  
Address interface hold uptime _Q_cnt Seq  
172.16.0.1 GigaEthernet0/0/13 00:09:27 0 4(0)  
Router_2#  
Router_2#show ip beigrp pro  
Router_2#show ip beigrp protocols  
Protocol Information of BEIGRP with AS 100:  
Router-id 2.2.2.2  
Metric Weight: K1=1, K2=0, K3=1, K4=0, K5=0.  
Redistributing:  
Automatic network summarization is enable.  
Active-time: 3(minutes)  
Routing for Networks:  
192.168.10.0/24  
2.2.2.2/32  
172.16.0.0/30  
Distance: internal 90, external 170  
Active Route:  
Router_2#
```

## Router 1 connected PC Snapshot

```
C:\Users\Harshad>
C:\Users\Harshad>ping 192.168.10.10

Pinging 192.168.10.10 with 32 bytes of data:
Reply from 192.168.10.10: bytes=32 time=1ms TTL=126
Reply from 192.168.10.10: bytes=32 time=1ms TTL=126
Reply from 192.168.10.10: bytes=32 time=1ms TTL=126
Reply from 192.168.10.10: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.10.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\Users\Harshad>
C:\Users\Harshad>tracert -d 192.168.10.10

Tracing route to 192.168.10.10 over a maximum of 30 hops:

  0  <1 ms    <1 ms    <1 ms   192.168.7.1
  1  <1 ms    <1 ms    <1 ms   172.16.0.2
  2  <1 ms    <1 ms    <1 ms   192.168.10.10

Trace complete.

C:\Users\Harshad>
```