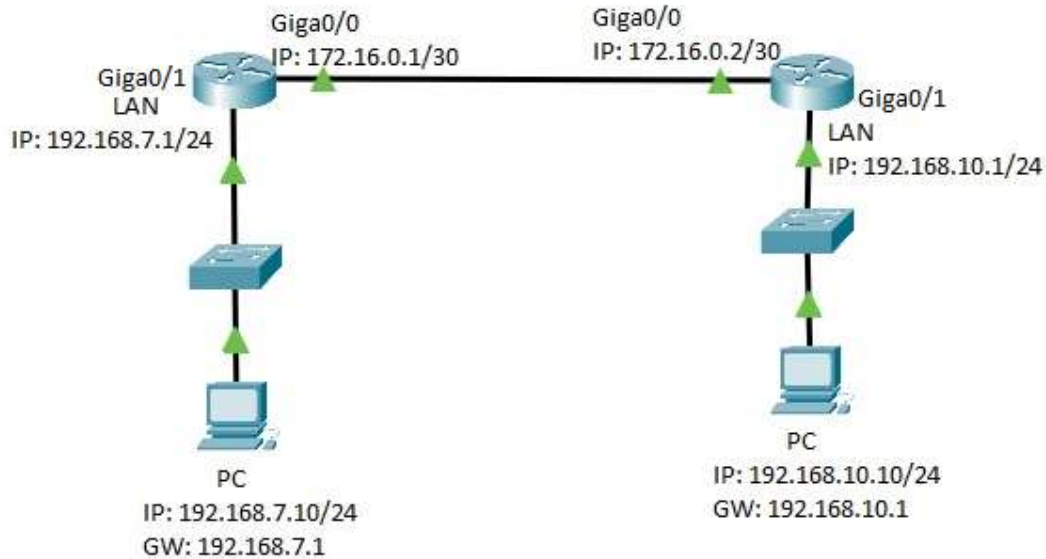


Verify Static Routing



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
!
ip route cache
ip route 2.2.2.2 255.255.255.255 172.16.0.2
ip route 192.168.10.0 255.255.255.0 172.16.0.2
```

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
!
ip route cache
ip route 1.1.1.1 255.255.255.255 172.16.0.1
ip route 192.168.7.0 255.255.255.0 172.16.0.1
```

Router 1

```
Router_1#
Router_1#show ip route
--output-- Show route table
Router_1#show ip route
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected
D - BEIGRP, DEX - external BEIGRP, 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
S 2.2.2.2/32 [1,0] 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
S 192.168.10.0/24 [1,0] via 172.16.0.2 (on GigaEthernet0/0)

Router_1#
Router_1#
Router_1#
```

Router 2

```
Router_2#
Router_2#show ip route
--output-- Show route table
Router_2#show ip route
Codes: C - connected, S - static, R - RIP, B - BGP, BC - BGP connected
D - BEIGRP, DEX - external BEIGRP, 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

S 1.1.1.1/32 [1,0] 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
S 192.168.7.0/24 [1,0] via 172.16.0.1 (on GigaEthernet0/0)
C 192.168.10.0/24 is directly connected, GigaEthernet0/1

Router_2#
Router_2#
Router_2#
```

Router 1 connected PC Snapshot

```
C:\Users\Harshad>
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=3ms 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 = 3ms, Average = 1ms

C:\Users\Harshad>
C:\Users\Harshad>tracert -d 192.168.10.1
'tracer' is not recognized as an internal or external command,
operable program or batch file.

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>
C:\Users\Harshad>
```

Router 2 connected PC Snapshot

```
C:\Windows\System32\cmd.exe
Windows IP Configuration

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

Wireless LAN adapter Local Area Connection* 3:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

Wireless LAN adapter Wi-Fi:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix . . . . . :
    IPv6 Address . . . . . : fd83:d2ba:83c8:d2c
    Link-local IPv6 Address . . . . . : fe80:425ad:1bf3:hc8e:dd38%3
    IPv4 Address . . . . . : 192.168.10.10
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.10.1

Tunnel adapter isatap.{9576471D-E1B9-4F11-A72F-AB7E8E7CD966}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

C:\Windows\System32>ping 192.168.7.10

Pinging 192.168.7.10 with 32 bytes of data:
Reply from 192.168.7.10: bytes=32 time=1ms TTL=126
Reply from 192.168.7.10: bytes=32 time=1ms TTL=126
Reply from 192.168.7.10: bytes=32 time=1ms TTL=126
Reply from 192.168.7.10: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.7.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\Windows\System32>tracert 192.168.7.10

Tracing route to LAPTOP-80PFJBB4 [192.168.7.10]
over a maximum of 30 hops:
  0  <1 ms  <1 ms  <1 ms  192.168.10.1
  1  <1 ms  <1 ms  <1 ms  192.16.0.1
  2  1 ms   1 ms   1 ms  LAPTOP-80PFJBB4 [192.168.7.10]

Trace complete.

C:\Windows\System32>
```