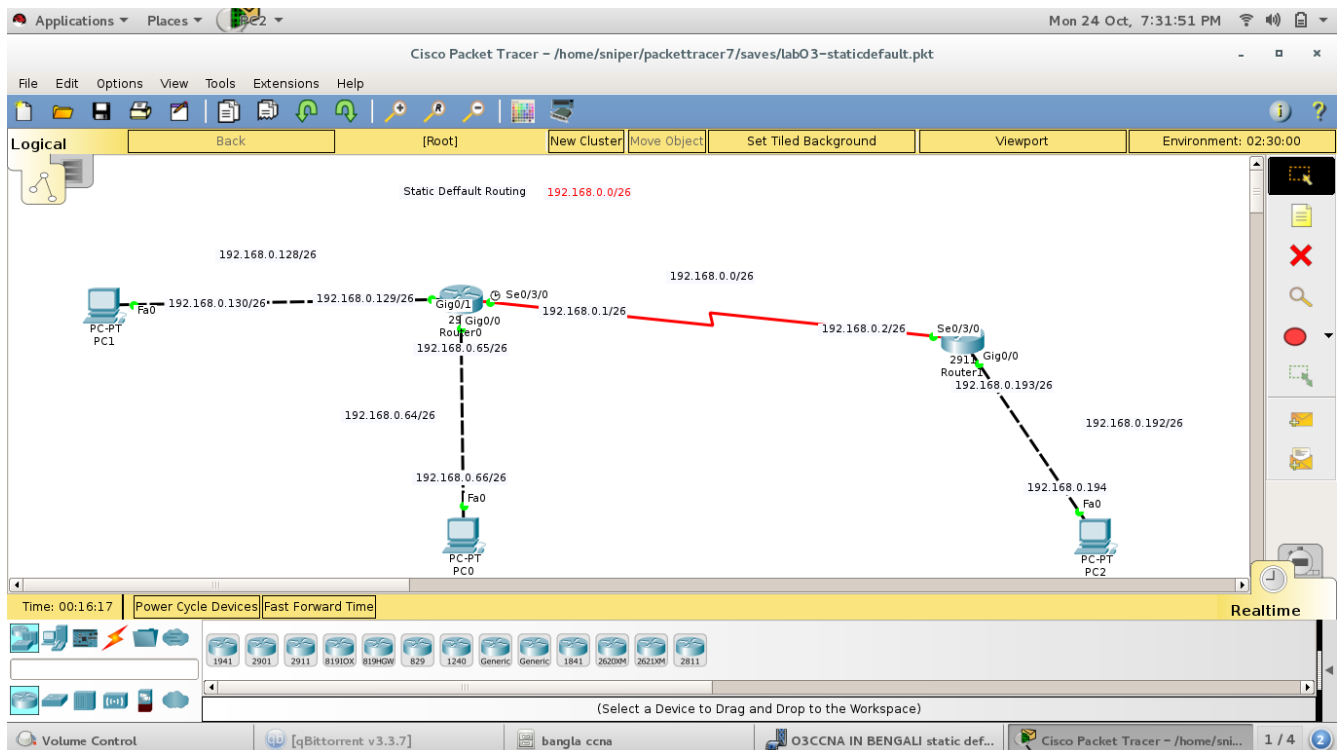


Lab-02-Static Default Routing With Sub netting



Router One Configure

```
Router>en
```

```
Router#conf t
```

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

```
Router(config)#host R1
```

```
R1(config)#int Gig 0/0
```

```
R1(config-if)#ip add 192.168.0.65 255.255.255.192
```

```
R1(config-if)#no shut
```

```
R1(config-if)#
```

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

```
R1(config-if)#exit
```

```
R1(config)#int Gig 0/1
```

```
R1(config-if)#ip add 192.168.0.129 255.255.255.192
```

```
R1(config-if)#no shut
```

```
R1(config-if)#
```

%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

```
R1(config-if)#exit
R1(config)#int se 0/3/0
R1(config-if)#ip add 192.168.0.1 255.255.255.192
R1(config-if)#clock rate 640000
Unknown clock rate
R1(config-if)#clock rate 64000
R1(config-if)#no shut
```

%LINK-5-CHANGED: Interface Serial0/3/0, changed state to down

```
R1(config-if)#
```

%LINK-5-CHANGED: Interface Serial0/3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to up

```
R1(config-if)#exit
R1(config)#do sh 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

```
192.168.0.0/24 is variably subnetted, 6 subnets, 2 masks
C    192.168.0.0/26 is directly connected, Serial0/3/0
L    192.168.0.1/32 is directly connected, Serial0/3/0
C    192.168.0.64/26 is directly connected, GigabitEthernet0/0
L    192.168.0.65/32 is directly connected, GigabitEthernet0/0
C    192.168.0.128/26 is directly connected, GigabitEthernet0/1
L    192.168.0.129/32 is directly connected, GigabitEthernet0/1
```

```
R1(config)#ip route 0.0.0.0 0.0.0.0 192.168.0.2
R1(config)#do sh 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 192.168.0.2 to network 0.0.0.0

```
192.168.0.0/24 is variably subnetted, 6 subnets, 2 masks
C    192.168.0.0/26 is directly connected, Serial0/3/0
L    192.168.0.1/32 is directly connected, Serial0/3/0
```

```
C    192.168.0.64/26 is directly connected, GigabitEthernet0/0
L    192.168.0.65/32 is directly connected, GigabitEthernet0/0
C    192.168.0.128/26 is directly connected, GigabitEthernet0/1
L    192.168.0.129/32 is directly connected, GigabitEthernet0/1
S*  0.0.0.0/0 [1/0] via 192.168.0.2
```

```
R1(config)#
```

RouterTwo Configure

```
Router>en
```

```
Router#conf t
```

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

```
Router(config)#host R2
```

```
R2(config)#int se 0/3/0
```

```
R2(config-if)#ip add 192.168.0.2 255.255.255.192
```

```
R2(config-if)#no shut
```

```
R2(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/3/0, changed state to up
```

```
R2(config-if)#e
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to up
```

```
% Ambiguous command: "e"
```

```
R2(config-if)#exit
```

```
R2(config)#int Gig 0/0
```

```
R2(config-if)#ip add 192.168.0.193 255.255.255.192
```

```
R2(config-if)#no shut
```

```
R2(config-if)#
```

```
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
```

```
R2(config-if)#exit
```

```
R2(config)#do sh 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
```

192.168.0.0/24 is variably subnetted, 4 subnets, 2 masks

C 192.168.0.0/26 is directly connected, Serial0/3/0
L 192.168.0.2/32 is directly connected, Serial0/3/0
C 192.168.0.192/26 is directly connected, GigabitEthernet0/0
L 192.168.0.193/32 is directly connected, GigabitEthernet0/0

R2(config)#ip route 0.0.0.0 0.0.0.0 192.168.0.1

R2(config)#do sh 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 192.168.0.1 to network 0.0.0.0

192.168.0.0/24 is variably subnetted, 4 subnets, 2 masks

C 192.168.0.0/26 is directly connected, Serial0/3/0
L 192.168.0.2/32 is directly connected, Serial0/3/0
C 192.168.0.192/26 is directly connected, GigabitEthernet0/0
L 192.168.0.193/32 is directly connected, GigabitEthernet0/0
S* 0.0.0.0/0 [1/0] via 192.168.0.1

R2(config)#

Test Connection

Applications ▾ Places ▾ ▾ Mon 24 Oct, 7:32:33 PM ▾

Cisco Packet Tracer - /home/sniper/packettracer7/saves/lab03-staticdefault.pkt

File Edit Options View Tools Extensions Help

Logical Back [Root] New Cluster Move Object Set Tiled Background Viewport Environment: 23:00:00

Static Default Routing

192.168.0.128/26

192.168.0.130/26

192.168.0.129/26

192.168.0.65/26

192.168.0.64/26

192.168.0.66/26

PC-PT PC1

Router0

PC-PT PC0

Time: 00:16:56 Power Cycle Devices Fast Forward Time

1941 2901 2911 8191OX 8191GW 829 1240 Generic Generic

Volume Control [qBittorrent v3.3.7] bangla ccna O3CCNA IN BENGALI sta... Cisco Packet Tracer - /ho... PC2 1 / 4

PC2

Physical Config Desktop Attributes Software/Services

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.66

Pinging 192.168.0.66 with 32 bytes of data:

Reply from 192.168.0.66: bytes=32 time=2ms TTL=126
Reply from 192.168.0.66: bytes=32 time=1ms TTL=126
Reply from 192.168.0.66: bytes=32 time=1ms TTL=126
Reply from 192.168.0.66: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.0.66:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.168.0.130

Pinging 192.168.0.130 with 32 bytes of data:

Reply from 192.168.0.130: bytes=32 time=7ms TTL=126
Reply from 192.168.0.130: bytes=32 time=5ms TTL=126
Reply from 192.168.0.130: bytes=32 time=6ms TTL=126
Reply from 192.168.0.130: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.0.130:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 7ms, Average = 4ms

C:\>
```

☐ Top

(Select a Device to Drag and Drop to the Workspace)