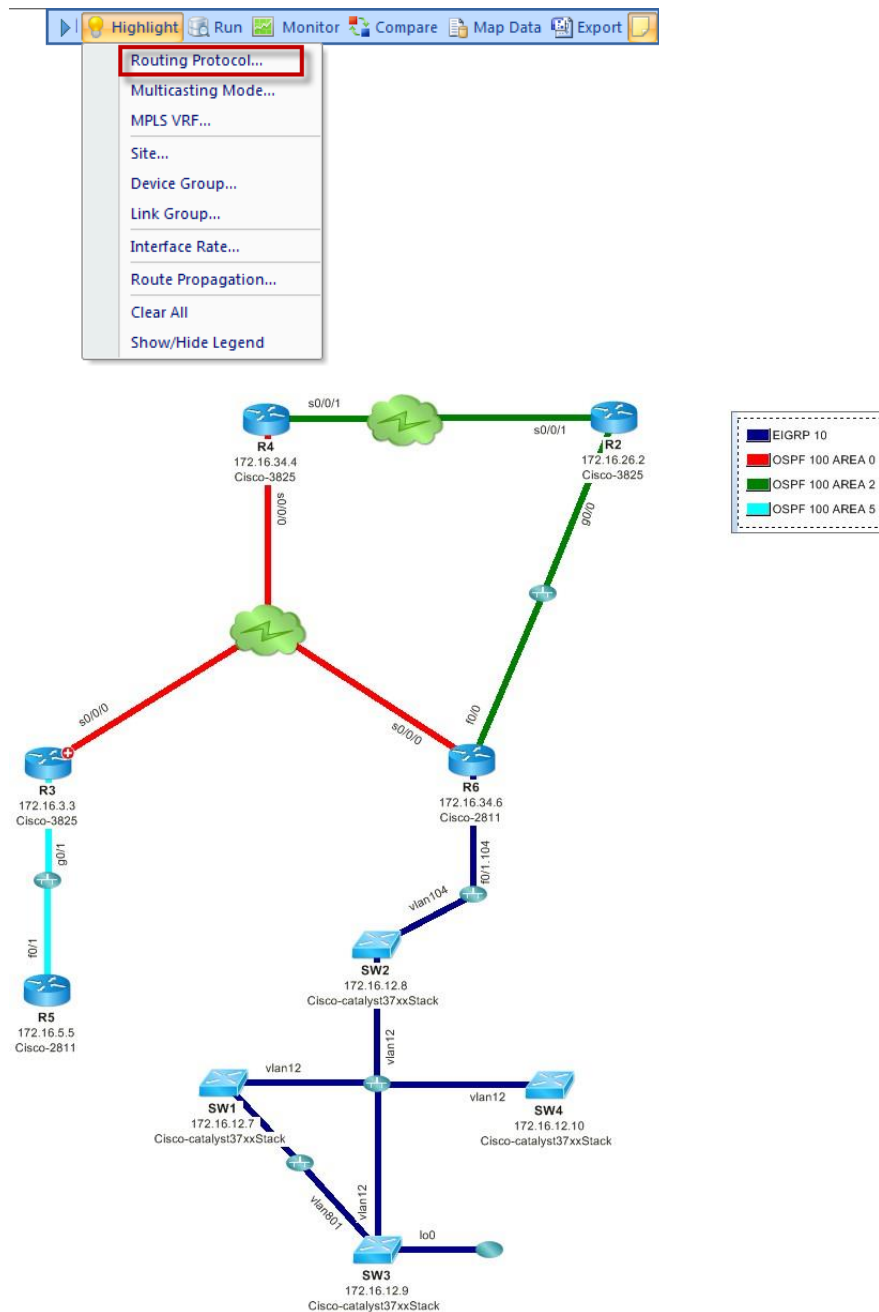


## Ticket 02: Missing route to 172.16.9.0/24

Routers running OSPF cannot see the route 172.16.9.0/24 (loopback0 of SW3) in their routing table.

### Explanation:

If you highlight the routing protocol by clicking the button on the floating menu located on the top right corner, you can see R3, R5, R4, R2 and R6 are running OSPF 100 and R6, SW1, SW2, SW3 and SW4 are running EIGRP 10.



All routers running OSPF cannot see 172.16.9.0/24 means the problem is either on R6 which is the redistribution point or in EIGRP side.

```
R6#sh ip route 172.16.9.0
% Subnet not in table
R6#_
```

After checking the routing table on R6, R6 does not have this route either.

```
R6#show ip eigrp 10 neighbor
IP-EIGRP neighbors for process 10
H   Address          Interface          Hold Uptime      SRTT   RTT  Q   Seq
  (sec)              (ms)
0   172.16.66.8       Fa0/1.104         12 6w0d           1    200  0  257396
R6#_
```

```
SW2#sh ip route 172.16.9.0
% Subnet not in table
SW2#_
```

R6's neighbor in EIGRP 10 is 172.16.66.8 which is SW2. But SW2 still does not have this route. Let's check the neighbor status between SW2 and SW3.

```
SW2#show ip eigrp 10 neighbor detail
EIGRP-IPv4:(10) neighbors for process 10
H   Address          Interface          Hold Uptime      SRTT   RTT  Q   Seq
  (sec)              (ms)
2   172.16.12.9       U112              12 5w6d           4    200  0  225272
  Version 12.2/3.0, Retrans: 37, Retries: 0
  Topology-ids from peer - 0
  Stub Peer Advertising < STATIC > Routes
  Suppressing queries
3   172.16.12.10      U112              11 6w0d           1    200  0  96545
  Version 12.2/3.0, Retrans: 19, Retries: 0, Prefixes: 1
  Topology-ids from peer - 0
  Stub Peer Advertising < CONNECTED SUMMARY > Routes
  Suppressing queries
1   172.16.12.7       U112              11 6w0d           1    200  0  225254
  Version 12.2/3.0, Retrans: 23, Retries: 0, Prefixes: 2
  Topology-ids from peer - 0
  Stub Peer Advertising < CONNECTED SUMMARY > Routes
  Suppressing queries
0   172.16.66.6       U1104             11 6w0d           1    200  0  64371
  Version 12.4/1.2, Retrans: 7, Retries: 0, Prefixes: 21
  Topology-ids from peer - 0
SW2#_
```

```
SW3#sh run | be router eigrp
router eigrp 10
no auto-summary
eigrp stub static
network 172.16.9.0 0.0.0.255
network 172.16.12.0 0.0.0.255
network 172.16.80.0 0.0.0.15
?
```

Seems like we found the problem already. From SW2, we can see that SW3 only advertises static routes to SW2, that's the reason SW2 cannot get the route 172.16.9.0/24 which is a connected loopback interface, thus all routers behind SW2 are not able to see this route in their routing table.

**Solution:**

```
SW3:   router eigrp 10
       no eigrp stub static
```