

1. Customer Site 2 is unable to reach Customer Site 1. Resolve the reachability issue and match the following output when complete. Do not modify any interface configurations to accomplish this.

**R7#show ip route 6.6.6.6**

Routing entry for 6.6.6.6/32

Known via "ospf 1", distance 110, metric 5, type intra area

Last update from 10.7.13.13 on GigabitEthernet2.713, 00:01:11 ago

Routing Descriptor Blocks:

\* 10.7.13.13, from 6.6.6.6, 00:01:11 ago, via GigabitEthernet2.713

Route metric is 5, traffic share count is 1

**R7#traceroute 6.6.6.6 source 7.7.7.7**

Type escape sequence to abort.

Tracing the route to 6.6.6.6

VRF info: (vrf in name/id, vrf out name/id)

1 10.7.13.13 2 msec 1 msec 1 msec

2 \* \*

10.2.13.2 [MPLS: Labels 16/34 Exp 0] 6 msec

3 10.1.5.1 [MPLS: Label 34 Exp 0] 3 msec 3 msec 3 msec

4 10.1.5.5 14 msec 6 msec 5 msec

5 10.5.6.6 5 msec \* 4 msec

2. After a maintenance window in AS 1000, customer sites R14 and R19 are unable to reach each other. Resolve the problem so that R14 and R19 can ping each other's Loopback0 interfaces.
3. After an outage of the R2 core route reflector, R19 and R14 were unable to forward traffic to each other. Resolve the problem in the core so that if R2 is down, traffic for the CSC attached customers still forwards successfully.
4. After a circuit outage between AS 8 and AS 9, AS 8 lost IP reachability to its other sites. Resolve this issue so that if R8's link to R9 is down, R8 can still ping R10's Loopback0. Do not modify any BGP configuration to accomplish this.
5. After a circuit outage between R13 and R14, R14 lost reachability to its remote site. Solve the issue so that if the link between R13 and R14 is down, R14 still has IP reachability to R19.