

Case A: Baseline test of IOS and hardware configuration.

A6. Test Results:

Step A4.4:

```
RTP-7505-A#sh run
Building configuration...

Current configuration:
!
version 12.0
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname RTP-7505-A
!
boot system flash slot0:rsp-pv-mz.eft1018
enable password
!
!
!
ip subnet-zero
ip cef distributed
!
!
!
interface Loopback0
ip address 10.140.255.1 255.255.255.255
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
!
interface Ethernet0/0/0
ip address 192.168.1.25 255.255.255.0
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
shutdown
!
interface Ethernet0/0/1
no ip address
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
shutdown
!
interface Ethernet0/0/2
ip address 10.140.33.1 255.255.255.0
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
shutdown
!
interface Ethernet0/0/3
no ip address
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
shutdown
!
interface FastEthernet0/1/0
ip address 10.140.1.1 255.255.255.0
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
load-interval 180
full-duplex
!
interface POS2/0/0
ip address 172.16.1.2 255.255.255.0
no ip directed-broadcast
no ip route-cache cef
ip route-cache distributed
no keepalive
```

```

!
router ospf 200
  passive-interface POS2/0/0
  network 10.140.255.1 0.0.0.0 area 0
  network 10.140.0.0 0.0.255.255 area 0
  network 172.16.1.0 0.0.0.255 area 0
!
router bgp 2000
  no synchronization
  bgp router-id 10.140.255.1
  bgp log-neighbor-changes
  network 10.140.1.0 mask 255.255.255.0
  network 10.140.33.0 mask 255.255.255.0
  network 10.140.255.1 mask 255.255.255.255
  network 10.140.0.0 mask 255.255.0.0
  neighbor 172.16.1.1 remote-as 1000
!
ip classless
!
!
!
line con 0
  transport input none
line aux 0
line vty 0 4
  password ww
  login
!
end

RTP-7505-A#sh ip ro
Codes: C - connected, S - static, I - IGRP, 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

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 2 subnets
C       172.16.1.0 is directly connected, POS2/0/0
B       172.16.2.0 [20/0] via 172.16.1.1, 01:18:22
    10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks
B       10.150.255.1/32 [20/0] via 172.16.1.1, 01:18:22
B       10.130.255.3/32 [20/0] via 172.16.1.1, 01:18:22
B       10.130.255.2/32 [20/0] via 172.16.1.1, 01:18:22
B       10.130.255.1/32 [20/0] via 172.16.1.1, 01:18:22
C       10.140.255.1/32 is directly connected, Loopback0
C       10.140.1.0/24 is directly connected, FastEthernet0/1/0
B       10.130.1.0/24 [20/0] via 172.16.1.1, 01:18:23
B       10.130.2.0/24 [20/0] via 172.16.1.1, 00:26:57
B       10.130.6.0/24 [20/0] via 172.16.1.1, 01:00:22
B       10.150.1.0/24 [20/0] via 172.16.1.1, 00:07:49
B       10.130.49.0/24 [20/0] via 172.16.1.1, 01:18:23

```

Observation:

Baseline for ARx. OSPF and BFP enabled.

Comments:

None

Step A4.4:

```

semtec#sh run
Building configuration...

Current configuration:
!
version 12.0
no service pad
service timestamps debug uptime
service timestamps log uptime

```



```

clock source internal
!
interface Ethernet0
description Utility subnet - do not remove...
ip address 192.168.1.13 255.255.255.0
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
load-interval 30
shutdown
!
router ospf 100
log-adjacency-changes
passive-interface POS5/3
network 10.130.255.3 0.0.0.0 area 0
network 10.130.0.0 0.0.255.255 area 0
network 172.16.1.0 0.0.0.255 area 0
!
router bgp 1000
no synchronization
bgp router-id 10.130.255.3
bgp log-neighbor-changes
network 10.130.255.3 mask 255.255.255.255
network 172.16.1.0 mask 255.255.255.0
redistribute connected
neighbor 10.130.255.1 remote-as 1000
neighbor 10.130.255.1 update-source Loopback0
neighbor 10.130.255.2 remote-as 1000
neighbor 10.130.255.2 update-source Loopback0
neighbor 172.16.1.2 remote-as 2000
no auto-summary
!
ip classless
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
password ww
login
!
end

semtec#sh ip ro
Codes: C - connected, S - static, I - IGRP, 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

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 2 subnets
C       172.16.1.0 is directly connected, POS5/3
O       172.16.2.0 [110/2] via 10.130.49.2, 00:29:57, POS3/3
    10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks
B       10.150.255.1/32 [200/0] via 10.130.255.2, 14:15:20
C       10.130.255.3/32 is directly connected, Loopback0
O       10.130.255.2/32 [110/2] via 10.130.49.2, 00:29:57, POS3/3
O       10.130.255.1/32 [110/2] via 10.130.2.1, 00:29:57, POS3/1
B       10.140.255.1/32 [20/0] via 172.16.1.2, 01:21:37
B       10.140.1.0/24 [20/0] via 172.16.1.2, 00:11:44
O       10.130.1.0/24 [110/2] via 10.130.49.2, 00:29:58, POS3/3
        [110/2] via 10.130.2.1, 00:29:58, POS3/1
C       10.130.2.0/24 is directly connected, POS3/1
O       10.130.6.0/24 [110/2] via 10.130.49.2, 00:29:58, POS3/3
B       10.150.1.0/24 [200/0] via 10.130.255.2, 00:11:05
C       10.130.49.0/24 is directly connected, POS3/3

```

Observation:

Baseline for GSR A. OSPF and BFP enabled.

Comments:


```

no ip directed-broadcast
shutdown
crc 32
!
interface POS3/2
no ip address
no ip directed-broadcast
shutdown
crc 32
!
interface POS3/3
no ip address
no ip directed-broadcast
shutdown
crc 32
!
interface Ethernet0
description Utility Subnet - don't remove...
ip address 192.168.1.15 255.255.255.0
no ip directed-broadcast
no ip mroute-cache
shutdown
!
router ospf 100
 redistribute connected
 network 10.130.255.1 0.0.0.0 area 0
 network 10.130.0.0 0.0.255.255 area 0
!
router bgp 1000
 no synchronization
 bgp router-id 10.130.255.1
 bgp log-neighbor-changes
 network 10.130.255.1 mask 255.255.255.255
 neighbor 10.130.255.2 remote-as 1000
 neighbor 10.130.255.2 update-source Loopback0
 neighbor 10.130.255.3 remote-as 1000
 neighbor 10.130.255.3 update-source Loopback0
 no auto-summary
!
ip classless
ip bgp-community new-format
!
no logging trap
no snmp-server ifindex persist
!
!
line con 0
 transport input none
line aux 0
line vty 0 4
 password ww
 login
!
end

gunpowder#sh ip ro
Codes: C - connected, S - static, I - IGRP, 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

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 2 subnets
O       172.16.1.0 [110/2] via 10.130.2.2, 00:28:41, POS3/0
O       172.16.2.0 [110/2] via 10.130.1.2, 00:28:41, POS2/0
    10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks
B       10.150.255.1/32 [200/0] via 172.16.2.2, 14:14:03
O       10.130.255.3/32 [110/2] via 10.130.2.2, 00:28:41, POS3/0
O       10.130.255.2/32 [110/2] via 10.130.1.2, 00:28:41, POS2/0
C       10.130.255.1/32 is directly connected, Loopback0
B       10.140.255.1/32 [200/0] via 172.16.1.2, 01:20:19
B       10.140.1.0/24 [200/0] via 172.16.1.2, 00:10:27
C       10.130.1.0/24 is directly connected, POS2/0
C       10.130.2.0/24 is directly connected, POS3/0
O       10.130.6.0/24 [110/2] via 10.130.1.2, 00:28:41, POS2/0
B       10.150.1.0/24 [200/0] via 172.16.2.2, 00:09:48
O       10.130.49.0/24 [110/2] via 10.130.1.2, 00:28:42, POS2/0

```

[110/2] via 10.130.2.2, 00:28:42, POS3/0

Observation:

Baseline for GSR B. OSPF and BFP enabled.

Comments:

None

Step A4.4:

```
nitro#sh run
Building configuration...

Current configuration:
!
version 12.0
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname nitro
!
boot system flash slot0:gsr-p-mz.eft1018
enable password
!
!
!
!
!
ip subnet-zero
no ip domain-lookup
no ip dvmrp route-limit
!
!
interface Loopback0
bandwidth 1000
ip address 10.130.255.2 255.255.255.255
no ip directed-broadcast
!
interface POS1/0
ip address 10.130.50.1 255.255.255.0
no ip directed-broadcast
no keepalive
shutdown
crc 32
clock source internal
!
interface POS1/1
ip address 10.130.6.1 255.255.255.0
no ip directed-broadcast
no keepalive
crc 32
clock source internal
!
interface POS1/2
no ip address
no ip directed-broadcast
no keepalive
shutdown
crc 32
clock source internal
!
interface POS1/3
```

```
ip address 10.130.49.2 255.255.255.0
no ip directed-broadcast
no keepalive
crc 32
clock source internal
!
interface POS2/0
ip address 10.130.1.2 255.255.255.0
no ip directed-broadcast
no keepalive
crc 32
clock source internal
!
interface POS2/1
no ip address
no ip directed-broadcast
no keepalive
shutdown
crc 32
clock source internal
!
interface POS2/2
no ip address
no ip directed-broadcast
no keepalive
shutdown
crc 32
!
interface POS2/3
no ip address
no ip directed-broadcast
no keepalive
shutdown
crc 32
!
interface POS3/0
no ip address
no ip directed-broadcast
ip pim sparse-mode
ip mroute-cache distributed
shutdown
crc 32
clock source internal
!
interface POS4/0
no ip address
no ip directed-broadcast
no keepalive
shutdown
crc 16
clock source internal
!
interface POS4/1
ip address 10.130.7.1 255.255.255.0
no ip directed-broadcast
no keepalive
shutdown
crc 16
clock source internal
!
interface POS4/2
no ip address
no ip directed-broadcast
shutdown
crc 16
!
interface POS4/3
ip address 172.16.2.1 255.255.255.0
no ip directed-broadcast
no keepalive
crc 16
clock source internal
!
interface Ethernet0
description Utility Subnet - don't remove...
ip address 192.168.1.16 255.255.255.0
no ip directed-broadcast
shutdown
!
router ospf 100
```

```

log-adjacency-changes
redistribute connected
redistribute bgp 1000
passive-interface POS4/3
network 10.130.255.2 0.0.0.0 area 0
network 10.130.0.0 0.0.255.255 area 0
network 172.16.2.0 0.0.0.255 area 0
!
router bgp 1000
no synchronization
bgp router-id 10.130.255.2
bgp log-neighbor-changes
network 10.130.255.2 mask 255.255.255.255
network 10.130.0.0 mask 255.255.0.0
network 172.16.2.0 mask 255.255.255.0
redistribute connected
neighbor 10.130.255.1 remote-as 1000
neighbor 10.130.255.1 update-source Loopback0
neighbor 10.130.255.3 remote-as 1000
neighbor 10.130.255.3 update-source Loopback0
neighbor 10.130.255.3 next-hop-self
neighbor 172.16.2.2 remote-as 3000
no auto-summary
!
ip classless
ip bgp-community new-format
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
password ww
login
!
end

nitro#sh ip rou
Codes: C - connected, S - static, I - IGRP, 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

Gateway of last resort is not set

172.16.0.0/24 is subnetted, 2 subnets
O   172.16.1.0 [110/2] via 10.130.49.1, 00:30:19, POS1/3
C   172.16.2.0 is directly connected, POS4/3
10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks
B   10.150.255.1/32 [20/0] via 172.16.2.2, 14:15:44
O   10.130.255.3/32 [110/2] via 10.130.49.1, 00:30:19, POS1/3
C   10.130.255.2/32 is directly connected, Loopback0
O   10.130.255.1/32 [110/2] via 10.130.1.1, 00:30:19, POS2/0
B   10.140.255.1/32 [200/0] via 172.16.1.2, 01:21:58
B   10.140.1.0/24 [200/0] via 172.16.1.2, 00:12:05
C   10.130.1.0/24 is directly connected, POS2/0
O   10.130.2.0/24 [110/2] via 10.130.1.1, 00:30:20, POS2/0
   [110/2] via 10.130.49.1, 00:30:20, POS1/3
C   10.130.6.0/24 is directly connected, POS1/1
B   10.150.1.0/24 [20/0] via 172.16.2.2, 00:11:28
C   10.130.49.0/24 is directly connected, POS1/3

```

Observation:

Baseline for GSR C. OSPF and BFP enabled.

Comments:

None

Step A4.4:

```
RTP-7505-B#sh run
Building configuration...

Current configuration:
!
version 12.0
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
service udp-small-servers
service tcp-small-servers
!
hostname RTP-7505-B
!
boot system flash slot0:rsp-pv-mz.eft1018
enable password
!
!
!
ip subnet-zero
ip cef distributed
no ip domain-lookup
!
!
!
interface Loopback0
 ip address 10.150.255.1 255.255.255.255
 no ip directed-broadcast
!
interface POS0/0/0
 ip address 172.16.2.2 255.255.255.0
 no ip directed-broadcast
 ip route-cache distributed
 no keepalive
!
interface FastEthernet2/1/0
 ip address 10.150.1.1 255.255.255.0
 no ip directed-broadcast
 ip route-cache distributed
 load-interval 180
 full-duplex
!
interface FastEthernet3/0/0
 ip address 10.150.23.1 255.255.255.0
 no ip directed-broadcast
 ip route-cache distributed
 load-interval 180
 shutdown
 full-duplex
!
router ospf 300
 passive-interface POS0/0/0
 network 10.150.0.0 0.0.255.255 area 0
 network 172.16.2.0 0.0.0.255 area 0
!
router bgp 3000
 no synchronization
 bgp router-id 10.150.255.1
 bgp log-neighbor-changes
 network 10.150.1.0 mask 255.255.255.0
 network 10.150.23.0 mask 255.255.255.0
 network 10.150.255.1 mask 255.255.255.255
 neighbor 172.16.2.1 remote-as 1000
 no auto-summary
!
 ip classless
 ip bgp-community new-format
!
snmp-server engineID local 00000009020000D0BC504448
snmp-server community public R0
no snmp-server ifindex persist
route-map set-community permit 11
 match ip address 1
 set community 3000:1
!
route-map set-community permit 33
 match ip address 9
 set community 3000:9 additive
```

<pre> ! ! ! line con 0 exec-timeout 0 0 transport input none line aux 0 modem Printer line vty 0 4 password ww login ! ipc cache 5000 no scheduler max-task-time end RTP-7505-B#sh ip rou Codes: C - connected, S - static, I - IGRP, 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 Gateway of last resort is not set 172.16.0.0/24 is subnetted, 2 subnets B 172.16.1.0 [20/0] via 172.16.2.1, 01:25:00 C 172.16.2.0 is directly connected, POS0/0/0 10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks C 10.150.255.1/32 is directly connected, Loopback0 B 10.130.255.3/32 [20/0] via 172.16.2.1, 14:14:27 B 10.130.255.2/32 [20/0] via 172.16.2.1, 14:14:27 B 10.130.255.1/32 [20/0] via 172.16.2.1, 14:14:27 B 10.140.255.1/32 [20/0] via 172.16.2.1, 01:20:39 B 10.140.1.0/24 [20/0] via 172.16.2.1, 00:10:47 B 10.130.1.0/24 [20/0] via 172.16.2.1, 14:14:27 B 10.130.2.0/24 [20/0] via 172.16.2.1, 00:29:15 B 10.130.6.0/24 [20/0] via 172.16.2.1, 01:02:41 C 10.150.1.0/24 is directly connected, FastEthernet2/1/0 B 10.130.49.0/24 [20/0] via 172.16.2.1, 14:14:29 </pre>
Observation:
Baseline for ARy. OSPF and BFP enabled.
Comments:
None

Step A4.5:
<pre> semtec#sh ip ro Codes: C - connected, S - static, I - IGRP, 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 Gateway of last resort is not set 172.16.0.0/24 is subnetted, 2 subnets C 172.16.1.0 is directly connected, POS5/3 O 172.16.2.0 [110/2] via 10.130.49.2, 00:31:29, POS3/3 10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks B 10.150.255.1/32 [200/0] via 10.130.255.2, 14:16:52 C 10.130.255.3/32 is directly connected, Loopback0 O 10.130.255.2/32 [110/2] via 10.130.49.2, 00:31:29, POS3/3 O 10.130.255.1/32 [110/2] via 10.130.2.1, 00:31:29, POS3/1 B 10.140.255.1/32 [20/0] via 172.16.1.2, 01:23:09 B 10.140.1.0/24 [20/0] via 172.16.1.2, 00:13:16 O 10.130.1.0/24 [110/2] via 10.130.49.2, 00:31:30, POS3/3 </pre>

<pre> C 10.130.2.0/24 [110/2] via 10.130.2.1, 00:31:30, POS3/1 O 10.130.6.0/24 [110/2] via 10.130.49.2, 00:31:30, POS3/3 B 10.150.1.0/24 [200/0] via 10.130.255.2, 00:12:38 C 10.130.49.0/24 is directly connected, POS3/3 semtec#traceroute 10.150.1.1 Type escape sequence to abort. Tracing the route to 10.150.1.1 1 10.130.49.2 0 msec 0 msec 0 msec 2 172.16.2.2 0 msec * 0 msec </pre>
Verdict:
Pass. On GSR A (semtec), the traceroute indicates that traffic to the subnets 10.150.1.0/24, which is directly attached to ARy(7505-B), will be forwarded over Link L4.
Comments:
None

<p>Step A4.5:</p> <pre> nitro#sh ip ro Codes: C - connected, S - static, I - IGRP, 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 Gateway of last resort is not set 172.16.0.0/24 is subnetted, 2 subnets O 172.16.1.0 [110/2] via 10.130.49.1, 00:33:46, POS1/3 C 172.16.2.0 is directly connected, POS4/3 O 10.0.0.0/8 is variably subnetted, 11 subnets, 2 masks B 10.150.255.1/32 [20/0] via 172.16.2.2, 14:19:11 O 10.130.255.3/32 [110/2] via 10.130.49.1, 00:33:46, POS1/3 C 10.130.255.2/32 is directly connected, Loopback0 O 10.130.255.1/32 [110/2] via 10.130.1.1, 00:33:46, POS2/0 B 10.140.255.1/32 [200/0] via 172.16.1.2, 01:25:25 B 10.140.1.0/24 [200/0] via 172.16.1.2, 00:15:32 C 10.130.1.0/24 is directly connected, POS2/0 O 10.130.2.0/24 [110/2] via 10.130.1.1, 00:33:46, POS2/0 [110/2] via 10.130.49.1, 00:33:46, POS1/3 C 10.130.6.0/24 is directly connected, POS1/1 B 10.150.1.0/24 [20/0] via 172.16.2.2, 00:14:55 C 10.130.49.0/24 is directly connected, POS1/3 nitro#traceroute 10.140.1.1 Type escape sequence to abort. Tracing the route to 10.140.1.1 1 10.130.49.1 0 msec 0 msec 0 msec 2 172.16.1.2 0 msec * 0 msec </pre>
Verdict:
Pass. On GSR B (nitro) the traceroute indicates that traffic to the subnets 10.140.1.0/24, which is directly attached to ARx(7505-A), will be forwarded over Link L4.
Comments:
None

Step A4.7:**Link L4 disconnected**

```
semtec#sh ip ro
Codes: C - connected, S - static, I - IGRP, 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
```

Gateway of last resort is not set

```
172.16.0.0/24 is subnetted, 2 subnets
C    172.16.1.0 is directly connected, POS5/3
O    172.16.2.0 [110/3] via 10.130.2.1, 00:00:04, POS3/1
10.0.0.0/8 is variably subnetted, 10 subnets, 2 masks
B    10.150.255.1/32 [200/0] via 10.130.255.2, 14:24:17
C    10.130.255.3/32 is directly connected, Loopback0
O    10.130.255.2/32 [110/3] via 10.130.2.1, 00:00:04, POS3/1
O    10.130.255.1/32 [110/2] via 10.130.2.1, 00:00:04, POS3/1
B    10.140.255.1/32 [20/0] via 172.16.1.2, 01:30:34
B    10.140.1.0/24 [20/0] via 172.16.1.2, 00:20:41
O    10.130.1.0/24 [110/2] via 10.130.2.1, 00:00:04, POS3/1
C    10.130.2.0/24 is directly connected, POS3/1
O    10.130.6.0/24 [110/3] via 10.130.2.1, 00:00:04, POS3/1
B    10.150.1.0/24 [200/0] via 10.130.255.2, 00:20:02
```

```
semtec#traceroute 10.150.1.1
```

Type escape sequence to abort.
Tracing the route to 10.150.1.1

```
 1 10.130.2.1 0 msec 4 msec 0 msec
 2 10.130.1.2 0 msec 0 msec 0 msec
 3 172.16.2.2 0 msec * 0 msec
```

Verdict:

Pass. On GSR A (semtec), the traceroute indicates that traffic to the subnet 10.150.1.0/24, which is directly attached to ARy(7505-B), will be forwarded over Links L3 and L4.

Comments:

None

Step A4.7:**Link L4 disconnected**

```
nitro#sh ip ro
Codes: C - connected, S - static, I - IGRP, 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
```

Gateway of last resort is not set

```
172.16.0.0/24 is subnetted, 2 subnets
O    172.16.1.0 [110/3] via 10.130.1.1, 00:07:49, POS2/0
C    172.16.2.0 is directly connected, POS4/3
10.0.0.0/8 is variably subnetted, 10 subnets, 2 masks
B    10.150.255.1/32 [20/0] via 172.16.2.2, 14:32:06
O    10.130.255.3/32 [110/3] via 10.130.1.1, 00:07:49, POS2/0
C    10.130.255.2/32 is directly connected, Loopback0
O    10.130.255.1/32 [110/2] via 10.130.1.1, 00:07:49, POS2/0
B    10.140.255.1/32 [200/0] via 172.16.1.2, 00:06:56
B    10.140.1.0/24 [200/0] via 172.16.1.2, 00:06:56
C    10.130.1.0/24 is directly connected, POS2/0
O    10.130.2.0/24 [110/2] via 10.130.1.1, 00:07:49, POS2/0
C    10.130.6.0/24 is directly connected, POS1/1
B    10.150.1.0/24 [20/0] via 172.16.2.2, 00:27:48
nitro#traceroute 10.140.1.1
```

Type escape sequence to abort.
Tracing the route to 10.140.1.1

```
 1 10.130.1.1 0 msec 0 msec 0 msec
 2 10.130.2.2 0 msec 0 msec 0 msec
 3 172.16.1.2 0 msec * 0 msec
```

Verdict:

Pass. On GSR B (nitro) the traceroute indicates that traffic to the subnet 10.140.1.0/24, which is directly attached to ARx(7505-A), will be forwarded over Links L5 and L3.

Comments:

None