Actual exam question from Cisco's 300-410
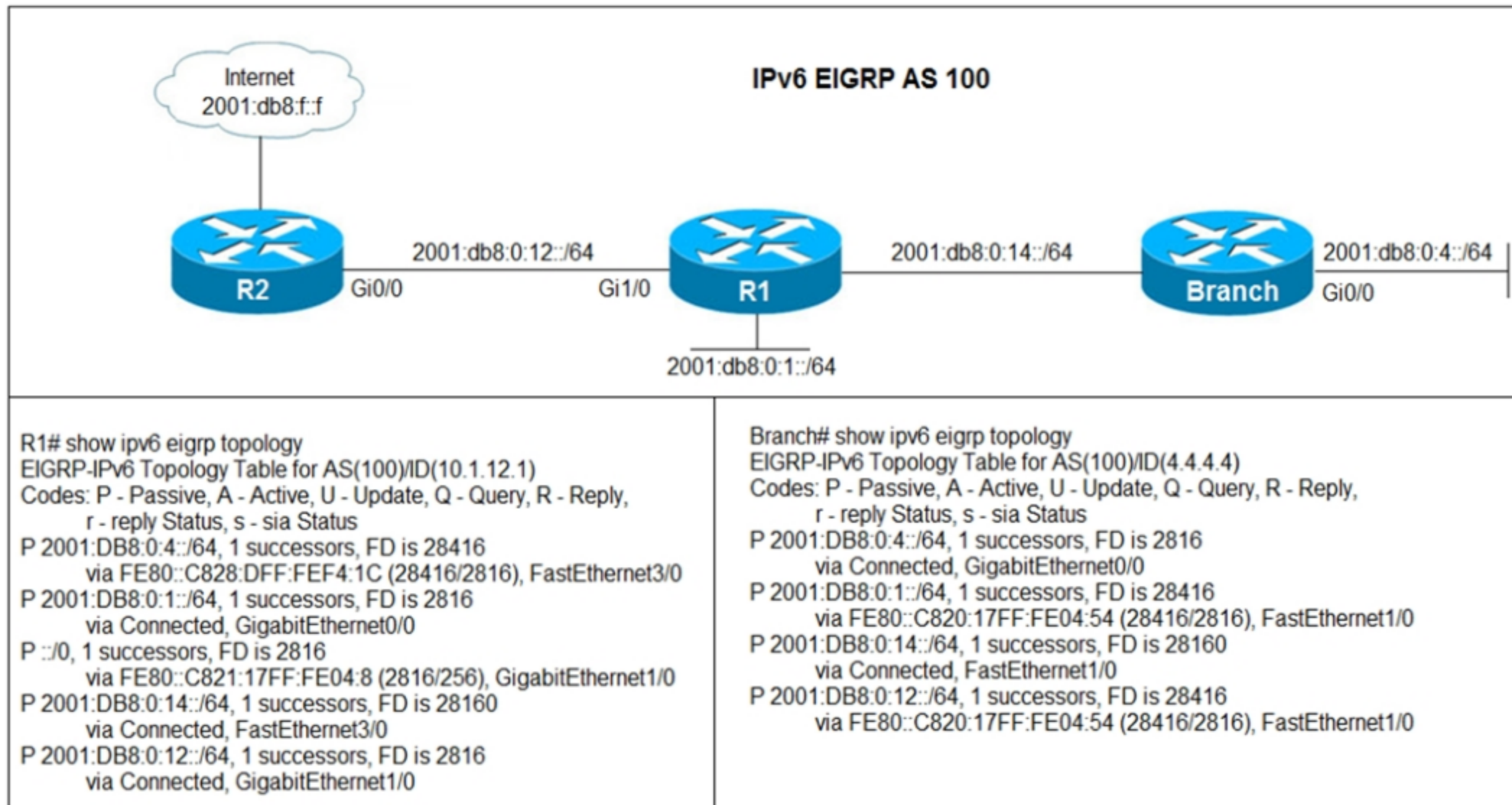
Question #: 1

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Users in the branch network of 2001:db8:0:4::/64 report that they cannot access the Internet.

Which command is issued in IPv6 router EIGRP 100 configuration mode to solve this issue?


```
R1# show ipv6 eigrp topology
EIGRP-IPv6 Topology Table for AS(100)/ID(10.1.12.1)
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status
P 2001:DB8:0:4::/64, 1 successors, FD is 28416
      via FE80::C828:DFF:FEF4:1C (28416/2816), FastEthernet3/0
P 2001:DB8:0:1::/64, 1 successors, FD is 2816
      via Connected, GigabitEthernet0/0
P ::/0, 1 successors, FD is 2816
      via FE80::C821:17FF:FE04:8 (2816/256), GigabitEthernet1/0
P 2001:DB8:0:14::/64, 1 successors, FD is 28160
      via Connected, FastEthernet3/0
P 2001:DB8:0:12::/64, 1 successors, FD is 2816
      via Connected, GigabitEthernet1/0
```

```
Branch# show ipv6 eigrp topology
EIGRP-IPv6 Topology Table for AS(100)/ID(4.4.4.4)
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status
P 2001:DB8:0:4::/64, 1 successors, FD is 2816
      via Connected, GigabitEthernet0/0
P 2001:DB8:0:1::/64, 1 successors, FD is 28416
      via FE80::C820:17FF:FE04:54 (28416/2816), FastEthernet1/0
P 2001:DB8:0:14::/64, 1 successors, FD is 28160
      via Connected, FastEthernet1/0
P 2001:DB8:0:12::/64, 1 successors, FD is 28416
      via FE80::C820:17FF:FE04:54 (28416/2816), FastEthernet1/0
```

A. Issue the eigrp stub command on R1.

B. Issue the no eigrp stub command on R1.

C. Issue the eigrp stub command on R2.

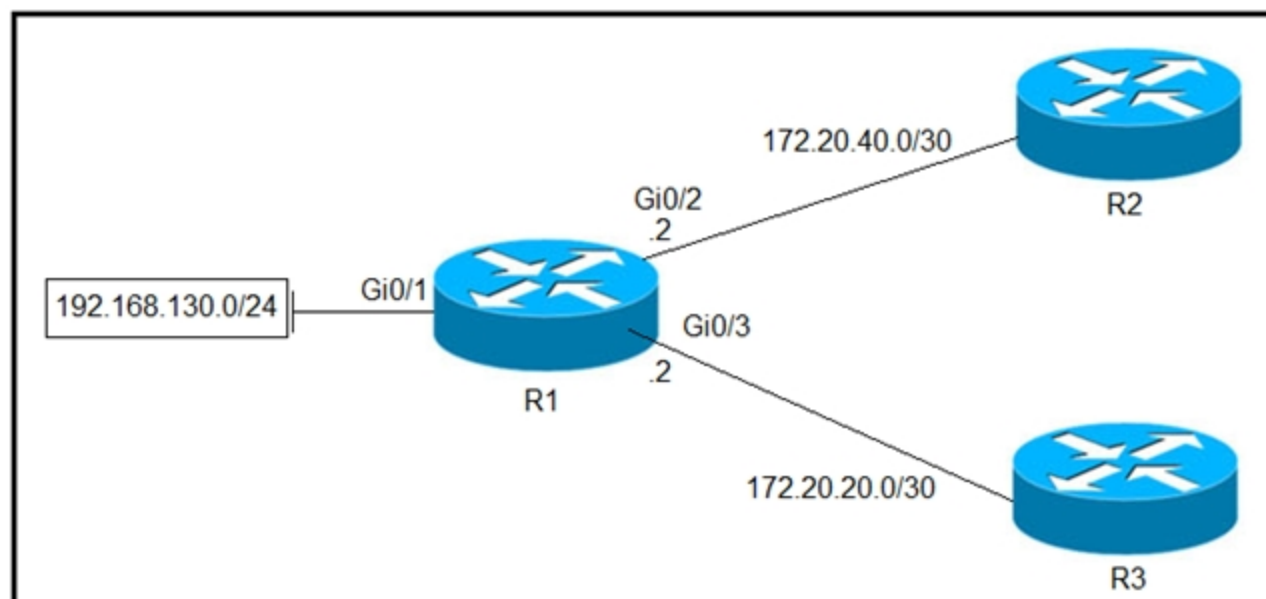D. Issue the no eigrp stub command on R2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 2

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Which configuration configures a policy on R1 to forward any traffic that is sourced from the 192.168.130.0/24 network to R2?

A.
```
access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/2
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.20.2
```

B.
```
access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/1
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.40.2
```

C.
```
access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/2
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.20.1
```

D.
```
access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/1
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.40.1
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 3

Topic #: 1

[All 300-410 Questions]

R2 has a locally originated prefix 192.168.130.0/24 and has these configurations:

ip prefix-list test seq 5 permit 192.168.130.0/24
!
route-map OUT permit10
match ip address prefix-list test
set as-path prepend 65000

What is the result when the route-map OUT command is applied toward an eBGP neighbor R1 (1.1.1.1) by using the neighbor 1.1.1.1 route-map OUT out command?

A. R1 sees 192.168.130.0/24 as two AS hops away instead of one AS hop away.

B. R1 does not accept any routes other than 192.168.130.0/24

C. R1 does not forward traffic that is destined for 192.168.30.0/24

D. Network 192.168.130.0/24 is not allowed in the R1 table

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 4

Topic #: 1

[All 300-410 Questions]

Which method changes the forwarding decision that a router makes without first changing the routing table or influencing the IP data plane?

    A. nonbroadcast multiaccess

    B. packet switching

    C. policy-based routing

    D. forwarding information base

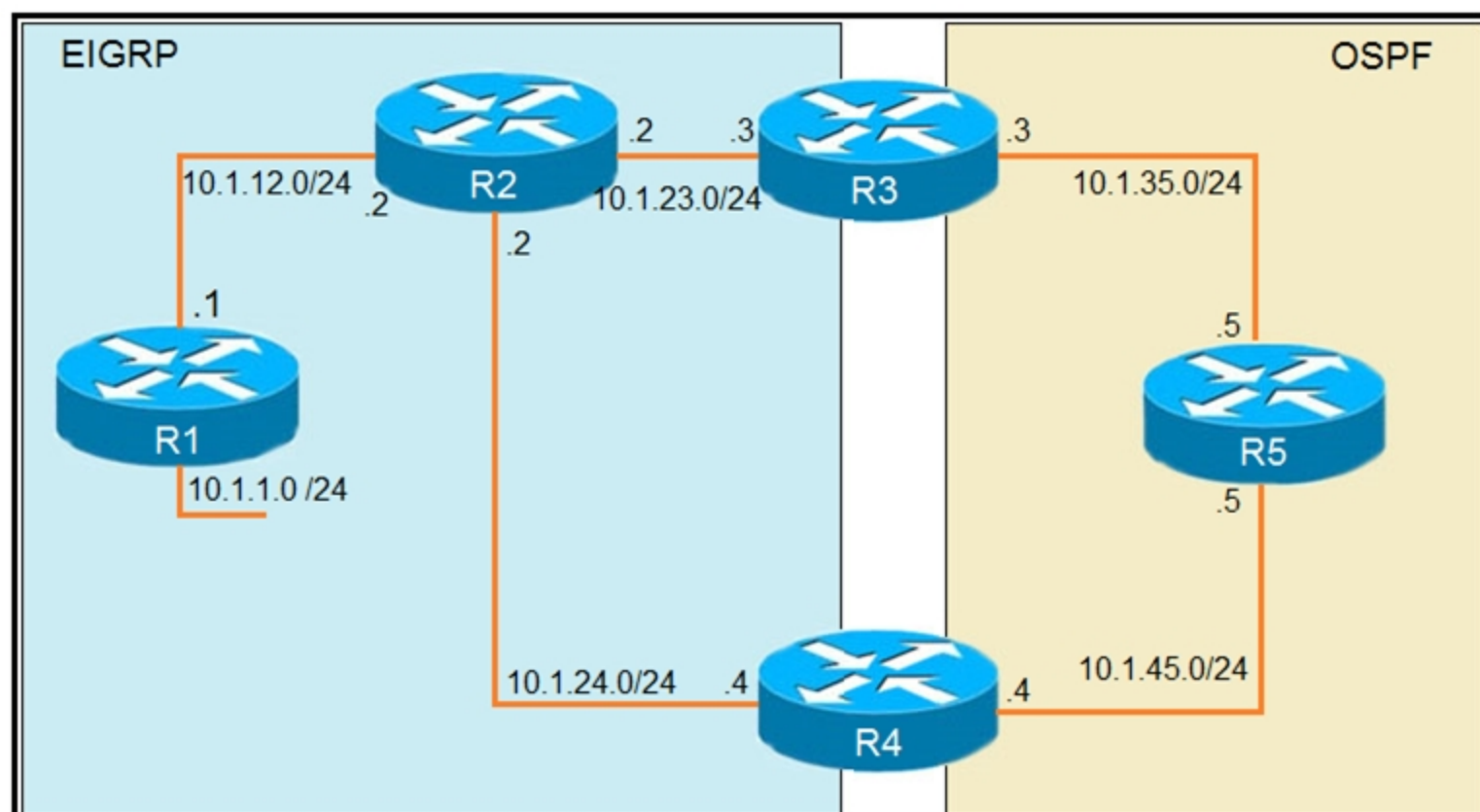**Show Suggested Answer**

Actual exam question from Cisco's 300-410

Question #: 5

Topic #: 1

[All 300-410 Questions]

Refer to the exhibits. The output of the trace route from R5 shows a loop in the network. Which configuration prevents this loop?


```
R1
router eigrp 1
 redistribute connected
 network 10.1.12.1 0.0.0.0

R3
router ospf 1
 redistribute eigrp 1 subnets
 network 10.1.35.3 0.0.0.0 area 0

R4
router eigrp 1
 redistribute ospf 1 metric 2000000 1 255 1 1500
 !
 router ospf 1
 network 10.1.45.4 0.0.0.0 area 0

R5#traceroute 10.1.1.1

Type escape sequence to abort.
Tracing the route to 10.1.1.1

1 10.1.35.3 80 msec 44 msec 20 msec
2 10.1.23.2 44 msec 104 msec 64 msec
3 10.1.24.4 44 msec 64 msec 40 msec
4 10.1.45.5 24 msec 40 msec 20 msec
5 10.1.35.3 92 msec 144 msec 148 msec
6 10.1.23.2 108 msec 76 msec 80 msec
 <output truncuated>
```

A.
```
R3
router ospf 1
 redistribute eigrp 1 subnets route-map SET-TAG
!
route-map SET-TAG permit 10
 set tag 1

R4
router eigrp 1
 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG
!
route-map FILTER-TAG deny 10
 match tag 1
!
route-map FILTER-TAG permit 20
```

B.
```
R3
router eigrp 1
 redistribute OSPF 1 route-map SET-TAG
!
route-map SET-TAG permit 10
 set tag 1

R4
router eigrp 1
 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG
 network 10.1.24.4 0.0.0.0
!
route-map FILTER-TAG deny 10
 match tag 1
!
route-map FILTER-TAG permit 20
```

C.
```
R3
router ospf 1
 redistribute eigrp 1 subnets route-map SET-TAG
!
route-map SET-TAG permit 10
 set tag 1

R4
router eigrp 1
 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG
!
route-map FILTER-TAG permit 10
 match tag 1
```

D.
```
R3
router ospf 1
 redistribute eigrp 1 subnets route-map SET-TAG
!
route-map SET-TAG deny 10
 set tag 1

R4
router eigrp 1
 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG
!
route-map FILTER-TAG deny 10
 match tag 1
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 6

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer configures a static route on a router, but when the engineer checks the route to the destination, a different next hop is chosen. What is the reason for this?

```
Router#show running-config | include ip route
ip route 192.168.2.2 255.255.255.255 209.165.200.225 130
Router#show ip route

<output omitted>

Gateway of last resort is not set

        192.168.1.0/32 is subnetted, 1 subnets
C           192.168.1.1 is directly connected, Loopback0
        192.168.2.0/32 is subnetted, 1 subnets
O           192.168.2.2[110/11] via 192.168.12.2, 00:52:09, Ethernet0/0
        192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.12.0/24 is directly connected, Ethernet0/0
L           192.168.12.1/32 is directly connected, Ethernet0/0
        209.165.200.0/24 is variably subnetted, 2 subnets, 2 masks
C           209.165.200.0/24 is directly connected, Ethernet0/1
            209.165.200.226/32 is directly connected, Ethernet0/1
```

A. Dynamic routing protocols always have priority over static routes.

B. The metric of the OSPF route is lower than the metric of the static route.

C. The configured AD for the static route is higher than the AD of OSPF.

D. The syntax of the static route is not valid, so the route is not considered.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 7

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer is trying to generate a summary route in OSPF for network 10.0.0.0/8, but the summary route does not show up in the routing table. Why is the summary route missing?

```
Router#show ip route
<output omitted>
Gateway of last resort is not set

        192.168.1.0/32 is subnetted, 1 subnets
O           192.168.1.1 [110/11] via 192.168.12.1, 16:56:40, Ethernet0/0
        192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.2.0/24 is directly connected, Loopback0
L           192.168.2.2/32 is directly connected, Loopback0
        192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.3.0/24 is directly connected, Ethernet0/1
L           192.168.3.1/32 is directly connected, Ethernet0/1
        192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.12.0/24 is directly connected, Ethernet0/0
L           192.168.12.2/32 is directly connected, Ethernet0/0
Router#show running-config | section ospf
router ospf 1
  summary-address 10.0.0.0 255.0.0.0
  redistribute static subnets
  network 192.168.3.0 0.0.0.255 area 0
  network 192.168.12.0 0.0.0.255 area 0
Router#
```

A. The summary-address command is used only for summarizing prefixes between areas.

B. The summary route is visible only in the OSPF database, not in the routing table.

C. There is no route for a subnet inside 10.0.0.0/8, so the summary route is not generated.

D. The summary route is not visible on this router, but it is visible on other OSPF routers in the same area.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 8

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer is trying to block the route to 192.168.2.2 from the routing table by using the configuration that is shown. The route is still present in the routing table as an OSPF route.

Which action blocks the route?

```
Router#show access-lists
Standard IP access list 1
        10 permit 192.168.2.2 (1 match)
Router#
Router#show route-map
route-map RM-OSPF-DL, permit, sequence 10
  Match clauses:
        ip address (access-lists): 1
  Set clauses:
  Policy routing matches: 0 packets, 0 bytes
Router#
Router#show running-config | section ospf
router ospf 1
  network 192.168.1.1 0.0.0.0 area 0
  network 192.168.12.0 0.0.0.255 area 0
  distribute-list route-map RM-OSPF-DL in
Router#|
```

A. Use an extended access list instead of a standard access list.

B. Change sequence 10 in the route-map command from permit to deny.

C. Use a prefix list instead of an access list in the route map.

D. Add this statement to the route map: route-map RM-OSPF-DL deny 20.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 9

Topic #: 1

[All 300-410 Questions]

What is a prerequisite for configuring BFD?

A. Jumbo frame support must be configured on the router that is using BFD.

B. All routers in the path between two BFD endpoints must have BFD enabled.

C. Cisco Express Forwarding must be enabled on all participating BFD endpoints.

D. To use BFD with BGP, the timers 3 9 command must first be configured in the BGP routing process.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 10

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the OSPF adjacency states from the left onto the correct descriptions on the right.

Select and Place:

Init	Each router compares the DBD packets that were received from the other router.
2-way	Routers exchange information with other routers in the multiaccess network.
Down	The neighboring router requests the other routers to send missing entries.
Exchange	The network has already elected a DR and a backup BDR.
ExStart	The OSPF router ID of the receiving router was not contained in the hello message.
Loading	No hellos have been received from a neighbor router.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 11

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. R2 is a route reflector, and R1 and R3 are route reflector clients. The route reflector learns the route to 172.16.25.0/24 from R1, but it does not advertise to R3.

What is the reason the route is not advertised?

```
R1 #show ip bgp summary
BGP router identifier 192.168.1.1, local AS number 65000
<output omitted>
Neighbor       V  AS     MsgRcvd  MsgSent     Tblver  InQ  OutQ  Up/Down    State/PfxRcd
192.168.2.2    4  65000       28  28          22      0    0     00:21:31            0
R1#show ip bgp
BGP table version is 22, local router ID is 192.168.1.1
Status codes: s suppressed, d damped, h history, * valid, > best, i – internal,
              r RIB-failure, s stale, m multipath, b backup-path, f RT-Filter,
              x best-external, a additional-path, C RIB-compressed,
Origin codes: i – IGP, e – EGP, ? – incomplete
RPKI validation codes: V valid, I invalid, N Not found


     Network            Next Hop          Metric LocPrf       Weight      Path
*>   172.16.25.0/24     209.165.200.225        0              32768       ?
R1#
```

```
R2 #show ip bgp summary
BGP router identifier 192.168.2.2, local AS number 65000
<output omitted>
Neighbor       V  AS     MsgRcvd  MsgSent     Tblver  InQ  OutQ  Up/Down    State/PfxRcd
192.168.1.1    4  65000       29  28          3       0    0     00:22:07            1
192.168.3.3    4  65000        7  8           3       0    0     00:02:55            0
R2#show ip bgp
BGP table version is 3, local router ID is 192.168.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i – internal,
              r RIB-failure, s stale, m multipath, b backup-path, f RT-Filter,
              x best-external, a additional-path, C RIB-compressed,
Origin codes: i – IGP, e – EGP, ? – incomplete
RPKI validation codes: V valid, I invalid, N Not found


     Network            Next Hop          Metric LocPrf       Weight      Path
* i  172.16.25.0/24     209.165.200.225    0     100           0          ?
R2#
```

```
R3 #show ip bgp summary
BGP router identifier 192.168.3.3, local AS number 65000
BGP table version is 4, main routing table version 4
Neighbor       V  AS     MsgRcvd  MsgSent     Tblver  InQ  OutQ  Up/Down    State/PfxRcd
192.168.2.2    4  65000        8  7           4       0    0     00:03:08            0
R3#
```

A. R2 does not have a route to the next hop, so R2 does not advertise the prefix to other clients.

B. Route reflector setup requires full IBGP mesh between the routers.

C. In route reflector setup, only classful prefixes are advertised to other clients.

D. In route reflector setups, prefixes are not advertised from one client to another.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 12

Topic #: 1

[All 300-410 Questions]

```
Router#sh ip route ospf
<output omitted>
Gateway is last resort is not set

        10.0.0.0/24 is subnetted, 1 subnets
o   E2      10.0.0.0 [110/20] via 192.168.12.2, 00:00:10, Ethernet0/0
o           192.168.3.0/24 [110/20] via 192.168.12.2, 00:00:50, Ethernet0/0
Router#

Router#show ip bgp
<output omitted>
        Network             Next Hop      Metric      LocPrf      Weight      Path
>*      192.168.1.1/32      0.0.0.0       0                       32768       ?
>*      192.168.3.0         192.168.12.2  20                      32768       ?
>*      192.168.12.0        0.0.0.0       0                       32768       ?
Router#show running-config | section router bgp
router bgp 65000
 bgp log-neighbor-changes
 redistribute ospf 1
Router#
```

Refer to the exhibit. An engineer is trying to redistribute OSPF to BGP, but not all of the routes are redistributed. What is the reason for this issue?

A. By default, only internal routes and external type 1 routes are redistributed into BGP

B. Only classful networks are redistributed from OSPF to BGP

C. BGP convergence is slow, so the route will eventually be present in the BGP table

D. By default, only internal OSPF routes are redistributed into BGP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 13

Topic #: 1

[All 300-410 Questions]

```
R200#show ip bgp summary
BGP router identifier 10.1.1.1, local AS number 65000
BGP table version is 26, main routing table version 26
1 network entries using 132 bytes of memory
1 path entries using 52 bytes of memory
2/1 BGP path/bestpath attribute entries using 296 bytes of memory
0 BGP route-map cache entries using 0 bytes of memory
0 BGP filter-list cache entries using 0 bytes of memory
Bitfield cache entries: current 1 (at peak 2) using 28 bytes of memory
BGP using 508 total bytes of memory
BGP activity 24/23 prefixes, 24/23 paths, scan interval 60 secs
Neighbor        V       AS MsgRcvd  MsgSent       TblVer  InQ  OutQ  Up/Down    State/PfxRcd
192.0.2.2       4   65100  20335       20329        0    0    0  00:02:04   Idle (PfxCt)
R200#
```

Refer to the exhibit. In which circumstance does the BGP neighbor remain in the idle condition?

A. if prefixes are not received from the BGP peer

B. if prefixes reach the maximum limit

C. if a prefix list is applied on the inbound direction

D. if prefixes exceed the maximum limit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 14

Topic #: 1

[All 300-410 Questions]

Which attribute eliminates LFAs that belong to protected paths in situations where links in a network are connected through a common fiber?

A. shared risk link group-disjoint

B. linecard-disjoint

C. lowest-repair-path-metric

D. interface-disjoint

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 15

Topic #: 1

[All 300-410 Questions]

```
* Jun 28 14:41:57: %BGP-5-ADJCHANGE: neighbor 192.168.2.2 Down User reset
* Jun 28 14:41:57: %BGP_SESSION-5-ADJCHANGE: neighbor 192.168.2.2 IPv4 Unicast
topology base removed from session   User reset
* Jun 28 14:41:57: %BGP-5-ADJCHANGE: neighbor 192.168.2.2 Up
R1#show clock
*15:42:00.506 CET Fri Jun 28 2019
```

Refer to the exhibit. An engineer is troubleshooting BGP on a device but discovers that the clock on the device does not correspond to the time stamp of the log entries. Which action ensures consistency between the two times?

A. Configure the service timestamps log uptime command in global configuration mode.

B. Configure the logging clock synchronize command in global configuration mode.

C. Configure the service timestamps log datetime localtime command in global configuration mode.

D. Make sure that the clock on the device is synchronized with an NTP server.

Show Suggested Answer
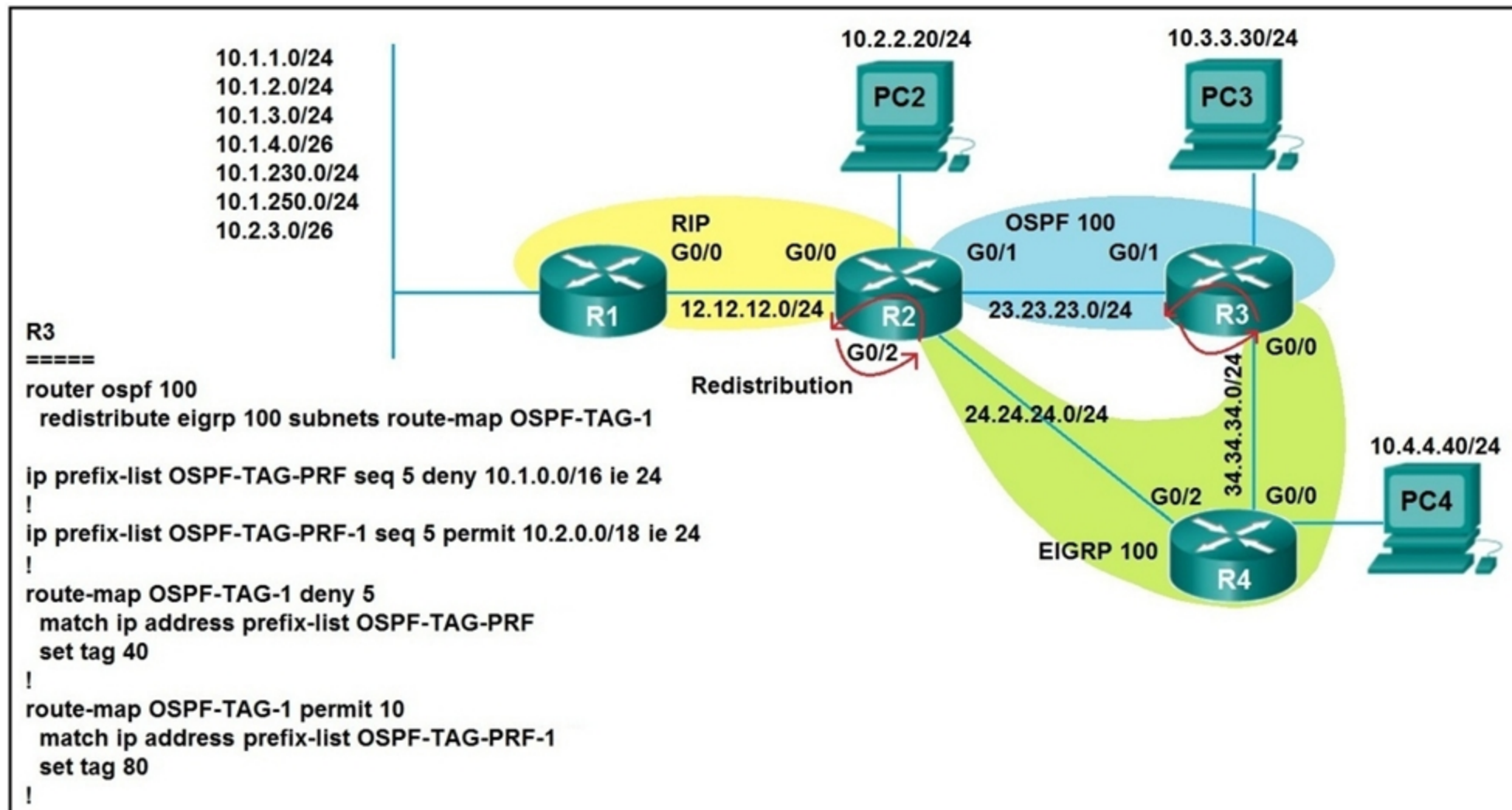
Actual exam question from Cisco's 300-410

Question #: 16

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. What is the result of applying this configuration?

```
R1#show policy-map control-plane
  Control Plane
        Service-policy input: CoPP-BGP
          Class-map: BGP (match all)
            2716 packets, 172071 bytes
            5 minute offered rate 0000 bps, drop rate 0000 bps
            Match: access-group name BGP
            drop

          Class-map: class-default (match-any)
            5212 packets, 655966 bytes
            5 minute offered rate 0000 bps, drop rate 0000 bps
            Match: any
```

A. The router can form BGP neighborships with any other device.

B. The router cannot form BGP neighborships with any other device.

C. The router cannot form BGP neighborships with any device that is matched by the access list named ג€BGPג€.

D. The router can form BGP neighborships with any device that is matched by the access list named ג€BGPג€.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 17

Topic #: 1

[All 300-410 Questions]

Which command displays the IP routing table information that is associated with VRF-Lite?

A. show ip vrf

B. show ip route vrf

C. show run vrf

D. show ip protocols vrf

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 18

Topic #: 1

[All 300-410 Questions]


```
10.1.1.0/24
10.1.2.0/24
10.1.3.0/24
10.1.4.0/26
10.1.230.0/24
10.1.250.0/24
10.2.3.0/26

R3
=====
router ospf 100
  redistribute eigrp 100 subnets route-map OSPF-TAG-1

ip prefix-list OSPF-TAG-PRF seq 5 deny 10.1.0.0/16 ie 24
!
ip prefix-list OSPF-TAG-PRF-1 seq 5 permit 10.2.0.0/18 ie 24
!
route-map OSPF-TAG-1 deny 5
  match ip address prefix-list OSPF-TAG-PRF
  set tag 40
!
route-map OSPF-TAG-1 permit 10
  match ip address prefix-list OSPF-TAG-PRF-1
  set tag 80
!
```

Refer to the exhibit. Which subnet is redistributed from EIGRP to OSPF routing protocols?

A. 10.2.2.0/24

B. 10.1.4.0/26

C. 10.1.2.0/24

D. 10.2.3.0/26

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 19

Topic #: 1

[All 300-410 Questions]

Which configuration adds an IPv4 interface to an OSPFv3 process in OSPFv3 address family configuration?

A. router ospfv3 1 address-family ipv4

B. Router(config-router)#ospfv3 1 ipv4 area 0

C. Router(config-if)#ospfv3 1 ipv4 area 0

D. router ospfv3 1 address-family ipv4 unicast

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 20

Topic #: 1

[All 300-410 Questions]

```
R1(config)#route-map ADD permit 20
R1(config-route-map)#set tag 1

R1(config)#router ospf1
R1(config-router)#redistribute rip subnets route-map ADD
```

Refer to the exhibit. Which statement about R1 is true?

A. OSPF redistributes RIP routes only if they have a tag of one.

B. RIP learned routes are distributed to OSPF with a tag value of one.

C. R1 adds one to the metric for RIP learned routes before redistributing to OSPF.

D. RIP routes are redistributed to OSPF without any changes.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 21

Topic #: 1

[All 300-410 Questions]
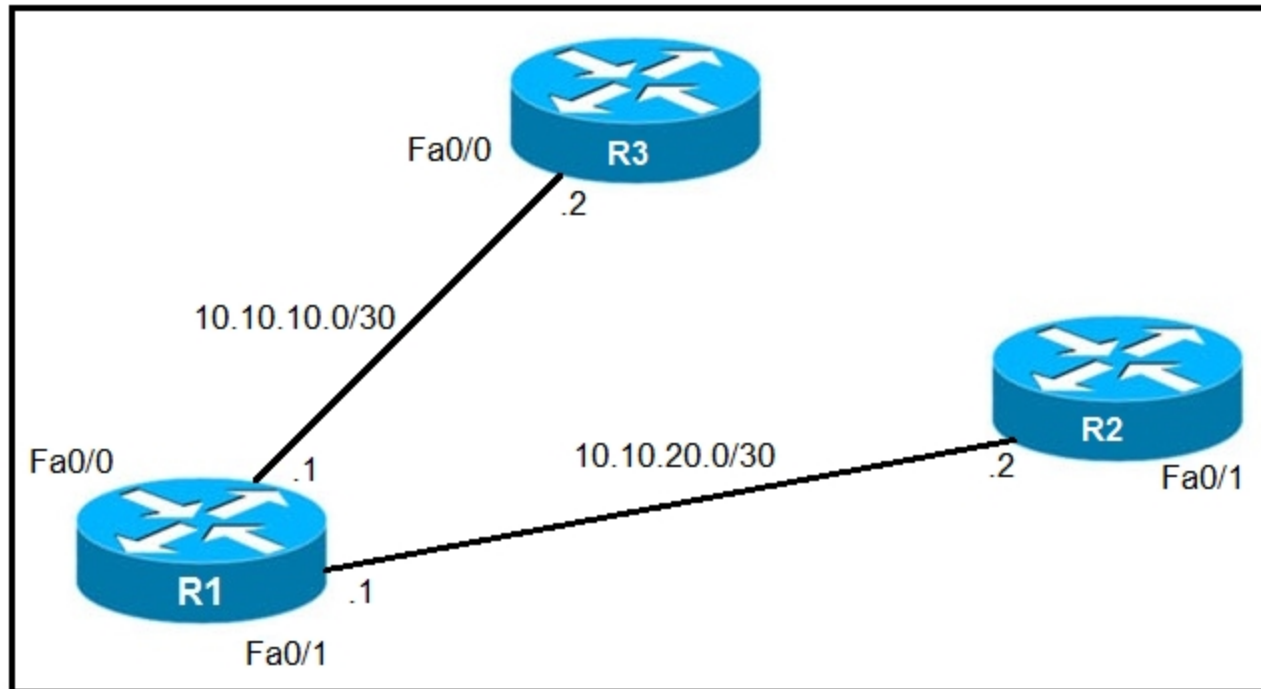
Refer to the exhibit. An IP SLA was configured on router R1 that allows the default route to be modified in the event that Fa0/0 loses reachability with the router R3 Fa0/0 interface. The route has changed to flow through router R2.

Which debug command is used to troubleshoot this issue?

A. debug ip flow

B. debug ip sla error

C. debug ip routing

D. debug ip packet

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 22

Topic #: 1

[All 300-410 Questions]

Which configuration enables the VRF that is labeled `Inet` on FastEthernet0/0?

A. R1(config)# ip vrf Inet R1(config-vrf)#ip vrf FastEthernet0/0

B. R1(config)#ip vrf Inet FastEthernet0/0

C. R1(config)# ip vrf Inet R1(config-vrf)#interface FastEthernet0/0 R1(config-if)#ip vrf forwarding Inet

D. R1(config)#router ospf 1 vrf Inet R1(config-router)#ip vrf forwarding FastEthernet0/0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 23

Topic #: 1

[All 300-410 Questions]
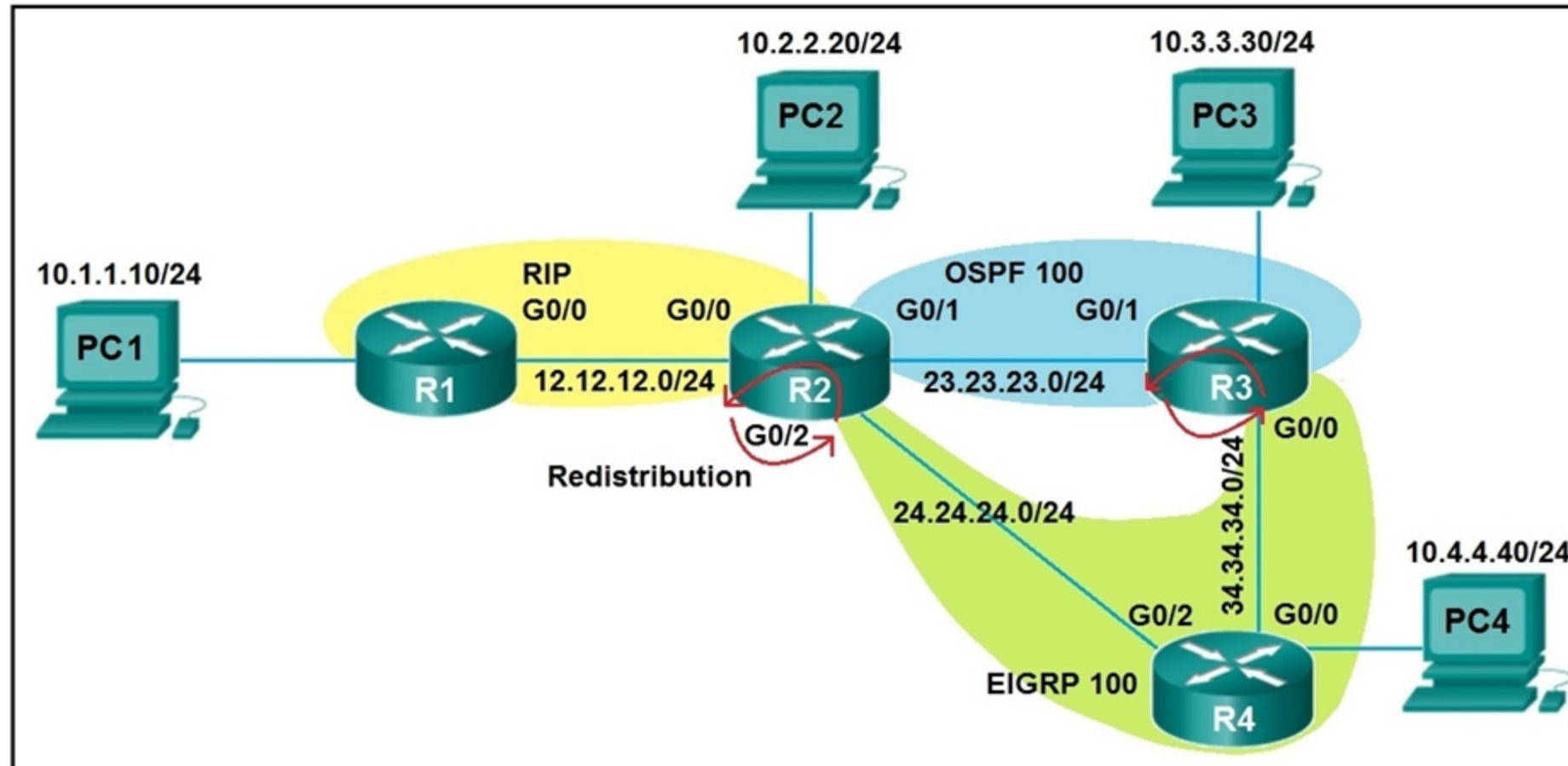
Refer to the exhibit. After redistribution is enabled between the routing protocols; PC2, PC3, and PC4 cannot reach PC1.

Which action can the engineer take to solve the issue so that all the PCs are reachable?

A. Set the administrative distance 100 under the RIP process on R2.

B. Filter the prefix 10.1.1.0/24 when redistributed from OSPF to EIGRP.

C. Filter the prefix 10.1.1.0/24 when redistributed from RIP to EIGRP.

D. Redistribute the directly connected interfaces on R2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 24

Topic #: 1

[All 300-410 Questions]

```
router bgp 100
!
  neighbor 10.222.1.1 route-map SET-WEIGHT in
  neighbor 10.222.1.1 remote-as 1
!
ip as-path access-list 200 permit ^690$
ip as-path access-list 200 permit ^1800
!
route-map SET-WEIGHT permit 10
  match as-path 200
  set local-preference 250
  set weight 200
```

Refer to the exhibit. A router is receiving BGP routing updates from multiple neighbors for routes in AS 690.

What is the reason that the router still sends traffic that is destined to AS 690 to a neighbor other than 10.222.1.1?

A. The local preference value in another neighbor statement is higher than 250.

B. The local preference value should be set to the same value as the weight in the route map.

C. The route map is applied in the wrong direction.

D. The weight value in another neighbor statement is higher than 200.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 25

Topic #: 1

[All 300-410 Questions]

R1

interface Loopback0

   ip address 172.16.1.1 255.255.255.255

interface FastEthernet0/0

   ip address 192.168.12.1 255.255.255.0

router eigrp 100

   no auto-summary

   network 192.168.12.0

   network 172.16.0.0

   neighbor 192.168.12.2 FastEthernet0/0

R2

interface Loopback0

   ip address 172.16.2.2 255.255.255.255

interface FastEthernet0/0

   ip address 192.168.12.2 255.255.255.0

router eigrp 100

   network 192.168.12.0

   network 172.16.0.0

   neighbor 192.168.12.1 FastEthernet0/0

   passive-interface FastEthernet0/0

Refer to the exhibit. R1 and R2 cannot establish an EIGRP adjacency.
Which action establishes EIGRP adjacency?

A. Remove the current autonomous system number on one of the routers and change to a different value.

B. Add the passive-interface command to the R1 configuration so that it matches the R2 configuration.

C. Remove the passive-interface command from the R2 configuration so that it matches the R1 configuration.

D. Add the no auto-summary command to the R2 configuration so that it matches the R1 configuration.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 26

Topic #: 1

[All 300-410 Questions]

An engineer configured policy-based routing for a destination IP address that does not exist in the routing table.

How is the packet treated through the policy for configuring the set ip default next-hop command?

A. Packets are not forwarded to the specific next hop.

B. Packets are forwarded based on the routing table.

C. Packets are forwarded based on a static route.

D. Packets are forwarded to the specific next hop.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 27

Topic #: 1

[All 300-410 Questions]

```
ip prefix-list DefaultRouteOnly seq 5 deny 0.0.0.0/0 le 32
ip prefix-list DefaultRouteOnly seq 10 permit 0.0.0.0/0


router eigrp ccnp
 address-family ipv4 unicast autonomous-system 1
  topology base
   distribute-list prefix DefaultRouteOnly out Tunnel0
```

Refer to the exhibit. The administrator configured route advertisement to a remote low resources router to use only the default route to reach any network but failed. Which action resolves this issue?

A. Remove the prefix keyword from the distribute-list command.

B. Remove the line with the sequence number 10 from the prefix list.

C. Change the direction of the distribute-list command from out to in.

D. Remove the line with the sequence number 5 from the prefix list.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 28

Topic #: 1

[All 300-410 Questions]

```
Ipv6 unicast-routing
!
Router ospfv3 4
    Router-id 192.168.1.1
  !
Interface E 0/0
 Ipv6 enable
 Ip address 10.1.1.1 255.255.255.0
 Ospfv3 4 area 0 ipv4
 No shut
!
Interface Loopback0
 Ipv6 enable
 Ipv4 172.16.1.1 255.255.255.0
 Ospfv3 4 area 0 ipv4
```

Refer to the exhibit. The network administrator configured the branch router for IPv6 on the E 0/0 interface. The neighboring router is fully configured to meet requirements, but the neighbor relationship is not coming up.

Which action fixes the problem on the branch router to bring the IPv6 neighbors up?

A. Disable OSPF for IPv4 using the no ospfv3 4 area 0 ipv4 command under the E 0/0 interface.

B. Enable the IPv4 address family under the router ospfv3 4 process by using the address-family ipv4 unicast command.

C. Disable IPv6 on the E 0/0 interface using the no ipv6 enable command.

D. Enable the IPv4 address family under the E 0/0 interface by using the address-family ipv4 unicast command.

Show Suggested Answer

Actual exam question from Cisco's 300-410
Question #: 29
Topic #: 1
[All 300-410 Questions]
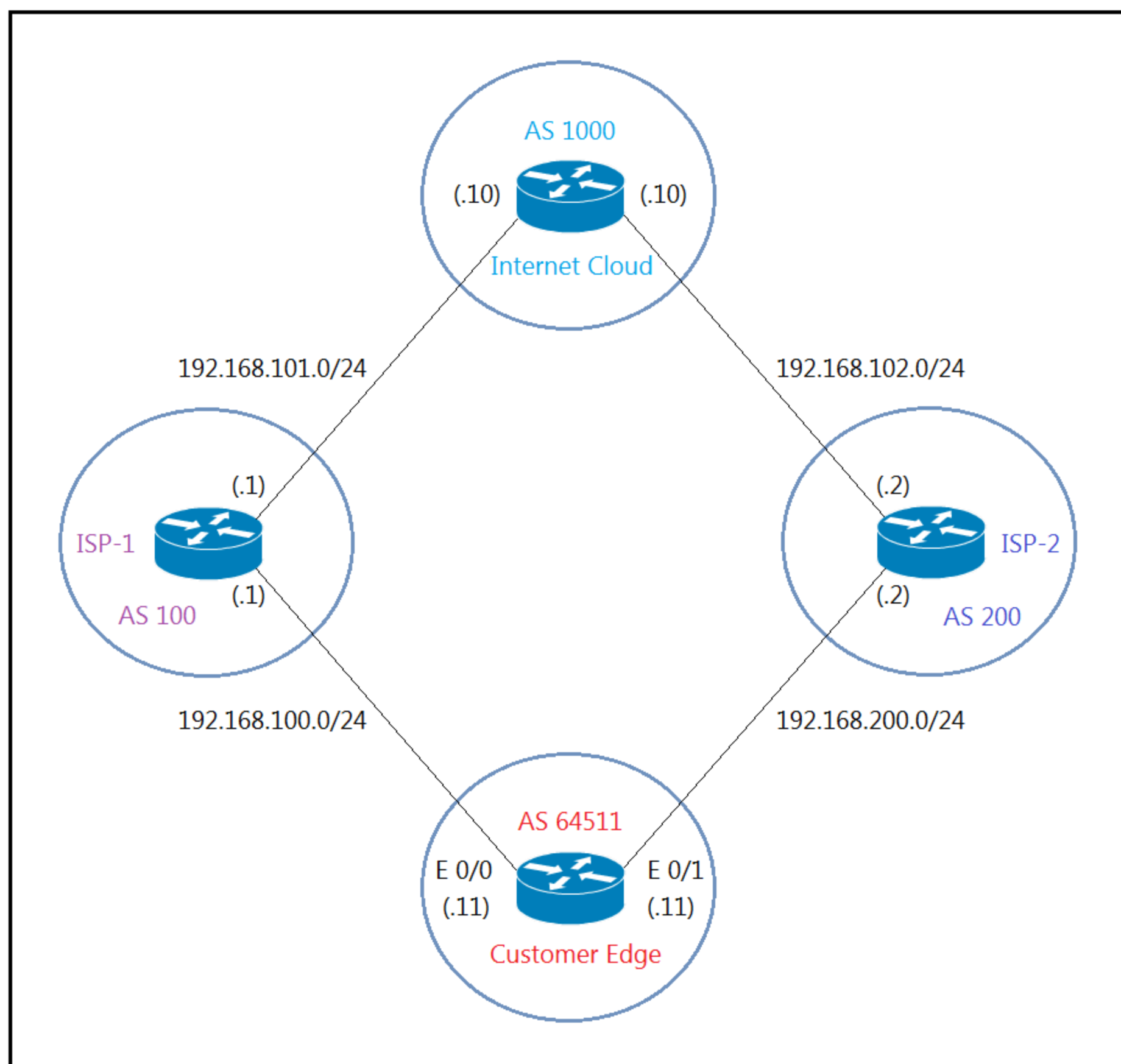
Refer to the exhibit. The network administrator has configured the Customer Edge router (AS 64511) to send only summarized routes toward ISP-1 (AS 100) and ISP-2 (AS 200).

router bgp 64511
network 172.16.20.0 mask 255.255.255.0
network 172.16.21.0 mask 255.255.255.0
network 172.16.22.0 mask 255.255.255.0
network 172.16.23.0 mask 255.255.255.0
aggregate-address 172.16.20.0 255.255.252.0

After this configuration, ISP-1 and ISP-2 continue to receive the specific routes and the summary route.
Which configuration resolves the issue?

A.

router bgp 64511
aggregate-address 172.16.20.0 255.255.252.0 summary-only

B.

router bgp 64511
neighbor 192.168.100.1 summary-only
neighbor 192.168.200.2 summary-only

C.

ip prefix-list PL_BLOCK_SPECIFIC deny 172.16.20.0/22 ge 22
ip prefix-list PL_BLOCK_SPECIFIC permit 172.16.20.0/22
!
route-map BLOCK_SPECIFIC permit 10
match ip address prefix-list PL_BLOCK_SPECIFIC
!
router bgp 64511
aggregate-address 172.16.20.0 255.255.252.0 suppress-map BLOCK_SPECIFIC

D.

interface E 0/0
ip bgp suppress-map BLOCK_SPECIFIC
!
interface E 0/1
ip bgp suppress-map BLOCK_SPECIFIC
!
ip prefix-list PL_BLOCK_SPECIFIC permit 172.16.20.0/22 ge 24
!
route-map BLOCK_SPECIFIC permit 10
match ip address prefix-list PL_BLOCK_SPECIFIC

Show Suggested Answer
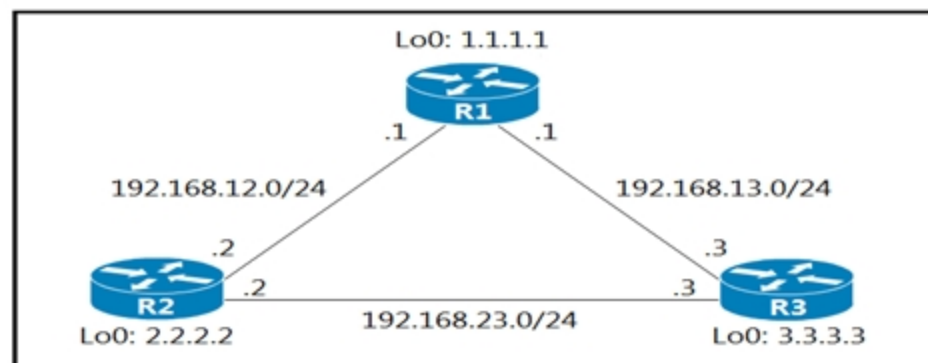
Actual exam question from Cisco's 300-410

Question #: 30

Topic #: 1

[All 300-410 Questions]


```
R2#show ip protocols | include eigrp|Maximum
Routing Protocol is "eigrp 1"
    Maximum path: 4
    Maximum hopcount 100
    Maximum metric variance 1

R2#show ip eigrp topology 192.168.13.0/24
EIGRP-IPv4 Topology Entry for AS(1)/ID(2.2.2.2) for 192.168.13.0/24
  State is Passive, Query origin flag is 1, 1 Successor(s) FD is 1075200
  Descriptor Blocks
  192.168.23.3 (FastEthernet0/1), from 192.168.23.3, Send flag is 0x0
   Composite metric is (1075200/281600), route is internal
   Vector metric
    Minimum bandwidth is 2500 Kbit
    Total delay is 2000 microseconds
    Reliability is 255/255
    Load is 255/255
    Minimum MTU is 1500
    Hop count is 1
    Originating router is 3.3.3.3
  192.168.12.1 (FastEthernet0/0), from 192.168.12.1, Send flag is 0x0
   Composite metric is (2611200/281600), route is internal
   Vector metric
    Minimum bandwidth is 1000 Kbit
    Total delay is 2000 microseconds
    Reliability is 255/255
    Load is 1/255
    Minimum MTU is 1500
    Hop count is 1
```

Refer to the exhibit. R2 has two paths to reach 192.168.13.0/24, but traffic is sent only through R3.

Which action allows traffic to use both paths?

A. Configure the variance 4 command under the EIGRP process on R2.

B. Configure the bandwidth 2000 command under interface FastEthernet0/0 on R2.

C. Configure the delay 1 command under interface FastEthernet0/0 on R2.

D. Configure the variance 2 command under the EIGRP process on R2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 31

Topic #: 1

[All 300-410 Questions]

```
OSPF: Send DBD to 10.100.1.2 on GigabitEthernet0/1 seq 0x9E6 opt
0x52 flag 0x7
    len 32
OSPF: Retransmitting DBD to 10.100.1.2 on GigabitEthernet0/1
[10]
OSPF: Send DBD to 10.100.1.2 on GigabitEthernet0/1 seq 0x9E6 opt
0x52 flag 0x7
    len 32
OSPF: Retransmitting DBD to 10.100.1.2 on GigabitEthernet0/1
[11]
%OSPF-5-ADJCHG: Process 1, Nbr 10.100.1.2 on GigabitEthernet0/1
from EXSTART to
    DOWN, Neighbor Down: Too many retransmissions
```

Refer to the exhibit. The OSPF neighbor relationship is not coming up.

What must be configured to restore OSPF neighbor adjacency?

A. matching hello timers

B. OSPF on the remote router

C. use router ID

D. matching mtu values

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 32

Topic #: 1

[All 300-410 Questions]

An engineer configured two routers connected to two different service providers using BGP with default attributes. One of the links is presenting high delay, which causes slowness in the network.

Which BGP attribute must the engineer configure to avoid using the high-delay ISP link if the second ISP link is up?

A. AS-PATH
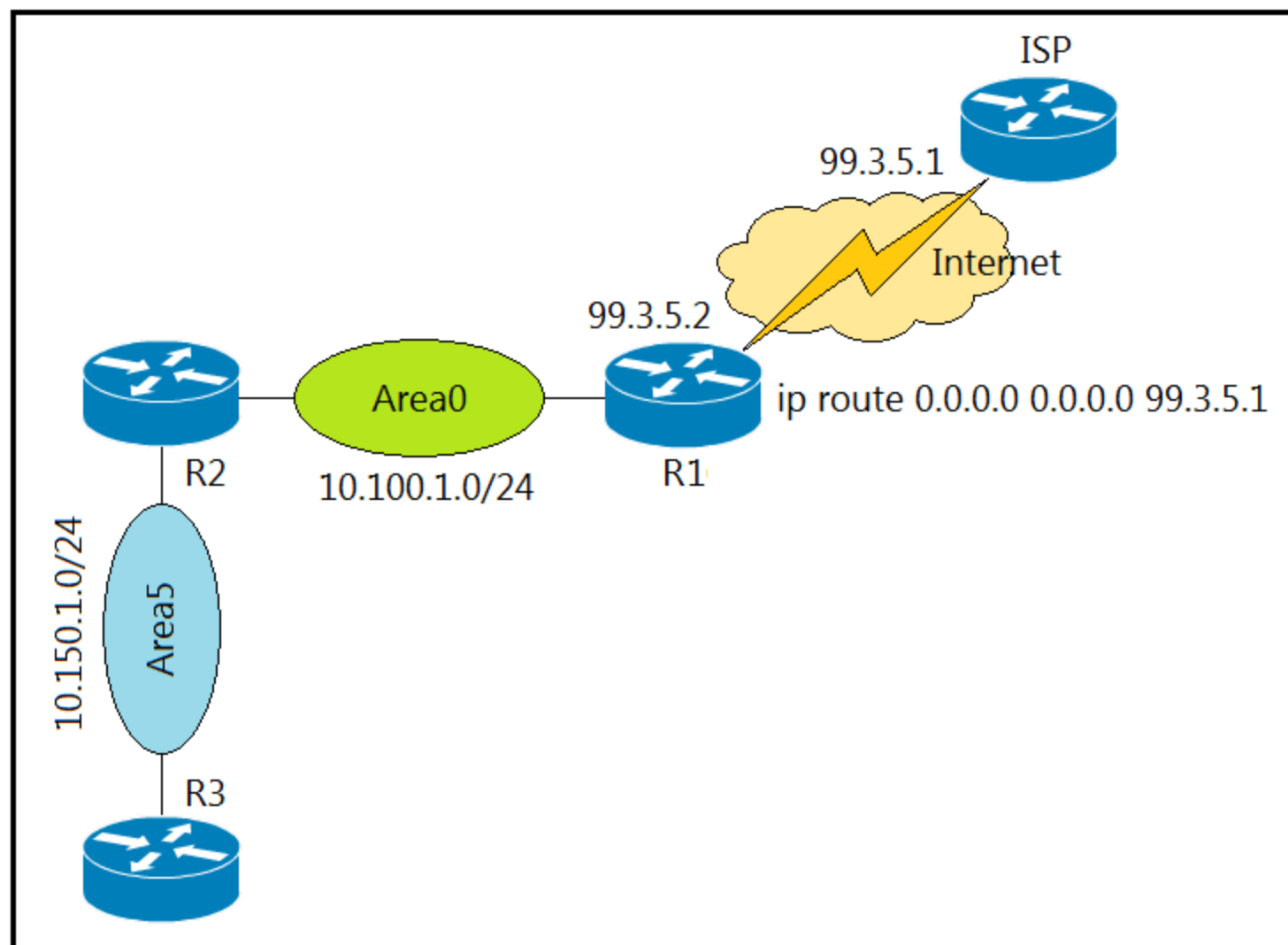
B. WEIGHT

C. MED

D. LOCAL_PREF

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 33

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A network administrator redistributed the default static route into OSPF toward all internal routers to reach to Internet. Which set of commands restores reachability to the Internet by internal routers?

A. router ospf 1 redistribute static subnets

B. router ospf 1 network 0.0.0.0 0.0.0.0 area 0

C. router ospf 1 redistribute connected 0.0.0.0

D. router ospf 1 default-information originate

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 34

Topic #: 1

[All 300-410 Questions]
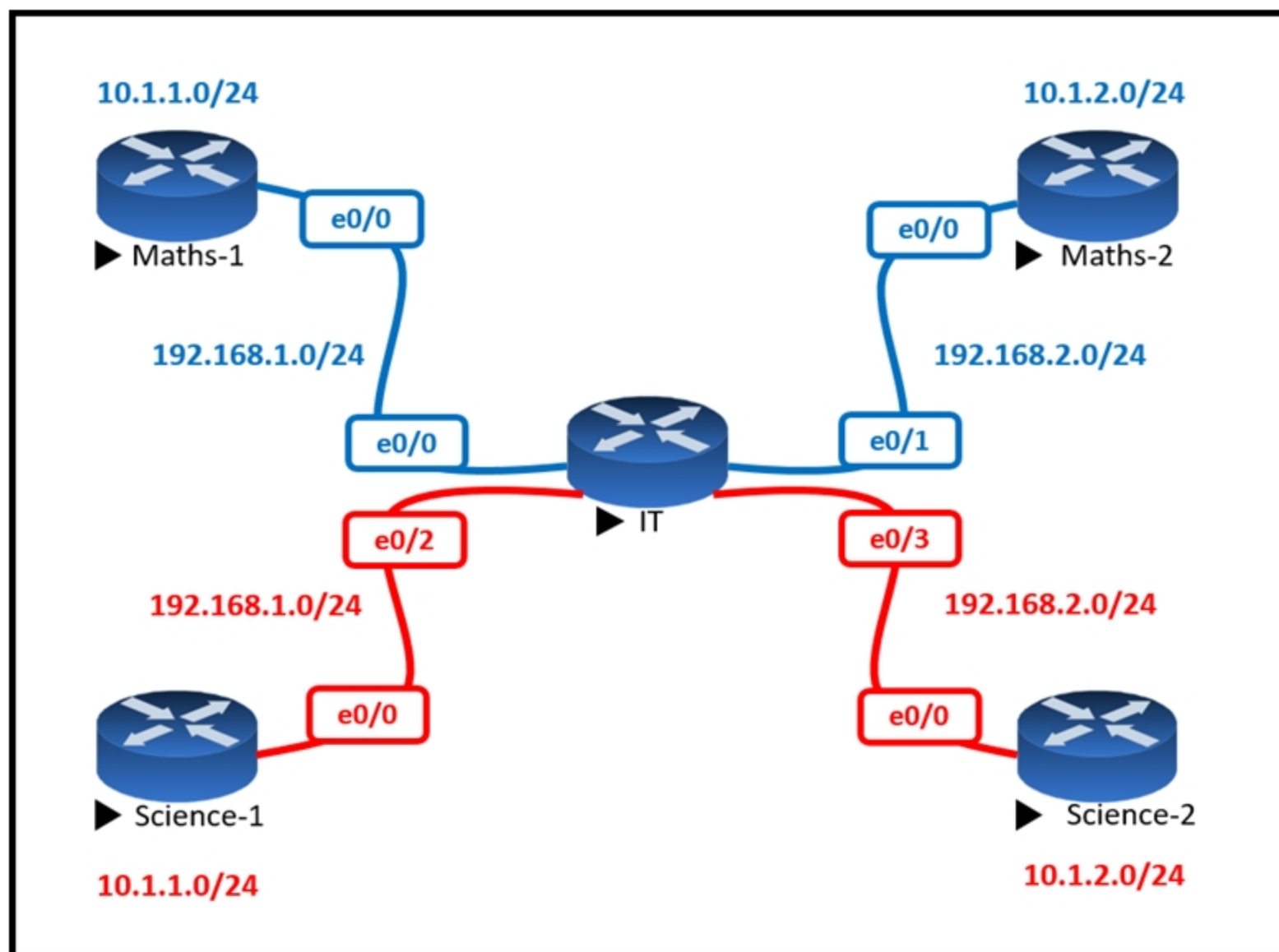
Refer to the exhibit. The Math and Science departments connect through the corporate IT router, but users in the Math department must not be able to reach the Science department and vice versa.

Which configuration accomplishes this task?

A. vrf definition Science address-family ipv4 ! interface E 0/2 ip address 192.168.1.1 255.255.255.0 no shut ! interface E 0/3 ip address 192.168.2.1 255.255.255.0 no shut

B. vrf definition Science address-family ipv4 ! interface E 0/2 vrf forwarding Science ip address 192.168.1.1 255.255.255.0 no shut ! interface E 0/3 vrf forwarding Science ip address 192.168.2.1 255.255.255.0 no shut

C. vrf definition Science address-family ipv4 ! interface E 0/2 ip address 192.168.1.1 255.255.255.0 vrf forwarding Science no shut ! interface E 0/3 ip address 192.168.2.1 255.255.255.0 vrf forwarding Science no shut

D. vrf definition Science ! interface E 0/2 ip address 192.168.1.1 255.255.255.0 no shut ! interface E 0/3 ip address 192.168.2.1 255.255.255.0 no shut

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 35

Topic #: 1

[All 300-410 Questions]

```
LA
router ospf 1
 network 192.168.12.0 0.0.0.255 area 0
 network 172.16.1.0 0.0.0.255 area 0


NY
router ospf 1
 network 192.168.12.0 0.0.0.255 area 0
 network 172.16.2.0 0.0.0.255 area 0
!
interface E 0/0
 ip ospf authentication message-digest
 ip ospf message-digest-key 1 md5 Cisco123
```

Refer to the exhibit. The neighbor relationship is not coming up.

Which two configurations bring the adjacency up? (Choose two.)

A. LA interface E 0/0 ip ospf authentication-key Cisco123

B. NY interface E 0/0 no ip ospf message-digest-key 1 md5 Cisco123 ip ospf authentication-key Cisco123

C. LA interface E 0/0 ip ospf message-digest-key 1 md5 Cisco123

D. LA router ospf 1 area 0 authentication message-digest

E. NY router ospf 1 area 0 authentication message-digest

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 36

Topic #: 1

[All 300-410 Questions]

```
router ospf 1
 redistribute eigrp 1 subnets route-map EIGRP->OSPF
!
router eigrp 1
 network 10.0.106.0 0.0.0.255
!
route-map EIGRP->OSPF permit 10
 match ip address WAN_PREFIXES
route-map EIGRP->OSPF permit 20
 match ip address LOCAL_PREFIXES
route-map EIGRP->OSPF permit 30
 match ip address VPN_PREFIXES
!
ip prefix-list LOCAL_PREFIXES seq 5 permit 172.16.0.0/12 le 24
ip prefix-list VPN_PREFIXES seq 5 permit 192.168.0.0/16 le 24
ip prefix-list WAN_PREFIXES seq 5 permit 10.0.0.0/8 le 24
!
```

Refer to the exhibit. The network administrator configured redistribution on an ASBR to reach to all WAN networks but failed.

Which action resolves the issue?

A. The route map EIGRP->OSPF must have the 10.0.106.0/24 entry to exist in one of the three prefix lists to pass

B. EIGRP must redistribute the 10.0.106.0/24 route instead of using the network statement

C. The OSPF process must have a metric when redistributing prefixes from EIGRP

D. The route map must have the keyword prefix-list to evaluate the prefix list entries
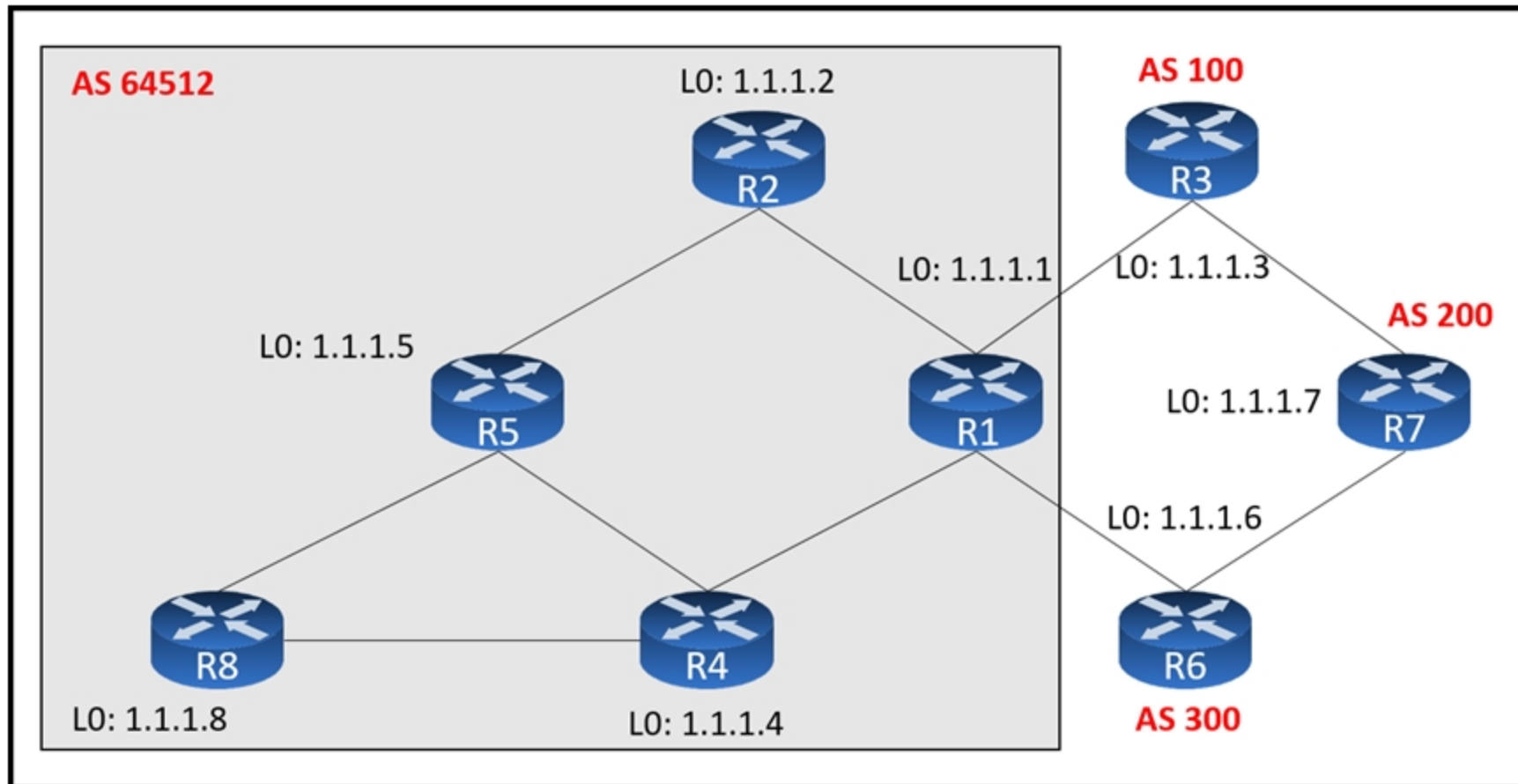
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 37

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer configured R2 and R5 as route reflectors and noticed that not all routes are sent to R1 to advertise to the eBGP peers. Which iBGP routers must be configured as route reflectors to advertise all routes to restore reachability across all networks?
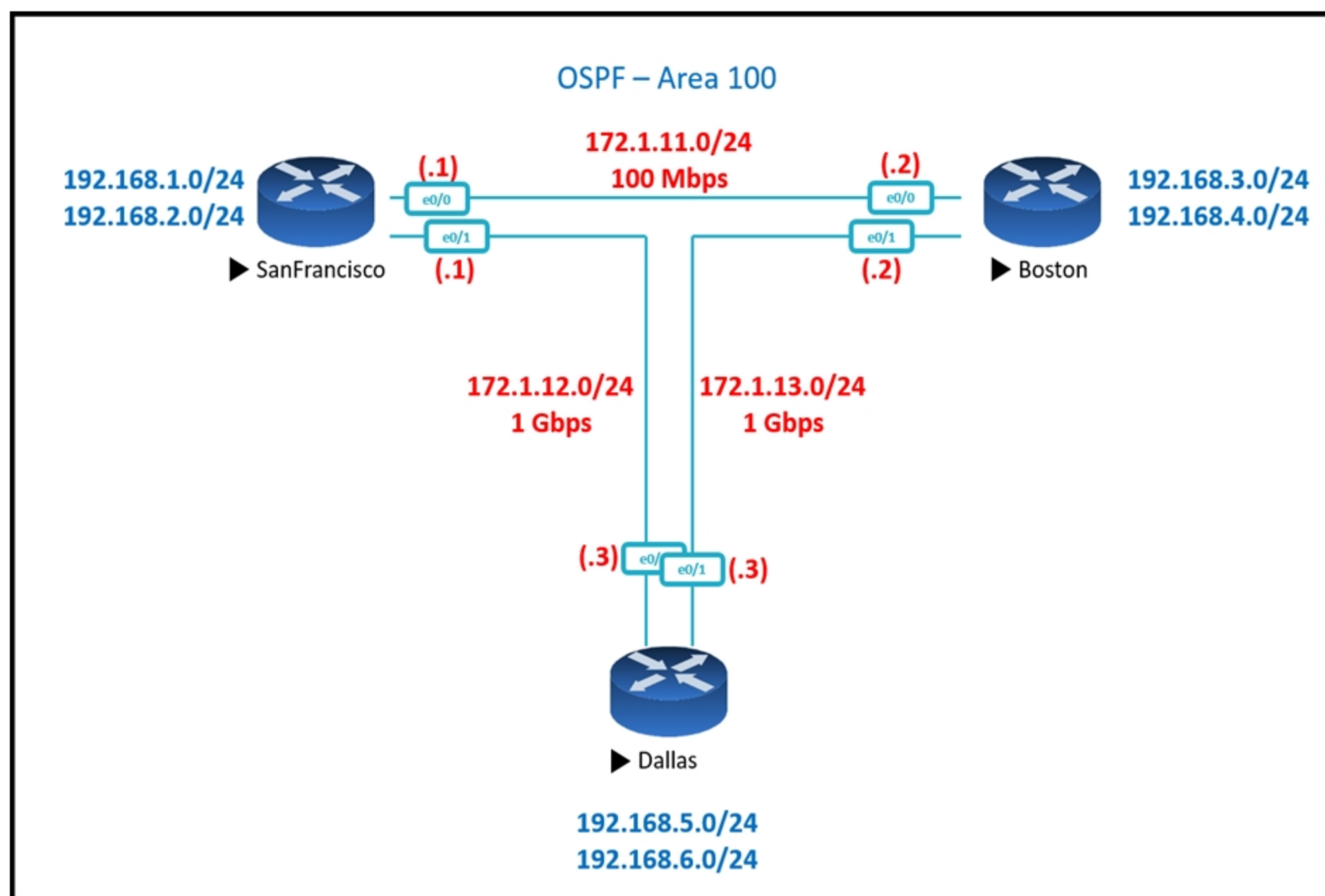
A. R1 and R4

B. R1 and R5

C. R4 and R5

D. R2 and R5

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 38

Topic #: 1

[All 300-410 Questions]

OSPF – Area 100

192.168.1.0/24
192.168.2.0/24
172.1.11.0/24
100 Mbps
(.1) e0/0
(.2) e0/0
192.168.3.0/24
192.168.4.0/24

SanFrancisco (.1) e0/1
Boston (.2) e0/1

172.1.12.0/24
1 Gbps
172.1.13.0/24
1 Gbps

(.3) e0/ e0/1 (.3)

Dallas

192.168.5.0/24
192.168.6.0/24

Show IP Route – San Francisco Router

Gateway of last resort is not set

```
     172.1.0.0/16 is variably subnetted, 5 subnets, 2 masks
C      172.1.11.0/24 is directly connected, Ethernet0/0
L    172.1.11.1/32 is directly connected, Ethernet0/0
C      172.1.12.0/24 is directly connected, Ethernet0/0
L    172.1.12.1/32 is directly connected, Ethernet0/0
O      172.1.13.0/24 [110/11] via 172.1.11.2, 00:02:34, Ethernet0/0
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.1.0/24 is directly connected, Loopback0
L      192.168.1.1/32 is directly connected, Loopback0
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.2.0/24 is directly connected, Loopback1
L      192.168.2.1/32 is directly connected, Loopback1
O      192.168.3.0/24 [110/11] via 172.1.11.2, 00:00:44, Ethernet0/0
O      192.168.4.0/24 [110/11] via 172.1.11.2, 00:00:34, Ethernet0/0
O      192.168.5.0/24 [110/11] via 172.1.12.3, 00:00:34, Ethernet0/1
O      192.168.6.0/24 [110/11] via 172.1.12.3, 00:00:24, Ethernet0/1
```

Show IP Route – Boston

Gateway of last resort is not set

```
     172.1.0.0/16 is variably subnetted, 5 subnets, 2 masks
O    172.1.11.0/24 [110/11] via 172.1.13.2, 00:04:44, Ethernet0/1
              [110/11] via 172.1.12.1, 00:04:44, Ethernet0/0
C    172.1.12.0/24 is directly connected, Ethernet0/0
L    172.1.12.3/32 is directly connected, Ethernet0/0
C    172.1.13.0/24 is directly connected, Ethernet0/0
L    172.1.13.3/32 is directly connected, Ethernet0/0
O      192.168.1.0/24 [110/11] via 172.1.12.1, 00:04:44, Ethernet0/0
O      192.168.2.0/24 [110/11] via 172.1.12.1, 00:04:44, Ethernet0/0
O      192.168.3.0/24 [110/11] via 172.1.13.2, 00:04:44, Ethernet0/1
O      192.168.4.0/24 [110/11] via 172.1.13.2, 00:04:44, Ethernet0/1
     192.168.5.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.5.0/24 is directly connected, Loopback0
L    192.168.5.1/32 is directly connected, Loopback0
     192.168.6.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.6.0/24 is directly connected, Loopback1
L    192.168.6.1/32 is directly connected, Loopback1
```

Refer to the exhibits. SanFrancisco and Boston routers are choosing slower links to reach each other despite the direct links being up. Which configuration fixes the issue?

A. All Routers router ospf 1 auto-cost reference-bandwidth 100

B. SanFrancisco Router router ospf 1 auto-cost reference-bandwidth 1000

C. Boston Router router ospf 1 auto-cost reference-bandwidth 1000

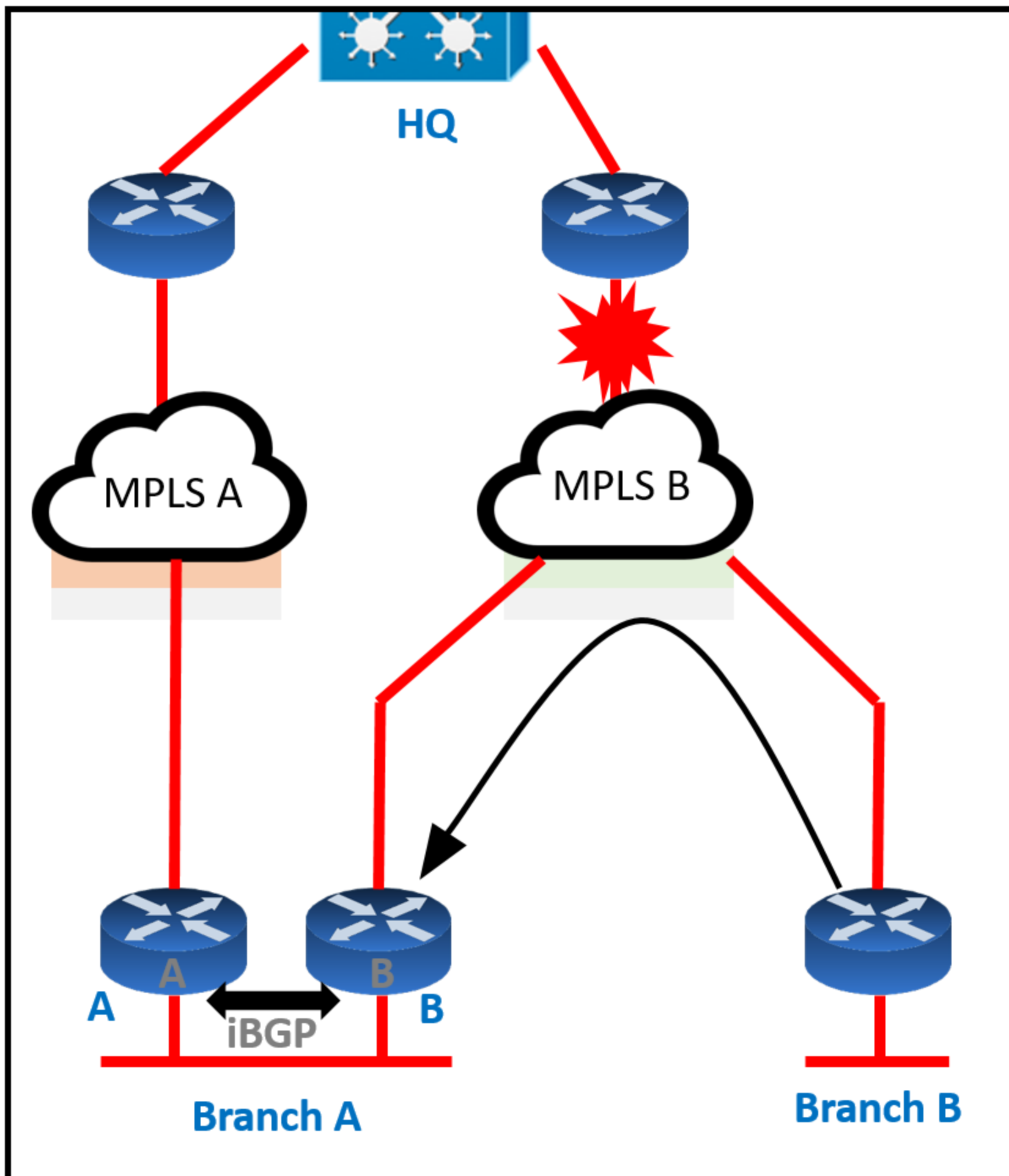D. All Routers router ospf 1 auto-cost reference-bandwidth 1000

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 39

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Troubleshoot and ensure that branch ן' only ever uses the MPLS ן' network to reach HQ.

Which action achieves this requirement?

A. Introduce AS path prepending on the branch A MPLS ן' network connection so that any HQ advertisements from branch A toward the MPLS ן' network are prepended three times

B. Modify the weight of all HQ prefixes received at branch ן' from the MPLS ן' network to be higher than the weights used on the MPLS A network

C. Increase the local preference for all HQ prefixes received at branch ן' from the MPLS ן' network to be higher than the local preferences used on the MPLS A network

D. Introduce an AS path filter on branch A routers so that only local prefixes are advertised into BGP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 40

Topic #: 1

[All 300-410 Questions]

Router Configuration:
router ospf 0.0.0.0
 network 2.0.0.0 0.255.255.255 area 0.0.0.0
!
router bgp 100
 redistribute ospf 0.0.0.0
!
neighbor 3.3.3.2 remote-as 200
!
end

Router# show ip route

    2.0.0.0/24 is subnetted, 1 subnets
C   2.2.2.0 is directly connected, Ethernet0/0
C   3.0.0.0/8 is directly connected, Serial1/0
O E2 200.1.1.0/24 [110/20] via 2.2.2.2, 00:16:17, Ethernet 0/0
O E1 200.2.2.0/24 [110/104] via 2.2.2.2, 00:00:41, Ethernet 0/0
    131.108.0.0/24 is subnetted, 2 subnets
O   131.108.2.0 [110/74] via 2.2.2.2, 00:16:17, Ethernet 0/0
O IA   131.108.1.0 [110/74] via 2.2.2.2, 00:16:17, Ethernet 0/0

Router# show ip bgp

Network	Next Hop	Metric	LocPrf	Weight	Path
*> 2.2.2.0/24	0.0.0.0	0		32768	?
*> 131.108.1.0/24	2.2.2.2	84		32768	?
*> 131.108.2.0/24	2.2.2.2	74		32768	?

Refer to the exhibit. The OSPF routing protocol is redistributed into the BGP routing protocol, but not all the OSPF routes are distributed into BGP. Which action resolves the issue?

A. Include the word external in the redistribute command

B. Use a route-map command to redistribute OSPF external routes defined in an access list

C. Include the word internal external in the redistribute command

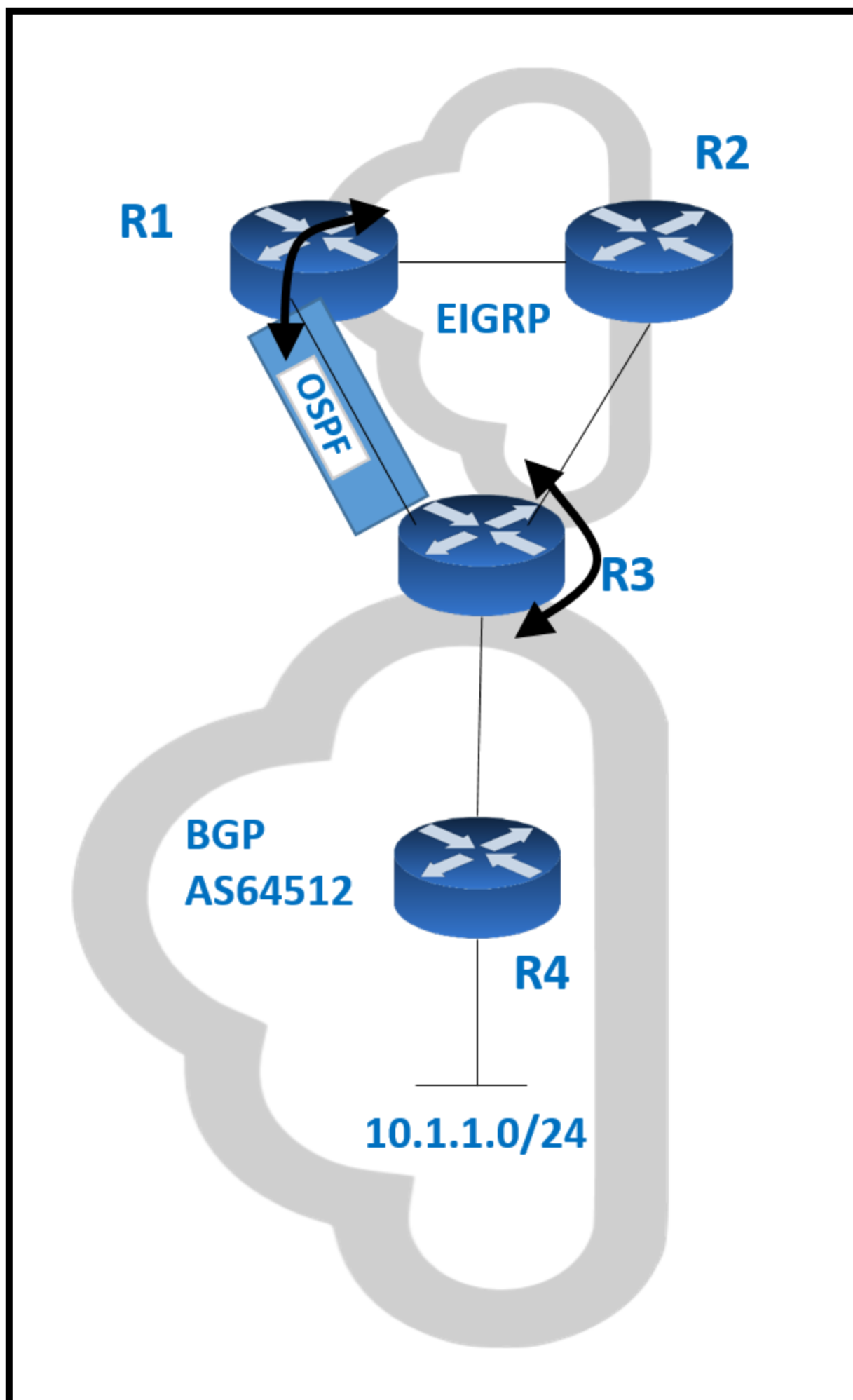D. Use a route-map command to redistribute OSPF external routes defined in a prefix list

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 41

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Routing protocols are mutually redistributed on R3 and R1. Users report intermittent connectivity to services hosted on the 10.1.1.0/24 prefix. Significant routing update changes are noticed on R3 when the show ip route profile command is run.

How must the services be stabilized?

A. The routing loop must be fixed by reducing the admin distance of OSPF from 110 to 80 on R3

B. The routing loop must be fixed by reducing the admin distance of iBGP from 200 to 100 on R3

C. The issue with using BGP must be resolved by using another protocol and redistributing it into EIGRP on R3

D. The issue with using iBGP must be fixed by running eBGP between R3 and R4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 42

Topic #: 1

[All 300-410 Questions]

When determining if a system is capable of support, what is the minimum time spacing required for a BFD control packet to receive once a control packet is arrived?

    A. Desired Min TX Interval

    B. Detect Mult

    C. Required Min RX Interval

    D. Required Min Echo RX Interval

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 43

Topic #: 1

[All 300-410 Questions]

An engineer is configuring a network and needs packets to be forwarded to an interface for any destination address that is not in the routing table.
What should be configured to accomplish this task?

A. set ip next-hop

B. set ip default next-hop

C. set ip next-hop recursive

D. set ip next-hop verify-availability

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 44

Topic #: 1

[All 300-410 Questions]

What is an advantage of using BFD?

A. It detects local link failure at layer 1 and updates the routing table.

B. It detects local link failure at layer 3 and updates the routing protocols.

C. It has sub-second failure detection for layer 1 and layer 3 problems.

D. It has sub-second failure detection for layer 1 and layer 2 problems.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 45

Topic #: 1

[All 300-410 Questions]

An engineer needs dynamic routing between two routers and is unable to establish OSPF adjacency. The output of the show ip ospf neighbor command shows that the neighbor state is EXSTART/EXCHANGE.

Which action should be taken to resolve this issue?

A. match the passwords

B. match the hello timers

C. match the MTUs

D. match the network types

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 46

Topic #: 1

[All 300-410 Questions]

```
*Jun 24 08:54:51.530: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from DOWN to DOWN
*Jun 24 08:54:52.525: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to down
*Jun 24 08:54:52.528: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from DOWN to DOWN
*Jun 24 08:54:53.215: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from DOWN to DOWN
*Jun 24 08:54:54.998: %LINK-3-UPDOWN: Interface GigabitEthemet0/0, changed state to up
*Jun 24 08:54:55.006: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from DOWN to UP
*Jun 24 08:54:55.998: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
```

Refer to the exhibit. R1 is connected with R2 via GigabitEthernet0/0, and R2 cannot ping R1.

What action will fix the issue?

A. Fix route dampening configured on the router.

B. Replace the SFP module because it is not supported.

C. Fix IP Event Dampening configured on the interface.

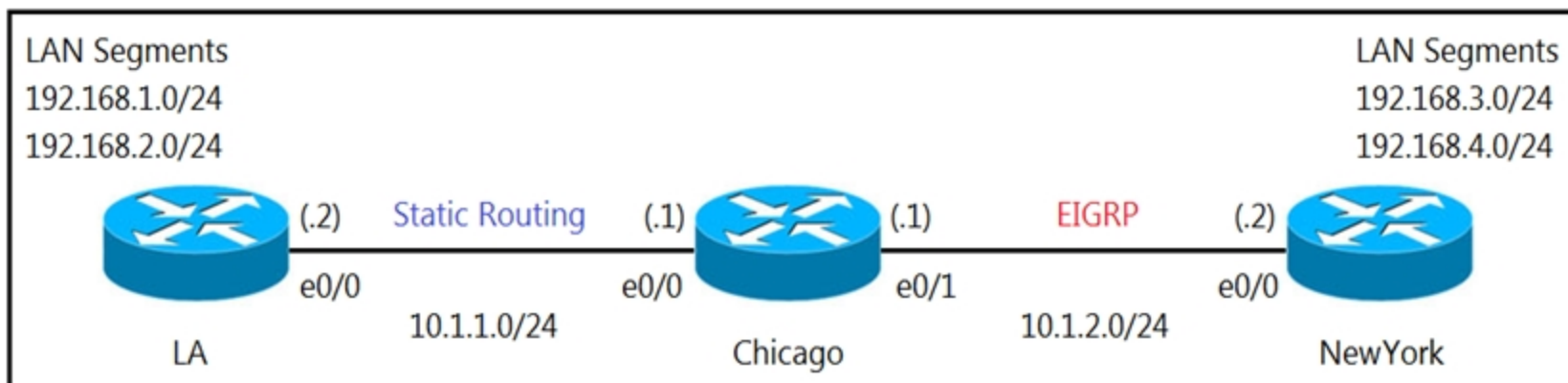D. Correct the IP SLA probe that failed.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 47

Topic #: 1

[All 300-410 Questions]

LAN Segments
192.168.1.0/24
192.168.2.0/24

LAN Segments
192.168.3.0/24
192.168.4.0/24

(.2) Static Routing (.1)   (.1)   EIGRP   (.2)

e0/0   e0/0   e0/1   e0/0

10.1.1.0/24   10.1.2.0/24

LA   Chicago   NewYork

```
Chicago Router
ip route 192.168.1.0 255.255.255.0 10.1.1.2
ip route 192.168.2.0 255.255.255.0 10.1.1.2
!
router eigrp 100
  redistribute static

LA Router
ip route 0.0.0.0 0.0.0.0 10.1.1.1
```

Refer to the exhibits. A user on the 192.168.1.0/24 network can successfully ping 192.168.3.1, but the administrator cannot ping 192.168.3.1 from the LA router. Which set of configurations fixes the issue?

A.

Chicago Router

ip route 192.168.3.0 255.255.255.0 10.1.2.2
ip route 192.168.4.0 255.255.255.0 10.1.2.2

B.

LA Router

ip route 192.168.3.0 255.255.255.0 10.1.1.1
ip route 192.168.4.0 255.255.255.0 10.1.1.1

C.

Chicago Router

router eigrp 100
  redistribute static metric 10 10 10 10 10

D.

Chicago Router

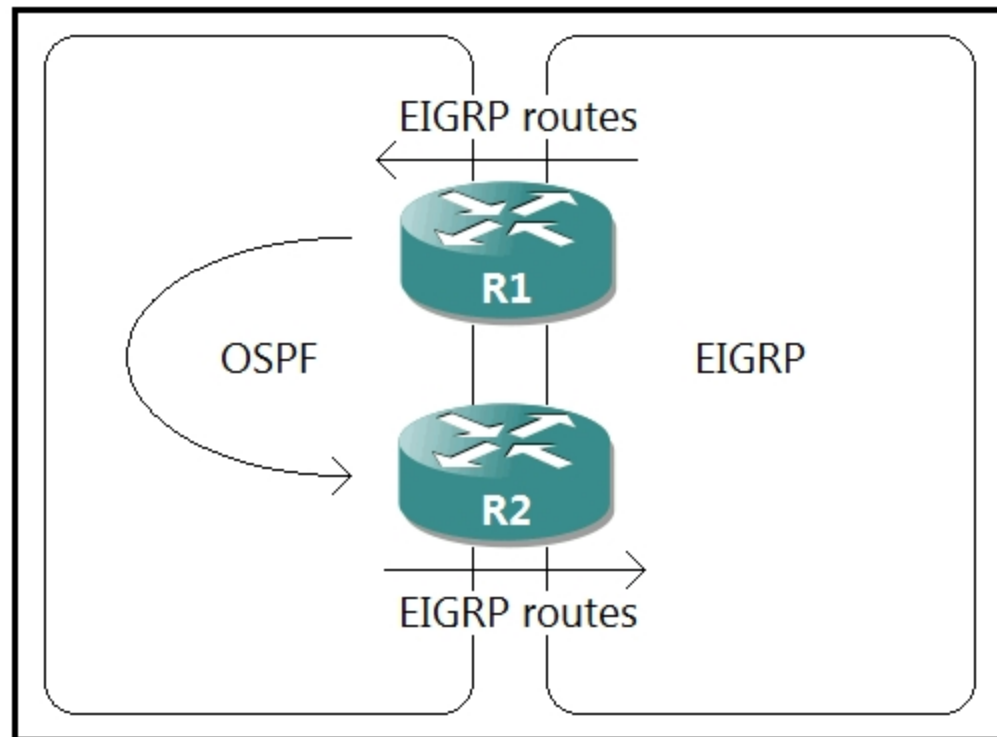router eigrp 100
  redistribute connected

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 48

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A network administrator configured mutual redistribution on R1 and R2 routers, which caused instability in the network.

Which action resolves the issue?

A. Set a tag in the route map when redistributing EIGRP into OSPF on R1, and match the same tag on R2 to deny when redistributing OSPF into EIGRP.

B. Set a tag in the route map when redistributing EIGRP into OSPF on R1, and match the same tag on R2 to allow when redistributing OSPF into EIGRP.

C. Apply a prefix list of EIGRP network routes in OSPF domain on R1 to propagate back into the EIGRP routing domain.

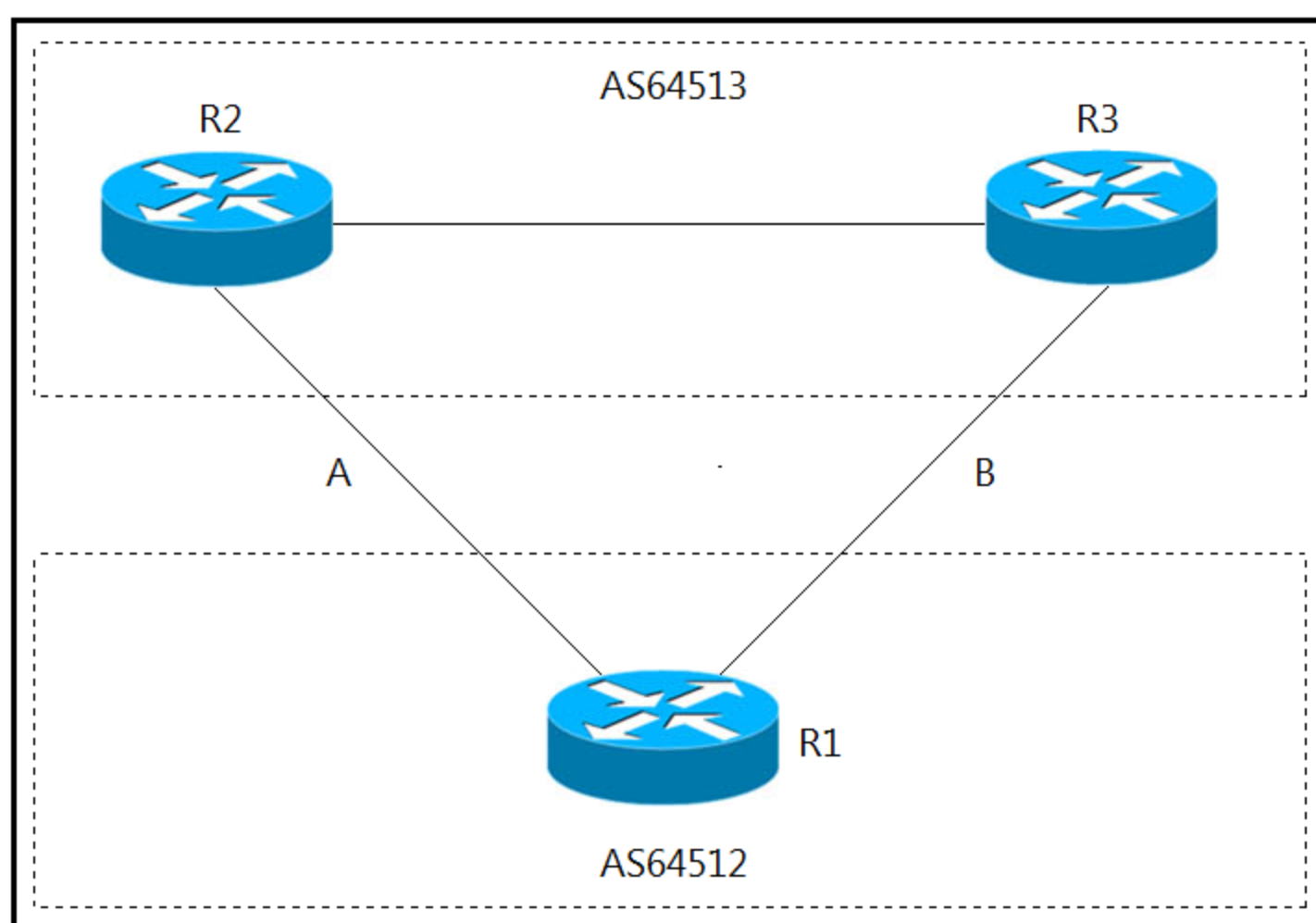D. Advertise summary routes of EIGRP to OSPF and deny specific EIGRP routes when redistributing into OSPF.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 49

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A network engineer for AS64512 must remove the inbound and outbound traffic from link A during maintenance without closing the BGP session so that there is still a backup link over link A toward the ASN.

Which BGP configuration on R1 accomplishes this goal?

A.

```
route-map link-a-in permit 10
 set weight 200
route-map link-a-out permit 10
 set as-path prepend 64512
route-map link-b-in permit 10
 set weight 100
route-map link-b-out permit 10
```

B.

```
route-map link-a-in permit 10
 set weight 200
route-map link-a-out permit 10
route-map link-b-in permit 10
 set weight 100
route-map link-b-out permit 10
 set as-path prepend 64512
```

C.

```
route-map link-a-in permit 10
route-map link-a-out permit 10
 set as-path prepend 64512
route-map link-b-in permit 10
 set local-preference 200
route-map link-b-out permit 10
```

D.

```
route-map link-a-in permit 10
 set local-preference 200
route-map link-a-out permit 10
route-map link-b-in permit 10
route-map link-b-out permit 10
 set as-path prepend 64512
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 50

Topic #: 1

[All 300-410 Questions]

An engineer configured access list NON-CISCO in a policy to influence routes.

```
route-map PBR, deny, sequence 5
 Match clauses:
  ip address (access-list): NON-CISCO
 Set clauses:
 Policy routing matches: 0 packets, 0 bytes
route-map PBR, permit, sequence 10
 Match clauses:
 Set clauses:
  ip next-hop 192.168.1.5
 Policy routing matches: 389362063 packets, 222009685077 bytes
```

What are the two effects of this route map configuration? (Choose two.)

A. Packets are forwarded using normal route lookup.

B. Packets are forwarded to the default gateway.

C. Packets are dropped by the access list.

D. Packets are evaluated by sequence 10.
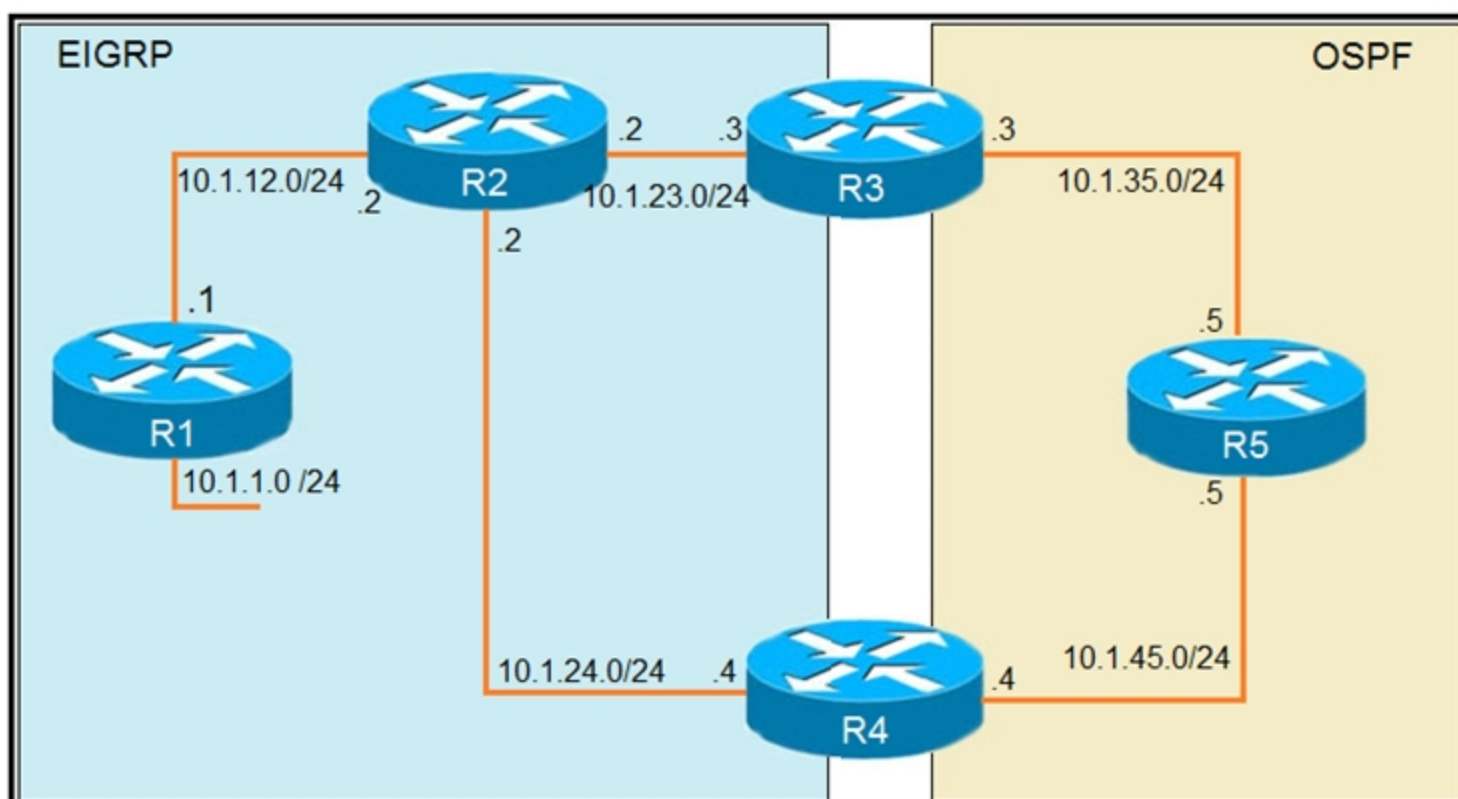
E. Packets are not evaluated by sequence 10.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 51

Topic #: 1

[All 300-410 Questions]

R1

router eigrp 1

 redistribute connected

 network 10.1.12.1 0.0.0.0

 default-metric 1000000 10 255 1 1500

R3

router eigrp 1

 network 10.1.23.3 0.0.0.0

!

router ospf 1

 redistribute eigrp 1 subnets

 network 10.1.35.3 0.0.0.0 area 0

Refer to the exhibits. To provide reachability to network 10.1.1.0/24 from R5, the network administrator redistributes EIGRP into OSPF on R3 but notices that R4 is now taking a suboptimal path through R5 to reach 10.1.1.0/24 network.

Which action fixes the issue while keeping the reachability from R5 to 10.1.1.0/24 network?

   A. Change the administrative distance of the external EIGRP to 90.

   B. Apply the outbound distribution list on R5 toward R4 in OSPF.

   C. Change the administrative distance of OSPF to 200 on R5.

   D. Redistribute OSPF into EIGRP on R4.
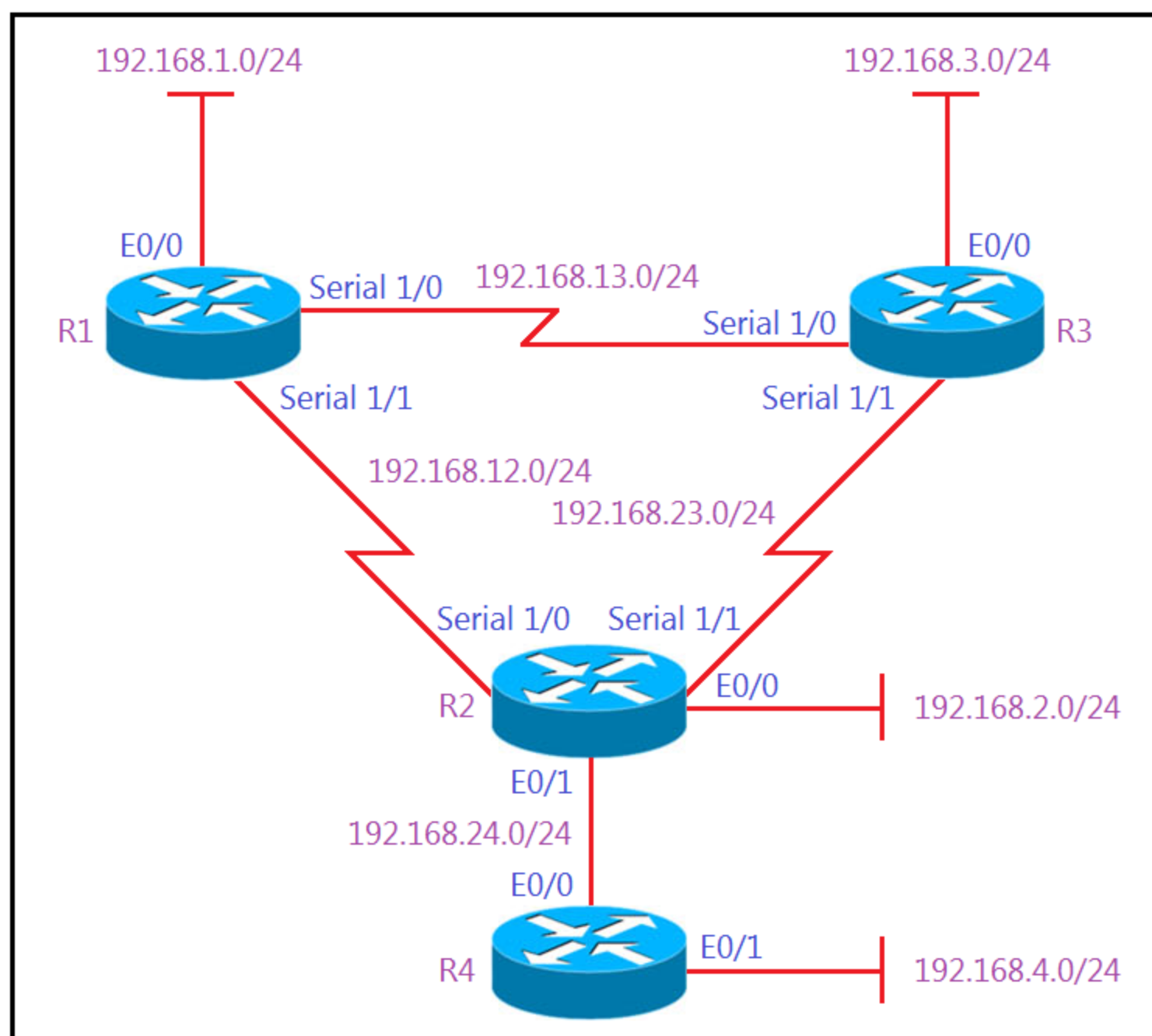
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 52

Topic #: 1

[All 300-410 Questions]


```
# Show IP route on R1
      192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.1.0/24 is directly connected, Ethernet0/0
L        192.168.1.1/32 is directly connected, Ethernet0/0
D        192.168.2.0/24 [90/2297856] via 192.168.12.2, 00:02:14, Serial1/1
S        192.168.3.0/24 [1/0] via 192.168.12.2
      192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.12.0/24 is directly connected, Serial1/1
L        192.168.12.1/32 is directly connected, Serial1/1
      192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.13.0/24 is directly connected, Serial1/0
L        192.168.13.1/32 is directly connected, Serial1/0
D        192.168.23.0/24 [90/2681856] via 192.168.13.3, 00:06:38, Serial1/0
                          [90/2681856] via 192.168.12.2, 00:06:38, Serial1/1
D        192.168.24.0/24 [90/2195456] via 192.68.12.2, 00:06:38, Serial1/1
```

Refer to the exhibits. All the serial links between R1, R2, and R3 have the same bandwidth. Users on the 192.168.1.0/24 network report slow response times while they access resources on network 192.168.3.0/24. When a traceroute is run on the path, it shows that the packet is getting forwarded via R2 to R3 although the link between R1 and R3 is still up.
What must the network administrator do to fix the slowness?

    A. Add a static route on R1 using the next hop of R3.

    B. Remove the static route on R1.

    C. Change the Administrative Distance of EIGRP to 5.
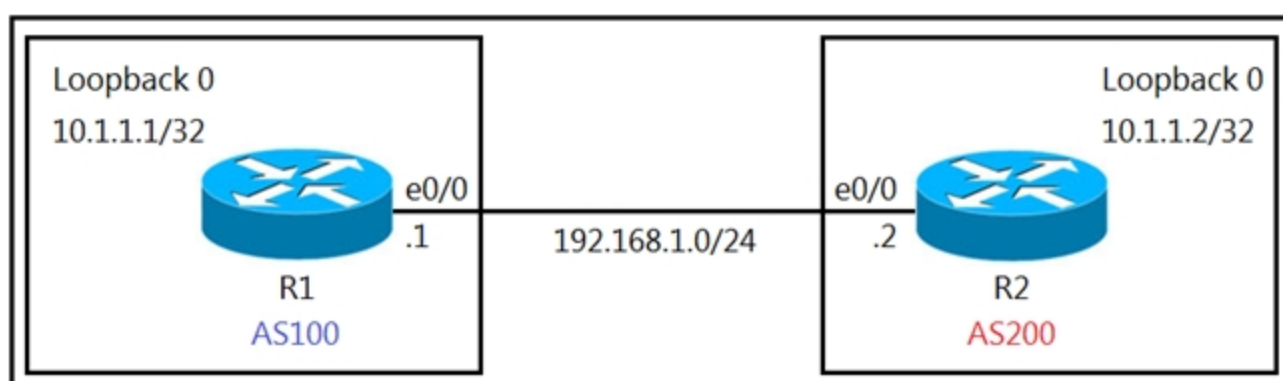
    D. Redistribute the R1 static route to EIGRP.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 53

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The R1 and R2 configurations are:

R1

router bgp 100
 neighbor 10.1.1.2 remote-as 200

R2

router bgp 200
 neighbor 10.1.1.1 remote-as 100

The neighbor relationship is not coming up.

Which two sets of configurations bring the neighbors up? (Choose two.)

A.

R1

ip route 10.1.1.2 255.255.255.255 192.168.1.2
!
router bgp 100
 neighbor 10.1.1.1 ttl-security hops 1
 neighbor 10.1.1.2 update-source loopback 0

B.

R2

ip route 10.1.1.2 255.255.255.255 192.168.1.2
!
router bgp 100
 neighbor 10.1.1.2 ttl-security hops 1
 neighbor 10.1.1.2 update-source loopback 0

C.

R2

ip route 10.1.1.1 255.255.255.255 192.168.1.1
!
router bgp 200
neighbor 10.1.1.1 ttl-security hops 1
neighbor 10.1.1.1 update-source loopback 0

D.

R1

ip route 10.1.1.2 255.255.255.255 192.168.1.2
!
router bgp 100
 neighbor 10.1.1.2 disable-connected-check
 neighbor 10.1.1.2 update-source Loopback0

E.

R2

ip route 10.1.1.1 255.255.255.255 192.168.1.1
!
router bgp 200
 neighbor 10.1.1.1 disable-connected-check
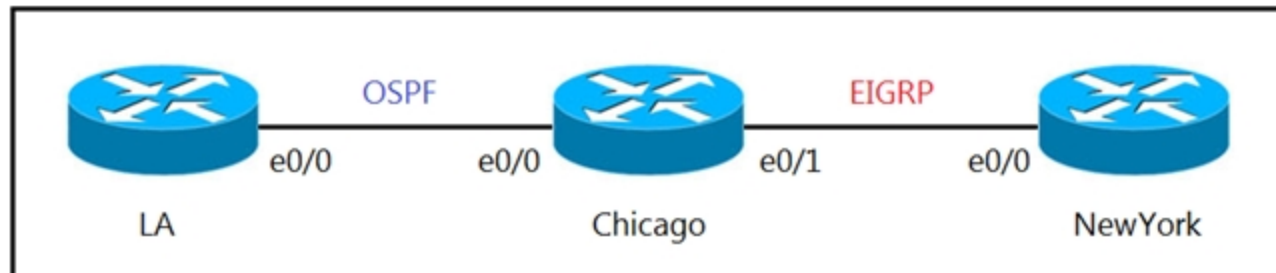 neighbor 10.1.1.1 update-source loopback 0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 54

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The network administrator must mutually redistribute routes at the Chicago router to the LA and NewYork routers. The configuration of the Chicago router is this:

router ospf 1

 redistribute eigrp 100

router eigrp 100

 redistribute ospf 1

After the configuration, the LA router receives all the NewYork routes, but the NewYork router does not receive any LA routes.

Which set of configurations fixes the problem on the Chicago router?

A.

 router ospf 1

    redistribute eigrp 100 metric 20

B.

 router eigrp 100

    redistribute ospf 1 metric 10 10 10 10 10

C.

 router ospf 1

    redistribute eigrp 100 subnets

D.

 router eigrp 100

    redistribute ospf 1 subnets

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 55

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the actions from the left into the correct order on the right to configure a policy to avoid following packet forwarding based on the normal routing path.

Select and Place:

Configure route map instances.	step 1
Configure set commands.	step 2
Configure fast switching for PBR.	step 3
Configure ACLs.	step 4
Configure match commands.	step 5
Configure PBR on the interface.	step 6

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 56

Topic #: 1

[All 300-410 Questions]

```
R1

ip prefix-list ccnp1 seq 5 permit 10.1.48.0/24 le 24
ip prefix-list ccnp2 seq 5 permit 10.1.80.0/24 le 32
ip prefix-list ccnp3 seq 5 permit 10.1.64.0/24 le 24


route-map ospf-to-eigrp permit 10
   match ip address prefix-list ccnp1
   set tag 30
route-map ospf-to-eigrp permit 20
   match ip address prefix-list ccnp2
   set tag 20
route-map ospf-to-eigrp permit 30
   match ip address prefix-list ccnp3
   set tag 10
```

Refer to the exhibit. An engineer wanted to set a tag of 30 to route 10.1.80.65/32 but it failed.

How is the issue fixed?

A. Modify route-map ospf-to-eigrp permit10 and match prefix-list ccnp2.

B. Modify prefix-list ccnp3 to add 10.1.64.0/20 ge 32.

C. Modify prefix-list ccnp3 to add 10.1.64.0/20 le 24.

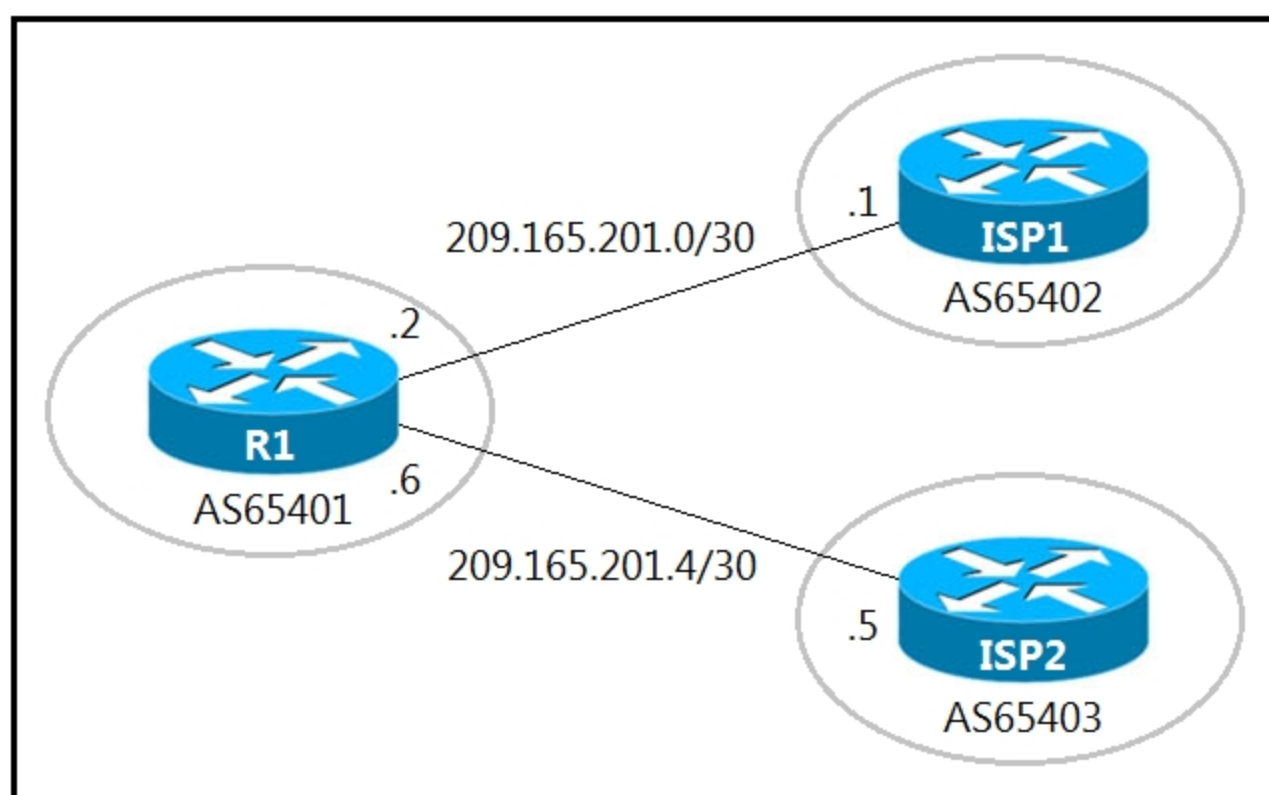D. Modify route-map ospf-to-eigrp permit 30 and match prefix-list ccnp2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 57

Topic #: 1

[All 300-410 Questions]


```
R1#
 interface GigabitEthernet0/0
  ip address 209.165.201.2 255.255.255.252
 !
 interface GigabitEthernet0/1
  ip address 209.165.201.6 255.255.255.252
 !
 router bgp 65401
  bgp log-neighbor-changes
  redistribute static
  neighbor 209.165.201.1 remote-as 65402
  neighbor 209.165.201.5 remote-as 65403
 !
 ip route 209.165.200.224 255.255.255.224 Null0
 ip route 209.165.202.128 255.255.255.224 Null0
 !
```

Refer to the exhibits. A company with autonomous system number AS65401 has obtained IP address block 209.165.200.224/27 from ARIN. The company needed more IP addresses and was assigned block 209.165.202.128/27 from ISP2. An engineer in ISP1 reports that they are receiving ISP2 routes from AS65401. Which configuration on R1 resolves the issue?

A.

```
 access-list 10 deny 209.165.202.128 0.0.0.31
 access-list 10 permit any
 !
 router bgp 65401
  neighbor 209.165.201.1 distribute-list 10 out
```

B.

```
 access-list 10 deny 209.165.202.128 0.0.0.31
  access-list 10 permit any
  !
 router bgp 65401
   neighbor 209.165.201.1 distribute-list 10 in
```

C.

```
 ip route 209.165.200.224 255.255.255.224 209.165.201.1
 ip route 209.165.202.128 255.255.255.224 209.165.201.5
```

D.

```
 ip route 0.0.0.0 0.0.0.0 209.165.201.1
 ip route 0.0.0.0 0.0.0.0 100 209.165.201.5
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 58

Topic #: 1

[All 300-410 Questions]

After some changes in the routing policy, it is noticed that the router in AS 45123 is being used as a transit AS router for several service providers. Which configuration ensures that the branch router in AS 45123 advertises only the local networks to all SP neighbors?

A.

```
ip as-path access-list 1 permit ^45123$
!
router bgp 45123
 neighbor SP-Neighbors filter-list 1 out
```

B.

```
ip as-path access-list 1 permit ^45123
!
router bgp 45123
 neighbor SP-Neighbors filter-list 1 out
```

C.

```
ip as-path access-list 1 permit ^$
!
router bgp 45123
 neighbor SP-Neighbors filter-list 1 out
```

D.

```
ip as-path access-list 1 permit .*
!
router bgp 45123
 neighbor SP-Neighbors filter-list 1 out
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 59

Topic #: 1

[All 300-410 Questions]

A network administrator is troubleshooting a high utilization issue on the route processor of a router that was reported by NMS. The administrator logged into the router to check the control plane policing and observed that the BGP process is dropping a high number of routing packets and causing thousands of routes to recalculate frequently.

Which solution resolves this issue?

A. Shape the pir for BGP, conform-action set-prec-transmit, and exceed action set-frde-transmit.

B. Police the pir for BGP, conform-action set-prec-transmit, and exceed action set-clp-transmit.

C. Shape the cir for BGP, conform-action transmit, and exceed action transmit.

D. Police the cir for BGP, conform-action transmit, and exceed action transmit.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 60

Topic #: 1

[All 300-410 Questions]

Which mechanism must be chosen to optimize the reconvergence time for OSPF at company location 408817202 that is less CPU-intensive than reducing the hello and dead timers?

A. sso

B. BFD

C. Dead Peer Detection keepalives
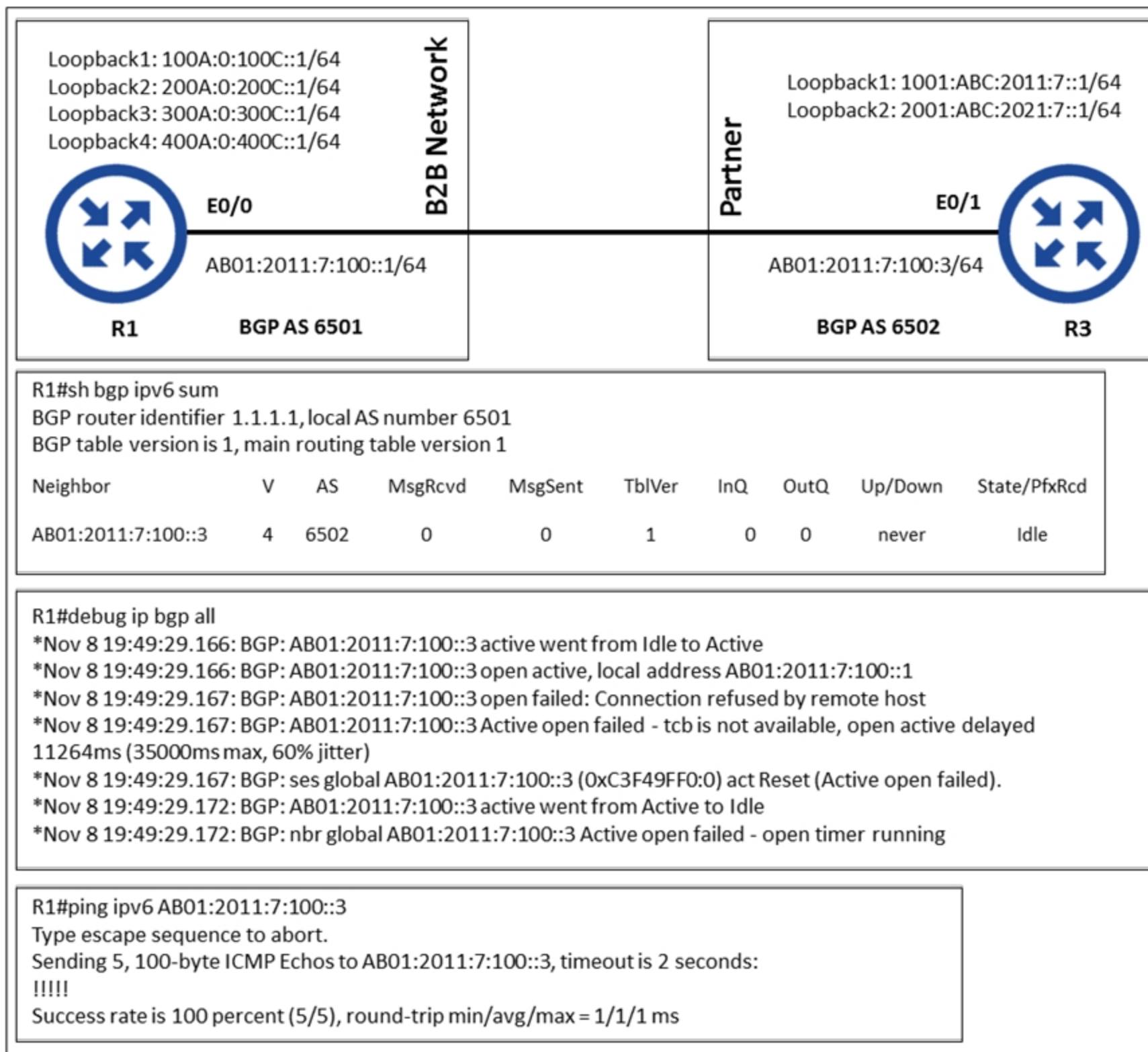
D. OSPF demand circuit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 61

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.


```
R1#sh bgp ipv6 sum
BGP router identifier 1.1.1.1, local AS number 6501
BGP table version is 1, main routing table version 1

Neighbor               V    AS    MsgRcvd    MsgSent    TblVer    InQ    OutQ    Up/Down    State/PfxRcd

AB01:2011:7:100::3     4    6502     0           0         1        0      0       never        Idle
```

```
R1#debug ip bgp all
*Nov 8 19:49:29.166: BGP: AB01:2011:7:100::3 active went from Idle to Active
*Nov 8 19:49:29.166: BGP: AB01:2011:7:100::3 open active, local address AB01:2011:7:100::1
*Nov 8 19:49:29.167: BGP: AB01:2011:7:100::3 open failed: Connection refused by remote host
*Nov 8 19:49:29.167: BGP: AB01:2011:7:100::3 Active open failed - tcb is not available, open active delayed
11264ms (35000ms max, 60% jitter)
*Nov 8 19:49:29.167: BGP: ses global AB01:2011:7:100::3 (0xC3F49FF0:0) act Reset (Active open failed).
*Nov 8 19:49:29.172: BGP: AB01:2011:7:100::3 active went from Active to Idle
*Nov 8 19:49:29.172: BGP: nbr global AB01:2011:7:100::3 Active open failed - open timer running
```

```
R1#ping ipv6 AB01:2011:7:100::3
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to AB01:2011:7:100::3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
```

An engineer configured BGP between routers R1 and R3. The BGP peers cannot establish neighbor adjacency to be able to exchange routes. Which configuration resolves this issue?

A. R1 router bgp 6501 address-family ipv6 neighbor AB01:2011:7:100::3 activate

B. R3 router bgp 6502 address-family ipv6 neighbor AB01:2011:7:100::1 activate

C. R1 router bgp 6501 neighbor AB01:2011:7:100::3 ebgp-multihop 255

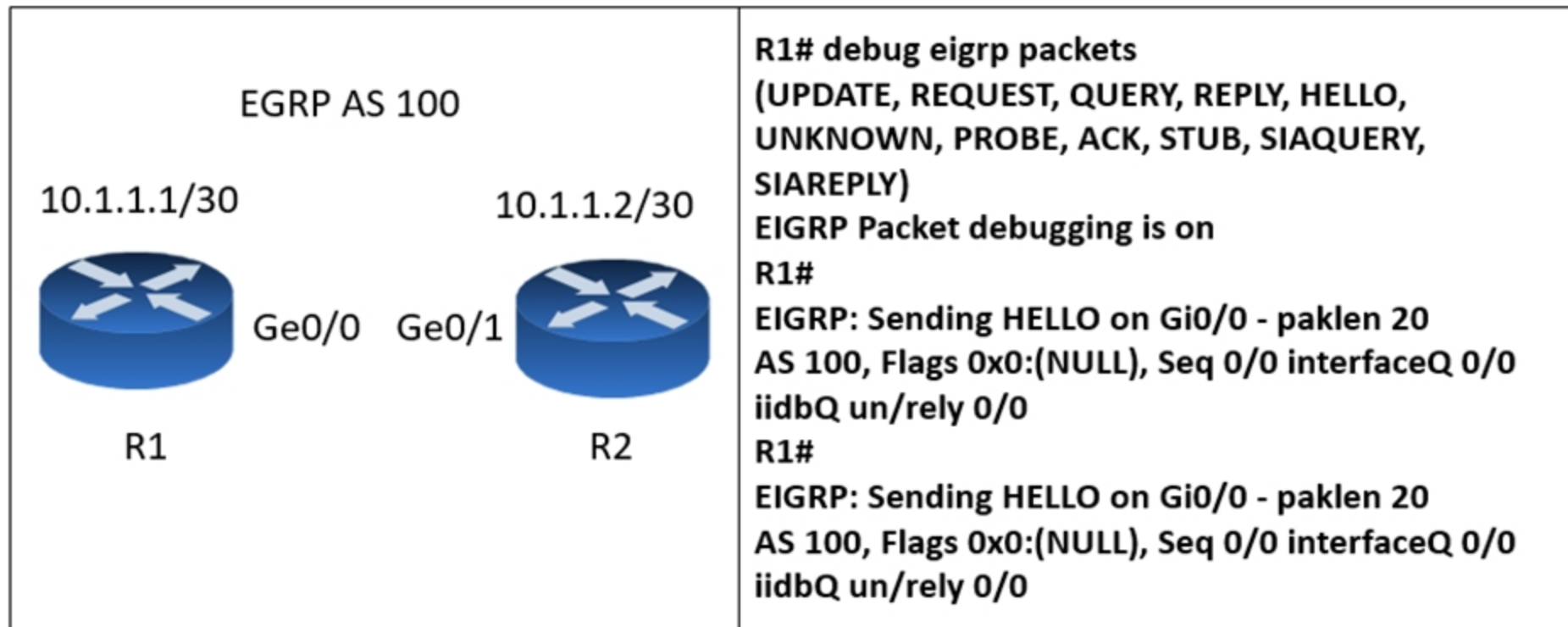D. R3 router bgp 6502 neighbor AB01:2011:7:100::1 ebgp-multihop 255

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 62

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

EGRP AS 100

10.1.1.1/30

10.1.1.2/30

Ge0/0   Ge0/1

R1

R2

```
R1# debug eigrp packets
(UPDATE, REQUEST, QUERY, REPLY, HELLO,
UNKNOWN, PROBE, ACK, STUB, SIAQUERY,
SIAREPLY)
EIGRP Packet debugging is on
R1#
EIGRP: Sending HELLO on Gi0/0 - paklen 20
AS 100, Flags 0x0:(NULL), Seq 0/0 interfaceQ 0/0
iidbQ un/rely 0/0
R1#
EIGRP: Sending HELLO on Gi0/0 - paklen 20
AS 100, Flags 0x0:(NULL), Seq 0/0 interfaceQ 0/0
iidbQ un/rely 0/0
```

Which action resolves the adjacency issue?

A. Configure the same autonomous system numbers.

B. Match the hello interval timers.

C. Match the authentication keys.

D. Configure the same EIGRP process IDs.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 63

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.
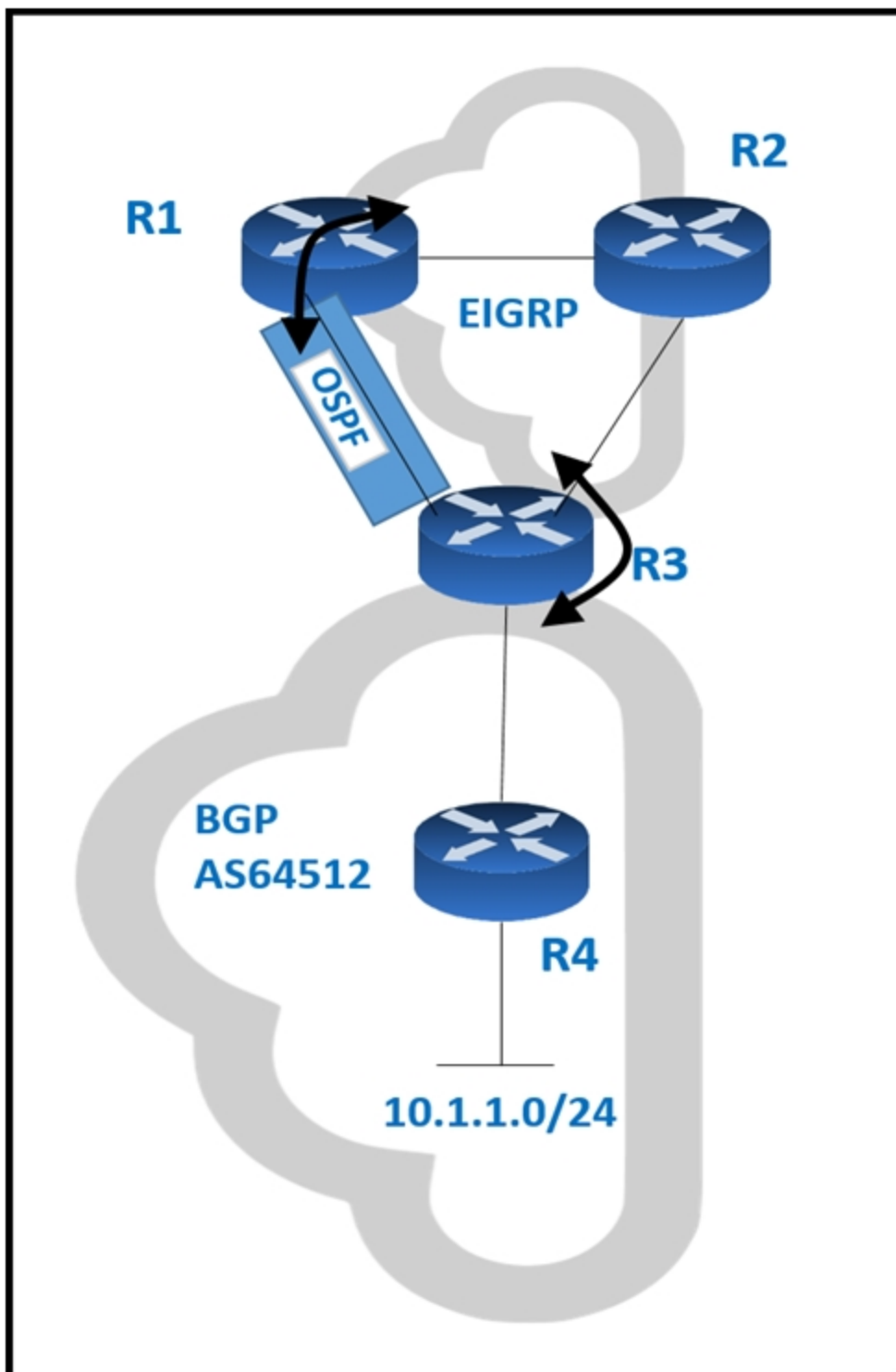
BGP and EIGRP are mutually redistributed on R3, and EIGRP and OSPF are mutually redistributed on R1. Users report packet loss and interruption of service to applications hosted on the 10.1.1.0/24 prefix. An engineer tested the link from R3 to R4 with no packet loss present but has noticed frequent routing changes on R3 when running the debug ip route command.

Which action stabilizes the service?

A. Reduce frequent OSPF SPF calculations on R3 that cause a high CPU and packet loss on traffic traversing R3.

B. Tag the 10.1.1.0/24 prefix and deny the prefix from being redistributed into OSPF on R1.

C. Place an OSPF distribute-list outbound on R3 to block the 10.1.1.0/24 prefix from being advertised back to R3.

D. Repeat the test from R4 using ICMP ping on the local 10.1.1.0/24 prefix, and fix any Layer 2 errors on the host or switch side of the subnet.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 64

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer has configured policy-based routing and applied the configuration to the correct interface. How is the configuration applied to the traffic that matches the access list?

```
Route-map PBR, permit, sequence 10
  Match clauses:
    ip address (access lists): FILTER_ACL
  Set clauses:
    ip next-hop verify-availability 209.165.202.129 1 track 100 [down]
    ip next-hop verify-availability 209.165.202.131 2 track 200 [up]
  Policy routing matches: 0 packets, 0 bytes
route-map PBR, deny, sequence 20
  Match clauses:
  Set clauses:
    ip next-hop 209.165.201.30
  Policy routing matches: 275364861 packets, 12200235037 bytes
```

A. It is forwarded using the routing table lookup.

B. It is sent to 209.165.202.129.

C. It is dropped.

D. It is sent to 209.165.202.131.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 65

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

Branch-Router#
"Nov 29 15.20.22.415: OSPF-1 HELLO Fa1/1: Rcv hello from 3.3.3.3 area 1 10.2.1.3
**"Nov 29 15.20.23.195: OSPF-1 HELLO Fa1/1: Send hello to 224.0.0.5 area 1 from 10.2.1.1**

Branch-Router#
"Nov 29 15.20:27.955: OSPF-1 HELLO Fa0/0: Rcv hello from 2.2.2.2 area 1 10.1.1.2
"Nov 29 15.20.27.955: OSPF-1 HELLO Fa0/0: Mismatched hello parameters from 10.1.1.2
"Nov 29 15.20.27.955: OSPF-1 HELLO Fa0/0: Dead R 40 C 40, Hello R 10 C 10 Mask R 255.255.255.0 C 255.255.255.240
"Nov 29 15.20.28.311: OSPF-1 HELLO Fa0/0: Send hello to 224.0.0.5 area 1 from 10.1.1.1
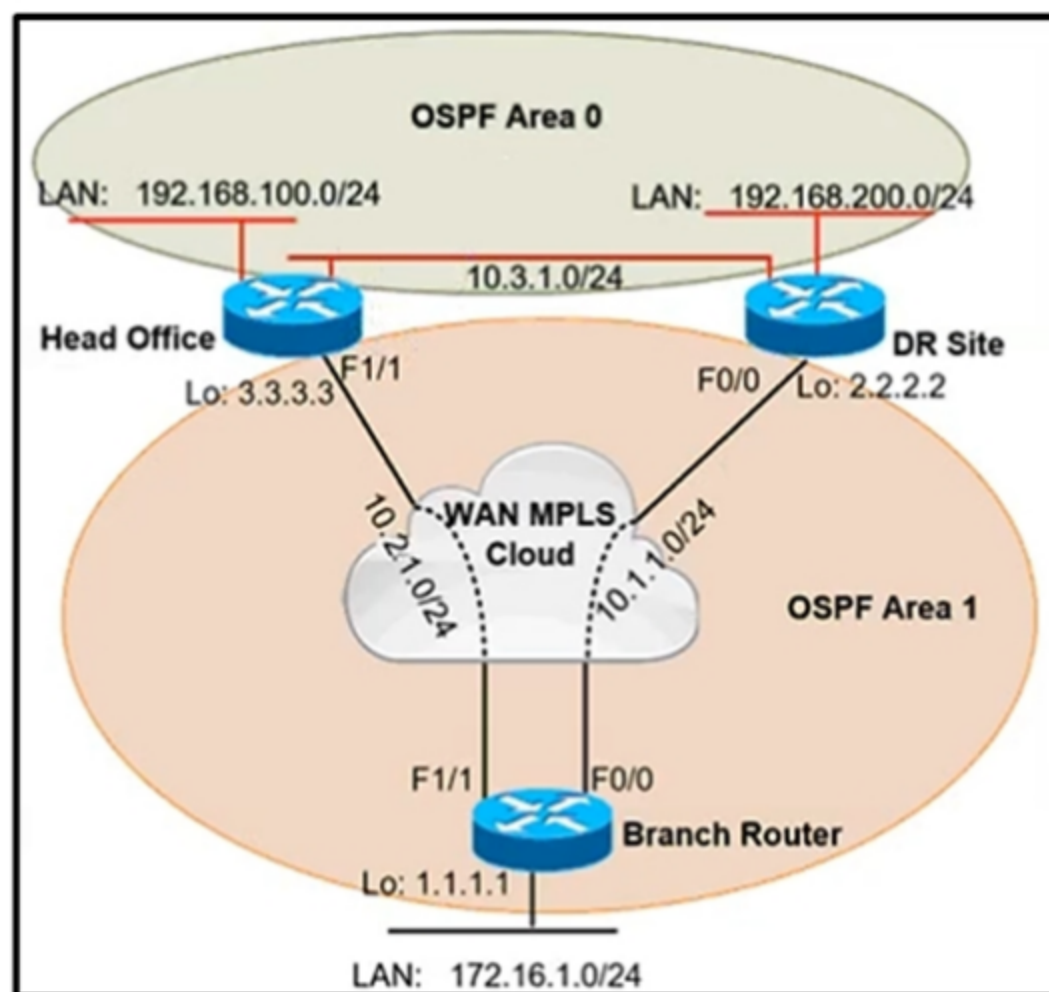
A network administrator reviews the branch router console log to troubleshoot the OSPF adjacency issue with the DR router.
Which action resolves this issue?

A. Stabilize the DR site flapping link to establish OSPF adjacency.

B. Advertise the branch WAN interface matching subnet for the DR site.

C. Configure the WAN interface for DR site in the related OSPF area.

D. Configure matching hello and dead intervals between sites.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 66

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

```
P 172.29.0.0/16, 1 successors, FD is 307200, serno 2
         via 192.168.254.2 (307200/281600), FastEthernet0/1
         via 192.168.253.2 (410200/352300), FastEthernet0/0
```

When the FastEthernet0/1 goes down, the route to 172.29.0.0/16 via 192.168.253.2 is not installed in the RIB. Which action resolves the issue?

A. Configure feasible distance greater than the reported distance.

B. Configure feasible distance greater than the successor's feasible distance.

C. Configure reported distance greater than the successor's feasible distance.

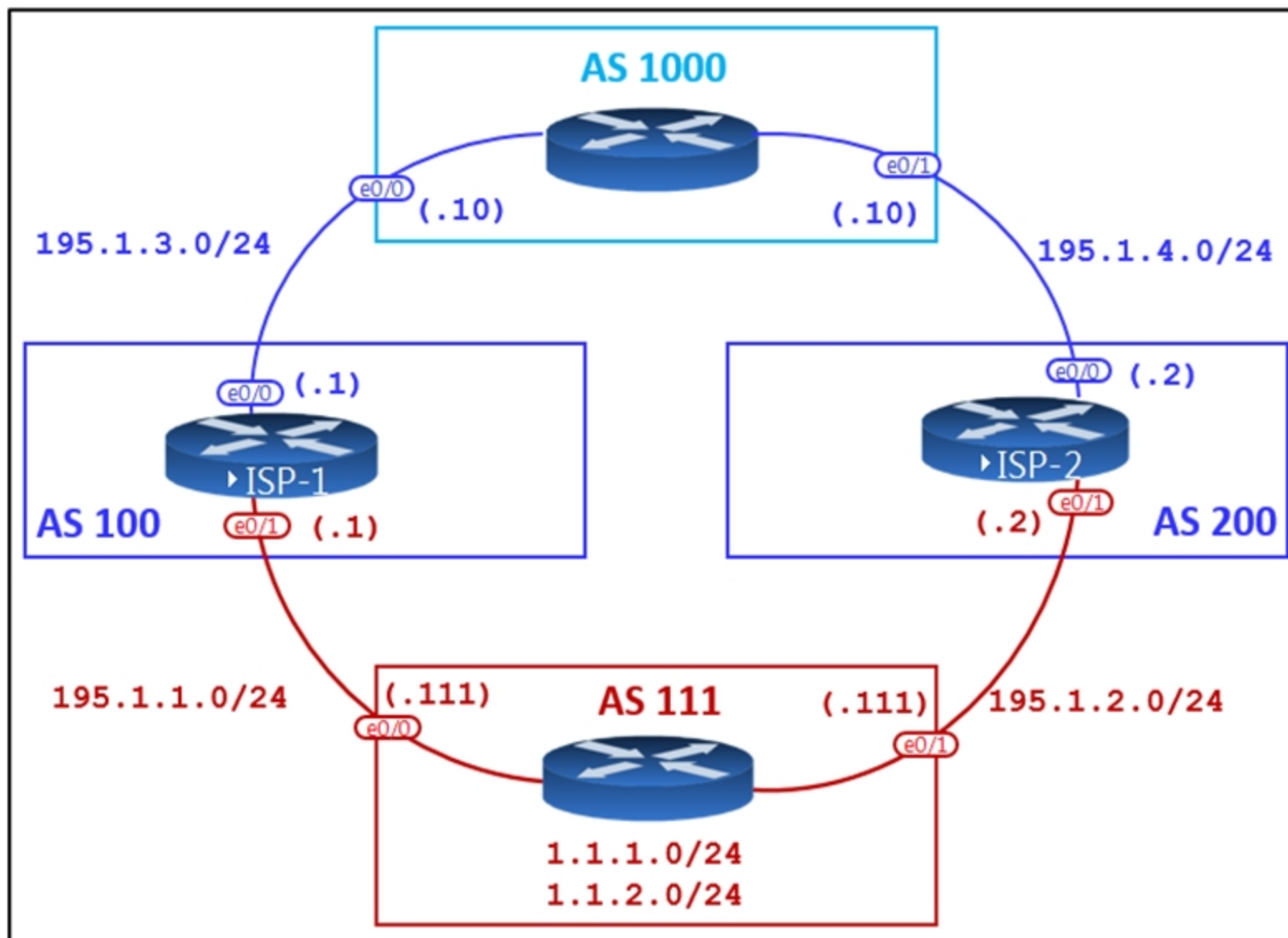D. Configure reported distance greater than the feasible distance.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 67

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

AS111

```
Router bgp 111
  Neighbor 195.1.1.1 remote-as 100
  Neighbor 195.1.1.1 allowas-in
  Neighbor 195.1.2.2 remote-as 200
  Neighbor 195.1.2.2 allowas-in
```

AS111 is receiving its own routes from AS200 causing a loop in the network.
Which configuration provides loop prevention?

A. router bgp 111 neighbor 195.1.1.1 as-override no neighbor 195.1.2.2 allowas-in

B. router bgp 111 no neighbor 195.1.1.1 allowas-in no neighbor 195.1.2.2 allowas-in

C. router bgp 111 neighbor 195.1.2.2 as-override no neighbor 195.1.1.1 allowas-in

D. router bgp 111 neighbor 195.1.1.1 as-override neighbor 195.1.2.2 as-override
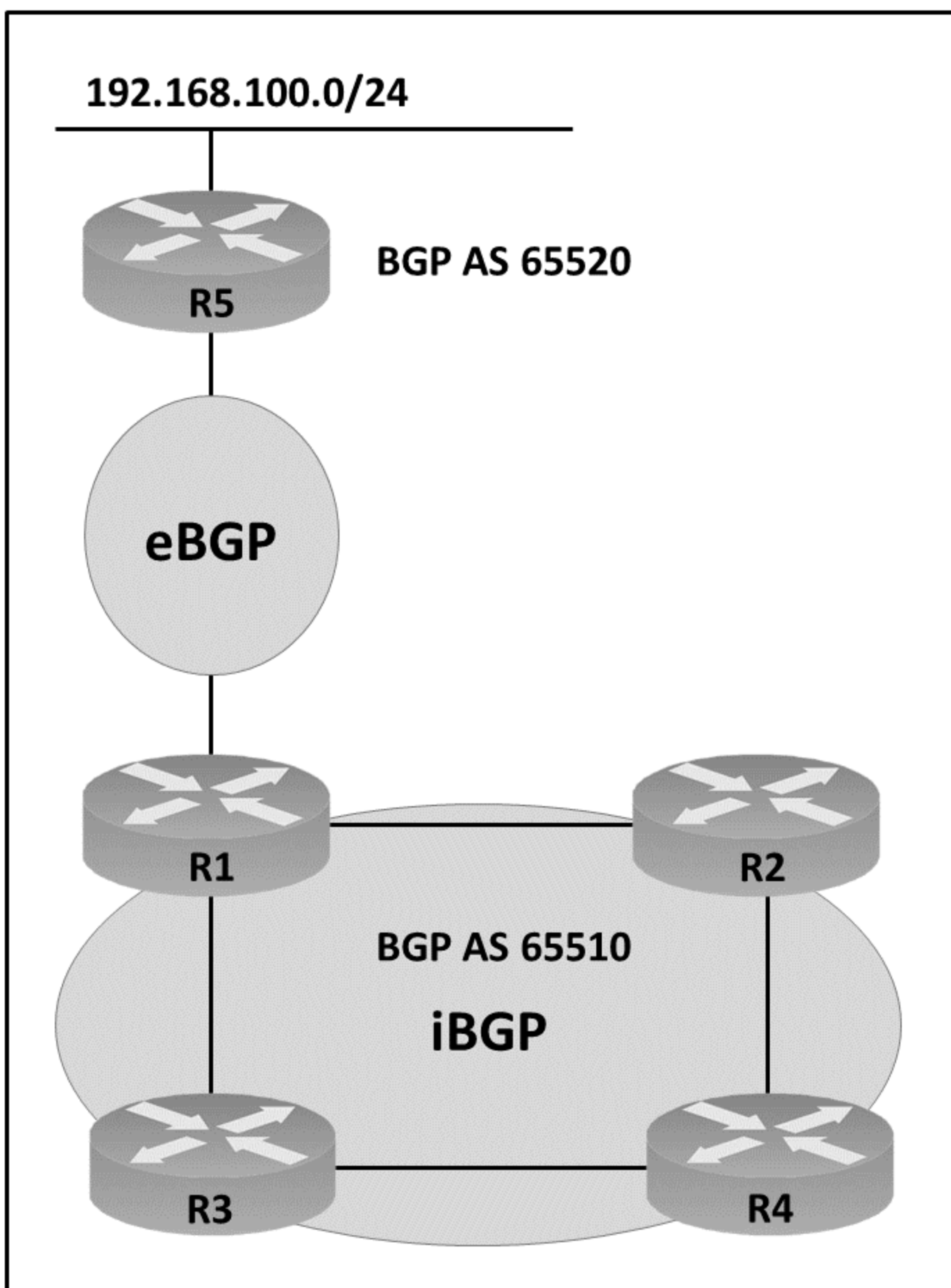
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 68

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

AS65510 iBGP is configured for directly connected neighbors. R4 cannot ping or traceroute network 192.168.100.0/24. Which action resolves this issue?

A. Configure R1 as a route reflector server and configure R2 and R3 as route reflector clients.

B. Configure R4 as a route reflector server and configure R2 and R3 as route reflector clients.

C. Configure R4 as a route reflector server and configure R1 as a route reflector client.

D. Configure R1 as a route reflector server and configure R4 as a route reflector client.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 69

Topic #: 1

[All 300-410 Questions]

Users report issues with reachability between areas as soon as an engineer configured summary routes between areas in a multiple area OSPF autonomous system. Which action resolves the issue?

A. Configure the area range command on the ASBR.

B. Configure the summary-address command on the ASBR.

C. Configure the summary-address command on the ABR.

D. Configure the area range command on the ABR.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 70

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

```
interface loopback0
ip address 4.4.4.4 255.255.255.0
!
interface FastEthernet1/0
Description **** WAN link ****
ip address 10.0.0.1 255.255.255.0
!
interface FastEthernet1/1
Description **** LAN Network ****
ip address 192.168.1.1 255.255.255.0
!
!
router ospf 1
router-id 4.4.4.4
log-adjacency-changes
network 4.4.4.4 0.0.0.0 area 0
network 10.0.0.1 0.0.0.0 area 0
network 192.168.1.1 0.0.0.0 area 10
!
```

Which set of commands restore reachability to loopback0?

A. interface loopback0 ip address 4.4.4.4 255.255.255.0 ip ospf network point-to-point

B. interface loopback0 ip address 4.4.4.4 255.255.255.0 ip ospf interface area 10

C. interface loopback0 ip address 4.4.4.4 255.255.255.0 ip ospf network broadcast

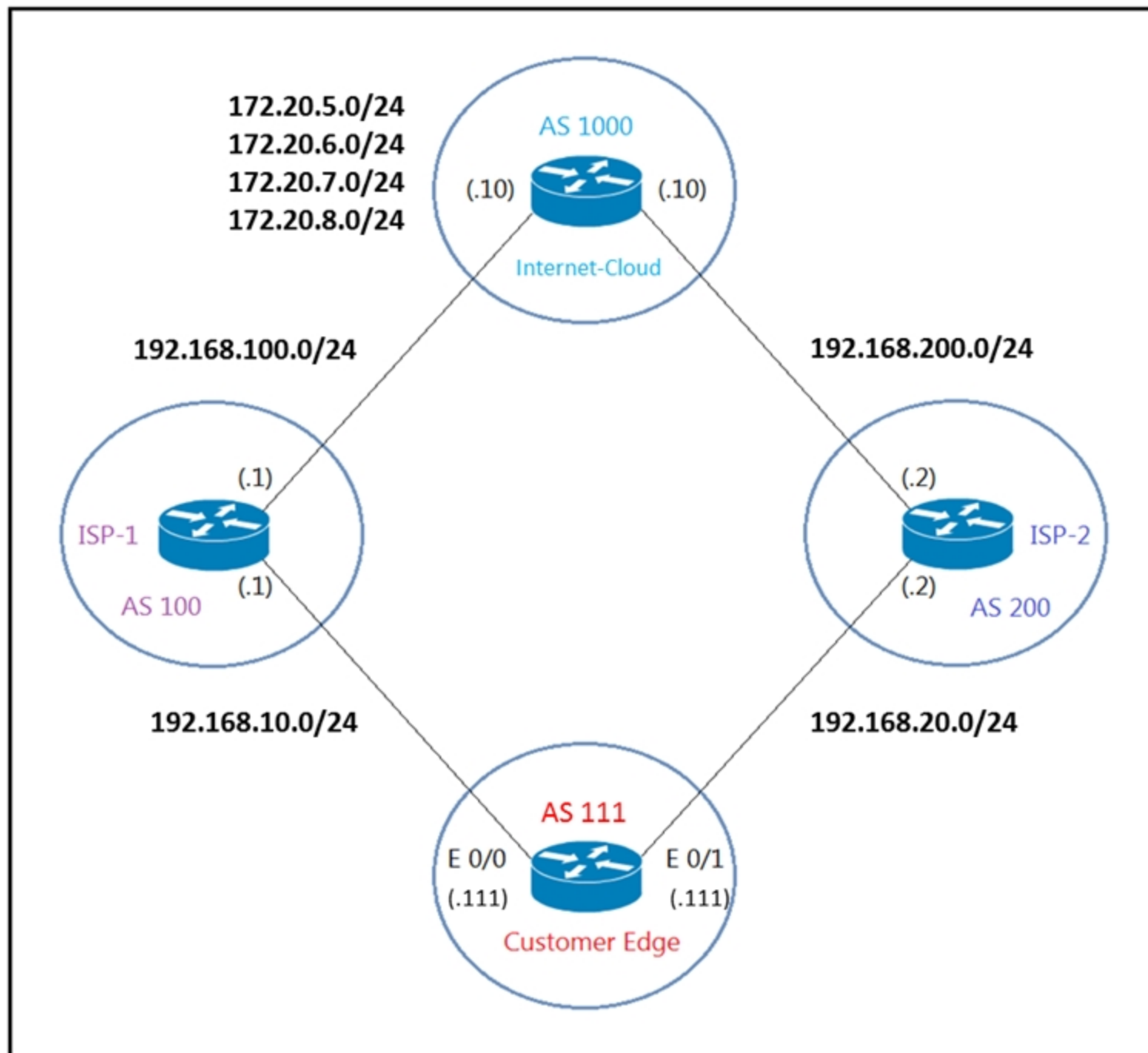D. interface loopback0 ip address 4.4.4.4 255.255.255.0 ip ospf interface type network

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 71

Topic #: 1

[All 300-410 Questions]


```
Customer-Edge

ip prefix-list PLIST1 permit 172.20.5.0/24
!
route-map SETLP permit 10
 match ip address prefix-list PLIST1
 set local-preference 90
!
router bgp 111
 neighbor 192.168.10.1 remote-as 100
 neighbor 192.168.10.1 route-map SETLP in
 neighbor 192.168.20.2 remote-as 200
```

AS 111 wanted to use AS 200 as the preferred path for 172.20.5.0/24 and AS 100 as the backup. After the configuration, AS 100 is not used for any other routes. Which configuration resolves the issue?

A. route-map SETLP permit 10 match ip address prefix-list PLIST1 set local-preference 99 route-map SETLP permit 20

B. router bgp 111 no neighbor 192.168.10.1 route-map SETLP in neighbor 192.168.20.2 route-map SETLP in

C. route-map SETLP permit 10 match ip address prefix-list PLIST1 set local-preference 110 route-map SETLP permit 20

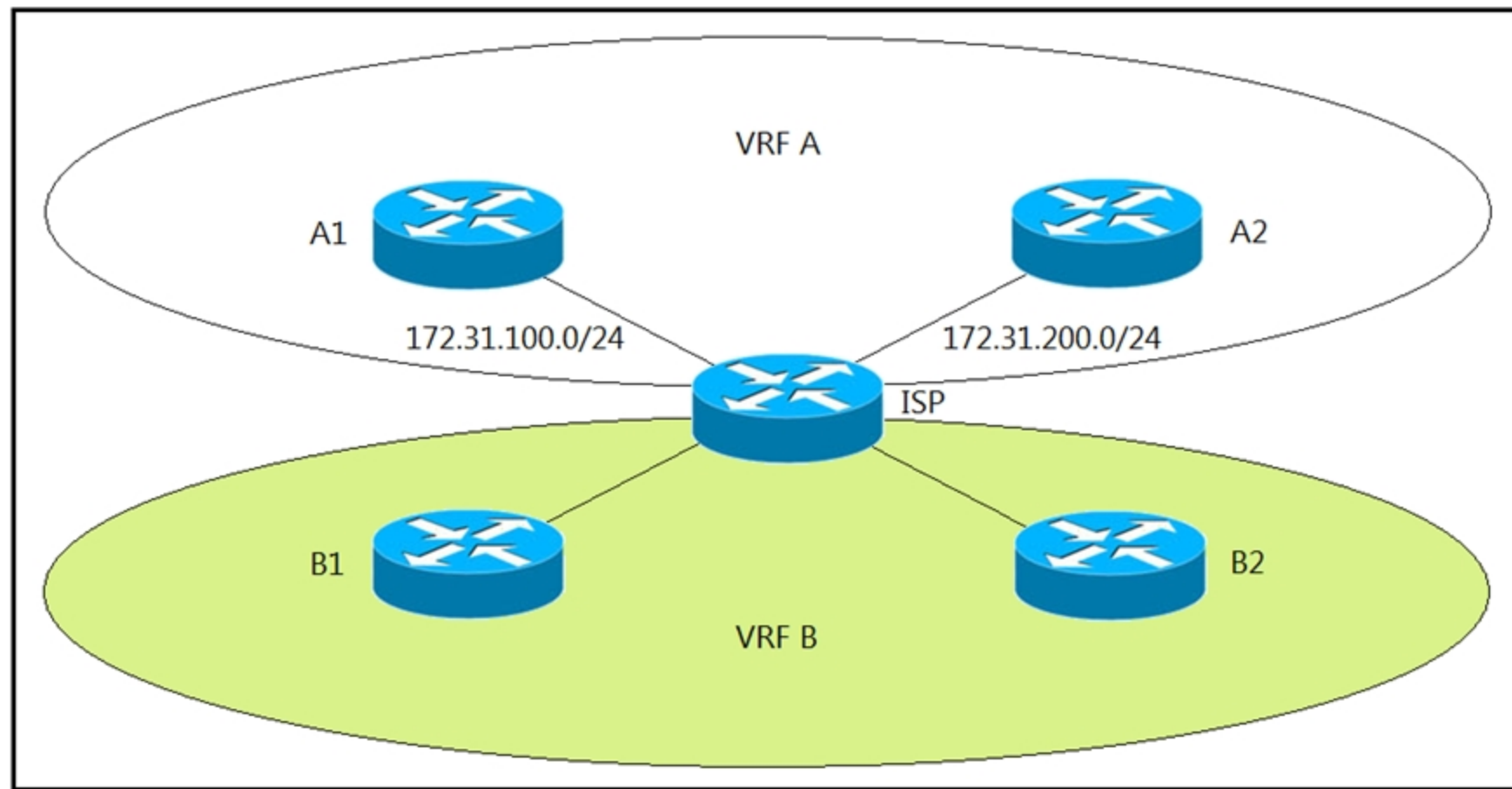D. router bgp 111 no neighbor 192.168.10.1 route-map SETLP in neighbor 192.168.10.1 route-map SETLP out

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 72

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The ISP router is fully configured for customer A and customer B using the VRF-Lite feature.

What is the minimum configuration required for customer A to communicate between routers A1 and A2?

A. A1 interface fa0/0 description To->ISP ip add 172.31.100.1 255.255.255.0 no shut ! router ospf 100 net 172.31.100.1 0.0.0.255 area 0 A2 interface fa0/0 description To->ISP ip add 172.31.200.1 255.255.255.0 no shut ! router ospf 100 net 172.31.200.1 0.0.0.255 area 0

B. A1 interface fa0/0 description To->ISP ip vrf forwarding A ip add 172.31.100.1 255.255.255.0 no shut ! router ospf 100 vrf A net 172.31.200.1 0.0.0.255 area 0 A2 interface fa0/0 description To->ISP ip vrf forwarding A ip add 172.31.100.1 255.255.255.0 no shut ! router ospf 100 vrf A net 172.31.200.1 0.0.0.255 area 0

C. A1 interface fa0/0 description To->ISP ip vrf forwarding A ip add 172.31.100.1 255.255.255.0 no shut ! router ospf 100 net 172.31.100.1 0.0.0.255 area 0 A2 interface fa0/0 description To->ISP ip vrf forwarding A ip add 172.31.200.1 255.255.255.0 no shut ! router ospf 100 net 172.31.200.1 0.0.0.255 area 0

D. A1 interface fa0/0 description To->ISP ip add 172.31.200.1 255.255.255.0 no shut ! router ospf 100 net 172.31.200.1 0.0.0.255 area 0 A2 interface fa0/0 description To->ISP ip add 172.31.100.1 255.255.255.0 no shut ! router ospf 100 net 172.31.100.1 0.0.0.255 area 0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 73

Topic #: 1

[All 300-410 Questions]

An engineer is implementing a coordinated change with a server team. As part of the change, the engineer must configure interface GigabitEthernet2 in an existing VRF "RED" then move the interface to an existing VRF "BLUE" when the server team is ready. The engineer configured interface GigabitEthernet2 in VRF "RED":

interface GigabitEthernet2

description Migration ID: B410A82D0935G35

vrf forwarding RED

ip address 10.0.0.0 255.255.255.254

negotiation auto

Which configuration completes the change?

A. interface GigabitEthernet2 no vrf forwarding RED vrf forwarding BLUE ip address 10.0.0.0 255.255.255.254

B. interface GigabitEthernet2 no ip address vrf forwarding BLUE

C. interface GigabitEthernet2 no vrf forwarding RED vrf forwarding BLUE

D. interface GigabitEthernet2 no ip address ip address 10.0.0.0 255.255.255.254 vrf forwarding BLUE
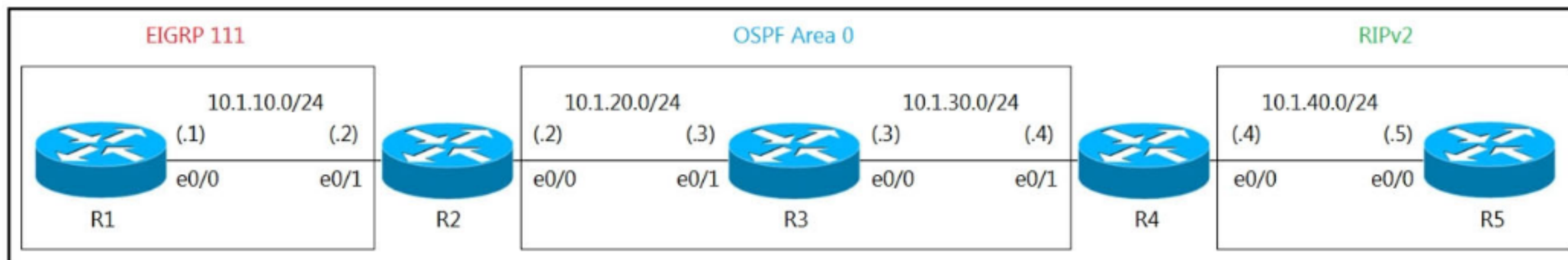
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 74

Topic #: 1

[All 300-410 Questions]


```
R2
route-map E20 permit 10
 set tag 111
!
router eigrp 111
 redistribute ospf 1 metric 10 10 10 10 10
!
router ospf 1
 redistribute eigrp 111 route-map E20 subnets

R4
router rip
 redistribute ospf 1 metric 1
!
router ospf 1
 redistribute rip subnets
```

Refer to the exhibit. R5 should not receive any routes originated in the EIGRP domain. Which set of configuration changes removes the EIGRP routes from the R5 routing table to fix the issue?

A. R4 route-map O2R deny 10 match tag 111 route-map O2R permit 20 ! router rip redistribute ospf 1 route-map O2R metric 1

B. R2 route-map E20 deny 20 R4 route-map O2R deny 10 match tag 111 ! router rip redistribute ospf 1 route-map O2R metric 1

C. R4 route-map O2R permit 10 match tag 111 route-map O2R deny 20 ! router rip redistribute ospf 1 route-map O2R metric 1

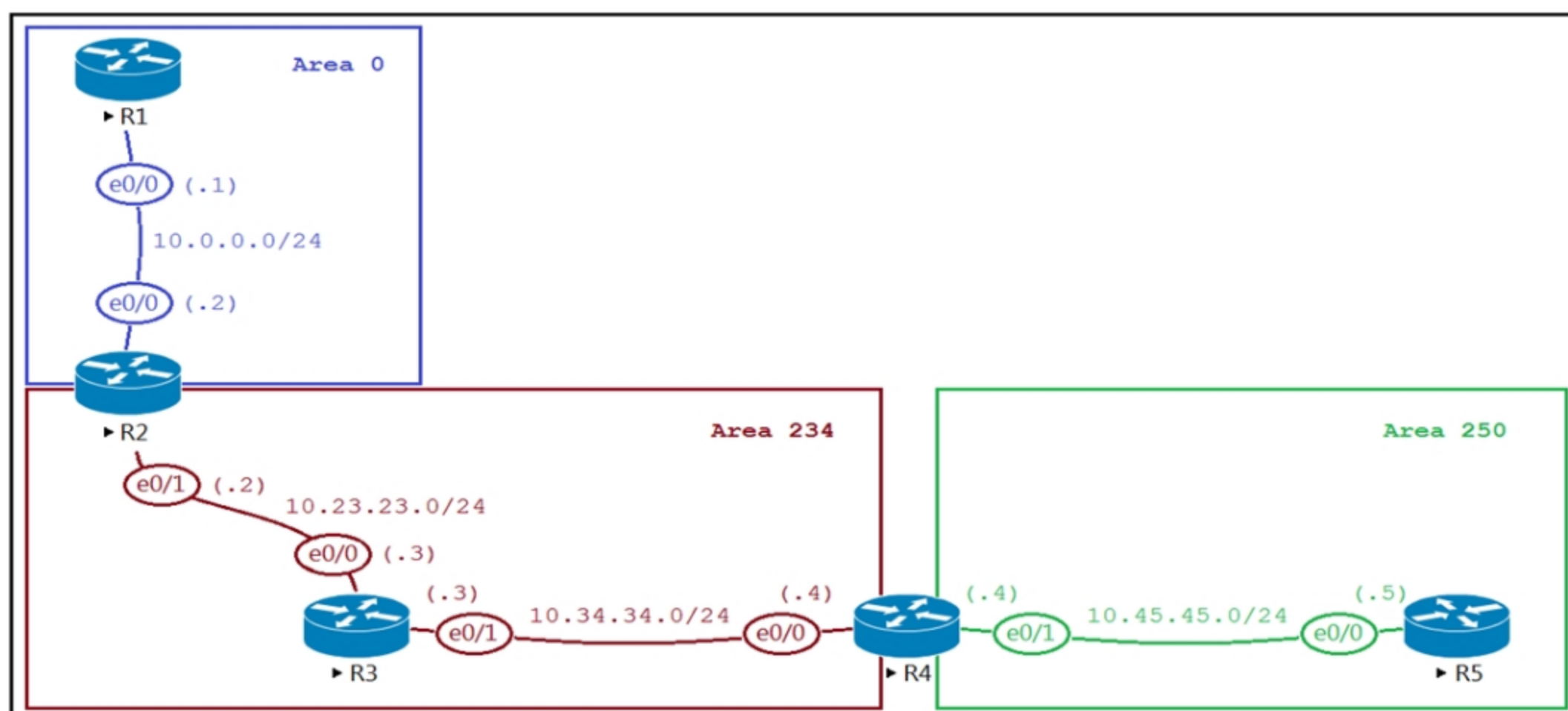D. R4 route-map O2R deny 10 match tag 111 ! router rip redistribute ospf 1 route-map O2R metric 1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 75

Topic #: 1

[All 300-410 Questions]

ABR Configurations

R2	R4
router ospf 1	router ospf 1
router-id 0.0.0.22	router-id 0.0.0.44
area 234 virtual-link 10.34.34.4	area 234 virtual-link 10.23.23.2
network 10.0.0.0 0.0.0.255 area 0	network 10.34.34.0 0.0.0.255 area 234
network 10.2.2.0 0.0.0.255 area 0	network 10.44.44.0 0.0.0.255 area 234
network 10.22.22.0 0.0.0.255 area 234	network 10.45.45.0 0.0.0.255 area 250
network 10.23.23.0 0.0.0.255 area 234	

Virtual Link Status

R4#sh ip ospf virtual-links

Virtual Link OSPF_VL0 to router 10.23.23.2 is down

Run as demand circuit

DoNotAge LSA allowed.

Transit area 234

Topology-MTID	Cost	Disabled	Shutdown	Topology Name
0	65535	no	no	Base

Transmit Delay is 1 sec, State DOWN,

Refer to the exhibit. The network administrator configured the network to connect two disjointed networks and all the connectivity is up except the virtual link, which causes area 250 to be unreachable.

Which two configurations resolve this issue? (Choose two.)

A. R2 router ospf 1 no area 234 virtual-link 10.34.34.4 area 234 virtual-link 0.0.0.44

B. R2 router ospf 1 no area 234 virtual-link 10.34.34.4 area 0 virtual-link 0.0.0.44

C. R4 router ospf 1 no area 234 virtual-link 10.23.23.2 area 0 virtual-link 0.0.0.22

D. R2 router ospf 1 router-id 10.23.23.2

E. R4 router ospf 1 no area 234 virtual-link 10.23.23.2 area 234 virtual-link 0.0.0.22
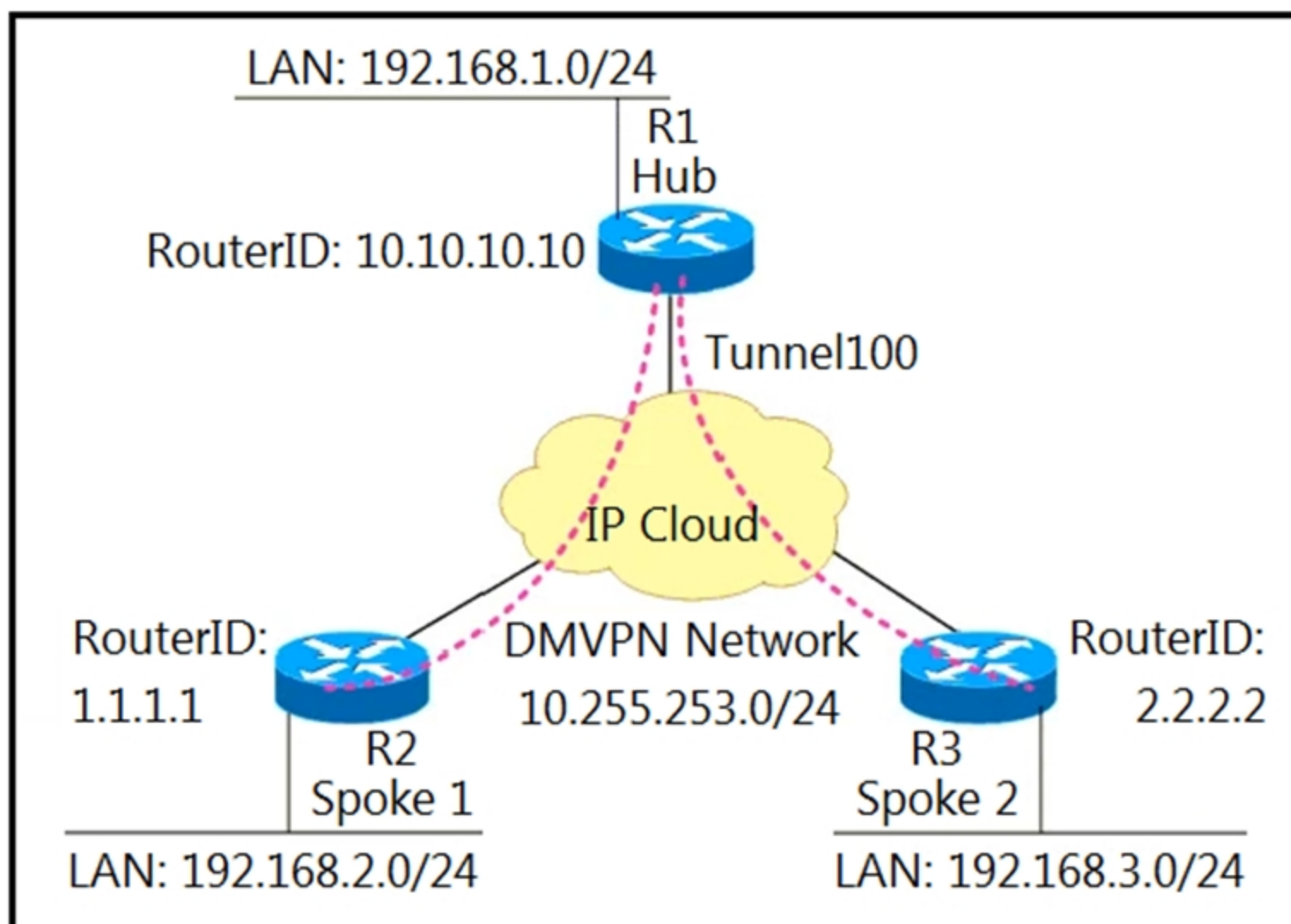
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 76

Topic #: 1

[All 300-410 Questions]


```
*Mar 1 17:19:04.051: %OSPF-5-ADJCHG: Process 100, Nbr 1.1.1.1 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:06.375: %OSPF-5-ADJCHG: Process 100, Nbr 1.1.1.1 on Tunnel100 from FULL to DOWN, Neighbor Down: Adjacency forced to reset
*Mar 1 17:19:06.627: %OSPF-5-ADJCHG: Process 100, Nbr 2.2.2.2 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:10.123: %OSPF-5-ADJCHG: Process 100, Nbr 2.2.2.2 on Tunnel100 from FULL to DOWN, Neighbor Down: Adjacency forced to reset
*Mar 1 17:19:14.499: %OSPF-5-ADJCHG: Process 100, Nbr 10.10.10.10 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:19.139: %OSPF-5-ADJCHG: Process 100, Nbr 10.10.10.10 on Tunnel100 from EXSTART to DOWN, Neighbor Down: Interface down or detached
*Mar 1 17:01:51.975: %OSPF-4-NONEIGHBOR: Received database description from unknown neighbor 192.168.1.1
*Mar 1 17:01:57.783: OSPF: Rcv LS UPD from 192.168.1.1 on Tunnel100 length 88 LSA count 1
*Mar 1 17.01.57.155: OSPF: Send UPD to 10.255.253.1 on Tunnel100 length 100 LSA count 2
```

Refer to the exhibit. A network administrator sets up an OSPF routing protocol for a DMVPN network on the hub router.

Which configuration command is required to establish a DMVPN tunnel with multiple spokes?

    A. ip ospf network point-to-point on the hub router

    B. ip ospf network point-to-multipoint on one spoke router

    C. ip ospf network point-to-multipoint on both spoke routers

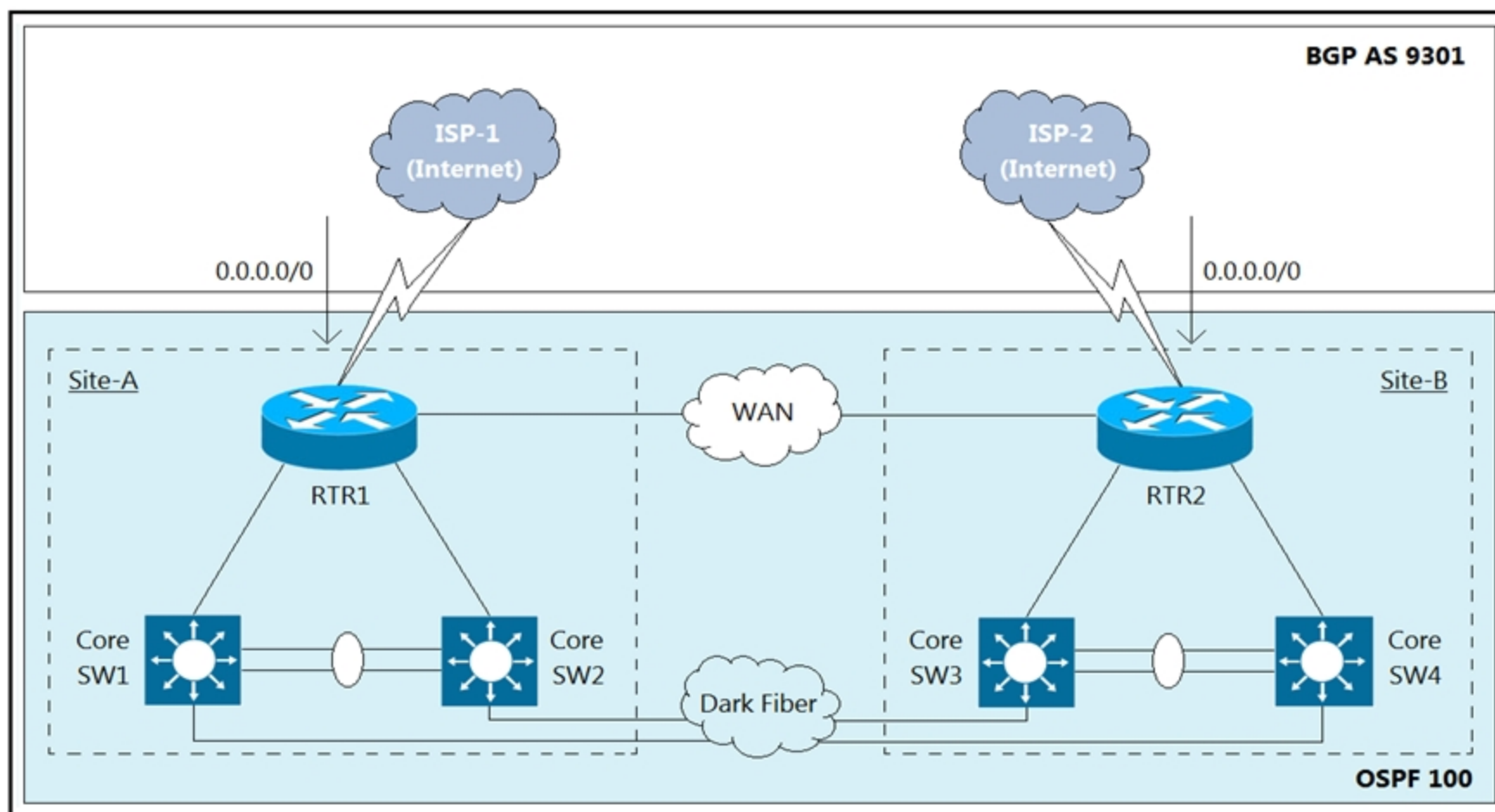   D. ip ospf network point-to-point on both spoke routers

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 77

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The Internet traffic should always prefer Site-A ISP-1 if the link and BGP connection are up; otherwise, all Internet traffic should go to ISP-2. Redistribution is configured between BGP and OSPF routing protocols, and it is not working as expected.

What action resolves the issue?

A. Set OSPF Cost 200 at Site-A RTR1, and set OSPF Cost 100 at Site-B RTR2.

B. Set metric-type 2 at Site-A RTR1, and set metric-type 1 at Site-B RTR2.

C. Set metric-type 1 at Site-A RTR1, and set metric-type 2 at Site-B RTR2.

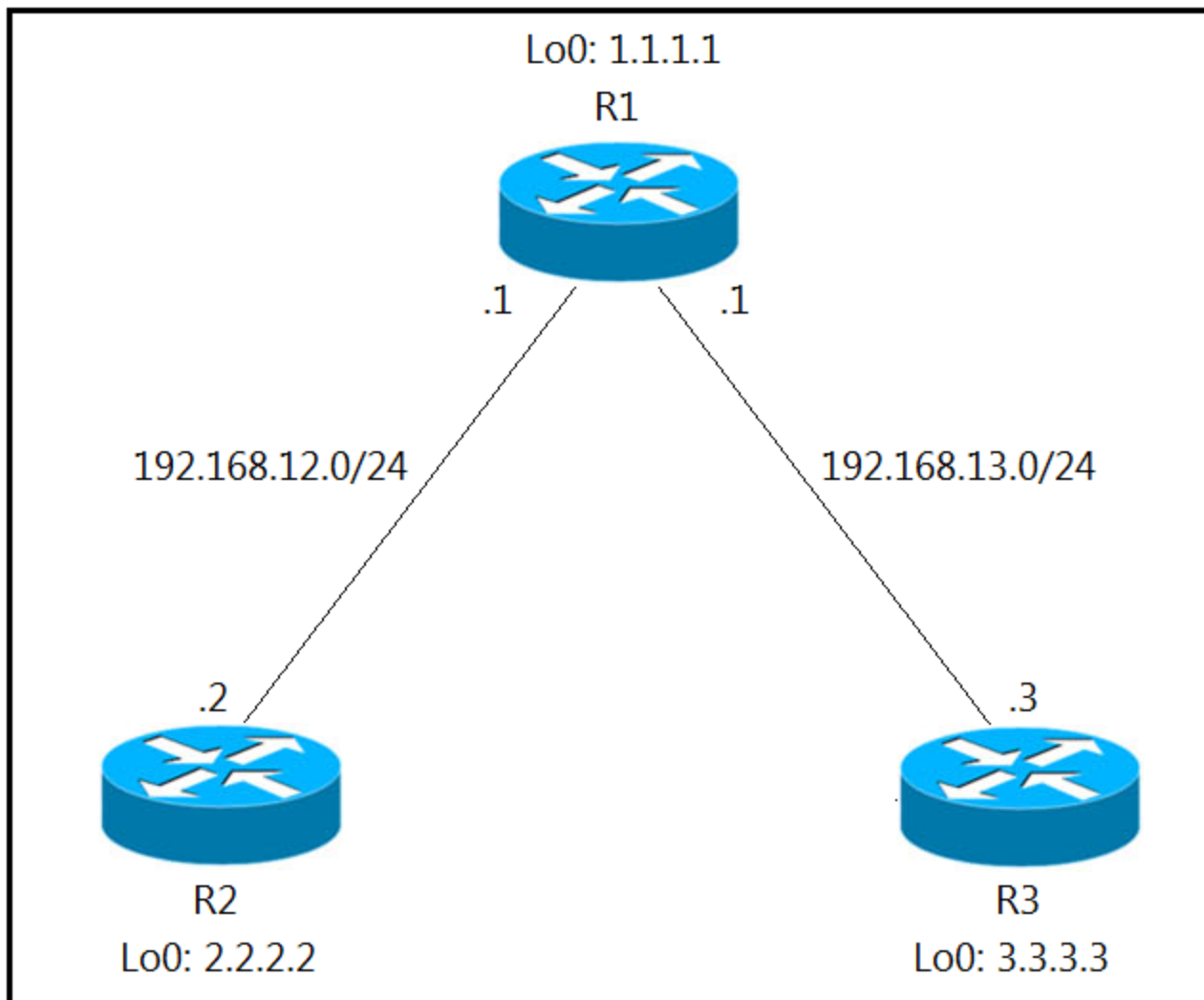D. Set OSPF Cost 100 at Site-A RTR1, and set OSPF Cost 200 at Site-B RTR2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 78

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer has configured R1 as EIGRP stub router. After the configuration, router R3 failed to reach to R2 loopback address. Which action advertises R2 loopback back into the R3 routing table?

A. Add a static route for R2 loopback address in R1 and redistribute it to advertise to R3.

B. Use a leak map on R1 that matches the required prefix and apply it with the distribute list command toward R3.

C. Use a leak map on R3 that matches the required prefix and apply it with the EIGRP stub feature.

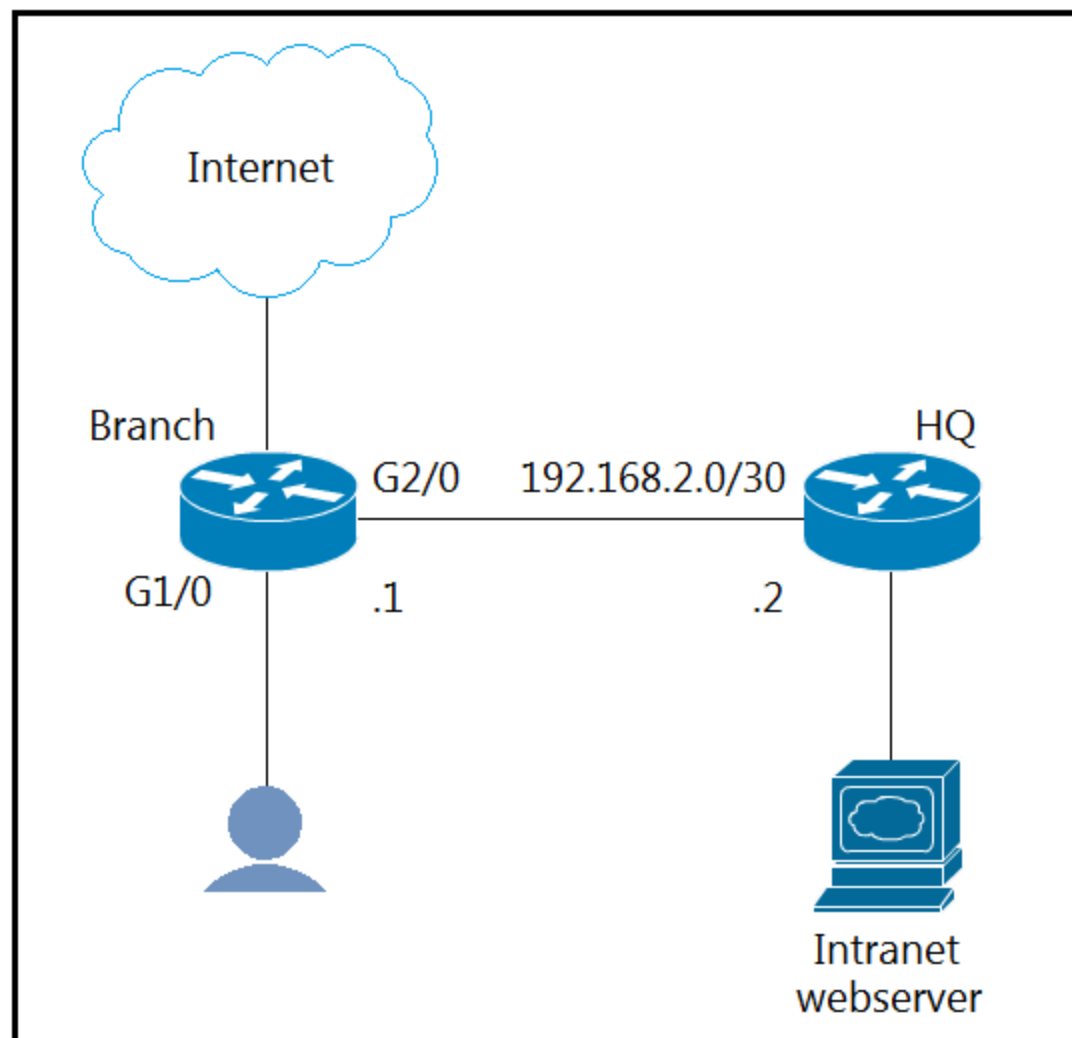D. Add a static null route for R2 loopback address in R1 and redistribute it to advertise to R3.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 79

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The branch router is configured with a default route toward the Internet and has no routes configured for the HQ site that is connected through interface G2/0. The HQ router is fully configured and does not require changes.

Which configuration on the branch router makes the intranet website (TCP port 80) available to the branch office users?

A. access-list 101 permit tcp any any eq 80 access-list 102 permit tcp any host intranet-webserver-ip ! route-map pbr permit 10 match ip address 101 set ip next-hop 192.168.2.2 route-map pbr permit 20 match ip address 102 set ip next-hop 192.168.2.2 ! interface G2/0 ip policy route-map pbr

B. access-list 100 permit tcp host intranet-webserver-ip eq 80 any ! route-map pbr permit 10 match ip address 100 set ip next-hop 192.168.2.2 ! interface G1/0 ip policy route-map pbr

C. access-list 100 permit tcp any host intranet-webserver-ip eq 80 ! route-map pbr permit 10 match ip address 100 set ip next-hop 192.168.2.2 ! interface G2/0 ip policy route-map pbr

D. access-list 101 permit tcp any any eq 80 access-list 102 permit tcp any host intranet-webserver-ip ! route-map pbr permit 10 match ip address 101 102 set ip next-hop 192.168.2.2 ! interface G1/0 ip policy route-map pbr

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 80

Topic #: 1

[All 300-410 Questions]

R1 and R2 are configured as eBGP neighbors. R1 is in AS100 and R2 is in AS200. R2 is advertising these networks to R1:

172.16.16.0/20

172.16.3.0/24

172.16.4.0/24

192.168.1.0/24

192.168.2.0/24

172.16.0.0/16

The network administrator on R1 must improve convergence by blocking all subnets of 172.16.0.0/16 major network with a mask lower than 23 from coming in.

Which set of configurations accomplishes the task on R1?

A. ip prefix-list PL-1 deny 172.16.0.0/16 ge 23 ip prefix-list PL-1 permit 0.0.0.0/0 le 32 ! router bgp 100 neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 prefix-list PL-1 in

B. ip prefix-list PL-1 deny 172.16.0.0/16 le 23 ip prefix-list PL-1 permit 0.0.0.0/0 le 32 ! router bgp 100 neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 prefix-list PL-1 in

C. ip prefix-list PL-1 deny 172.16.0.0/16 ip prefix-list PL-1 permit 0.0.0.0/0 ! router bgp 100 neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 prefix-list PL-1 in

D. access-list 1 deny 172.16.0.0 0.0.254.255 access-list 1 permit any ! router bgp 100 neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 distribute-list 1 in

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 81

Topic #: 1

[All 300-410 Questions]

```
R1#sh ip route
     10.0.0.0/8 is variably subnetted, 3 subnets, 1 masks
D       10.1.2.0/24 [90/409600] via 10.1.100.10, 00:08:45,
FastEthernet0/0
D       10.1.1.0/24 [90/409600] via 10.1.100.10, 00:08:45,
FastEthernet0/0
C       10.1.100.0/24 is directly connected, FastEthernet0/0
```

Refer to the exhibit. An engineer configures the router 10.1.100.10 for EIGRP autosummarization so that R1 should receive the summary route of 10.0.0.0/8.

However, R1 receives more specific /24 routes.

Which action resolves this issue?

A. Router R1 should configure ip summary address eigrp (AS number) 10.0.0.0 255.0.0.0 for the R1 Fast Ethernet 0/0 connected interface.

B. Router R1 should configure ip route 10.0.0.0 255.0.0.0 null 0 for the routes that are received on R1.

C. Router 10.1.100.10 should configure ip route 10.0.0.0 255.0.0.0 null 0 for the routes that are summarized toward R1.

D. Router 10.1.100.10 should configure ip summary address eigrp (AS number) 10.0.0.0 255.0.0.0 for the R1 Fast Ethernet 0/0 connected interface.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 82

Topic #: 1

[All 300-410 Questions]

```
R1 (config)# ip vrf CCNP
R1 (config-vrf)# rd 1:100
R1 (config-vrf)# exit
R1 (config)# interface Loopback0
R1 (config-if)# ip address 10.1.1.1 255.255.255.0
R1 (config-if)# ip vrf forwarding CCNP
R1 (config-if)# exit
R1 (config)# exit
R1# ping vrf CCNP 10.1.1.1
% Unrecognized host or address, or protocol not running.
```

Refer to the exhibit. Which command must be configured to make VRF CCNP work?

A. interface Loopback0 ip address 10.1.1.1 255.255.255.0 vrf forwarding CCNP

B. interface Loopback0 ip address 10.1.1.1 255.255.255.0

C. interface Loopback0 vrf forwarding CCNP

D. interface Loopback0 ip address 10.1.1.1 255.255.255.0 ip vrf forwarding CCNP
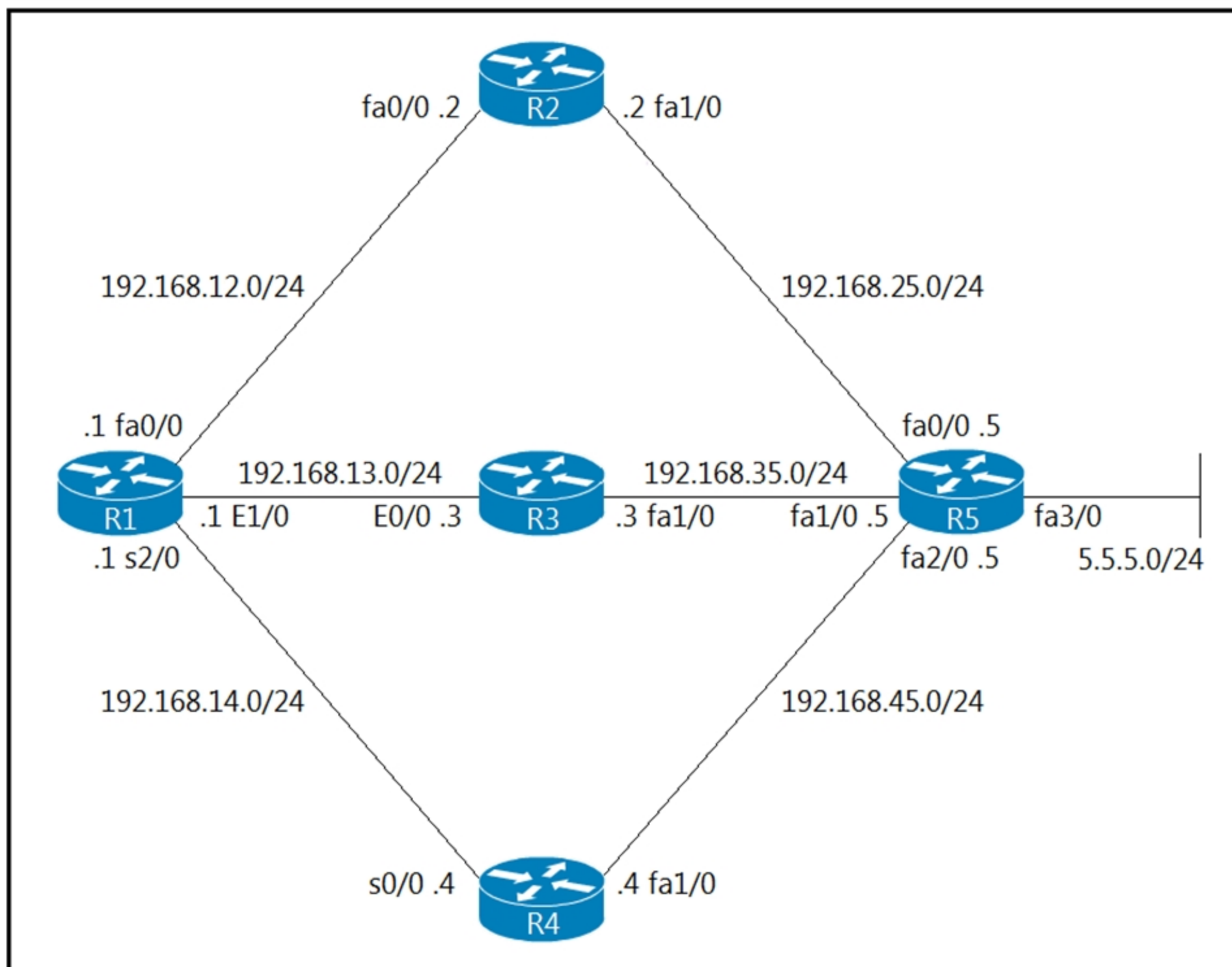
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 83

Topic #: 1

[All 300-410 Questions]

```
R1#show ip route 5.5.5.0
Routing entry for 5.5.5.0/24
  Known via "eigrp 1", distance 90, metric 158720, type internal
  Redistributing via eigrp 1
  Last update from 192.168.13.3 on Ethernet1/0, 00:00:40 ago
  Routing Descriptor Blocks:
  * 192.168.13.3, from 192.168.13.3, 00:00:40 ago, via Ehernet1/0
      Route metric is 412160, traffic share count is 23
      Total delay is 6100 microseconds, minimum bandwidth is 10000 Kbit
      Reliability 255/255, minimum MTU 1500 bytes
      Loading 1/255, Hops 2
    192.168.12.2, from 192.168.12.2, 00:00:40 ago, via FastEthernet0/0
      Route metric is 158720, traffic share count is 60
      Total delay is 5200 microseconds, minimum bandwidth is 100000 Kbit
      Reliability 255/255, minimum MTU 1500 bytes
      Loading 1/255, Hops 2
```


Refer to the exhibits. An engineer investigates a routing issue on R1 and finds that traffic destined to 5.5.5.0/24 does not take all of the paths. Which action resolves the issue?

    A. Increase the variance value in EIGRP.

    B. Decrease the variance value in EIGRP.

    C. Remove the adjacency of R3 from EIGRP.

    D. Stop advertising 192.168.13.0/24 in EIGRP.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 84

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the MPLS VPN concepts from the left onto the correct descriptions on the right.

Select and Place:

| route distinguisher | | propagates VPN reachability information |

| route target | | distributes labels for traffic engineering |

| Resource Reservation Protocol | | uniquely identifies a customer prefix |

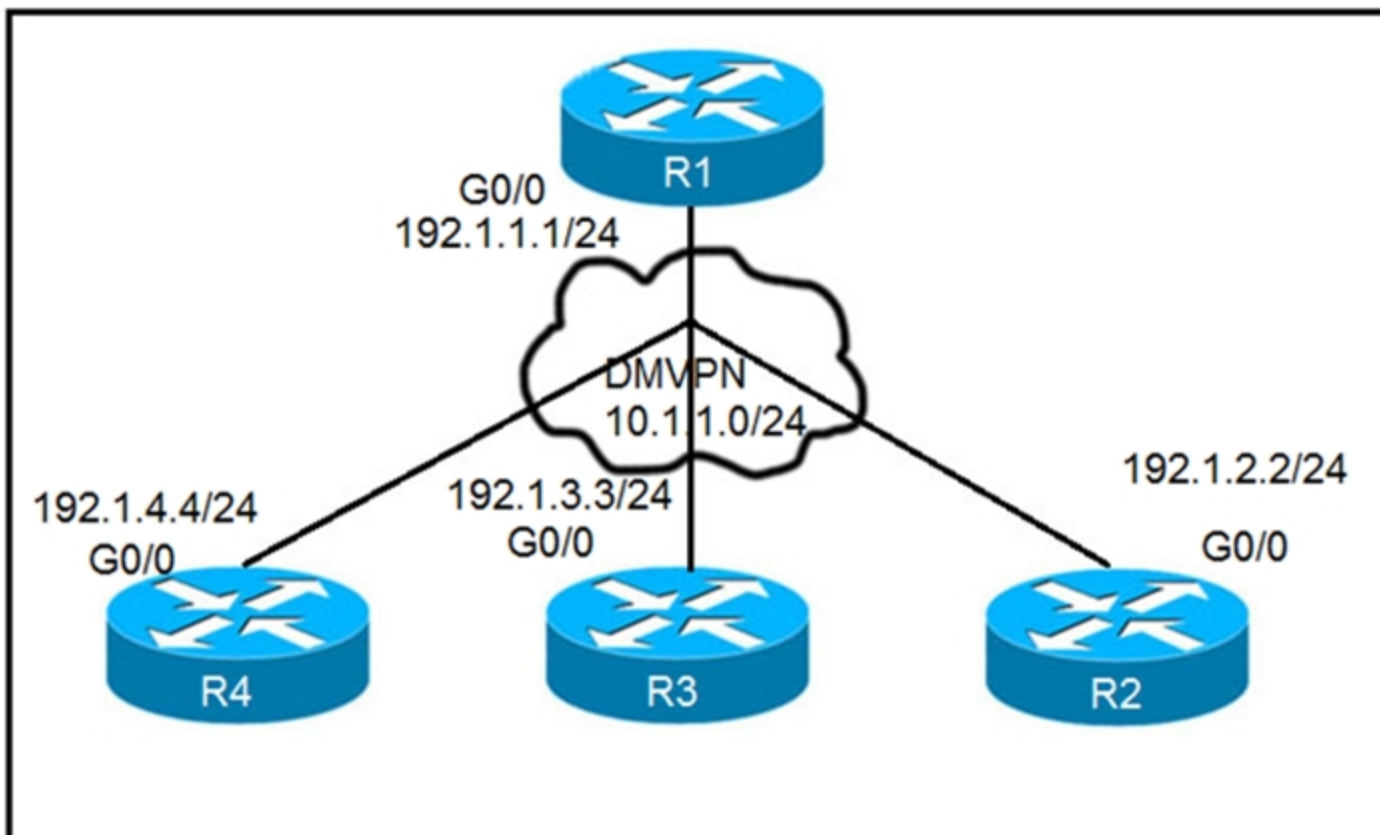| multiprotocol BGP | | controls the import/export of customer prefixes |

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 85

Topic #: 1

[All 300-410 Questions]


```
On R1:
R1(config)# interface tunnel 1
R1(config-if)# ip address 10.1.1.1 255.255.255.0
R1(config-if)# tunnel source 192.1.1.1
R1(config-if)# tunnel mode gre multipoint
R1(config-if)# ip nhrp network-id 111

On R2:
R2(config)# interface tunnel 1
R2(config-if)# ip address 10.1.1.2 255.255.255.0
R2(config-if)# tunnel source FastEthernet0/0
R2(config-if)# tunnel mode gre multipoint
R2(config-if)# ip nhrp network-id 222
R2(config-if)# ip nhrp nhs 10.1.1.1
R2(config-if)# ip nhrp map 10.1.1.1 192.1.1.1

On R3:
R3(config)# interface tunnel 1
R3(config-if)# ip address 10.1.1.3 255.255.255.0
R3(config-if)# tunnel source FastEthernet0/0
R3(config-if)# tunnel mode gre multipoint
R3(config-if)# ip nhrp network-id 333 R3(config-if)# ip nhrp nhs 10.1.1.1
R3(config-if)# ip nhrp map 10.1.1.1 192.1.1.1

On R4: R4(config)# interface tunnel 1
R4(config-if)# ip address 10.1.1.4 255.255.255.0
R4(config-if)# tunnel source FastEthernet0/0
R4(config-if)# tunnel mode gre multipoint
R4(config-if)# ip nhrp network-id 444
R4(config-if)# ip nhrp nhs 10.1.1.1
R4(config-if)# ip nhrp map 10.1.1.1 192.1.1.1
```

Refer to the exhibits. Phase-3 tunnels cannot be established between spoke-to-spoke in DMVPN.

Which two commands are missing? (Choose two.)

A. The ip nhrp redirect command is missing on the spoke routers.

B. The ip nhrp shortcut command is missing on the spoke routers.

C. The ip nhrp redirect command is missing on the hub router.

D. The ip nhrp shortcut command is missing on the hub router.

E. The ip nhrp map command is missing on the hub router.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 86

Topic #: 1

[All 300-410 Questions]

Which protocol is used to determine the NBMA address on the other end of a tunnel when mGRE is used?

A. NHRP

B. IPsec

C. MP-BGP

D. OSPF

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 87

Topic #: 1

[All 300-410 Questions]

A DMVPN single hub topology is using IPsec + mGRE with OSPF.

What should be configured on the hub to ensure it will be the designated router?

A. route map to set the metrics of learned routes to 110

B. tunnel interface of the hub with ip nhrp ospf dr

C. OSPF priority to 0

D. OSPF priority greater than 1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 88

Topic #: 1

[All 300-410 Questions]

What are two purposes of using IPv4 and VPNv4 address-family configurations in a Layer 3 MPLS VPN? (Choose two.)

A. RD is prepended to the IPv4 route to make it unique.

B. The VPNv4 address consists of a 64-bit route distinguisher that is prepended to the IPv4 prefix.

C. MP-BGP is used to allow overlapping IPv4 addresses between customers to advertise through the network.

D. The IPv4 address is needed to tag the MPLS label.

E. The VPNv4 address is used to advertise the MPLS VPN label.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 89

Topic #: 1

[All 300-410 Questions]

What are two functions of MPLS Layer 3 VPNs? (Choose two.)

A. It is used for transparent point-to-multipoint connectivity between Ethernet links/sites.

B. A packet with node segment ID is forwarded along with shortest path to destination.

C. Customer traffic is encapsulated in a VPN label when it is forwarded in MPLS network.

D. BGP is used for signaling customer VPNv4 routes between PE nodes.

E. LDP and BGP can be used for Pseudowire signaling.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 90

Topic #: 1

[All 300-410 Questions]

What are two MPLS label characteristics? (Choose two.)

A. The label edge router swaps labels on the received packets.

B. Labels are imposed in packets after the Layer 3 header.

C. LDP uses TCP for reliable delivery of information.

D. An MPLS label is a short identifier that identifies a forwarding equivalence class.

E. A maximum of two labels can be imposed on an MPLS packet.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 91

Topic #: 1

[All 300-410 Questions]

Which command allows traffic to load-balance in an MPLS Layer 3 VPN configuration?

A. multi-paths eibgp 2

B. maximum-paths 2

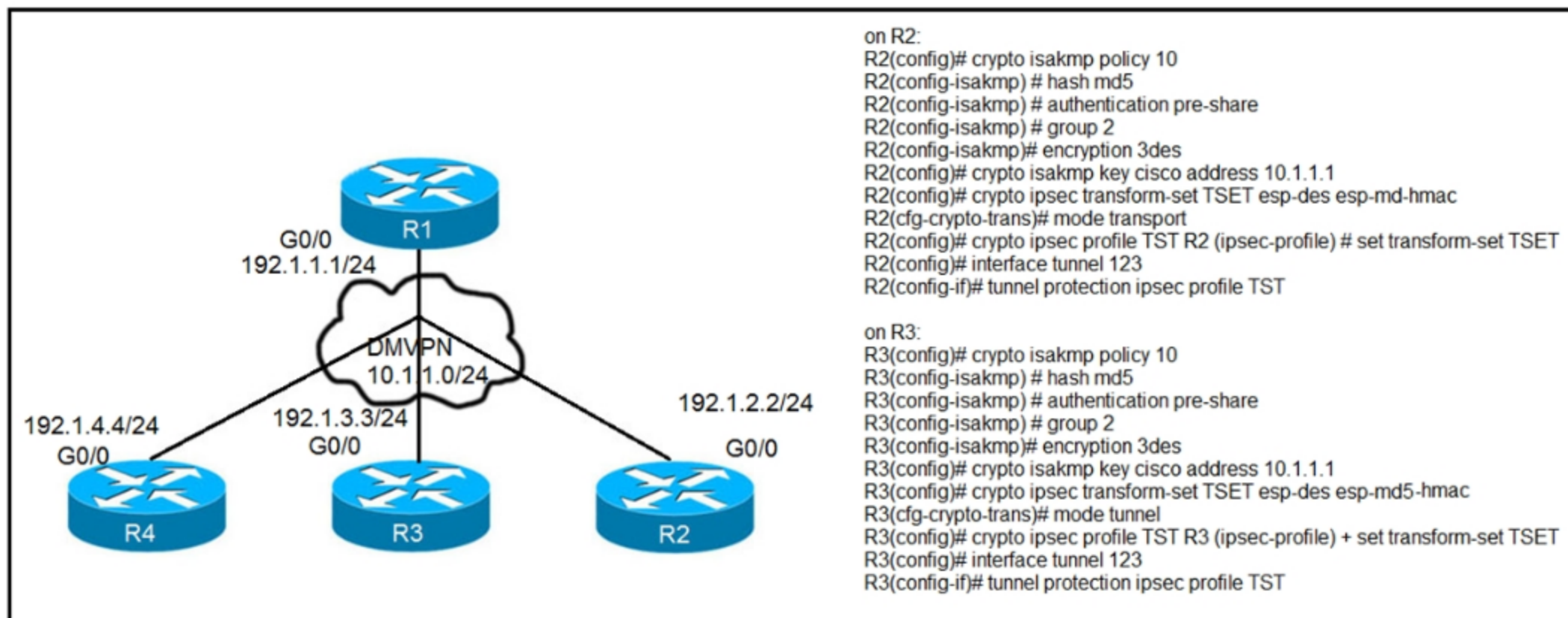C. maximum-paths ibgp 2

D. multi-paths 2

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 92

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. After applying IPsec, the engineer observed that the DMVPN tunnel went down, and both spoke-to-spoke and hub were not establishing. Which two actions resolve the issue? (Choose two.)


```
on R2:
R2(config)# crypto isakmp policy 10
R2(config-isakmp) # hash md5
R2(config-isakmp) # authentication pre-share
R2(config-isakmp) # group 2
R2(config-isakmp)# encryption 3des
R2(config)# crypto isakmp key cisco address 10.1.1.1
R2(config)# crypto ipsec transform-set TSET esp-des esp-md-hmac
R2(cfg-crypto-trans)# mode transport
R2(config)# crypto ipsec profile TST R2 (ipsec-profile) # set transform-set TSET
R2(config)# interface tunnel 123
R2(config-if)# tunnel protection ipsec profile TST

on R3:
R3(config)# crypto isakmp policy 10
R3(config-isakmp) # hash md5
R3(config-isakmp) # authentication pre-share
R3(config-isakmp) # group 2
R3(config-isakmp)# encryption 3des
R3(config)# crypto isakmp key cisco address 10.1.1.1
R3(config)# crypto ipsec transform-set TSET esp-des esp-md5-hmac
R3(cfg-crypto-trans)# mode tunnel
R3(config)# crypto ipsec profile TST R3 (ipsec-profile) + set transform-set TSET
R3(config)# interface tunnel 123
R3(config-if)# tunnel protection ipsec profile TST
```

R1
G0/0
192.1.1.1/24

DMVPN
10.1.1.0/24

192.1.4.4/24
G0/0
R4

192.1.3.3/24
G0/0
R3

192.1.2.2/24
G0/0
R2

A. Change the mode from mode tunnel to mode transport on R3.

B. Remove the crypto isakmp key cisco address 10.1.1.1 on R2 and R3.

C. Configure the crypto isakmp key cisco address 192.1.1.1 on R2 and R3.

D. Configure the crypto isakmp key cisco address 0.0.0.0 on R2 and R3.

E. Change the mode from mode transport to mode tunnel on R2.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 93

Topic #: 1

[All 300-410 Questions]

Which statement about route distinguishers in an MPLS network is true?

A. Route distinguishers allow multiple instances of a routing table to coexist within the edge router.

B. Route distinguishers are used for label bindings.

C. Route distinguishers make a unique VPNv4 address across the MPLS network.

D. Route distinguishers define which prefixes are imported and exported on the edge router.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 94

Topic #: 1

[All 300-410 Questions]

Which statement about MPLS LDP router ID is true?

A. If not configured, the operational physical interface is chosen as the router ID even if a loopback is configured.

B. The loopback with the highest IP address is selected as the router ID.

C. The MPLS LDP router ID must match the IGP router ID.

D. The force keyword changes the router ID to the specified address without causing any impact.
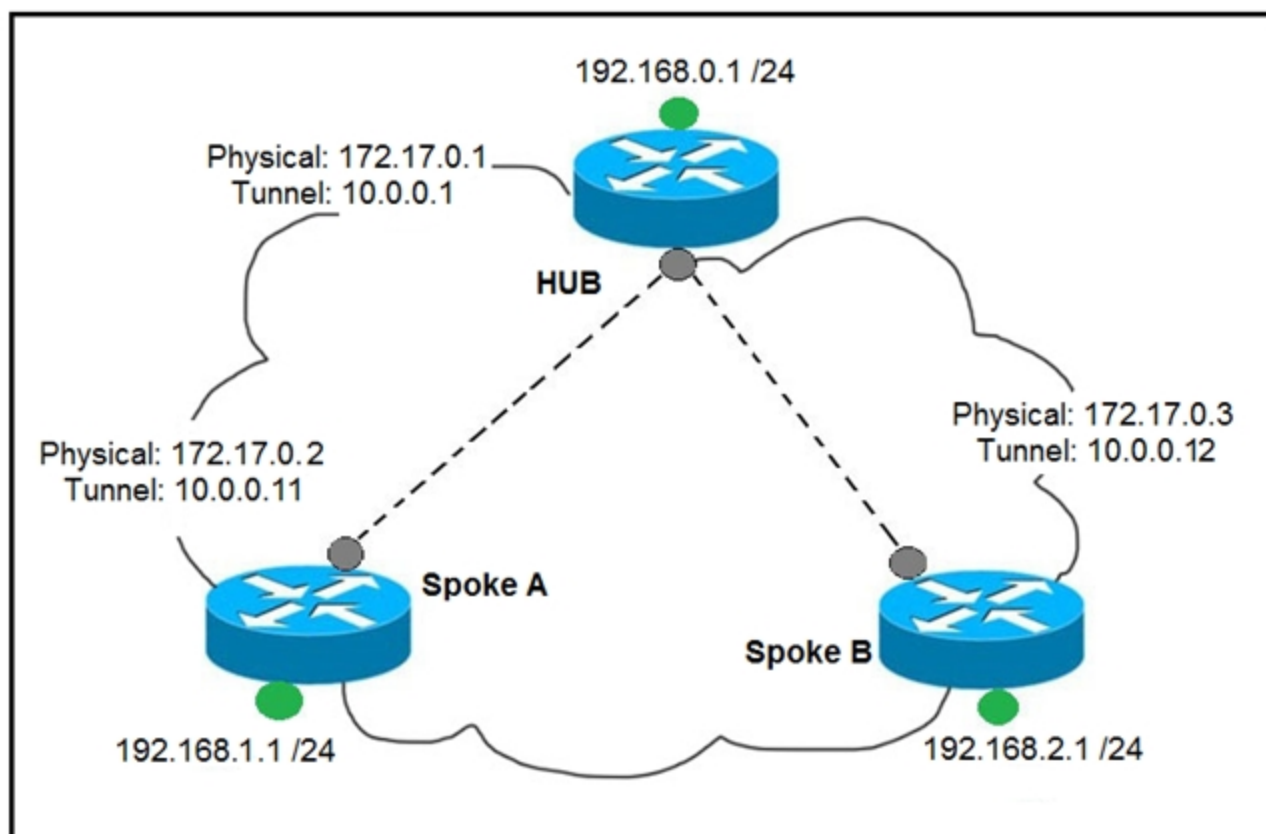
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 95

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Which interface configuration must be configured on the spoke A router to enable a dynamic DMVPN tunnel with the spoke B router?

A.

interface Tunnel0
description mGRE – DMVPN Tunnel
ip address 10.0.0.11 255.255.255.0
ip nhrp map multicast dynamic
ip nhrp network-id 1
tunnel source 10.0.0.1
tunnel destination FastEthernet 0/0
tunnel mode gre multipoint

B.

interface Tunnel0
ip address 10.0.0.11 255.255.255.0
ip nhrp network-id 1
tunnel source FastEthernet 0/0
tunnel mode gre multipoint
ip nhrp nhs 10.0.0.1
ip nhrp map 10.0.0.1 172.17.0.1

C.

interface Tunnel0
ip address 10.1.0.11 255.255.255.0
ip nhrp network-id 1
tunnel source 1.1.1.10
ip nhrp map 10.0.0.11 172.17.0.2
tunnel mode gre

D.

interface Tunnel0
ip address 10.0.0.11 255.255.255.0
ip nhrp map multicast static
ip nhrp network-id 1
tunnel source 10.0.0.1
tunnel mode gre multipoint

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 96

Topic #: 1

[All 300-410 Questions]

Which list defines the contents of an MPLS label?

- A. 20-bit label; 3-bit traffic class; 1-bit bottom stack; 8-bit TTL

- B. 32-bit label; 3-bit traffic class; 1-bit bottom stack; 8-bit TTL

- C. 20-bit label; 3-bit flow label; 1-bit bottom stack; 8-bit hop limit

- D. 32-bit label; 3-bit flow label; 1-bit bottom stack; 8-bit hop limit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 97

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. What does the imp-null tag represent in the MPLS VPN cloud?

```
Router# show tag-switching tdp bindings
(…)
tib entry: 10.10.10.1/32, rev 31
        local binding: tag: 18
        remote binding: tsr: 10.10.10.1:0, tag: imp-null
        remote binding: tsr: 10.10.10.2:0, tag: 18
        remote binding: tsr: 10.10.10.6:0, tag: 21
tib entry: 10.10.10.2/32, rev 22
        local binding: tag: 17
        remote binding: tsr: 10.10.10.2:0, tag: imp-null
        remote binding: tsr: 10.10.10.1:0, tag: 19
        remote binding: tsr: 10.10.10.6:0, tag: 22
```

A. Pop the label

B. Impose the label

C. Include the EXP bit

D. Exclude the EXP bit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 98

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the MPLS terms from the left onto the correct definitions on the right.

Select and Place:

| PE | | device that forwards traffic based on labels |

| P | | path that the labeled packet takes |

| CE | | device that is unaware of MPLS labeling |

| LSP | | device that removes and adds the MPLS labeling |

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 99

Topic #: 1

[All 300-410 Questions]

Which transport layer protocol is used to form LDP sessions?
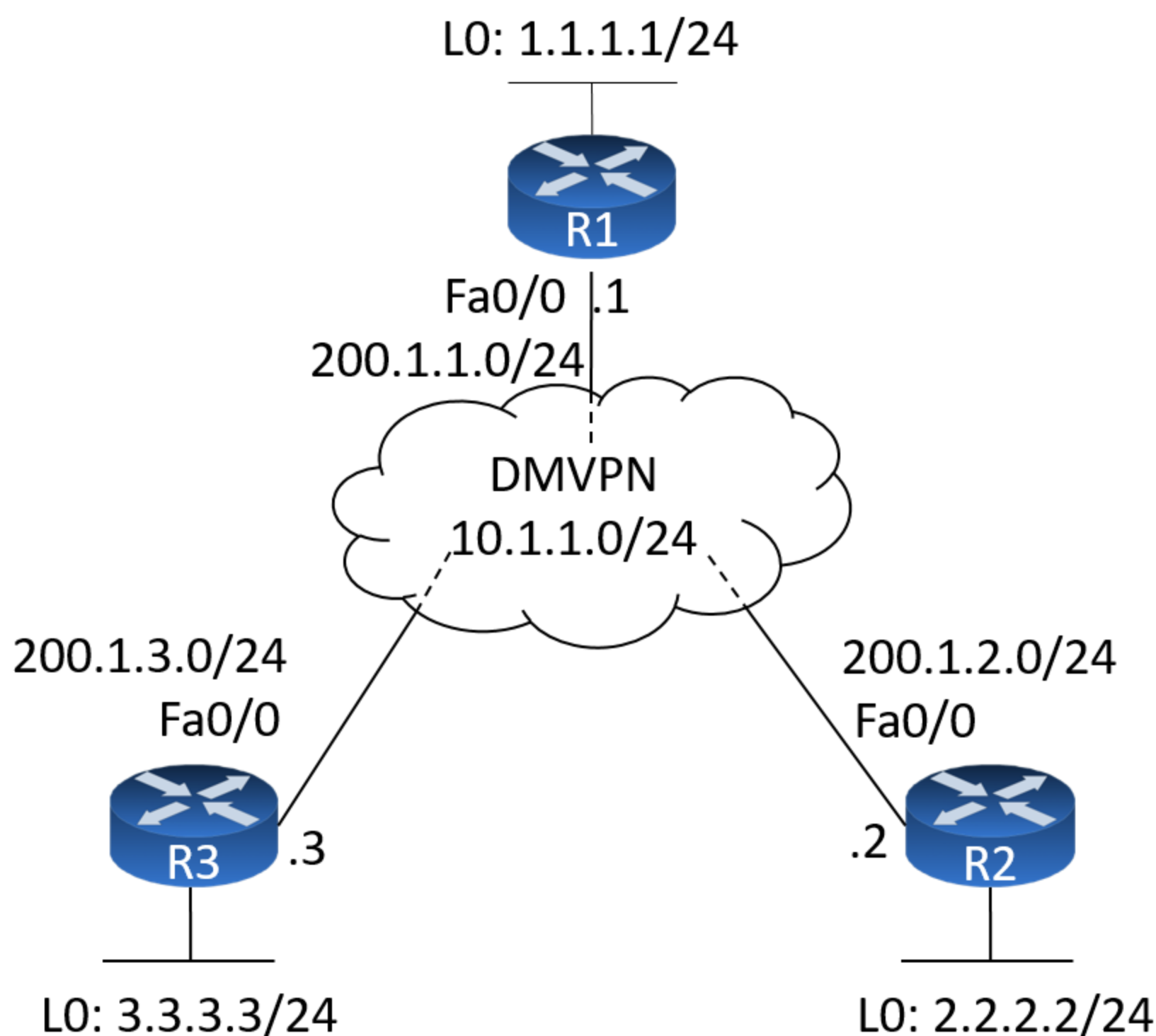
A. UDP

B. SCTP

C. TCP

D. RDP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 100

Topic #: 1

[All 300-410 Questions]


```
R2
======
R2(config)# crypto isakmp policy 10
R2(config-isakmp)# hash md5
R2(config-isakmp)# authentication pre-share
R2(config-isakmp)# group 2
R2(config-isakmp)# encryption 3des
R2(config)# crypto ipsec transform-set TSET esp-des esp-md5-hmac
R2(cfg-crypto-trans)# mode transport
R2(config)# crypto ipsec profile TST
R2(ipsec-profile)# set transform-set TSET
R2(config)# interface tunnel 123
R2(config-if)# tunnel protection ipsec profile TST
```

Refer to the exhibits.

Which configuration allows spoke-to-spoke communication using loopback as a tunnel source?

A. Configure crypto isakmp key cisco address 0.0.0.0 on the hub

B. Configure crypto isakmp key cisco address 200.1.0.0 255.255.0.0 on the hub

C. Configure crypto isakmp key cisco address 200.1.0.0 255.255.0.0 on the spokes

D. Configure crypto isakmp key cisco address 0.0.0.0 on the spokes

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 101

Topic #: 1

[All 300-410 Questions]

How does an MPLS Layer 3 VPN function?

A. multiple customer sites interconnect through service provider network to create secure tunnels between customer edge devices

B. multiple customer sites interconnect through a service provider network using customer edge to provider edge connectivity

C. set of sites interconnect privately over the Internet for security

D. set of sites use multiprotocol BGP at the customer site for aggregation

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 102

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the LDP features from the left onto the descriptions on the right.

Select and Place:

| implicit null label | | provides ways of improving load balancing by eliminating the need for DPI at transit LSRs |

| explicit null label | | LSR receives an MPLS header with the label set to 3 |

| inbound label binding filtering | | packet is encapsulated in MPLS with the option of copying the IP precedence to EXP bits |

| entropy label | | controls the amount of memory used to store LDP label bindings advertised by other devices |

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 103

Topic #: 1

[All 300-410 Questions]

Which two protocols work in the control plane of P routers across the MPLS cloud? (Choose two.)

A. ECMP

B. LDP

C. RSVP

D. MPLS OAM

E. LSP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 104

Topic #: 1

[All 300-410 Questions]

Spoke# **show dmvpn**

Tunnel0, Type:Spoke, NHRP Peers:2,

Ent Peer NBMA Addr Peer Tunnel Add State UpDn Tm Attrb

---- ------------- ------------- ---- ------- ----

1 172.18.16.2 192.168.1.1 UP 01:05:35 S

1 172.18.46.2 192.168.1.4 UP 00:00:25 D

Refer to the exhibit. An engineer has configured DMVPN on a spoke router.

What is the WAN IP address of another spoke router within the DMVPN network?

A. 172.18.46.2

B. 172.18.16.2

C. 192.168.1.1

D. 192.168.1.4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 105

Topic #: 1

[All 300-410 Questions]

What are two functions of LDP? (Choose two.)

A. It advertises labels per Forwarding Equivalence Class.

B. It uses Forwarding Equivalence Class.

C. It is defined in RFC 3038 and 3039.

D. It requires MPLS Traffic Engineering.

E. It must use Resource Reservation Protocol.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 106

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the operations from the left onto the locations where the operations are performed on the right.

Select and Place:

	Label Switch Router
assigns labels to unlabeled packets	
performs penultimate hop popping	
handles traffic between multiple VPNs	**Label Edge Router**
reads the labels and forwards the packet based on the labels	

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 107

Topic #: 1

[All 300-410 Questions]

Which protocol does MPLS use to support traffic engineering?

A. TDP

B. RSVP

C. LDP

D. BGP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 108

Topic #: 1

[All 300-410 Questions]

An engineer configured a company's multiple area OSPF Head Office router and Site A Cisco routers with VRF lite. Each site router is connected to a PE router of an MPLS backbone:

Head Office & Site A -
ip cef
ip vrf abc
rd 101:101
!
interface FastEthernet0/0
ip vrf forwarding abc
ip address 172.16.16.X 255.255.255.252
!
router ospf 1 vrf abc
log-adjacency-changes
network 172.16.16.0 0.0.0.255 area 1
After finishing both site router configurations, none of the LSA 3, 4, 5, and 7 are installed at Site A router.
Which configuration resolves this issue?

    A. configure capability vrf-lite on Site A and its connected PE router under router ospf 1 vrf abc

    B. configure capability vrf-lite on both PE routers connected to Head Office and Site A routers under router ospf 1 vrf abc

    C. configure capability vrf-lite on Head Office and its connected PE router under router ospf 1 abc

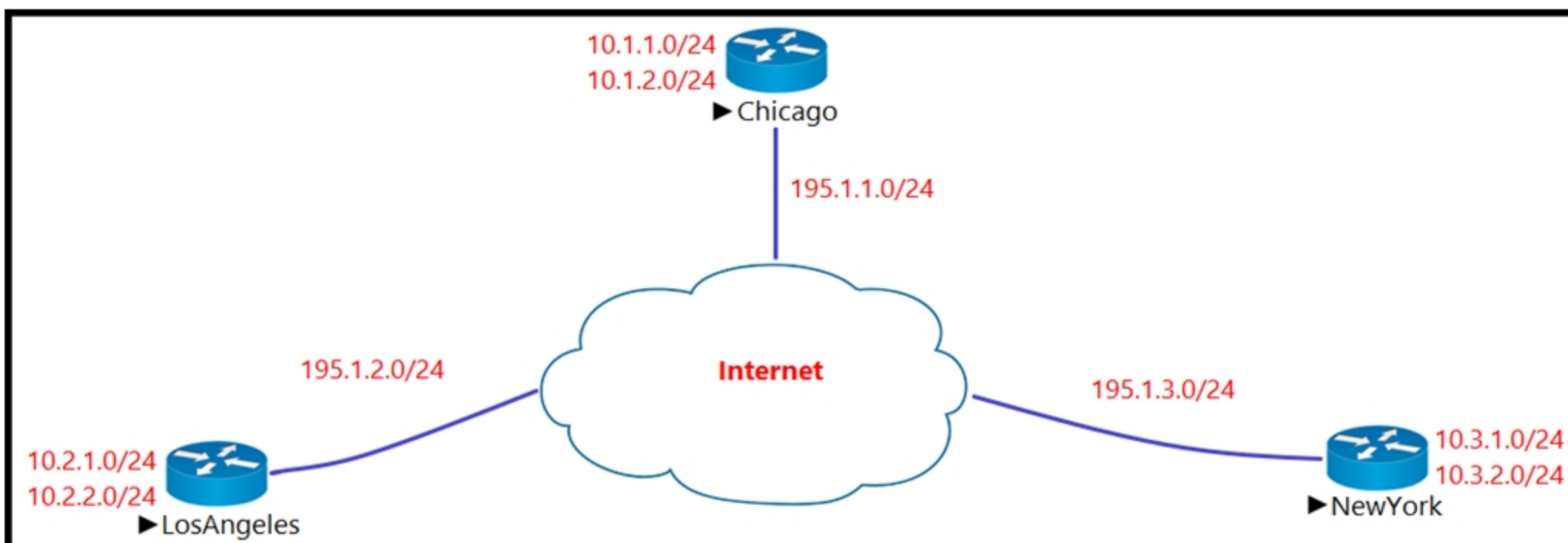   D. configure capability vrf-lite on Head Office and Site A routers under router ospf 1 vrf abc

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 109

Topic #: 1

[All 300-410 Questions]

10.1.1.0/24
10.1.2.0/24
►Chicago

195.1.1.0/24

195.1.2.0/24

Internet

195.1.3.0/24

10.2.1.0/24
10.2.2.0/24
►LosAngeles

10.3.1.0/24
10.3.2.0/24
►NewYork

Chicago

interface Tunnel 1
 ip address 192.168.1.1 255.255.255.0
 tunnel source E0/0
 tunnel mode gre multipoint
 ip nhrp network-id 1
 ip nhrp map multicast dynamic
 no ip next-hop-self eigrp 111
 tunnel protection ipsec profile IPSec-PROFILE
 !
router eigrp 111
 network 192.168.1.0
 network 10.0.0.0

Refer to the exhibit. The Los Angeles and New York routers are receiving routers from Chicago but not from each other.
Which configuration fixes the issue?

   A. interface Tunnel1 no ip split-horizon eigrp 111

   B. interface Tunnel1 ip next-hop-self eigrp 111

   C. interface Tunnel1 tunnel mode ipsec ipv4

   D. interface Tunnel1 tunnel protection ipsec profile IPSec-PROFILE

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 110

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the MPLS VPN device types from the left onto the definitions on the right.

Select and Place:

Customer (C) device	device in the core of the provider network that switches MPLS packets
CE device	device that attaches and detaches the VPN labels to the packets in the provider network
PE device	device in the enterprise network that connects to other customer devices
Provider (P) device	device at the edge of the enterprise network that connects to the SP network

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 111

Topic #: 1

[All 300-410 Questions]

Router Configuration:

```
ip vrf customer_a
  rd 1:1
  route-target export 1:1
  route-target import 1:1
 !
 !
interface FastEthemet0.1
  encapsulation dot1Q 2
  ip vrf forwarding customer_a
  ip address 192.168.4.1 255.255.255.0
 !
router ospf 1
  log-adjacency-changes
 !
router ospf 2 vrf customer_a
  log-adjacency-changes
  network 192.168.4.0 0.0.0.255 area 0
 !
 end
```

Refer to the exhibit. The network administrator configured VRF lite for customer A. The technician at the remote site misconfigured VRF on the router. Which configuration will resolve connectivity for both sites of customer_a?

A.

```
ip vrf customer_a
 rd 1:1
 route-target export 1:2
 route-target import 1:2
```

B.

```
ip vrf customer_a
 rd 1:1
 route-target import 1:1
 route-target export 1:2
```

C.

```
ip vrf customer_a
 rd 1:2
 route-target both 1:2
```

D.

```
ip vrf customer_a
 rd 1:2
 route-target both 1:1
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 112

Topic #: 1

[All 300-410 Questions]

What does the PE router convert the IPv4 prefix to within an MPLS VPN?

    A. eBGP path association between the PE and CE sessions

    B. prefix that combines the ASN, PE router-id, and IP prefix

    C. 48-bit route combining the IP and PE router-id

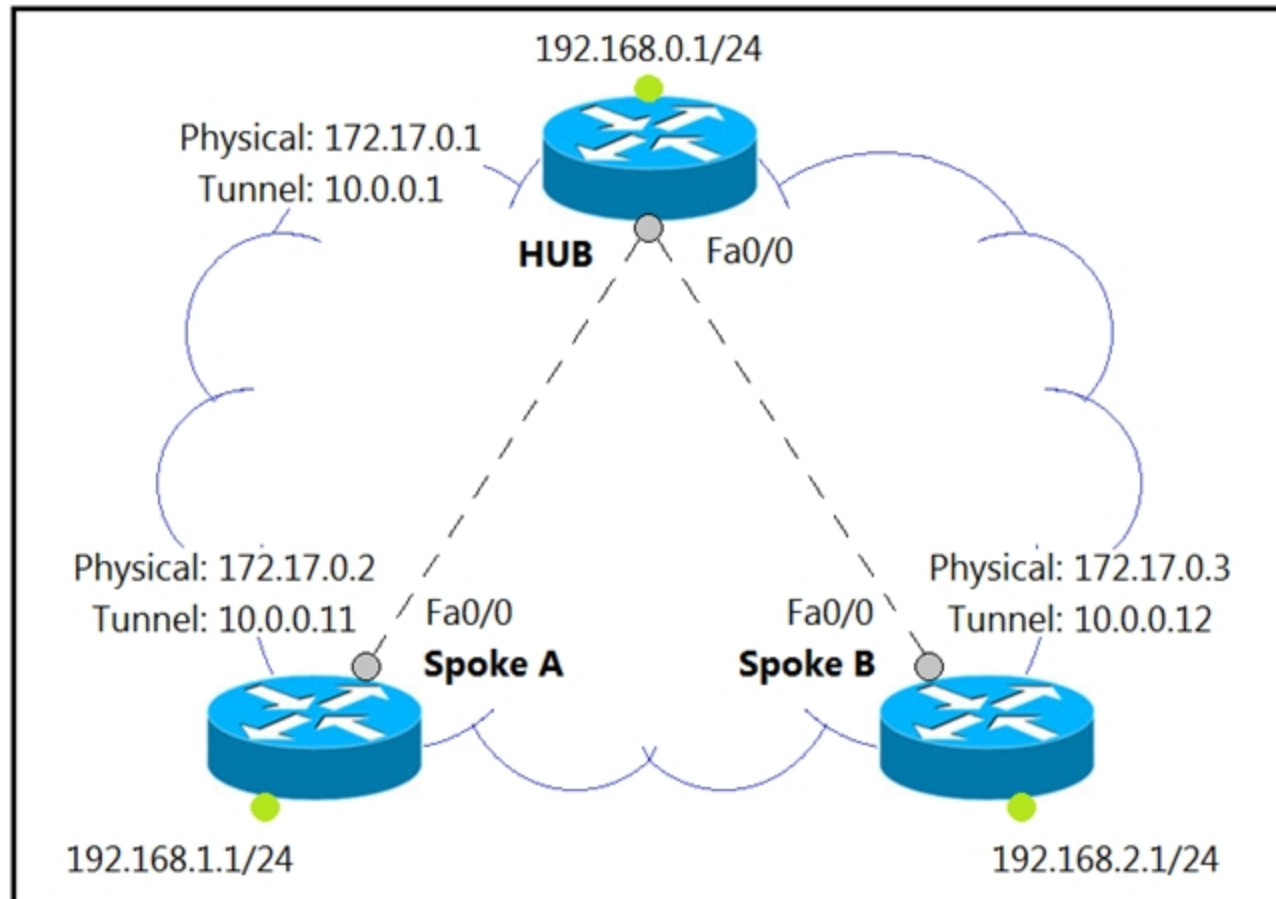   D. VPN-IPv4 prefix combined with the 64-bit route distinguisher

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 113

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Which interface configuration must be configured on the HUB router to enable MVPN with mGRE mode?

A. interface Tunnel0 description mGRE - DMVPN Tunnel ip address 10.1.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 172.17.0.1 ip nhrp map 10.0.0.11 172.17.0.2 ip nhrp map 10.0.0.12 172.17.0.3 tunnel mode gre

B. interface Tunnel0 description mGRE - DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 10.0.0.1 tunnel mode gre multipoint

C. interface Tunnel0 description mGRE - DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp network-id 1 tunnel source 172.17.0.1 tunnel mode gre multipoint

D. interface Tunnel0 description mGRE - DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 10.0.0.1 tunnel destination 172.17.0.2 tunnel mode gre multipoint

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 114

Topic #: 1

[All 300-410 Questions]

How are MPLS Layer 3 VPN services deployed?

    A. The RD and RT values must match under the VRF.

    B. The import and export RT values under a VRF must always be the same.

    C. The label switch path must be available between the local and remote PE routers.

    D. The RD and RT values under a VRF must match on the remote PE router.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 115

Topic #: 1

[All 300-410 Questions]

Which IGPs are supported by the MPLS LDP autoconfiguration feature?

A. IS-IS and RIPv2

B. RIPv2 and OSPF

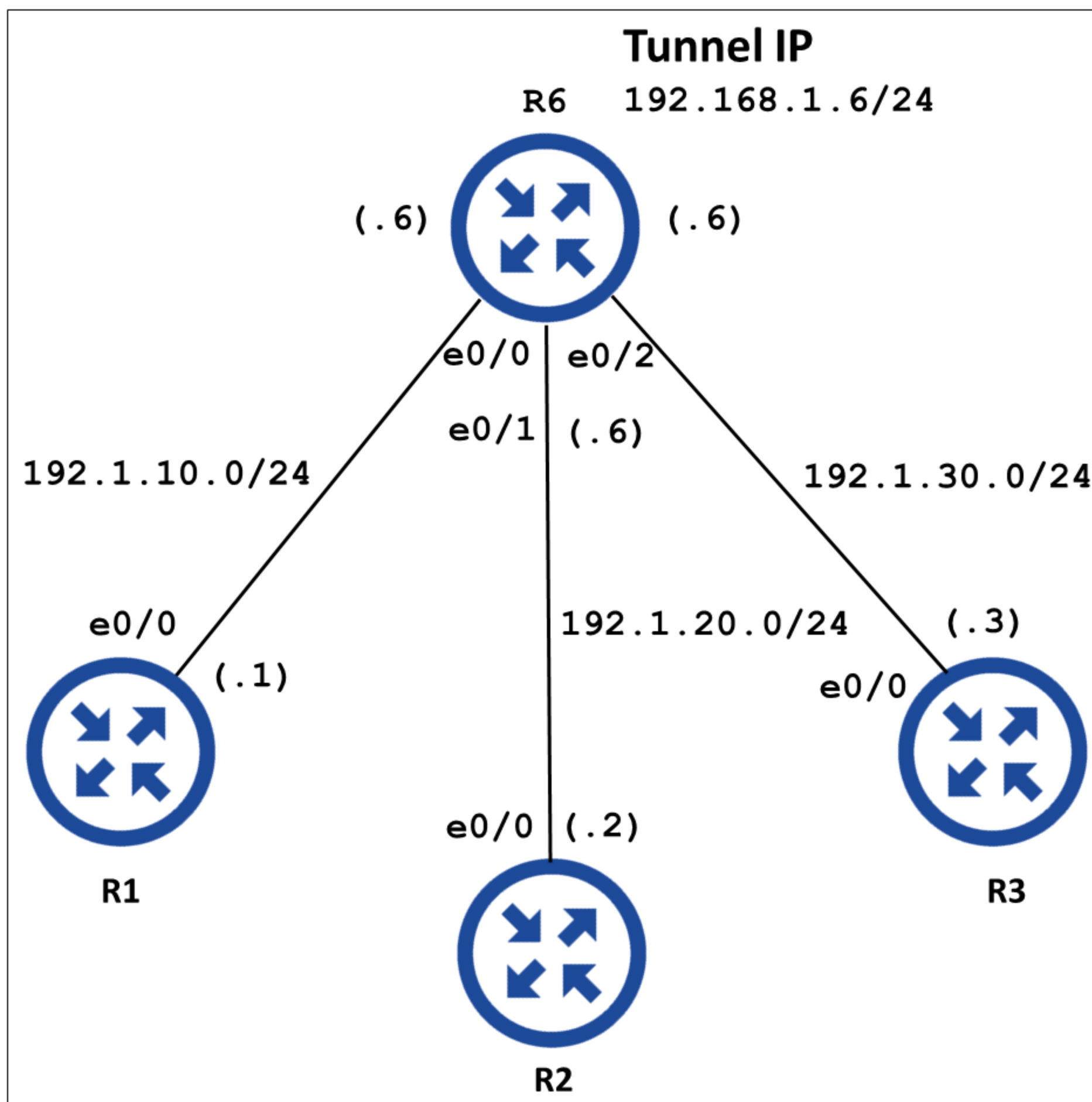C. OSPF and EIGRP

D. OSPF and IS-IS

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 116

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

An engineer must establish multipoint GRE tunnels between hub router R6 and branch routers R1, R2, and R3.
Which configuration accomplishes this task on R1?

A. interface Tunnel 1 ip address 192.168.1.1 255.255.255.0 tunnel source e0/0 tunnel mode gre multipoint ip nhrp nhs 192.168.1.6 ip nhrp map 192.168.1.6 192.1.10.1 ip nhrp map 192.168.1.2 192.1.20.2 ip nhrp map 192.168.1.3 192.1.30.3

B. interface Tunnel 1 ip address 192.168.1.1 255.255.255.0 tunnel source e0/1 tunnel mode gre multipoint ip nhrp nhs 192.168.1.6 ip nhrp map 192. 168.1.6 192.1.10.6

C. interface Tunnel 1 ip address 192.168.1.1 255.255.255.0 tunnel source e0/0 tunnel mode gre multipoint ip nhrp network-id 1 ip nhrp nhs 192.168.1.6 ip nhrp map 192.168.1.6 192.1.10.6

D. interface Tunnel 1 ip address 192.168.1.1 255. 255.255.0 tunnel source e0/1 tunnel mode gre multipoint ip nhrp network-id 1 ip nhrp nhs 192.168.1.6 ip nhrp map 192.168.1.6 192.1.10.1 ip nhrp map 192.168.1.2 192.1.20.2 ip nhrp map 192.168.1.3 192.1.30.3

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 117

Topic #: 1

[All 300-410 Questions]

How is VPN routing information distributed in an MPLS network?

A. The top level of the customer data packet directs it to the correct CE device.

B. It is established using VPN IPsec peers.

C. It is controlled through the use of RD.

D. It is controlled using of VPN target communities.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 118

Topic #: 1

[All 300-410 Questions]

IPv6 is enabled in the infrastructure to support customers with an IPv6 network over WAN and to connect the head office to branch offices in the local network.

One of the customers is already running IPv6 and wants to enable IPv6 over the DMVPN network infrastructure between the headend and branch sites.

Which configuration command must be applied to establish an mGRE IPv6 tunnel neighborship?

A. ipv6 nhrp holdtime 30

B. tunnel mode gre multipoint ipv6

C. ipv6 unicast-routing

D. tunnel protection mode ipv6

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 119

Topic #: 1

[All 300-410 Questions]

What is a characteristic of Layer 3 MPLS VPNs?

    A. Traffic engineering capabilities provide QoS and SLAs.

    B. Traffic engineering supports multiple IGP instances.

    C. LSP signaling requires the use of unnumbered IP links for traffic engineering.

    D. Authentication is performed by using digital certificates or preshared keys.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 120

Topic #: 1

[All 300-410 Questions]

How does an MPLS Layer 3 VPN differentiate the IP address space used between each VPN?

A. by RT

B. by address family

C. by RD

D. by MP-BGP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 121

Topic #: 1

[All 300-410 Questions]

Which OSI model is used to insert an MPLS label?

A. between Layer 2 and Layer 3

B. between Layer 5 and Layer 6

C. between Layer 1 and Layer 2

D. between Layer 3 and Layer 4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 122

Topic #: 1

[All 300-410 Questions]

Which function does LDP provide in an MPLS topology?

A. It enables a MPLS topology to connect multiple VPNs to P routers.

B. It provides hop-by-hop forwarding in an MPLS topology for LSRs.

C. It exchanges routes for MPLS VPNs across different VRFs.

D. It provides a means for LSRs to exchange IP routes.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 123

Topic #: 1

[All 300-410 Questions]

Which mechanism provides traffic segmentation within a DMVPN network?

A. BGP

B. IPsec

C. MPLS

D. RSVP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 124

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Which configuration denies Telnet traffic to router 2 from 198A:0:200C::1/64?
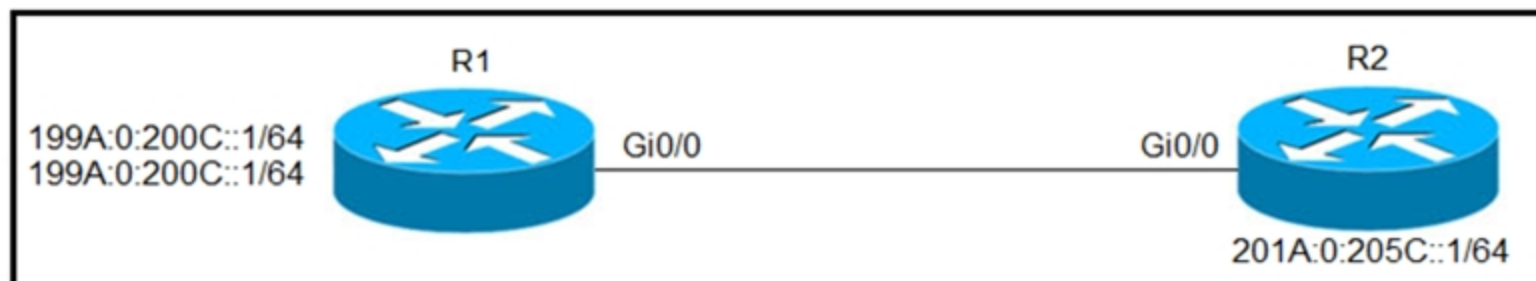
A.

ipv6 access-list Deny_Telnet sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64 eq telnet
!
int Gi0/0
ipv6 traffic-filter Deny_Telnet in
!

B.

ipv6 access-list Deny_Telnet sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64 eq telnet
!
int Gi0/0
ipv6 access-map Deny_Telnet in
!

C.

ipv6 access-list Deny_Telnet sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64
!
int Gi0/0
ipv6 access-map Deny_Telnet in
!

D.

ipv6 access-list Deny_Telnet sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64
!
int Gi0/0
ipv6 traffic-filter Deny_Telnet in
!

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 125

Topic #: 1

[All 300-410 Questions]

```
access-list 100 deny tcp any any eq 465
access-list 100 deny tcp any eq 465 any
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any eq 80 any
access-list 100 permit udp any any eq 443
access-list 100 permit udp any eq 443 any
```

Refer to the exhibit. During troubleshooting it was discovered that the device is not reachable using a secure web browser.

What is needed to fix the problem?

A. permit tcp port 443

B. permit udp port 465

C. permit tcp port 465

D. permit tcp port 22

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 126

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the packet types from the left onto the correct descriptions on the right.

Select and Place:

data plane packets	user-generated packets that are always forwarded by network devices to other end-station devices
control plane packets	network device generated or received packets that are used for the creation of the network itself
management plane packets	network device generated or received packets; packets that are used to operate the network
services plane packets	user-generated packets that are forwarded by network devices to other end-station devices, but that require higher priority than the normal traffic by the network devices

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 127

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the addresses from the left onto the correct IPv6 filter purposes on the right.

Select and Place:

permit ip 2001:d8b:800:200c:: /117 2001:0DBB:800:2010::/64 eq 443	Permit NTP from this source 2001:0D8B:0800:200c::1f
permit ip 2001:D88:800:200C::e/126 2001:0DBB:800:2010::/64 eq 514	Permit syslog from this source 2001:0D88:0800:200c::1c
permit ip 2001:d8b:800:200c::800 /117 2001:0DBB:800:2010::/64 eq 80	Permit HTTP from this source 2001:0D8B:0800:200c::0fff
permit ip 2001:D8B:800:200C::c/126 2001:0DBB:800:2010::/64 eq 123	Permit HTTPS from this source 2001:0D8B:0800:200c::07ff

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 128

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer is trying to configure local authentication on the console line, but the device is trying to authenticate using TACACS+.

Which action produces the desired configuration?

```
R1#show running-config | include aaa
aaa new-model
aaa authentication login default group tacacs+ local
aaa authentication login Console local
R1#show running-config | section line
line con 0
  logging synchronous
R1#
```

A. Add the aaa authentication login default none command to the global configuration.

B. Replace the capital ג€Cג€ with a lowercase ג€cג€ in the aaa authentication login Console local command.

C. Add the aaa authentication login default group tacacs+ local-case command to the global configuration.

D. Add the login authentication Console command to the line configuration

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 129

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer is trying to connect to a device with SSH but cannot connect. The engineer connects by using the console and finds the displayed output when troubleshooting.

Which command must be used in configuration mode to enable SSH on the device?

```
R1#show ip ssh
SSH Disabled – version 1.99
%Please create RSA keys to enable SSH (and of atleast 768 bits for SSH v2).
Authentication timeout: 120 secs; Authentication retries: 3
Minimum expected Diffie Hellman key size: 1024 bits
IOS Keys in SECSH format (ssh-rsa, base64 encoded) : NONE
R1#
```

A. no ip ssh disable

B. ip ssh enable

C. ip ssh version 2

D. crypto key generate rsa

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 130

Topic #: 1

[All 300-410 Questions]

Which statement about IPv6 ND inspection is true?

A. It learns and secures bindings for stateless autoconfiguration addresses in Layer 3 neighbor tables.

B. It learns and secures bindings for stateless autoconfiguration addresses in Layer 2 neighbor tables.

C. It learns and secures bindings for stateful autoconfiguration addresses in Layer 3 neighbor tables.

D. It learns and secures bindings for stateful autoconfiguration addresses in Layer 2 neighbor tables.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 131

Topic #: 1

[All 300-410 Questions]

While troubleshooting connectivity issues to a router, these details are noticed:

☞ Standard pings to all router interfaces, including loopbacks, are successful.

☞ Data traffic is unaffected.

☞ SNMP connectivity is intermittent.

☞ SSH is either slow or disconnects frequently.

Which command must be configured first to troubleshoot this issue?

    A. show policy-map control-plane

    B. show policy-map

    C. show interface | inc drop

    D. show ip route

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 132

Topic #: 1

[All 300-410 Questions]

TAC+: TCP/IP open to 171.68.118.101/49 failed --
Destination unreachable; gateway or host down
AAA/AUTHEN (2546660185): status = ERROR
AAA/AUTHEN/START (2546660185): Method=LOCAL
AAA/AUTHEN (2546660185): status = FAIL
As1 CHAP: Unable to validate Response. Username chapuser: Authentication failure

Refer to the exhibit. Why is user authentication being rejected?

A. The TACACS+ server expects ג€userג€, but the NT client sends ג€domain/userג€.

B. The TACACS+ server refuses the user because the user is set up for CHAP.

C. The TACACS+ server is down, and the user is in the local database.

D. The TACACS+ server is down, and the user is not in the local database.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 133

Topic #: 1

[All 300-410 Questions]

```
Cat3850-Stack-2# show policy-map

Policy Map LIMIT_BGP
  Class BGP
   drop

Policy Map SHAPE_BGP
  Class BGP
   Average Rate Traffic Shaping
   cir 10000000 (bps)

Policy Map POLICE_BGP
  Class BGP
   police cir 1000k bc 1500
    conform-action transmit
    exceed-action transmit

Policy Map COPP
  Class BGP
   police cir 1000k bc 1500
    conform-action transmit
    exceed-action drop
```

Refer to the exhibit. Which control plane policy limits BGP traffic that is destined to the CPU to 1 Mbps and ignores BGP traffic that is sent at higher rate?

A. policy-map SHAPE_BGP

B. policy-map LIMIT_BGP

C. policy-map POLICE_BGP

D. policy-map COPP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 134

Topic #: 1

[All 300-410 Questions]

Which statement about IPv6 RA Guard is true?

A. It does not offer protection in environments where IPv6 traffic is tunneled.

B. It cannot be configured on a switch port interface in the ingress direction.

C. Packets that are dropped by IPv6 RA Guard cannot be spanned.

D. It is not supported in hardware when TCAM is programmed.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 135

Topic #: 1

[All 300-410 Questions]

An engineer must configure a Cisco router to initiate secure connections from the router to other devices in the network but kept failing.

Which two actions resolve the issue? (Choose two.)

A. Configure transport input ssh command on the console.

B. Configure a domain name.

C. Configure a crypto key to be generated.

D. Configure a source port for the SSH connection to initiate.

E. Configure a TACACS+ server and enable it.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 136

Topic #: 1

[All 300-410 Questions]

When configuring Control Plane Policing on a router to protect it from malicious traffic, an engineer observes that the configured routing protocols start flapping on that device.

Which action in the Control Plane Policy prevents this problem in a production environment while achieving the security objective?

A. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the output direction.

B. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the input direction.

C. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy in the input direction.

D. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy in the output direction.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 137

Topic #: 1

[All 300-410 Questions]

In which two ways does the IPv6 First-Hop Security Binding Table operate? (Choose two.)

A. by IPv6 HSRP to make sure neighbors are authenticated before being used as gateways

B. by various IPv6 guard features to validate the data link layer address

C. by the recovery mechanism to recover the binding table in the event of a device reboot

D. by IPv6 routing protocols to securely build neighborships without the need of authentication

E. by storing hashed keys for IPsec tunnels for the built-in IPsec features

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 138

Topic #: 1

[All 300-410 Questions]

Router1

```
ip access list extended EGRESS2
   10 deny ip any any
!
interface GigabitEthernet0/0
  ip address 209.165.201.1 255.255.255.0
  ip access-group EGRESS2 out
  duplex auto
  speed auto
  media-type rj45
  ipv6 address 2001:DB8::1/64
!
line vty 0 4
  no login
  transport input telnet
```

Router2

```
ipv6 access list INGRESS
  permit ipv6 2001:DB8::/64 any sequence 10
  deny ipv6 2001:DB8::/32 any sequence 20
!
interface GigabitEthernet0/0
  ip address 209.165.201.25 255.255.255.0
  duplex auto
  speed auto
  media-type rj45
  ipv6 address autoconfig
  ipv6 nd autoconfig default-route
  ipv6 nd cache expire 60
  ipv6 nd ra suppress
  ipv6 traffic-filter INGRESS in
  ipv6 nd ra suppress
```

Refer to the exhibit. The engineer configured and connected Router2 to Router1. The link came up but could not establish a Telnet connection to Router1 IPv6 address of 2001:DB8::1.

Which configuration allows Router2 to establish a Telnet connection to Router1?

A. ipv6 unicast-routing

B. permit ICMPv6 on access list INGRESS for Router2 to obtain IPv6 address

C. permit ip any any on access list EGRESS2 on Router1

D. IPv6 address on GigabitEthernet0/0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 139

Topic #: 1

[All 300-410 Questions]

An engineer configured Reverse Path Forwarding on an interface and noticed that the routes are dropped when a route lookup fails on that interface for a prefix that is available in the routing table.

Which interface configuration resolves the issue?

A. ip verify unicast source reachable-via l2-src

B. ip verify unicast source reachable-via allow-default

C. ip verify unicast source reachable-via any

D. ip verify unicast source reachable-via rx

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 140

Topic #: 1

[All 300-410 Questions]

```
ipv6 access-list INTERNET
 permit ipv6 2001:DB8:AD59:BA21::/64 2001:DB8:C0AB:BA14::/64
 permit tcp 2001:DB8:AD59:BA21::/64 2001:DB8:C0AB:BA13::/64 eq telnet
 permit tcp 2001:DB8:AD59:BA21::/64 any eq http
 permit ipv6 2001:DB8:AD59::/48 any
 deny ipv6 any any log
```

Refer to the exhibit. When monitoring an IPv6 access list, an engineer notices that the ACL does not have any hits and is causing unnecessary traffic through the interface

Which command must be configured to resolve the issue?

A. ip access-group INTERNET in

B. ipv6 traffic-filter INTERNET in

C. ipv6 access-class INTERNET in

D. access-class INTERNET in

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 141

Topic #: 1

[All 300-410 Questions]

Which configuration feature should be used to block rogue router advertisements instead of using the IPv6 Router Advertisement Guard feature?

A. VACL blocking broadcast frames from nonauthorized hosts

B. PVLANs with promiscuous ports associated to route advertisements and isolated ports for nodes

C. PVLANs with community ports associated to route advertisements and isolated ports for nodes

D. IPv4 ACL blocking route advertisements from nonauthorized hosts

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 142

Topic #: 1

[All 300-410 Questions]

Configuration Output:

aaa new-model

!

aaa authentication login default local

aaa authentication login VTY_AUTH local

aaa authorization exec default none

aaa authorization exec VTY_AUTH local

aaa accounting exec default start-stop group radius

!

password 7 k0AyUudDrfOgO4s

authorization exec VTY_AUTH

login authentication VTY_AUTH

!

Debug Output

AAA/AUTHEN/LOGIN (000004B6): Pick method list 'default'

AAA/AUTHOR (0x4B6): Pick method list 'VTY_AUTH'

AAA/AUTHOR/EXEC(000004B6): Authorization FAILED

Refer to the exhibit.

Which action resolves the failed authentication attempt to the router?

A. Configure aaa authorization console global command

B. Configure aaa authorization console command on line vty 0 4

C. Configure aaa authorization login command on line console 0

D. Configure aaa authorization login command on line vty 0 4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 143

Topic #: 1

[All 300-410 Questions]

Debug output:
username: USER55
password:
Aug 26 12:39:23.812: TPLUS: Queuing AAA Authentication request 4950 for processing
Aug 26 12:39:23.812: TPLUS(00001356) login timer started 1020 sec timeout
Aug 26 12:39:23.812: TPLUS: processing authentication continue request id 4950
Aug 26 12:39:23.812: TPLUS: Authentication continue packet generated for 4950
Aug 26 12:39:23.812: TPLUS(00001356)/0/WRITE/3A72C8D0: Started 5 sec timeout
!
!----- output omitted -----!
!
Aug 26 12:40:01.241: TAC+: using previously set server 192.168.1.3 from group tacacs+
Aug 26 12:40:01.241: TAC+: Opening TCP/IP to 192.168.1.3/49 timeout=5
Aug 26 12:40:01.249: TAC+: Opened TCP/IP handle 0x3BE31D1C to 192.168.1.3/49
Aug 26 12:40:01.249: TAC+: Opened 192.168.1.3 index=1
Aug 26 12:40:01.250: TAC+: 192.168.1.3 (3653537180) AUTOR/START queued
Aug 26 12:40:01.449: TAC+: (3653537180) AUTOR/START processed
Aug 26 12:40:01.449: TAC+: (-641430116): received author response status = FAIL
Aug 26 12:40:01.450: TAC+: Closing TCP/IP 0x3BE31D1C connection to 192.168.1.3/49

Refer to the exhibit. A network administrator logs into the router using TACACS+ username and password credentials, but the administrator cannot run any privileged commands.

Which action resolves the issue?

   A. Configure the username from a local database

   B. Configure TACACS+ synchronization with the Active Directory admin group

   C. Configure an authorized IP address for this user to access this router

   D. Configure full access for the username from TACACS+ server

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 144

Topic #: 1

[All 300-410 Questions]

Global RADIUS shared secret: *******

retransmission count:5

timeout value:10

following RADIUS servers are configured:

    myradius.cisco.users.com:

        available for authentication on port:1814

        available for accounting on port:1813

    10.1.1.1:

        available for authentication on port:1814

        available for accounting on port:1813

        RADIUS shared secret: ******

    10.2.2.3:

        available for authentication on port:1814

        available for accounting on port:1813

        RADIUS shared secret: ******

Refer to the exhibit. AAA server 10.1.1.1 is configured with the default authentication and accounting settings, but the switch cannot communicate with the server. Which action resolves this issue?

    A. Correct the timeout value.

    B. Match the authentication port.

    C. Correct the shared secret.

    D. Match the accounting port.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 145

Topic #: 1

[All 300-410 Questions]

```
R1#show policy-map control-plane
  Control Plane
          Service-policy output: CoPP
          Class-map: SNMP-Out (match-all)
            124 packets, 3693 bytes
            5 minute offered rate 0000 bps, drop rate 0000 bps
            Match: access-group name SNMP
            police:
                cir 8000 bps, bc 1500 bytes
              conformed 0 packets, 0 bytes; actions:
                transmit
              exceeded 0 packets, 0 bytes; actions:
                drop
              conformed 0000 bps, exceeded 0000 bps


          Class-map: class-default (match-any)
            10 packets, 1003 bytes
            5 minute offered rate 0000 bps, drop rate 0000 bps
            Match: any
R1#show ip access-list SNMP
Extended IP access list SNMP
          10 permit udp any eq snmp any
```

Refer to the exhibit. R1 is being monitored using SNMP and monitoring devices are getting only partial information. What action should be taken to resolve this issue?

A. Modify the CoPP policy to increase the configured exceeded limit for SNMP.

B. Modify the access list to include snmptrap.

C. Modify the CoPP policy to increase the configured CIR limit for SNMP.

D. Modify the access list to add a second line to allow udp any any eq snmp.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 146

Topic #: 1

[All 300-410 Questions]

```
MASS-RTR#show running-config
!
hostname MASS-RTR
!
aaa new-model
!
aaa authentication login default local
aaa authorization exec default local
aaa authorization commands 15 default local
!
username admin privilege 15 password 7 0236244818115F3348
username cisco privilege 15 password 7 0607072C494A5B
archive
  log config
    logging enable
    logging size 1000
!
interface GigabitEthernet0/0
  ip address dhcp
  duplex auto
  speed auto
!
line vty 0 4
!

MASS-RTR#show archive log config all
 idx  sess     user@line         Logged command
   1     1  console@console    |interface GigabitEthernet0/0
   2     1  console@console    | no shutdown
   3     1  console@console    | ip address dhcp
   4     2     admin@vty0       |username cisco privilege 15 password cisco
   5     2     admin@vty0       |!config: USER TABLE MODIFIED
```

Refer to the exhibit. A client is concerned that passwords are visible when running this show archive log config all. Which router configuration is needed to resolve this issue?

A. MASS-RTR(config)#aaa authentication arap

B. MASS-RTR(config-archive-log-cfg)#password encryption aes

C. MASS-RTR(config)#service password-encryption

D. MASS-RTR(config-archive-log-cfg)#hidekeys

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 147

Topic #: 1

[All 300-410 Questions]

```
policy-map COPP-7600
  class COPP-CRITICAL-7600
    police cir 2000000 bc 62500
    conform-action transmit
    exceed-action transmit
    !
  class class-default
    police cir 200000 bc 6250
    conform-action transmit
    exceed-action drop
  !
  class-map match-all COPP-CRITICAL-7600
    match access-group name COPP-CRITICAL-7600
  !
  ip access-list extended COPP-CRITICAL-7600
    permit ip any any eq http
    permit ip any any eq https
```

Refer to the exhibit. BGP is flapping after the CoPP policy is applied.
What are the two solutions to fix the issue? (Choose two.)

A. Configure a higher value for CIR under the Class COPP-CRITICAL-7600.

B. Configure a higher value for CIR under the default class to allow more packets during peak traffic.

C. Configure BGP in the COPP-CRITICAL-7600 ACL.

D. Configure IP CEF for CoPP policy and BGP to work.

E. Configure a three-color policer instead of two-color policer under Class COPP-CRITICAL-7600.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 148

Topic #: 1

[All 300-410 Questions]

```
ipv6 access-list inbound
 permit tcp any any
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound out
```

Refer to the exhibit. A network administrator configured an IPv6 access list to allow TCP return traffic only, but it is not working as expected. Which changes resolve this issue?

A.

```
ipv6 access-list inbound
 permit tcp any any established
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound in
```

B.

```
ipv6 access-list inbound
 permit tcp any any established
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound out
```

C.

```
ipv6 access-list inbound
 permit tcp any any syn
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound in
```

D.

```
ipv6 access-list inbound
 permit tcp any any syn
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound out
```

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 149

Topic #: 1

[All 300-410 Questions]

What are two functions of IPv6 Source Guard? (Choose two.)

A. It works independent from IPv6 neighbor discovery.

B. It denies traffic from unknown sources or unallocated addresses.

C. It uses the populated binding table to allow legitimate traffic.

D. It denies traffic by inspecting neighbor discovery packets for specific patterns.

E. It blocks certain traffic by inspecting DHCP packets for specific sources.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 150

Topic #: 1

[All 300-410 Questions]

```
R1#show policy-map control-plane
 Control Plane
   Service-policy input: CoPP
     Class-map: PERMIT (match-all)
       50 packets, 3811 bytes
       5 minute offered rate 0000 bps
       Match: access-group 100
     Class-map: ANY (match-all)
       210 packets, 19104 bytes
       5 minute offered rate 0000 bps, drop rate 0000 bps
       Match: access-group 199
       drop
     Class-map: class-default (match-any)
       348 packets, 48203 bytes
       5 minute offered rate 0000 bps, drop rate 0000 bps
       Match: any

R1#show access-list 100
Extended IP access list 100
     10 permit udp any any eq 23 (100 matches)
     20 permit tcp any any eq telnet (5 matches)
     30 permit tcp any eq telnet any (10 matches)

R1#show access-list 199
Extended IP access list 199
     10 deny tcp any eq telnet any (50 matches)
```

Refer to the exhibit. Which two actions restrict access to router R1 by SSH? (Choose two.)

A. Remove class-map ANY from service-policy CoPP.

B. Configure transport output ssh on line vty and remove sequence 20 from access list 100.

C. Configure transport input ssh on line vty and remove sequence 30 from access list 100.

D. Remove sequence 10 from access list 100 and add sequence 20 deny tcp any any eq telnet to access list 199.

E. Configure transport output ssh on line vty and remove sequence 10 from access list 199.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 151

Topic #: 1

[All 300-410 Questions]

```
R3#show policy-map control-plane
    Control Plane

        Service-policy output: R3_CoPP

            Class-map: mgmt (match-all)
              361 packets, 73858 bytes
              5 minute offered rate 0 bps, drop rate 0 bps
              Match: access-group 120
              police:
                  cir 8000 bps, bc 1500 bytes, be 1500 bytes
                  conformed 8 packets, 1506 bytes; actions:
                    transmit
                  exceeded 353 packets, 72352 bytes; actions:
                    drop
                  violated 0 packets, 0 bytes; actions:
                    drop
                  conformed 0 bps, exceed 0 bps, violate 0 bps

            Class-map: class-default (match-any)
              124 packets, 10635 bytes
              5 minute offered rate 0 bps, drop rate 0 bps
              Match: any
R3#show access-lists 120
Extended IP access list 120
            10 permit udp any any eq snmptrap (361 matches)
    R3#
```

Refer to the exhibit. Which action resolves intermittent connectivity observed with the SNMP trap rackets?

A. Decrease the committed burst size of the mgmt class map.

B. Increase the CIR of the mgmt class map.

C. Add one new entry in the ACL 120 to permit the UDP port 161.

D. Add a new class map to match TCP traffic.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 152

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

```
aaa new-model
aaa authentication login default none
aaa authentication login telnet local
!
username cisco password 0 ocsic
!
line vty 0
 password LetMeIn
  login authentication telnet
  transport input telnet
line vty 1
  password LetMeIn
transport input telnet
```

Refer to the exhibit. Drag and drop the credentials from the left onto the remote login information on the right to resolve a failed login attempt to vtys. Not all credentials are used.

Select and Place:

no password	vty0
ocsic	username
no username	password
LetMeIn	vty1
cisco	username
LetMeIn	password

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 153

Topic #: 1

[All 300-410 Questions]

```
!
time-range no-conn
periodic weekdays 17:00 to 23:59
periodic weekend 0:00 to 23:59
!
ip access-list extended NOT-ALLOWED
deny tcp any any time-range no-conn
deny udp any any time-range no-conn
deny icmp any any time-range no-conn
!

interface gi0/1
ip access-group NOT-ALLOWED in
```

Refer to the exhibit. A network administrator wants to block all traffic toward the Internet after business hours and on weekends. When the administrator applies an access list on interface Gi0/1, all traffic is blocked and there is no access to the Internet at any time.

Which action resolves the issue?

A. Add the permit ip any any time-range no-conn statement after the deny udp any any time-range no-conn command in the access list.

B. Add the permit ip any any statement after the deny icmp any any time-range no-conn command in the access list.

C. Add the permit allowed time-range no-conn statement after the deny icmp any any time-range no-conn command in the access list.

D. Add the permit ip any any time-range no-conn statement after the deny icmp any any time-range no-conn command in the access list.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 154

Topic #: 1

[All 300-410 Questions]

LO:2001:ABC:2000:2:2::1

R1

R2

R3

LO:2000:ABC:20:2:2::2

LO:2002:ABC:2000:2:2::2

```
IPv6 access list PERMIT_SSH
 10 deny tcp 2001:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 23
 20 permit tcp 2001:ABC:2000:2:2::/64 host 2000:ABC:20:2:2::2 eq 22
 30 deny tcp 2002:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 22
 40 permit tcp 2000:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 22
 50 permit tcp 2000:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 23
 60 permit tcp host 2002:ABC:2000:2:2::2 host 2000:ABC:20:2:2::2 eq 22
 70 deny ipv6 any any
```

Refer to the exhibit. An IPv6 network was newly deployed in the environment, and the help desk reports that R3 cannot SSH to the R2s Loopback interface. Which action resolves the issue?

A. Modify line 10 of the access list to permit instead of deny.

B. Remove line 60 from the access list.

C. Modify line 30 of the access list to permit instead of deny.

D. Remove line 70 from the access list.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 155

Topic #: 1

[All 300-410 Questions]

```
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip access-group 101 in
!
time-range Office-hour
periodic weekdays 08:00 to 17:00
!
access-list 101 permit tcp 10.0.0.0 0.0.0.0 172.16.1.0 0.0.0.255 eq ssh time-range Office-hour
```

Refer to the exhibit. An IT staff member comes into the office during normal office hours and cannot access devices through SSH.
Which action should be taken to resolve this issue?

A. Modify the access list to use the correct IP address.

B. Configure the correct time range.

C. Modify the access list to correct the subnet mask.

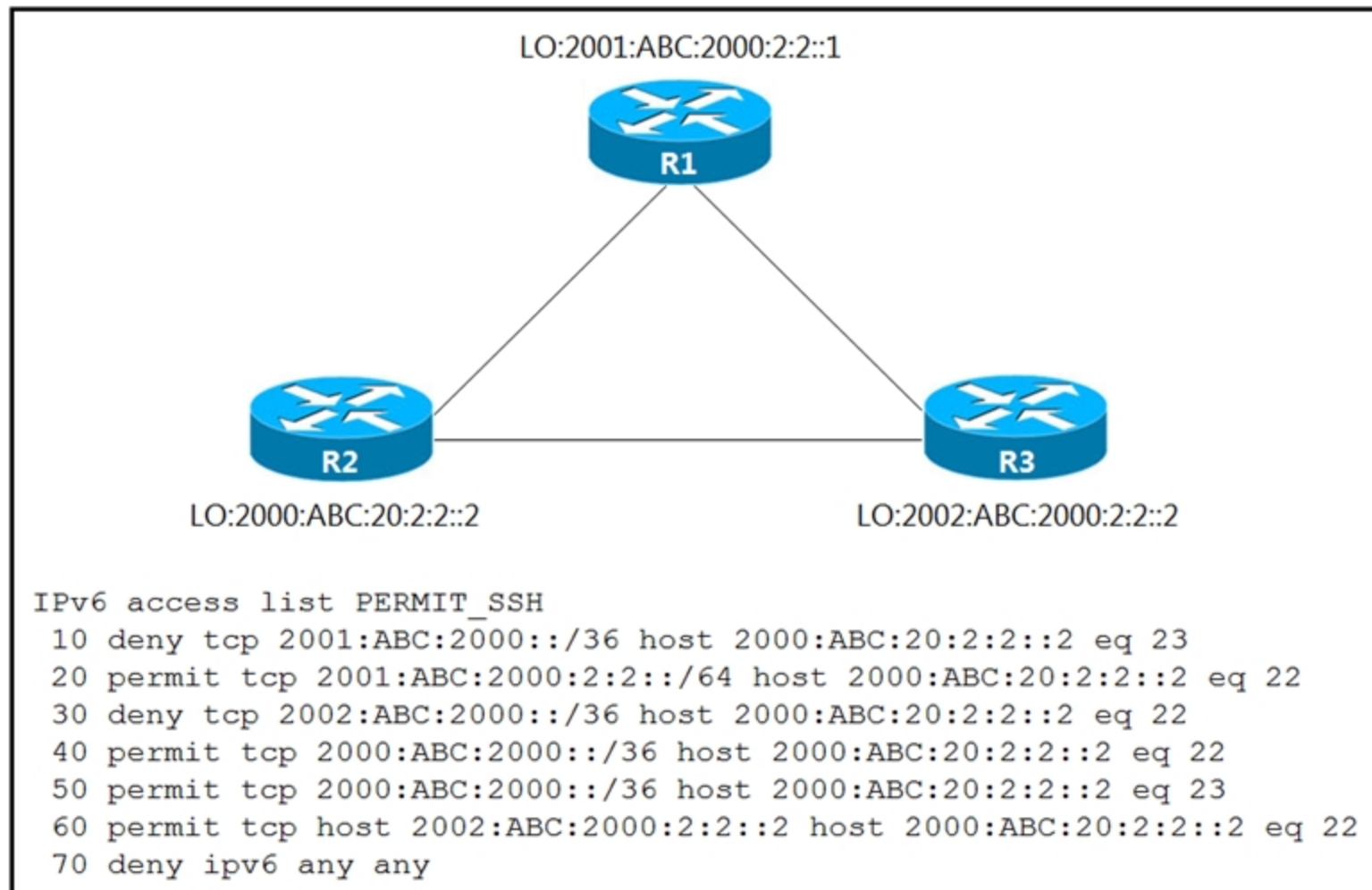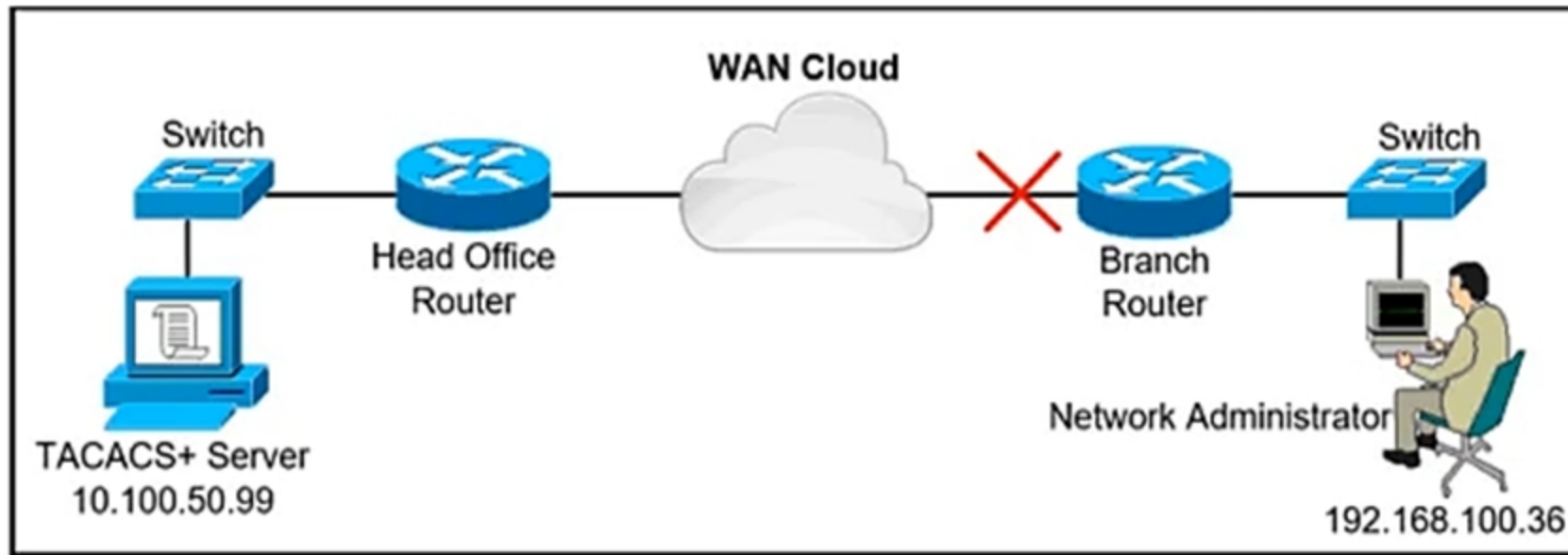D. Configure the access list in the outbound direction.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 156

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

A network administrator is trying to access a branch router using TACACS+ username and password credentials, but the administrator cannot log in to the router because the WAN connectivity is down. The branch router has following AAA configuration: aaa new-model aaa authorization commands 15 default group tacacs+ aaa accounting commands 1 default stop-only group tacacs+ aaa accounting commands 15 default stop-only group tacacs+ tacacs-server host 10.100.50.99 tacacs-server key Ci$co123 Which command will resolve this problem when WAN connectivity is down?

A. aaa authentication login console group tacacs+ enable

B. aaa authentication login default group tacacs+ local

C. aaa authentication login default group tacacs+ enable

D. aaa authentication login default group tacacs+ console

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 157

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.
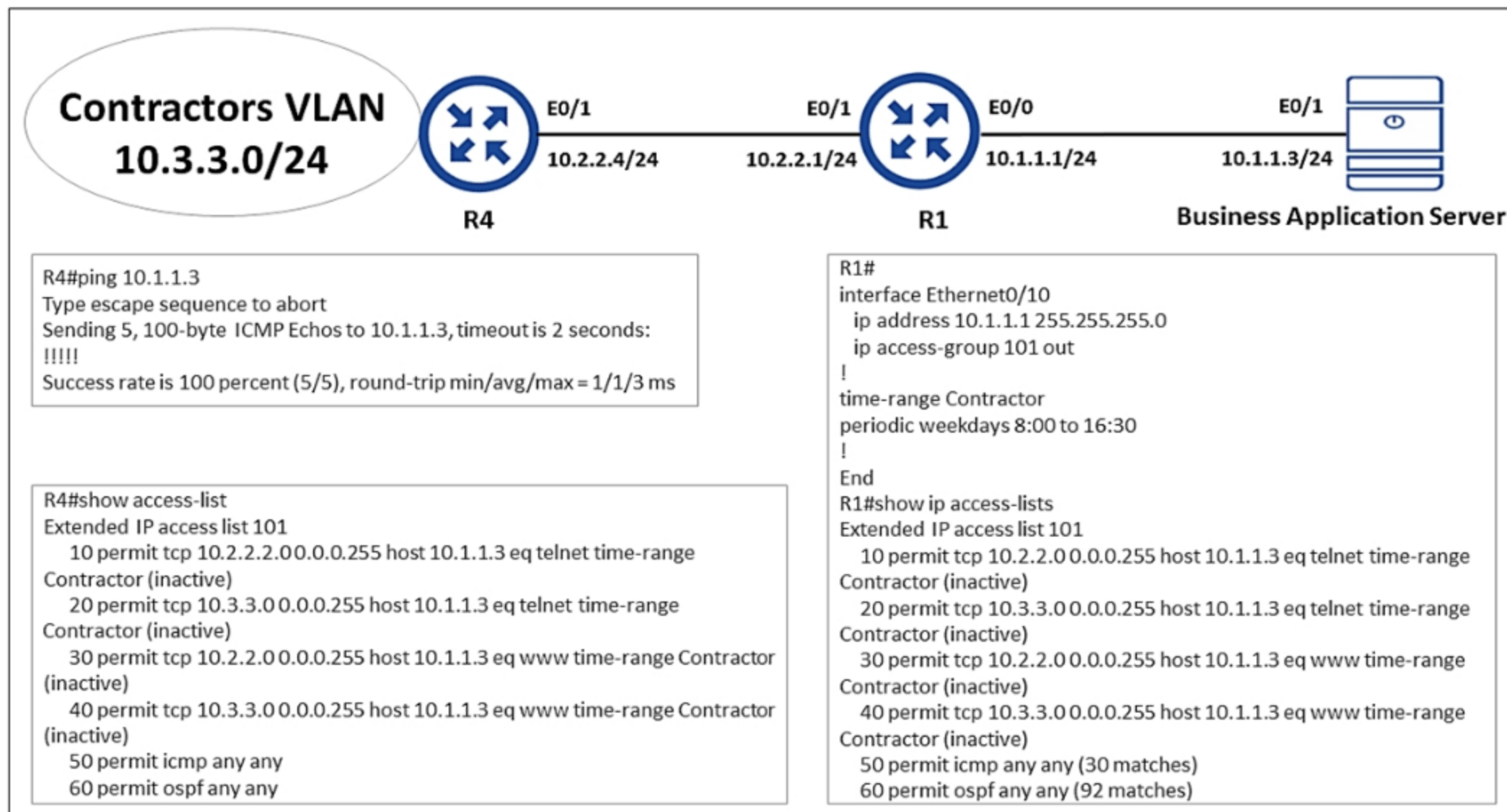
An engineer is troubleshooting failed access by contractors to the business application server via Telnet or HTTP during the weekend.

Which configuration resolves the issue?

A. R1 no access-list 101 permit tcp 10.3.3.0 0.0.0.255 host 10.1.1.3 eq telnet time-range Contractor

B. R1 time-range Contractor no periodic weekdays 8:00 to 16:30 periodic daily 8:00 to 16:30

C. R4 time-range Contractor no periodic weekdays 17:00 to 23:59 periodic daily 8:00 to 16:30

D. R4 no access-list 101 permit tcp 10.3.3.0 0.0.0.255 host 10.1.1.3 eq telnet time-range Contractor

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 158

Topic #: 1

[All 300-410 Questions]

What are two characteristics of IPv6 Source Guard? (Choose two.)

A. requires the user to configure a static binding

B. used in service provider deployments to protect DDoS attacks

C. requires that validate prefix be enabled

D. requires IPv6 snooping on Layer 2 access or trunk ports

E. recovers missing binding table entries

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 159

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the IPv6 first hop security device roles from the left onto the corresponding descriptions on the right.

Select and Place:

host	Receives router advertisements from valid routers, and no router solicitation are received.
router	Receives router solicitation and sends router advertisements.
monitor	Receives valid and rogue router advertisements and all router solicitation.
switch	Received router advertisements are trusted and are flooded to synchronize states.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 160

Topic #: 1

[All 300-410 Questions]

The network administrator configured R1 for Control Plane Policing so that the inbound Telnet traffic is policed to 100 kbps. This policy must not apply to traffic coming in from 10.1.1.1/32 and 172.16.1.1/32. The administrator has configured this: access-list 101 permit tcp host 10.1.1.1 any eq 23 access-list 101 permit tcp host 172.16.1.1 any eq 23

!

class-map CoPP-TELNET

match access-group 101

!

policy-map PM-CoPP

class CoPP-TELNET

police 100000 conform transmit exceed drop

!

control-plane

service-policy input PM-CoPP

The network administrator is not getting the desired results.

Which set of configurations resolves this issue?

A. no access-list 101 access-list 101 deny tcp host 10.1.1.1 any eq 23 access-list 101 deny tcp host 172.16.1.1 any eq 23 access-list 101 permit ip any any

B. control-plane no service-policy input PM-CoPP ! interface Ethernet 0/0 service-policy input PM-CoPP

C. no access-list 101 access-list 101 deny tcp host 10.1.1.1 any eq 23 access-list 101 deny tcp host 172.16.1.1 any eq 23 access-list 101 permit ip any any ! Interface E 0/0 service-policy input PM-CoPP

D. control-plane no service-policy input PM-CoPP service-policy input PM-CoPP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 161

Topic #: 1

[All 300-410 Questions]

```
aaa new-model
aaa group server radius RADIUS-SERVERS
aaa authentication login default group RADIUS-SERVERS local
aaa authentication enable default group RADIUS-SERVERS enable
aaa authorization exec default group RADIUS-SERVERS if-authenticated
aaa authorization network default group RADIUS-SERVERS if-authenticated
aaa accounting send stop-record authentication failure
aaa session-id common
!
line con 0
logging synchronous
stopbits 1
line vty 0 4
logging synchronous
transport input ssh
```

Refer to the exhibit. A network administrator successfully logs in to a switch using SSH from a RADIUS server. When the network administrator uses a console port to access the switch, the RADIUS server returns shell:priv-lvl=15" and the switch asks to enter the enable command. When the command is entered, it gets rejected. Which command set is used to troubleshoot and resolve this issue?

A. line con 0 aaa authorization console privl5 ! line vty 0 4 authorization exec

B. line con 0 aaa authorization console ! line vty 0 4 authorization exec

C. line con 0 aaa authorization console authorization priv15 ! line vty 0 4 transport input ssh

D. line con 0 aaa authorization console authorization exec ! line vty 0 4 transport input ssh

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 162

Topic #: 1

[All 300-410 Questions]

```
*17:40:07.826: AAA/BIND(00000055): Bind i/f
*17:40:07.826: AAA/AUTHEN/LOGIN (00000055): Pick method list 'default'
*17:40:07.826: TPLUS: Queuing AAA Authentication request 85 for processing
*17:40:07.826: TPLUS: TPLUS(00000055) login timer started 1020 sec timeout
*17:40:07.826: TPLUS: processing authentication start request id 85
*17:40:07.826: TPLUS: Authentication start packet created for 85()
*17:40:07.826: Using server 10.106.60.182
*17:40:07.826: TPLUS(00000055)/0/NB_WAIT/225FE2DC: Started 5 sec timeout
*17:40:07.830: TPLUS(00000055)/0/NB_WAIT: socket event 2
*17:40:07.830: TPLUS(00000055)/0/NB_WAIT: wrote entire 38 bytes request
*17:40:07.830: TPLUS(00000055)/0/READ: socket event 1
*17:40:07.830: TPLUS(00000055)/0/READ: Would block while reading
*17:40:07.886: TPLUS(00000055)/0/READ: socket event 1
*17:40:07.886: TPLUS(00000055)/0/READ: read entire 12 header bytes (expect 6 bytes data)
*17:40:07.886: TPLUS(00000055)/0/READ: socket event 1
*17:40:07.886: TPLUS(00000055)/0/READ: read entire 18 bytes response
*17:40:07.886: TPLUS(00000055)/0/225FE2DC: Processing the reply packet
*17:40:07.886: TPLUS: received bad AUTHEN packet: length = 6, expected 43974
*17:40:07.886: TPLUS: Invalid AUTHEN packet (check keys).
```

Refer to the exhibit. An engineer is troubleshooting a TACACS problem.

Which action resolves the issue?

A. Configure a matching TACACS server IP.

B. Configure a matching preshared key.

C. Generate authentication from a relative source interface.

D. Apply a configured AAA profile to the VTY.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 163

Topic #: 1

[All 300-410 Questions]

The network administrator configured CoPP so that all HTTP and HTTPS traffic from the administrator device located at 172.16 1.99 toward the router CPU is limited to 500 kbps. Any traffic that exceeds this limit must be dropped. access-list 100 permit ip host 172.16.1.99 any

!

class-map CM-ADMIN

match access-group 100

!

policy-map PM-COPP

class CM-ADMIN

police 500000 conform-action transmit

!

interface E0/0

service-policy input PM-COPP

CoPP failed to capture the desired traffic and the CPU load is getting higher.

Which two configurations resolve the issue? (Choose two.)

    A. interface E0/0 no service-policy input PM-COPP ! control-plane service-policy input PM-COPP

    B. policy-map PM-COPP class CM-ADMIN no police 500000 conform-action transmit police 500 conform-action transmit ! control-plane service-policy input PM-COPP

    C. no access-list 100 access-list 100 permit tcp host 172.16.1.99 any eq 80

    D. no access-list 100 access-list 100 permit tcp host 172.16.1.99 any eq 80 access-list 100 permit tcp host 172.16.1.99 any eq 443

    E. policy-map PM-COPP class CM-ADMIN no police 500000 conform-action transmit police 500 conform-action transmit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 164

Topic #: 1

[All 300-410 Questions]

```
ipv6 access-list INTERNET
 permit ipv6 2001:DB8:AD59:BA21::/64 2001:DB8:C0AB:BA14::/64
 permit tcp 2001:DB8:AD59:BA21::/64 2001:DB8:C0AB:BA13::/64 eq telnet
 permit tcp 2001:DB8:AD59:BA21::/64 any eq http
 permit ipv6 2001:DB8:AD59::/48 any
 deny ipv6 any any log
```

Refer to the exhibit. While monitoring VTY access to a router, an engineer notices that the router does not have any filter and anyone can access the router with username and password even though an ACL is configured.

Which command resolves this issue?

A. access-class INTERNET in

B. ip access-group INTERNET in

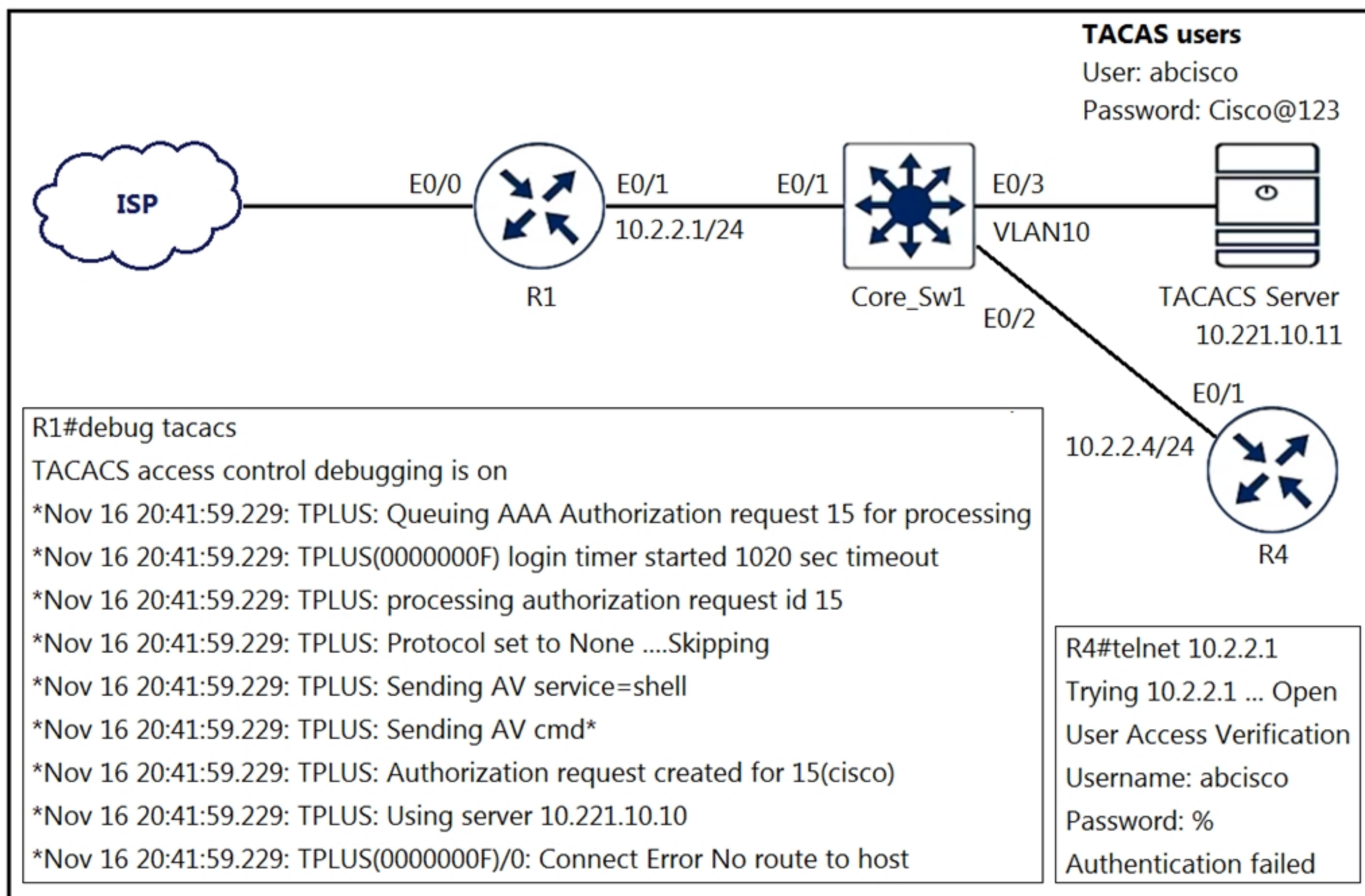C. ipv6 traffic-filter INTERNET in

D. ipv6 access-class INTERNET in

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 165

Topic #: 1

[All 300-410 Questions]

TACAS users
User: abcisco
Password: Cisco@123

E0/0   E0/1   E0/1   E0/3
10.2.2.1/24   VLAN10

ISP

R1   Core_Sw1   TACACS Server
E0/2   10.221.10.11

E0/1

10.2.2.4/24

R4

R1#debug tacacs

TACACS access control debugging is on

*Nov 16 20:41:59.229: TPLUS: Queuing AAA Authorization request 15 for processing

*Nov 16 20:41:59.229: TPLUS(0000000F) login timer started 1020 sec timeout

*Nov 16 20:41:59.229: TPLUS: processing authorization request id 15

*Nov 16 20:41:59.229: TPLUS: Protocol set to None ....Skipping

*Nov 16 20:41:59.229: TPLUS: Sending AV service=shell

Nov 16 20:41:59.229: TPLUS: Sending AV cmd

*Nov 16 20:41:59.229: TPLUS: Authorization request created for 15(cisco)

*Nov 16 20:41:59.229: TPLUS: Using server 10.221.10.10

*Nov 16 20:41:59.229: TPLUS(0000000F)/0: Connect Error No route to host

R4#telnet 10.2.2.1

Trying 10.2.2.1 ... Open

User Access Verification

Username: abcisco

Password: %

Authentication failed

Refer to the exhibit. An engineer is trying to connect to R1 via Telnet with no success.

Which configuration resolves the issue?

A. tacacs server prod address ipv4 10.221.10.10 exit

B. ip route 10.221.10.10 255.255.255.255 ethernet 0/1

C. ip route 10.221.0.11 255.255.255.255 ethernet 0/1

D. tacacs server prod address ipv4 10.221.10.11 exit

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 166

Topic #: 1

[All 300-410 Questions]

An engineer is trying to copy an IOS file from one router to another router by using TFTP.

Which two actions are needed to allow the file to copy? (Choose two.)

A. Copy the file to the destination router with the copy tftp: flash: command

B. Enable the TFTP server on the source router with the tftp-server flash: <filename> command

C. TFTP is not supported in recent IOS versions, so an alternative method must be used

D. Configure a user on the source router with the username tftp password tftp command

E. Configure the TFTP authentication on the source router with the tftp-server authentication local command

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 167

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Users report that IP addresses cannot be acquired from the DHCP server. The DHCP server is configured as shown. About 300 total nonconcurrent users are using this DHCP server, but none of them are active for more than two hours per day.

Which action fixes the issue within the current resources?

```
R1#show running-config | section dhcp
ip dhcp excluded-address 192.168.1.1 192.168.1.49
ip dhcp pool DHCP
   network 192.168.1.0 255.255.255.0
   default-router 192.168.1.1
   dns-server 8.8.8.8
   lease 0 12
```

A. Modify the subnet mask to the network 192.168.1.0 255.255.254.0 command in the DHCP pool

B. Configure the DHCP lease time to a smaller value

C. Configure the DHCP lease time to a bigger value

D. Add the network 192.168.2.0 255.255.255.0 command to the DHCP pool

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 168

Topic #: 1

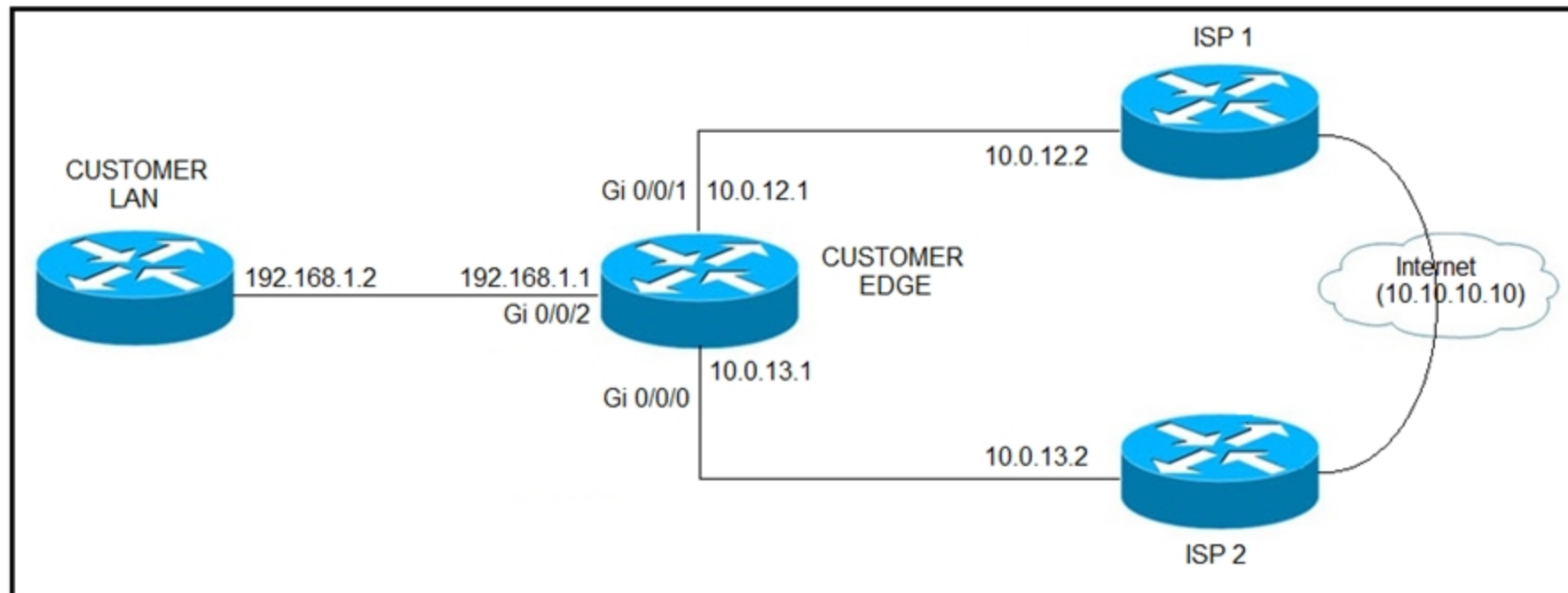[All 300-410 Questions]

Refer to the exhibit. ISP 1 and ISP 2 directly connect to the Internet. A customer is tracking both ISP links to achieve redundancy and cannot see the Cisco IOS IP SLA tracking output on the router console.

Which command is missing from the IP SLA configuration?

A. Start-time 00:00

B. Start-time 0

C. Start-time immediately

D. Start-time now

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 169

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An administrator noticed that after a change was made on R1, the timestamps on the system logs did not match the clock. What is the reason for this error?

```
service timestamps debug datetime msec
service timestamps log datetime
clock timezone MST -7 0
clock summer-time MST recurring
ntp authentication-key 1 md5 00101A0B0152181206224747071E 7
ntp server 10.10.10.10

R1#show clock
*06:13:44.045 MST Sun Dec 30 2018

R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config) #logging host 10.10.10.20
R1(config) #end
R1#
*Dec 30 13:15:28: %SYS-5-CONFIG_I: Configured from console by console
R1#
*Dec 30 13:15:28: %SYS-6-LOGGINGHOST_STARTSTOP: Logging to host 10.10.10.20 port 514
started – CLI initiated
```

A. An authentication error with the NTP server results in an incorrect timestamp.

B. The keyword localtime is not defined on the timestamp service command.

C. The NTP server is in a different time zone.

D. The system clock is set incorrectly to summer-time hours.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 170

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the DHCP messages from the left onto the correct uses on the right.

Select and Place:

DHCPACK		server-to-client communication, refusing the request for configuration parameters
DHCPINFORM		client-to-server communication, indicating that the network address is already in use
DHCPNAK		server-to-client communication with configuration parameters, including committed network address
DHCPDECLINE		client-to-server communication, asking for only local configuration parameters that the client has already externally configured as an address

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 171

Topic #: 1

[All 300-410 Questions]

A network engineer is investigating a flapping (up/down) interface issue on a core switch that is synchronized to an NTP server. Log output currently does not show the time of the flap.

Which command allows the logging on the switch to show the time of the flap according to the clock on the device?

A. service timestamps log uptime

B. clock summer-time mst recurring 2 Sunday mar 2:00 1 Sunday nov 2:00

C. service timestamps log datetime localtime show-timezone

D. clock calendar-valid

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 172

Topic #: 1

[All 300-410 Questions]

When provisioning a device in Cisco DNA Center, the engineer sees the error message `Cannot select the device. Not compatible with template`.
What is the reason for the error?

A. The template has an incorrect configuration.

B. The software version of the template is different from the software version of the device.

C. The changes to the template were not committed.

D. The tag that was used to filter the templates does not match the device tag.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 173

Topic #: 1

[All 300-410 Questions]

While working with software images, an engineer observes that Cisco DNA Center cannot upload its software image directly from the device. Why is the image not uploading?

A. The device must be resynced to Cisco DNA Center.

B. The software image for the device is in install mode.

C. The device has lost connectivity to Cisco DNA Center.

D. The software image for the device is in bundle mode

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 174

Topic #: 1

[All 300-410 Questions]

An engineer configured the wrong default gateway for the Cisco DNA Center enterprise interface during the install.

Which command must the engineer run to correct the configuration?

A. sudo maglev-config update

B. sudo maglev install config update

C. sudo maglev reinstall

D. sudo update config install

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 175

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the SNMP attributes in Cisco IOS devices from the left onto the correct SNMPv2c or SNMPv3 categories on the right.

Select and Place:

community string

| username and password |

| authentication |

| no encryption |

| privileged |

| read-only |

SNMPv2c

SNMPv3

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 176

Topic #: 1

[All 300-410 Questions]

```
R1(config) # do show running-config | section line|username
username cisco secret 5 $1$yb/o$L3G5cXODxpYMSJ70PzEyo0
line con 0
  logging synchronous
line vty 0 4
  login local
  transport input telnet
R1(config) # logging console 7
R1(config) # do debug aaa authentication
R1(config) #
```

Refer to the exhibit. An administrator that is connected to the console does not see debug messages when remote users log in.

Which action ensures that debug messages are displayed for remote logins?

A. Enter the transport input ssh configuration command.

B. Enter the terminal monitor exec command.

C. Enter the logging console debugging configuration command.

D. Enter the aaa new-model configuration command.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 177

Topic #: 1

[All 300-410 Questions]

```
snmp-server community ciscotest1
snmp-server host 192.168.1.128 ciscotest
snmp-sever enable traps bgp
```

Refer to the exhibit. Network operations cannot read or write any configuration on the device with this configuration from the operations subnet.

Which two configurations fix the issue? (Choose two.)

A. Configure SNMP rw permission in addition to community ciscotest.

B. Modify access list 1 and allow operations subnet in the access list.

C. Modify access list 1 and allow SNMP in the access list.

D. Configure SNMP rw permission in addition to version 1.

E. Configure SNMP rw permission in addition to community ciscotest 1.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 178

Topic #: 1

[All 300-410 Questions]

```
config t
flow record v4_r1
match ipv4 tos
match ipv4 protocol
match ipv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
collect counter bytes long
collect counter packets long
!
flow exporter EXPORTER-1
  destination 172.16.10.2
  transport udp 90
  exit
!
flow monitor FLOW-MONITOR-1
  record v4_r1
  exit
!
ip cef
!
interface Ethernet0/0.1
  ip address 172.16.6.2 255.255.255.0
  ip flow monitor FLOW-MONITOR-1 input
!
```

Refer to the exhibit. Why is the remote NetFlow server failing to receive the NetFlow data?

A. The flow exporter is configured but is not used.

B. The flow monitor is applied in the wrong direction.

C. The flow monitor is applied to the wrong interface.
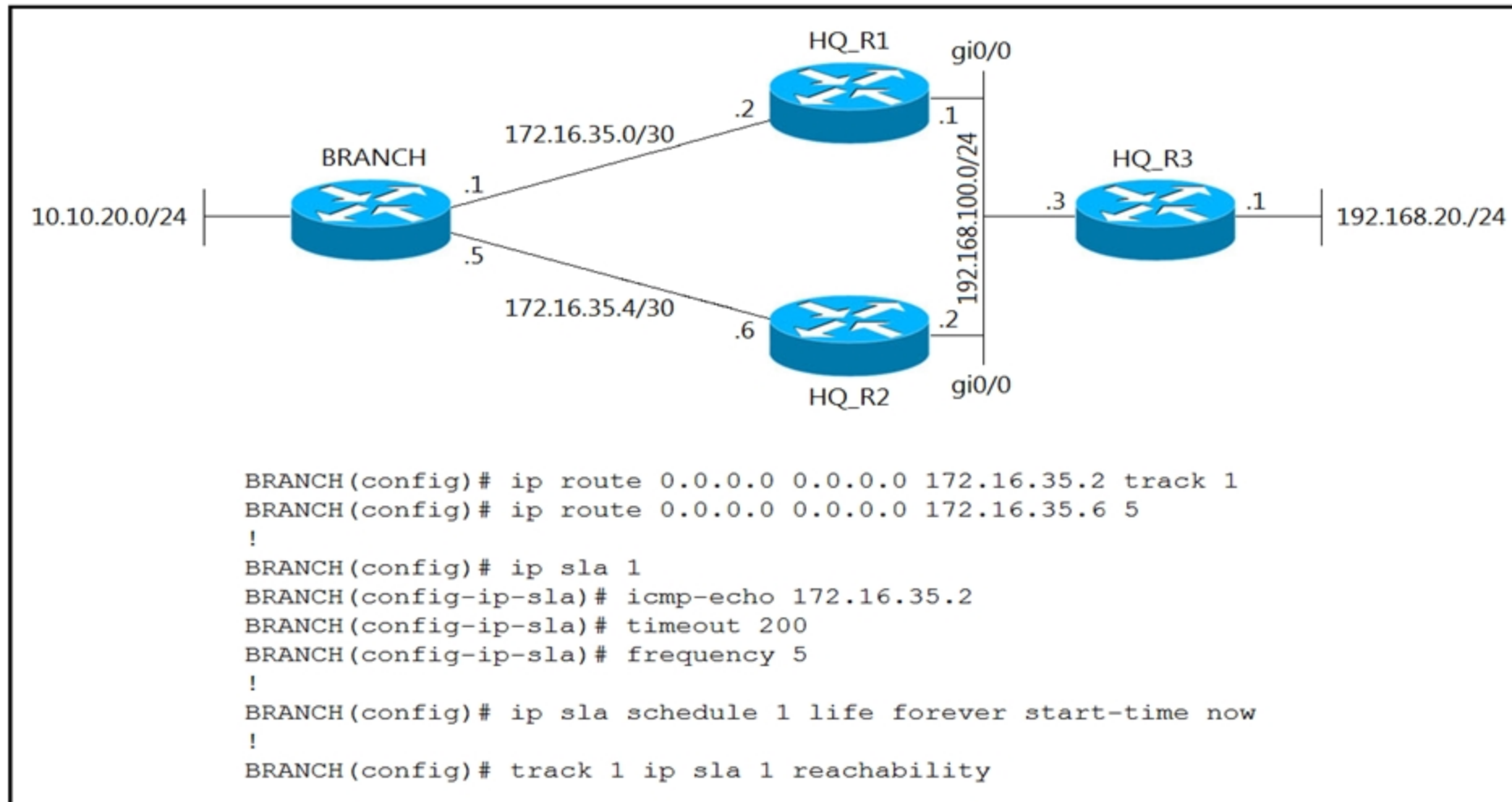
D. The destination of the flow exporter is not reachable.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 179

Topic #: 1

[All 300-410 Questions]


```
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.2 track 1
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.6 5
!
BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 172.16.35.2
BRANCH(config-ip-sla)# timeout 200
BRANCH(config-ip-sla)# frequency 5
!
BRANCH(config)# ip sla schedule 1 life forever start-time now
!
BRANCH(config)# track 1 ip sla 1 reachability
```

Refer to the exhibit. An engineer has successfully set up a floating static route from the BRANCH router to the HQ network using HQ_R1 as the primary default gateway. When the g0/0 goes down on HQ_R1, the branch network cannot reach the HQ network 192.168.20.0/24.

Which configuration resolves the issue?

A. HQ_R3(config)# ip sla responder HQ_R3(config)# ip sla responder icmp-echo 172.16.35.1

B. BRANCH(config)# ip sla 1 BRANCH(config-ip-sla)# icmp-echo 192.168.100.2

C. HQ_R3(config)# ip sla responder HQ_R3(config)# ip sla responder icmp-echo 172.16.35.5

D. BRANCH(config)# ip sla 1 BRANCH(config-ip-sla)# icmp-echo 192.168.100.1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 180

Topic #: 1

[All 300-410 Questions]

An engineer configured a DHCP server for Cisco IP phones to download its configuration from a TFTP server, but the IP phones failed to load the configuration. What must be configured to resolve the issue?

A. BOOTP port 67

B. DHCP option 66

C. BOOTP port 68

D. DHCP option 69

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 181

Topic #: 1

[All 300-410 Questions]

```
config t
flow record v4_r1
match ipv4 tos
match ipv4 protocol
match ipv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
collect counter bytes long
collect counter packets long
!
flow exporter EXPORTER-1
  destination 172.16.10.2
  transport udp 2055
  exit
!
flow monitor FLOW-MONITOR-1
  exporter EXPORTER-1
  record v4_r1
  exit
!
flow monitor v4_r1
!
ip cef
!
interface Ethernet0/0.1
  ip address 172.16.6.2 255.255.255.0
  ip flow monitor v4_r1 input
!
```

Refer to the exhibit. The remote server is failing to receive the NetFlow data.
Which action resolves the issue?

A. Modify the flow transport command transport udp 2055 to move under flow monitor profile.

B. Modify the interface command to ip flow monitor FLOW-MONITOR-1 input.

C. Modify the udp port under flow exporter profile to ip transport udp 4739.

D. Modify the flow record command record v4_r1 to move under flow exporter profile.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 182

Topic #: 1

[All 300-410 Questions]

Configuration output:

clock timezone PST -8

clock summer-time PDT recurring

service timestamps debug datetime

service timestamps log datetime

logging buffered 16000 debugging

ntp clock-period 17179272

ntp server 161.181.92.152

Debug output:

router#show clock

14:12:26.312 PDT Thu Apr 27 2019

router#config t

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

router(config)#exit

router#

Apr 27 21:12:28: %SYS-5-CONFIG_I: Configured from console by vty0

Refer to the exhibit. A network administrator configured NTP on a Cisco router to get synchronized time for system and logs from a unified time source. The configuration did not work as desired.

Which service must be enabled to resolve the issue?

    A. Enter the service timestamps log datetime clock-period global command.

    B. Enter the service timestamps log datetime synchronize global command.

    C. Enter the service timestamps log datetime console global command.

    D. Enter the service timestamps log datetime localtime global command.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 183

Topic #: 1

[All 300-410 Questions]

Filtered

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
```

Desired

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed
state to down 2 *Mar 1 18:46:11: %SYS-5-CONFIG_I: Configured from console by vty2
```

Refer to the exhibits. An engineer filtered messages based on severity to minimize log messages. After applying the filter, the engineer noticed that it filtered required messages as well.

Which action must the engineer take to resolve the issue?

A. Configure syslog level 2.

B. Configure syslog level 3.

C. Configure syslog level 4.

D. Configure syslog level 5.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 184

Topic #: 1

[All 300-410 Questions]

An engineer is troubleshooting on the console session of a router and turns on multiple debug commands. The console screen is filled with scrolling debug messages that none of the commands can be verified if entered correctly or display any output.

Which action allows the engineer to see entered console commands while still continuing the analysis of the debug messages?

A. Configure the term no mon command globally.

B. Configure the logging synchronous level all command.

C. Configure the logging synchronous command.

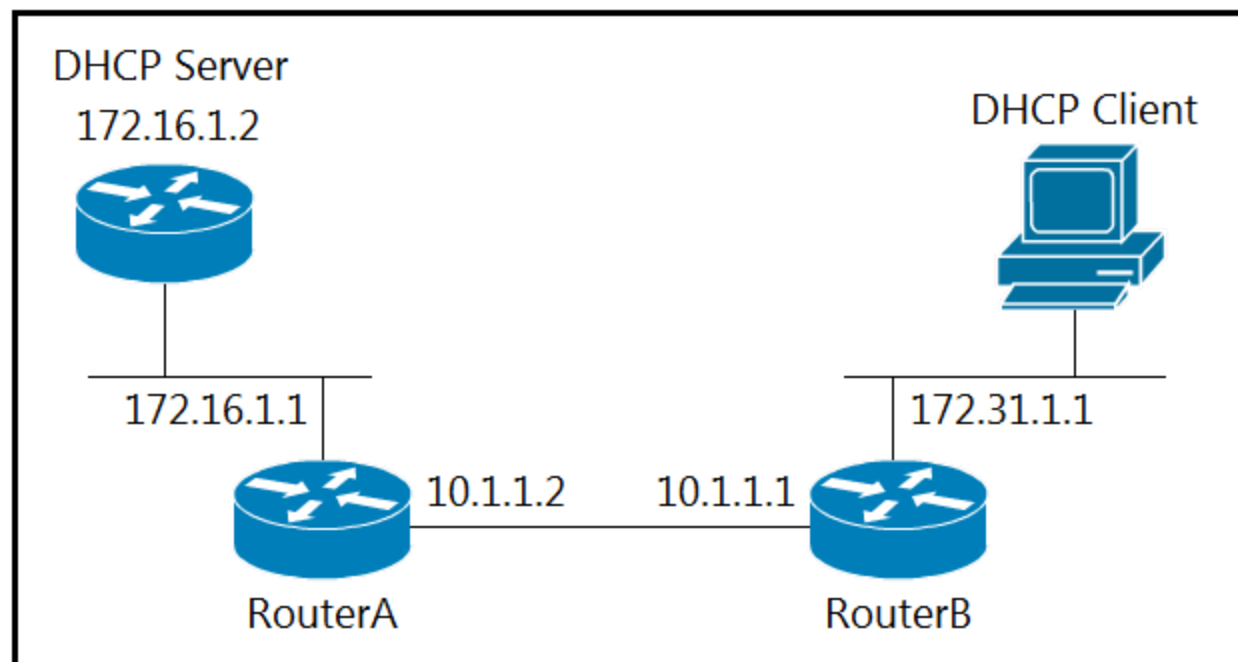D. Configure the no logging console debugging command globally.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 185

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The DHCP client is unable to receive an IP address from the DHCP server. RouterB is configured as follows:

Interface fastethernet 0/0

description Client DHCP

ip address 172.31.1.1 255.255.255.0

!

ip route 172.16.1.0 255.255.255.0 10.1.1.2

Which command is required on the fastethernet 0/0 interface of RouterB to resolve this issue?

A. RouterB(config-if)#ip helper-address 172.16.1.1

B. RouterB(config-if)#ip helper-address 255.255.255.255

C. RouterB(config-if)#ip helper-address 172.16.1.2
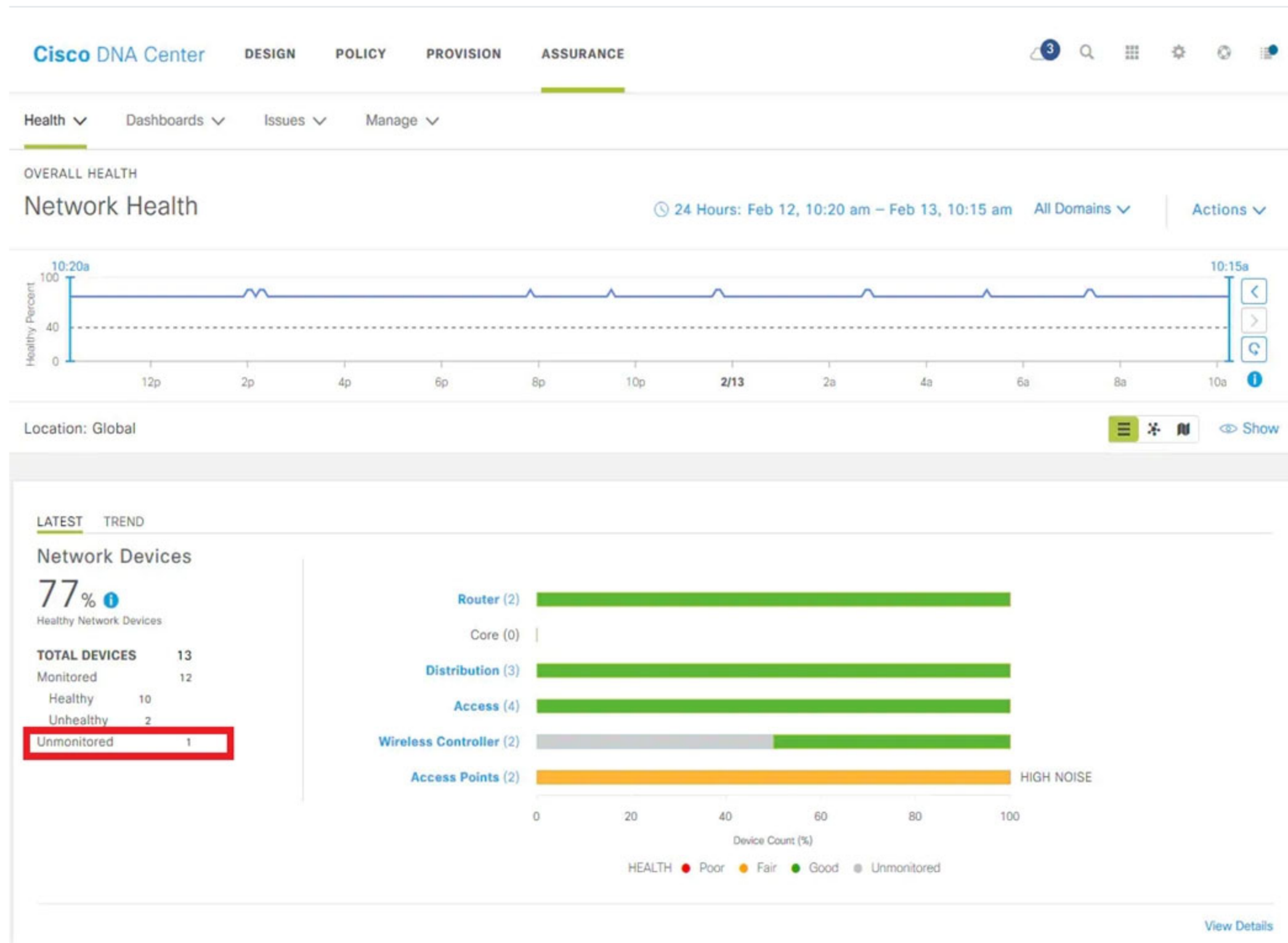
D. RouterB(config-if)#ip helper-address 172.31.1.1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 186

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A network administrator added one router in the Cisco DNA Center and checked its discovery and health from the Network Health Dashboard. The network administrator observed that the router is still showing up as unmonitored.

What must be configured on the router to mount it in the Cisco DNA Center?

A. Configure router with SNMPv2c or SNMPv3 traps

B. Configure router with the telemetry data

C. Configure router with routing to reach Cisco DNA Center

D. Configure router with NetFlow data

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 187

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. NTP is configured across the network infrastructure and Cisco DNA Center. An NTP issue was reported on the Cisco DNA Center at 17:15. Which action resolves the issue?

A. Reset the NTP server to resolve any synchronization issues for all devices

B. Check and resolve reachability between Cisco DNA Center and the NTP server

C. Check and resolve reachability between the WLC and the NTP server

D. Check and configure NTP on the WLC and synchronize with Cisco DNA Center

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 188

Topic #: 1

[All 300-410 Questions]

Terminal server
2018:db1:a:c::1/64

2018:db1:a:c::55/64 Gig0/2

PC-1
2018:db1:a:b::1/64

Edge Switch   Gig0/1

Gig0/0   Gig0/0   Gig0/1   Internet

2018:db1:a:b::55/64

Gig0/2

Gateway Router

PC-2
2018:db1:a:b::2/64

Gateway-Router# show ipv6 access-list
IPv6 access list Default_Access
permit tcp host 2018:DB1:A:B::1 host 2018:DB1:A:C::1 eq www sequence 10
deny tcp any host 2018:DB1:A:C::1 eq telnet sequence 20
permit tcp host 2018:DB1:A:B::2 host 2018:DB1:A:C::1 eq telnet sequence 30
permit ipv6 2018:DB1:A:B::/64 any sequence 40

Refer to the exhibit. PC-2 failed to establish a Telnet connection to the terminal server.
Which configuration resolves the issue?

A. Gateway-Router(config)#ipv6 access-list Default_Access Gateway-Router(config-ipv6-acl)#sequence 25 permit tcp host 2018:DB1:A:B::2 host 2018:DB1:A:C::1 eq telnet

B. Gateway-Router(config)#ipv6 access-list Default_Access Gateway-Router(config-ipv6-acl)#no sequence 20 Gateway-Router(config-ipv6-acl)#sequence 5 permit tcp host 2018:DB1:A:B::2 host 2018:DB1:A:C::1 eq telnet

C. Gateway-Router(config)#ipv6 access-list Default_Access Gateway-Router(config-ipv6-acl)#permit tcp host 2018:DB1:A:B::2 host 2018:DB1:A:C::1 eq telnet

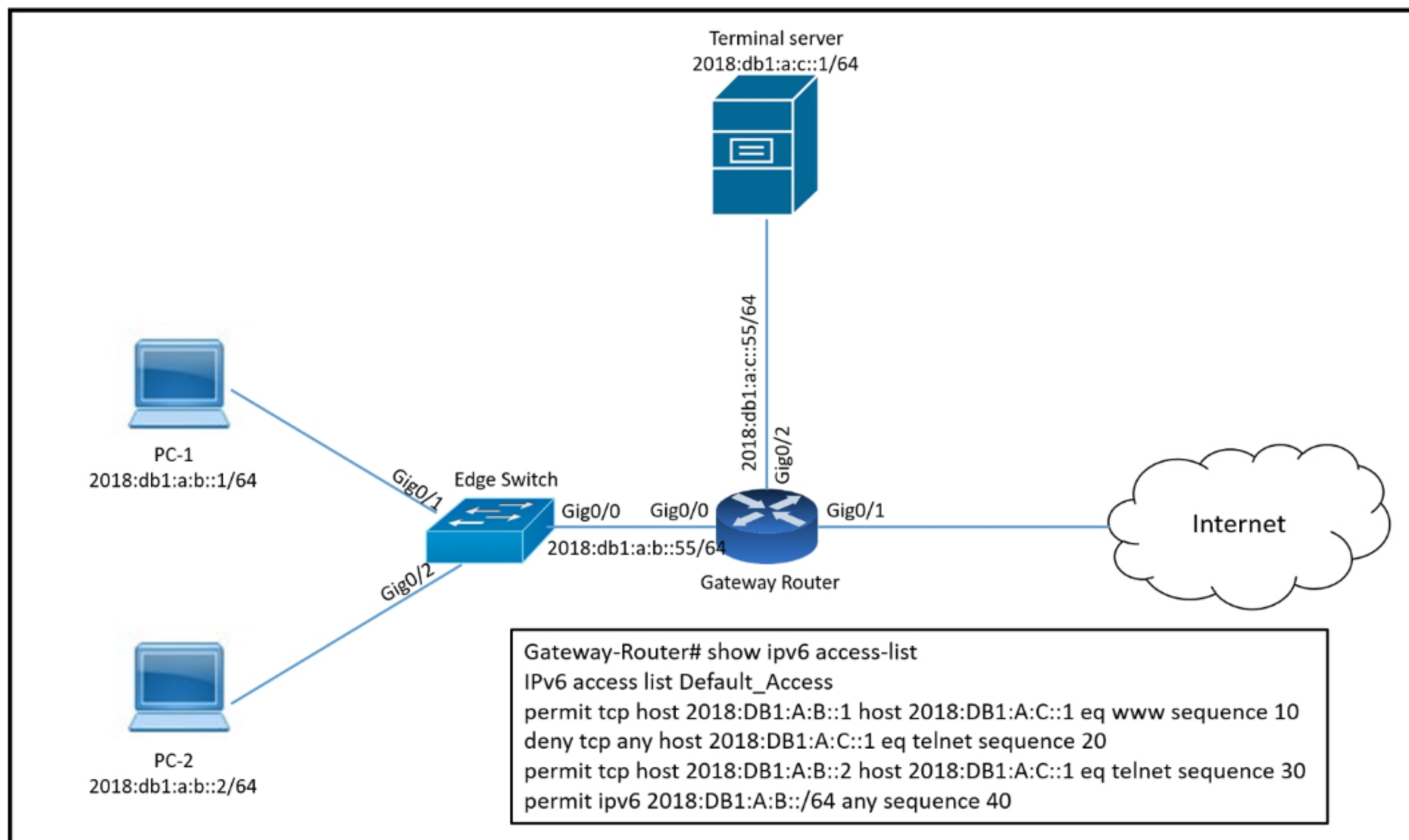D. Gateway-Router(config)#ipv6 access-list Default_Access Gateway-Router(config-ipv6-acl)#sequence 15 permit tcp host 2018:DB1:A:B::2 host 2018:DB1:A:C::1 eq telnet

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 189

Topic #: 1

[All 300-410 Questions]

```
Jan 9 15:29:29.713: DHCP_SNOOPING: process new DHCP packet, message type: DHCPINFORM, input interface:
Po2, MAC da: ffff.ffff.ffff, DHCP yiaddr: 0.0.0.0, DHCP siaddr: 0.0.0.0, DHCP giaddr: 0.0.0.0
Jan 9 15:29:29.713: DHCP_SNOOPING_SW: bridge packet get invalid mat entry: FFFF:FFFF:FFFF, packet is
flooded to ingress VLAN: (1)
Jan 9 15:29:29.722: DHCP_SNOOPING_SW: bridge packet send packet to cpu port: Vlan1.
Jan 9 15:29:31.509: DHCPSNOOP(hlfm_set_if_input): Setting if_input to Po2 for pak. Was VI1
Jan 9 15:29:31.509: DHCPSNOOP(hlfm_set_if_input): Setting if_input to VI1 for pak. Was Po2
Jan 9 15:29:31.509: DHCPSNOOP(hlfm_set_if_input): Setting if_input to Po2 for pak. Was VI1Jan 9
15:29:31.517: DHCP_SNOOPING: received new DHCP packet from input interface (Port-channel2)
```

Refer to the exhibit. A network administrator enables DHCP snooping on the Cisco Catalyst 3750-X switch and configures the uplink port (Port-channel2) as a trusted port. Clients are not receiving an IP address, but when DHCP snooping is disabled, clients start receiving IP addresses.

Which global command resolves the issue?

A. ip dhcp relay information trust portchannel2

B. ip dhcp snooping

C. ip dhcp snooping trust

D. no ip dhcp snooping information option

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 190

Topic #: 1

[All 300-410 Questions]

A customer reports to the support desk that they cannot print from their PC to the local printer id:123456789.

Which tool must be used to diagnose the issue using Cisco DNA Center Assurance?

A. device trace

B. ACL trace

C. path trace

D. application trace

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 191

Topic #: 1

[All 300-410 Questions]

An engineer configured SNMP notifications sent to the management server using authentication and encrypting data with DES. An error in the response PDU is received as "UNKNOWNUSERNAME, WRONGDIGEST".

Which action resolves the issue?

A. Configure the correct authentication password using SNMPv3 authNoPriv.

B. Configure correct authentication and privacy passwords using SNMPv3 authPriv.

C. Configure correct authentication and privacy passwords using SNMPv3 authNoPriv.

D. Configure the correct authentication password using SNMPv3 authPriv.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 192

Topic #: 1

[All 300-410 Questions]
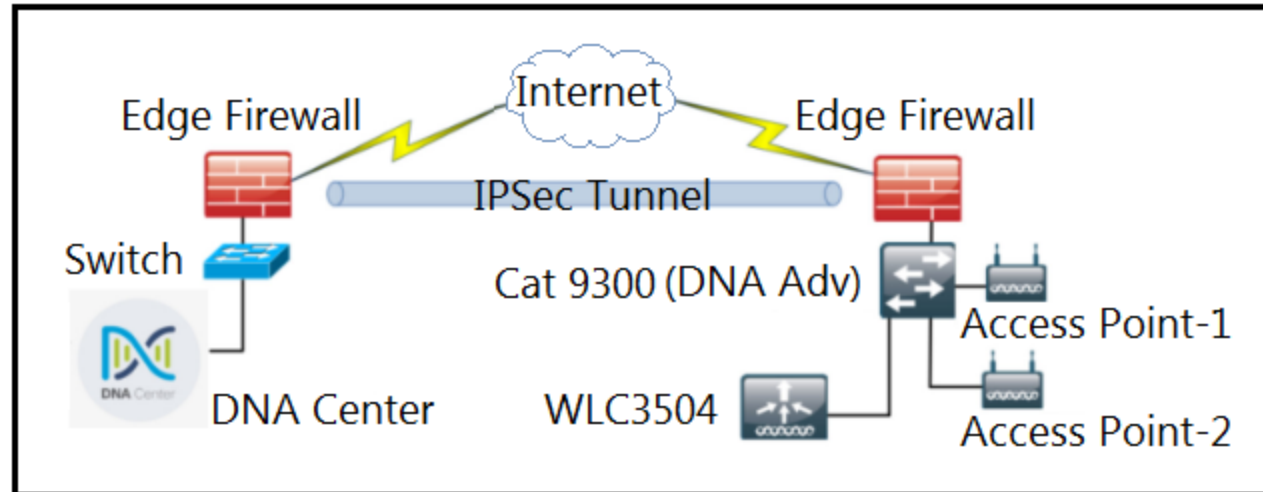
Refer to the exhibit. A network administrator is discovering a Cisco Catalyst 9300 and a Cisco WLC 3504 in Cisco DNA Center. The Catalyst 9300 is added successfully. However, the WLC is showing the error "uncontactable" when the administrator tries to add it in Cisco DNA Center.

Which action discovers WLC in Cisco DNA Center successfully?

A. Delete the WLC 3504 from Cisco DNA Center and add it to Cisco DNA Center again.

B. Add the WLC 3504 under the hierarchy of the Catalyst 9300 connected devices.

C. Copy the .cert file from the Cisco DNA Center on the USB and upload it to the WLC 3504.

D. Copy the .pem file from the Cisco DNA Center on the USB and upload it to the WLC 3504.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 193

Topic #: 1

[All 300-410 Questions]

```
router# show running-config
Building configuration...
!
<output omitted -----!>
!
hostname R1
ip domain-name cisco.com
!
crypto key generate rsa modulus 2048
!
username admin privilege 15 secret cisco123
!
access-list 1 permit 10.1.1.0 0.0.0.255
access-list 1 deny any log
!
line vty 0 15
access-class 1 in
login local
!
<output omitted -----!>
!
end
```

Refer to the exhibit. A user cannot SSH to the router.
What action must be taken to resolve this issue?

    A. Configure transport input ssh

    B. Configure transport output ssh

    C. Configure ip ssh version 2

    D. Configure ip ssh source-interface loopback0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 194

Topic #: 1

[All 300-410 Questions]

An engineer configured a Cisco router to send reliable and encrypted notifications for any events to the management server. It was noticed that the notification messages are reliable but not encrypted.

Which action resolves the issue?

A. Configure all devices for SNMPv3 informs with auth.

B. Configure all devices for SNMPv3 informs with priv.

C. Configure all devices for SNMPv3 traps with auth.

D. Configure all devices for SNMPv3 traps with priv.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 195

Topic #: 1

[All 300-410 Questions]


```
R1
 ip sla 100
  icmp-echo 10.12.1.254
 !
 track 10 ip sla 100 reachability
 !
 ip route 0.0.0.0 0.0.0.0 10.12.1.254 track 10
 ip route 0.0.0.0 0.0.0.0 10.13.1.254 10
 !

R1#show ip route
 (Output Omitted)
 Gateway of last resort is 10.13.1.254 to network 0.0.0.0

 S* 0.0.0.0/0 [10/0] via 10.13.1.254
     10.0.0.0/8 is variably subnetted, 6 subsets, 2 masks
 C      10.11.1.0/24 is directly connected, GigabitEthernet0/1
 L      10.11.1.1/32 is directly connected, GigabitEthernet0/1
 C      10.12.1.0/24 is directly connected, GigabitEthernet0/0
 L      10.12.1.1/32 is directly connected, GigabitEthernet0/0
 C      10.13.1.0/24 is directly connected, GigabitEthernet0/2
 L      10.13.1.1/32 is directly connected, GigabitEthernet0/2
```

Refer to the exhibit. An engineer is monitoring reachability of the configured default routes to ISP1 and ISP2. The default route from ISP1 is preferred if available. How is this issue resolved?

A. Use the icmp-echo command to track both default routes.

B. Use the same AD for both default routes.

C. Start IP SLA by matching numbers for track and ip sla commands.

D. Start IP SLA by defining frequency and scheduling it.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 196

Topic #: 1

[All 300-410 Questions]

Priority ▲	Issue Type	Device Role	Category	Issue Count	Site Count (Area)	Device Count
P2	Layer 2 loop symptoms	DISTRIBUTION	Connectivity	48	1	2

Layer 2 loop symptoms

Feb

2	Open issues	1	Area 1 Buildings, 0 Floors	2	DISTRIBUTION

Filter

Issue	Site	Device	Device Type	Issue Count
Host flaps observed in 1 VLAN(s)	USA/SF	SF-D9300-1	Cisco Catalyst 9300 Switch	24
Host flaps observed in 1 VLAN(s)	USA/SF	SF-D9300-2	Cisco Catalyst 9300 Switch	24

Potential Loop Details

Filter   Find

Device	Role	Port in loop	Duplex	VLAN in loop
SF-D9300-1	DISTRIBUTION	GigabitEthernet1/0/13	Full	30-33
SF-D9300-2	DISTRIBUTION	GigabitEthernet1/0/13	Full	30-33
SF-D9300-1	DISTRIBUTION	GigabitEthernet1/0/23	Full	30-33
SF-A3850-1	ACCESS	GigabitEthernet1/0/23	Full	30-33

```
interface GigabitEthernet1/0/13
  switchport trunk allowed vlan 30-33
  switchport mode trunk
!
interface GigabitEthernet1/0/23
  switchport trunk allowed vlan 30-33
  switchport mode trunk
```

Refer to the exhibits. An engineer identified a Layer 2 loop using DNAC. Which command fixes the problem in the SF-D9300-1 switch?

A. spanning-tree portfast bpduguard

B. no spanning-tree uplinkfast

C. spanning-tree backbonefast

D. spanning-tree loopguard default

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 197

Topic #: 1

[All 300-410 Questions]

```
R1#show run | begin line
line con 0
 exec-timeout 0 0
 privilege level 15
 logging synchronous
 transport preferred telnet
 transport output none
 stopbits 0 4
line vty 0 4
 login
 transport referred telnet
 transport input none
 transport output telnet
R1#


R1#ssh -1 cisco 192.168.12.2
% ssh connections not permitted from this terminal
R1#
```

Refer to the exhibit. An engineer receives this error message when trying to access another router in-band from the serial interface connected to the console of R1.

Which configuration is needed on R1 to resolve this issue?

    A. R1(config)#line vty 0 R1(config-line)# transport output ssh

    B. R1(config)#line console 0 R1(config-line)# transport output ssh

    C. R1(config)#line console 0 R1(config-line)# transport preferred ssh

    D. R1(config)#line vty 0 R1(config-line)# transport output ssh R1(config-line)# transport preferred ssh

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 198

Topic #: 1

[All 300-410 Questions]

```
ip dhcp pool 1
network 200.30.30.0/24
default-router 200.30.30.100
lease 40
!
ip dhcp pool 2
network 200.30.40.0/24
default-router 200.30.40.100
lease 40
!
```

Refer to the exhibit. The server for the finance department is not reachable consistently on the 200.30.40.0/24 network and after every second month it gets a new IP address.

What two actions must be taken to resolve this issue? (Choose two.)

A. Configure the server to use DHCP on the network with default gateway 200.30.40.100.

B. Configure the server with a static IP address and default gateway.

C. Configure the router to exclude a server IP address.

D. Configure the server to use DHCP on the network with default gateway 200.30.30.100.

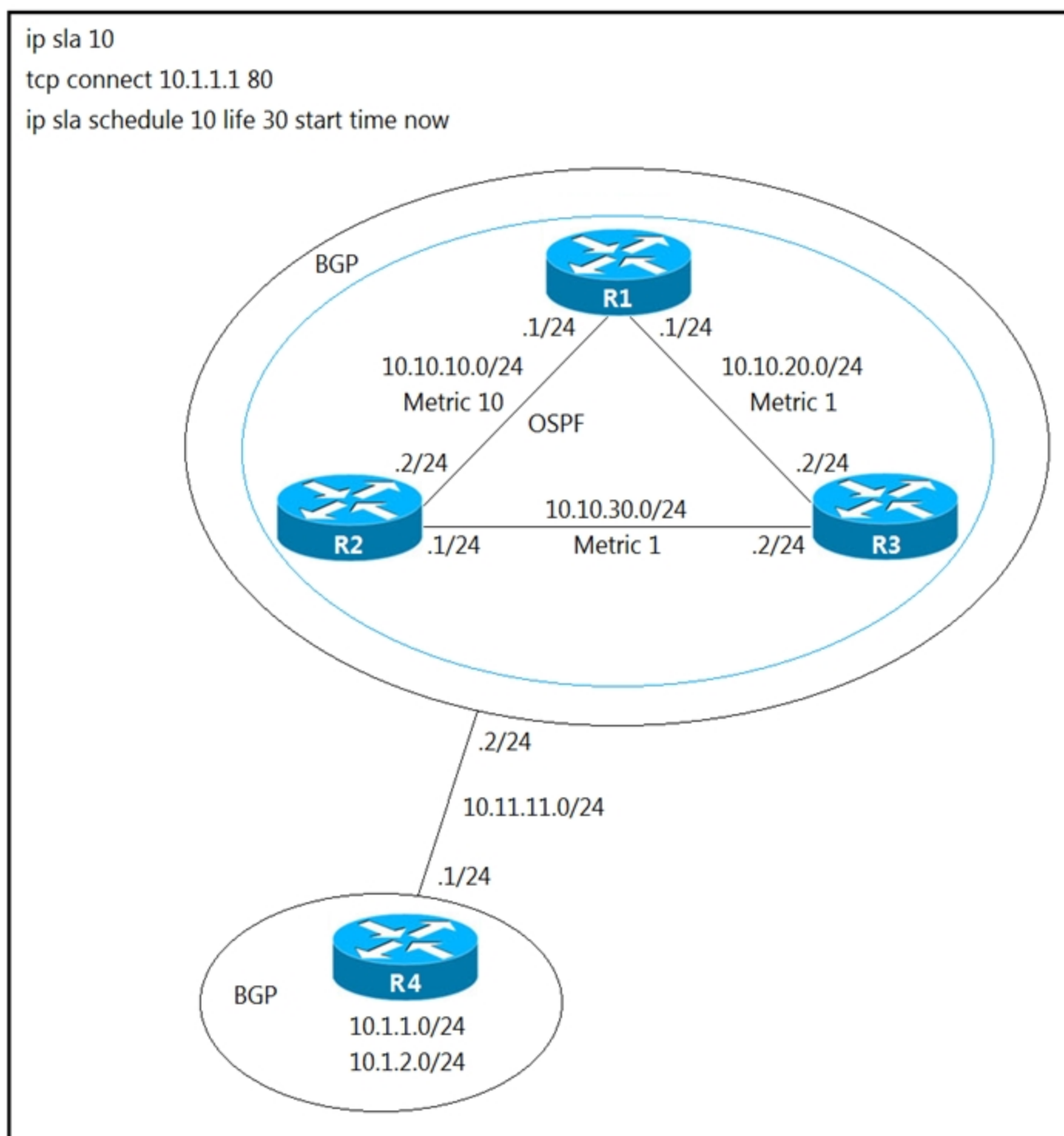E. Configure the router to exclude a server IP address and default gateway.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 199

Topic #: 1

[All 300-410 Questions]

```
ip sla 10
tcp connect 10.1.1.1 80
ip sla schedule 10 life 30 start time now
```


Refer to the exhibit. A user has set up an IP SLA probe to test if a non SLA host web server on IP address 10.1.1.1 accepts HTTP sessions prior to deployment. The probe is failing.

Which action should the network administrator recommend for the probe to succeed?

A. Re-issue the ip sla schedule command.

B. Add the control disable option to the tcp connect.

C. Modify the ip sla schedule frequency to forever.

D. Add icmp-echo command for the host.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 200

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A network administrator is using the DNA Assurance Dashboard panel to troubleshoot an OSPF adjacency that failed between Edge_NYC Interface GigabitEthernet1/3 with Neighbor Edge_SNJ. The administrator observes that the neighborship is stuck in the exstart state.

How does the administrator fix this issue?

A. Configure to match the OSPF interface network types on both routers.

B. Configure to match the OSPF interface speed and duplex settings on both routers.

C. Configure to match the OSPF interface MTU settings on both routers.

D. Configure to match the OSPF interface unique IP address and subnet mask on both routers.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 201

Topic #: 1

Debug output:

May 5 15:19:26.173: OSPF: Send DBD to 192.168.95.11 on GigabitEthernet3/1 seq 0x2AC opt 0x50 flag 0x7 len 32

May 5 15:19:30.749: OSPF: Send DBD to 192.168.95.11 on GigabitEthernet3/1 seq 0x2AC opt 0x50 flag 0x7 len 32

May 5 15:19:30.749: OSPF: Retransmitting DBD to 192.168.95.11 on GigabitEthernet3/1 [1]

May 5 15:19:35.509: OSPF: Send DBD to 192.168.95.11 on GigabitEthernet3/1 seq 0x2AC opt 0x50 flag 0x7 len 32

May 5 15:27:29.904: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel0 from LOADING to FULL, Loading Done

May 5 15:28:28.176: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel9 from LOADING to FULL, Loading Done

May 5 15:30:02.028: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel55 from LOADING to FULL, Loading Done

May 5 15:30:34.720: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:30:44.009: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:19:30.749: OSPF: Send DBD to 192.168.95.11 on GigabitEthernet3/1 seq 0x2AC opt 0x50 flag 0x7 len 32

May 5 15:19:30.749: OSPF: Retransmitting DBD to 192.168.95.11 on GigabitEthernet3/1 [1]

May 5 15:31:09.441: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel9 from LOADING to FULL, Loading Done

May 5 15:31:27.341: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:31:42.137: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:32:14.777: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel55 from LOADING to FULL, Loading Done

May 5 15:19:30.749: OSPF: Send DBD to 192.168.95.11 on GigabitEthernet3/1 seq 0x2AC opt 0x50 flag 0x7 len 32

May 5 15:19:30.749: OSPF: Retransmitting DBD to 192.168.95.11 on GigabitEthernet3/1 [1]

May 5 15:33:40.761: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:34:32.065: %CRYPTO-4-IKE_DEFAULT_POLICY_ACCEPTED: IKE default policy was matched and is being used.

May 5 15:35:05.950: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.99.22 on Tunnel0 from LOADING to FULL, Loading Done

May 5 15:56:36.603: %PARSER-5-CFGLOG_LOGGEDCMD: User:gua logged command:lexec: enable

Refer to the exhibit. A network administrator is troubleshooting OSPF adjacency issue by going through the console logs in the router, but due to an overwhelming log messages stream, it is impossible to capture the problem.

Which two commands reduce console log messages to relevant OSPF neighbor problem details so that the issue can be resolved? (Choose two.)

A. debug condition ospf neighbor

B. debug condition interface

C. debug condition session-id ADJCHG

D. debug condition all

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 202

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

A network is under a cyberattack. A network engineer connected to R1 by SSH and enabled the terminal monitor via SSH session to find the source and destination of the attack. The session was flooded with messages, which made it impossible for the engineer to troubleshoot the issue.

Which command resolves this issue on R1?

A. (config)#terminal no monitor

B. (config)#no terminal monitor

C. #no terminal monitor

D. #terminal no monitor

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 203

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

```
admin@linux:~$ scp script.py admin@198.51.100.64:script.py
Password:
Administratively disabled.
admin@linux:~$ Connection to 198.51.100.64 closed by remote
host.
```

A network administrator has developed a Python script on the local Linux machine and is trying to transfer it to the router. However, the transfer fails.

Which action resolves this issue?

A. The Python interpreter must first be enabled with the guestshell enable command.

B. The SSH access must be allowed on the VTY lines using the transport input ssh command.

C. The SSH service must be enabled with the crypto key generate rsa command.

D. The SCP service must be enabled with the ip scp server enable command.

Show Suggested Answer
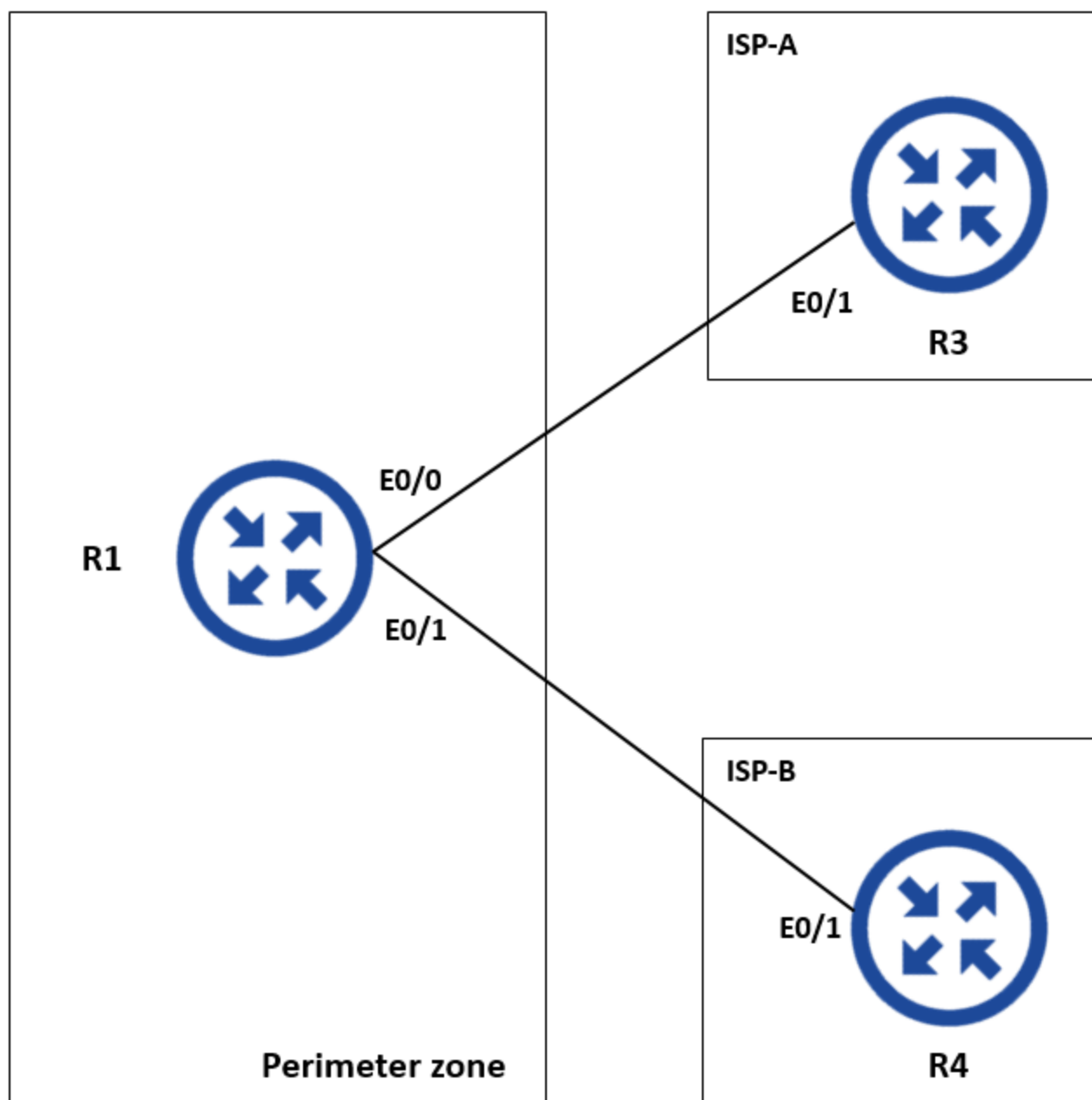
Actual exam question from Cisco's 300-410

Question #: 204

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.
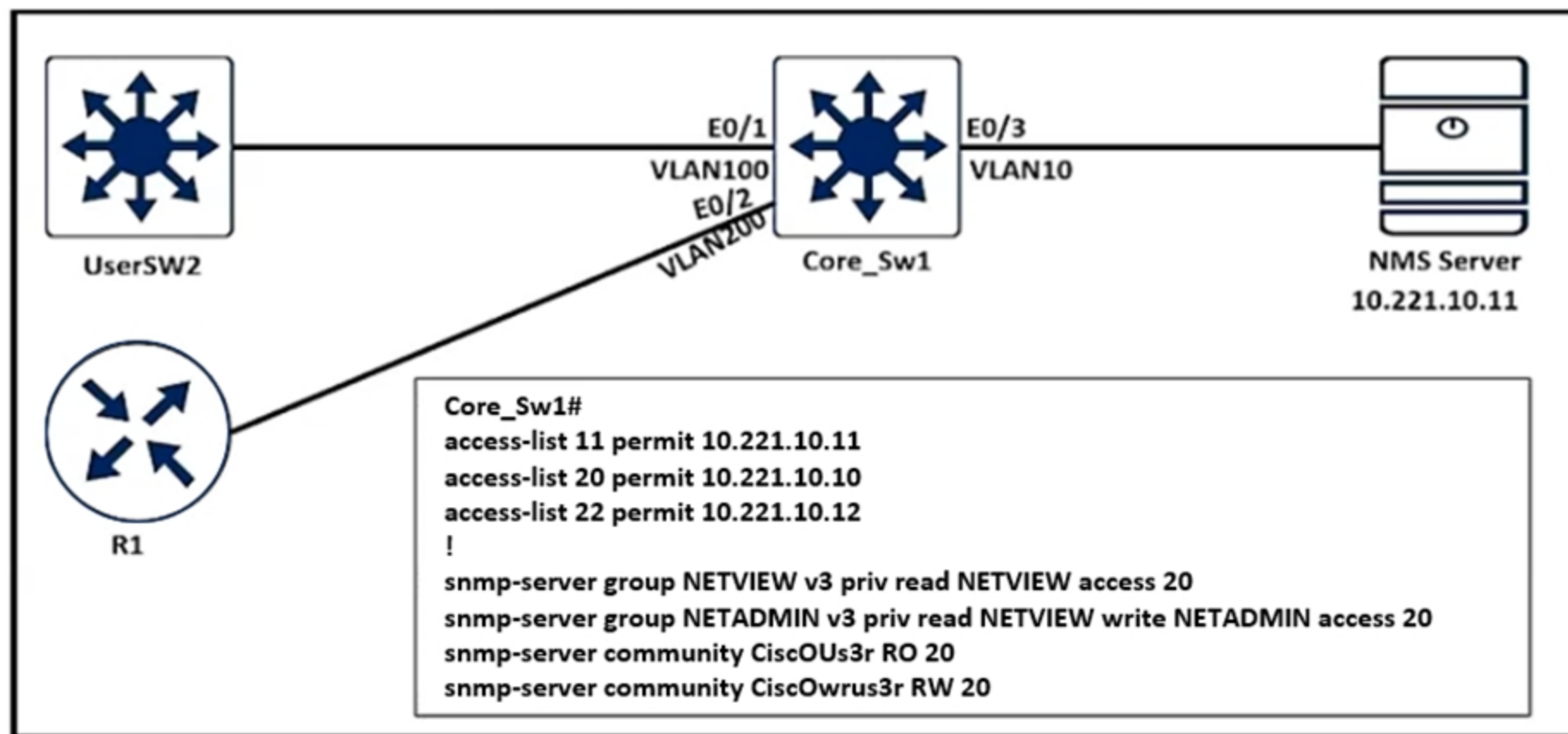
An engineer configured SNMP communities on the Core_Sw1, but the SNMP server cannot obtain information from Core_Sw1.
Which configuration resolves this issue?

    A. access-list 20 permit 10.221.10.11

    B. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22

    C. snmp-server group NETVIEW v2c priv read NETVIEW access 20

    D. access-list 20 permit 10.221.10.12

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 205

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.

```
*Sep 26 19:50:43.504: SNMP: Packet received via UDP from
192.168.1.2 on GigabitEthernet0/1SrParseV3SnmpMessage: No
matching Engine ID.

SrParseV3SnmpMessage: Failed.
SrDoSnmp: authentication failure, Unknown Engine ID

*Sep 26 19:50:43.504: SNMP: Report, reqid 29548, errstat 0,
erridx 0
internet.6.3.15.1.1.4.0 = 3
*Sep 26 19:50:43.508: SNMP: Packet sent via UDP to 192.168.1.2
process_mgmt_req_int: UDP packet being de-queued
```

Which two commands provide the administrator with the information needed to resolve the issue? (Choose two.)

A. debug snmpv3 engine-id

B. show snmp user

C. debug snmp packet

D. debug snmp engine-id

E. show snmpv3 user

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 206

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit.
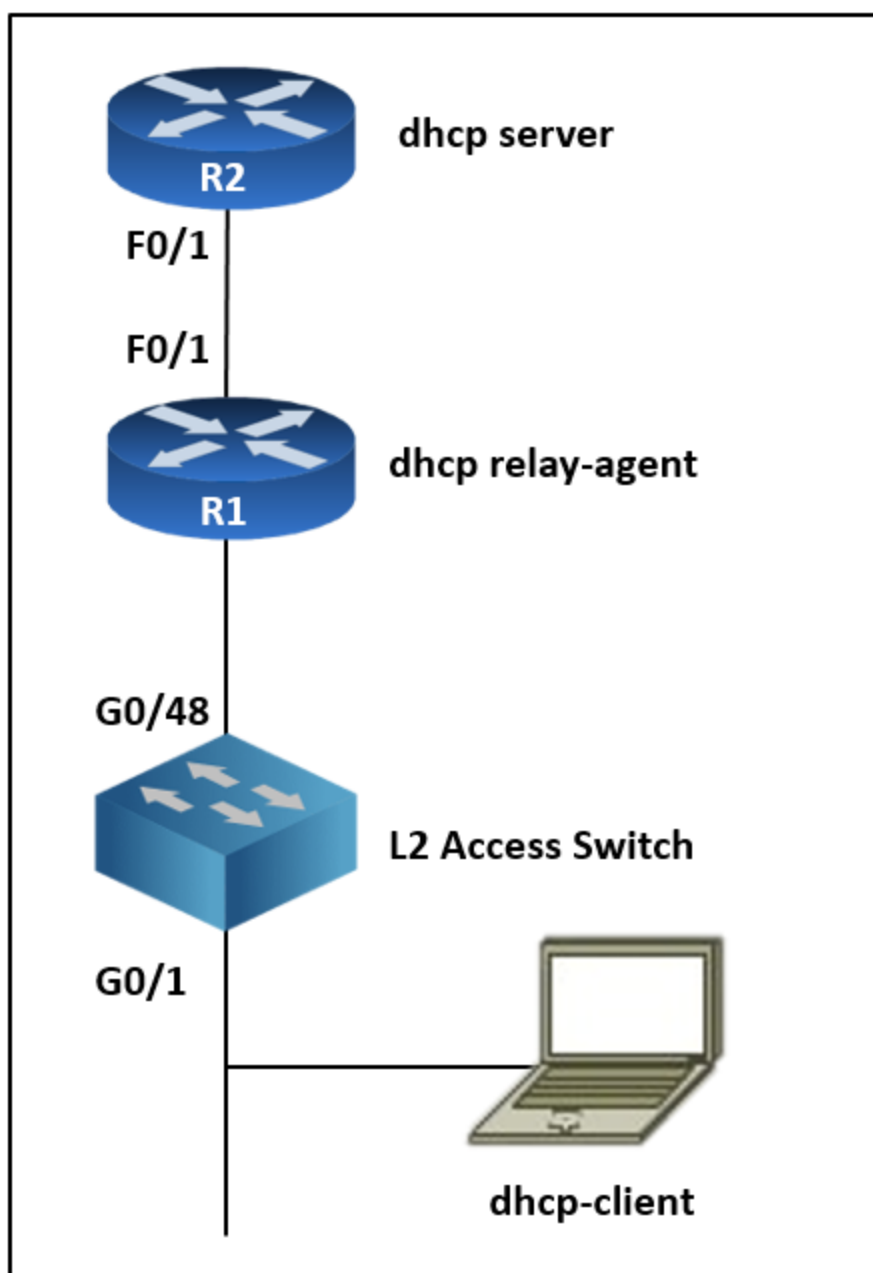
The network administrator can see the DHCP discovery packet in R1, but R2 is not replying to the DHCP request. The R1 related interface is configured with the DHCP helper address. If the PC is directly connected to the Fa0/1 interface on R2, the DHCP server assigns as IP address from the DHCP pool to the PC. Which two commands resolve this issue? (Choose two.)

A. service dhcp-relay command on R1

B. ip dhcp relay information enable command on R1

C. ip dhcp option 82 command on R2

D. service dhcp command on R1

E. ip dhcp relay information trust-all command on R2

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 207

Topic #: 1

[All 300-410 Questions]

A network administrator performed a Compact Flash Memory upgrade on a Cisco Catalyst 6509 Switch. Everything is functioning normally except SNMP, which was configured to monitor the bandwidth of key interfaces but the interface indexes are changed.

Which global configuration resolves the issue?

A. snmp-server ifindex persist

B. snmp-server ifindex permanent

C. snmp ifindex persist

D. snmp ifindex permanent

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 208

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. R1 is configured with IP SLA to check the availability of the server behind R6 but it kept failing.
Which configuration resolves the issue?

- A. R6(config)#ip sla responder udp-echo ip address 10.10.10.1 port 5000

- B. R6(config)#ip access-list extended DDOS R6(config-ext-nacl)#5 permit icmp host 10.10.10.1 host 10.66.66.66

- C. R6(config)#ip sla responder

- D. R6(config)#ip access-list extended DDOS R6(config-ext-nacl)#5 permit icmp host 10.66.66.66 host 10.10.10.1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 209

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer configured IP SLA on R1 to avoid the ISP link flapping problem, but it is not working as designed. IP SLA should wait 30 seconds before switching traffic to a secondary connection and then revert to the primary link after waiting 20 seconds, when the primary link is available and stabilized.
Which configuration resolves the issue?

A. R1(config)#track 700 ip sla 700 R1 (config-track)#delay down 30 up 20

B. R1 (config)#ip sla 700 R1(config-ip-sla)#delay down 30 up 20

C. R1 (config)#ip sla 700 R1(config-ip-sla)#delay down 20 up 30

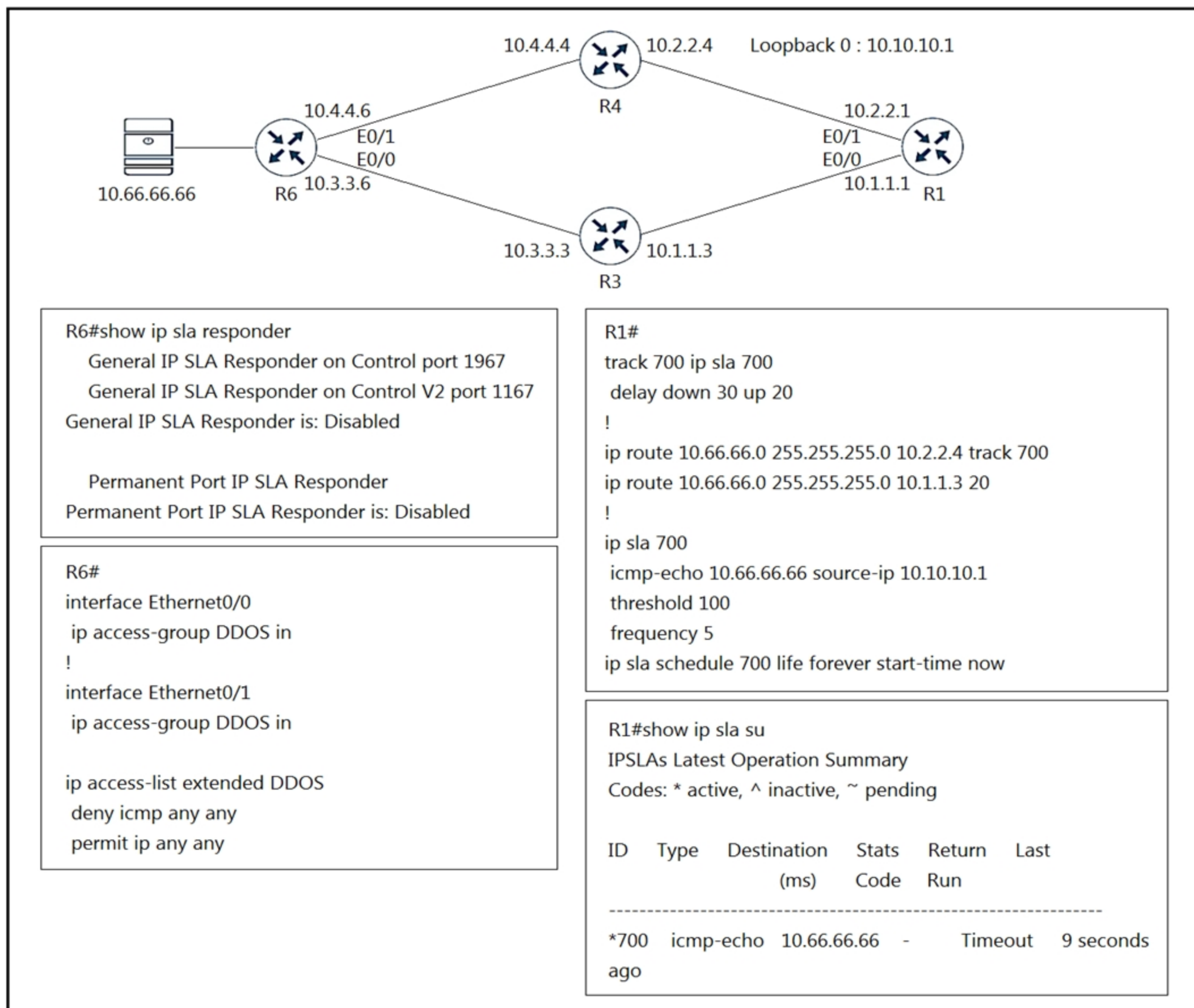D. R1(config)#track 700 ip sla 700 R1(config-track)#delay down 20 up 30

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 210

Topic #: 1

[All 300-410 Questions]
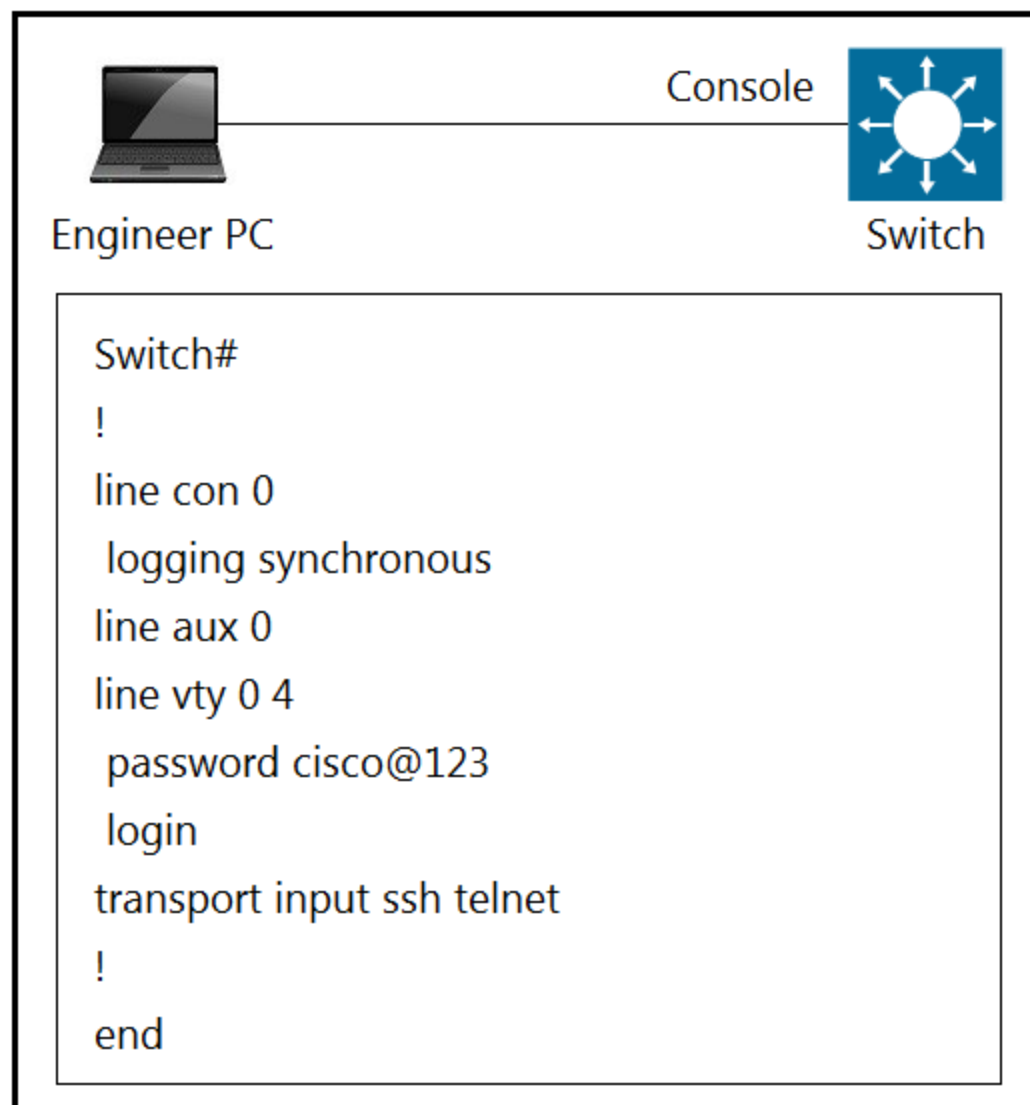
Refer to the exhibit. An engineer must block access to the console ports for all corporate remote Cisco devices based on the recent corporate security policy but the security team still can connect through the console port.

Which configuration on the console port resolves the issue?

A. login and password

B. exec 0 0

C. transport input telnet

D. no exec

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 211

Topic #: 1

[All 300-410 Questions]

---

ipv6 dhcp server:

ipv6 unicast-routing
!
int e0/1
ipv6 enable
ipv6 add 2001:11::1/64
ipv6 nd other-config-flag
no shut
ipv6 dhcp server IPv6Pool
!
ipv6 dhcp pool IPv6Pool
dns-server 2002:555::1
domain-name my.net

ipv6 dhcp client:

interface Ethernet0/1
no ip address
ipv6 address dhcp
ipv6 enable
no shut

Refer to the exhibit. A network administrator is troubleshooting IPv6 address assignment for a DHCP client that is not getting an IPv6 address from the server. Which configuration retrieves the client IPv6 address from the DHCP server?

A. ipv6 address autoconfig command on the interface

B. ipv6 dhcp server automatic command on DHCP server

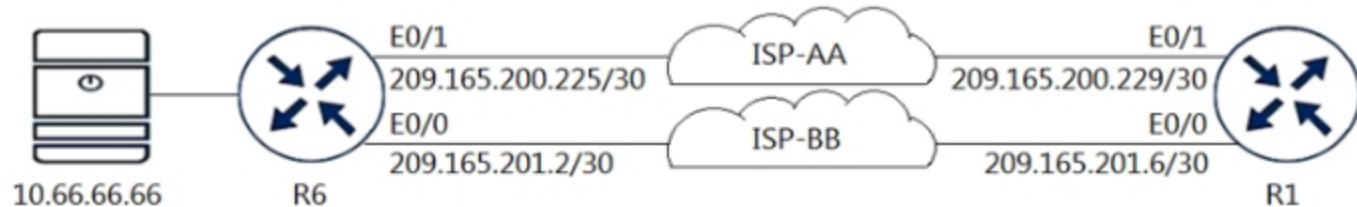C. ipv6 dhcp relay-agent command on the interface

D. service dhcp command on DHCP server

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 212

Topic #: 1

[All 300-410 Questions]
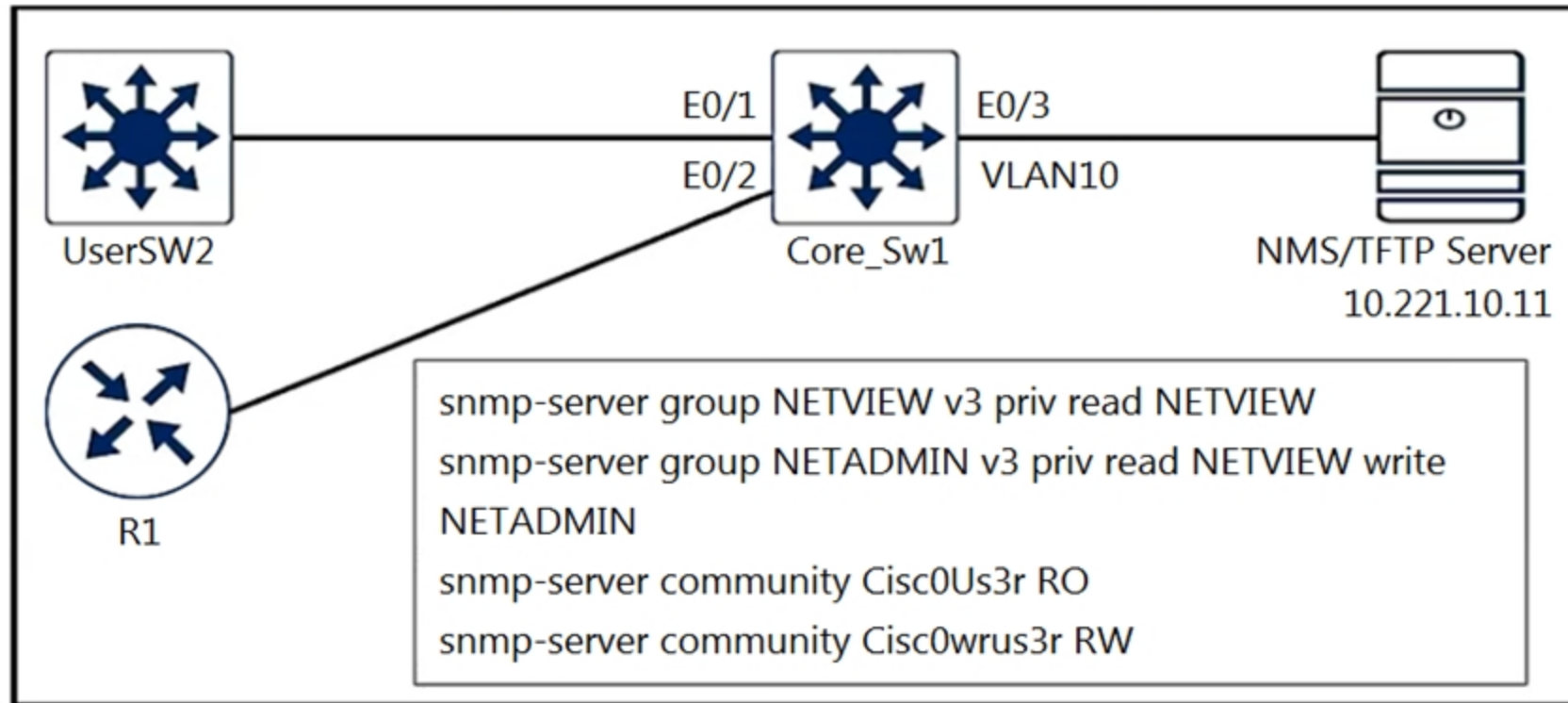
Refer to the exhibit. A junior engineer configured SNMP to network devices. Malicious users have uploaded different configurations to the network devices using SNMP and TFTP servers.

Which configuration prevents changes from unauthorized NMS and TFTP servers?

A. access-list 20 permit 10.221.10.11 access-list 20 deny any log ! snmp-server group NETVIEW v3 priv read NETVIEW access 20 snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 20 snmp-server community Cisc0Us3r RO 20 snmp-server community Cisc0wrus3r RW 20 snmp-server tftp-server-list 20

B. access-list 20 permit 10.221.10.11 access-list 20 deny any log ! snmp-server group NETVIEW v3 priv read NETVIEW access 20 snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 20 snmp-server community Cisc0wrus3r RO 20 snmp-server community Cisc0Us3r RW 20 snmp-server tftp-server-list 20

C. access-list 20 permit 10.221.10.11 access-list 20 deny any log

D. access-list 20 permit 10.221.10.11

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 213

Topic #: 1

[All 300-410 Questions]

An engineer creates a Cisco DNA Center cluster with three nodes, but all the services are running on one host node.

Which action resolves this issue?

A. Restore the link on the switch interface that is connected to a cluster link on the Cisco DNA Center.

B. Click system updates, and upgrade to the latest version of Cisco DNA Center.

C. Enable service distribution from the Systems 360 page.

D. Click the master host node with all the services and select services to be moved to other hosts.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 214

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The AP status from Cisco DNA Center Assurance Dashboard shows some physical connectivity issues from access switch interface G1/0/14. Which command generates the diagnostic data to resolve the physical connectivity issues?

A. check cable-diagnostics tdr interface GigabitEthernet1/0/14

B. verify cable-diagnostics tdr interface GigabitEthernet1/0/14

C. show cable-diagnostics tdr interface GigabitEthernet1/0/14

D. test cable-diagnostics tdr interface GigabitEthernet1/0/14

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 215

Topic #: 1

[All 300-410 Questions]

R1#sh flow exporter
Flow Exporter FlowAnalyzer1:
 Description: User defined
 Export protocol: NetFlow Version 9
 Transport Configuration:
  Destination IP address: 10.221.10.10
  Source IP address: 10.2.2.1
  Source Interface: Ethernet0/1
  Transport Protocol: UDP
  Destination Port: 2055
  Source Port: 49398
  DSCP: 0x0
  TTL: 255
  Output Features: Not Used

Refer to the exhibit. An engineer configured NetFlow on R1, but the NMS server cannot see the flow from R1.

Which configuration resolves the issue?

A. interface Ethernet0/1 flow-destination 10.221.10.11

B. interface Ethernet0/0 flow-destination 10.221.10.11

C. flow exporter FlowAnalyzer1 destination 10.221.10.11

D. flow monitor Flowmonitor1 destination 10.221.10.11

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 216

Topic #: 1

[All 300-410 Questions]

FTP Server — 10.0.0.2/24

Username: cisco
Password: cisco
File to download: IOS.bin

```
C:\Users\FTPServer>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:
Reply from 10.0.0.1: bytes=32 time=1ms TTL=64
Reply from 10.0.0.1: bytes=32 time=1ms TTL=64
Reply from 10.0.0.1: bytes=32 time=1ms TTL=64
Reply from 10.0.0.1: bytes=32 time=1ms TTL=64

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms
```

Switch — E0/1, VLAN2

```
Switch#
!
Interface VLAN2
 ip address 10.0.0.1 255.255.255.0
!
ip ftp source-interface vlan 2
```

```
Switch#copy ftp://cisco:cisco@10.0.0.2/IOS.bin flash:/
Destination filename [IOS.bin]?
Accessing ftp://cisco:cisco@10.0.0.2/IOS.bin...
%Error opening ftp://cisco:cisco@10.0.0.2/IOS.bin (No such file or directory)
```

Refer to the exhibit. An engineer cannot copy the IOS.bin file from the FTP server to the switch.

Which action resolves the issue?

    A. Allow file permissions to download the file from the FTP server.

    B. Add the IOS.bin file, which does not exist on FTP server.

    C. Make memory space on the switch flash or USB drive to download the file.

    D. Use the copy flash:/ ftp://cisco@10.0.0.2/IOS.bin command.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 217

Topic #: 1

[All 300-410 Questions]

```
CPE# show snmp mib ifmib ifindex detail

Description              ifIndex   Active    Persistent   Saved   TrapStatus
--------------------------------------------------------------------------------
Loopback1                8         yes       disabled     no      enabled
GigabitEthernet1         1         yes       disabled     no      enabled
GigabitEthernet3         3         yes       disabled     no      enabled
GigabitEthernet3.123     10        yes       disabled     no      disabled
VoIP-Null0               5         yes       disabled     no      enabled
Loopback0                7         yes       disabled     no      enabled
Null0                    6         yes       disabled     no      enabled
Loopback2                9         yes       disabled     no      enabled
GigabitEthernet4         4         yes       disabled     no      enabled
GigabitEthernet2         2         yes       disabled     no      enabled
```

Refer to the exhibit. After reloading the router, an administrator discovered that the interface utilization graphs displayed inconsistencies with their previous history in the NMS.

Which action prevents this issue from occurring after another router reload in the future?

A. Configure SNMP interface index persistence on the router.

B. Save the router configuration to startup-config before reloading the router.

C. Rediscover all the router interfaces through SNMP after the router is reloaded.

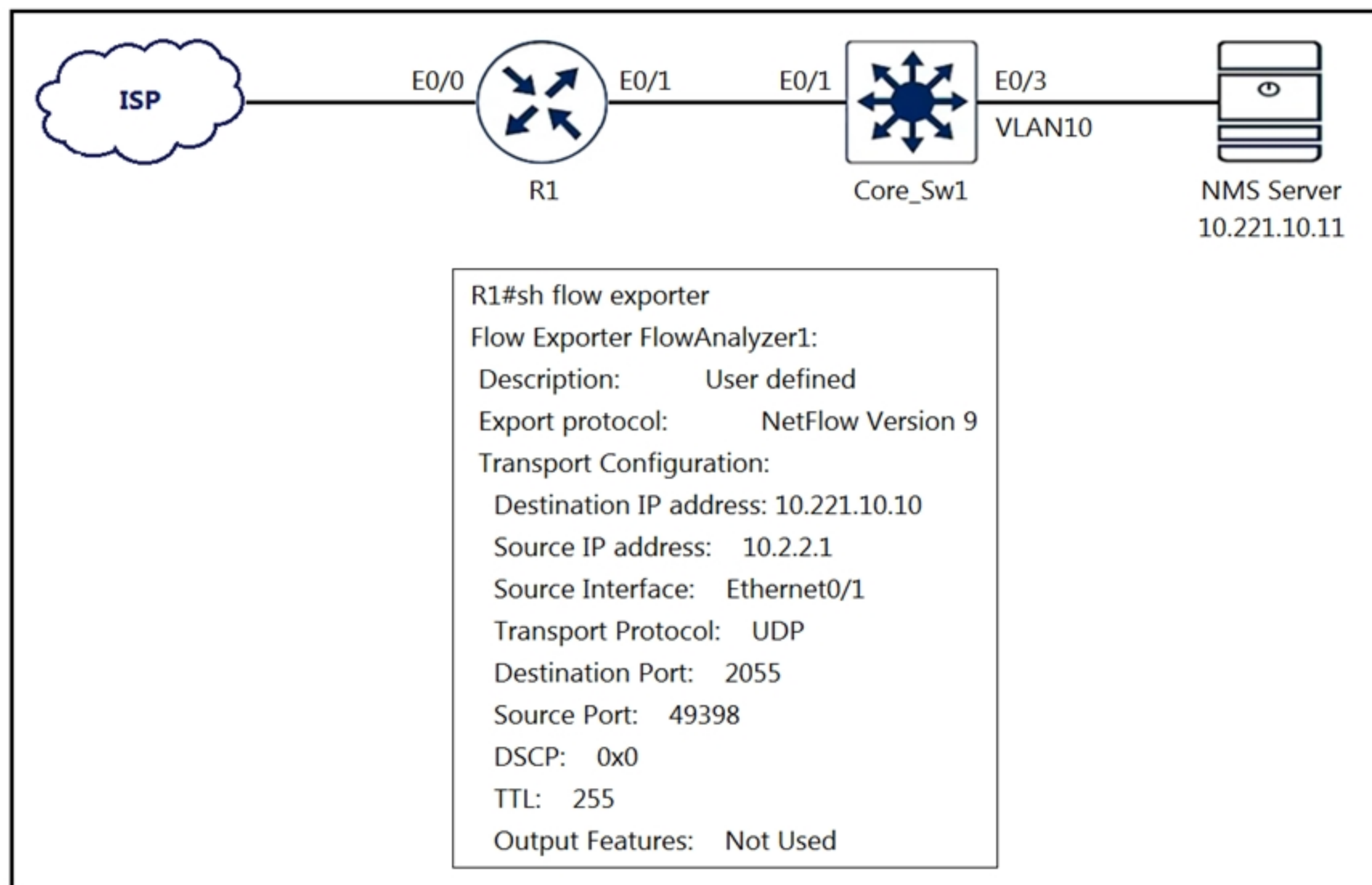D. Configure SNMP to use static OIDs referring to individual router interfaces.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 218

Topic #: 1

[All 300-410 Questions]

```
ip access-list extended Gi3-in
 <...>
 remark => All UDP rules below <=
 70 permit udp 192.168.30.0 0.0.0.255 eq bootpc host
255.255.255.255 eq bootps
 80 permit udp 192.168.30.0 0.0.0.255 host
192.168.255.4 eq domain
 90 deny   udp any any log
 remark => End of UDP rules <=
<...>
 !
interface GigabitEthernet3
 ip helper-address 192.168.255.3
 ip address 192.168.30.1 255.255.255.0
 ip access-group Gi3-in in
 ip ospf 1 area 0
 no shutdown
```

Refer to the exhibit. In an attempt to increase the network security, the administrator applied the Gi3-in ACL to the Gi3 interface. After the ACL was applied, clients in the network connected to Gi3 lost their ability to obtain IP settings from DHCP.

Which two configuration commands must be added to the Gi3-in ACL to reinstate the DHCP service for the clients? (Choose two.)

A. 74 permit udp 192.168.30.0 0.0.0.255 eq bootpc host 192.168.255.3 eq bootps

B. 71 permit udp host 0.0.0.0 eq bootps host 255.255.255.255 eq bootpc

C. 73 permit udp host 0.0.0.0 eq bootpc host 192.168.255.3 eq bootps

D. 72 permit udp host 192.168.255.3 eq bootps 192.168.30.0 0.0.0.255 eq bootpc
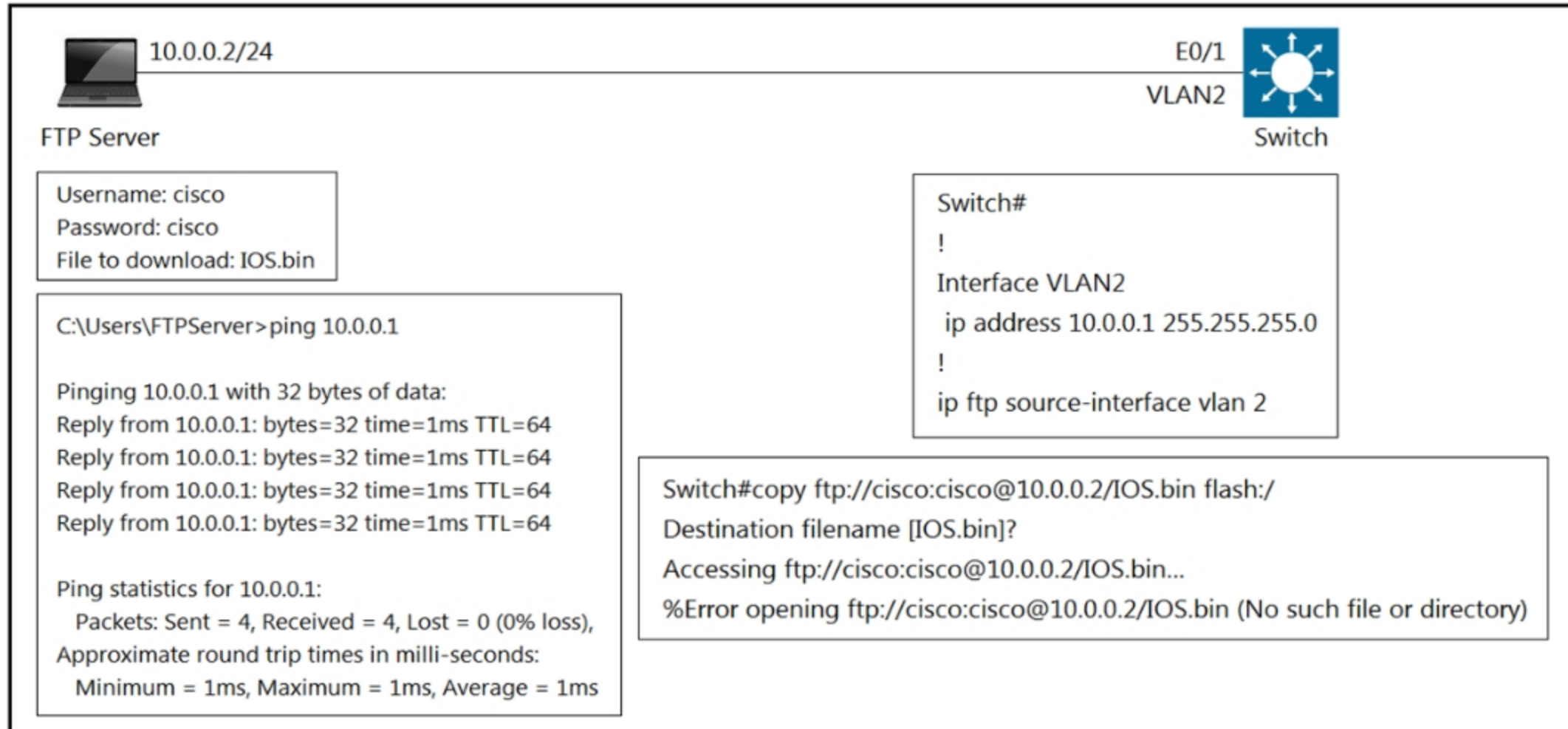
E. 75 permit udp host 0.0.0.0 eq bootpc host 255.255.255.255 eq bootps

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 219

Topic #: 1

[All 300-410 Questions]

```
R2#show ip route

Gateway of last resort is not set
    10.0.0.0/8 is variably subnetted, 12 subnets, 3 masks
C     10.1.3.0/30 is directly connected, FastEthernet0/1
C     10.1.2.0/30 is directly connected, FastEthernet0/0
C     10.1.1.0/30 is directly connected, FastEthernet1/0
O E2 10.19.0.0/24 [110/20] via 10.1.3.2, 00:02:04, FastEthernet0/1
D     10.55.13.0/24 (90/4096001 via 10.1.2.2. 00:01:00. FastEthernet0/0
D     10.37.100. 0/24 (90/4096001 via 10.1.2.2. 00:01:00. FastEthernet0/0
C     10.100.10.0/29 is directly connected, FastEthernet2/0.10
D     10.55.72.0/24 (90/409600] via 10.1.2.2. 00:01:01. FastEthernet0/0
C     10.100.20.0/29 is directly connected. FastEthernet2/0.20
O E2 10.144.1.0/24 /110/201 via 10.1.3.2. 00:12:51. FastEthernet0/1
D     10.55.144.0/24 (90/4096001 via 10.1.2.2. 00:01:01. FastEthernet0/0
O E2 10.123.187.0/24 (110/20] via 10.1.3.2. 00:12:51, FastEthernet0/1
```

```
R2#sh ip eigrp topology
IP-EIGRP Topology Table for AS(100)/ID(10.100.20.2)

Codes: P - Passive, A - Active, U - U- Update, Q - Query, R - Reply,
r- reply Status, s - sia Status
P 10.1.3.0/30, 1 successors, FD is 281600 via Connected, FastEthernet0/1
P 10.1.2.0/30, 1 successors, FD is 281600 via Connected, FastEthernet0/0
P 10.1.1.0/30, 1 successors, FD is 28160 via Connected, FastEthernet1/0
P 10.55.13.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256).
FastEthernet0/0
P 10.37.100.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256).
FastEthernet0/0
P 10.55.72.0/24. 1 successors, FD is 409600 via 10.1.2.2 (409600/128256),
FastEthernet0/0
P 10.55.144.0/24. 1 successors, FD is 409600 via 10.1.2.2 (409600/128256),
FastEthernet0/0
P 10.123.187.0/24.0 successors, FD is Inaccessible via 10.1.2.2 (409600/128256),
FastEthernet0/0
```

Refer to the exhibit. Router R2 should be learning the route for 10.123.187.0/24 via EIGRP. Which action resolves the issue without introducing more issues?

A. Redistribute the route in EIGRP with metric, delay, and reliability.

B. Use distribute-list to modify the route as an internal EIGRP route.

C. Use distribute-list to filter the external routes in OSPF.

D. Remove route redistribution in R2 for this route in OSPF.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 220

Topic #: 1

[All 300-410 Questions]

```
!-- ACL for CoPP Routing class-map
!
access-list 120 permit tcp any gt 1024 eq bgp log
access-list 120 permit tcp any eq bgp gt 1024 established
access-list 120 permit tcp any gt 1024 eq 639
access-list 120 permit tcp any eq 639 gt 1024 established
access-list 120 permit tcp any eq 646
access-list 120 permit udp any eq 646
access-list 120 permit ospf any
access-list 120 permit ospf any host 224.0.0.5
access-list 120 permit ospf any host 224.0.0.6
access-list 120 permit eigrp any
access-list 120 permit eigrp any host 224.0.0.10
access-list 120 permit udp any any eq pim-auto-rp
```

Refer to the exhibit. The control plane is heavily impacted after the CoPP configuration is applied to the router. Which command removal lessens the impact on the control plane?

A. access-list 120 permit tcp any gt 1024 eq bgp log

B. access-list 120 permit ospf any

C. access-list 120 permit udp any any eq pim-auto-rp

D. access-list 120 permit eigrp any host 224.0.0.10

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 221

Topic #: 1

[All 300-410 Questions]


```
R1(config)#username Admin password 7 Cisco@123
Invalid encrypted password: Cisco@123
```

Refer to the exhibit. An engineer is trying to add an encrypted user password that should not be visible in the router configuration. Which two configuration commands resolve the issue?

(Choose two.)

A. username Admin password Cisco@123

B. service password-encryption

C. username Admin secret Cisco@123

D. password encryption aes

E. no service password-encryption

F. username Admin password 5 Cisco@123

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 222

Topic #: 1

[All 300-410 Questions]

A customer reports that traffic is not passing on an EIGRP enabled multipoint interface on a router configured as below:

interface Serial0/0/0
 no ip address

interface Serial0/0/0.9 multipoint
 ip address 10.1.1.1 255.255.255.248
 ip split-horizon eigrp 1

Which action resolves the issue?

   A. Enable poison reverse.

   B. Disable split horizon.

   C. Disable poison reverse.

   D. Enable split horizon.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 223

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. A loop occurs between R1, R2, and R3 while EIGRP is run with poison reverse enabled. Which action prevents the loop between R1, R2, and R3?

A. Enable split horizon.

B. Configure R3 as stub receive-only.

C. Configure route tagging.

D. Configure route filtering.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 224

Topic #: 1

[All 300-410 Questions]
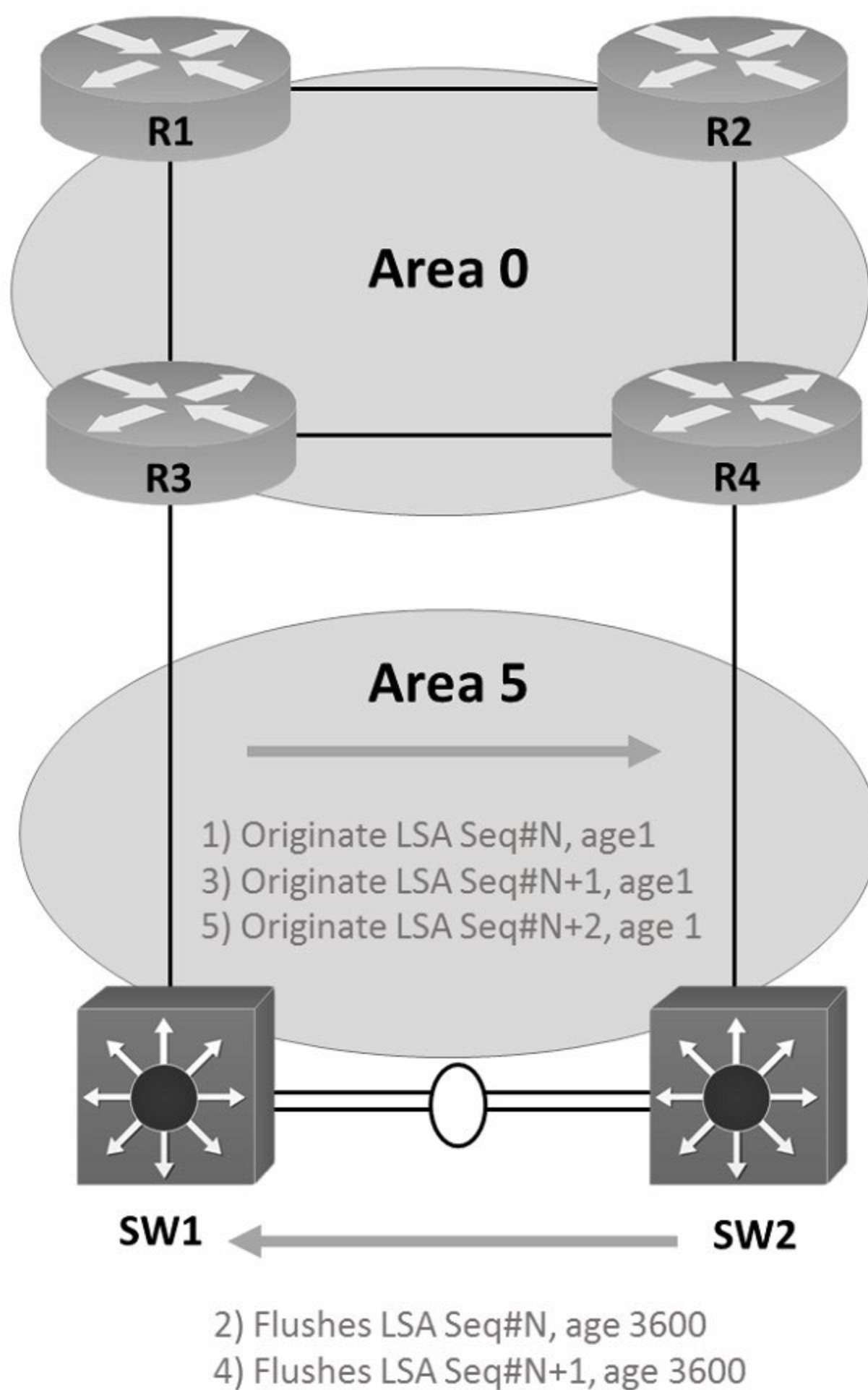
Refer to the exhibit. An error message "an OSPF-4-FLOOD_WAR" is received on SW2 from SW1. SW2 is repeatedly receiving its own link-state advertisement and flushes it from the network. Which action resolves the issue?

    A. Change area 5 to a normal area from a nonstub area.

    B. Resolve different subnet mask issue on the link.

    C. Configure Layer 3 port channel on interfaces between switches.

    D. Resolve duplicate IP address issue in the network.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 225

Topic #: 1

[All 300-410 Questions]

Which two components are required for MPLS Layer 3 VPN configuration? (Choose two.)

A. Use LDP for customer routes.

B. Use pseudowire for Layer 2 routes.

C. Use a unique RD per customer VRF.

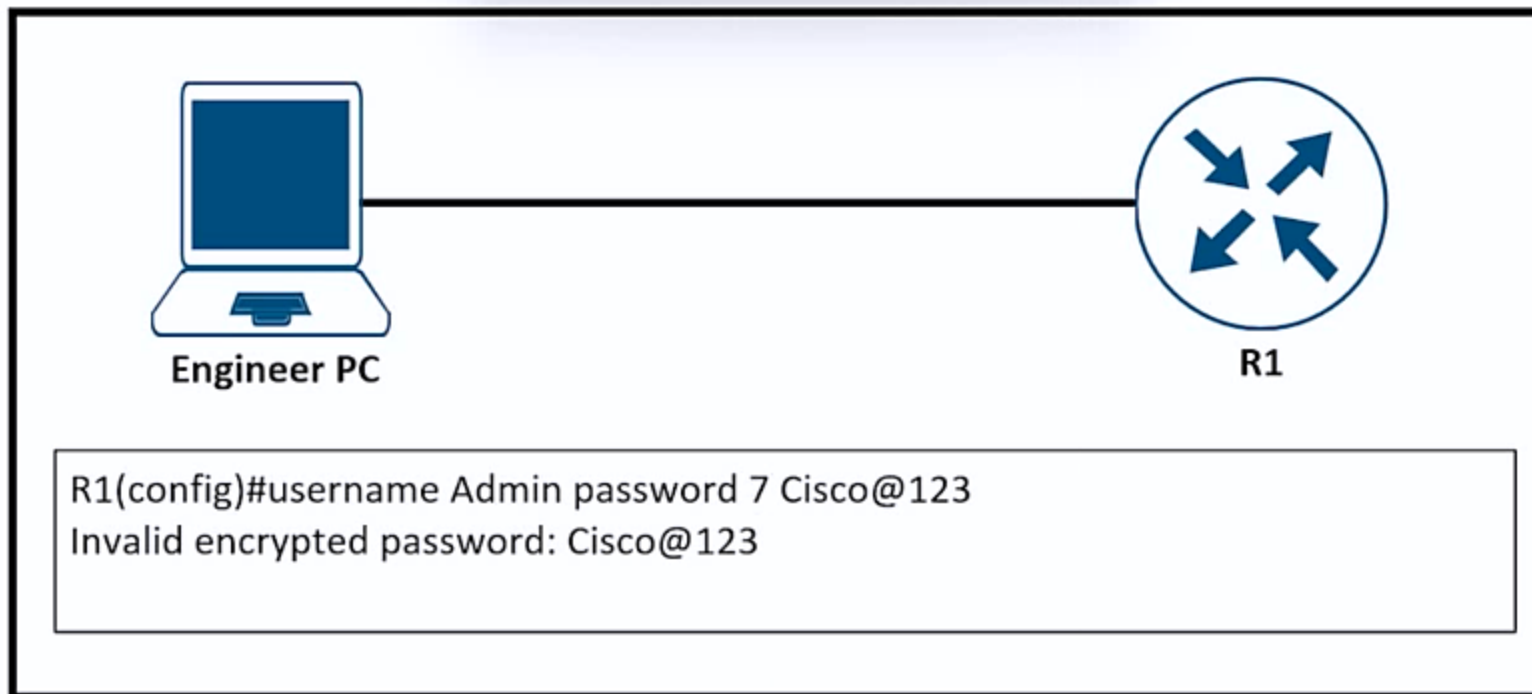D. Use OSPF between PE and CE.

E. Use MP-BGP for customer routes.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 226

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Which configuration resolves the IP SLA issue from R1 to the server?

A. R6(config)#ip sla responder

B. R6(config)#ip sla 650 R6(config-ip-sla)#udp-jitter 10.60.60.6

C. R6(config)#ip sla responder udp-echo ipaddress 10.60.60.6 po 5000

D. R6(config)#ip sla schedule 10 life forever start-time now

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 227

Topic #: 1

[All 300-410 Questions]

A network administrator added a new spoke site with dynamic IP on the DMVPN network. Which configuration command passes traffic on the DMVPN tunnel from the spoke router?

A. ip nhrp registration no-registration

B. ip nhrp registration dynamic

C. ip nhrp registration no-unique

D. ip nhrp registration ignore

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 228

Topic #: 1

[All 300-410 Questions]

```
ip vrf CCNP
  rd 1:1
interface Ethernet1
  ip vrf forwarding CCNP
  ip address 10.1.1.1 255.255.255.252
!
interface Ethernet2
  ip vrf forwarding CCNP
  ip address 10.2.2.2 255.255.255.252
```

Refer to the exhibit. Which configuration enables OSPF for area 0 interfaces to establish adjacency with a neighboring router with the same VRF?

A. router ospf 1 vrf CCNP network 10.1.1.1 0.0.0.0 area 0 network 10.2.2.2 0.0.0.0 area 0

B. router ospf 1 interface Ethernet1 ip ospf 1 area 0.0.0.0 interface Ethernet2 ip ospf 1 area 0.0.0.0

C. router ospf 1 vrf CCNP interface Ethernet1 ip ospf 1 area 0.0.0.0 interface Ethernet2 ip ospf 1 area 0.0.0.0
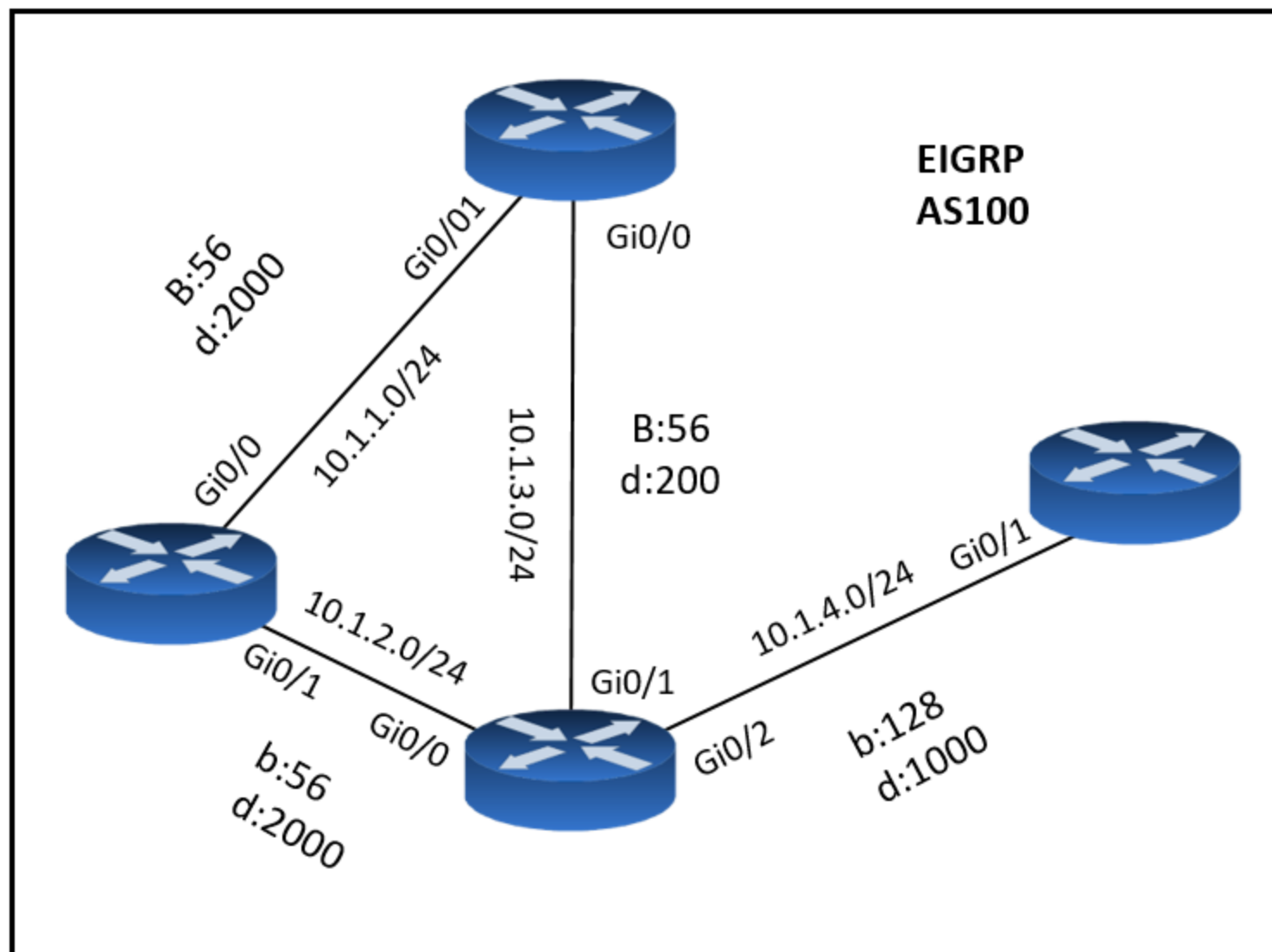
D. router ospf 1 vrf CCNP network 10.0.0.0 0.0.255.255 area 0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 229

Topic #: 1

[All 300-410 Questions]


```
R1#config t
R1 (config) #ip access-list extended UDP-ACL
R1 (config-ext-nacl) #permit udp any
R1 (config-ext-nacl) #exit
R1 (config) #route-map VIA-R2 permit 10
R1 (config-route-map) #match ip address UDP-ACL
R1 (config-route-map) #set ip next-hop 10.10.11.2
R1 (config-route-map) #exit
R1 (config) #interface Gi0/1
R1 (config-if) #ip policy route-map VIA-R2
R1 (config-if) #end
R1#
```

Refer to the exhibit. TCP traffic should be reaching host 10.10.10.10/24 via R2. Which action resolves the issue?

A. Allow TCP in the access list with no changes to the route map.

B. Add a permit 20 statement in the route map to allow TCP traffic.

C. TCP traffic will reach the destination via R2 without any changes.

D. Set IP next-hop to 10.10.12.2 under the route-map permit 10 to allow TCP traffic.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 230

Topic #: 1

[All 300-410 Questions]

A newly installed spoke router is configured for DMVPN with the ip mtu 1400 command. Which configuration allows the spoke to use fragmentation with the maximum negotiated TCP MTU over GRE?

A. ip tcp adjust-mss 1360 crypto ipsec fragmentation mtu-discovery

B. ip tcp adjust-mss 1360 crypto ipsec fragmentation after-encryption

C. ip tcp payload-mtu 1360 crypto ipsec fragmentation after-encryption

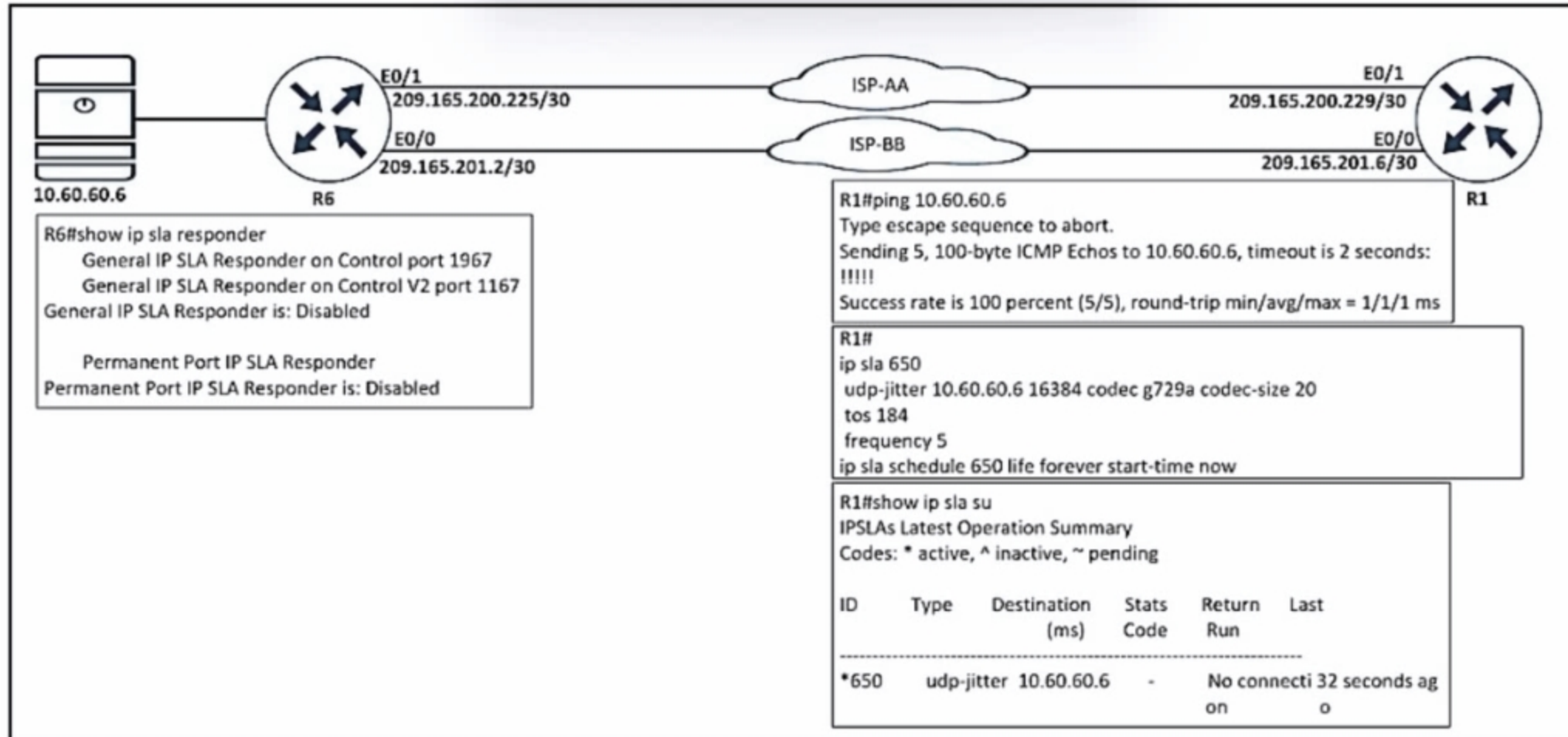D. ip tcp payload-mtu 1360 crypto ipsec fragmentation mtu-discovery

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 231

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. During ISP router maintenance, the network produced many alerts because of the flapping interface. Which configuration on R1 resolves the issue?

A. ip verify drop-rate notify hold-down 60

B. snmp trap link-status down

C. snmp trap ip verify drop-rate

D. no snmp trap link-status

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 232

Topic #: 1

[All 300-410 Questions]

```
ipv6 dhcp pool DHCPPOOL
address prefix 2001:0:1:4:/64 lifetime infinite

Infinite interface FastEthernet0/0
ip address 10.0.0.1 255.255.255.240
duplex auto
speed auto
ipv6 address 2001:0:1:4::1/64
ipv6 enableipv6 ND rag suppress
ipv6 ospf 1 area 1
ipv6 dhcp server DHCP POOL
```

Refer to the exhibit. Reachability between servers in a network deployed with DHCPv6 is unstable. Which command must be removed from the configuration to make DHCPv6 function?

A. ipv6 nd ra suppress

B. address prefix 2001:0:1:4::/64 lifetime infinite infinite

C. ipv6 dhcp server DHCP POOL

D. ipv6 address 2001:0:1:4::1/64

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 233

Topic #: 1

[All 300-410 Questions]

A customer requested a GRE tunnel through the provider network between two customer sites using loopback to hide internal networks. Which configuration on R2 establishes the tunnel with R1?

A. R2(config)#interface Tunnel1 R2(config-if)#ip address 172.20.1.2 255.255.255.0 R2(config-if)#ip mtu 1400 R2(config-if)#ip tcp adjust-mss 1360 R2(config-if)#tunnel source 192.168.20.1 R2(config-if)#tunnel destination 192.168.10.1

B. R2(config)#interface Tunnel1 R2(config-if#ip address 172.20.1.2 255.255.255.0 R2(config-if)#ip mtu 1400 R2(config-if)#ip tcp adjust-mss 1360 R2(config-if)#tunnel source 10.10.2.2 R2(config-if)#tunnel destination 10.10.1.1

C. R2(config)#interface Tunnel1 R2(config-if)#ip address 172.20.1.2 255.255.255.0 R2(config-if)#ip mtu 1500 R2(config-if)#ip tcp adjust-mss 1360 R2(config-if)#tunnel source 10.10.2.2 R2(config-if)#tunnel destination 10.10.1.1

D. R2(config)#interface Tunnel1 R2(config-if)#ip address 172.20.1.2 255.255.255.0 R2(config-if)#ip mtu 1500 R2(config-if)#ip tcp adjust-mss 1360 R2(config-if)#tunnel source 192.168.20.1 R2(config-if)#tunnel destination 10.10.1.1
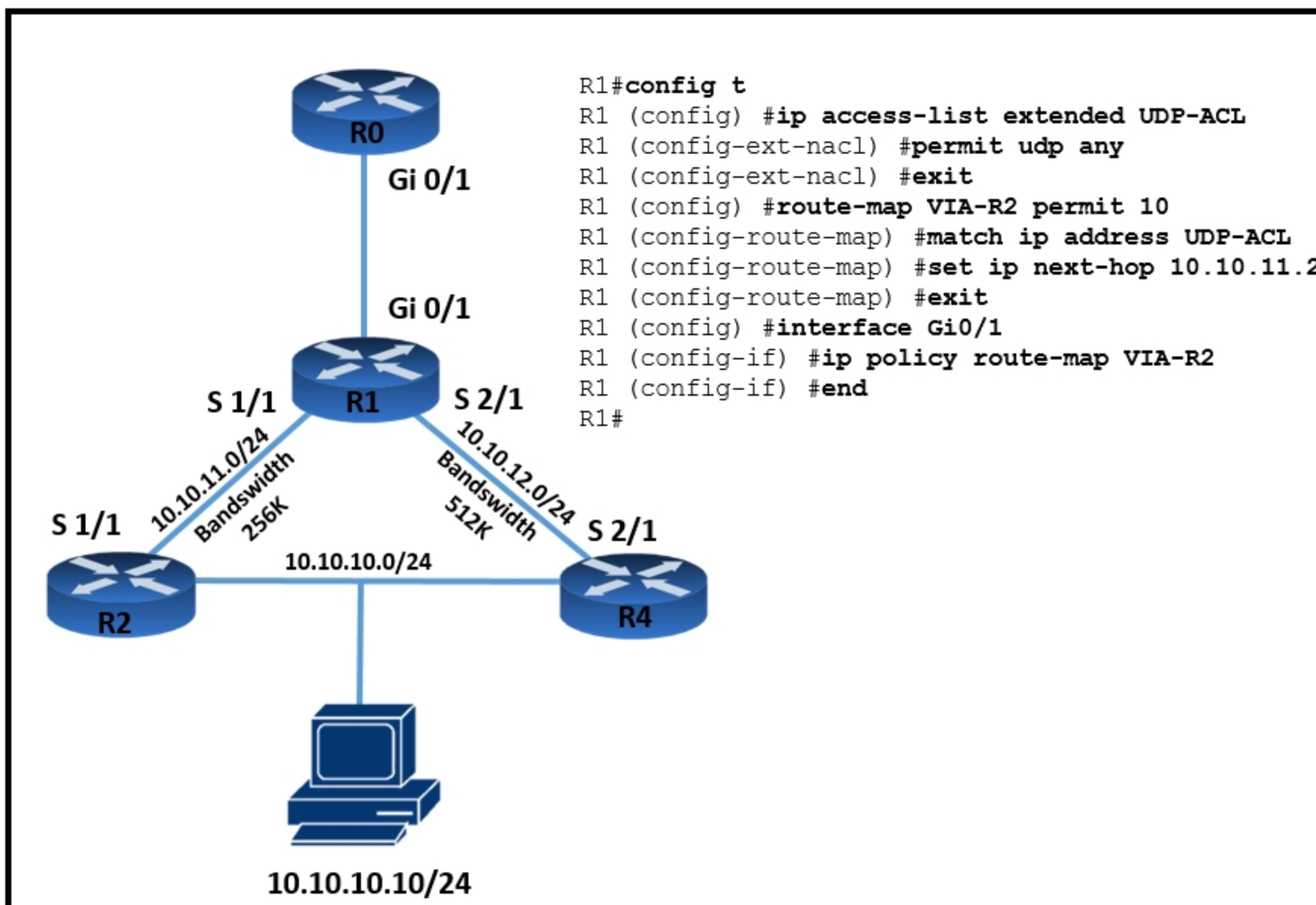
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 234

Topic #: 1

[All 300-410 Questions]

```
R2#show ip eigrp neighbors
IP-EIGRP neighbors for process 100
H   Address                     Interface        Hold Uptime    SRTT    RTO  Q  Seq
                                                 (sec)          (ms)         Cnt Num
1    192.168.10.1               Se1/0            12 00:00:39    1   5000  2  0
*Jan  1 15:40:21.295: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 192.168.10.1 (Serial1/0) is down: retry limit exceeded
*Jan  1 15:40:51.567: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 192.168.10.1 (Serial1/0) is up: new adjacency
*Jan  1 15:42:11.107: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 192.168.10.1 (Serial1/0) is down: retry limit exceeded
*Jan  1 15:42:14.879: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 192.168.10.1 (Serial1/0) is up: new adjacency



R1#show ip eigrp neighbors
IP-EIGRP neighbors for process 100
```

```
R1 Configuration:                        R2 configuration:
key chain cisco                          key chain cisco
key 2                                    key 1
  key-string abc                           key-string 123
!                                        key 2
interface Loopback0                        key-string abc
ip address 10.10.1.1 255.255.255.0       !
!                                        interface Loopback0
interface Serial1/0                      ip address 10.10.2.2 255.255.255.0
ip address 192.168.10.1 255.255.255.0    !
ip authentication mode eigrp 100 md5     interface Serial1/0
ip authentication key-chain eigrp 100 cisco  ip address 192.168.10.2 255.255.255.0
serial restart-delay 0                   ip authentication mode eigrp 100 md5
!                                        ip authentication key-chain eigrp 100 cisco
router eigrp 100                         no fair-queue
network 10.10.1.0 0.0.0.255             !
network 192.168.10.0                    !
no auto-summary                         router eigrp 100
                                         network 10.10.2.0 0.0.0.255
                                         network 192.168.10.0
                                         no auto-summary
```

Refer to the exhibit. R1 and R2 are configured for EIGRP peering using authentication and the neighbors failed to come up. Which action resolves the issue?

A. Configure a matching lowest key-id on both routers.

B. Configure a matching authentication type on both routers.

C. Configure a matching key-id number on both routers.

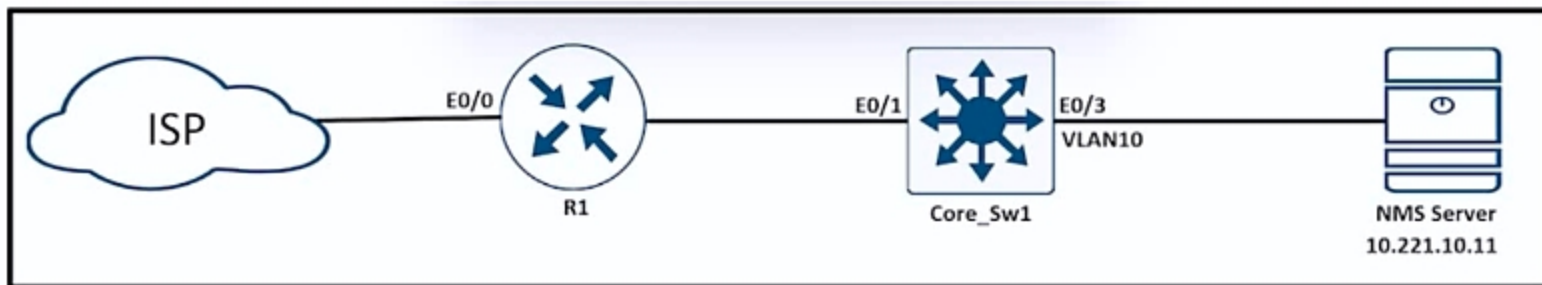D. Configure a matching key-chain name on both routers.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 235

Topic #: 1

[All 300-410 Questions]
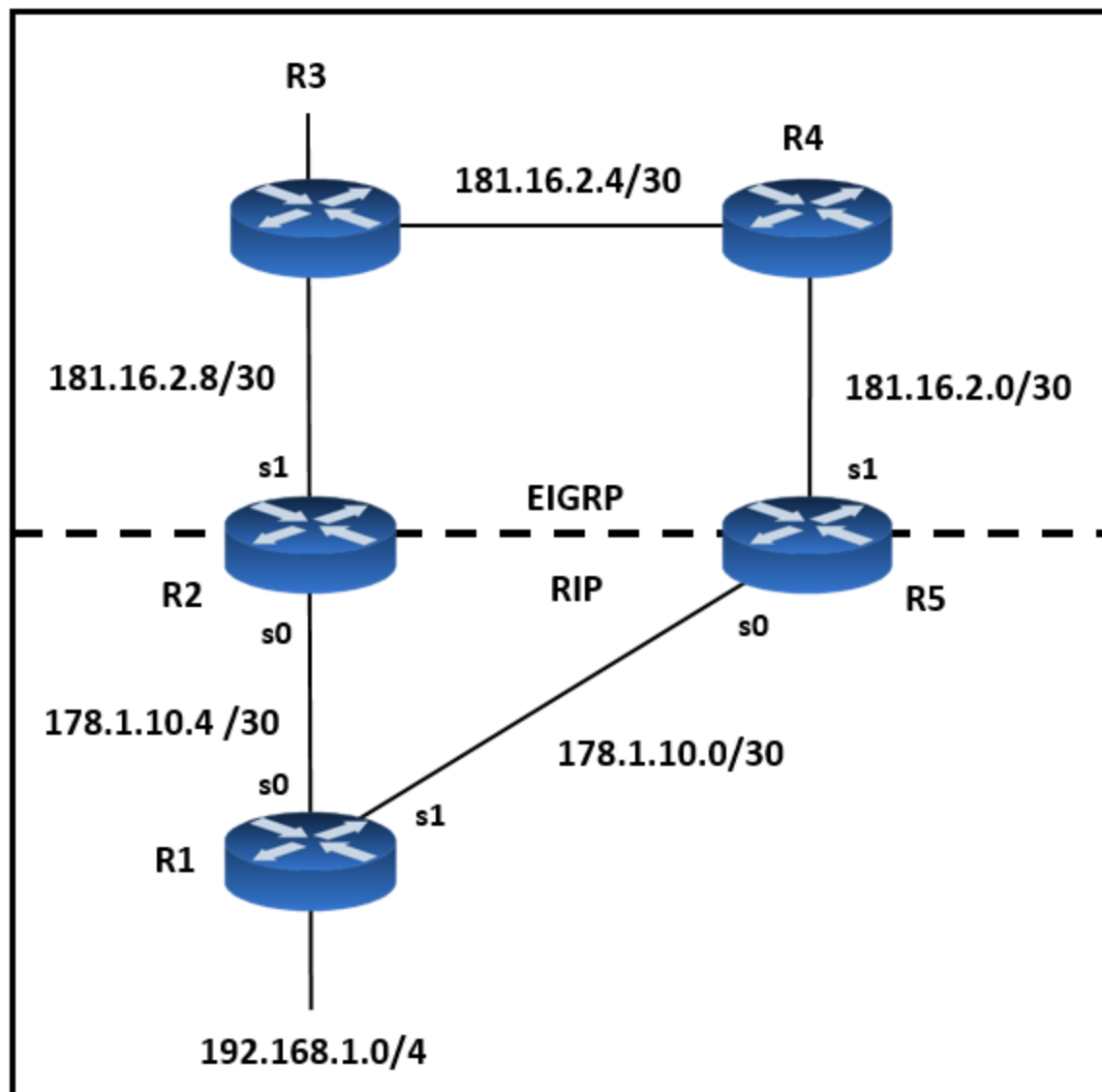
Refer to the exhibit. Mutual redistribution is enabled between RIP and EIGRP on R2 and R5. Which configuration resolves the routing loop for the 192.168.1.0/24 network?

A. R2: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any R5: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any

B. R2: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any R5: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any

C. R2: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192. 168.1.0 access-list 1 permit any R5: router eigrp 10 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0 ! router rip network 178.1.0.0 redistribute eigrp 10 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any

D. R2: router eigrp 7 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1 ! router rip network 178.1.0.0 redistribute eigrp 7 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any R5: router eigrp 7 network 181.16.0.0 redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1 ! router rip network 178.1.0.0 redistribute eigrp 7 metric 2 ! access-list 1 deny 192.168.1.0 access-list 1 permit any

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 236

Topic #: 1

[All 300-410 Questions]

Which method provides failure detection in BFD?

A. long duration, low overhead

B. short duration, low overhead

C. long duration, high overhead

D. short duration, high overhead

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 237

Topic #: 1

[All 300-410 Questions]
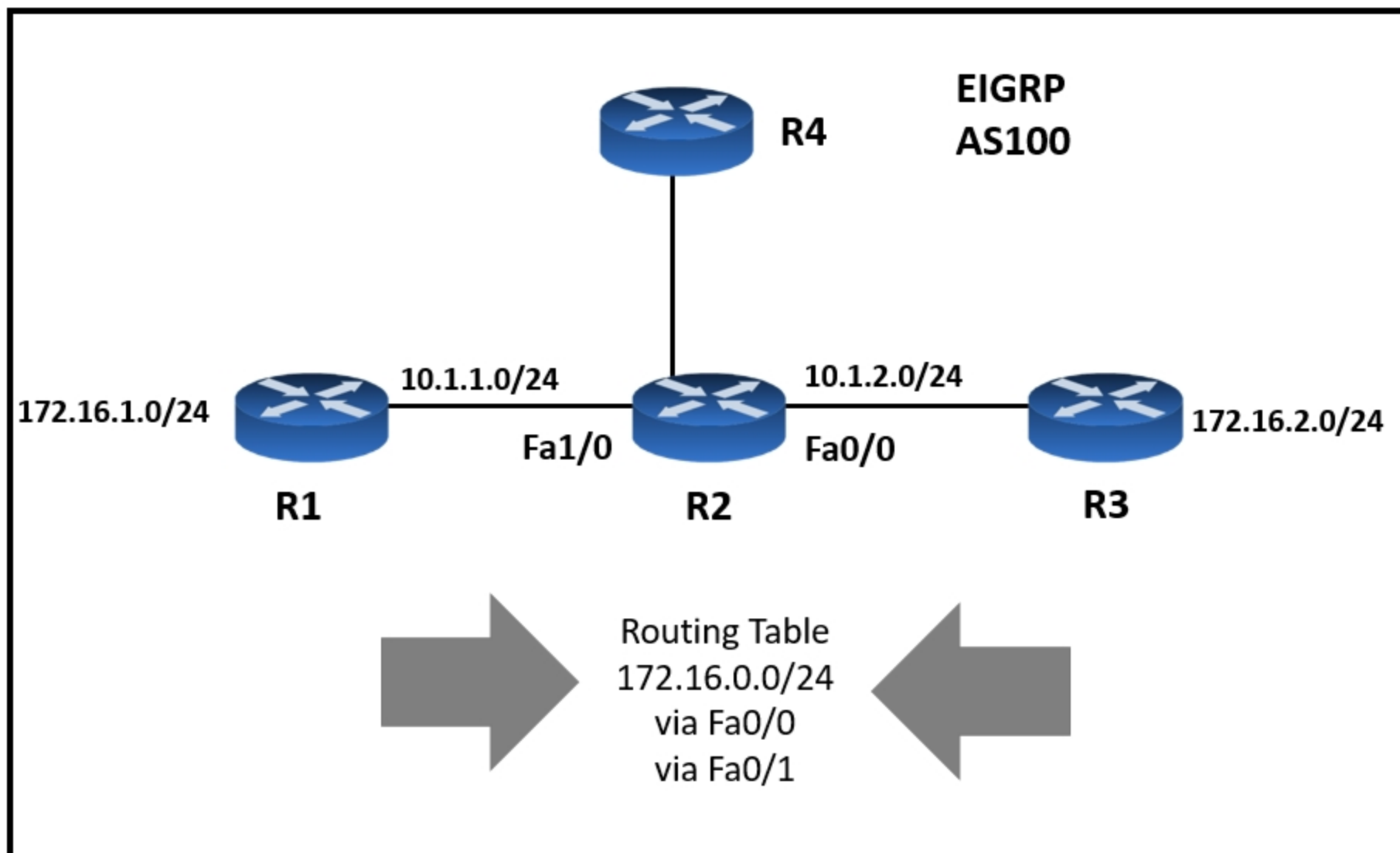
Refer to the exhibit. R4 is experiencing packet drop when trying to reach 172.16.2.7 behind R2. Which action resolves the issue?

A. Insert a /24 floating static route on R2 toward R3 with metric 254.

B. Disable auto summarization on R2.

C. Enable auto summarization on all three routers R1, R2, and R3.

D. Insert a /16 floating static route on R2 toward R3 with metric 254.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 238

Topic #: 1

[All 300-410 Questions]
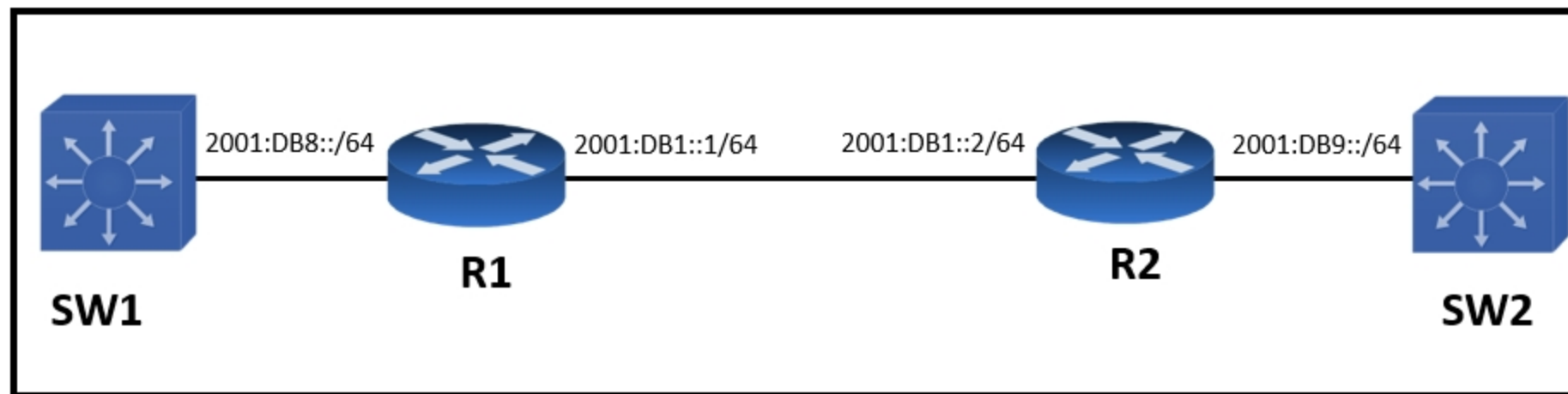
Refer to the exhibit. An engineer must advertise routes into IPv6 MP-BGP and failed. Which configuration resolves the issue on R1?

A. router bgp 64900 no bgp default ipv4-unicast address-family ipv6 unicast redistribute ospf network 2001:DB9::/64

B. router bgp 64900 no bgp default ipv4-unicast address-family ipv6 multicast neighbor 2001:DB8:7000::2 translate-update ipv6 multicast

C. router bgp 65000 no bgp default ipv4-unicast address-family ipv6 unicast network 2001:DB8::/64

D. router bgp 65000 no bgp default ipv4-unicast address-family ipv6 multicast network 2001:DB8::/64

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 239

Topic #: 1

[All 300-410 Questions]

```
CPE# ping 10.0.2.4
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.0.2.4, timeout is
2seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max
=1/1/1 ms
CPE# copy flash:/packages.conf tftp://10.0.2.4/
Address or name of remote host [10.0.2.4]?
Destination filename [packages.conf]?
%Error opening tftp://10.0.2.4/packages.conf (Undefined error)
```

Refer to the exhibit. The administrator is trying to overwrite an existing file on the TFTP server that was previously uploaded by another router. However, the attempt to update the file fails.

Which action resolves this issue?

A. Make the TFTP folder writable by all on the TFTP server.

B. Make the package.conf file writable by all on the TFTP server.

C. Make the package.conf file executable by all on the TFTP server.

D. Make sure to run the TFTP service on the TFTP server.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 240

Topic #: 1

[All 300-410 Questions]
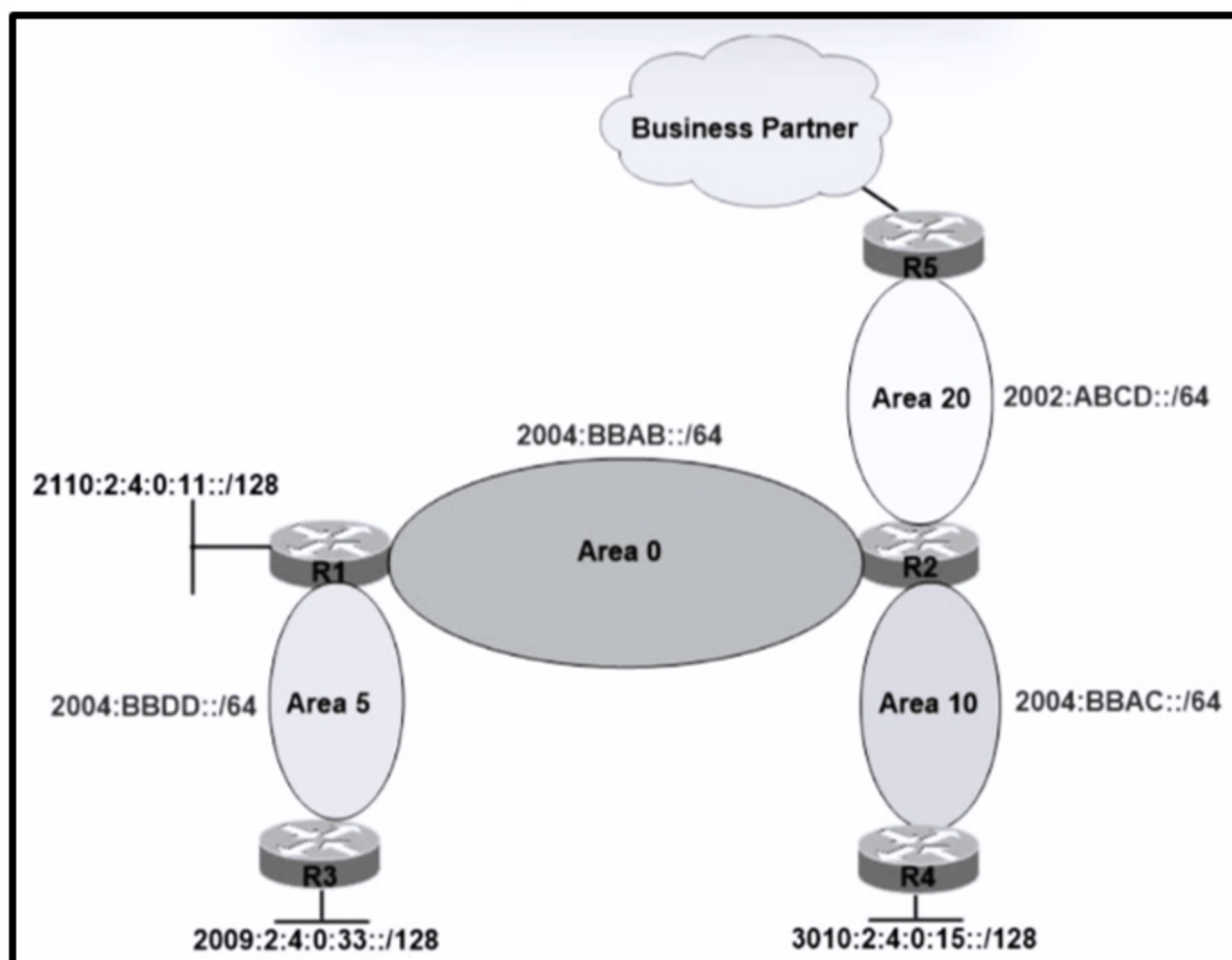

```
R2#sh ipv6 route ospf
O 2002:ABCD::/64 [110/1]
     via FastEthernet0/1, directly connected
O 2004:BBAB::/64 [110/1]
     via FastEthernet0/0, directly connected
O 2004:BBAC::/64 [110/1]
     via FastEthernet1/0, directly connected
O 3010:2:4:0:15::/128 [110/1]
     via FE80::C804:1DFF:FE20:8, FastEthernet0/0
```

Refer to the exhibit. A network engineer applied a filter for ISA traffic on OSPFv3 inter area routes on the area 5 ABR to protect advertising the internal routes of area 5 to the business partner network. All other areas should receive the area 5 internal routes. After the respective route filtering configuration is applied on the ABR, area 5 routes are not visible on any of the areas. How must the filter list be applied on the ABR to resolve this issue?

A. in the "in" direction for area 5 on router R1

B. in the "in" direction for area 20 on router R2

C. in the "out" direction for area 20 on router R2

D. in the "out" direction for area 5 on router R1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 241

Topic #: 1

[All 300-410 Questions]

```
R1#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
       El - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, 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, H - NHRP, 1 - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR

Gateway of last resort is not set

D      10.0.0.0/8 [90/409600] via 172.16.1.200, 00:00:28, Ethernet0/0
       172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C         172.16.1.0/24 is directly connected, Ethernet0/0
L         172.16.1.100/32 is directly connected, Ethernet0/0
       192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C         192.168.1.0/24 is directly connected, Loopback0
L         192.168.1.100/32 is directly connected, Loopback0
R1#
```

Refer to the exhibit. The R2 loopback interface is advertised with RIP and EIGRP using default values. Which configuration changes make R1 reach the R2 loopback using RIP?

A. R1(config)#router rip R1(config-router)#distance 90

B. R1(config)#router eigrp 1 R1(config-router)#distance eigrp 130 120

C. R1(config)#router rip R1(config-router)#distance 100

D. R1(config)#router eigrp 1 R1(config-router)#distance eigrp 120 120

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 242

Topic #: 1

[All 300-410 Questions]

```
snmp-server community Public RO 90
snmp-server community Private RW 90
R1#show access-list 90
Standard IP access list 90
  permit 10.11.110.11
  permit 10.11.111.12


Nov 6 06:45:11: %SNMP-3-AUTHFAIL: Authentication failure for SNMP req from host
10.11.110.12
Nov 6 06:45:12: %SNMP-3-AUTHFAIL: Authentication failure for SNMP req from host
10.11.110.12
```

Refer to the exhibit. A network administrator notices these console messages from host 10.11.110.12 originating from interface E1/0. The administrator considers this an unauthorized attempt to access SNMP on R1. Which action prevents the attempts to reach R1 E1/0?

A. Configure IOS control plane protection using ACL 90 on interface E1/0.

B. Create an inbound ACL on interface E1/0 to deny SNMP from host 10.11.110.12.

C. Add a permit statement including the host 10.11.110.12 into ACL 90.

D. Configure IOS management plane protection using ACL 90 on interface E1/0.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 243

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. R6 should reach R1 via R5>R2>R1. Which action resolves the issue?

A. Decrease the cost to 2 between R6-R5-R2.

B. Increase the cost to 61 between R2-R3-R1.

C. Increase the cost to 61 between R2 and R3.

D. Decrease the cost to 41 between R2 and R1.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 244

Topic #: 1

[All 300-410 Questions]

An engineer failed to run diagnostic commands on devices using Cisco DNA Center. Which action in Cisco DNA Center resolves the issue?

    A. Enable Secure Shell.

    B. Enable APIs.

    C. Enable CDP.

    D. Enable Command Runner.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 245

Topic #: 1

[All 300-410 Questions]

```
ip prefix-list DMZ-STATIC seq 5 permit 10.1.1.0/24
!
route-map DMZ permit 10
    match ip address prefix-list DMZ-STATIC
 !
Router ospf 1
network 0.0.0.0 0.0.0.0 area 0
redistribute static route-map DMZ
!
ip route 10.1.1.0 255.255.255.0 10.20.20.1
```

Refer to the exhibit. The static route is not present in the routing table of an adjacent OSPF neighbor router. Which action resolves the issue?

A. Configure a permit 20 statement to the route map to redistribute the static route.

B. Configure the next-hop interface at the end of the static route for it to get redistributed.

C. Configure the next hop of 10.20.20.1 in the prefix list DMZ-STATIC.

D. Configure the subnets keyword in the redistribution command.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 246

Topic #: 1

[All 300-410 Questions]

```
access-list 1 permit 209.165.200.215
access-list 2 permit 209.165.200.216
!
interface ethernet 1
ip policy route-map Texas
!
route-map Texas permit 10
match ip address 1
set ip precedence priority
set ip next-hop 209.165.200.217
!
route-map Texas permit 20
match ip address 2
set ip next-hop 209.165.200.218
```

Refer to the exhibit. Packets arriving from source 209.165.200.215 must be sent with the precedence bit set to 1, and packets arriving from source 209.165.200.216 must be sent with the precedence bit set to 5. Which action resolves the issue?

A. set ip precedence critical in route-map Texas permit 20

B. set ip precedence critical in route-map Texas permit 10

C. set ip precedence priority in route-map Texas permit 20
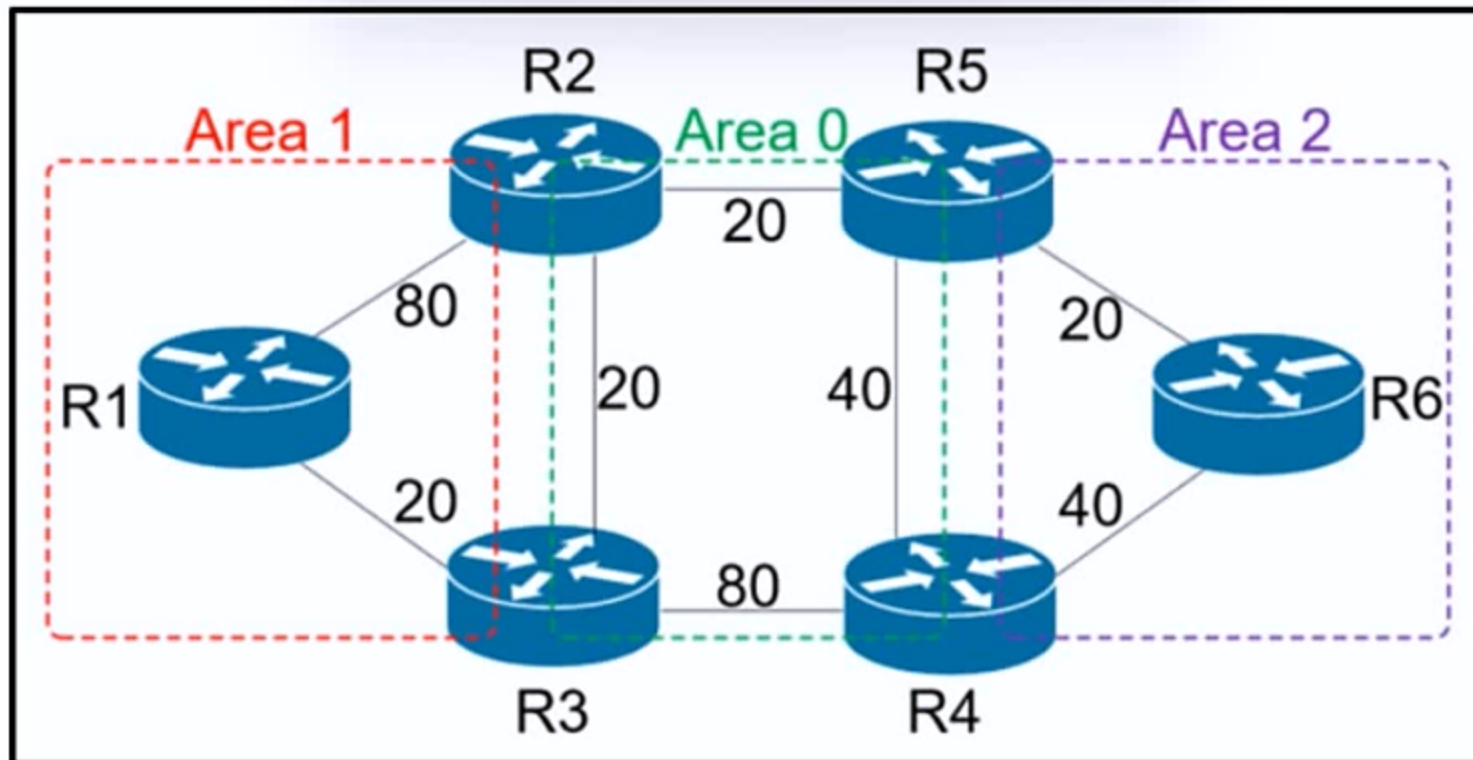
D. set ip precedence immediate in route-map Texas permit 10

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 247

Topic #: 1

[All 300-410 Questions]
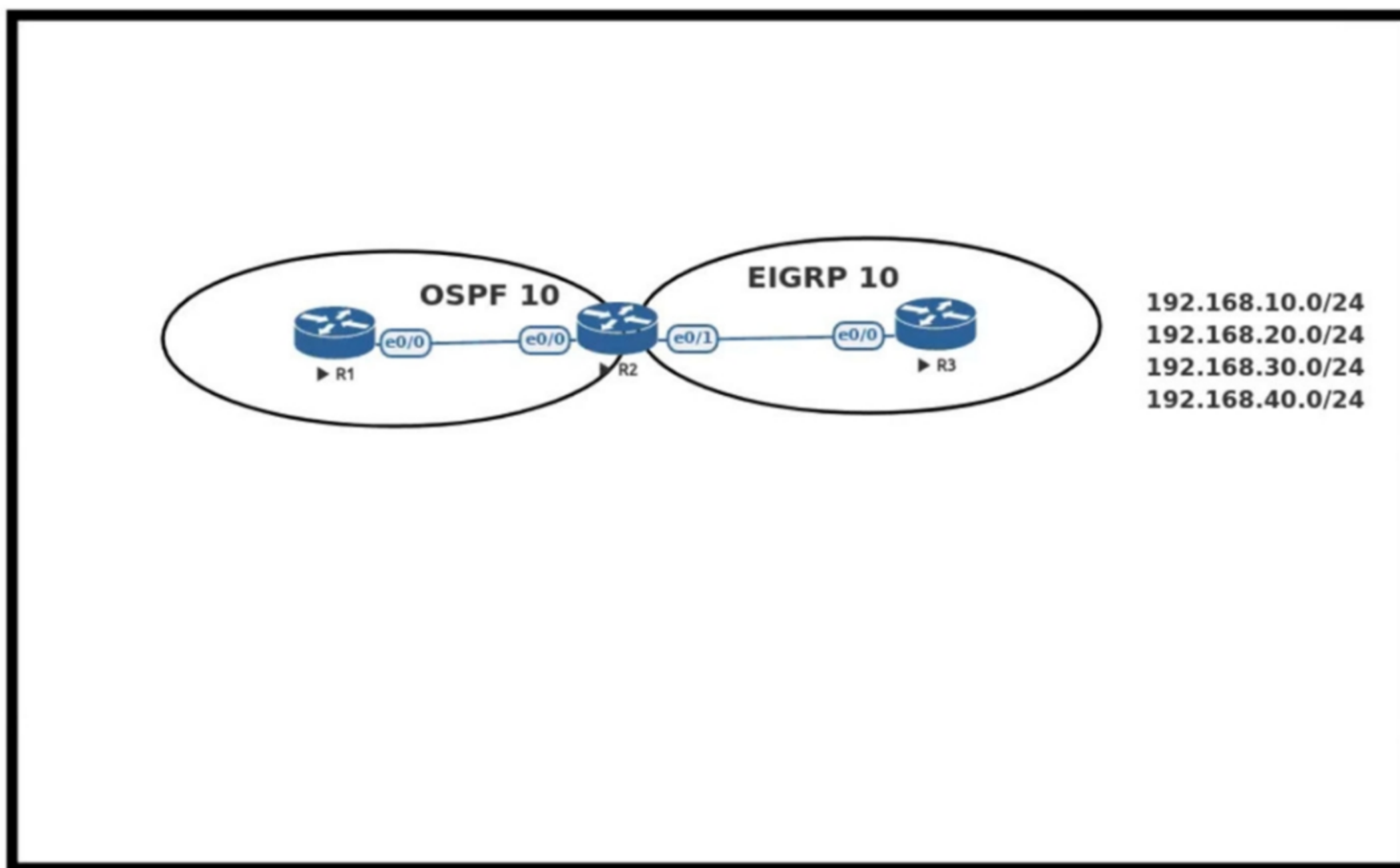
Refer to the exhibit. An engineer must redistribute networks 192.168.10.0/24 and 192.168.20.0/24 into OSPF from EIGRP, where the metric must be added when traversing through multiple hops to start an external route of 20. The engineer notices that the external metric is fixed and does not add at each hop. Which configuration resolves the issue?

A. R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R2(config)#route-map RD permit 10 R2(config-route-map)#match ip address 10 R2(config-route-map)#set metric 20 R2(config-route-map)#set metric-type type-2 ! R2(config)#router ospf 10 R2(confjg-router)#redistribute eigrp 10 subnets route-map RD

B. R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R2(config)#route-map RD permit 10 R2(config-route-map)#match ip address 10 R2(config-route-map)#set metric 20 R2(config-route-map)#set metric-type type-1 ! R2(config)#router ospf 10 R2(config-router)#redistribute eigrp 10 subnets route-map RD

C. R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R1(config)#route-map RD permit 10 R1(config-route-map)#match ip address 10 R1(config-route-map)#set metric 20 R1(config-route-map)#set metric-type type-1 ! R1(config)#router ospf 10 R1(config-router)#redistribute eigrp 10 subnets route-map RD

D. R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255 R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255 ! R1(config)#route-map RD permit 10 R1(config-route-map)#match ip address 10 R1(config-route-map)#set metric 20 R1(config-route-map)#set metric-type type-2 ! R1(config)#router ospf 10 R1(config-router)#redistribute eigrp 10 subnets route-map RD

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 248

Topic #: 1

[All 300-410 Questions]

An engineer notices that R1 does not hold enough log messages to identify the root cause during troubleshooting. Which command resolves this issue?

A. #logging buffered 4096 critical

B. #logging buffered 16000 critical

C. (config)#logging buffered 16000 informational

D. (config)#logging buffered 4096 informational

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 249

Topic #: 1

[All 300-410 Questions]

Which feature minimizes DoS attacks on an IPv6 network?

    A. IPv6 Binding Security Table

    B. IPv6 Router Advertisement Guard

    C. IPv6 Prefix Guard

    D. IPv6 Destination Guard

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 250

Topic #: 1

[All 300-410 Questions]
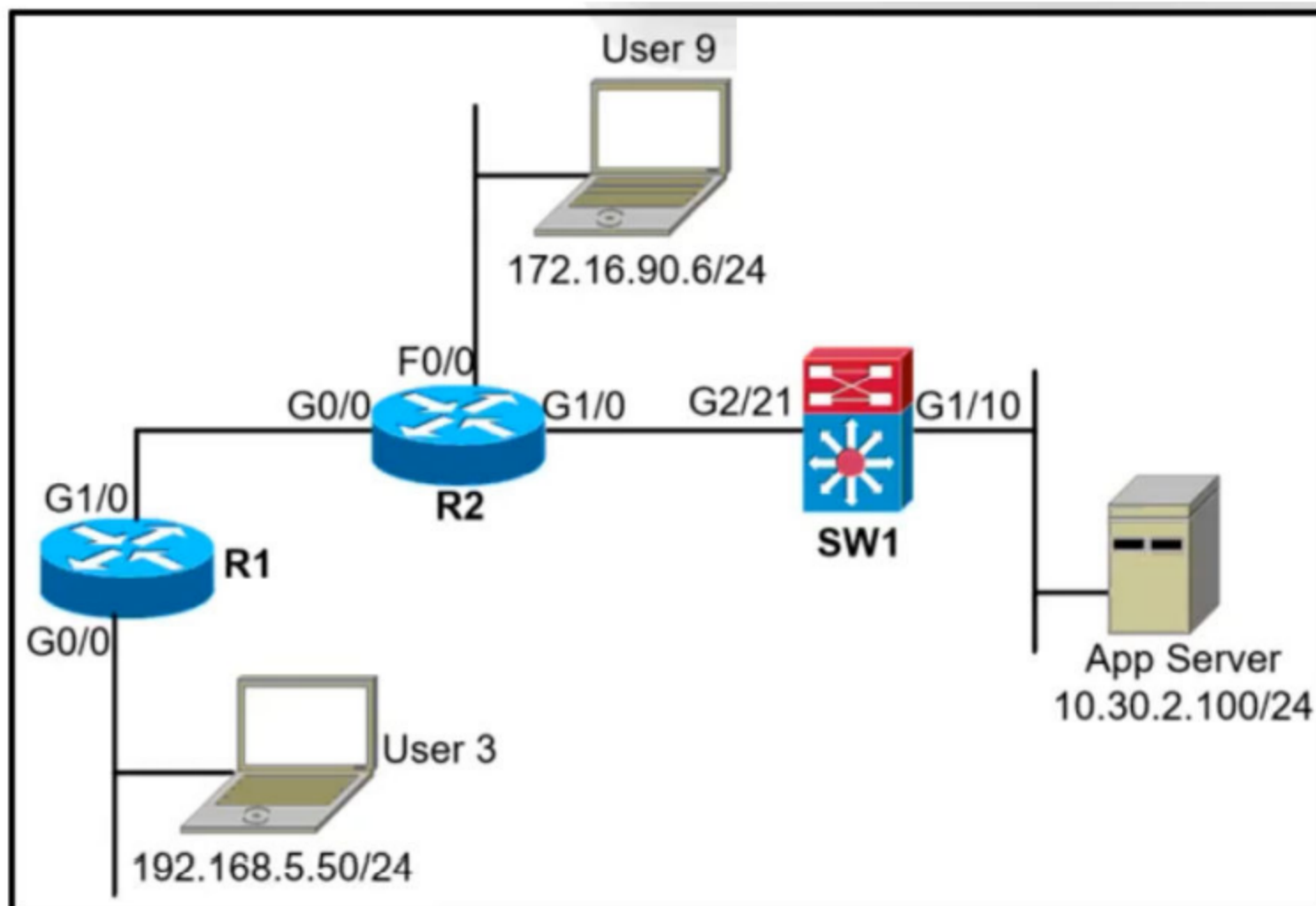
Refer to the exhibit. A network administrator must block ping from user 3 to the App Server only. An inbound standard access list is applied to R1 interface G0/0 to block ping. The network administrator was notified that user 3 cannot even ping user 9 anymore. Where must the access list be applied in the outgoing direction to resolve the issue?

A. R2 interface G0/0

B. SW1 interface G1/10

C. R2 interface G1/0

D. SW1 interface G2/21

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 251

Topic #: 1

[All 300-410 Questions]


```
10.255.255.4 /30
Gi 1/0                    Gi 1/0    CORE
DHCP

DHCP Loopback0:
    4.4.4.4 /32
2002:404:404::404:404 /128

                         Gi 1/2

                         10.255.255.8 /30

                         Gi 1/2    DSW1

                    F0/0          F0/1

            ALS1                       ALS2

    PC1        PC2              PC3        PC4

  VLAN 10    VLAN 20          VLAN 10    VLAN 20
```

```
DSW1#sh run int f0/0
Building configuration...

Current configuration : 174 bytes
!
interface FastEthernet0/0
 ip address 10.4.10.1 255.255.255.0
 ip helper-address 4.4.4.4
 duplex auto
 speed auto
 ipv6 address 2002:A04:A01::A04:A01/120
 ipv6 enable
end
```

Refer to the exhibit. Clients on ALS2 receive IPv4 and IPv6 addresses, but clients on ALS1 receive only IPv4 addresses and not IPv6 addresses. Which action on DSW1 allows clients on ALS1 to receive IPv6 addresses?

A. Configure DSW1(dhcp-config)#default-router 2002:A04:A01::A04:A01

B. Configure DSW1(config-if)#ipv6 dhcp relay destination 2002:404:404::404:404 GigabitEthernet1/2

C. Configure DSW1(config)#ipv6 route 2002:404:404::404:404/128 FastEthernet1/0

D. Configure DSW1(config-if)#ipv6 helper address 2002:404:404::404:404

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 252

Topic #: 1

[All 300-410 Questions]

```
Router#show ip bgp vpnv4  rd 1100:1001 10.30.116.0/23
BGP routing table entry for 1100:1001:10.30.116.0/23, version 26765275
Paths: (9 available, best #6, no table)
  Advertised to update-groups:
     1     2     3
  (65001 64955 65003) 65089, (Received from a RR-client)
    172.16.254.226 (metric 20645) from 172.16.224.236 (172.16.224.236)
      Origin IGP, metric 0, localpref 100, valid, confed-internal
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (65008 64955 65003) 65089
    172.16.254.226 (metric 20645) from 10.131.123.71 (10.131.123.71)
      Origin IGP, metric 0, localpref 100, valid, confed-external
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (65001 64955 65003) 65089
    172.16.254.226 (metric 20645) from 172.16.216.253 (172.16.216.253)
      Origin IGP, metric 0, localpref 100, valid, confed-external
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (65001 64955 65003) 65089
    172.16.254.226 (metric 20645) from 172.16.216.252 (172.16.216.252)
      Origin IGP, metric 0, localpref 100, valid, confed-external
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (64955 65003) 65089
    172.16.254.226 (metric 20645) from 10.77.255.57 (10.77.255.57)
      Origin IGP, metric 0, localpref 100, valid, confed-external
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (64955 65003) 65089
    172.16.254.226 (metric 20645) from 10.57.255.11 (10.57.255.11)
      Origin IGP, metric 0, localpref 100, valid, confed-external, best
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362

  (64955 65003) 65089
    172.16.254.226 (metric 20645) from 172.16.224.253 (172.16.224.253)
      Origin IGP, metric 0, localpref 100, valid, confed-internal
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  (65003) 65089
    172.16.254.226 (metric 20645) from 172.16.254.234 (172.16.254.234)
      Origin IGP, metric 0, localpref 100, valid, confed-external
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/362
  65089, (Received from a RR-client)
    172.16.228.226 (metric 20645) from 172.16.228.226 (172.16.228.226)
      Origin IGP, metric 0, localpref 100, valid, confed-internal
      Extended Community: RT:1100:1001
      mpls labels in/out nolabel/278
```

Refer to the exhibit. An engineer configured BGP and wants to select the path from 10.77.255.57 as the best path instead of current best path. Which action resolves the issue?

A. Configure higher MED to select as the best path.

B. Configure AS_PATH prepend for the current best path.

C. Configure AS_PATH prepend for the desired best path.

D. Configure lower LOCAL_PREF to select as the best path.
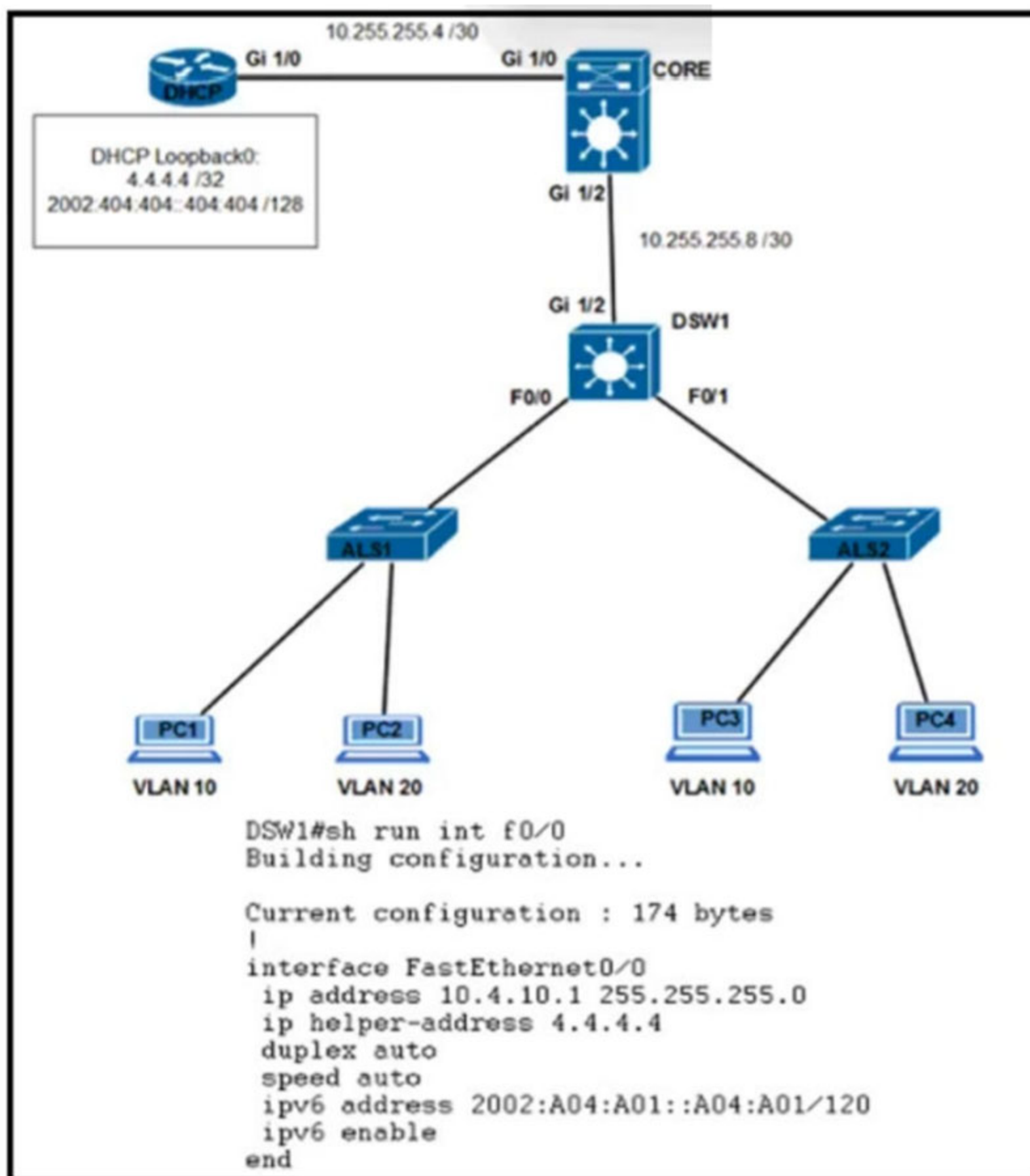
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 253

Topic #: 1

[All 300-410 Questions]

What is a function of IPv6 Source Guard?

A. It inspects ND and DHCP packets to build an address binding table.

B. It works with address glean or ND to find existing addresses.

C. It notifies the ND protocol to inform hosts if the traffic is denied by it.

D. It denies traffic from known sources and allocated addresses.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 254

Topic #: 1

[All 300-410 Questions]
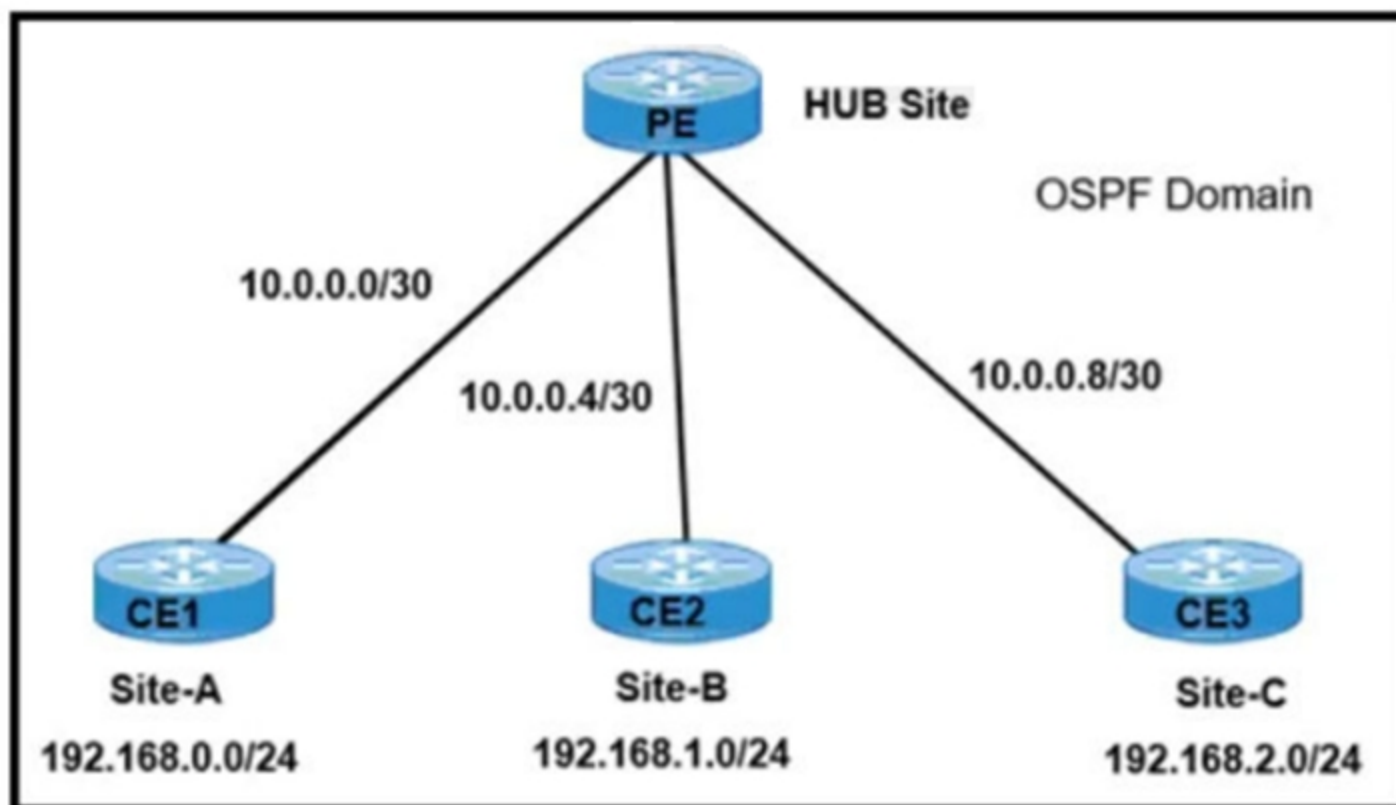
Refer to the exhibit. A network engineer must establish communication between three different customer sites with these requirements:

* Site-A: must be restricted to access to any users at Site-B or Site-C.

* Site-B and Site-C: must be able to communicate between sites and share routes using OSPF.

PE interface configuration:

interface FastEthernet0/0

ip vrf forwarding Site-A

!

interface FastEthernet0/1

ip vrf forwarding SharedSites

!

interface FastEthernet0/2

ip vrf forwarding SharedSites

Which configuration meets the requirements?

A. PE(config)#router ospf 10 vrf Site-A PE(config-router)#network 0.0.0.0 255.255.255.255 area 0 PE(config)#router ospf 10 vrf SharedSites PE(config-router)#network 0.0.0.0 255.255.255.255 area 1

B. PE(config)#router ospf 10 vrf Site-A PE(config-router)#network 0.0.0.0 255.255.255.255 area 0 PE(config)#router ospf 20 vrf SharedSites PE(config-router)#network 0.0.0.0 255.255.255.255 area 1

C. PE(config)#router ospf 10 vrf Site-A PE(config-router)#network 0.0.0.0 255.255.255.255 area 0 PE(config)#router ospf 10 vrf SharedSites PE(config-router)#network 0.0.0.0 255.255.255.255 area 0

D. PE(config)#router ospf 10 vrf Site-A PE(config-router)#network 0.0.0.0 255.255.255.255 area 0 PE(config)#router ospf 20 vrf SharedSites PE(config-router)#network 0.0.0.0 255.255.255.255 area 0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 255

Topic #: 1

[All 300-410 Questions]

What is LDP label binding?

- A. destination prefix with label

- B. two routers with label distribution session

- C. source prefix with label

- D. neighboring router with label

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 256

Topic #: 1

[All 300-410 Questions]

```
ip sla 1
 icmp-echo 8.8.8.8
 threshold 1000
 timeout 2000
 frequency 5
ip sla schedule 1 life forever start-time now
!
track 1 ip sla 1
!
ip route 0.0.0.0 0.0.0.0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 198.51.100.1 name ISP2 track 1
```

Refer to the exhibit. An administrator configures a router to stop using a particular default route if the DNS server 8.8.8.8 is not reachable through that route. However, this configuration did not work as desired and the default route still works even if the DNS server 8.8.8.8 is unreachable. Which two configuration changes resolve the issue? (Choose two.)

A. Use a separate track object to reference the existing IP SLA 1 probe for every static route.

B. Use a separate IP SLA probe and track object for every static route.

C. Associate every IP SLA probe with the proper WAN address of the router.

D. Reference the proper exit interfaces along with the next hops in both static default routes.

E. Configure two static routes for the 8.8.8.8/32 destination to match the IP SLA probe for each ISP.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 257

Topic #: 1

[All 300-410 Questions]
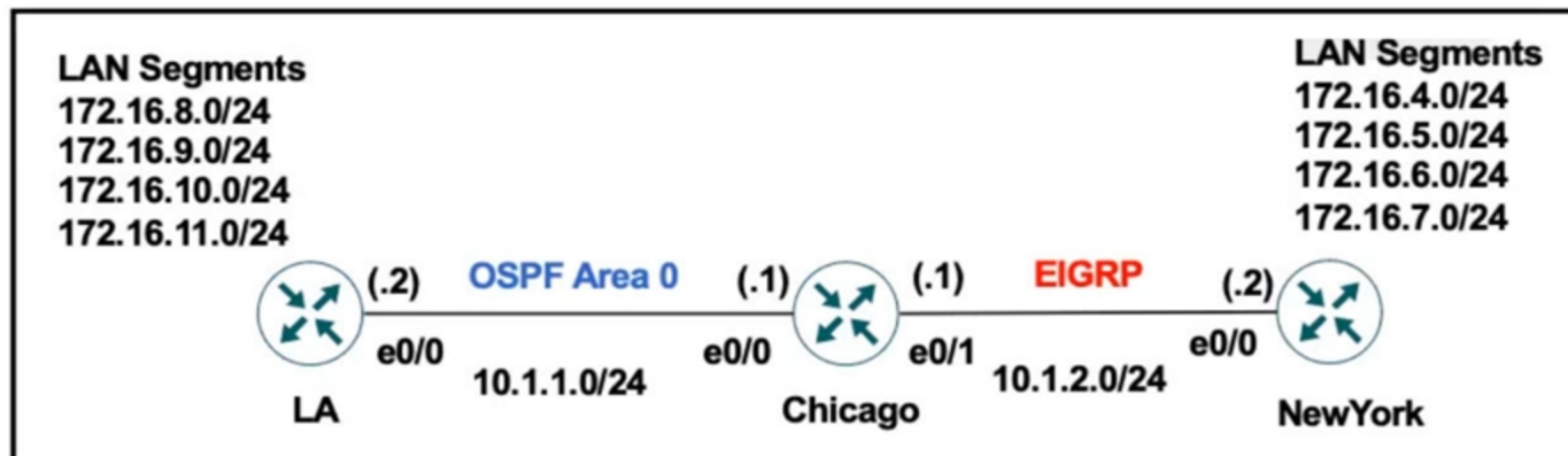
Refer to the exhibit. The network administrator configured the Chicago router to mutually redistribute the LA and NewYork routes with OSPF routes to be summarized as a single route in EIGRP using the longest summary mask: router eigrp 100 redistribute ospf 1 metric 10 10 10 10 10 router ospf 1 redistribute eigrp 100 subnets

!

interface E 0/0

ip summary-address eigrp 100 172.16.0.0 255.255.0.0

After the configuration, the New York router receives all the specific LA routes but the summary route. Which set of configurations resolves the issue on the Chicago router?

A. router eigrp 100 summary-address 172.16.8.0 255.255.252.0

B. interface E 0/1 ip summary-address eigrp 100 172.16.8.0 255.255.252.0

C. router eigrp 100 summary-address 172.16.0.0 255.255.0.0

D. interface E 0/1 ip summary-address eigrp 100 172.16.0.0 255.255.0.0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 258

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer must configure PBR on R1 to reach to 10.2.2.0/24 via R3 AS64513 as the primary path and a backup route through default route via R2 AS64513. All BGP routes are in the routing table of R1, but a static default route overrides BGP routes. Which PBR configuration achieves the objective?

A. access-list 100 permit ip 10.1.1.0 0.0.0.255 10.2.2.0 0.0.0.255 ! route-map PBR permit 10 match ip address 100 set ip next-hop recursive 10.3.3.1

B. access-list 100 permit ip 10.1.1.0 255.255.255.0 10.2.2.0 255.255.255.0 ! route-map PBR permit 10 match ip address 100 set ip next-hop recursive 10.3.3.1

C. access-list 100 permit ip 10.1.1.0 0.0.0.255 10.2.2.0 0.0.0.255 ! route-map PBR permit 10 match ip address 100 set ip next-hop 10.3.3.1

D. access-list 100 permit ip 10.1.1.0 255.255.255.0 10.2.2.0 255.255.255.0 ! route-map PBR permit 10 match ip address 100 set ip next-hop 10.3.3.1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 259

Topic #: 1

[All 300-410 Questions]

What is the function of BFD?

A. It creates high CPU utilization on hardware deployments

B. It provides uniform failure detection on the same media type

C. It provides uniform failure detection regardless of media type

D. It negotiates to the highest version if the neighbor version differs

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 260

Topic #: 1

[All 300-410 Questions]

Network A   IPV-6 Router   Network B

Gi0/0   Gi0/1

FTP Server
2001:0db8::1

FTP Client
2001:0db8:8000:1

```
interface GigabitEthernet0/0
 description FTP SERVER
 no ip address
 ipv6 address 2001:DB8::F/33
 ipv6 enable
 ipv6 traffic-filter FTP-SERVER in
!
interface GigabitEthernet0/1
 description FTP CLIENT
 no ip address
 ipv6 address 2001:DB8:8000::F/33
 ipv6 enable
 ipv6 traffic-filter FTP-CLIENT in

ipv6 access-list FTP-CLIENT
 permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp
 permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp-data
!
ipv6 access-list FTP-SERVER
 permit tcp host 2001:DB8::1 host 2001:DB8:8000::1 eq ftp established
 permit tcp host 2001:DB8::1 host 2001:DB8:8000::1 eq ftp-data established
```

Refer to the exhibit. When an FTP client attempts to use passive FTP to connect to the FTP server, the file transfers fail. Which action resolves the issue?

A. Modify traffic filter FTP-SERVER in to the outbound direction.

B. Configure active FTP traffic.

C. Configure to permit TCP ports higher than 1023.

D. Modify FTP-SERVER access list to remove established at the end.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 261

Topic #: 1

[All 300-410 Questions]

```
Configuration Output:
aaa new-model
aaa group server tacacs+ admin
server name admin
!
ip tacacs source-interface GigabitEthernet1
aaa authentication login admin group tacacs+ local enable
aaa session-id common
!
tacacs server admin
address ip 10.11.15.6
key 7 01150F165E1C07032D
!
line vty 0 4
login authentication admin

Debug Output:
Oct 22 12:38:57.587: AAA/BIND(0000001A): Bind i/f
Oct 22 12:38:57.587: AAA/AUTHEN/LOGIN (0000001A): Pick method list 'admin'
Oct 22 12:38:57.587: AAA/AUTHEN/ENABLE(0000001A): Processing request action LOGIN
Oct 22 12:38:57.587: AAA/AUTHEN/ENABLE(0000001A): Done status GET_PASSWORD
Oct 22 12:39:02.327: AAA/AUTHEN/ENABLE(0000001A): Processing request action LOGIN
Oct 22 12:39:02.327: AAA/AUTHEN/ENABLE(0000001A): Done status FAIL - bad password
```

Refer to the exhibit. An administrator configured a Cisco router for TACACS authentication, but the router is using the local enable password instead. Which action resolves the issue?

A. Configure the aaa authentication login default group admin local if-authenticated command instead.

B. Configure the aaa authentication login admin group tacacs+ local enable none command instead.

C. Configure the aaa authentication login admin group tacacs+ local if-authenticated command instead.

D. Configure the aaa authentication login admin group admin local enable command instead.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 262

Topic #: 1

[All 300-410 Questions]

An administrator attempts to download the .pack NBAR2 file using TFTP from the CPE router to another device over the Gi0/0 interface. The CPE is configured as below:

hostname CPE

!

ip access-list extended WAN

<`¦>

remark => All UDP rules below for WAN ID: S421T18E58F90

permit udp any eq domain any

permit udp any any eq tftp

deny udp any any

!

interface GigabitEthernet0/0

<`¦>

ip access-group WAN in

<`¦>

!

tftp-server flash:pp-adv-csr1000v-1612.1a-37-53.0.0.pack

The transfer fails. Which action resolves this issue?

    A. Make the permit udp any eq tftp any entry the last entry in the WAN ACL

    B. Shorten the file name to the 8+3 naming convention

    C. Change the WAN ACL to permit the entire UDP destination port range

    D. Change the WAN ACL to permit the UDP port 69 to allow TFTP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 263

Topic #: 1

[All 300-410 Questions]

A network administrator must optimize the segment size of the TCP packet on the DMVPN IPsec protected tunnel interface, which carries application traffic from the head office to a designated branch. The TCP segment size must not overwhelm the MTU of the outbound link. Which configuration must be applied to the router to improve the application performance?

A. interface tunnel30 ip mtu 1400 ip tcp payload-size 1360 ! crypto ipsec fragmentation before-encryption

B. interface tunnel30 ip mtu 1400 ip tcp adjust-mss 1360 ! crypto ipsec fragmentation after-encryption

C. interface tunnel30 ip mtu 1400 ip tcp max-segment 1360 ! crypto ipsec fragmentation before-encryption

D. interface tunnel30 ip mtu 1400 ip tcp packet-size 1360 ! crypto ipsec fragmentation after-encryption

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 264

Topic #: 1

[All 300-410 Questions]

In a DMVPN network, the Spoke1 user observed that the voice traffic is coming to Spoke2 users via the hub router. Which command is required on both spoke routers to communicate directly to one another?

A. ip nhrp nhs multicast

B. ip nhrp shortcut

C. ip nhrp map dynamic

D. ip nhrp redirect

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 265

Topic #: 1

[All 300-410 Questions]
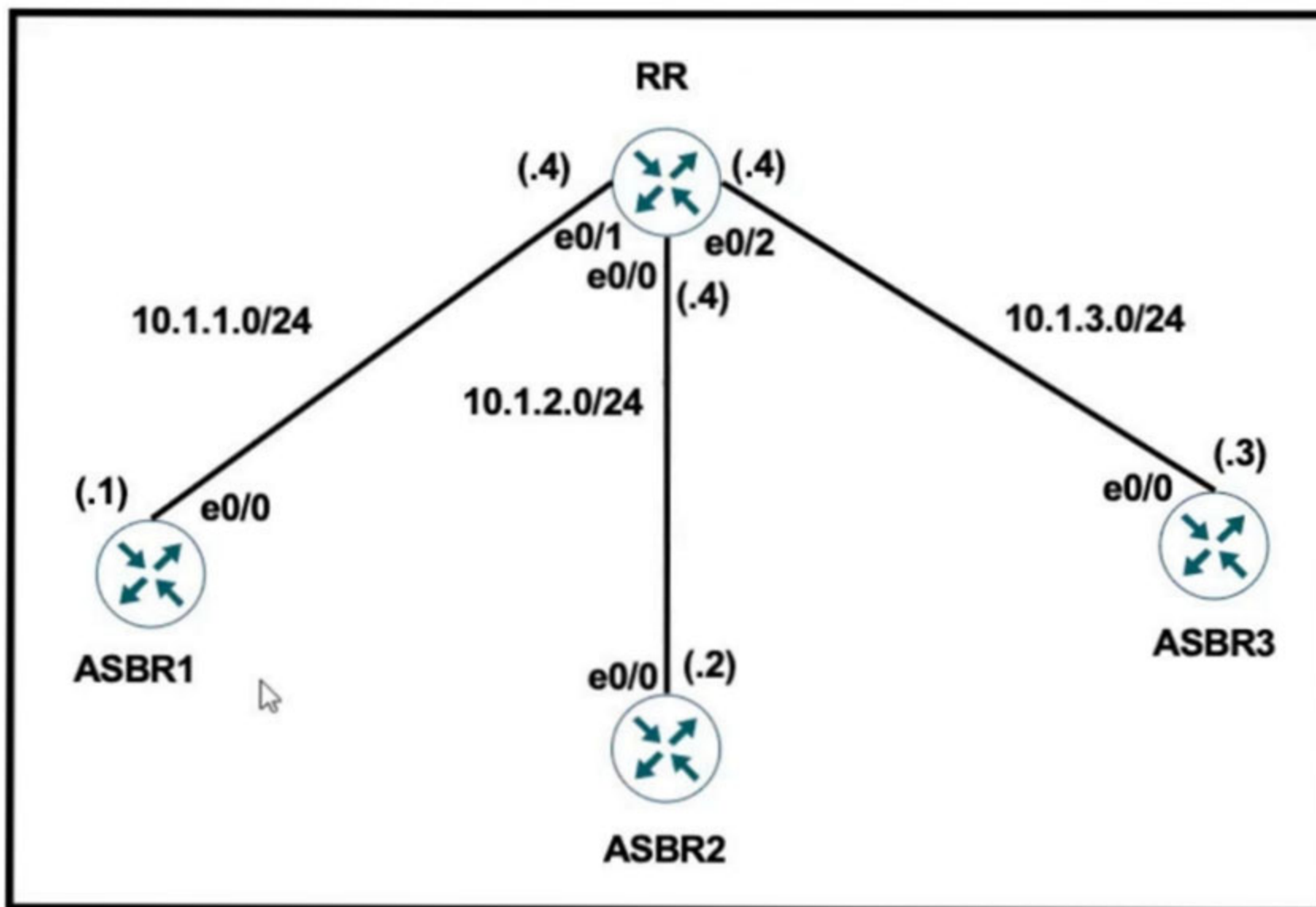
Refer to the exhibit.

RR Configuration:

router bgp 100

neighbor IBGP peer-group

neighbor IBGP route-reflector-client

neighbor 10.1.1.1 remote-as 100

neighbor 10.1.2.2 remote-as 100

neighbor 10.1.3.3 remote-as 100

The network administrator configured the network to establish connectivity between all devices and notices that the ASBRs do not have routes for each other. Which set of configurations resolves this issue?

A. router bgp 100 neighbor IBGP update-source Loopback0

B. router bgp 100 neighbor IBGP next-hop-self

C. router bgp 100 neighbor 10.1.1.1 next-hop-self neighbor 10.1.2.2 next-hop-self neighbor 10.1.3.3 next-hop-self

D. router bgp 100 neighbor 10.1.1.1 peer-group IBGP neighbor 10.1.2.2 peer-group IBGP neighbor 10.1.3.3 peer-group IBGP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 266

Topic #: 1

[All 300-410 Questions]

```
R1(config)#ip prefix-list EIGRP seq 10 deny 0.0.0.0/0 le 32
R1(config)#ip prefix-list EIGRP seq 20 permit 10.0.0.0/8
R1(config)#router eigrp 10
R1(config-router)#distribute-list prefix EIGRP in Ethernet0/0


R1#show ip route eigrp
```

Refer to the exhibit. A prefix list is created to filter routes inbound to an EIGRP process except for network 10 prefixes. After the prefix list is applied, no network 10 prefixes are visible in the routing table from EIGRP. Which configuration resolves the issue?

A. ip prefix-list EIGRP seq 10 permit 0.0.0.0/0 le 32

B. ip prefix-list EIGRP seq 20 permit 10.0.0.0/8 ge 9 ip prefix-list EIGRP seq 10 permit 0.0.0.0/0 le 32

C. ip prefix-list EIGRP seq 20 permit 10.0.0.0/8 ge 9

D. ip prefix-list EIGRP seq 5 permit 10.0.0.0/8 ge 9 no ip prefix-list EIGRP seq 20 permit 10.0.0.0/8

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 267

Topic #: 1

[All 300-410 Questions]

```
R1(config)# ip verify drop-rate compute window 60
R1(config)# ip verify drop-rate compute interval 60
R1(config)# ip verify drop-rate notify hold-down 60
R1(config)# interface ethernet 0/0
R1(config-if)# ip verify unicast notification threshold 75000
R1(config-if)# snmp trap ip verify drop-rate
R1(config-if)# end
```

Refer to the exhibit. An engineer configured SNMP traps to record spoofed packets drop of more than 48000 a minute on the ethernet0/0 interface. During an IP spoofing attack, the engineer noticed that no notifications have been received by the SNMP server. Which configuration resolves the issue on R1?

A. ip verify unicast notification threshold 800

B. ip verify unicast notification threshold 8000

C. ip verify unicast notification threshold 48000

D. ip verify unicast notification threshold 80

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 268

Topic #: 1

[All 300-410 Questions]

```
R1:                                              R2:
interface Loopback1                              interface Loopback0
 no ip address                                    no ip address
 ipv6 address 100A:0:100C::1/64                   ipv6 address 1001:ABC:2011:7::1/64
 ipv6 enable                                      ipv6 enable
 ipv6 ospf 10 area 0                              ipv6 ospf 10 area 0
!                                                !
interface Loopback4                              interface Serial1/0
 no ip address                                    no ip address
 ipv6 address 400A:0:400C::1/64                   ipv6 address AB01:2011:7:100::/64 eui-64
 ipv6 enable                                      ipv6 enable
 ipv6 ospf 10 area 0                              ipv6 ospf network point-to-point
!                                                 ipv6 ospf 10 area 0
interface Serial1/0                               serial restart-delay 0
 no ip address                                   !
 ipv6 address AB01:2011:7:100::/64 eui-64        ipv6 router ospf 10
 ipv6 enable                                      router-id 2.2.2.2
 ipv6 ospf network point-to-point                 log-adjacency-changes
 ipv6 ospf 10 area 0                             !
 ipv6 traffic-filter DENY_TELNET_Lo4 in         end
 serial restart-delay 0
 clock rate 64000
!
ipv6 router ospf 10
 router-id 1.1.1.1
 log-adjacency-changes
!
ipv6 access-list DENY_TELNET_LO4
 sequence 20 deny tcp host 100:ABC:2011:7 host 400A:0:400C::1 eq telnet permit ipv6 any any
end
```

Refer to the exhibit. An engineer implemented an access list on R1 to allow anyone to Telnet except R2 Loopback0 to R1 Loopback4. How must sequence 20 be replaced on the R1 access list to resolve the issue?

A. sequence 20 permit tcp host 1001:ABC:2011:7::1 host 400A:0:400C::1 eq telnet

B. sequence 20 deny tcp host 400A:0:400C::1 host 1001:ABC:2011:7::1 eq telnet

C. sequence 20 permit tcp host 400A:0:400C::1 host 1001:ABC:2011:7::1 eq telnet

D. sequence 20 deny tcp host 1001:ABC:2011:7::1 host 400A:0:400C::1 eq telnet
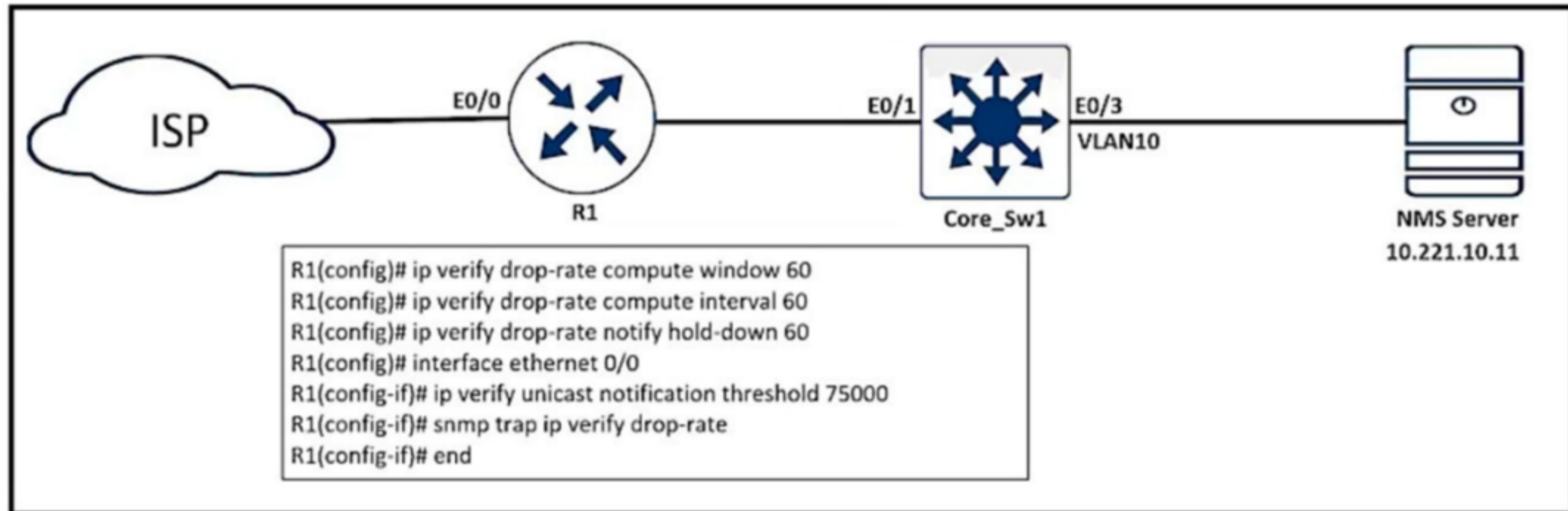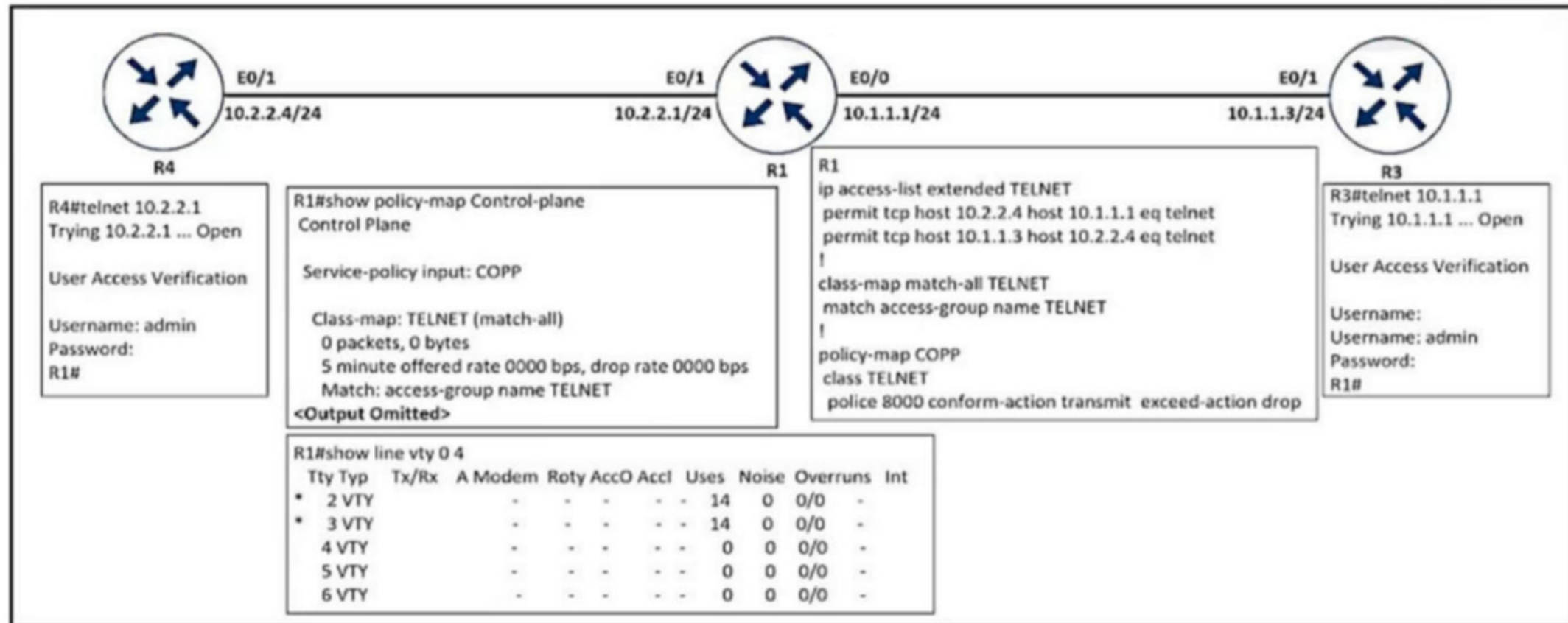
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 269

Topic #: 1

[All 300-410 Questions]


```
                    E0/1                          E0/1           E0/0                                    E0/1
                    10.2.2.4/24                   10.2.2.1/24    10.1.1.1/24                             10.1.1.3/24

        R4                          R1                           R1                                      R3
                                                                 ip access-list extended TELNET
  R4#telnet 10.2.2.1          R1#show policy-map Control-plane     permit tcp host 10.2.2.4 host 10.1.1.1 eq telnet    R3#telnet 10.1.1.1
  Trying 10.2.2.1 ... Open    Control Plane                        permit tcp host 10.1.1.3 host 10.2.2.4 eq telnet    Trying 10.1.1.1 ... Open
                                                                 !
  User Access Verification       Service-policy input: COPP     class-map match-all TELNET                             User Access Verification
                                                                  match access-group name TELNET
  Username: admin                  Class-map: TELNET (match-all) !                                                     Username:
  Password:                        0 packets, 0 bytes           policy-map COPP                                        Username: admin
  R1#                              5 minute offered rate 0000 bps, drop rate 0000 bps  class TELNET                    Password:
                                   Match: access-group name TELNET  police 8000 conform-action transmit  exceed-action drop   R1#
                               <Output Omitted>

                               R1#show line vty 0 4
                               Tty Typ   Tx/Rx   A Modem  Roty AccO Accl  Uses  Noise  Overruns  Int
                             *   2 VTY     -        -       -    -   -     14     0      0/0       -
                             *   3 VTY     -        -       -    -   -     14     0      0/0       -
                                 4 VTY     -        -       -    -   -      0     0      0/0       -
                                 5 VTY     -        -       -    -   -      0     0      0/0       -
                                 6 VTY     -        -       -    -   -      0     0      0/0       -
```

Refer to the exhibit. An engineer implemented CoPP to limit Telnet traffic to protect the router CPU. It was noticed that the Telnet traffic did not pass through CoPP. Which configuration resolves the issue?

A. ip access-list extended TELNET permit tcp host 10.2.2.1 host 10.2.2.4 eq telnet permit tcp host 10.1.1.1 host 10.1.1.3 eq telnet

B. policy-map COPP class TELNET police 8000 conform-action transmit exceed-action transmit

C. ip access-list extended TELNET permit tcp host 10.2.2.4 host 10.2.2.1 eq telnet permit tcp host 10.1.1.3 host 10.1.1.1 eq telnet

D. policy-map COPP class TELNET police 8000 conform-action transmit exceed-action transmit violate-action drop

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 270

Topic #: 1

[All 300-410 Questions]

```
R1# show ip ospf database self-originate

            OSPF Router with ID (10.255.255.1) (Process ID 1)

                Router Link States (Area 0)

Link ID          ADV Router       Age          Seq#          Checksum
Link count
10.255.255.1    10.255.255.1     4            0x800003BD 0x001AD9
3


                Summary Net Link States (Area 0)

Link ID          ADV Router       Age          Seq#          Checksum
10.0.34.0       10.255.255.1     3604         0x80000380 0x00275C
10.255.255.4    10.255.255.1     3604         0x80000380 0x00762B

                Type-5 AS External Link States

Link ID          ADV Router       Age          Seq#          Checksum
Tag
0.0.0.0         10.255.255.1     3604         0x800001D0 0x001CBC
0




*Feb 22 22:50:39.523: %OSPF-4-FLOOD_WAR: Process 1 flushes LSA
ID 0.0.0.0 type-5 adv-rtr 10.255.255.1 in area 0
```

Refer to the exhibit. After configuring OSPF in R1, some external destinations in the network became unreachable. Which action resolves the issue?

A. Disconnect the router with the OSPF router ID 0.0.0 0 from the network.

B. Increase the SPF delay interval on R1 to synchronize routes.

C. Change the R1 router ID from 10.255.255.1 to a unique value and clear the process.

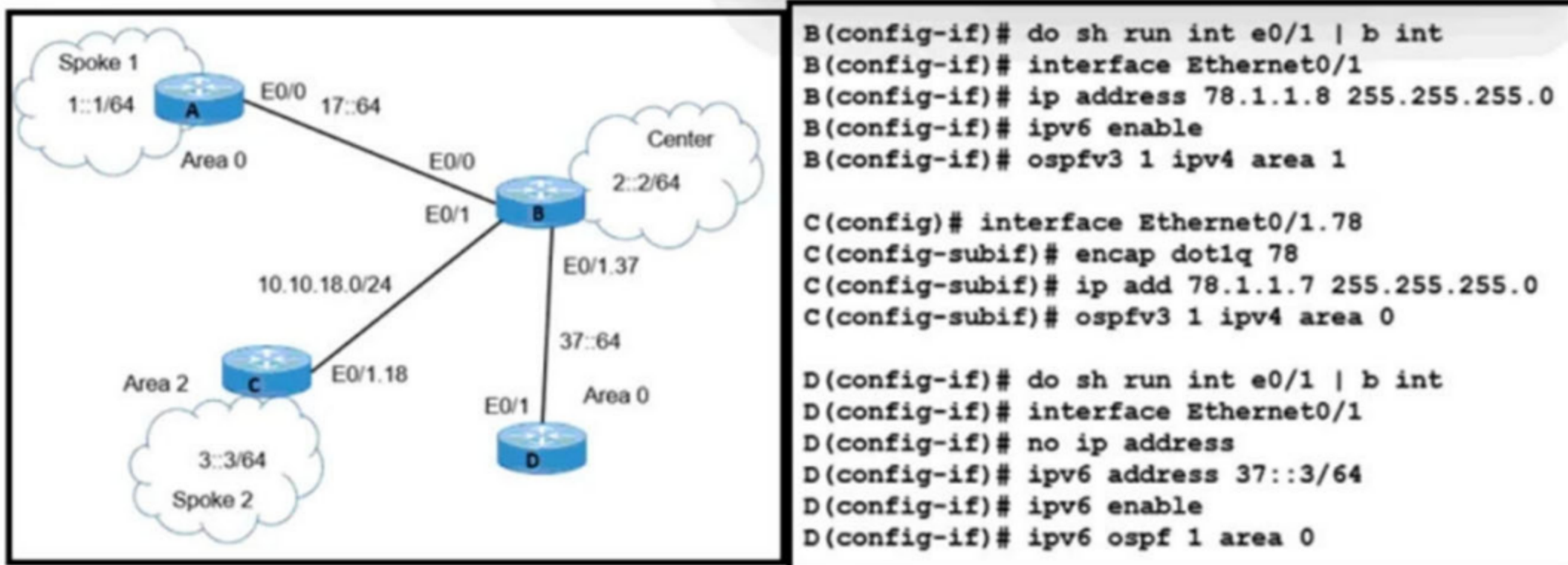D. Clear the OSPF process on R1 to flush stale LSAs sent by other routers.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 271

Topic #: 1

[All 300-410 Questions]


```
B(config-if)# do sh run int e0/1 | b int
B(config-if)# interface Ethernet0/1
B(config-if)# ip address 78.1.1.8 255.255.255.0
B(config-if)# ipv6 enable
B(config-if)# ospfv3 1 ipv4 area 1

C(config)# interface Ethernet0/1.78
C(config-subif)# encap dot1q 78
C(config-subif)# ip add 78.1.1.7 255.255.255.0
C(config-subif)# ospfv3 1 ipv4 area 0

D(config-if)# do sh run int e0/1 | b int
D(config-if)# interface Ethernet0/1
D(config-if)# no ip address
D(config-if)# ipv6 address 37::3/64
D(config-if)# ipv6 enable
D(config-if)# ipv6 ospf 1 area 0
```

Refer to the exhibit. A network engineer receives a report that Spoke 1 users can perform bank transactions with the server located at the Center site, but Spoke 2 users cannot. Which action resolves the issue?

A. Configure the Spoke 2 users IP on the router B OSPF domain

B. Configure IPv6 on the routers B and C interfaces

C. Configure OSPFv2 on the routers B and C interfaces

D. Configure encapsulation dot1q 78 on the router C interface

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 272

Topic #: 1

[All 300-410 Questions]

What is an MPLS LDP targeted session?

- A. LDP session established by exchanging multicast hello packets

- B. LDP session established between LSRs by exchanging TCP hello packets

- C. session between neighbors that are connected no more than one hop away

- D. label distribution session between non-directly connected neighbors

Show Suggested Answer
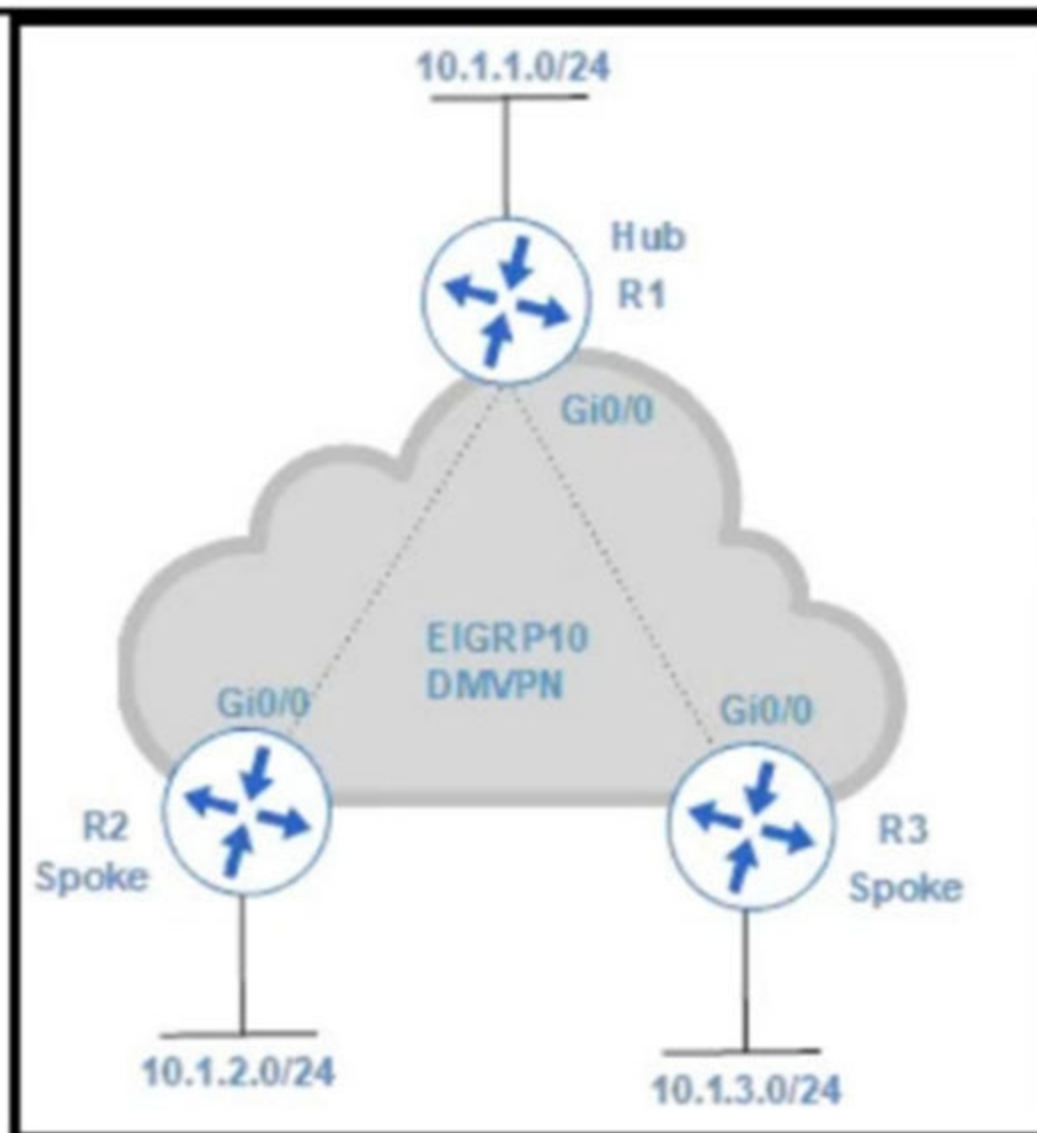
Actual exam question from Cisco's 300-410

Question #: 273

Topic #: 1

[All 300-410 Questions]

```
R2#show ip route eigrp | include 10.1.
D       10.1.1.0/24

R3#show ip route eigrp | include 10.1.
D       10.1.1.0/24
```


Refer to the exhibit. An engineer configures DMVPN and receives the hub location prefix of 10.1.1.0/24 on R2 and R3. The R3 prefix of 10.1.3.0/24 is not received on R2, and the R2 prefix 10.1.2.0/24 is not received on R3. Which action resolves the issue?

A. Split horizon prevents the routes from being advertised between spoke routers. It should be disabled with the no ip split-horizon eigrp 10 command on the Gi0/0 interface of R1.

B. There is no spoke-to-spoke connection. DMVPN configuration should be modified with a manual neighbor relationship configured between R2 and R3 and confirmed by use of the show ip eigrp neighbor command.

C. There is no spoke-to-spoke connection. DMVPN configuration should be modified to enable a tunnel connection between R2 and R3 and neighbor relationship confirmed by use of the show ip eigrp neighbor command.

D. Split horizon prevents the routes from being advertised between spoke routers. It should be disabled with the command no ip split-horizon eigrp 10 on the tunnel interface of R1.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 274

Topic #: 1

[All 300-410 Questions]

```
ip dhcp excluded-address 172.16.16.1 172.16.16.2
!
ip dhcp pool 0
 network 172.16.16.0 255.255.255.0
 domain-name cisco.com
 dns-server 172.16.16.2
 lease 30


interface Ethernet0/0
 ip address 10.1.1.1 255.255.255.252
 ip access-group 100 in



access-list 100 deny   udp any any
access-list 100 permit ip any any
```

Refer to the exhibit. Which two configurations allow clients to get dynamic IP addresses assigned? (Choose two.)

A. Configure access-list 100 permit udp any any eq 68 as the first line

B. Configure access-list 100 permit udp any any eq 69 as the first line

C. Configure access-list 100 permit udp any any eq 61 as the first line

D. Configure access-list 100 permit udp any any eq 66 as the first line

E. Configure access-list 100 permit udp any any eq 67 as the first line

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 275

Topic #: 1

[All 300-410 Questions]
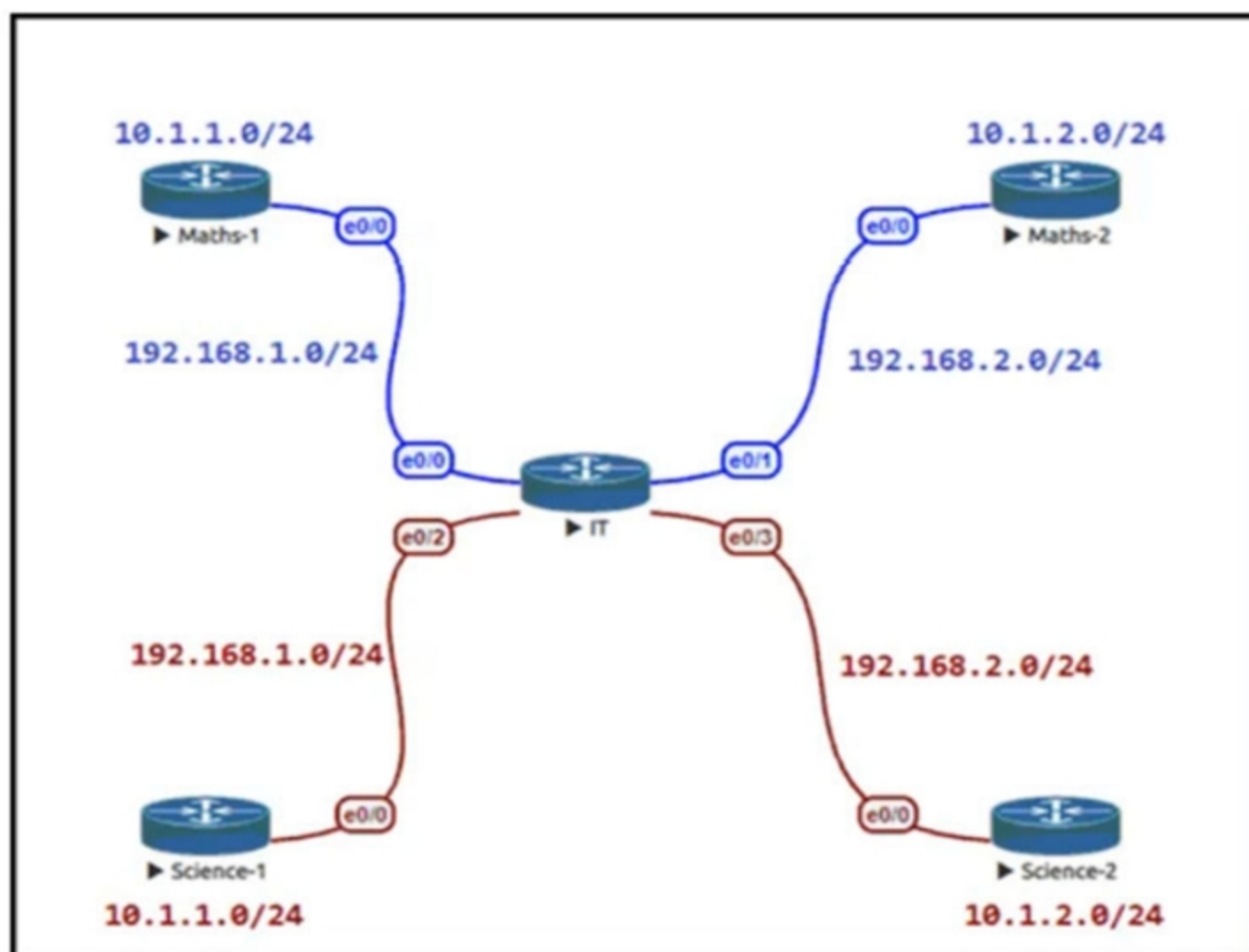

```
IT Router

vrf definition Science
 address-family ipv4
!

Interface E 0/2
 Vrf forwarding Science
 Ip address 192.168.1.1 255.255.255.0
 No shut
!

Interface E 0/3
 Vrf forwarding Science
 Ip address 192.168.2.1 255.255.255.0
 No shut
```

Refer to the exhibit. The IT router has been configured with the Science VRF and the interfaces have been assigned to the VRF. Which set of configurations advertises Science-1 and Science-2 routes using EIGRP AS 111?

A. router eigrp 111 address-family ipv4 vrf Science autonomous-system 1 network 192.168.1.0 network 192.168.2.0

B. router eigrp 111 address-family ipv4 vrf Science network 192.168.1.0 network 192.168.2.0

C. router eigrp 111 network 192.168.1.0 network 192.168.2.0

D. router eigrp 1 address-family ipv4 vrf Science autonomous-system 111 network 192.168.1.0 network 192.168.2.0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 276

Topic #: 1

[All 300-410 Questions]

An engineer must override the normal routing behavior of a router for Telnet traffic that is destined to 10.10.10.10 from 10.10.1.0/24 via a next hop of 10.4.4.4, which is directly connected to the router that is connected to the 10.1.1.0/24 subnet. Which configuration reroutes traffic according to this requirement?

A. access-list 100 deny tcp 10.10.1.0 0.0.0.255 host 10.10.10.10 eq 23 ! route-map POLICY permit 10 match ip address 100 set ip next-hop 10.4.4.4 route-map POLICY permit 20

B. access-list 100 permit tcp 10.10.1.0 0.0.0.255 host 10.10.10.10 eq 23 ! route-map POLICY permit 10 match ip address 100 set ip next-hop 10.4.4.4 route-map POLICY permit 20

C. access-list 100 permit tcp 10.10.1.0 0.0.0.255 host 10.10.10.10 eq 23 ! route-map POLICY permit 10 match ip address 100 set ip next-hop recursive 10.4.4.4 route-map POLICY permit 20

D. access-list 100 permit tcp 10.10.1.0 0.0.0.255 host 10.10.10.10 eq 23 ! route-map POLICY permit 10 match ip address 100 set ip next-hop recursive 10.4.4.4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 277

Topic #: 1

[All 300-410 Questions]
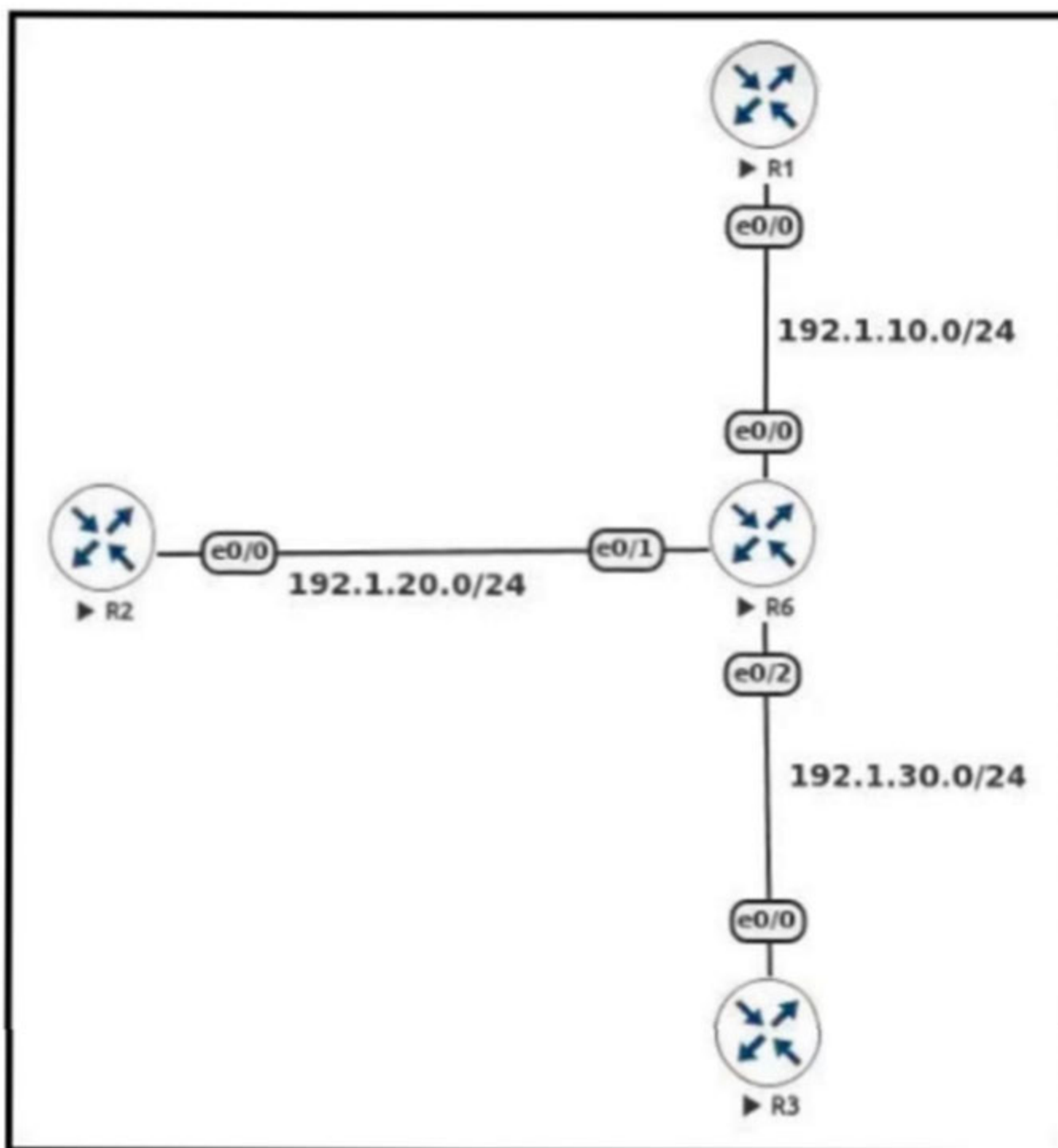
Refer to the exhibit. An engineer must configure DMVPN Phase 3 hub-and-spoke topology to enable a spoke-to-spoke tunnel. Which NHRP configuration meets the requirement on R6?

A. interface Tunnel1 ip nhrp authentication Cisco123 ip nhrp map multicast dynamic ip nhrp network-id 1 ip nhrp holdtime 300 ip nhrp redirect

B. interface Tunnel 1 ip address 192.168.1.1 255.255.255.0 tunnel source e 0/1 tunnel mode gre multipoint ip nhrp network-id 1 ip nhrp map 192.168.1.2 192.1.20.2

C. interface Tunnel1 ip nhrp authentication Cisco123 ip nhrp map multicast dynamic ip nhrp network-id 1 ip nhrp holdtime 300 ip nhrp shortcut

D. Interface Tunnel 1 ip address 192.168.1.1 255.255.255.0 tunnel source e 0/0 tunnel mode gre multipoint ip nhrp network-id 1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 278

Topic #: 1

[All 300-410 Questions]

R1#show policy-map control-plane
 Control Plane
  Service-policy input: COPP
   Class-map: OSPF (match-all)
    0 packets, 0 bytes
    5 minute offered rate 0000 bps, drop rate 0000 bps
    Match: access-group name OSPF
    police:
      cir 8000 bps, bc 1500 bytes
      conformed 0 packets, 0 bytes; actions:
      transmit
<Output Omitted>

R1
ip access-list extended OSPF
 permit ospf host 10.2.2.4 host 10.1.1.3
 permit ospf host 10.1.1.3 host 10.2.2.4
!
class-map match-all OSPF
 match access-group name OSPF
!
policy-map COPP
 class OSPF
  police 8000 conform-action transmit exceed-action transmit

R1# show ip ospf neighbor

Neighbor ID	Pri	State	Dead Time	Address	Interface
10.1.1.3	1	FULL/BDR	00:00:31	10.1.1.3	Ethernet0/0
10.2.2.4	1	FULL/BDR	00:00:34	10.2.2.4	Ethernet0/1

Refer to the exhibit. An engineer implemented CoPP but did not see OSPF traffic going through it. Which configuration resolves the issue?

A. control-plane service-policy input COPP

B. policy-map COPP class OSFP police 8000 conform-action transmit exceed-action transmit violate-action drop

C. ip access-list extended OSFP permit ospf any any

D. class-map match-all OSFP match access-group name OSFP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 279

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Site1 must perform unequal cost load balancing toward the segments behind Site2 and Site3. Some of the routes are getting load balanced but others are not. Which configuration allows Site1 to load balance toward all the LAN segments of the remote routers?

A. Site3 router eigrp 100 variance 2

B. Site2 router eigrp 100 variance 2

C. Site2 router eigrp 100 variance 3

D. Site1 router eigrp 100 variance 3

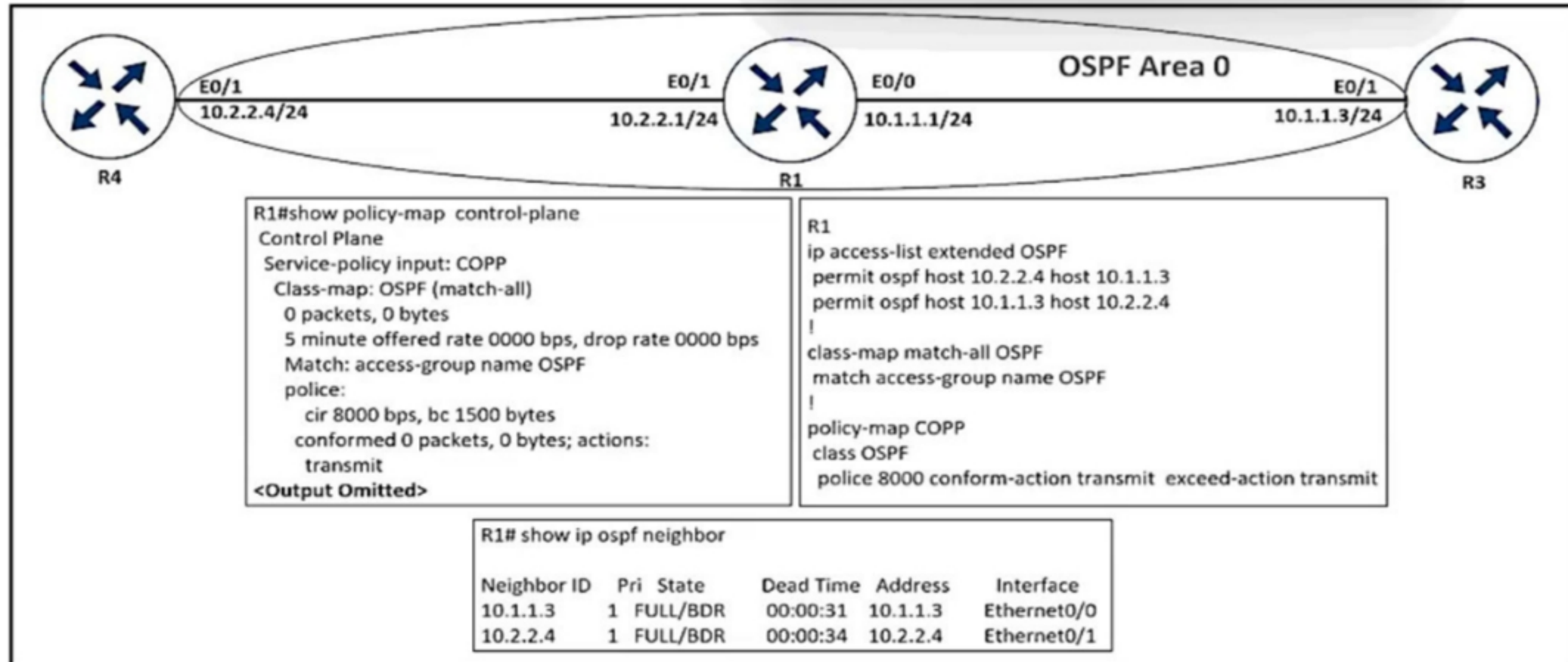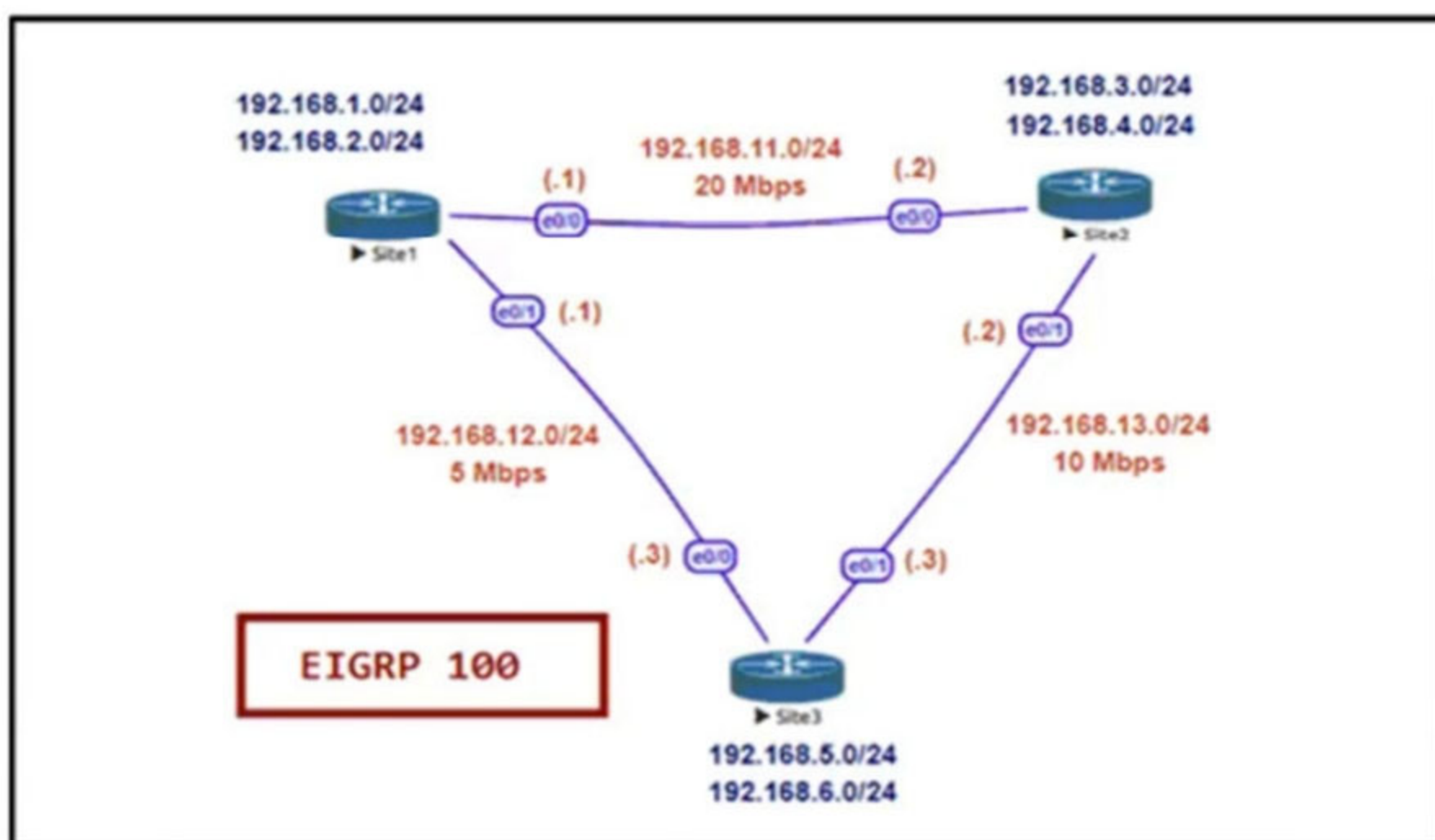Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 280

Topic #: 1

[All 300-410 Questions]


```
R2#                                              R1#
router eigrp 100                                 router eigrp 100
network 10.10.10.0 0.0.0.3                        network 10.10.10.0 0.0.0.3
network 10.20.10.0 0.0.0.3                        network 10.10.20.0 0.0.0.3
!                                                network 1.1.1.1 0.0.0.0
router ospf 100                                  !
network 10.10.10.0 0.0.0.3 area 0                router ospf 100
network 10.20.10.0 0.0.0.3 area 0                network 10.10.10.0 0.0.0.3 area 0
!                                                network 10.10.20.0 0.0.0.3 area 0
!                                                !
router bgp 100                                   router bgp 200
distance 100 10.20.10.0 0.0.0.3                  distance 100 10.10.10.0 0.0.0.3
distance 100 10.10.10.0 0.0.0.3                  distance 100 10.20.10.0 0.0.0.3
neighbor 1.1.1.1 remote-as 200                   neighbor 2.2.2.2 remote-as 100
neighbor 10.10.10.1 remote-as 200                neighbor 10.10.10.2 remote-as 100
network 10.20.10.0 mask 255.255.255.252          network 10.10.10.0 mask 255.255.255.252
                                                 network 10.20.10.0 mask 255.255.255.252
```

Refer to the exhibit. R1 and R2 use IGP protocol to route traffic between AS 100 and AS 200 despite being configured to use BGP. Which action resolves the issue and ensures the use of BGP?

A. Configure distance to 100 under the OSPF process of R1 and R2

B. Remove distance commands under BGP AS 100

C. Remove distance commands under BGP AS 100 and AS 200.

D. Configure distance to 100 under the EIGRP process of R1 and R2

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 281

Topic #: 1

[All 300-410 Questions]

DRAG DROP -

Drag and drop the MPLS concepts from the left onto the descriptions on the right.

Select and Place:

label edge router	allows an LSR to remove the label before forwarding the packet
label switch router	accepts unlabeled packets and imposes labels
forwarding equivalence class	group of packets that are forwarded in the same manner
penultimate hop popping	receives labeled packets and swaps labels

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 282

Topic #: 1

[All 300-410 Questions]

Which table is used to map the packets in an MPLS LSP that exit from the same interface, via the same next hop, and have the same queuing policies?

A. LDP

B. FEC

C. CEF

D. RIB

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 283

Topic #: 1

[All 300-410 Questions]

You have configured router R1 with multiple VRF's in order to support multiple customer VPN networks. If you wanted to see the best path for the 10.1.1.0.24 route in VRF Blue, what command would you use?

A. show ip route vrf Blue 10.1.1.0

B. show ip route 10.1.1.0 vrf Blue

C. show route all 10.1.1.0

D. show ip route all 10.1.1.0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 284

Topic #: 1

[All 300-410 Questions]

Which of the following OSPF Link State Advertisements (LSA's) were created for IPV6 and do not apply to IPv4 OSPF networks? (Choose two.)

A. Link LSA (Type 8)

B. Summary LSA (Type 3)

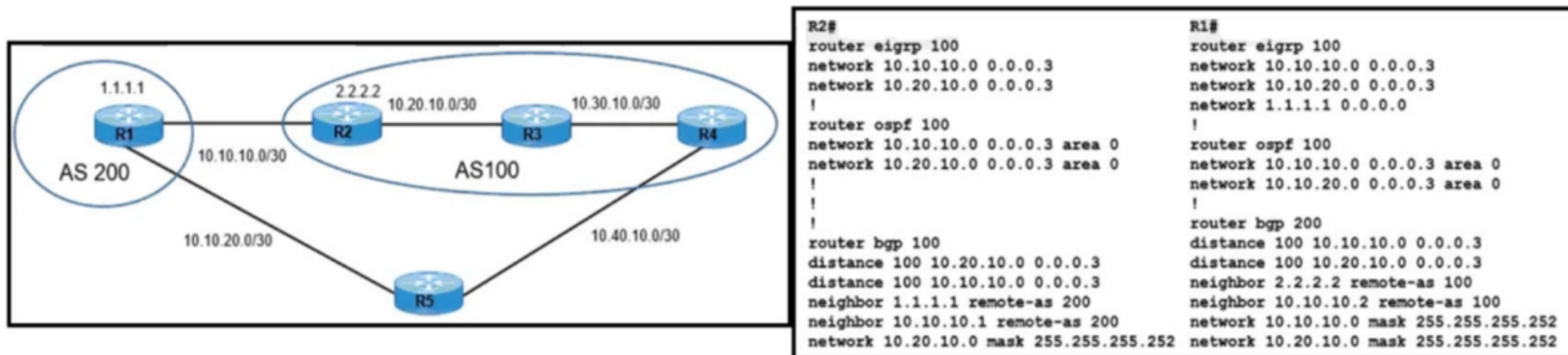C. Router LSA (Type 2)

D. Intra-Area Prefix LSA (Type 9)

E. Opaque LSA (Type 9)

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 285

Topic #: 1

[All 300-410 Questions]

Router R1 has been configured with a default route like this:

R1#(config) ip route 0.0.0.0 0.0.0.0 10.2.3.1

You want to redistribute this route into OSPF but when you configure the redistribute static command under the OSPF process the default route is not present. What will create a default route in the OSPF routing process?

    A. Use the redistribute static subnets command.

    B. Create a default metric for the static default route.

    C. Use the default-information originate command under the OSPF process.

    D. Change the static default route to use an Administrative Distance (AD) greater than 110.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 286

Topic #: 1

[All 300-410 Questions]

Which one of the following statements regarding Bidirectional Forwarding Detection (BFD) is correct?

A. BFD echo mode is the default mode of operation.

B. BFD is not supported for HSRP.

C. CEF must be disabled for BFD to work.

D. BFD is not supported when using static routes.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 287

Topic #: 1

[All 300-410 Questions]

Which of the following OSPF neighbor adjacency states is applicable only to manually configured OSPF neighbors in a Non Broadcast Multi-Access network?

A. Attempt

B. Init

C. 2-Way

D. Exstart

E. Exchange

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 288

Topic #: 1

[All 300-410 Questions]

With Internal BGP, there is a requirement for all peers to be logically fully meshed, where all IBGP routers must peer with all other IBGP routers. For scaling purposes, there are two mechanisms that were developed to bypass this requirement. What are they? (Choose two.)

A. Confederations

B. IBGP to EBGP route redistribution

C. BGP peer filtering

D. Route reflectors.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 289

Topic #: 1

[All 300-410 Questions]

You have configured policy-based routing on router R1 to force some traffic to go over an alternate link. In order to verify the configuration, which debug command should be used to verify that the specific traffic is taking the intended path?

A. Debug policy routing

B. Debug ip routing

C. Debug ip policy

D. Debug policy map

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 290

Topic #: 1

[All 300-410 Questions]

Which BGP attribute can be used to influence the path that incoming traffic takes into your AS from other Autonomous Systems?

A. Metric manipulation

B. AS_Path

C. Weight

D. Local Preference

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 291

Topic #: 1

[All 300-410 Questions]

Routers R1 and R2 have been configured to use Bidirectional Forwarding Detection? What is the advantage of doing this?

A. It is able to discover local link failures at layer 1 and provide automatic re-routing

B. It is able to discover local link failures at layer 1 and provide automatic re-routing

C. It is able to discover local link failures at layer 1 only and provides detection for this in less than one second.

D. It is able to discover local link failures at layers 1 and 2 and provides detection for this in less than one second.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 292

Topic #: 1

[All 300-410 Questions]

Which BGP attribute can be used to influence the path that outgoing traffic takes from your AS to other Autonomous Systems? (Choose two.)

A. MED

B. AS_Path

C. Weight

D. Local Preference

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 293

Topic #: 1

[All 300-410 Questions]

In order to connect between disparate OSPF and EIGRP portions of a network, mutual route redistribution has been configured. What are two disadvantages of doing this? (Choose two.)

A. Prone to routing loops if not done correctly

B. Differing metrics between the routing protocols could result in sub-optimal routing.

C. Route redistribution is not supported on most Cisco router platforms.

D. Increased convergence times.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 294

Topic #: 1

[All 300-410 Questions]

Which of the following statements are true regarding two EIGRP routers to become neighbors?

A. Must have identical hello and dead timers

B. Must utilize unique router ID's

C. Must have matching MTU's on the physical network links that connect the routers.

D. Must use the same ASN.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 295

Topic #: 1

[All 300-410 Questions]

Which of the following statements are true regarding two OSPF routers to become neighbors? (Choose two.)

A. Must use the same ASN

B. Must have identical hello and dead timers

C. Must have matching MTU's on the physical network links that connect the routers.

D. Need not be on the same subnet.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 296

Topic #: 1

[All 300-410 Questions]

A new site has been added to an OPSF network using area 2. Area 2 is connected only to area 1 of this OSPF network. Area 1 is used to connect area 1 to the backbone area 0. Should you expect full connectivity to the networks located in area 2 from area 0 in this scenario?

A. Yes, by default there will be full connectivity.

B. No, you will need to redistribute the area 2 routes into area 0.

C. No, a virtual link is needed to logically connect area 2 info area 0.

D. Yes, but area 2 will need to be configured as a stub area.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 297

Topic #: 1

[All 300-410 Questions]

Router R1 is configured using VRF's to support customer VPN's. Some customers are using the same private IP address space. Which of the following is used to ensure that these routes are unique when advertised throughout the VPN?

A. Route Distinguisher

B. Route Targets

C. MP-BGP

D. LDP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 298

Topic #: 1

[All 300-410 Questions]

Two MPLS routers, R1 and R2, are not directly connected and have an established LDP session running between them. What type of LDP session is this?

A. Remote LDP session

B. Direct LDP session

C. Tunneled LDP session

D. Targeted LDP session

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 299

Topic #: 1

[All 300-410 Questions]

What is the total length of an MPLS header?

A. 16 bits

B. 20 bits

C. 28 bits

D. 32 bits

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 300

Topic #: 1

[All 300-410 Questions]

Which of the following are valid fields in an MPLS header? (Choose four.)

A. Label

B. Sequence Number

C. Experimental (Exp)

D. Bottom of Stack (BoS)

E. Time to Live (TTL)

F. Checksum

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 301

Topic #: 1

[All 300-410 Questions]

What TCP port is used by LDP to provide for reliable transport connections?

A. 646

B. 648

C. 752

D. 712

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 302

Topic #: 1

[All 300-410 Questions]

Which of the following are control plane protocols used within a service provider MPLS network? (Choose two.)

A. OAM

B. RSVP

C. Targeted LDP

D. SNMP

E. LDP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 303

Topic #: 1

[All 300-410 Questions]

In a typical MPLS VPN, which routers act as the MPLS label imposition and disposition points in the network?

A. CE Router

B. P router

C. PE Router

D. Core router

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 304

Topic #: 1

[All 300-410 Questions]

In an MPLS network, which of the following describes the role of the Provider (P) router?

A. To connect to customer edge (CE) devices

B. To connect to PE routers and act as transit routers

C. To impose MPLS labels

D. To filter VPN routes in the core

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 305

Topic #: 1

[All 300-410 Questions]

The MPLS LDP autoconfiguration feature allows you to enable LDP on every interface that is associated with an IGP instance. Which of the following Interior Gateway Protocols support this? (Choose two.)

A. OSPF

B. IS-IS

C. BGP

D. RIP

E. EIGRP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 306

Topic #: 1

[All 300-410 Questions]

In an MPLS VPN network, how are customer routes controlled and distributed?

A. Through the use of GRE tunnels

B. Customer routes are redistributed into the IGP that the service provider is using

C. Customer routes are redistributed into BGP within the service provider

D. It is distributed through the use of route targets

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 307

Topic #: 1

[All 300-410 Questions]

At which layer of the OSI model is an MPLS label imposed?

A. Layer 2

B. Layer 3

C. Between layers 2 and 3

D. Between layers 3 and 4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 308

Topic #: 1

[All 300-410 Questions]

Which of the following are valid IPv6 Router Advertisement (RA) Guard modes? (Choose two.)

A. Guard mode

B. Host mode

C. Router mode

D. Open mode

E. Closed mode

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 309

Topic #: 1

[All 300-410 Questions]

Which of the following statements are true regarding the e IPv6 RA Guard feature?

A. This feature is support on LAG bundles interfaces

B. This feature is supported on private VLANs

C. Packets dropped by the IPv6 RA Guard feature cannot be spanned.

D. This feature offers protection in networks where IPv6 traffic is tunneled.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 310

Topic #: 1

[All 300-410 Questions]

Unicast Reverse Path Forwarding (uRPF) has been configured on a service provider network to protect itself from spoofed based attacks. Which of the following are valid uRPF modes? (Choose two.)

A. Strict mode

B. Open mode

C. Closed mode

D. Block mode

E. Loose mode

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 311

Topic #: 1

[All 300-410 Questions]

Which of the following are commonly used ports when implementing RADIUS based authentication and accounting? (Choose two.)

A. UDP port 1644 for authentication

B. UDP port 1812 for authentication

C. TCP port 1812 for authentication

D. UDP port 1813 for accounting

E. TCP port 1813 for accounting

F. UDP port 1644 for accounting

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 312

Topic #: 1

[All 300-410 Questions]

Which of the following are valid restrictions when configuring Control Plane Policing (CoPP) on Cisco devices? (Choose two.)

A. You cannot use the "log" keyword with CoPP on the access list entries

B. CEF must be disabled

C. The only match types supported with CoPP is ip precedence, ip dscp, and access-group

D. Only standard access-lists are supported.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 313

Topic #: 1

[All 300-410 Questions]

Which of the following are used to validate the source of IPv6 traffic and are considered IPv6 layer 2 snooping features? (Choose two.)

A. DHCPv6 Guard

B. DHCPv6 Root Guard

C. IPv6 Source Guard

D. IPv6 Prefix Guard

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 314

Topic #: 1

[All 300-410 Questions]

You want to implement AAA on router R1 for a more robust authentication and authorization system. What is typically the first global command used to do this?

A. aaa new-model

B. aaa enable

C. aaa server-group

D. aaa authentication login

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 315

Topic #: 1

[All 300-410 Questions]

A time based access list has been configured on R1 to allow SSH access to the device only on weekdays. Which of the following are valid options when using the time range command? (Choose two.)

A. relative

B. recurring

C. absolute

D. periodic

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 316

Topic #: 1

[All 300-410 Questions]

First-Hop Security (FHS) is a set of features to optimize IPv6 link operation, and help with scale in large L2 domains. Which of the following are valid First-Hop Security features supported by Cisco? (Choose three.)

A. IPv6 RA Guard

B. IPv6 Source Guard

C. DHCPv6 Guard

D. IPv6 Snooping

E. DHCPv6 Snooping

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 317

Topic #: 1

[All 300-410 Questions]

What are the four stages of obtaining an IP address from a DHCP server that corresponds to the acronym DORA?

- A. Discover, Offer, Release, Addressing

- B. Discover, Obtain, Request, Acknowledge

- C. Determine, Offer, Release, Acknowledge

- D. Discover, Offer, Request, Acknowledge

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 318

Topic #: 1

[All 300-410 Questions]

SNMPv2 has been used throughout a network to manage all of the network devices. You have been asked to migrate to an SNMPv3 solution instead. What is the biggest advantage to migrating from SNMPv2 to SNMPv3?

A. Enhanced security, including encryption of passwords

B. Enhanced performance, supporting more messages per minute.

C. Enhanced scaling, supporting thousands more devices per network segment than SNMPv2.

D. Using a push model instead of pull. SNMPv3 uses telemetry to push data to SNMP management stations in real time.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 319

Topic #: 1

[All 300-410 Questions]

You are configuring Netflow on various network elements in order to gain visibility into the traffic types used. How many export destinations can this Network data be sent to?

A. Up to 2

B. Up to 4

C. Up to 8

D. There is no limitation on the number of flow data export destinations.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 320

Topic #: 1

[All 300-410 Questions]

A Cisco router has just been configured for NTP and is synchronized with the configured NTP server. However, log messages still show an incorrect time. What else should be done to match the log messages time stamps with the NTP based time?

A. Wait a bit longer for the synchronized time to get applied to new log messages.

B. Configure the "service timestamps log datetime localtime" command in global mode.

C. Configure the "service timestamps log datetime synchronize" command globally

D. Configure the "service timestamps log ntp" command in global config mode.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 321

Topic #: 1

[All 300-410 Questions]

There is an issue between two nodes within your network, and you are using Cisco DNA Center Path Trace to help troubleshoot the problem. Which of the following statements are true regarding the Path Trace tool?

A. Overlapping IP addresses are supported.

B. Path trace between a fabric client and a non-fabric client is supported

C. Path trace between a wired client and a wireless client is supported

D. Only TCP traffic is supported.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 322

Topic #: 1

[All 300-410 Questions]

Which of the following are valid DHCP options that DHCP servers can be configured to use with DHCP clients when offering a lease? (Choose two.)

A. DHCP Option 1: subnet mask

B. DHCP Option 3: Lease Duration

C. DHCP Option 4: Client host name

D. DHCP Option 6: DNS servers

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 323

Topic #: 1

[All 300-410 Questions]

Which feature of the Cisco DNA Center allows you to run diagnostic CLI commands to the devices that are managed by DNA Center for troubleshooting purposes?

A. Command Runner

B. DNA Spaces

C. DNA Advantage

D. Intelligent Capture

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 324

Topic #: 1

[All 300-410 Questions]

You want to change the Administrative Distance of external EIGRP routes from the default of 170 to 130 instead on router R1 while leaving the default AD value for internal EIGRP routes. Which set of command will accomplish this?

A. R1(config)#router eigrp -

R1(config-router)#distance 170 -

B. R1(config)#router eigrp 1 -
R1(config-router)#distance eigrp 90 130

C. R1(config)#router eigrp 1 -
R1(config-router)#distance eigrp 130 90

D. R1(config)#router eigrp 1 -
R1(config-router)#distance 90 130

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 325

Topic #: 1

[All 300-410 Questions]

Which of the following are valid TFTP error codes? (Choose two.)

    A. Error Code 1 – File not found

    B. Error Code 2 – Unknown error

    C. Error code 3 – Invalid user

    D. Error code 6 – File already exists

    E. Error code 8 – Undefined error

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 326

Topic #: 1

[All 300-410 Questions]

What are the two prerequisites of setting up DMVPN tunnel? (Choose two.)

A. Before a multipoint GRE (mGRE) and IPsec tunnel can be established, define an Internet Key Exchange (IKE) policy by using the crypto isakmp policy command.

B. The Public IP's of the routers should be able to ping each other.

C. To enable 2547oDMPVN - Traffic Segmentation Within DMVPN configure multiprotocol label switching (MPLS) by using the mpls ip command

D. It is mandatory to use wildcard preshared keys to build the DMVPN tunnel

E. DMVPN can work on all OEM devices that support IKE.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 327

Topic #: 1

[All 300-410 Questions]
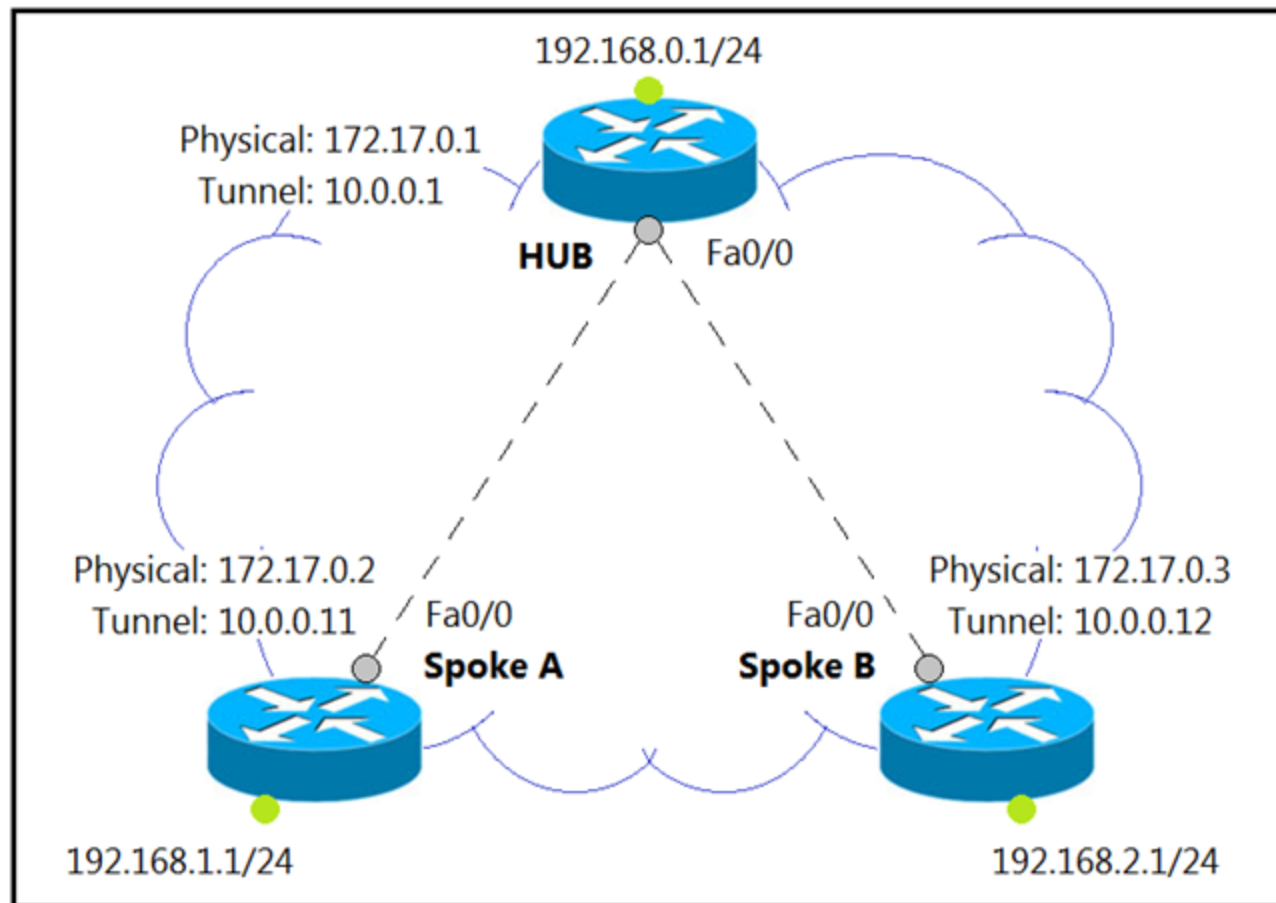
Refer to the exhibit. An administrator is setting up above shown routers to enable MVPN with mGRE mode. What would be the recommended interface configuration that must be done by the engineer to make it to work?

A. interface Tunnel0
   description mGRE - DMVPN Tunnel
   ip address 10.0.0.1 255.255.255.0
   ip nhrp map multicast dynamic
   ip nhrp network-id 1
   tunnel source 10.0.0.1
   tunnel mode IPSec multipoint

B. interface Tunnel0
   description mGRE - DMVPN Tunnel
   ip address 10.0.0.1 255.255.255.0
   ip nhrp map multicast dynamic
   ip nhrp network-id 1
   tunnel source 10.0.0.1
   tunnel mode gre multipoint

C. interface Tunnel0
   description mGRE - DMVPN Tunnel
   ip address 10.0.0.1 255.255.255.0
   ip nhrp network-id 1
   tunnel source 172.17.0.1
   tunnel mode IPsec multipoint

D. interface Tunnel0
   description mGRE - DMVPN Tunnel
   ip address 10.0.0.1 255.255.255.0
   ip nhrp map multicast dynamic
   ip nhrp network-id 1
   tunnel source 10.0.0.1
   tunnel destination 172.17.0.2
   tunnel mode IPsec multipoint

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 328

Topic #: 1

[All 300-410 Questions]

Select three benefits of setting up a MPLS Network from the below options. (Choose three.)

A. Connection less Service

B. Security as good as connection-oriented VPNs

C. Provides IPS level intelligence to filter packets.

D. Integrated QoS support

E. All variations of Static routes are supported

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 329

Topic #: 1

[All 300-410 Questions]

```
access-list 100 deny tcp any any eq 465
access-list 100 deny tcp any eq 465 any
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any eq 80 any
access-list 100 permit udp any any eq 443
access-list 100 permit udp any eq 443 any
```

Refer to the Exhibit. The access-lists are configured on the network device. There is a server behind the network device. User are trying to access the server securely however they are not able to access it. What changes would you recommend to the above configuration?

A. Permit tcp port 465

B. Permit tcp port 3389

C. Permit tcp port 443

D. Permit tcp any any

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 330

Topic #: 1

[All 300-410 Questions]

Which of the following is true regarding IPsec Pre-fragmentation (Look-Ahead Fragmentation)? (Choose two.)

A. Operates in tunnel mode only

B. Operates in transport mode only

C. Is used to help in the overall IPsec throughput since the end host is able to avoid packet reassembly after packet decryption.

D. Is not dependent on the MTU of the physical interface used for IPsec.

E. Does not support Path MTU Discovery

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 331

Topic #: 1

[All 300-410 Questions]

Which of the following correctly describes the concept of split horizon with IP routing? (Choose two.)

A. Split horizon is a valid routing loop prevention mechanism

B. Split horizon is used to filter customer routes in an ISP network.

C. When enabled, split horizons informs the router to not advertise routes back out the same interface from where that route was originally received.

D. Split horizons cannot be disabled on WAN interfaces

E. Split horizon is not applicable to EIGRP networks

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 332

Topic #: 1

[All 300-410 Questions]

DRAG DROP

-

Arrange the below as per the recommended steps:

Copy the IOS image in the file system	STEP 1
Save the configuration & Reload the router.	STEP 2
Download the Cisco IOS image to the TFTP Server	STEP 3
Verify the configuration register & boot variable	STEP 4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 333

Topic #: 1

[All 300-410 Questions]

A network administrator is reloading a router and during the bootup, he is getting the error message "%Error opening tftp://255.255.255.255/network-confg (Socket error)". What command need to be applied on Cisco Router to fix this issue.

A. No service config

B. Write erase reload

C. Reload noconfirm

D. Copy run start

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 334

Topic #: 1

[All 300-410 Questions]

DRAG DROP

-

The steps for configuring BGP on Cisco IOS Router:

Identify the BGP Neighbor's IP address and Autonomous System Number. Identify the BGP neighbor's IP address and autonomous system number with the BGP router configuration command neighbor ip-address remote-as as-number.	STEP 1
Activate the address-family for the BGP neighbor with the BGP address-family configuration command neighbor ip-address activate.	STEP 2
Create the BGP Routing Process. Initialize the BGP process with the global command router bgp as-number.	STEP 3
Initialize the address-family with the BGP router configuration command address-family afi safi	STEP 4

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 335

Topic #: 1

[All 300-410 Questions]

What is the term used when it causes the packets to lose their MPLS labels including the VPN in-formation that lies in the inner MPLS Label i.e. if a packet goes through an untagged interface, the VPN information is lost and VPN sites lose connectivity?

A. Pseudowire

B. Black Hole

C. Traffic Engineering

D. Active Network Abstraction

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 336

Topic #: 1

[All 300-410 Questions]

An administrator wants to implement security on his company's router. Please select three options that you will use on your router to secure it. (Choose three.)

    A. Control Access to the router

    B. Restrict all traffic through the router

    C. Restrict SNMP

    D. Enable all unused services

    E. Encrypt all passwords

    F. Disable logging

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 337

Topic #: 1

[All 300-410 Questions]

An administrator is setting up a DMVPN tunnel between their offices and he is getting below output when he is running the command "show crypto isakmp sa":

```
IPv4 Crypto ISAKMP SA
Dst                     src                     state          conn-id          slot          status
172.17.0.1              172.16.1.1              MM_NO_STATE       0                0            ACTIVE
172.17.0.1              172.16.1.1              MM_NO_STATE       0                0            ACTIVE (deleted)
172.17.0.5              172.16.1.1              MM_NO_STATE       0                0            ACTIVE
172.17.0.5              172.16.1.1              MM_NO_STATE       0                0            ACTIVE (deleted)
```

What command will you run to identify the issue?

A. Debug ip icmp

B. Debug crypto isakmp

C. Debug crypto ipsec sa

D. Debug ssh

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 338

Topic #: 1

[All 300-410 Questions]

A company is looking to implement VPN between their Head Quarter and over 100+ Branch Offices. They are looking for a solution that:

1. Reduces deployment complexity

2. Simplifies branch communications

3. Offers branch to branch connectivity.

4. Is cost effective

5. Offers strong encryption

Select the best option from the below options that you would recommend to implement.

    A. MPLS

    B. IPSEC

    C. DMVPN

    D. GRE

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 339

Topic #: 1

[All 300-410 Questions]

You have a DNA center deployed in your environment. Which feature of the DNA Center will you use for system-guided as well as self-guided troubleshooting.

A. Assurance

B. Automation

C. Zero Trust

D. Discovery

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 340

Topic #: 1

[All 300-410 Questions]

DRAG DROP

-

You are logged in to the DNA Center Client Health Dashboard. Under the client health, you see some color-coded fields that reflects the health status of the client devices. Drag the health scores on the left to their respective colors in the right.

Health Score is 0	Red
Health Score is 4 to 7	Orange
Health Score is 1 to 3	Green
Health Score is 8 to 10	Gray

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 341

Topic #: 1

[All 300-410 Questions]

Out of the below options regarding DMVPN & FLEXVPN, select the correct one.

A. FlexVPN uses a new key management protocol – IKEv2, while most traditional DMVPN networks use IKEv1

B. FlexVPN uses a new key management protocol – IKEv1, while most traditional DMVPN networks use IKEv2

C. With FlexVPN there's multiple standard way of NHRP and routing protocols operations as opposed to 1 phase of DMVPN

D. Flex VPN & DMVPN both are supported only on Firewalls.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 342

Topic #: 1

[All 300-410 Questions]


```
ISP(config)# ip vrf EA
ISP(config-vrf)# ip vrf EB

ISP(config-if)# router ospf 100 vrf EA
ISP(config-router)# net 172.16.100.0 0.0.0.255 area 0
ISP(config-router)# net 172.16.200.0 0.0.0.255 area 0
ISP(config-router)# exit

ISP(config-if)# router ospf 200 vrf EB
ISP(config-router)# net 172.16.100.0 0.0.0.255 area 0
ISP(config-router)# net 172.16.200.0 0.0.0.255 area 0
ISP(config-router)# end
```
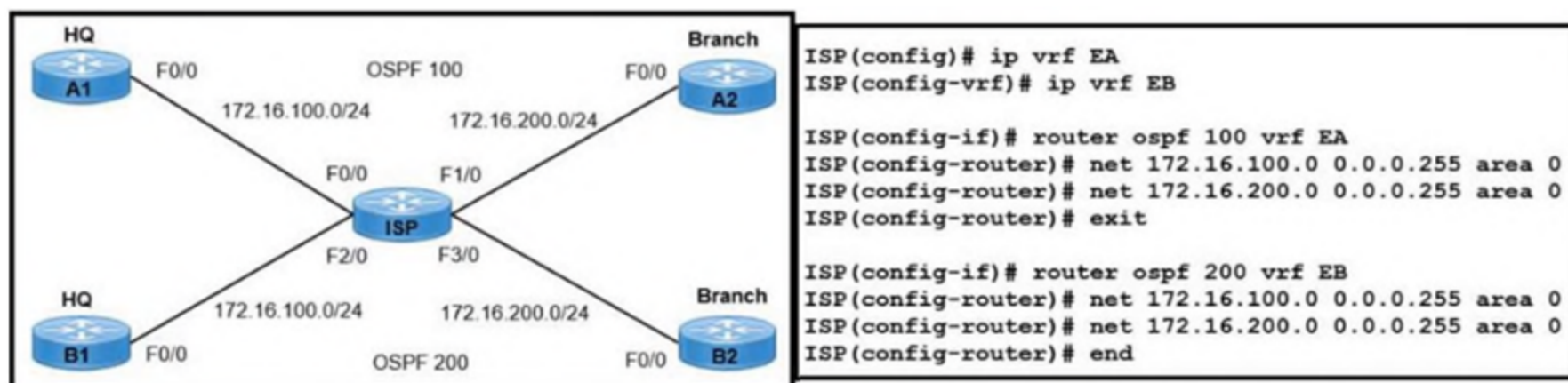
Refer to the exhibit. A network engineer is provisioning end-to-end traffic service for two different enterprise networks with these requirements:

• The OSPF process must differ between customers on HQ and Branch office routers, and adjacencies should come up instantly.

• The enterprise networks are connected with overtapping networks between HQ and a Branch office.

Which configuration meets the requirements for a customer site?

A. ISP(config-if)#int f1/0 -
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA2_Branch
ISP(config-if)#ip add 172.16.200.2 255.255.255.0

ISP(config-if)#no shut -

B. ISP(config-vrf)#int f0/0 -
ISP(config-if)#ip vrf forwarding EB
ISP(config-if)#description TO->EB1_Branch
ISP(config-if)#ip add 172.16.100.2 255.255.255.0

ISP(config-if)#no shut -

C. ISP(config)#int f2/0 -
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA1_HQ
ISP(config-if)#ip address 172.16.100.2 255.255.255.0

ISP(config-if)#no shut -

D. ISP(config-if)#int f3/0 -
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA2_Branch
ISP(config-if)#ip address 172.16.200.2 255.255.255.0
ISP(config-if)#no shut

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 343

Topic #: 1

[All 300-410 Questions]

```
R1#show policy-map control-plane
 Control Plane
 Class-map: NMS (match-all)
  500461 packets, 24038351 bytes
  5 minute offered rate 1390000 bps, drop rate 0 bps
  police:
   cir 50000 bps, bc 5000 bytes
  conformed 50444 packets, 24031001 bytes; actions:
   transmit
  exceeded 990012 packets, 94030134 bytes; actions
   drop conformed 4000 bps, exceed 0 bps
R1#
```

Refer to the exhibit. A company is evaluating multiple network management system tools. Trending graphs generated by SNMP data are returned by the NMS and appear to have multiple gaps. While troubleshooting the issue, an engineer noticed the relevant output. Which action resolves the gaps in the graphs?

A. Remove the class map NMS from being part of control plane policing.

B. Configure the CIR rate to a lower value that accommodates all the NMS tools.

C. Remove the exceed-rate command in the class map.

D. Separate the NMS class map in multiple class maps based on the specific protocols with appropriate CoPP actions.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 344

Topic #: 1

[All 300-410 Questions]


```
R5# show ip ospf 1 | begin Area 36
Area 36
Number of interfaces in this area is 2
It is a NSSA area
Area has no authentication
SPF algorithm last executed 00:32:46.376 ago
SPF algorithm executed 13 times
Area ranges are
172.16.0.0/16 Passive Advertise
```

Refer to the exhibit. The network engineer configured the summarization of the RIP routes into the OSPF domain on R5 but still sees four different 172.16.0.0/24 networks on R4. Which action resolves the issue?

A. R5(config)#router ospf 99 -
R5(config-router)#network 172.16.0.0 0.255.255.255 area 56
R5(config-router)#area 56 range 172.16.0.0 255.255.255.0

B. R5(config)#router ospf 1 -

R5(config-router)#no area -
R5(config-router)#summary-address 172.16.0.0 255.255.252.0

C. R4(config)#router ospf 1 -

R4(config-router)#no area -
R4(config-router)#summary-address 172.16.0.0 255.255.252.0

D. R4(config)#router ospf 99 -
R4(config-router)#network 172.16.0.0 0.255.255.255 area 56
R4(config-router)#area 56 range 172.16.0.0 255.255.255.0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 345

Topic #: 1

[All 300-410 Questions]

What is the minimum time gap required by the local system before putting a BFD control packet on the wire?

A. Desired Min TX Interval

B. Detect Mult

C. Required Min RX Interval

D. Required Min Echo RX Interval

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 346

Topic #: 1

[All 300-410 Questions]

What must be configured by the network engineer to circumvent AS_PATH loop prevention mechanism in IP/VPN Hub and Spoke deployment scenarios?

A. Use allowas-in at the PE_Hub.

B. Use allowas-in and as-override at all PEs.

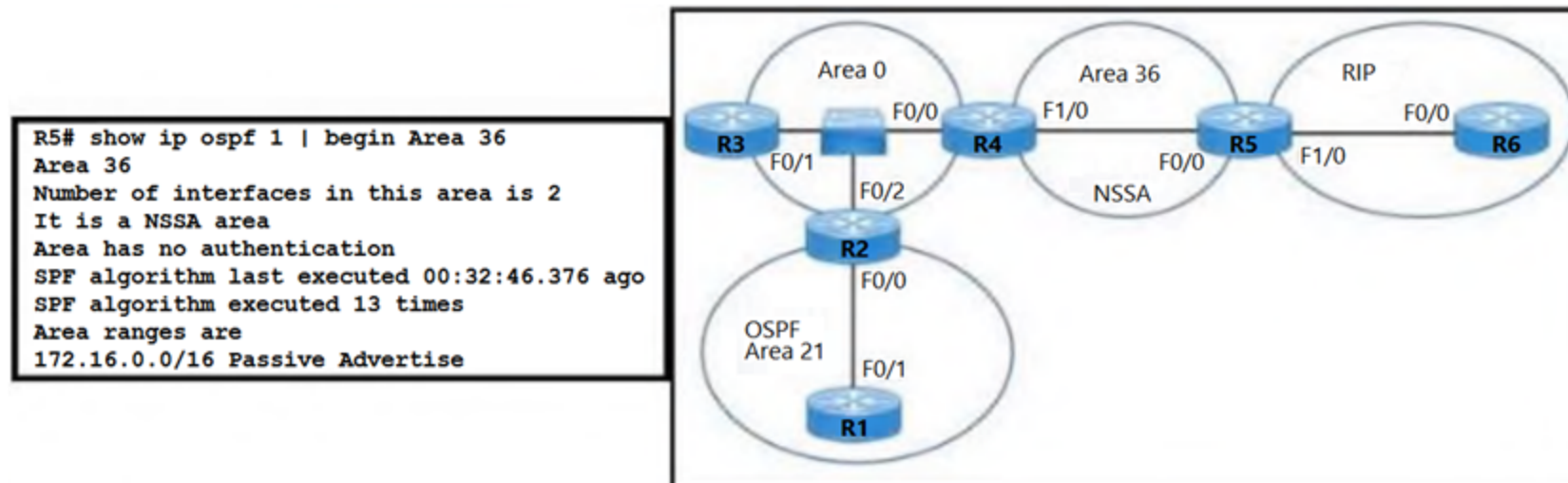C. Use allowas-in and as-override at the PE_Hub.

D. Use as-override at the PE_Hub.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 347

Topic #: 1

[All 300-410 Questions]

RtrA#show ip eigrp topology all-links
IP-EIGRP Topology Table for AS(1)/ID(10.1.6.1)
++--+snip+_+++
P 10.200.1.0/24, 1 successors, FD is 21026560
via 10.1.1.2 (21026560/20514560), Serial1/0
via 10.1.2.2 (46740736/20514560), Serial1/1
via 10.1.3.2 (46740736/46228736), Serial1/2

Refer to the exhibit. Which action makes 10.1.3.2 the feasible successor to reach 10.200.1.0/24 for location S42T431E64F51?

A. Increase path bandwidth higher than 10.1.1.2 and lower than 10.1.2.2 between RtrA and the destination.

B. Increase path bandwidth lower than 10.1.1.2 and lower than 10.1.2.2 between RtrA and the destination.

C. Increase path bandwidth higher than 10.1.2.2 and lower than 10.1.1.2 between RtrA and the destination.

D. Increase path bandwidth higher than 10.1.2.2 and higher than 10.1.1.2 between RtrA and the destination.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 348

Topic #: 1

[All 300-410 Questions]

```
BRANCH-RTR#

router eigrp 100
 network 10.4.31.0 0.0.0.7
 network 10.100.100.1 0.0.0.0
 distribute-list route-map FILTER-IN in FastEthernet0/0
 eigrp router-id 10.100.100.1
!
ip prefix-list 102 seq 10 permit 10.1.1.100/32
!
route-map FILTER-IN deny 10
 match ip address prefix-list 102
!
```

Refer to the exhibit A junior engineer updated a branch router configuration. Immediately after the change, the engineer receives calls from the help desk that branch personnel cannot reach any network destinations. Which configuration restores service and continues to block 10.1.1.100/32?

    A. route-map FILTER-IN deny 5

    B. ip prefix-list 102 seq 15 permit 0.0.0.0/32 le 32

    C. route-map FILTER-IN permit 20

    D. ip prefix-list 102 seq 5 permit 0.0.0.0/32 le 32

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 349

Topic #: 1

[All 300-410 Questions]

What does the MP-BGP OPEN message contain?

A. the version number and the AS number to which the router belongs

B. IP routing information and the AS number to which the router belongs

C. NLRI, path attributes, and IP addresses of the sending and receiving routers

D. MPLS labels and the IP address of the router that receives the message

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 350

Topic #: 1

[All 300-410 Questions]

```
R1(config)#ip prefix-list EIGRP seq 10 permit 10.0.0.0/8
R1(config)#ip prefix-list EIGRP seq 20 deny 0.0.0.0/0 le 32
R1(config)#router eigrp 10
R1(config-router)#distribute-list prefix EIGRP in Ethernet0/0

R1#show ip route eigrp | include 10.
D EX 10.0.0.0/8 [170/2665332] via 192.168.10.1, 00:00:10,
Ethernet0/0
```

Refer to the exhibit. An engineer applies a prefix-list filter that filters most of the network 10 prefixes instead of allowing them. Which action resolves the issue?

    A. Modify the ip prefix-list EIGRP seq 20 permit 10.0.0.0/8 ge 9 command.

    B. Modify the ip prefix-list EIGRP seq 10 permit 10.0.0.0/8 le 9 command.

    C. Modify the ip prefix-list EIGRP seq 20 permit 0.0.0.0/0 le 32 command.

    D. Modify the ip prefix-list EIGRP seq 10 permit 10.0.0.0/8 le 32 command.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 351

Topic #: 1

[All 300-410 Questions]

How is a preshared key "Test" for all the remote VPN routers configured in a DMVPN using GRE over IPsec set up?

A. authentication pre-share Test address 0.0.0.0 0.0.0.0

B. set pre-share Test address 0.0.0.0 0.0.0.0

C. crypto ipsec key Test address 0.0.0.0 0.0.0.0

D. crypto isakmp key Test address 0.0.0.0 0.0.0.0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 352

Topic #: 1

[All 300-410 Questions]

```
router# show ip route

....
D   192.168.32.0/19 [90/25789217] via 10.1.1.1
R   192.168.32.0/24 [120/4] via 10.1.1.2
O   192.168.32.0/26 [110/229840] via 10.1.1.3
```

Refer to the exhibit. An engineer is trying to get 192.168.32.100 forwarded through 10.1.1.1, but it was forwarded through 10.1.1.2. What action forwards the packets through 10.1.1.1?

A. Configure EIGRP to receive 192.168.32.0 route with lower metric.

B. Configure EIGRP to receive 192.168.32.0 route with lower admin distance.

C. Configure EIGRP to receive 192.168.32.0 route with longer prefix than /19.

D. Configure EIGRP to receive 192.168.32.0 route with equal or longer prefix than /24.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 353

Topic #: 1

[All 300-410 Questions]

What is a characteristic of IPv6 RA Guard?

A. It filters rogue RA broadcasts from connected hosts.

B. It is supported on the egress direction of the switch.

C. RA messages are allowed from the host port to the switch.

D. It is unable to protect tunneled traffic.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 354

Topic #: 1

[All 300-410 Questions]

A network administrator is troubleshooting a failed AAA login issue on a Cisco Catalyst c3560 switch. When the network administrator tries to log in with SSH using TACACS+ username and password credentials, the switch is no longer authenticating and is failing back to the local account. Which action resolves this issue?

    A. Configure ip tacacs-server source-interface GigabitEthernet 1/1.

    B. Configure ip tacacs source-ip 192.168.100.55.

    C. Configure ip tacacs source-interface GigabitEthernet 1/1.

    D. Configure ip tacacs-server source-ip 192.168.100.55.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 355

Topic #: 1

[All 300-410 Questions]

Which two solutions are used to overcome a flapping link that causes a frequent label binding exchange between MPLS routers? (Choose two.)

    A. Increase input queue on links to protect the session.

    B. Increase a hold-timer to protect the session.

    C. Increase a session delay to protect the session.

    D. Create link dampening on links to protect the session.

    E. Create targeted hellos to protect the session.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 356

Topic #: 1

[All 300-410 Questions]

```
R1(config)#ip access-list standard EIGRP-FILTER
R1(config-std-nacl)#deny 10.10.10.0 0.0.0.0
R1(config-std-nacl)#permit 0.0.0.0 0.0.0.0
R1(config)#router eigrp 10
R1(config-router)#distribute-list route-map EIGRP in
!
R1(config)#route-map EIGRP permit 10
R1(config-route-map)#match ip address EIGRP-FILTER
!
R1#show ip route eigrp | include 10.10.10.
D       10.10.10.128/25
```

Refer to the exhibit. An engineer must filter EIGRP updates that are received to block all 10.10.10.0/24 prefixes. The engineer tests the distribute list and finds one associated prefix. Which action resolves the issue?

A. There is a permit in the ACL that allows this prefix into EIGRP. The ACL should be modified to deny 10.10.10.0 255.255.255.0.

B. There is a permit in the ACL that allows this prefix into EIGRP. The ACL should be modified to deny 10.10.10.0 0.0.0.255.

C. There is a permit in the route map that allows this prefix. A deny 20 statement is required with a match condition to match a new ACL that denies all prefixes.

D. There is a permit in the route map that allows this prefix. A deny 20 statement is required with no match condition to block the prefix.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 357

Topic #: 1

[All 300-410 Questions]

A network engineer must configure a DMVPN network so that a spoke establishes a direct path to another spoke if the two must send traffic to each other. A spoke must send traffic directly to the hub if required. Which configuration meets this requirement?

A. At the hub router:

interface tunnel10

ip nhrp nhs dynamic multipoint

ip nhrp nhs shortcut

tunnel mode gre multicast

On the spokes router:

interface tunnel10

ip nhrp nhs multicast dynamic

ip nhrp nhs redirect

tunnel mode gre multicast

B. At the hub router:

interface tunnel10

ip nhrp map dynamic multipoint

ip nhrp redirect

tunnel mode gre multicast

On the spokes router:

interface tunnel10

ip nhrp map multicast dynamic

ip nhrp shortcut

tunnel mode gre multicast

C. At the hub router:

interface tunnel10

ip nhrp nhs multicast dynamic

ip nhrp nhs shortcut

tunnel mode gre multipoint

On the spokes router:

interface tunnel10

ip nhrp nhs multicast dynamic

ip nhrp nhs redirect

tunnel mode gre multipoint

D. At the hub router:

interface tunnel10

ip nhrp map multicast dynamic

ip nhrp redirect

tunnel mode gre multipoint

On the spokes router:

interface tunnel10

ip nhrp map multicast dynamic

ip nhrp shortcut

tunnel mode gre multipoint

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 358

Topic #: 1

[All 300-410 Questions]

The network administrator configured R1 to authenticate Telnet connections based on Cisco ISE using TACACS+. ISE has been configured with an IP address of 192.168.1.5 and with a network device pointing toward R1 (192.168.1.1) with a shared secret password of Cisco123.

The administrator has configured this on R1:

aaa new-model
!
tacacs server ISE1
address ipv4 192.168.1.5
key Cisco123
!
aaa group server tacacs+ TAC-SERV
server name ISE1
!
aaa authentication login telnet group TAC-SERV

The network administrator cannot authenticate to R1 based on ISE. Which configuration fixes the issue?

    A. line vty 0 4
login authentication TAC-SERV

    B. tacacs-server host 192.168.1.5 key Cisco123

    C. ip tacacs-server host 192.168.1.5 key Cisco123

    D. line vty 0 4
login authentication telnet

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 359

Topic #: 1

[All 300-410 Questions]

The network administrator must configure R1 to authenticate Telnet connections based on Cisco ISE using RADIUS. ISE has been configured with an IP address of 192.168.1.5 and with a network device pointing toward R1 (192.168.1.1) with a shared secret password of Cisco123.
The administrator has configured this on R1:

aaa new-model
!
radius server ISE1
address ipv4 192.168.1.5
key Cisco123
!
aaa group server tacacs+ RAD-SERV
server name ISE1
!
aaa authentication login default group RAD-SERV

The network administrator cannot authenticate to access R1 based on ISE. Which set of configurations fixes the issue?

    A. line vty 0 4
    login authentication RAD-SERV

    B. aaa group server tacacs+ ISE1
    server name RAD-SERV

    C. aaa group server radius RAD-SERV
    server name ISE1

    D. line vty 0 4
    login authentication default

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 360

Topic #: 1

[All 300-410 Questions]

Which IPv6 first-hop security feature helps to minimize denial of service attacks?

A. IPv6 Router Advertisement Guard

B. IPv6 Destination Guard

C. DHCPv6 Guard

D. IPv6 MAC address filtering

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 361

Topic #: 1

[All 300-410 Questions]
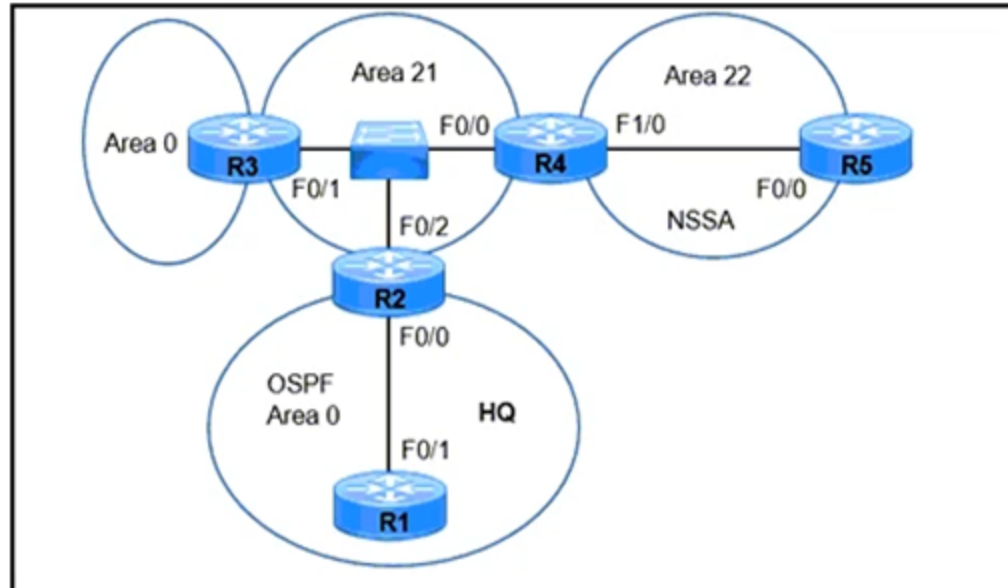
Refer to the exhibit. A network engineer is troubleshooting a failed link between R2 and R3. No traffic loss is reported from router R5 to HQ. Which command fixes the separated backbone?

A. R3(config-router)#area 21 virtual-link 192.168.125.5

B. R2(config-router)#area 21 virtual-link 192.168.125.5

C. R3(config-router)#no area 21 stub

D. R2(config-router)#no area 21 stub

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 362

Topic #: 1

[All 300-410 Questions]

A CoPP policy is applied for receiving SSH traffic from the WAN interface on a Cisco ISR4321 router. However, the SSH response from the router is abnormal and stuck during the high link utilization. The problem is identified as SSH traffic does not match in the ACL. Which action resolves the issue?

A. Apply CoPP on the control plane interface.

B. Apply CoPP on the WAN interface inbound direction.

C. Rate-limit SSH traffic to ensure dedicated bandwidth.

D. Increase the IP precedence value of SSH traffic to 6.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 363

Topic #: 1

[All 300-410 Questions]
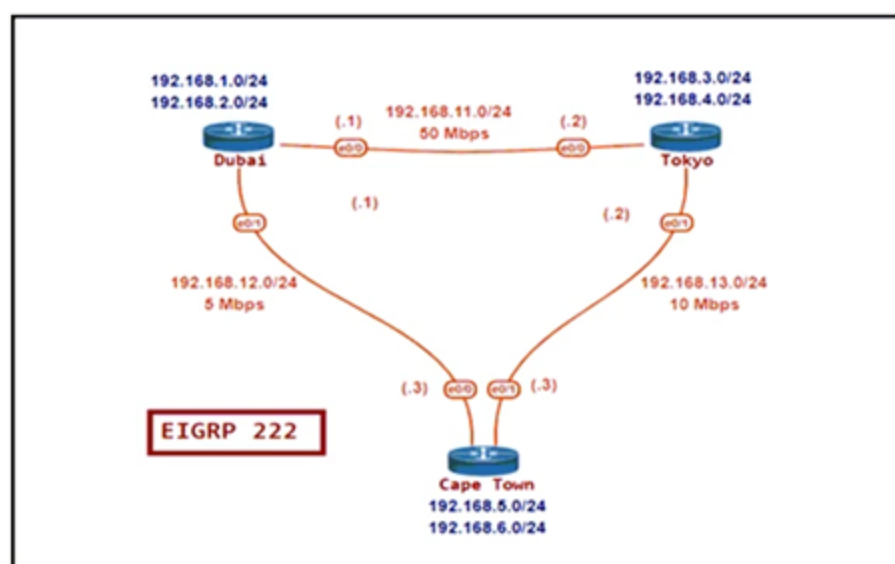

```
Cape Town - Show ip route
Gateway of last resort is not set

D    192.168.1.0/24 [90/409600] via 192.168.12.1, 00:17:40, Ethernet0/0
D    192.168.2.0/24 [90/409600] via 192.168.12.1, 00:09:11, Ethernet0/0
D    192.168.3.0/24 [90/409600] via 192.168.13.2, 00:17:23, Ethernet0/1
D    192.168.4.0/24 [90/409600] via 192.168.13.2, 00:17:23, Ethernet0/1
     192.168.5.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.5.0/24 is directly connected, Loopback0
L       192.168.5.1/32 is directly connected, Loopback0
     192.168.6.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.6.0/24 is directly connected, Loopback1
L       192.168.6.1/32 is directly connected, Loopback1
D    192.168.11.0/24 [90/307200] via 192.168.13.2, 00:17:40, Ethernet0/1
                     [90/307200] via 192.168.12.1, 00:17:40, Ethernet0/O
     192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.12.0/24 is directly connected, Ethernet0/0
L       192.168.12.3/32 is directly connected, Ethernet0/O
     192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.13.0/24 is directly connected, Ethernet0/1
L       192.168.13.3/32 is directly connected, Ethernet0/1
```

Refer to the exhibit. The network administrator must configure Cape Town to reach Dubai via Tokyo based on the speeds provided by the service provider. It was noticed that Cape Town is reaching Dubai directly and failed to meet the requirement. Which configuration fixes the issue?

A. CapeTown -

router eigrp 100
variance 2

B. CapeTown -

interface E 0/0
bandwidth 5000
interface E 0/1
bandwidth 10000

C. CapeTown -

interface E 0/0
bandwidth 5000
interface E 0/1
bandwidth 10000

Dubai -

interface E 0/0
bandwidth 50000
interface E 0/1
bandwidth 5000

Tokyo -

interface E 0/0
bandwidth 50000
interface E 0/1
bandwidth 10000

D. Dubai -

router eigrp 100
variance 2

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 364

Topic #: 1

[All 300-410 Questions]

DRAG DROP

-

Drag and drop the ICMPv6 neighbor discovery messages from the left onto the correct packet types on the right.

Neighbor Solicitation	ICMPv6 Type 134
Neighbor Advertisement	ICMPv6 Type 137
Router Advertisement	ICMPv6 Type 135
Redirect Message	ICMPv6 Type 133
Router Solicitation	ICMPv6 Type 136

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 365

Topic #: 1

[All 300-410 Questions]
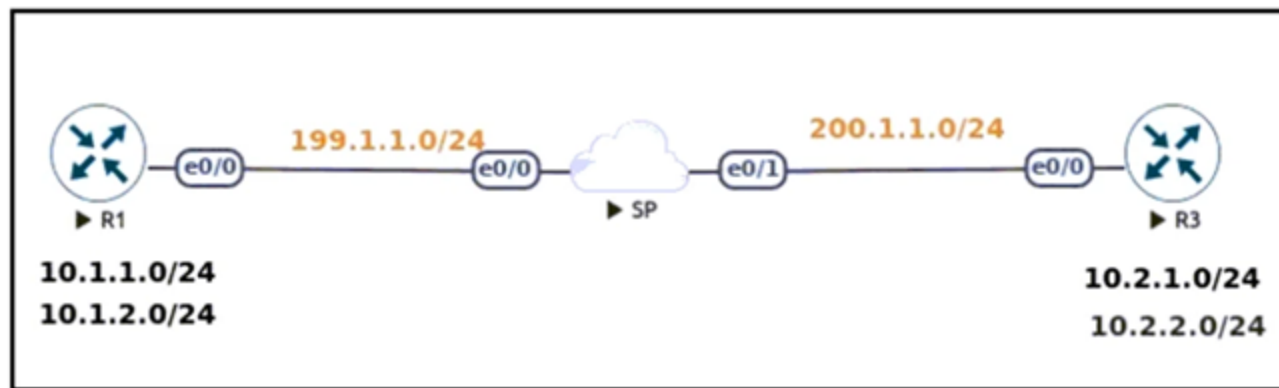
Refer to the exhibit. An engineer must configure a LAN-to-LAN IPsec VPN between R1 and the remote router. Which IPsec Phase 1 configuration must the engineer use for the local router?

A. crypto isakmp policy 5

authentication pre-share

encryption 3des

hash sha

group 2

!

crypto isakmp key cisco123 address 200.1.1.3

B. crypto isakmp policy 5

authentication pre-share

encryption 3des

hash md5

group 2

!

crypto isakmp key cisco123! address 199.1.1.1

C. crypto isakmp policy 5

authentication pre-share

encryption 3des

hash md5

group 2

!

crypto isakmp key cisco123 address 199.1.1.1

D. crypto isakmp policy 5

authentication pre-share

encryption 3des

hash md5

group 2

!

crypto isakmp key cisco123 address 200.1.1.3

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 366

Topic #: 1

[All 300-410 Questions]

R3

```
R3#show cef interface e0/1
Ethernet0/1 is up (if_number 4)
  Corresponding hwidb fast_if_number 4
  Corresponding hwidb firstsw->if_number 4
  Internet address is 209.165.200.226/27
  ICMP redirects are always sent
  Per packet load-sharing is disabled
  IP unicast RPF check is disabled
  IP policy routing is disabled
  BGP based policy accounting on input is disabled
  BGP based policy accounting on output is disabled
  Hardware idb is Ethernet0/1
  Fast switching type 1, interface type 64
  IP CEF switching enabled
  IP CEF switching turbo vector
  IP prefix lookup IPv4 mtrie 8-8-8-8 optimized
  Input fast flags 0x0, Output fast flags 0x0
  ifindex 4(4)
  Slot Slot unit 1 VC-1
  IP MTU 1500
```

Branch A Server   **E0/1**

ISP   **Branch A**

```
R4#sh cef interface e0/1
Ethernet0/1 is up (if_number 4)
  Corresponding hwidb fast_if_number 4
  Corresponding hwidb firstsw->if_number 4
  Internet address is 209.165.201.1/27
  ICMP redirects are always sent
  Per packet load-sharing is disabled
  IP unicast RPF check is enabled
  Input features: uRPF
  IP policy routing is disabled
  BGP based policy accounting on input is disabled
  BGP based policy accounting on output is disabled
  Hardware idb is Ethernet0/1
  Fast switching type 1, interface type 64
  IP CEF switching enabled
  IP CEF switching turbo vector
  IP prefix lookup IPv4 mtrie 8-8-8-8 optimized
  Input fast flags 0x4000, Output fast flags 0x0
  ifindex 4(4)
  Slot Slot unit 1 VC-1
  IP MTU 1500
```

E0/1

R4   **Branch B Server**

Branch B

Refer to the exhibit. A shoe retail company implemented the uRPF solution for an antispoofing attack. A network engineer received the call that the branch A server is under an IP spoofing attack. Which configuration must be implemented to resolve the attack?

A. R4 -

interface ethernet0/1

ip verify unicast source reachable-via any allow-default allow-self-ping

B. R4 -

interface ethernet0/1

ip unicast RPF check reachable-via any allow-default allow-self-ping

C. R3 -

interface ethernet0/1

ip verify unicast source reachable-via any allow-default allow-self-ping

D. R3 -

interface ethernet0/1

ip unicast RPF check reachable-via any allow-default allow-self-ping

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 367

Topic #: 1

[All 300-410 Questions]

```
R1#show ip route ospf

     10.0.0.0/24 is subnetted, 7 subnets

O E2    10.4.9.0 [110/200] via 10.4.17.6, 00:06:43,
FastEthernet0/0

               [110/200] via 10.4.15.5, 00:06:43,
FastEthernet0/1

O IA    10.4.27.0 [110/2] via 10.4.15.5, 00:06:44,
FastEthernet0/1

O E2    10.4.49.0 [110/200] via 10.4.17.6, 00:06:43,
FastEthernet0/0
```

Refer to the exhibit. An engineer configures two ASBRs, 10.4.17.6 and 10.4.15.5, in an OSPF network to redistribute routes from EIGRP. However, both ASBRs show the EIGRP routes as equal costs even though the next-hop router 10.4.17.6 is closer to R1. How should the network traffic to the EIGRP prefixes be sent via 10.4.17.6?

A. The administrative distance should be raised to 120 from the ASBR 10.4.17.6.

B. The redistributed prefixes should be advertised as Type 1.

C. The ASBR 10.4.17.6 should assign a tag to match and assign a lower metric on R1.

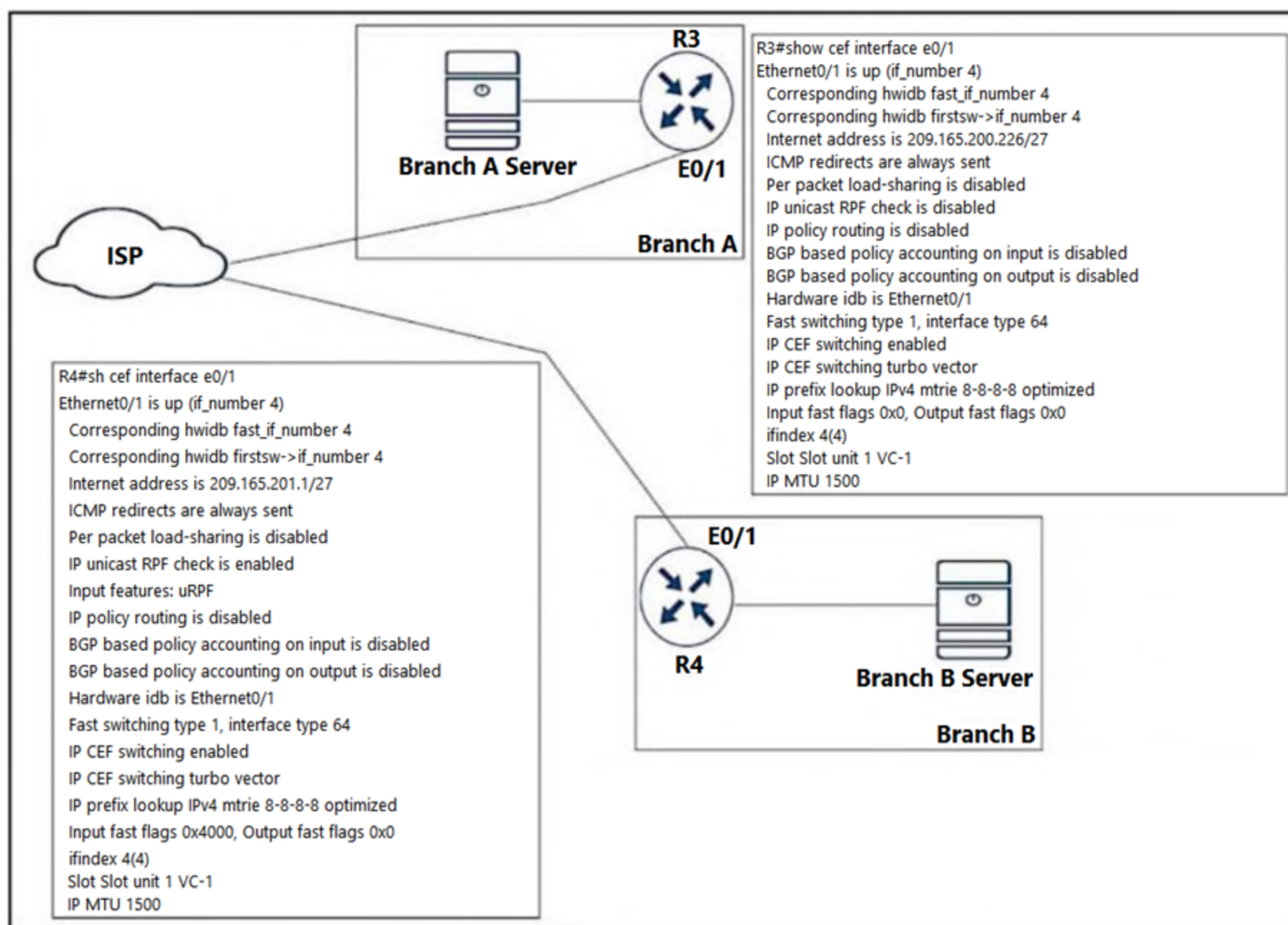D. The administrative distance should be raised to 120 from the ASBR 10.4.15.5.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 368

Topic #: 1

[All 300-410 Questions]

Which component of MPLS VPNs is used to extend the IP address so that an engineer is able to identify to which VPN it belongs?

A. RT

B. RD

C. LDP

D. VPNv4 address family

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 369

Topic #: 1

[All 300-410 Questions]

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/1,
changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/2,
changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/3,
changed state to up
%OSPF-5-ADJCHG: Process 1, Nbr 10.1.1.2 on Ethernet0/0 from
LOADING to FULL, Loading Done
%BGP-3-NOTIFICATION: received from neighbor 192.168.200.1
active 6/7 (Connection Collision Resolution) 0 bytes
%BGP-5-NBR_RESET: Neighbor 192.168.200.1 active reset (BGP
Notification received)
%BGP-5-ADJCHANGE: neighbor 192.168.200.1 active Down BGP
Notification received
%BGP_SESSION-5-ADJCHANGE: neighbor 192.168.200.1 IPv4 Unicast
topology base removed from session  BGP Notification received
```

Refer to the exhibit. An engineer noticed that the router log messages do not have any information about when the event occurred. Which action should the engineer take when enabling service time stamps to improve the logging functionality at a granular level?

A. Configure the debug uptime option.

B. Configure the msec option.

C. Configure the timezone option.

D. Configure the log uptime option.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 370

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer configured SNMP Communities on UserSW2 switch, but the SNMP server cannot upload modified configurations to the switch. Which configuration resolves this issue?

A. snmp-server community CiscoUs3r RW 11

B. snmp-server community Ciscowruser RW 11

C. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22

D. snmp-server group NETVIEW v2c priv read NETVIEW access 11

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 371

Topic #: 1

[All 300-410 Questions]

```
Switch(config)# ip vrf 70
Switch(config-vrf)# rd 70:1
Switch(config-vrf)# route-target export 70:1
Switch(config-vrf)# route-target import 70:1
Switch(config-vrf)# exit
Switch(config)# ip vrf 80
Switch(config-vrf)# rd 80:1
Switch(config-vrf)# route-target export 80:1
Switch(config-vrf)# route-target import 80:1
```

Refer to the exhibit. An engineer must extend VRF-Lite over a trunk to another switch for VLAN 70 (10.70.70.0/24) on port GigabitEtheret0/0 and VLAN 80 (10.80.80.0/24) on port GigabitEthernet0/1. Which configuration accomplishes this objective?

A. interface GigabitEthernet0/0
no switchport
ip vrf forwarding 70

ip address 10.70.70.1 255.255.255.0
!
interface GigabitEthernet0/1
no switchport
ip vrf forwarding 80
ip address 10.80.80.1 255.255.255.0

B. interface GigabitEthernet0/0
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 70
!
interface GigabitEthernet0/1
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 80

C. interface GigabitEthernet0/0
switchport mode access
switchport access vlan 70
ip vrf forwarding 70
!
interface GigabitEthernet0/1
switchport mode access
switchport access vlan 80
ip vrf forwarding 80

D. interface GigabitEthernet0/0
switchport mode access
switchport access vlan 70
!
interface GigabitEthernet0/1
switchport mode access
switchport access vlan 80
!

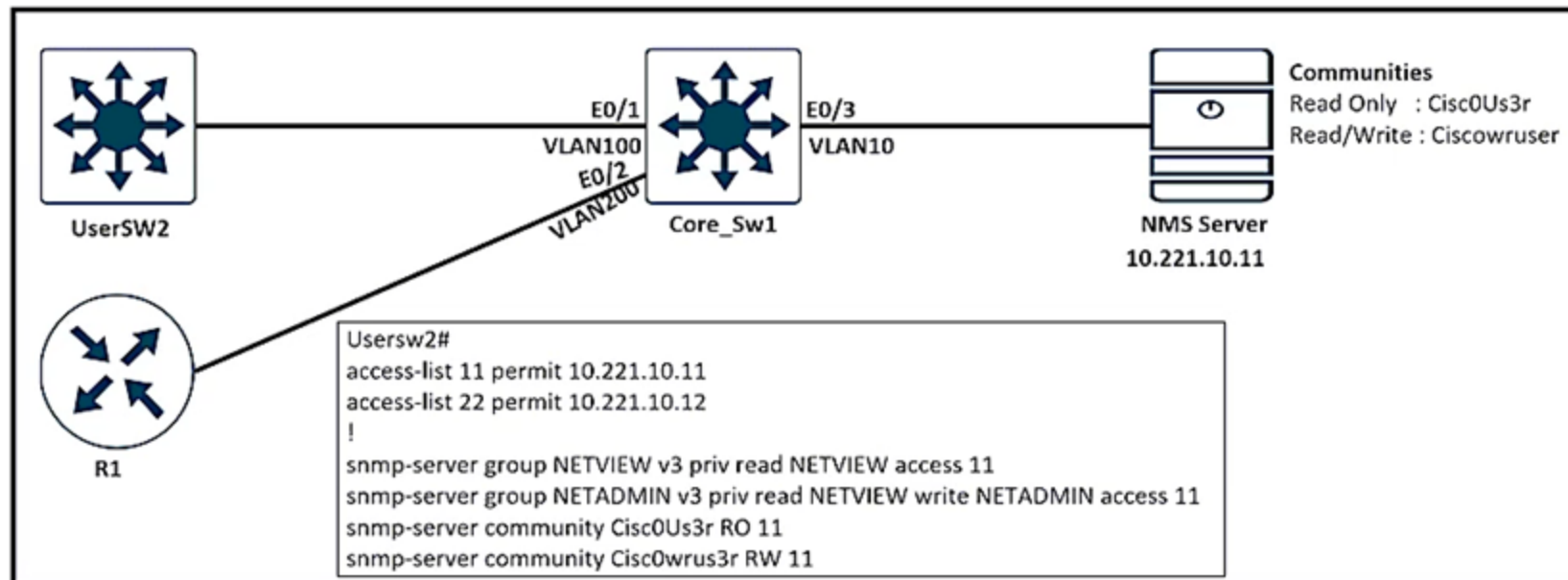**Show Suggested Answer**

Actual exam question from Cisco's 300-410

Question #: 372

Topic #: 1

[All 300-410 Questions]

```
router ospfv3 1
router-id 10.1.1.1
address-family ipv4 unicast
passive-interface Loopback0
exit-address-family
address-family ipv6 unicast
passive-interface Loopback0
exit-address-family
interface Loopback0
ip address 10.1.1.1 255.255.255.255
ipv6 address 2001:DB8::1/64
ospfv3 10 ipv4 area 10
ospfv3 10 ipv6 area 0
interface GigabitEthernet2
ip address 10.10.10.1 255.255.255.0
ipv6 enable
ospfv3 10 ipv4 area 10
ospfv3 10 ipv6 area 0
```

Refer to the exhibit. An administrator must configure the router with OSPF for IPv4 and IPv6 networks under a single process. The OSPF adjacencies are not established and did not meet the requirement. Which action resolves the issue?

A. Replace OSPF process 10 on the interfaces with OSPF process 1 for the IPv4 address, and remove process 10 from the global configuration.

B. Replace OSPF process 10 on the interfaces with OSPF process 1, and configure an additional router ID with IPv6 address.

C. Replace OSPF process 10 on the interfaces with OSPF process 1, and remove process 10 from the global configuration.

D. Replace OSPF process 10 on the interfaces with OSPF process 1 for the IPv6 address, and remove process 10 from the global configuration.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 373

Topic #: 1

[All 300-410 Questions]

What is the purpose of an OSPF sham-link?

A. to allow inter-area routing when OSPF is used as the PE-CE connection protocol in an MPLS VPN network

B. to allow intra-area routing when OSPF is used as the PE-CE connection protocol in an MPLS VPN network

C. to correct OSPF backdoor routing when OSPF is used as the PE-CE connection protocol in an MPLS VPN network

D. to correct OSPF backdoor routing when OSPF is used as the PE-PE connection protocol in an MPLS VPN network
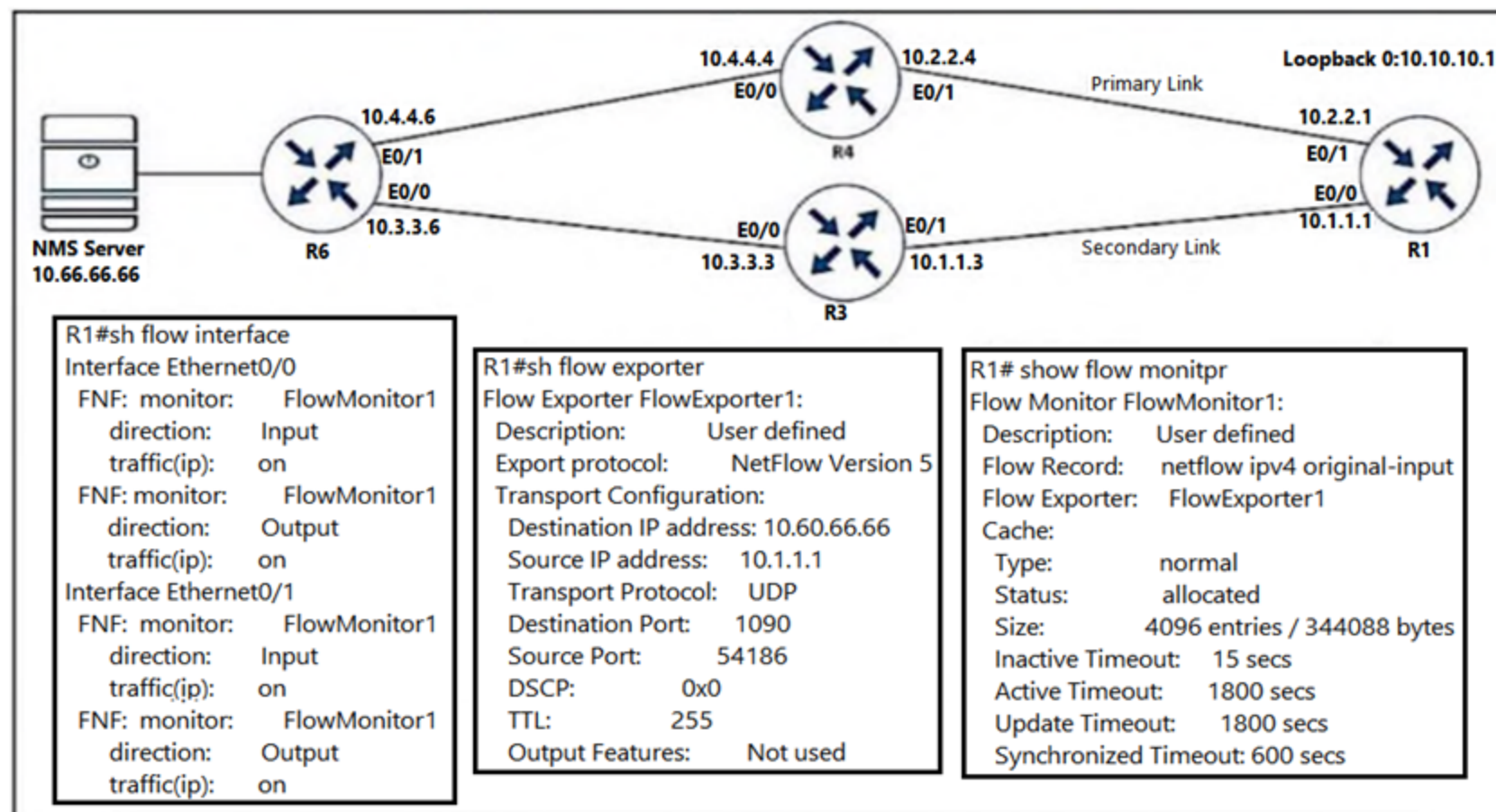
Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 374

Topic #: 1

[All 300-410 Questions]


```
R1#sh flow interface
Interface Ethernet0/0
  FNF:  monitor:        FlowMonitor1
      direction:       Input
      traffic(ip):     on
  FNF: monitor:        FlowMonitor1
      direction:       Output
      traffic(ip):     on
Interface Ethernet0/1
  FNF:  monitor:        FlowMonitor1
      direction:       Input
      traffic(ip):     on
  FNF:  monitor:        FlowMonitor1
      direction:       Output
      traffic(ip):     on
```

```
R1#sh flow exporter
Flow Exporter FlowExporter1:
  Description:          User defined
  Export protocol:       NetFlow Version 5
  Transport Configuration:
    Destination IP address: 10.60.66.66
    Source IP address:    10.1.1.1
    Transport Protocol:   UDP
    Destination Port:     1090
    Source Port:          54186
    DSCP:                 0x0
    TTL:                  255
    Output Features:      Not used
```

```
R1# show flow monitpr
Flow Monitor FlowMonitor1:
  Description:      User defined
  Flow Record:     netflow ipv4 original-input
  Flow Exporter:   FlowExporter1
  Cache:
    Type:              normal
    Status:            allocated
    Size:              4096 entries / 344088 bytes
    Inactive Timeout:   15 secs
    Active Timeout:    1800 secs
    Update Timeout:    1800 secs
    Synchronized Timeout: 600 secs
```

Refer to the exhibit. An engineer configured NetFlow on R1, but the flows do not reach the NMS server from R1. Which configuration resolves this issue?

A. R1(config)#flow monitor FlowMonitort1
R1(config-flow-monitor)#destination 10.66.66.66

B. R1(config)#interface Ethernet0/0
R1(config-if)#ip flow monitor Flowmonitor1 input
R1(config-if)#ip flow monitor Flowmonitor1 output

C. R1(config)#interface Ethernet0/1
R1(config-if)#ip flow monitor Flowmonitor1 input
R1(config-if)#ip flow monitor Flowmonitor1 output

D. R1(config)#flow exporter FlowExporter1
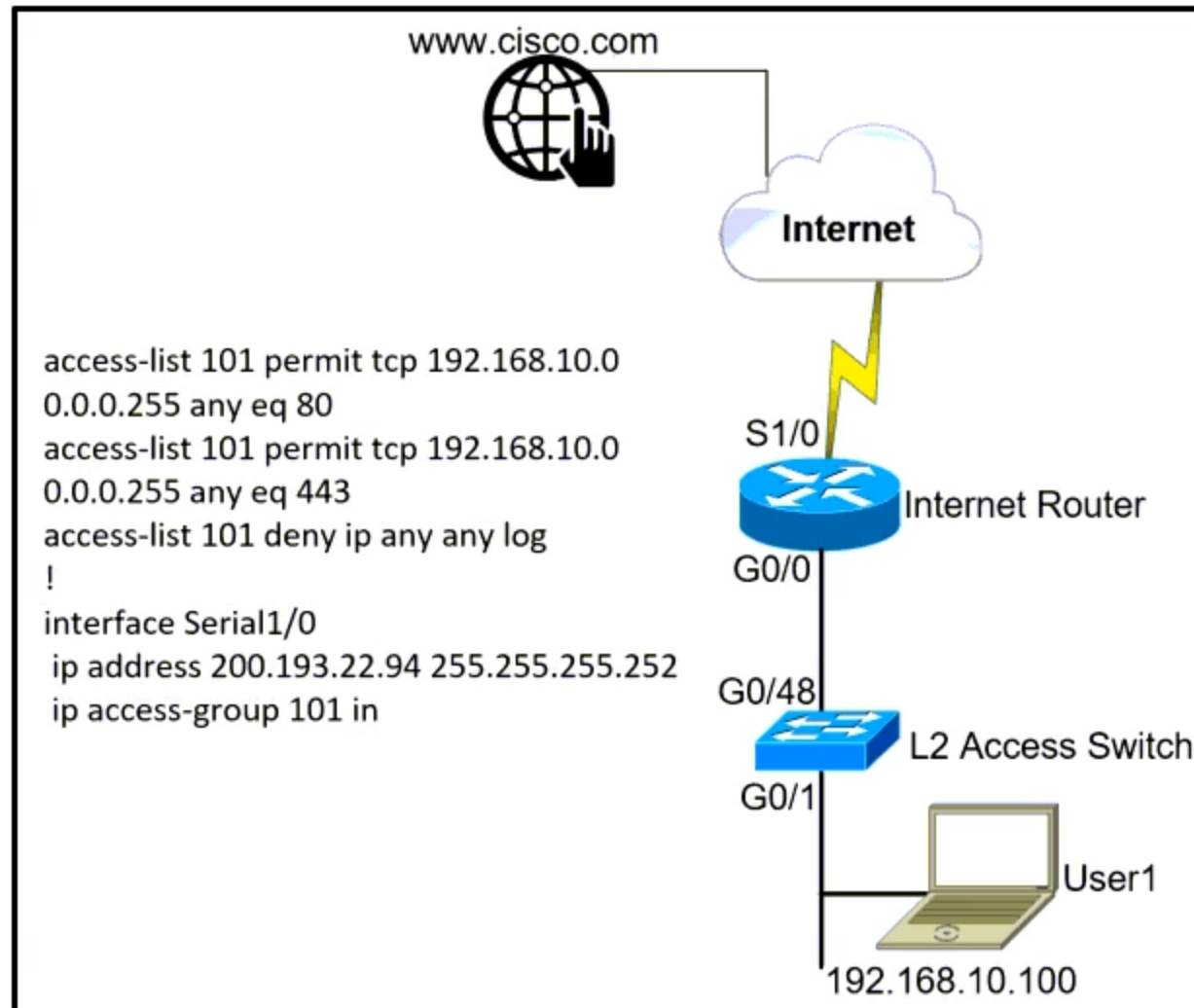R1(config-flow-exporter)#destination 10.66.66.66

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 375

Topic #: 1

[All 300-410 Questions]


```
access-list 101 permit tcp 192.168.10.0
0.0.0.255 any eq 80
access-list 101 permit tcp 192.168.10.0
0.0.0.255 any eq 443
access-list 101 deny ip any any log
!
interface Serial1/0
 ip address 200.193.22.94 255.255.255.252
 ip access-group 101 in
```

Refer to the exhibit. A network administrator is tasked to permit http and https traffic only toward the internet from the User1 laptop to adhere to company's security policy. The administrator can still ping to www.cisco.com. Which interface should the access list 101 be applied to resolve this issue?

A. Interface G0/0 in the outgoing direction.

B. Interface G0/0 in the incoming direction.

C. Interface S1/0 in the outgoing direction.

D. Interface G0/48 in the incoming direction.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 376

Topic #: 1

[All 300-410 Questions]

An engineer configured routing between multiple OSPF domains and introduced a routing loop that caused network instability. Which action resolves the problem?

A. Set a tag using the redistribute command toward a domain and deny inbound in the other domain by a matching tag.

B. Set a tag using the redistribute command toward a different domain and deny the matching tag when exiting from that domain.

C. Set a tag using the network command in a domain and use the route-map command to deny the matching tag when exiting toward a different domain.

D. Set a tag using the network command in a domain and use the route-map command to deny the matching tag when entering into a different domain.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 377

Topic #: 1

[All 300-410 Questions]

```
R4#
interface FastEthernet1/0
 ip address 10.1.1.14 255.255.255.252
 ip access-group VENDOR in
 ip authentication mode eigrp 100 md5
 ip authentication key-chain eigrp 100 EIGRPKEY
 speed 100
 full-duplex
!
interface loopback 100
 ip address 10.199.100.1 255.255.255.255
!
router eigrp 100
 network 10.1.1.8 0.0.0.3
 network 10.1.1.12 0.0.0.3
 no auto-summary
 eigrp router-id 100.4.4.4
 neighbor 10.1.1.13 FastEthernet1/0
 redistribute connected
!
router bgp 65001
 no synchronization
 bgp log-neighbor-changes
 network 100.4.4.4 mask 255.255.255.255
 neighbor 10.1.1.13 remote-as 65001
 no auto-summary
!
ip access-list extended VENDOR
 permit tcp 192.168.32.0 0.0.7.255 host 10.199.100.1 eq 22 time-range VENDOR_ACCESS
!
time-range VENDOR_ACCESS
 periodic weekend 22:00 to 23:00
```

Refer to the exhibit. A network engineer received a call from the vendor for a failed attempt to remotely log in to their managed router loopback interface from 192.168.40.15. Which action must the network engineer take to resolve the issue?

    A. The source IP summarization must be updated to include the vendor source IP address.

    B. The time-range configuration must be changed to use absolute instead of periodic.

    C. The EIGRP configuration must be updated to include a network statement for loopback 100.

    D. The IP access list VENDOR must be applied to interface loopback 100.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 378

Topic #: 1

[All 300-410 Questions]

DRAG DROP

-

Drag and drop the descriptions from the left onto the corresponding MPLS components on the right.

FEC	routers in the core of the provider network known as P routers
LSP	all traffic to be forwarded using the same path and same label
LER	routers that connect to the customer routers known as PE routers
LSR	used for exchanging label mapping information between MPLS enabled routers
LDP	path along which the traffic flows across an MPLS network

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 379

Topic #: 1

[All 300-410 Questions]

Network operations report issues with receiving too many external routes, which caused CPU spike on routers with smaller memories. Which action resolves the issue?

A. Configure the area range command when redistributing on ASBR.

B. Configure the summary-address command when redistributing on ABR.

C. Configure the area range command when redistributing on ABR.

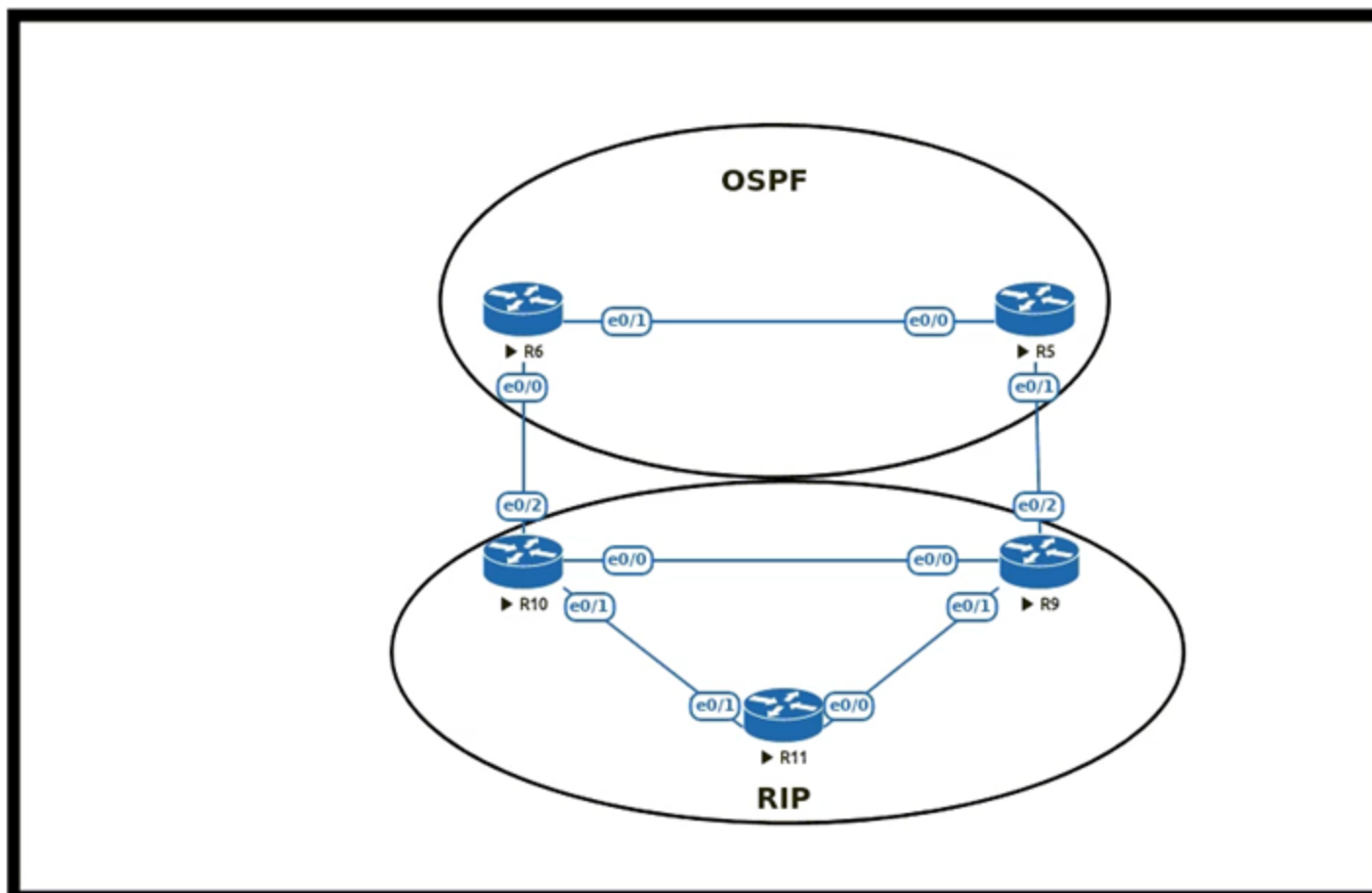D. Configure the summary-address command when redistributing on ASBR.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 380

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. An engineer must configure OSPF with R9 and R10 and configure redistribution between OSPF and RIP, causing a routing loop. Which configuration on R9 and R10 meets this objective?

A. router ospf 1
redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
match tag 20
route-map deny_tag20 permit 20
!
router ospf 1
distribute-list route-map deny_tag20 in

B. router ospf 1
redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
match tag 20
route-map deny_tag20 deny 20
!
router ospf 1
distribute-list route-map deny_tag20 in

C. router ospf 1
redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
match tag 20
route-map deny_tag20 permit 20
!
router rip 1
distribute-list route-map deny _tag20 in

D. router ospf 1
redistribute rip subnets tag 20
!
route-map deny_tag20 permit 10
match tag 20
route-map deny_tag20 permit 20
!
router ospf 1
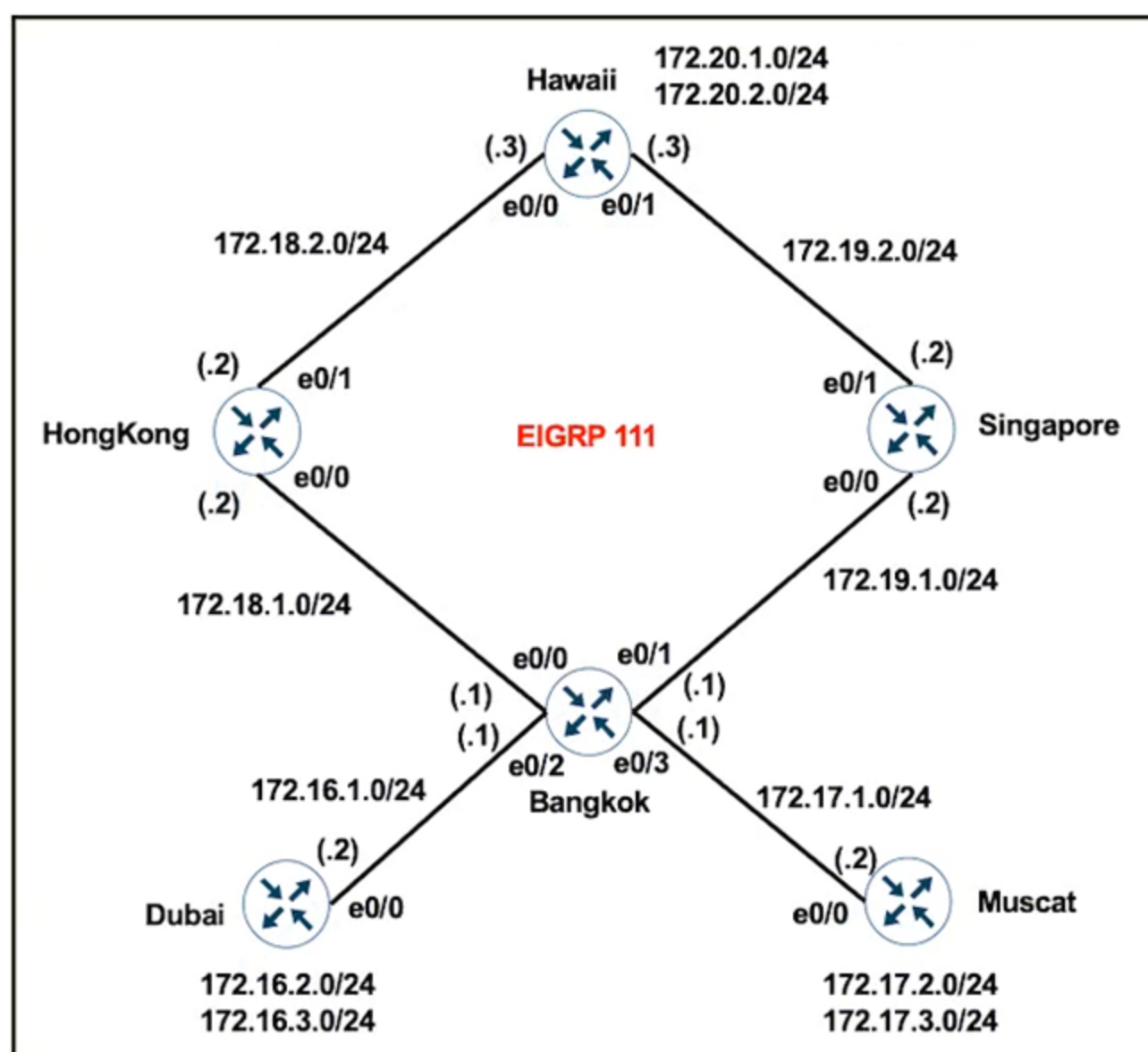distribute-list route-map deny_tag20 in

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 381

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. Bangkok is using ECMP to reach the 172.20.2.0/24 network. The network administrator must configure it in such a way that traffic from 172.16.2.0/24 network uses the Singapore router as the preferred route. Which set of configurations accomplishes this task?

A. Bangkok -

access-list 101 permit ip 172.16.2.0 0.0.0.255 172.20.2.0 0.0.0.255
!
route-map PBR1 permit 10
match ip address 101
set ip next-hop 172.19.1.2
!
interface Ethernet0/1
ip policy route-map PBR1

B. Dubai -

access-list 101 permit ip 172.16.2.0 0.0.0.255 172.20.2.0 0.0.0.255
!
route-map PBR1 permit 10
match ip address 101
set ip next-hop 172.19.1.2
set ip next-hop peer-address
!
interface Ethernet0/0
ip policy route-map PBR1

C. Bangkok -

access-list 101 permit ip 172.16.2.0 0.0.0.255 172.20.2.0 0.0.0.255
!
route-map PBR1 permit 10
match ip address 101
set ip next-hop 172.19.1.2
!
interface Ethernet0/2
ip policy route-map PBR1

D. Dubai -

access-list 101 permit ip 172.16.2.0 0.0.0.255 172.20.2.0 0.0.0.255
!
route-map PBR1 permit 10
match ip address 101
set ip next-hop 172.19.1.2
!
interface Ethernet0/0
ip policy route-map PBR1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 382

Topic #: 1

[All 300-410 Questions]

Which label operations are performed by a label edge router?

A. SWAP and POP

B. PUSH and POP
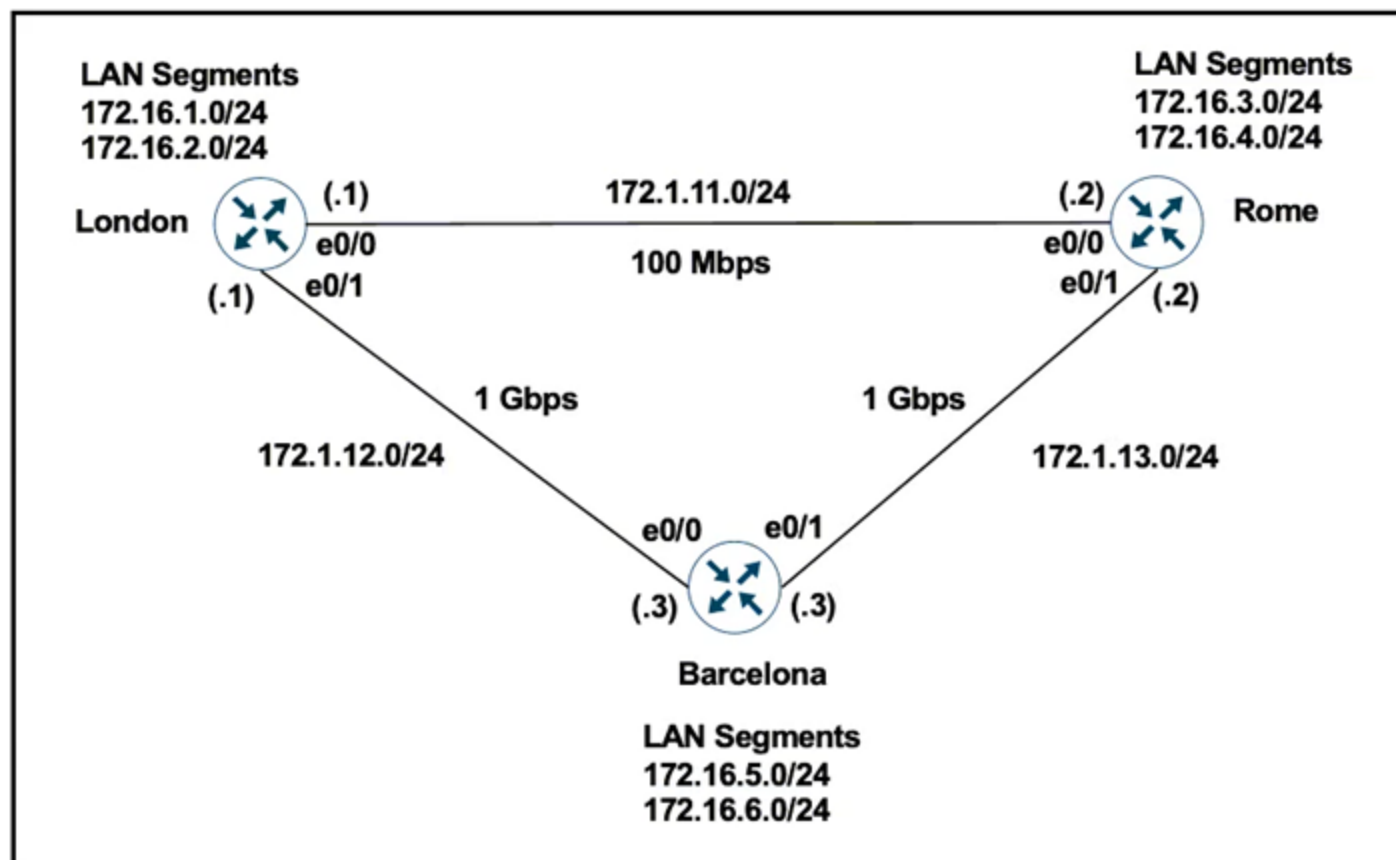
C. SWAP and PUSH

D. PUSH and PHP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 383

Topic #: 1

[All 300-410 Questions]


```
London – "show ip route" output

Gateway of last resort is not set

    172.1.0.0/16 is variably subnetted, 5 subnets, 2 masks
C    172.1.11.0/24 is directly connected, Ethernet0/0
L    172.1.11.1/32 is directly connected, Ethernet0/0
C    172.1.12.0/24 is directly connected, Ethernet0/1
L    172.1.12.1/32 is directly connected, Ethernet0/1
D    172.1.13.0/24 [90/76800] via 172.1.11.2, 00:00:50, Ethernet0/0
    172.16.0.0/16 is variably subnetted, 8 subnets, 2 masks
C    172.16.1.0/24 is directly connected, Loopback0
L    172.16.1.1/32 is directly connected, Ethernet0/0
C    172.16.2.0/24 is directly connected, Loopback1
L    172.16.2.1/32 is directly connected, Loopback1
R    172.16.3.0/24 [120/1] via 172.1.11.2, 00:00:08, Ethernet0/0
R    172.16.4.0/24 [120/1] via 172.1.11.2, 00:00:08, Ethernet0/0
D    172.16.5.0/24 [90/156160] via 172.1.12.3, 00:00:50, Ethernet0/1
D    172.16.6.0/24 [90/156160] via 172.1.12.3, 00:00:50, Ethernet0/1


  redistribute connected
!
router rip
  version 2
  network 172.1.0.0
  network 172.16.0.0
  no auto-summary
```

Refer to the exhibits. London must reach Rome using a faster path via EIGRP if all the links are up, but it failed to take this path. Which action resolves the issue?

A. Change the administrative distance of RIP to 150.

B. Increase the bandwidth of the link between London and Barcelona.

C. Use the network statement on London to inject the 172.16.X.0/24 networks into EIGRP.

D. Use the network statement on Rome to inject the 172.16.X.0/24 networks into EIGRP.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 384

Topic #: 1

[All 300-410 Questions]

The network administrator configured the router for Control Plane Policing so that inbound SSH traffic is policed to 500 kbps. This policy must apply to traffic coming in from 10.10.10.0/24 and 192.168.10.0/24 networks.

```
access-list 100 permit ip 10.10.10.0 0.0.0.255 any
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 23
!
class-map CLASS-SSH
match access-group 100
!
policy-map PM-COPP
class CLASS-SSH
police 500000 conform-action transmit
!
interface E0/0
service-policy input PM-COPP
!
interface E0/1
service-policy input PM-COPP
```

The Control Plane Policing is not applied to SSH traffic and SSH is open to use any bandwidth available. Which configuration resolves this issue?

A. no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22

B. interface E0/0
no service-policy input PM-COPP
!
interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP

C. no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
policy-map PM-COPP
class CLASS-SSH
no police 500000 conform-action transmit
police 500000 conform-action transmit exceed-action drop

D. no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
interface E0/0
no service-policy input PM-COPP
!
interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 385

Topic #: 1

[All 300-410 Questions]

```
interface GigabitEthernet2
 no ip address
 ip helper-address 192.168.255.3
 no shutdown
!
interface GigabitEthernet2.10
 encapsulation dot1Q 210
 ip address 192.168.210.1 255.255.255.0
 ip ospf 1 area 0
 no shutdown
```

Refer to the exhibit. With the partial configuration of a router-on-a-stick, clients in VLAN 10 on Gi2 cannot obtain IP configuration from the central DHCP server. The DHCP server is reachable by a successful ping from the router. Which action resolves the issue?

A. Configure the ip helper-address 192.168.255.3 command on the Gi2.10 subinterface.

B. Configure a valid IP address on the Gi2 interface so that DHCP requests can be forwarded.

C. Configure the ip dhcp pool 1 and network 192.168.210.0 255.255.255.0 commands.

D. Configure the ip dhcp excluded-address 192.168.255.3 command on the Gi2.10 subinterface.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 386

Topic #: 1

[All 300-410 Questions]

The IPv6 network is under attack by an unknown source that is neither in the binding table nor learned through neighbor discovery. Which feature helps prevent the attack?

A. IPv6 Destination Guard

B. IPv6 Prefix Guard

C. IPv6 Router Advertisement Guard

D. IPv6 Snooping

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 387

Topic #: 1

The network administrator configured CoPP so that all routing protocol traffic toward the router CPU is limited to 1 mbps. All traffic that exceeds this limit must be dropped. The router is running BGP and OSPF. Management traffic for Telnet and SSH must be limited to 500 kbps.

```
access-list 100 permit tcp any any eq 179
access-list 100 permit tcp any any range 22 23
access-list 100 permit ospf any any
!
class-map CM-ROUTING
match access-group 100
class-map CM-MGMT
match access-group 100
!
policy-map PM-COPP
class CM-ROUTING
police 1000000 conform-action transmit
class CM-MGMT
police 500000 conform-action transmit
!
control-plane
service-policy output PM-COPP
```

No traffic is filtering through CoPP, which is resulting in high CPU utilization. Which configuration resolves the issue?

A. control-plane
no service-policy output PM-COPP
service-policy input PM-COPP

B. no access-list 100
access-list 100 permit tcp any any eq 179
access-list 100 permit ospf any any
access-list 101 permit tcp any any range 22 23
!
!
class-map CM-MGMT
no match access-group 100
match access-group 101

C. no access-list 100
access-list 100 permit tcp any any eq 179
access-list 100 permit ospf any any
access-list 101 permit tcp any any range 22 23
!
!
class-map CM-MGMT
no match access-group 100
match access-group 101
!
control-plane
no service-policy output PM-COPP
service-policy input PM-COPP

D. No access-list 100 -
access-list 100 permit tcp any any eq 179
access-list 100 permit tcp any any range eq 22
access-list 100 permit tcp any any range eq 23
access-list 100 permit ospf any any

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 388

Topic #: 1

[All 300-410 Questions]

Which failure detection mechanism is used for BFD?

A. consistent rate

B. Layer 2 protocol failure

C. variable rate

D. routing protocol failure

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 389

Topic #: 1

[All 300-410 Questions]

```
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
       i - IS-IS, su - IS-IS summary, 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, H - NHRP, I - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR

Gateway of last resort is 10.255.0.1 to network 0.0.0.0

S*    0.0.0.0/0 [254/0] via 10.255.0.1
      10.0.0.0/8 is variably subnetted, 6 subnets, 4 masks
B        10.0.0.0/8 [20/0] via 192.168.20.2, 23:07:56
D        10.0.0.0/16 [90/2816] via 192.168.90.2, 22:59:54, GigabitEthernet4
O        10.0.0.0/24 [110/2] via 192.168.110.2, 22:45:53, GigabitEthernet3
C        10.255.0.0/16 is directly connected, GigabitEthernet1
S        10.255.0.2/32 [254/0] via 10.255.0.1, GigabitEthernet1
L        10.255.4.85/32 is directly connected, GigabitEthernet1
      192.168.20.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.20.0/24 is directly connected, GigabitEthernet2
L        192.168.20.1/32 is directly connected, GigabitEthernet2
      192.168.90.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.90.0/30 is directly connected, GigabitEthernet4
L        192.168.90.1/32 is directly connected, GigabitEthernet4
      192.168.110.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.110.0/30 is directly connected, GigabitEthernet3
L        192.168.110.1/32 is directly connected, GigabitEthernet3
```

Refer to the exhibit. The network administrator configured BGP as the backup route for 10.0.0.0/8 and it should work only when EIGRP 10.0.0.0/8 failed to install for site S4248T5E130F6. Which configuration resolves the issue?

A. configure terminal

!

router eigrp 1

distance eigrp 90 170

B. configure terminal

!

router eigrp 1

redistribute bgp metric 10000 1 255 1 1500

C. configure terminal

!

ip route 10.0.0.0 255.0.0.0 192.168.90.2

D. configure terminal

!

router eigrp 1

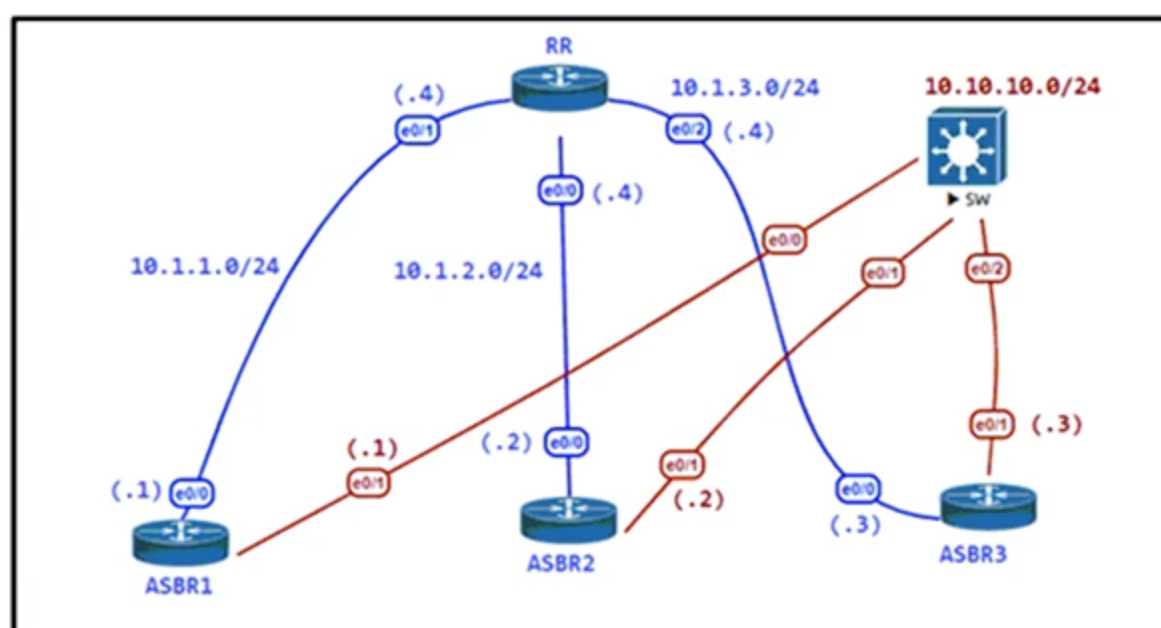distance eigrp 10 170

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 390

Topic #: 1

[All 300-410 Questions]


```
RR

router bgp 100
 neighbor 10.1.1.1 remote-as 100
 neighbor 10.1.2.2 remote-as 100
 neighbor 10.1.3.3 remote-as 100


ASBR2

router bgp 100
 neighbor 10.1.1.4 remote-as 100


ASBR3

router bgp 100
 neighbor 10.1.2.4 remote-as 100


ASBR4

router bgp 100
 neighbor 10.1.3.4 remote-as 100
```

Refer to the exhibit. The administrator configured the network devices for end-to-end reachability, but the ASBRs are not propagating routes to each other. Which set of configurations resolves this issue?

A. router bgp 100
neighbor 10.1.1.1 next-hop-self
neighbor 10.1.2.2 next-hop-self
neighbor 10.1.3.3 next-hop-self

B. router bgp 100
neighbor 10.1.1.1 update-source Loopback0
neighbor 10.1.2.2 update-source Loopback0
neighbor 10.1.3.3 update-source Loopback0

C. router bgp 100
neighbor 10.1.1.1 route-reflector-client
neighbor 10.1.2.2 route-reflector-client
neighbor 10.1.3.3 route-reflector-client

D. router bgp 100
neighbor 10.1.1.1 ebgp-multihop
neighbor 10.1.2.2 ebgp-multihop
neighbor 10.1.3.3 ebgp-muttihop

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 391

Topic #: 1

Refer to the exhibit. The Customer Edge router (AS 65500) wants to use AS 100 as the preferred ISP for all external routes.

Customer Edge -
route-map SETLP
set local-preference 111
!
router bgp 65500
neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETLP out
neighbor 192.168.112.2 remote-as 200

This configuration failed to send routes to AS 100 as the preferred path. Which set of configurations resolves the issue?

A. route-map SETLP
set local-preference 111
!
router bgp 65500
neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETLP in

B. route-map SETPP
set as-path prepend 100 100
!
router bgp 65500
neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETPP in

C. route-map SETPP
set as-path prepend 111 111
!
router bgp 65500
neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETPP out

D. route-map SETLP
set local-preference 111
!
router bgp 65500
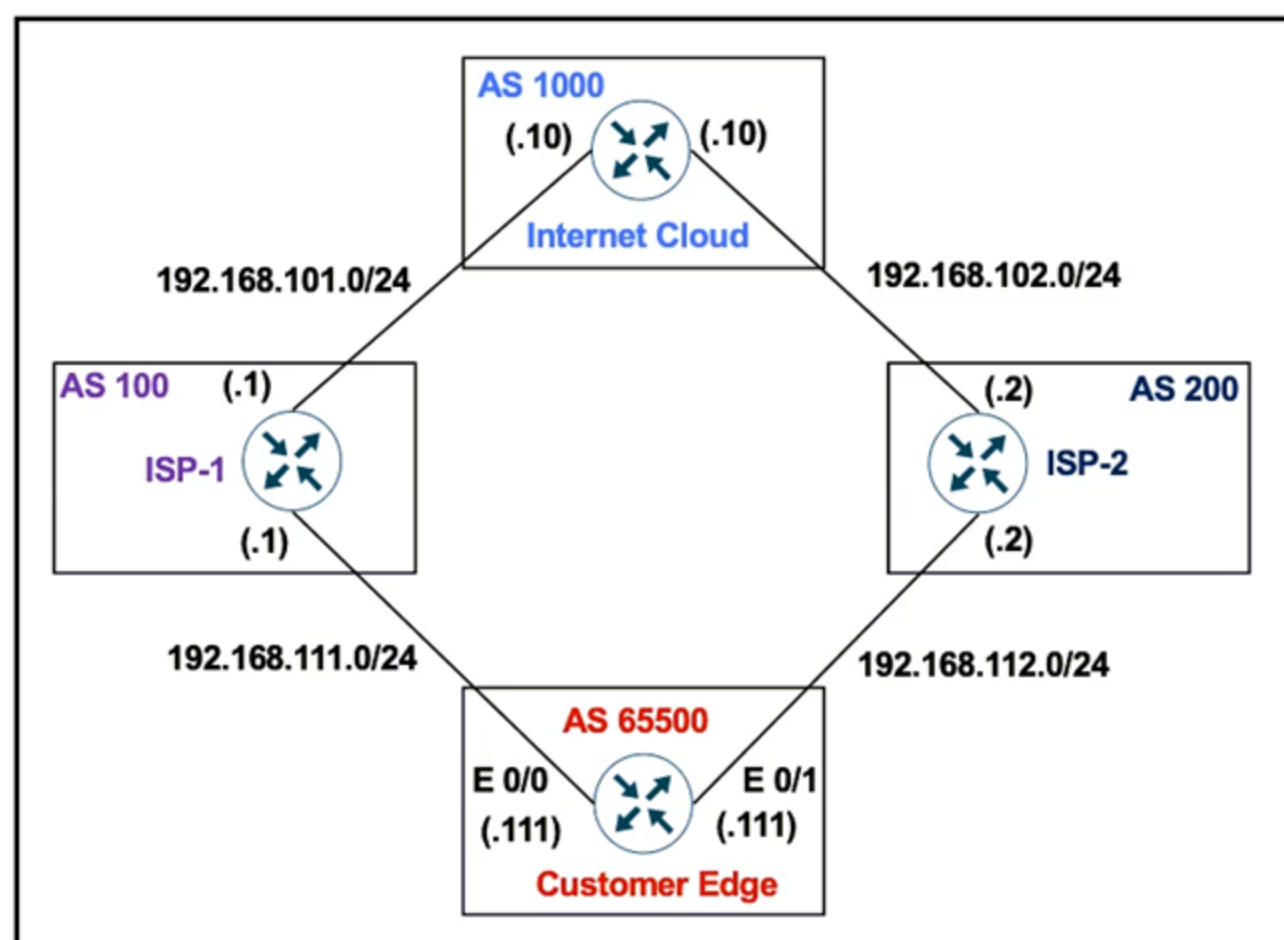neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETLP out

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 392

Topic #: 1

[All 300-410 Questions]

```
ip sla 1
 icmp-echo 8.8.8.8
 threshold 1000
 timeout 2000
 frequency 5
ip sla schedule 1 life forever start-time now
!
track 1 ip sla 1
!
ip route 0.0.0.0 0.0.0.0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 198.51.100.1 2 name ISP2
```

Refer to the exhibit. The administrator noticed that the connection was flapping between the two ISPs instead of switching to ISP2 when the ISP1 failed. Which action resolves the issue?

A. Include a valid source-interface keyword in the icmp-echo statement.

B. Reference the track object 1 on the default route through ISP2 instead of ISP1.

C. Modify the static routes to refer both to the next hop and the outgoing interface.

D. Modify the threshold to match the administrative distance of the ISP2 route.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 393

Topic #: 1

[All 300-410 Questions]

```
R1# configure terminal
R1(config)# hostname CPE1
CPE1(config)# ip domain-name example.com
CPE1(config)# crypto key generate rsa
The name for the keys will be: CPE1.example.com
Choose the size of the key modulus in the range of 360 to 4096
for your
  General Purpose Keys. Choosing a key modulus greater than 512
may take
  a few minutes.

How many bits in the modulus [512]: 2048
% Generating 2048 bit RSA keys, keys will be non-exportable...
[OK] (elapsed time was 2 seconds)

CPE1(config)# service password-encryption
CPE1(config)# username csadmin secret Secur3p4s$w0rd
CPE1(config)# line vty 0 4
CPE1(config-line)# transport input telnet ssh
CPE1(config-line)# login local
CPE1(config-line)# end
CPE1# copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
CPE1# ssh 10.0.0.1
% No user specified nor available for SSH client
```

Refer to the exhibit. An administrator must harden a router, but the administrator failed to test the SSH access successfully to the router. Which action resolves the issue?

A. SSH must be allowed with the transport output ssh command.

B. Configure enable secret to log in to the device.

C. SSH syntax must be ssh -l user ip to log in to the remote device.

D. Configure SSH on the remote device to log in using SSH.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 394

Topic #: 1

[All 300-410 Questions]

Which MPLS value is combined with the IP prefix to convert to a VPNv4 prefix?

A. 8-byte Route Distinguisher

B. 8-byte Route Target

C. 16-byte Route Target

D. 16-byte Route Distinguisher

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 395

Topic #: 1

[All 300-410 Questions]

What are the two reasons for RD and VPNv4 addresses in an MPLS Layer 3 VPN? (Choose two.)

A. VPN RT communities are used to identify customer unique routes.

B. When the PE redistributes customer routes into MP-BGP, they must be unique.

C. They are on a CE device to use for static configuration.

D. They are used for a BGP session with the CE device.

E. RD is prepended to each prefix to make routes unique.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 396

Topic #: 1

[All 300-410 Questions]

An engineer configured a leak-map command to summarize EIGRP routes and advertise specifically loopback 0 with an IP of 10.1.1.1 255.255.255.252 along with the summary route. After finishing configuration, the customer complained about not receiving the summary route with the specific loopback address. Which two configurations will fix this issue? (Choose two.)

```
router eigrp 1
!
route-map Leak-Route deny 10
!
interface Serial 0/0
ip summary-address eigrp 1 10.0.0.0 255.0.0.0 leak-map Leak-Route
```

A. access-list 1 permit 10.1.1.0 0.0.0.3

B. access-list 1 permit 10.1.1.1 0.0.0.252

C. access-list 1 and match under route-map Leak-Route

D. route-map Leak-Route permit 10 and match access-list 1

E. route-map Leak-Route permit 20

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 397

Topic #: 1

[All 300-410 Questions]


```
ISP-1

ip as-path access-list 1 permit ^111
!
router bgp 100
  neighbor 192.168.101.10 remote-as 1000
  neighbor 192.168.11.111 remote-as 111
  neighbor 192.168.11.111 filter-list 1 in
```

Refer to the exhibit. AS 111 must not be used as a transit AS, but ISP-1 is getting ISP-2 routes from AS 111. Which configuration stops Customer AS from being used as a transit path on ISP-1?

A. ip as-path access-list 1 permit.*

B. ip as-path access-list 1 permit_111_

C. ip as-path access-list 1 permit ^$

D. ip as-path access-list 1 permit ^111$

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 398

Topic #: 1

[All 300-410 Questions]

What is considered the primary advantage of running BFD?

    A. reduction in time needed to detect Layer 3 routing neighbor failures

    B. reduction in CPU needed to detect Layer 3 routing neighbor failures

    C. reduction in time needed to detect Layer 2 switched neighbor failures

    D. reduction in CPU needed to detect Layer 2 switch neighbor failures

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 399

Topic #: 1

[All 300-410 Questions]


```
R2(Config)# ip route 2.2.2.2 255.255.255.255 10.10.23.3
R2(Config)# router eigrp 100
R2(config-router}# network 1.1.1.1 0.0.0.0
R2(config-router}# network 10.10.12.0 0.0.0.3
R2(config-router)# eigrp stub static
R2(config-router)# eigrp stub connected
```

Refer to the exhibit. R2 can access content on the server successfully. A network engineer finds packet drops on PC1 for traffic destined to network 2.2.2.2/32. Which action resolves the issue?

A. Redistribute the connected metric in EIGRP.

B. Add the eigrp stub connected static command.

C. Redistribute the static metric in EIGRP.

D. Remove the eigrp stub connected command.

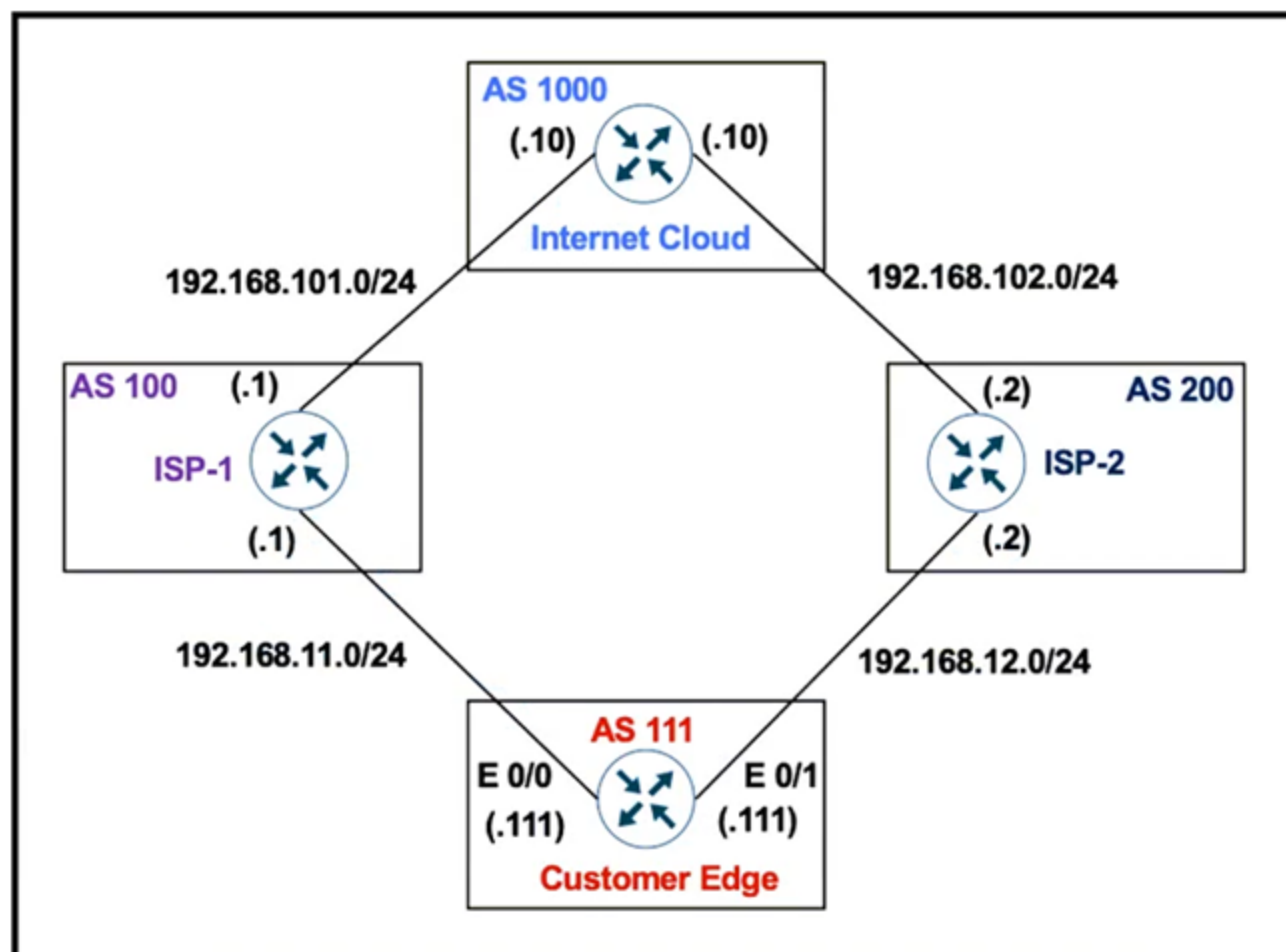Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 400

Topic #: 1

[All 300-410 Questions]

```
R1(config)# ip route 0.0.0.0 0.0.0.0 1.1.1.1
R1(config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2 10
R1(config)# ip sla 1
R1(config)# icmp-echo 1.1.1.1 source-interface FastEthernet0/0
R1(config)# ip sla schedule 1 life forever start-time now


R1(config)# track 1 ip sla 1 reachability
```

Refer to the exhibit. An IP SLA is configured to use the backup default route when the primary is down, but it is not working as desired. Which command fixes the issue?

    A. R1(config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2 10 track 1

    B. R1(config}# ip route 0.0.0.0 0.0.0.0 2.2.2.2

    C. R1(config)# ip sla track 1

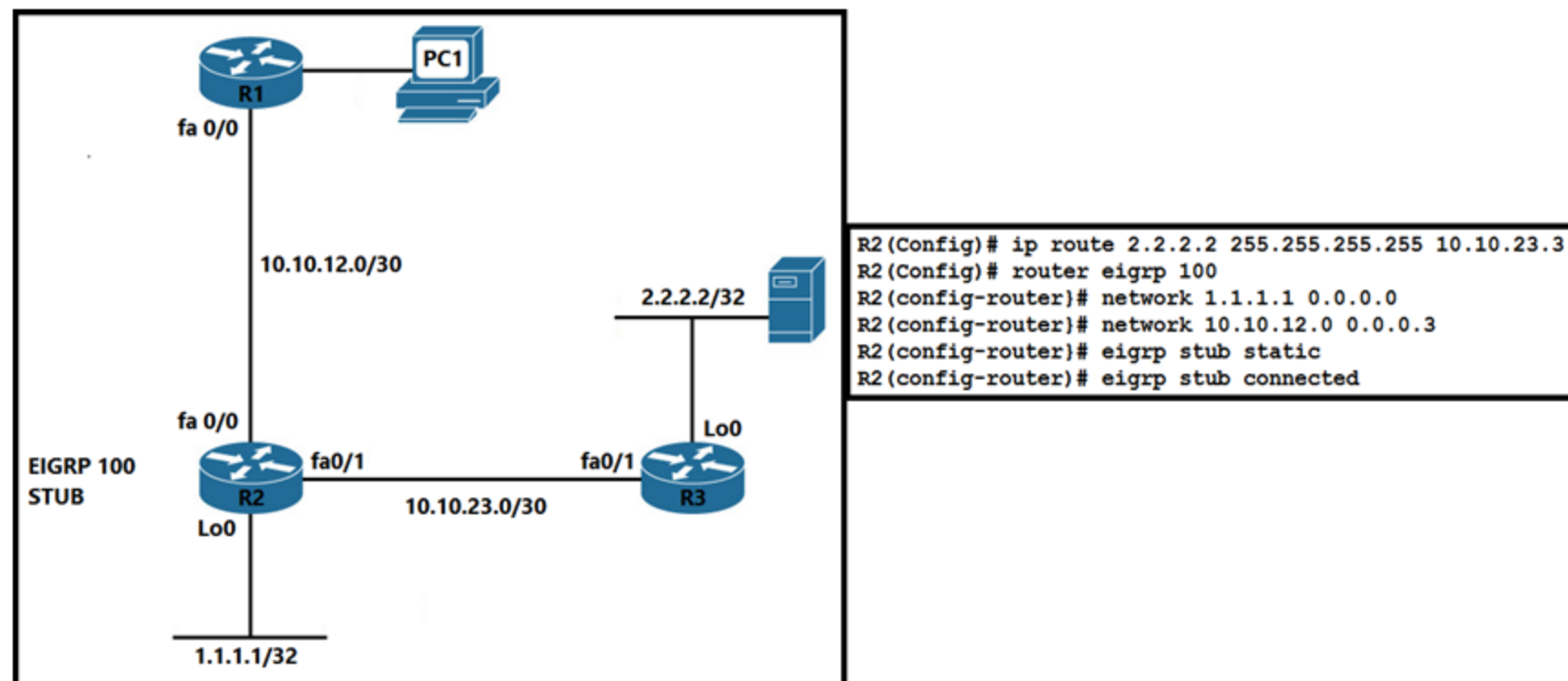   D. R1(config)# ip route 0.0.0.0 0.0.0.0 1.1.1.1 track 1

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 401

Topic #: 1

[All 300-410 Questions]

Refer to the exhibit. The route to 192.168.200.0 is flapping between R1 and R2. Which set of configuration changes resolves the flapping route?

A. R2(config)#router ospf 100 -
R2(config-router)#no redistribute eigrp 100
R2(config-router)#redistribute eigrp 100 metric 1 subnets

B. R1(config)#no router rip -
R1(config)#ip route 192.168.200.0 255.255.255.0 10.40.0.2

C. R2(config)#router eigrp 100 -
R2(config-router)#no redistribute ospf 100
R2(config-router)#redistribute rip

D. R1(config)#router ospf 100 -
R1(config-router)#redistribute rip metric 1 metric-type 1 subnets

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 402

Topic #: 1

[All 300-410 Questions]

```
Router#show ip route
<output omitted>
Gateway of last resort is not set


        3.0.0.0/32 is subnetted, 1 subnets
C           3.3.3.3 is directly connected, Loopback0
        192.168.1.0/32 is subnetted, 1 subnets
O           192.168.1.1 [110/21] via 192.168.3.1, 23:00:29, Ethernet0/1
        192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.3.0/24 is directly connected, Ethernet0/1
L           192.168.3.2/32 is directly connected, Ethernet0/1
Router#show ip bgp
BGP table version is 3, local router ID is 3.3.3.3
<output omitted>
    Network          Next   Hop          Metric    LocPrf    Weight    Path
* i  192.168.2.2/32  209.165.200.225         0       100          O       ?
Router#show ip bgp summary
BGP router identifier 3.3.3.3, local AS number 65000
<output omitted>
Neighbor      V      AS      MsRcvd      MsgSent      Tblver      Up/Down      State/PfxRcd
192.168.1.1   4    65000          7            6           3     00:02:04             1
Router#
```

Refer to the exhibit. Which action installs route 192.168.2.2/32 in the routing table?

   A. Redistribute connected networks into BGP on the local router.

   B. Configure NAT on the local router to translate private IP addresses.

   C. Configure the next-hop-self attribute for the peering on the local router.

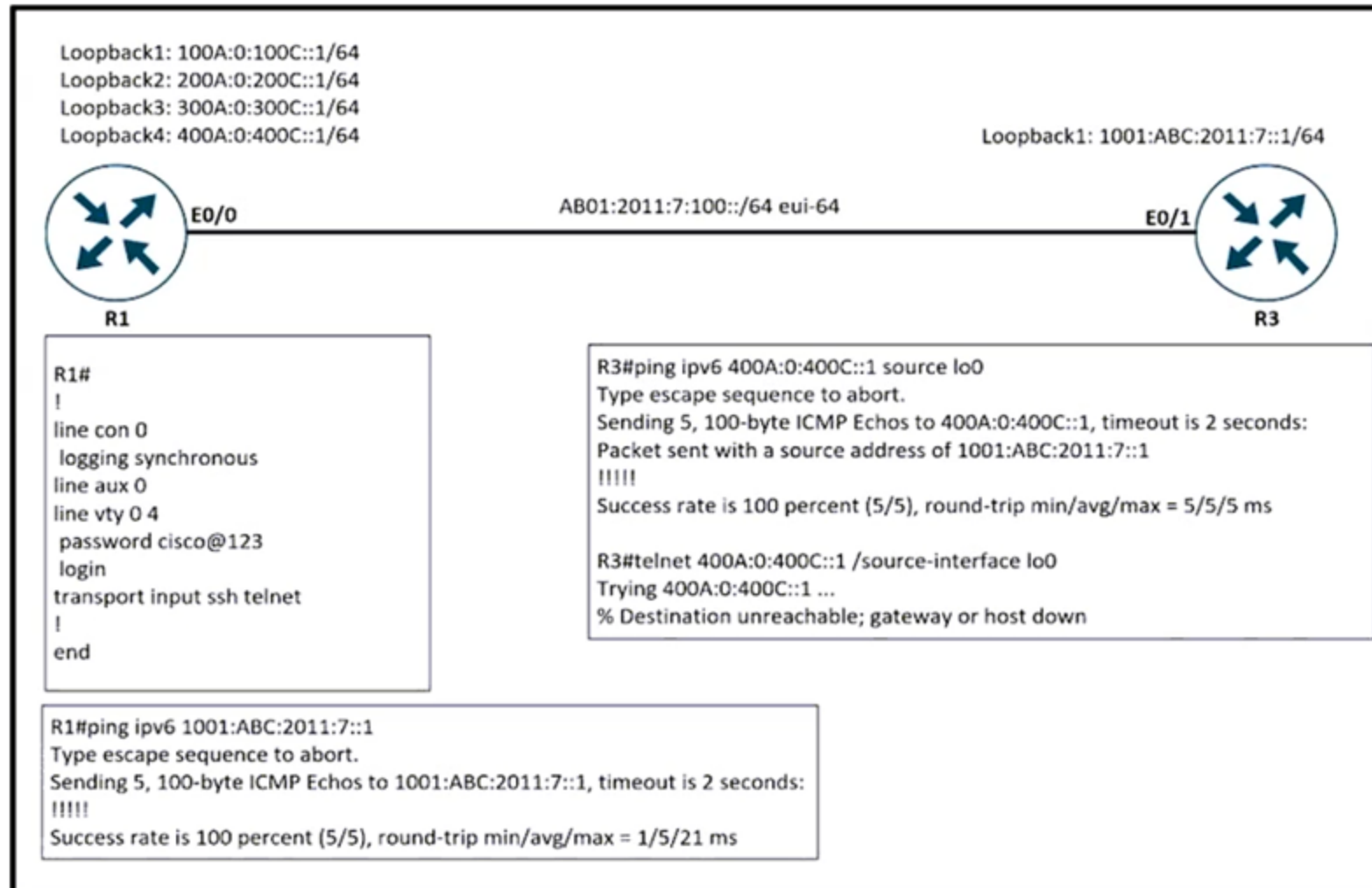   D. Configure the next-hop-self attribute for the peering on the peer router.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 403

Topic #: 1

[All 300-410 Questions]


```
Loopback1: 100A:0:100C::1/64
Loopback2: 200A:0:200C::1/64
Loopback3: 300A:0:300C::1/64
Loopback4: 400A:0:400C::1/64                                    Loopback1: 1001:ABC:2011:7::1/64

        E0/0          AB01:2011:7:100::/64 eui-64          E0/1

        R1                                                        R3

R1#                              R3#ping ipv6 400A:0:400C::1 source lo0
!                                Type escape sequence to abort.
line con 0                       Sending 5, 100-byte ICMP Echos to 400A:0:400C::1, timeout is 2 seconds:
 logging synchronous             Packet sent with a source address of 1001:ABC:2011:7::1
line aux 0                       !!!!!
line vty 0 4                     Success rate is 100 percent (5/5), round-trip min/avg/max = 5/5/5 ms
 password cisco@123
 login                           R3#telnet 400A:0:400C::1 /source-interface lo0
transport input ssh telnet       Trying 400A:0:400C::1 ...
!                                % Destination unreachable; gateway or host down
end

R1#ping ipv6 1001:ABC:2011:7::1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 1001:ABC:2011:7::1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/5/21 ms
```

Refer to the exhibit. An engineer is trying to log in to R1 via R3 loopback address. Which action resolves the issue?

A. Add transport input SCP.

B. Remove the IPv6 traffic filter from R1, which is blocking the SSH.

C. Remove the IPv6 traffic filter from R1, which is blocking the Telnet.

D. Add transport input none.

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 404

Topic #: 1

[All 300-410 Questions]

```
access-list 1 permit 1.1.1.0 0.0.0.255
!
route-map FILTER1 deny 10
match ip address 1
!
router eigrp 1
distribute-list route-map FILTER1 in
```

Refer to the exhibit. Which action restores the routes from neighbors while still filtering 1.1.1.0/24?

A. Add a second line in the access list to permit any.

B. Modify the route map to permit the access list instead of deny it.

C. Modify the access list to deny instead of permit it.

D. Add a second sequence in the route map permit 20.

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Actual exam question from Cisco's 300-410

Question #: 405

Topic #: 1

[All 300-410 Questions]

```
CPE# copy flash:packages.conf ftp://192.0.2.40/
Address or name of remote host [192.0.2.40]?
Destination filename [packages.conf]?
Writing packages.conf
%Error opening ftp://192.0.2.40/packages.conf (Incorrect
Login/Password)
CPE#
```

Refer to the exhibit. An administrator must upload the packages.conf file to an FTP server. However, the FTP server rejected anonymous service and required users to authenticate. What are the two ways to resolve the issue? (Choose two.)

A. Use the copy flash:packages.conf scp: command instead, and enter the FTP server credentials when prompted.

B. Use the copy flash:packages.conf ftp: command instead, and enter the FTP server credentials when prompted.

C. Enter the FTP server credentials directly in the FTP URL using the ftp://username:password@192.0.2.40/ syntax.

D. Create a user on the router matching the username and password on the FTP server and log in before attempting the copy.

E. Use ip ftp username and ip ftp password configuration commands to specify valid FTP server credentials.

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Actual exam question from Cisco's 300-410

Question #: 406

Topic #: 1

[All 300-410 Questions]

An engineer configured VRF-Lite on a router for VRF blue and VRF red. OSPF must be enabled on each VRF to peer to a directly connected router in each VRF. Which configuration forms OSPF neighbors over the network 10.10.10.0/28 for VRF blue and 192.168.0.0/30 for VRF red?

A. router ospf 1 vrf blue

network 10.10.10.0 0.0.0.252 area 0

router ospf 2 vrf red

network 192.168.0.0 0.0.0.240 area 0

B. router ospf 1 vrf blue

network 10.10.10.0 0.0.0.15 area 0

router ospf 2 vrf red

network 192.168.0.0 0.0.0.3 area 0

C. router ospf 1 vrf blue

network 10.10.10.0 0.0.0.240 area 0

router ospf 2 vrf red

network 192.168.0.0 0.0.0.252 area 0

D. router ospf 1 vrf blue

network 10.10.10.0 0.0.0.3 area 0

router ospf 2 vrf red

network 192 168.0.0 0.0.0.15 are 0

Show Suggested Answer

Actual exam question from Cisco's 300-410

Question #: 407

Topic #: 1

[All 300-410 Questions]

The network administrator must implement IPv6 in the network to allow only devices that not only have registered IP addresses but are also connecting from assigned locations. Which security feature must be implemented?

A. IPv6 Snooping

B. IPv6 Destination Guard

C. IPv6 Router Advertisement Guard

D. IPv6 Prefix Guard

Show Suggested Answer