

## Exam Questions 300-410

Implementing Cisco Enterprise Advanced Routing and Services (ENARSI)

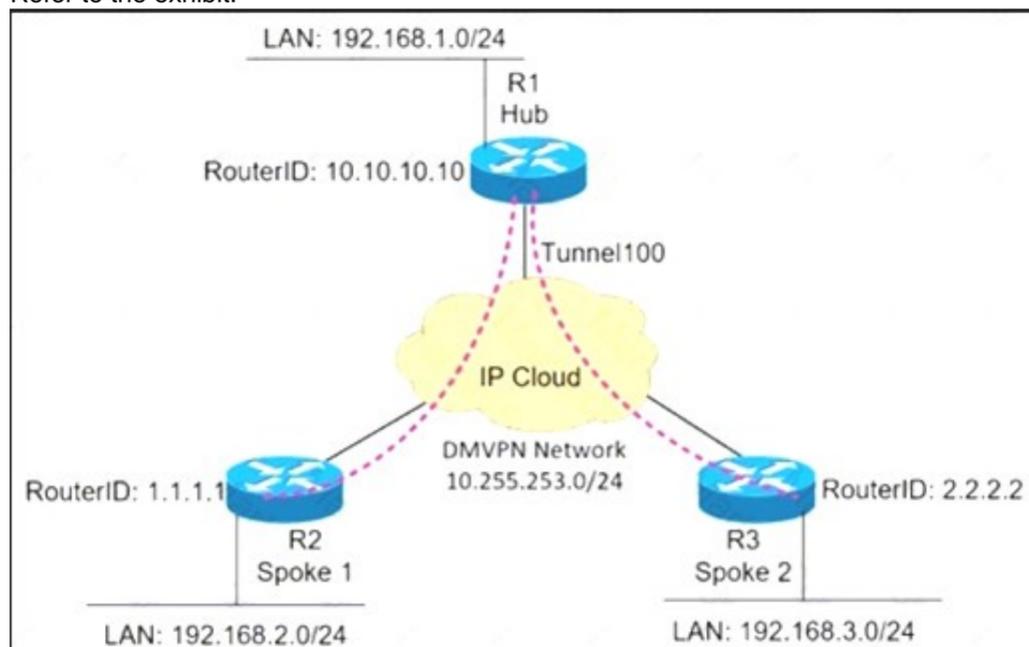
<https://www.2passeasy.com/dumps/300-410/>



**NEW QUESTION 1**

- (Exam Topic 3)

Refer to the exhibit.



```
*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
```

A network administrator sets up an OSPF routing protocol for a DMVPN network on the hub router. Which configuration required to establish a DMVPN tunnel with multiple spokes?

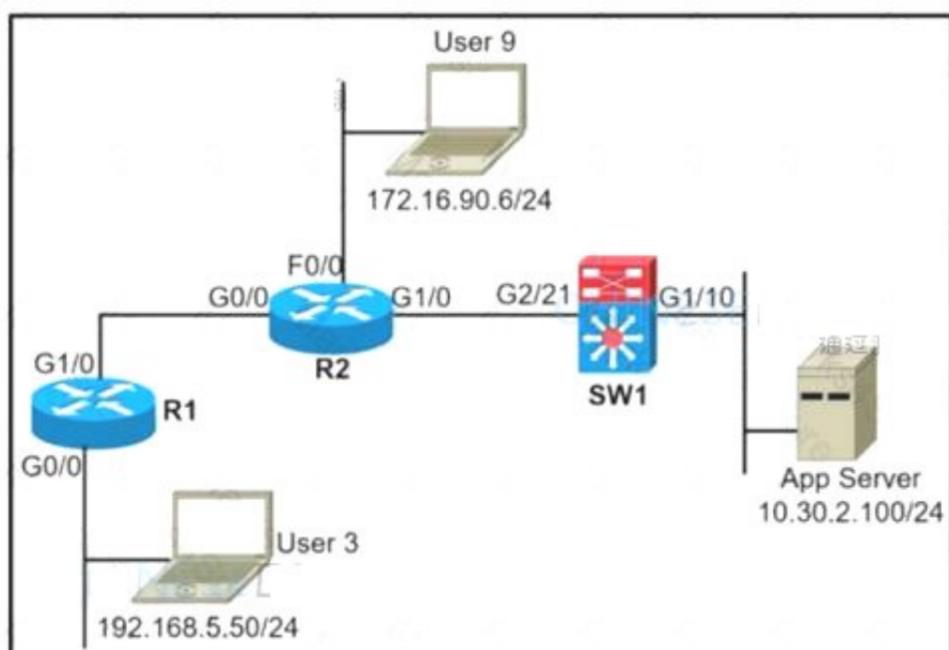
- A. ip ospf network point-to-multipoint on both spoke routers
- B. ip ospf network point-to-point on the hub router
- C. ip ospf network point-to-multipoint on One spoke router
- D. ip ospf network point-to-point on both spoke routers

**Answer: A**

**NEW QUESTION 2**

- (Exam Topic 3)

Refer to the exhibit.



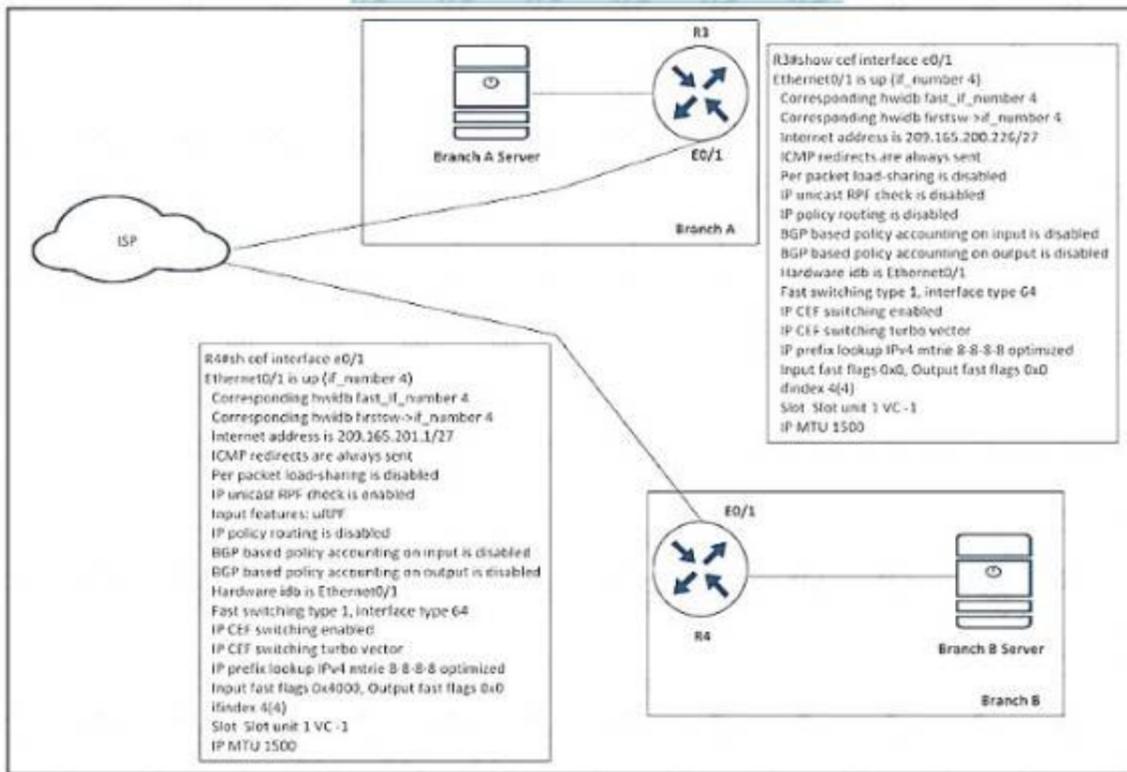
A network administrator must block ping from user 3 to the App Server only. An inbound standard access list is applied to R1 interface G0/0 to block ping. The network administrator was notified that user 3 cannot even ping user 9 anymore. Where must the access list be applied in the outgoing direction to resolve the issue?

- A. R2 interface G1/0
- B. R2 interface G0/0
- C. SW1 interface G1/10
- D. SW1 interface G2/21

**Answer: D**

**NEW QUESTION 3**

- (Exam Topic 3)



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 unicast RPF check reachable-via any allow-default allow-self-ping
    
```

B)

```

R4
interface ethernet0/1
ip verify unicast source 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
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

**NEW QUESTION 4**

- (Exam Topic 3)

A network administrator cannot connect to a device via SSH. The line vty configuration is as follows:

```

line vty 0 4
location S421T50E27F86
session-timeout 10
transport preferred ssh
transport input all
transport output telnet ssh
stopbits 1
    
```

Which action resolves this issue?

- A. Increase the session timeout
- B. Change the stopbits to 10.
- C. Configure the transport input SSH
- D. initialize the SSH key

Answer: D

**NEW QUESTION 5**

- (Exam Topic 3)

Refer to the exhibit.

```
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
```

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.

**Answer:** A

**Explanation:**

<https://www.cisco.com/c/en/us/support/docs/ip/ip-routing/200785-ISP-Failover-withdefault-routes-using-l.html>

**NEW QUESTION 6**

- (Exam Topic 3)

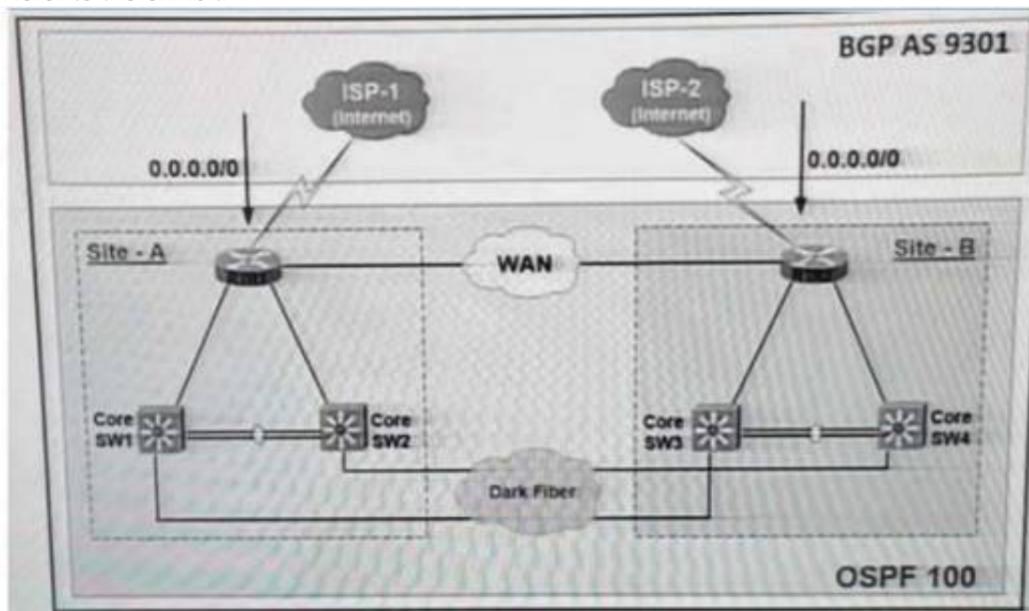
- A. Redistribute the static metric in EIGRP.
- B. Add the eigrp stub connected static command.
- C. Redistribute the connected metric in EIGRP.
- D. Remove the eigrp stub connected command.

**Answer:** B

**NEW QUESTION 7**

- (Exam Topic 3)

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 metric-type 2 at Site-A RTR1, and set metric-type 1 at Site-B RTR2
- B. Set OSPF cost 100 at Site-A RTR1, and set OSPF Cost 200 at Site-B RTR2
- C. Set OSPF cost 200 at Site: A RTR1 and set OSPF Cost 100 at Site-B RTR2
- D. Set metric-type 1 at Site-A RTR1, and set metric-type 2 at Site-B RTR2

**Answer:** D

**Explanation:**

OSPF type 1 route is always preferred over a type 2 route for the same destination so we can set metric-type 1 at Site-A RTR1 so that it is preferred over Site-B RTR2.

Note:

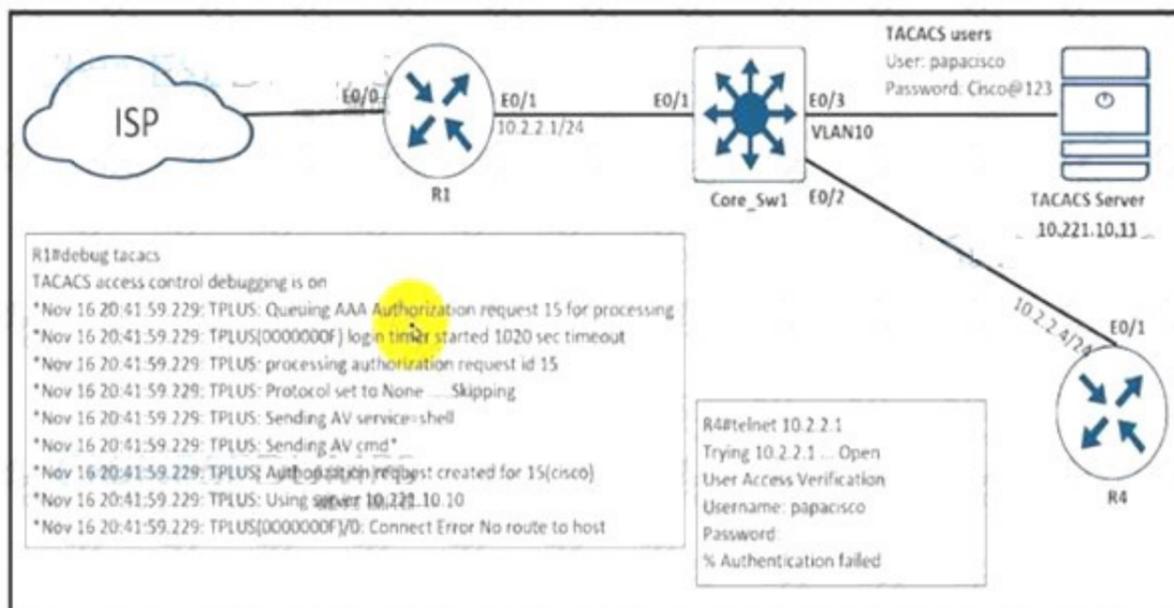
Routes are redistributed in OSPF as either type 1 (E1) routes or type 2 (E2) routes, with type 2 being the default.

- A type 1 route has a metric that is the sum of the internal OSPF cost and the external redistributed cost.
- A type 2 route has a metric equal only to the redistributed cost.
- If routes are redistributed into OSPF as type 2 then every router in the OSPF domain will see the same cost to reach the external networks.
- If routes are redistributed into OSPF as type 1, then the cost to reach the external networks could vary from router to router.

**NEW QUESTION 8**

- (Exam Topic 3)

Refer to the exhibit.



An engineer is trying to connect to R1 via Telnet with no success. Which configuration resolves the issue?

- tacacs server prod  
address ipv4 10.221.10.10  
exit
- ip route 10.221.10.10 255.255.255.255 ethernet 0/1
- tacacs server prod  
address ipv4 10.221.10.11  
exit
- ip route 10.221.0.11 255.255.255.255 ethernet 0/1

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

**NEW QUESTION 9**

- (Exam Topic 3)

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?

- 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
- 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
- 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
- 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 area 0

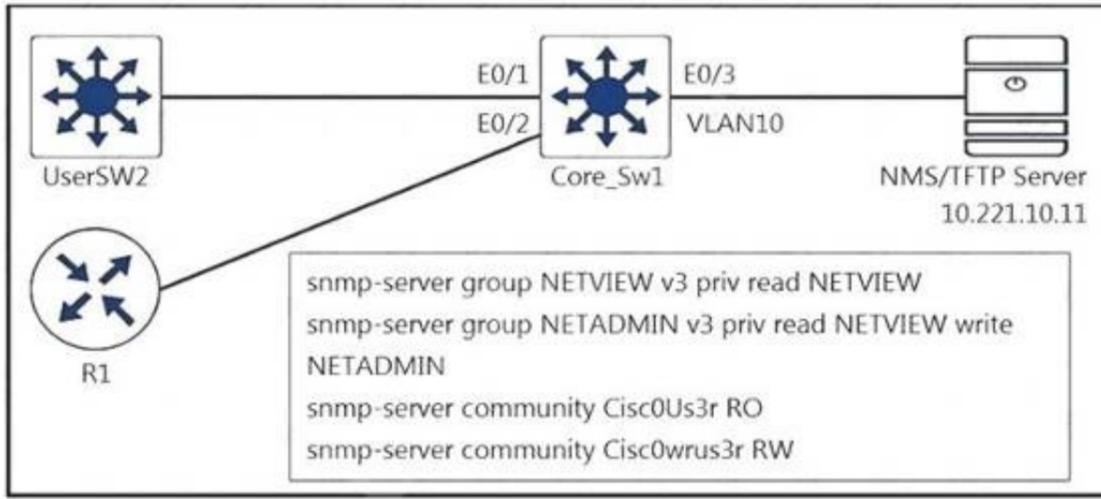
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 10**

- (Exam Topic 3)

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?

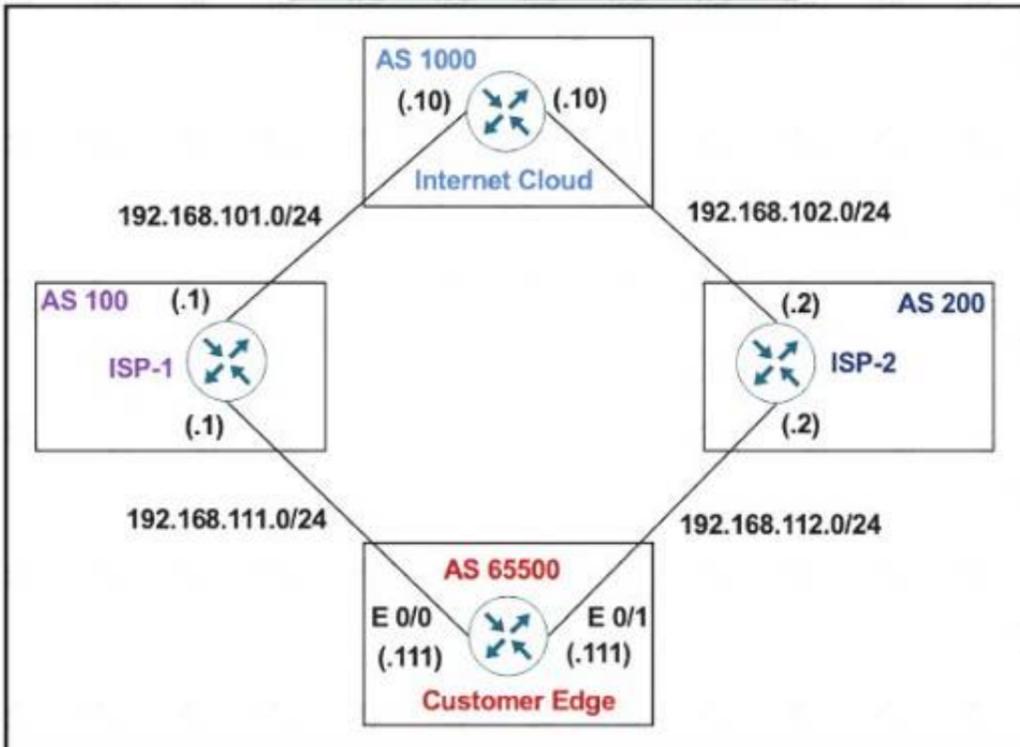
- A. access-list 20 permit 10.221.10.11 access-list 20 deny any log!snmp-server group NETVIEW v3 priv read NETVIEW access 20snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 20 snmp-server community Cisc0Us3r RO 20snmp-server community Cisc0wrus3r RW 20 snmp-server tftp-server-list 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 20snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 20 snmp-server community Cisc0wrus3r RO 20snmp-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

Answer: A

**NEW QUESTION 10**

- (Exam Topic 3)

Refer to the exhibit.



The Customer Edge router (AS 65500) wants to use ASC100 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 configuration resolves the issue?

```

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

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

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

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
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

**NEW QUESTION 15**

- (Exam Topic 3)

What must be configured by the network engineer to circumvent AS\_PATH prevention mechanism in IP/VPN Hub and Spoke deployment scenarios?

- A. Use allows in and as-override at all Pes.
- B. Use allows in and as-override at the PE-Hub.
- C. Use Allows-in the PE\_Hub
- D. Use as-override at the PE\_Hub

Answer: D

**NEW QUESTION 17**

- (Exam Topic 3)

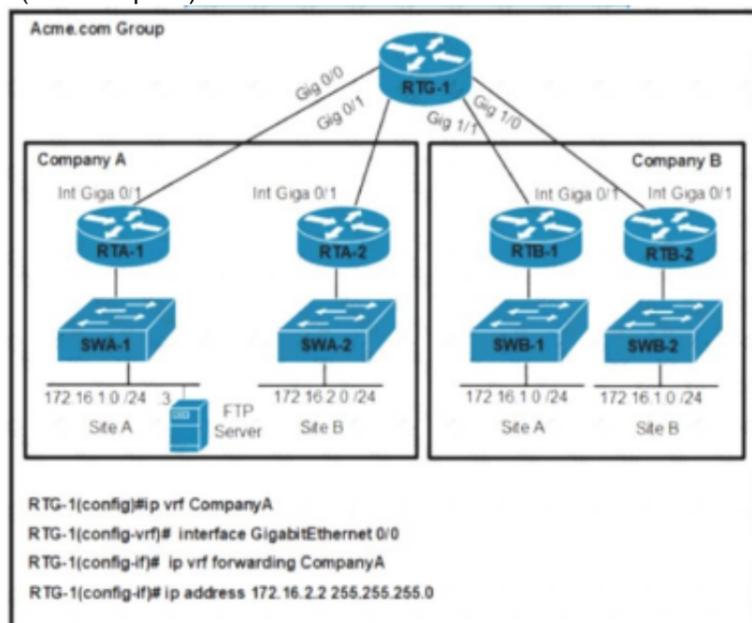
Which technique removes the outermost label of an MPLS-tagged packet before the packet is forwarded to an adjacent LER?

- A. label swap
- B. explicit-null
- C. label imposition
- D. PHP

Answer: D

**NEW QUESTION 18**

- (Exam Topic 3)



Refer to the exhibit. An engineer must configure a per VRF for TACACS+ for company A. Which configuration on RTG-1 accomplishes the task?

- aaa new-model  
 aaa group server tacacs+ Tacacscluster  
 server-private 172.16.1.1 port 49 key routing  
 ip tacacs source-interface GigabitEthernet 0/0  
 ip vrf forwarding CompanyA
- aaa new-model  
 aaa group server tacacs+ Tacacscluster  
 server-private 172.16.1.3 port 49 key routing  
 ip tacacs source-interface GigabitEthernet 0/1  
 ip vrf forwarding CompanyA
- aaa new-model  
 aaa group server tacacs+ Tacacscluster  
 server-private 172.16.1.1 port 49 key routing  
 ip tacacs source-interface GigabitEthernet 0/1  
 ip vrf CompanyA
- aaa new-model  
 aaa group server tacacs+ Tacacscluster  
 server-private 172.16.1.3 port 49 key routing  
 ip tacacs source-interface GigabitEthernet 0/0  
 ip vrf CompanyA

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 19**

- (Exam Topic 3)

A newly Installed router starts establishing an LDP session from another MPLS router to which it is not directly connected. Which LDP message type responds by target router to the Initiating router using UDP protocol?

- A. notification message
- B. session message
- C. extended discovery message
- D. advertisement message

Answer: C

**NEW QUESTION 20**

- (Exam Topic 3)

```

R4#show ip route
Gateway of last resort is not set

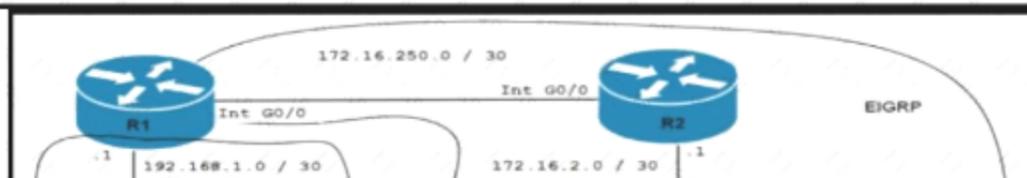
 172.16.0.0/16 is variably subnetted, 8 subnets, 3 masks
C   172.16.2.0/30 is directly connected, GigabitEthernet0/1
L   172.16.2.2/32 is directly connected, GigabitEthernet0/1
C   172.16.2.16/28 is directly connected, Loopback1
L   172.16.2.17/32 is directly connected, Loopback1
C   172.16.2.32/28 is directly connected, Loopback2
L   172.16.2.33/32 is directly connected, Loopback2
S   172.16.2.48/28 [1/0] via 172.16.2.34
D   172.16.250.0/30 [90/3072] via 172.16.2.1, 1d08h, GigabitEthernet0/1

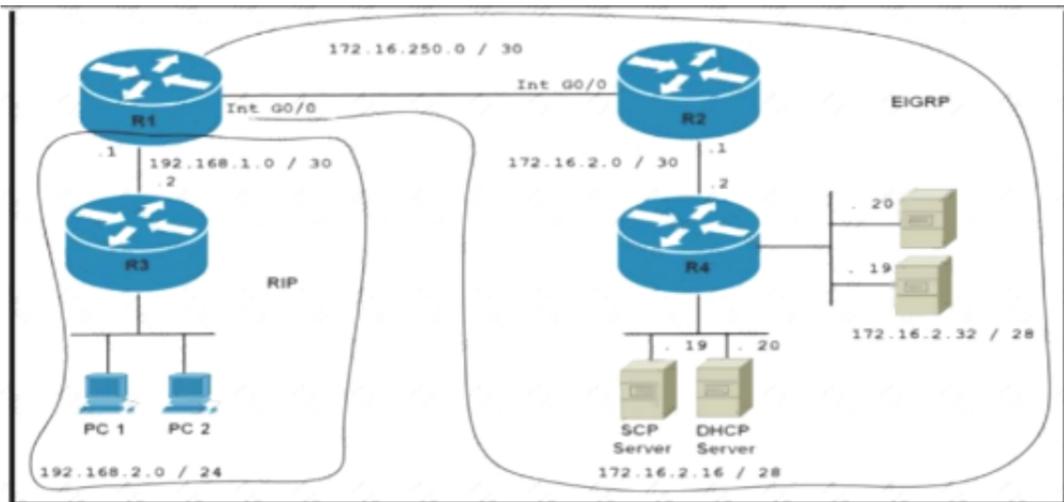
R3#sho ip route
Gateway of last resort is not set

R   172.16.0.0/16 [120/10] via 192.168.1.1, 00:00:03, GigabitEthernet0/1
 192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C   192.168.1.0/30 is directly connected, GigabitEthernet0/1
L   192.168.1.2/32 is directly connected, GigabitEthernet0/1
 192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C   192.168.2.0/24 is directly connected, Loopback2
L   192.168.2.33/32 is directly connected, Loopback2
 192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C   192.168.3.0/24 is directly connected, Loopback1
L   192.168.3.17/32 is directly connected, Loopback1

R1#sho running-config | begin router eigrp
router eigrp 100
 network 172.16.250.0 0.0.0.3
 redistribute rip
!
router rip
 redistribute eigrp 100 metric 10
 network 192.168.1.0
!
ip forward-protocol nd
!
route-map REDIST permit 10
 match ip address 15
!
route-map CCNP deny 10
 match route-type external
!
route-map CCNP permit 20
!
access-list 15 permit 192.168.0.0 0.0.0.255

R3#traceroute 172.16.2.33
Type escape sequence to abort.
Tracing the route to 172.16.2.33
VRF info: (vrf in name/id, vrf out name/id)
 1 192.168.1.1 27 msec 31 msec 16 msec
 2 * * *
 3 * * *
 4 * *
R3#
    
```





Refer to the exhibit Users from the 192.168.2.0/24 network cannot connect to the 172.16.2.32/28 network Which configuration resolves the issue?

A)

```
R4(config)#ip route 0.0.0.0 0.0.0.0 172.16.2.1
```

B)

```
R1(config)#route-map REDIST permit 10
R1(config-route-map)#match ip address 15
R1(config-route-map)# set metric 1000 10 255 1 1500
R1(config-route-map)#exit
R1(config)# access-list 15 permit 192.168.2.0 0.0.255.255
```

C)

```
R1(config-router)#router eigrp 100
R1(config-router)#redistribute rip
R1(config-router)#default-metric 10000 100 255 100 1500
```

D)

```
R1(config)#router eigrp 100
R1(config-router)#network 192.168.0.0
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 24**

- (Exam Topic 3)

Which IPv6 first hop security feature controls the traffic necessary for proper discovery of neighbor device operation and performance?

- A. RA Throttling
- B. Source or Destination Guard
- C. ND Multicast Suppression
- D. IPv6 Snooping

Answer: D

**NEW QUESTION 25**

- (Exam Topic 3)

```
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

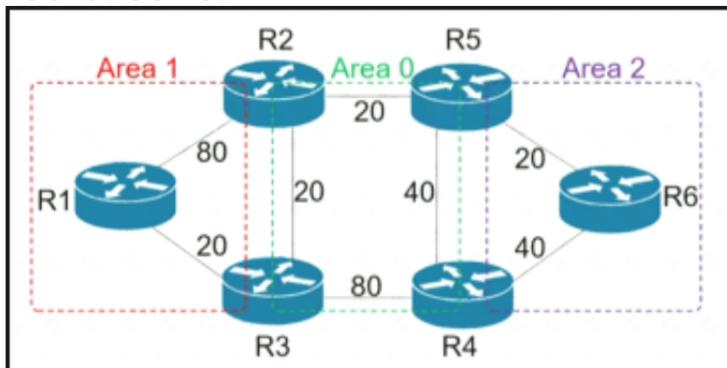
D. Configure the tog uptime option

Answer: D

**NEW QUESTION 26**

- (Exam Topic 3)

Refer to the exhibit.



R6 should reach R1 via R5>R2>R1. Which action resolves the issue?

- A. Increase the cost to 61 between R2-R3-R1
- B. Increase the cost to 61 between R2 and R3
- C. Decrease the cost to 2 between R6-R5-R2
- D. Decrease the cost to 41 between R2 and R1

Answer: B

**NEW QUESTION 27**

- (Exam Topic 3)

```

March 10 19:28:53.254 GMT: %SNMP-3-AUTHFAIL: Authentication
failure for SNMP request from host 10.1.1.1

snmp-server community public RO 15
snmp-server community private RW 16
!
logging snmp-authfail
!
access-list 15 permit 10.1.1.1
!
access-list 16 permit 10.1.1.2
    
```

Refer to the exhibit Which action resolves the issue?

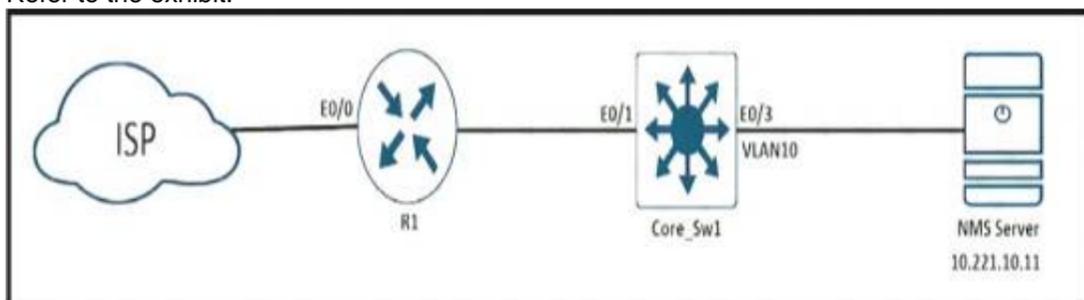
- A. Configure host IP address in access-list 16
- B. Configure SNMPv3 on the router
- C. Configure SNMP authentication on the router
- D. Configure a valid SNMP community string

Answer: D

**NEW QUESTION 29**

- (Exam Topic 3)

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. no snmp trap link-status
- B. snmp trap link-status down
- C. snmp trap ip verify drop-rate
- D. ip verify drop-rate notify hold-down 60

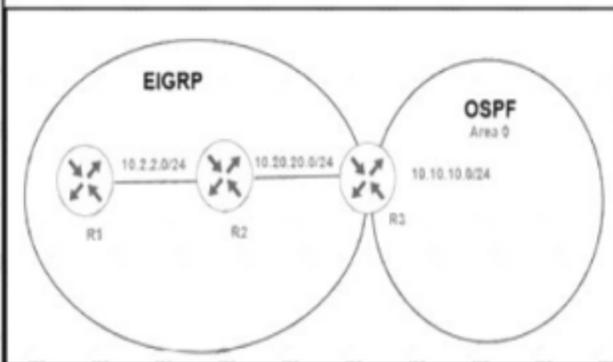
Answer: D

**NEW QUESTION 32**

- (Exam Topic 3)

```
R2#show ip eigrp topology 10.10.10.0 255.255.255.0
IP-EIGRP (AS 1): Topology entry for 10.10.10.0/24
  State is Passive, Query origin flag is 1, 1 Successor(s), FD
  is 256005120
  Routing Descriptor Blocks:
    10.20.20.3 (FastEthernet0/1), from 10.20.20.3, Send flag is
    0x0
  Composite metric is (256005120/256002560), Route is
  External
  Vector metric:
    Minimum bandwidth is 10 Kbit
    Total delay is 200 microseconds
    Reliability is 10/255
    Load is 10/255
    Minimum MTU is 10
    Hop count is 1
  External data:
    Originating router is 10.1.1.1
    AS number of route is 1
    External protocol is OSPF, external metric is 0
    Administrator tag is 0 (0x00000000)

R1#sh run | s eigrp
router eigrp 1
router-id 10.1.1.1
network 10.2.2.0 0.0.0.255
no auto-summary
```



Refer to the exhibit. An engineer configured router R3 to redistribute the prefix 10.10.10.0/24 from OSPF into EIGRP. R1 has no connectivity to the prefix. Which action enables receipt of prefixes on R1?

- A. R3 is advertising the 10.20.20.0/24 prefix with a TTL of 1, R3 must set the TTL to 2 for this prefix.
- B. R1 does not have a neighbor relationship with R2. The EIGRP process should be cleared on R1.
- C. Duplicate router IDs on R1 and R3, R1 should modify its router ID.
- D. R1 is not receiving the next-hop IP address of R3. R2 must enable the network 10.20.20.0/24 within EIGRP.

Answer: B

**NEW QUESTION 36**

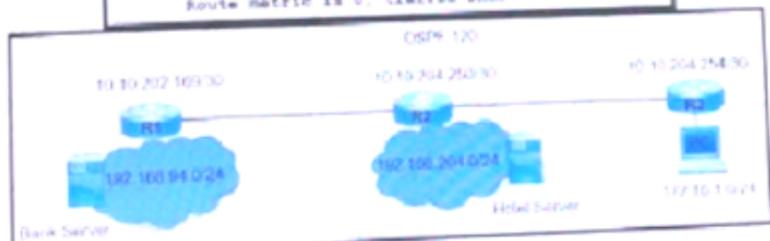
- (Exam Topic 3)

Refer to the exhibit.

```
R3# show ip ospf database router 10.10.202.168
OSPF Router with ID (10.10.204.254) (Process ID 120)
Router Link States (Area 0)
  Link connected to: a Stub Network
  (Link ID) Network/subnet number: 192.168.94.0
  (Link Data) Network Mask: 255.255.255.0
  Number of TOS metrics: 0
  TOS 0 Metrics: 100

  Link connected to: a Stub Network
  (Link ID) Network/subnet number: 10.10.202.168
  (Link Data) Network Mask: 255.255.255.252
  Number of TOS metrics: 0
  TOS 0 Metrics: 1

R3# show ip route 10.10.202.168
Routing entry for 10.10.202.168/30
  Known via "static", distance 1, metric 0
  Routing Descriptor blocks:
  * 172.16.1.24
  Route metric is 0, traffic share count is 1
```



A network engineer finds that PC1 is accessing the hotel website to do the booking but fails to make payment. Which action resolves the issue?

- A. Allow stub network 10.10.202.168/30 on router R3 OSPF.
- B. Decrease the AD to 5 OSPF route 192.168.94.0 on R1.
- C. Increase the AD to 200 of static route 192.168.94.0 on R3.
- D. Configure a reverse route on R1 for PC1 172.16.1.0/24.

Answer: A

**NEW QUESTION 40**

- (Exam Topic 3)

What is a function of IPv6 Source Guard?

- A. It works with address glean or ND to find existing addresses.
- B. It inspects ND and DHCP packets to build an address binding table.
- C. It denies traffic from known sources and allocated addresses.
- D. It notifies the ND protocol to inform hosts if the traffic is denied by it.

Answer: A

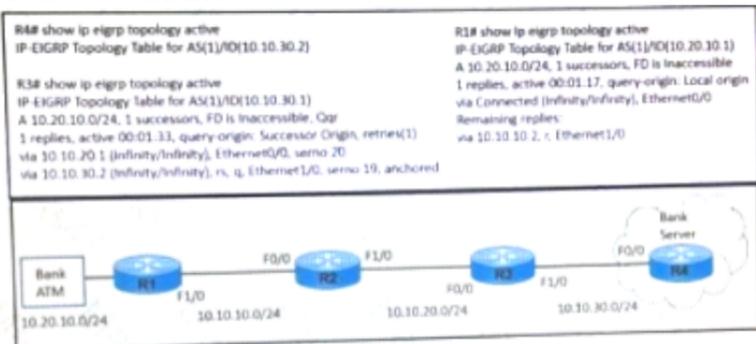
**Explanation:**

IPv6 source guard is an interface feature between the populated binding table and data traffic filtering. This feature enables the device to deny traffic when it is originated from an address that is not stored in the binding table. IPv6 source guard does not inspect ND or DHCP packets; rather, it works in conjunction with IPv6 neighbor discovery (ND) inspection or IPv6 address glean, both of which detect existing addresses on the link and store them into the binding table.

**NEW QUESTION 41**

- (Exam Topic 3)

Refer to the exhibit.



A bank ATM site has difficulty connecting with the bank server. A network engineer troubleshoots the issue and finds that R4 has no active route to the bank ATM site. Which action resolves the issue?

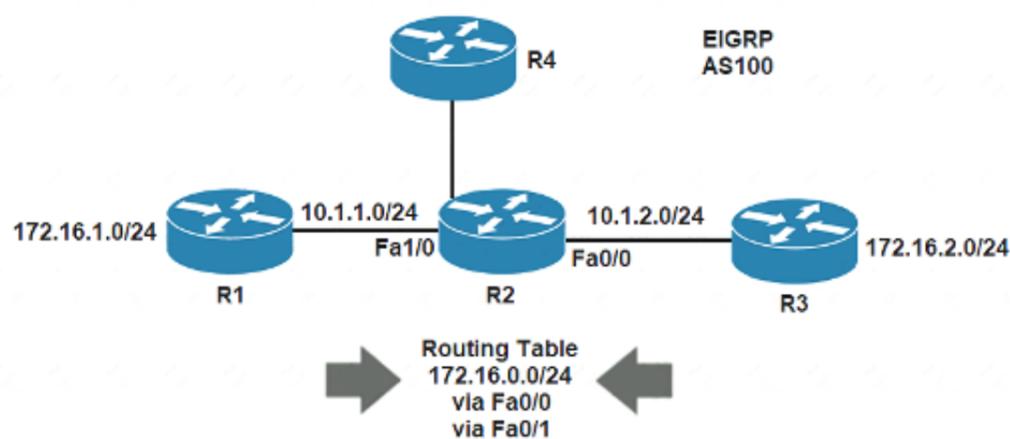
- A. Advertise 10.10.30.0/24 subnet in R1 EIGRP AS.
- B. EIGRP peering between R3 and R4 to be fixed.
- C. EIGRP peering between R1 and R2 to be fixed.
- D. Advertise 10.10.30.0/24 subnet in R3 EIGRP AS.

**Answer: D**

**NEW QUESTION 43**

- (Exam Topic 3)

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 /16 floating static route on R2 toward R3 with metric 254
- B. Insert a /24 floating static route on R2 toward R3 with metric 254
- C. Enable auto summarization on all three routers R1, R2, and R3
- D. Disable auto summarization on R2

**Answer: D**

**NEW QUESTION 45**

- (Exam Topic 3)

Which router takes an active role between two LDP neighbors when initiating LDP session negotiation and LDP TCP connection establishment?

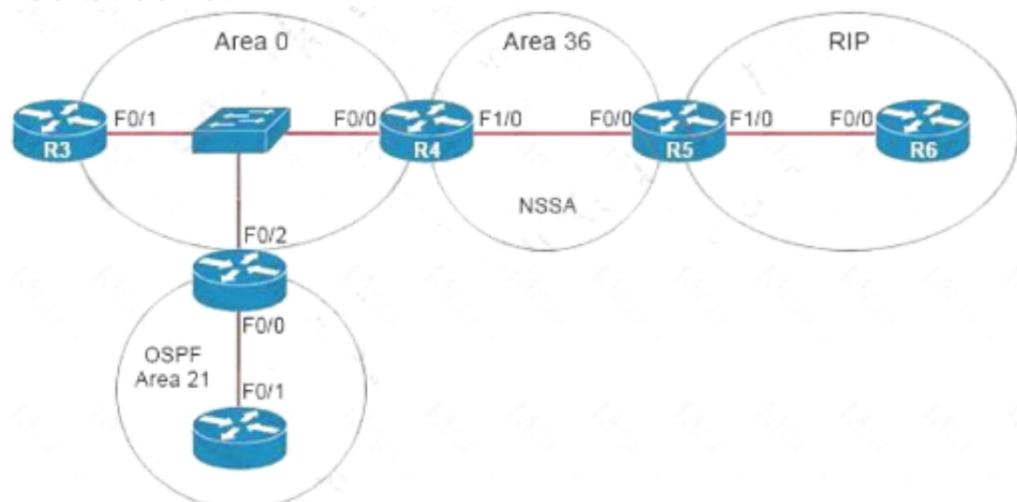
- A. with the higher IP address
- B. with the larger number of LDP TCP neighbors
- C. with the lowest IP address
- D. with one interface in the MPLS backbone

**Answer: A**

**NEW QUESTION 48**

- (Exam Topic 3)

Refer to the exhibit.



```
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
SFF algorithm executed 13 times
Area ranges are
172.16.0.0/16 Passive Advertise
```

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 1 R5(config-router)#no areaR5(config-router)#summary-address 172.16.0.0 255.255.252.0
- B. R4(config)#router ospf 99R4(config-router)#network 172.16.0.0 0.255.255.255 area 56R4(config-router)#area 56 range 172.16.0.0 255.255.255.0
- C. R4(config)#router ospf 1 R4(config-router)#no areaR4(config-router)#summary-address 172.16.0.0 255.255.252.0
- D. R5(config)#router ospf 99R5(config-router)#network 172.16.0.0 0.255.255.255 area 56R5(config-router)#area 56 range 172.16.0.0 255.255.255.0

**Answer: A**

**Explanation:**

Area 36 is a NSSA so R5 is an ASBR so we can summarize external routes using the “summaryaddress” command. The command “area area-id range” can only be used on ABR so it is not correct.

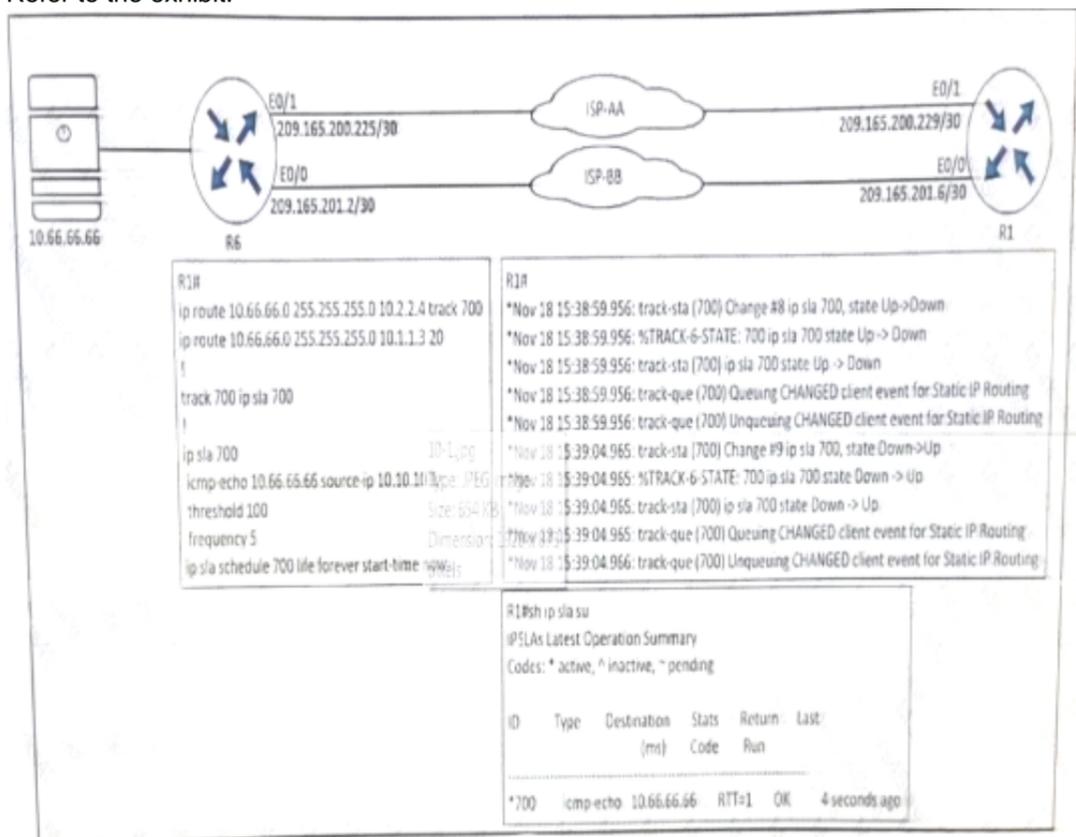
The summarization must be done on the ASBR which is R5, not R4 so the correct answer must be started with “R5(config)#router ospf 1”.

Note: The “no area” command is used to remove any existing “area ...” command (maybe “area 56 range ...” command).

**NEW QUESTION 51**

- (Exam Topic 3)

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)#ip sla 700R1(config-ip-sla)#delay down 30 up 20
- B. R1(config)#ip sla 700R1(config-ip-sla)#delay down 20 up 30
- C. R1(config)#track 700 ip sla 700R1(config-track)#delay down 30 up 20
- D. R1(config)#track 700 ip sla 700R1(config-track)#delay down 20 up 30

**Answer: C**

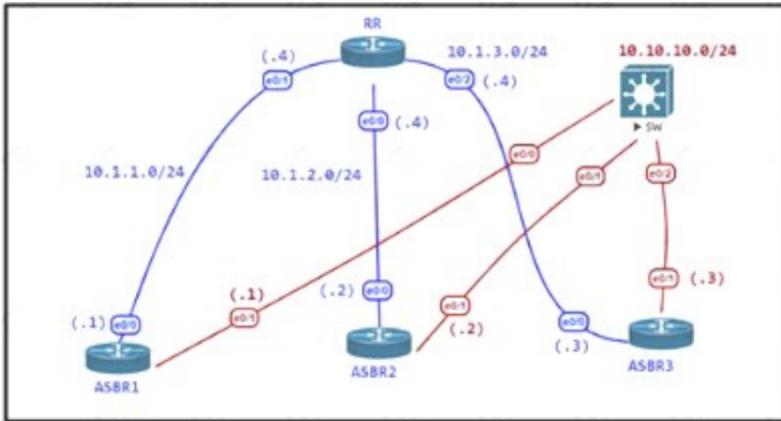
**Explanation:**

“wait 30 seconds before switching traffic to a secondary connection” -> delay down 30 “then revert to the primary link after waiting 20 seconds” -> up 20 Under the track object, you can specify delays so we have to configure delay under “track 700 ip sla 700” (not under “ip sla 700”).

**NEW QUESTION 52**

- (Exam Topic 3)

Exhibits:



**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
```

**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?

- 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
- 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
- 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
- router bgp 100  
neighbor 10.1.1.1 ebgp-multihop  
neighbor 10.1.2.2 ebgp-multihop  
neighbor 10.1.3.3 ebgp-multihop

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 54**

- (Exam Topic 3)

An engineer is creating a policy that overrides normal routing behavior.if the route to a destination of 10.100.100.0/24 is withdrawn from the routing Table, the policy must direct traffic to a next hop of 10.1.1.1. if the route is present in the routing table, then normal forwarding must occur. Which configuration meets the requirements?

- A. access-list 100 permit ip any any!route-map POLICY permit 10 match ip address 100set ip next-hop recursive 10.1.1.1
- B. access-list 100 permit ip any 10.100.100.0 0.0.0.255!Route-map POLICY permit 10 match ip address 100set ip default next-hop 10.1.1.1
- C. access-list 100 permit ip any 10.100.100.0 0.0.0.255!route-map POLICY permit 10 match ip address 100set ip next-hop 10.1.1.1!route map POLICY permit 20
- D. access-list 100 permit ip any 10.100.100.0 0.0.0.255!route map POLICY permit 10 match ip address 100Set ip next-hop recursive 10.1.1.1!route-map POLICY permit 20

Answer: D

#### NEW QUESTION 56

- (Exam Topic 3)

```
R1(config)#interface GigabitEthernet 0/0
R1(config-if)#ip address 10.10.10.10 255.255.255.252
R1(config-if)#ospfv3 1 ipv4 area 0

R2(config)#interface GigabitEthernet 0/0
R2(config-if)#ip address 10.10.10.11 255.255.255.252
R2(config-if)#ospfv3 10 ipv4 area 0
R2(config-if)#ospfv3 network broadcast
```

Refer to the exhibit An engineer is troubleshooting an OSPF adjacency issue between directly connected routers R1 and R2 Which configuration resolves the issue?

A)

```
R1(config)#interface GigabitEthernet 0/0
R1(config-if)#ospfv3 network broadcast
```

B)

```
R2(config)#interface GigabitEthernet 0/0
R2(config-if)#ip address 10.10.10.9 255.255.255.252
```

C)

```
R1(config)#interface GigabitEthernet 0/0
R1(config-if)#ospfv3 10 ipv4 area 0
```

D)

```
R2(config)#interface GigabitEthernet 0/0
R2(config-if)#no ospfv3 network broadcast
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

#### NEW QUESTION 59

- (Exam Topic 3)

```
RouterA#show snmp community
Community name: ILMI
Community Index: ILMI
Community SecurityName: ILMI
storage-type: read-only active

Community name: ccnp
Community Index: ccnp Community SecurityName: ccnp
storage-type: nonvolatile active access-list: 4

RouterA#show ip access-lists
Standard IP access list 4
10 permit 172.16.1.1
20 permit 172.16.2.2
30 permit 172.16.3.3
Extended IP access list BRANCHES
10 permit ip 172.16.4.4 any (95 matches)
20 deny ip any any (95 matches)
```

Refer to the exhibit The SNMP server with IP address 172.16.4.4 cannot access host router A Which configuration command on router A resolves the issue?

- A. snmp-server community ccnp
- B. access-list 4 permit 172.16.4.0 0.0.0.3
- C. access-list 4 permit host 172.16.4.4
- D. snmp-server host 172.16.4.4 ccnp

Answer: D

**NEW QUESTION 64**  
 - (Exam Topic 3)

```
R3#copy tftp flash:
Address or name of remote host [172.16.2.19]?
Source filename [c2600-i-mz.121.T.bin]? c2600-i-mz.121-1.T.bin
Destination filename [c2600-i-mz.121-1.T.bin]?
Loading c2600-i-mz.121-1.T.bin from 172.16.2.19(via GigabitEthernet0/0): !
%Error copying tftp://172.16.2.19/c2600-i-mz.121-1.T.bin (Not enough space
on device)
R3#
```

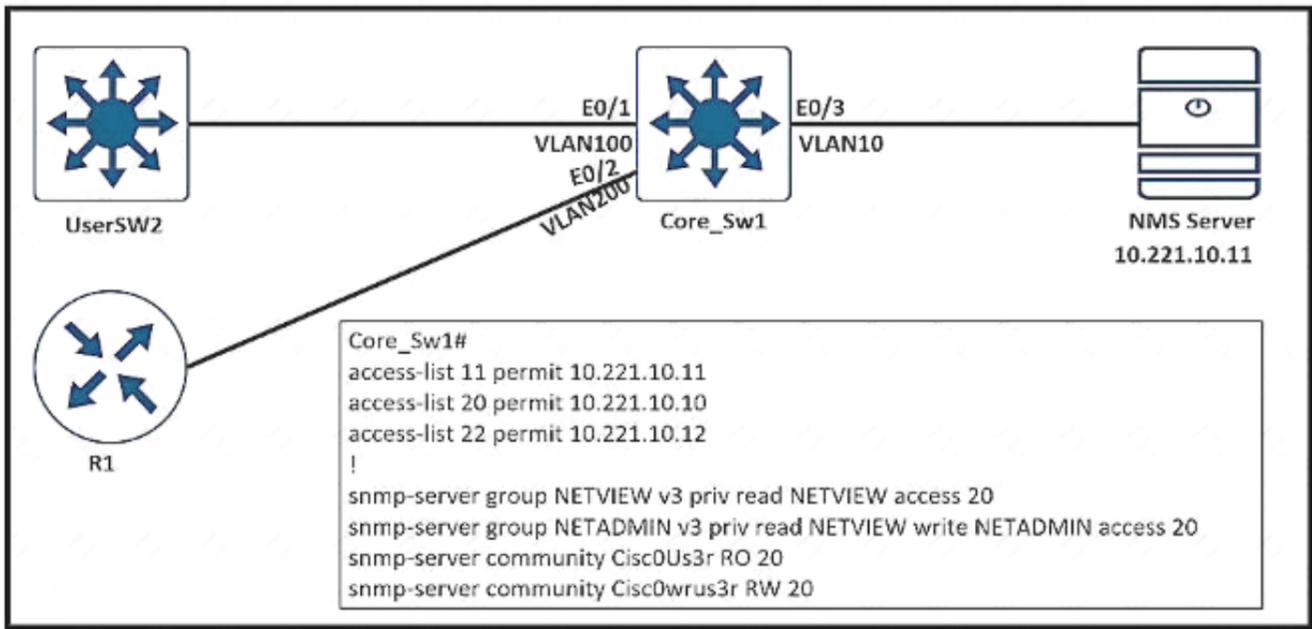


Refer to the exhibit. The engineer is getting an error when trying to transfer a new IOS file to the router. Which action resolves the issue?

- A. Delete some files on the router flash memory.
- B. Delete some files on the router NVRAM.
- C. Remove any access-list filtering the TFTP file transfer.
- D. Split the file into parts to transfer them one by one.

**Answer: A**

**NEW QUESTION 66**  
 - (Exam Topic 3)



- A. access-list 20 permit 10.221.10.12
- B. snmp-server group NETVIEW v2c priv read NETVIEW access 20
- C. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22
- D. access-list 20 permit 10.221.10.11

**Answer: D**

**NEW QUESTION 70**  
 - (Exam Topic 3)

```
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
```

```
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. Configure SSH on the remote device to log in using SSH
- B. SSH syntax must be ssh -l user ip to log in to the remote device
- C. Configure enable secret to log in to the device
- D. SSH must be allowed with the transport output ssh command

**Answer: B**

#### NEW QUESTION 71

- (Exam Topic 3)

configuration on the hub router meets this requirement?

- A. interface Tunnel0 tunnel mode gre multipoint
- B. interface Tunnel0 tunnel mode dvmrp
- C. interface Tunnel0 tunnel mode ipsec ipv4
- D. interface Tunnel0 tunnel mode ip

**Answer: A**

#### NEW QUESTION 75

- (Exam Topic 3)

A company is redesigning WAN infrastructure so that all branch sites must communicate via the head office and the head office can directly communicate with each site independently. The network engineer must configure the head office router by considering zero-touch technology when adding new sites in the same WAN infrastructure. Which configuration must be applied to the head office router to meet this requirement?

- interface Tunnel0  
tunnel mode ip  
ip nhrp map multicast dynamic
- interface Tunnel0  
tunnel mode dvmrp  
ip nhrp redirect
- interface Tunnel0  
tunnel mode ip  
ip nhrp redirect
- interface Tunnel0  
tunnel mode gre multipoint  
ip nhrp map multicast dynamic

- A. Option A
- B. Option B

- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 77**

- (Exam Topic 3)

```

R1:
interface Loopback1
no ip address
ipv6 address 100A:0:100C::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Loopback4
no ip address
ipv6 address 400A:0:400C::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Serial1/0
no ip address
ipv6 address AB01:2011:7:100::/64 eui-64
ipv6 enable
ipv6 ospf network point-to-point
ipv6 ospf 10 area 0
ipv6 traffic-filter DENY_TELNET_Lo4 in
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

R2:
interface Loopback0
no ip address
ipv6 address 1001:ABC:2011:7::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Serial1/0
no ip address
ipv6 address AB01:2011:7:100::/64 eui-64
ipv6 enable
ipv6 ospf network point-to-point
ipv6 ospf 10 area 0
serial restart-delay 0
!
ipv6 router ospf 10
router-id 2.2.2.2
log-adjacency-changes
!
end
    
```

```

R1:
interface Loopback1
no ip address
ipv6 address 100A:0:100C::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Loopback4
no ip address
ipv6 ospf 10 area 0
!
interface Serial1/0
no ip address
ipv6 address AB01:2011:7:100::/64 eui-64
ipv6 enable
ipv6 ospf network point-to-point
ipv6 ospf 10 area 0
ipv6 traffic-filter DENY_TELNET_Lo4 in
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

R2:
interface Loopback0
no ip address
ipv6 address 1001:ABC:2011:7::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Serial1/0
no ip address
ipv6 ospf network point-to-point
ipv6 ospf 10 area 0
serial restart-delay 0
!
ipv6 router ospf 10
router-id 2.2.2.2
log-adjacency-changes
!
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?

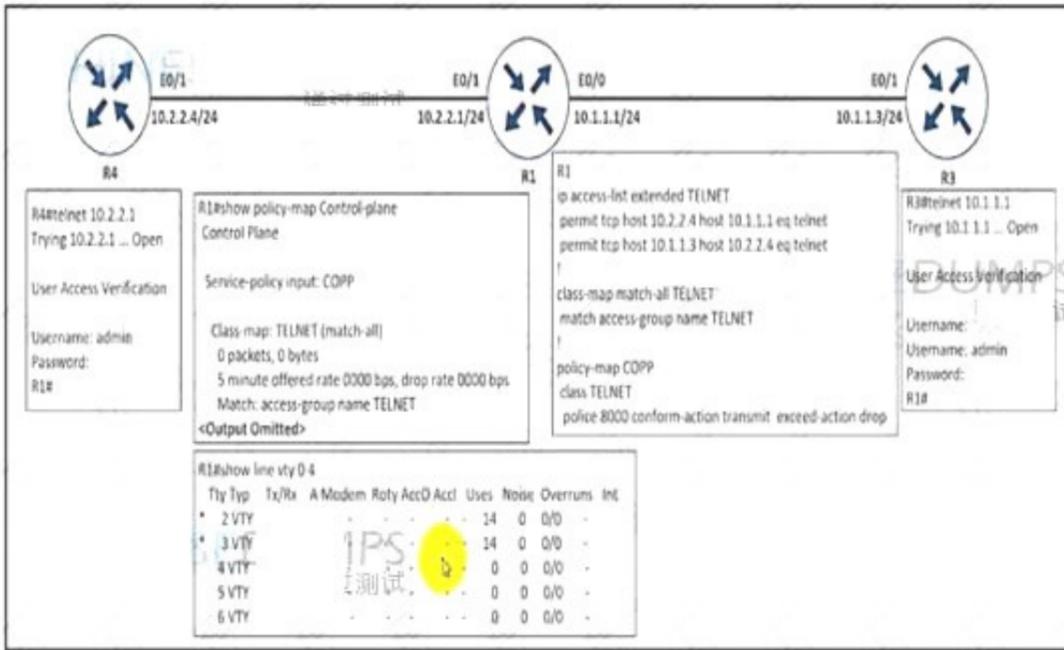
- A. sequence 20 permit tcp host 1001 ABC:2011:7:: 1 host 400A:0:400C::1 eq telnet
- B. sequence 20 deny tcp host 400A:0:400C::1 host 1001 :ABC:2011:7::1 eq telnet
- C. sequence 20 deny tcp host 1001:ABC:2011:7::1 host 400A:0:400C::1 eq telnet
- D. sequence 20 permit tcp host 400A:0:400C::1 host 1001ABC:2011:7::1 eq telnet

Answer: C

**NEW QUESTION 78**

- (Exam Topic 3)

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?

- policy-map COPP  
 class TELNET  
 police 8000 conform-action transmit exceed-action transmit
- policy-map COPP  
 class TELNET  
 police 8000 conform-action transmit exceed-action transmit violate-action drop
- 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
- 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

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 79**

- (Exam Topic 3)

Configure individual VRFs for each customer according to the topology to achieve these goals :

Comment

Guidelines Topology Tasks
R1 R2 SW1 SW2 SW3 SW4

Topology Diagram

```

R1>
R1>
R1>
R1>
R1>
R1>
                    
```

















```

!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
> On R1:
interface Ethernet0/2.100 mpls ip
!
interface Ethernet0/2.200 mpls ip
!
Configure BGP:
router bgp 65000
neighbor 10.10.10.2 remote-as 65000
neighbor 10.10.20.2 remote-as 65000
!
address-family vpnv4 neighbor 10.10.10.2 activate
neighbor 10.10.20.2 activate exit-address-family
!
address-family ipv4 vrf cu-green redistribute connected
exit-address-family
!
address-family ipv4 vrf cu-red redistribute connected
exit-address-family
!
R1(config)#ip vrf cu-red
R1(config-vrf)#route-target both 65000:100
!
R1(config)#ip vrf cu-green
R1(config-vrf)#route-target both 65000:200
> On R2:
interface Ethernet0/2.100
mpls ip
!
interface Ethernet0/2.200 mpls ip
!
router bgp 65000
neighbor 10.10.10.1 remote-as 65000
neighbor 10.10.20.1 remote-as 65000
!
address-family vpnv4 neighbor 10.10.10.1 activate
neighbor 10.10.20.1 activate exit-address-family
!
address-family ipv4 vrf cu-green redistribute connected
exit-address-family
!
address-family ipv4 vrf cu-red redistribute connected
exit-address-family R2(config)#ip vrf cu-red
R2(config-vrf)#route-target both 65000:100
!
R2(config)#ip vrf cu-green
R2(config-vrf)#route-target both 65000:200
> Verification:
From SW1 to SW3: SW1#ping 192.168.1.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
But can't Reach SW2 or SW4 in VRF cu-green: SW1#ping 192.168.22.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.22.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
SW1#ping 192.168.20.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.20.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
Same Test for SW2: From SW2 to SW4: SW2#ping 192.168.20.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.20.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
But can't Reach SW3 or SW1 in VRF cu-red: SW2#ping 192.168.1.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
SW2#ping 192.168.2.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.2.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
Both R1 & R2 has separate tables for VRFs cu-red and cu-green.

```

## NEW QUESTION 82

- (Exam Topic 3)

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 E0/0no service-policy input PM-COPP!control-planeservice-policy input PM-COPP
- B. policy-map PM-COPP class CM-ADMINno police 500000 conform-action transmit police 500 conform-action transmit!control-planeservice-policy input PM-COPP
- C. no access-list 100access-list 100 permit tcp host 172.16.1.99 any eq 80
- D. no access-list 100access-list 100 permit tcp host 172.16.1.99 any eq 80access-list 100 permit tcp host 172.16.1.99 any eq 443
- E. policy-map PM-COPP class CM-ADMINno police 500000 conform-action transmit police 500 conform-action transmit

Answer: A

**NEW QUESTION 83**

- (Exam Topic 3)



Refer to the exhibit. Not all connected and static routes of router B are received by router A even though EIGRP neighborhood is established between the routers. Which configuration resolves the issue?

- A)
 

```
router eigrp 100
network 209.165.200.224 0.0.0.7
redistribute static metric 1000 1 255 1 1500
eigrp stub connected
```
- B)
 

```
router eigrp 100
network 209.165.200.224 0.0.0.7
```
- C)
 

```
router eigrp 100
network 209.165.200.224 0.0.0.31
redistribute static metric 1000 1 255 1 1500
```
- D)
 

```
router eigrp 100
network 209.165.200.224 0.0.0.7
redistribute static metric 1000 1 255 1 1500
eigrp stub static
```

A. Option A

- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 84**

- (Exam Topic 3)

```
R3#show ip sla statistics
IPSLAs Latest Operation Statistics
IPSLA operation id: 10
Type of operation: icmp-echo
Latest RTT: 24 milliseconds
Latest operation start time: *21:26:43.211 UTC Sat Sep 18 2021
Latest operation return code: OK
Number of successes: 75
Number of failures: 0
Operation time to live: Forever

IPSLA operation id: 20
Type of operation: icmp-echo
Latest RTT: NoConnection/Busy/Timeout
Latest operation start time: *21:26:47.499 UTC Sat Sep 18 2021
Latest operation return code: No connection
Number of successes: 128
Number of failures: 459
Operation time to live: Forever
```



Refer to me exhibit Traffic from R3 to the central site does not use alternate paths when R3 cannot reach 10 10 10 2 Traffic on R3 destined to R4 takes an alternate route via 10 10 10.6 when 10 10 10 4 is not accessible from R3 Which configuration switches traffic destined to 10 10 10 2 from R3 on the alternate path”

- A. R3(config)#ip route 192.168.10.1 255.255.255.255 10.10.10.2 track 20
- B. R2(config)#ip route 10.10 10 3 255 255.255 255 10.0.0.6
- C. R3(config)#track( 20 ip sla 20 reachability
- D. R6(config)#ip route 10.10.10 3 255.255.255.255 10.0.0.30

Answer: A

**NEW QUESTION 88**

- (Exam Topic 3)

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?

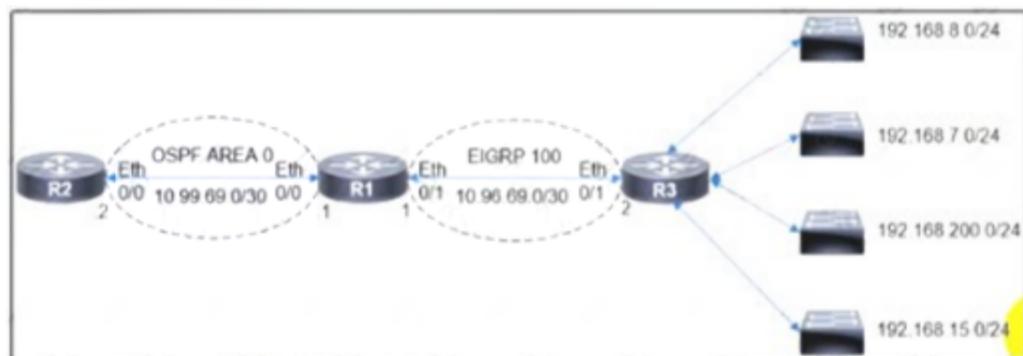
- A. test cable diagnostics tdr interface GigabitEthernet1/0/14
- B. Check cable-diagnostics tdr interface GigabitEthernet1/0/14
- C. show cable-diagnostics tdr interface GigabitEthernet1/0/14
- D. Verify cable-diagnostics tdr interface GigabitEthernet1/0/14

Answer: A

**Explanation:**

The Time Domain Reflectometer (TDR) feature allows you to determine if a cable is OPEN or SHORT when it is at fault.





```
R1#show route-map
route-map FROM->EIGRP, permit, sequence 10
  Match clauses:
    ip address (access-lists): 10
  Set clauses:
    Policy routing matches: 0 packets, 0 bytes
R1#show run | sec router
router eigrp 100
network 10.96.69.0 0.0.0.3
no auto-summary
eigrp router-id 1.1.1.1
router ospf 100
router-id 1.1.1.1
log-adjacency-changes
redistribute eigrp 100 subnets route-map FROM->EIGRP
network 10.99.69.0 0.0.0.3 area 0
R1#show ip access-list
Standard IP access list 10
 10 permit 192.168.16.0, wildcard bits 0.0.3.255
 11 permit 192.168.0.0, wildcard bits 0.0.7.255
 20 deny any
```

Refer to the exhibit The engineer configured route redistribution in the network but soon received reports that R2 cannot access 192.168.7.0/24 and 192.168.15.0/24 subnets Which configuration resolves the issue?

- ```
R1(config)#ip access-list standard 10
R1(config-std-nacl)#no 10 permit
R1(config-std-nacl)#no 11 permit
R1(config-std-nacl)#10 permit 192.168.0.0 0.0.3.255
R1(config-std-nacl)#11 permit 192.168.8.0 0.0.3.255
```
- ```
R1(config)#ip access-list standard 10
R1(config-std-nacl)#no 10 permit
R1(config-std-nacl)#no 11 permit
R1(config-std-nacl)#10 permit 192.168.0.0 0.0.7.255
R1(config-std-nacl)#11 permit 192.168.8.0 0.0.3.255
```
- ```
R1(config)#ip access-list standard 10
R1(config-std-nacl)#no 10 permit
R1(config-std-nacl)#no 11 permit
R1(config-std-nacl)#10 permit 192.168.0.0 0.0.3.255
R1(config-std-nacl)#11 permit 192.168.8.0 0.0.7.255
```
- ```
R1(config)#ip access-list standard 10
R1(config-std-nacl)#no 10 permit
R1(config-std-nacl)#no 11 permit
R1(config-std-nacl)#10 permit 192.168.4.0 0.0.3.255
R1(config-std-nacl)#11 permit 192.168.12.0 0.0.3.255
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 97**

- (Exam Topic 3)

Which MPLS value is combined with the IP prefix to convert to a VPNv4 prefix?

- A. 16-byte Route Distinguisher
- B. 8-byte Route Target
- C. 16-byte Route Target
- D. 8-byte Route Distinguisher

Answer: D

**NEW QUESTION 100**

- (Exam Topic 3)

Which routing protocol is used by the PE router to advertise routes to a CE router without redistribution or static after removing the RD tag from the P router?

- A. IS-IS
- B. OSPF
- C. BGP
- D. MP-BGP

Answer: C

**NEW QUESTION 102**

- (Exam Topic 3)

```

R1#sh track brief
Track Type      Instance      Parameter      State Last Change
1 ip sla        10            reachability   Down 00:03:52

R1#show ip sla configuration
IP SLAs Infrastructure Engine-III
Entry number: 10
Owner:
Tag:
Operation timeout (milliseconds): 5000
Type of operation to perform: icmp-echo
Target address/Source interface: 10.10.10.10/GigabitEthernet0/0
<->
Schedule:
  Operation frequency (seconds): 60 (not considered if randomly scheduled)
  Next Scheduled Start Time: Pending trigger
  Group Scheduled : FALSE
  Randomly Scheduled : FALSE
  Life (seconds): Forever
  Entry Ageout (seconds): never
  Recurring (Starting Everyday): FALSE
  Status of entry (SNMP RowStatus): Active
Threshold (milliseconds): 5000
Distribution Statistics:
Operation timeout (milliseconds): 5000
Type of operation to perform: icmp-echo
Target address/Source interface: 10.10.10.10/GigabitEthernet0/0
<->
Schedule:
  Operation frequency (seconds): 60 (not considered if randomly scheduled)
  Next Scheduled Start Time: Pending trigger
  Group Scheduled : FALSE
  Randomly Scheduled : FALSE
  Life (seconds): Forever
  Entry Ageout (seconds): never
  Recurring (Starting Everyday): FALSE
  Status of entry (SNMP RowStatus): Active
Threshold (milliseconds): 5000
Distribution Statistics:

```

Refer to the exhibit A network engineer notices that the configured track option is down Which configuration resolves the issue\*?

- A. ip sla schedule 10 start-time now
- B. ip sla schedule 10 start-time pending life forever
- C. ip sla schedule 10 no timeout
- D. ip sla schedule 10 no threshold

Answer: A

**NEW QUESTION 106**

- (Exam Topic 3)

An engineer configured a router with this configuration

```
ip access-hst DENY TELNET
```

```
10 deny tcp any any eq 23 log-input
```

The router console starts receiving log message :%SEC-6-IPACCESSLOGP: list DENY\_TELNET denied tcp 192.168.1.10(1022)(FastEthernet1/0 D508.89gb.003f) ->192.168.2.20(23), 1 packet"

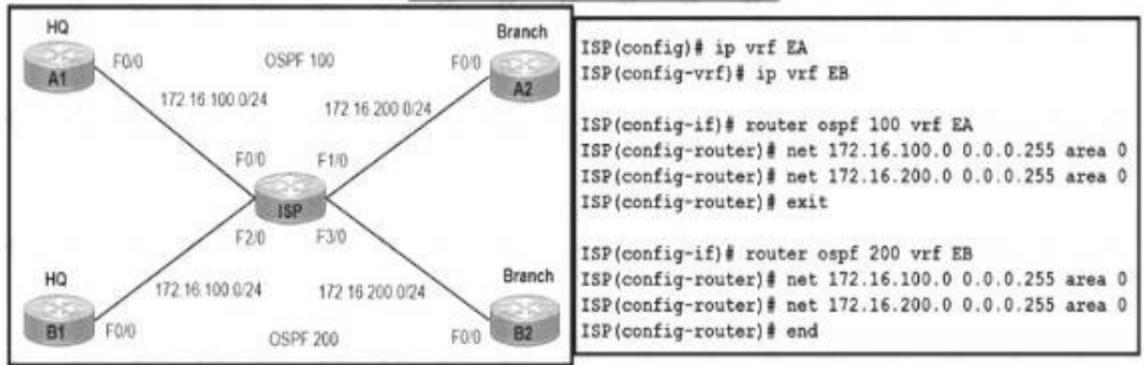
Which action stops messages on the console while still denying Telnet?

- A. Configure a 20 permit ip any any command
- B. Remove log-Input keyword from the access list.
- C. Replace log-input keyword with the log keyword in the access list.
- D. Configure a 20 permit ip any any log-input command.

**Answer: B**

**NEW QUESTION 111**

- (Exam Topic 3)



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 overlapping networks between HO and a branch office Which configuration meets the requirements for a customer site?

A)

```
ISP(config)#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
```

B)

```
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
```

C)

```
ISP(config-vrf)#int f0/0
ISP(config-if)#ip vrf forwarding EB
ISP(config-if)#description TO->EB1_HQ
ISP(config-if)#ip add 172.16.100.2 255.255.255.0
ISP(config-if)#no shut
```

D)

```
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
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: A**

**NEW QUESTION 115**

- (Exam Topic 3)

How is the LDP router ID used in an MPLS network?

- A. The MPLS LDP router ID must match the IGP router ID.
- B. If not configured, the operational physical interface is chosen as the router ID over d a loopback is configured.
- C. The loopback with the highest IP address is selected as the router ID

D. The force keyword changes the router ID to the speeded address without causing any impact.

Answer: D

**NEW QUESTION 116**

- (Exam Topic 3)

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. snmp user
- B. debug snmp engine-id
- C. debug snmpv3 engine-id
- D. debug snmp packet
- E. showsnmpv3 user

Answer: AE

**NEW QUESTION 121**

- (Exam Topic 3)

A company is expanding business by opening 35 branches over the Internet. A network engineer must configure DMVPN at the branch routers to connect with the hub router and allow NHRP to add spoke routers securely to the multicast NHRP mappings automatically Which configuration meets this requirement at the hub router?

A)

```
interface Tunnel0
ip address 10.0.0.1 255.255.255.0
ip nhrp authentication KEY1
ip nhrp nhs dynamic
ip nhrp network-id 10
tunnel mode mgre auto
```

B)

```
interface Tunnel0
ip address 10.0.0.1 255.255.255.0
ip nhrp authentication KEY1
ip nhrp registration no-unique
ip nhrp network-id 10
tunnel mode gre nmba
```

C)

```
interface Tunnel0
ip address 10.0.0.1 255.255.255.0
ip nhrp authentication KEY1
ip nhrp map multicast dynamic
ip nhrp network-id 10
tunnel mode gre multipoint
```

D)

```
interface Tunnel0
ip address 10.0.0.1 255.255.255.0
ip nhrp authentication KEY1
ip nhrp map multicast 224.0.0.0
ip nhrp network-id 10
tunnel mode gre ipv4
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

**Explanation:**

The command "ip nhrp map multicast dynamic" allows NHRP to automatically add spoke routers to the multicast NHRP mappings.

**NEW QUESTION 125**

- (Exam Topic 3)

Refer to the exhibit.

```
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
```

The static route is not present in the routing table of an adjacent OSPF neighbor router. Which action resolves the issue?

- A. Configure the next hop of 10.20.20.1 in the prefix list DMZ-STATIC
- B. Configure the next-hop interface at the end of the static router for it to get redistributed
- C. Configure a permit 20 statement to the route map to redistribute the static route
- D. Configure the subnets keyword in the redistribution command

**Answer: D**

#### NEW QUESTION 127

- (Exam Topic 3)

Refer to the exhibit.

```
ip prefix-list 1 permit 172.16.0.0/16
ip prefix-list 2 permit 192.168.2.0/24
!
route-map RED permit 10
  match ip address prefix-list 1
  set ip next hop 10.1.1.1
  continue 20
exit
!
route-map RED permit 20
  match ip address prefix-list 2
  set ip next hop 10.2.2.2
end
```

The forwarding entries show that the next hop for prefixes from the 172.16.0.0/16 network is set to 10.2.2.2 instead of 10.1.1.1. Which action resolves the issue?

- A. Add set ip next hop 10.1.1.1 in route-map RED permit 20.
- B. Add the continue statement in route-map RED permit 10 instead of continue 20.
- C. Remove match ip address prefix-list 1 from route-map RED permit 10.
- D. Remove the continue 20 statement from route-map RED permit 10

**Answer: D**

#### NEW QUESTION 132

- (Exam Topic 3)

What does the MP-BGP OPEN message contain?

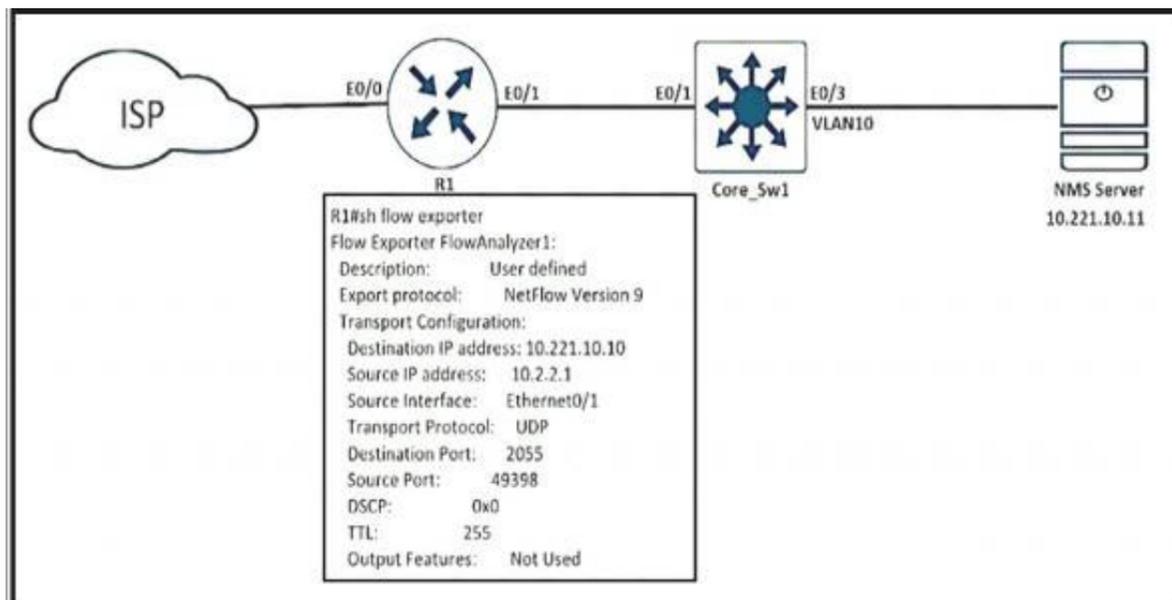
- A. MPLS labels and the IP address of the router that receives the message
- B. the version number and the AS number to which the router belongs
- C. IP routing information and the AS number to which the router belongs
- D. NLRI, path attributes, and IP addresses of the sending and receiving routers

**Answer: B**

#### NEW QUESTION 135

- (Exam Topic 3)

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. flow monitor Flowmonitor1 destination 10.221.10.11
- B. flow exporter FlowAnalyzer1 destination 10.221.10.11
- C. interface Ethernet0/1flow-destination 10.221.10.11
- D. interface Ethernet0/0flow-destination 10.221.10.11

**Answer: B**

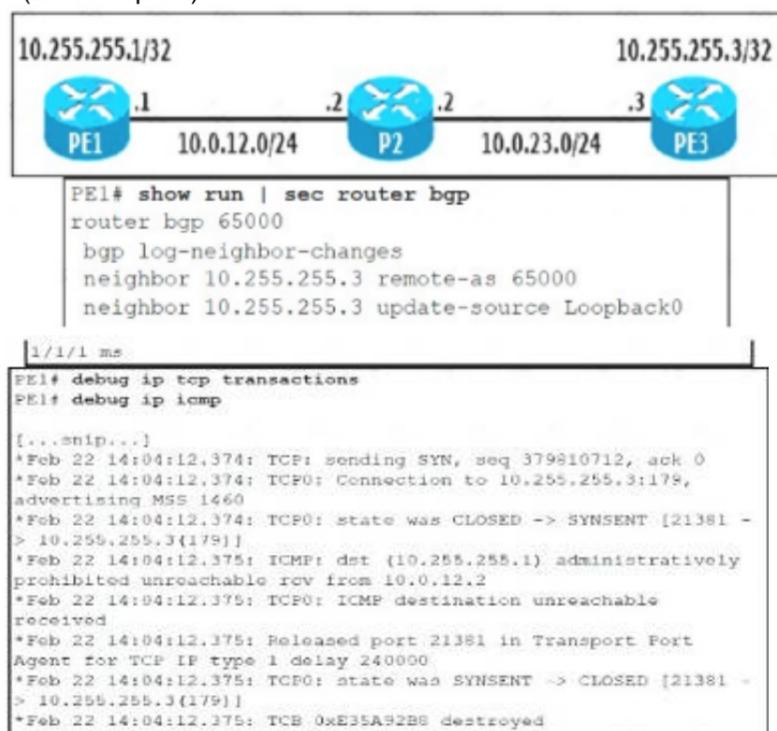
**Explanation:**

From the output we notice that the destination IP address is not correct. The NMS server IP address should be 10.221.10.11, not 10.221.10.10. Therefore we have to change this information under "flow exporter ..." configuration.

NetFlow configuration reference: <https://www.cisco.com/c/en/us/td/docs/iosxml/ios/fnetflow/configuration/15-mt/fnf-15-mt-book/cfg-de-fnflow-exprts.html>

**NEW QUESTION 136**

- (Exam Topic 3)



Refer to the exhibit. The administrator is troubleshooting a BGP peering between PE1 and PE3 that is unable to establish Which action resolves the issue?

- A. P2 must have a route to PE3 to establish a BGP session to PE1
- B. Disable sending ICMP unreachables on P2 to allow PE1 to establish a session with PE3
- C. Ensure that the PE3 loopback address is used as a source for BGP peering to PE1
- D. Remove the traffic filtering rules on P2 blocking the BGP communication between PE1 and PE3

**Answer: C**

**NEW QUESTION 137**

- (Exam Topic 3)

Which IPv6 feature enables a device to reject traffic when it is originated from an address that is not stored in the device binding table?

- A. IPv6 Snooping
- B. IPv6 Source Guard
- C. IPv6 DAD Proxy
- D. IPv6 RA Guard

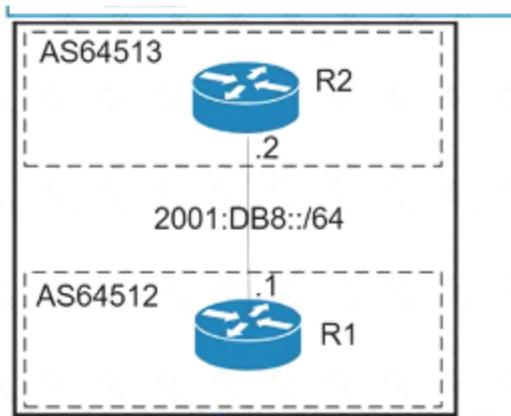
**Answer: B**

**Explanation:**

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6\\_fhsec/configuration/xs-3s/ipv6f-xe-3s-book/ipv6-src-guar](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6_fhsec/configuration/xs-3s/ipv6f-xe-3s-book/ipv6-src-guar)

**NEW QUESTION 140**

- (Exam Topic 3)



```
R1#show ipv6 access-list
IPv6 access list inbound-acl
  permit tcp host 2001:DB8::2 eq bgp host 2001:DB8::1 (75 matches) sequence 20
  permit tcp host 2001:DB8::2 host 2001:DB8::1 eq bgp (17 matches) sequence 30
  deny ipv6 2001:DB8::/32 any (77 matches) sequence 40
  permit ipv6 any (20 matches) sequence 1000
R1#ping ipv6 2001:DB8::2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 2001:DB8::2, timeout is 2 seconds:
```

```
.....
Success rate is 0 percent (0/5)
R1#show ipv6 access-list
IPv6 access list inbound-acl
  permit tcp host 2001:DB8::2 eq bgp host 2001:DB8::1 (77 matches) sequence 20
  permit tcp host 2001:DB8::2 host 2001:DB8::1 eq bgp (19 matches) sequence 30
  deny ipv6 2001:DB8::/32 any (95 matches) sequence 40
  permit ipv6 any (23 matches) sequence 1000
R1#
```

Refer to the exhibit. An engineer applied filter on R1 The interface flapped between R1 and R2 and cleaning the BGP session did not restore the BGP session and failed Which action must the engineer take to restore the BGP session from R2 to R1?

- A. Apply the IPv6 traffic filter in the outbound direction on the interface
- B. ICMPv6 must be permitted by the IPv6 traffic filter
- C. Enable the BGP session, which went down when the session was cleared.
- D. Swap the source and destination IP addresses in the IPv6 traffic filter

**Answer: B**

**NEW QUESTION 145**

- (Exam Topic 3)

Refer to the exhibit.

```
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 vrf
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
```

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 admin group admin local enable 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 default group admin local if-authenticated command instead.

Answer: C

**NEW QUESTION 148**

- (Exam Topic 3)

Refer to the exhibit.

```
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
```

Although summarization is configured for R1 to receive 10.0.0.0/8, more specific routes are received by R1. How should the 10.0.0.0/8 summary route be received from the neighbor, attached to R1 via Fast Ethernet0/0 interface?

- A. R1 should configure the ip summary-address eigrp <AS number> 10.0.0.0.255.0.0.0 command under the Fast Ethernet 0/0 interface.
- B. The summarization condition is not met Router 10 1 100.10 requires a route for 10 0.0.0/8 that points to null 0
- C. The summarization condition is not met
- D. The network 10.1.100.0/24 should be changed to 172.16.0.0/24.
- E. R1 should configure the ip summary-address eigrp <AS number> 10.0.0.0 0.0.0.255 command under the Fast Ethernet 0/0 interface.

Answer: D

**NEW QUESTION 149**

- (Exam Topic 3)

Refer to the exhibit.

```
crypto isakmp policy 1
 authentication pre-share
 crypto isakmp key cisco47 address 0.0.0.0
 |
 crypto ipsec transform-set trans2 esp-des esp-md5-hmac
 mode transport
 |
 crypto ipsec profile vpnprof
 set transform-set trans2
 |
 interface Tunnel0
 bandwidth 1000
 ip address 10.0.0.1 255.255.255.0
 ip mtu 1400
 ip nhrp authentication dontell
 ip nhrp map multicast dynamic
 ip nhrp network-id 99
 ip nhrp holdtime 300
 no ip split-horizon eigrp 1
 ip tcp adjust-mss 1360
 delay 1000
 tunnel source GigabitEthernet 0/0/0
 tunnel mode gre multipoint
 tunnel key 100000
 tunnel protection ipsec profile vpnprof
 |
 interface FastEthernet0/0/0
 ip address 172.17.0.1 255.255.255.0
 |
 interface FastEthernet0/0/1
 ip address 192.168.0.1 255.255.255.0
 |
 router eigrp 1
 network 10.0.0.0 0.0.0.255
 network 192.168.0.0 0.0.0.255
```

A network administrator must configure DMVPN tunnels between the hub and spoke with dynamic spoke-to-spoke tunnel capabilities using EIGRP. Which tunnel interface command must the network administrator configure to establish an EIGRP peer?

- A. no ip next-hop-self eigrp 1
- B. ip next-hop-self eigrp 1
- C. no ip nhrp next-hop-self
- D. ip nhrp next-hop-self

Answer: C

**NEW QUESTION 153**

- (Exam Topic 3)

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 le 23 ip prefix-list PL-1 permit 0.0.0.0/0 le 32!router bgp 100neighbor 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 ge 23 ip prefix-list PL-1 permit 0.0.0.0/0 le 32!router bgp 100neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 prefix-list PL-1 in
- C. access-list 1 deny 172.16.0.0 0.0.254.255 access-list 1 permit any!router bgp 100neighbor 192.168.100.2 remote-as 200neighbor 192.168.100.2 distribute-list 1 in
- D. ip prefix-list PL-1 deny 172.16.0.0/16 ip prefix-list PL-1 permit 0.0.0.0/0!router bgp 100neighbor 192.168.100.2 remote-as 200 neighbor 192.168.100.2 prefix-list PL-1 in

Answer: A

**Explanation:**

“Blocking all subnets of 172.16.0.0/16 major network with a mask lower than 23 from coming in” would block 172.16.16.0/20.

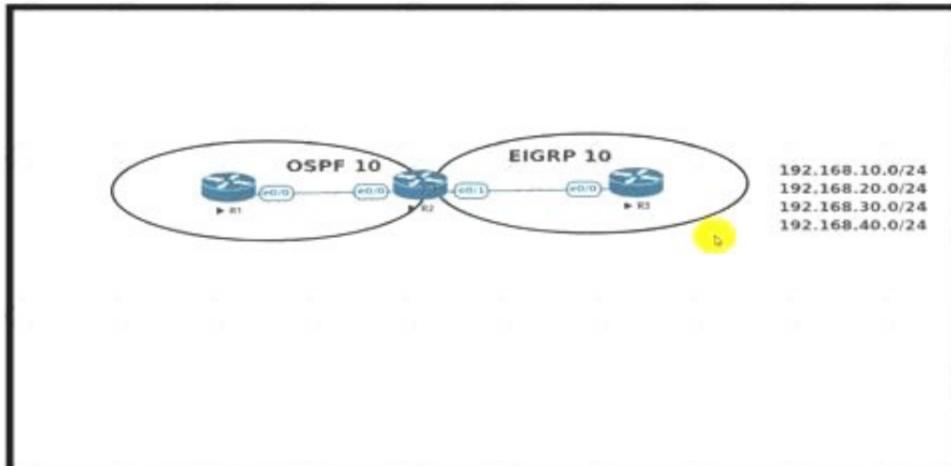
The first prefix-list “ip prefix-list PL-1 deny 172.16.0.0/16 le 23” means “all networks that fall within the 172.16.0.0/16 range AND that have a subnet mask of /23 or less” are denied.

The second prefix-list “ip prefix-list PL-1 permit 0.0.0.0/0 le 32” means allows all other prefixes.

**NEW QUESTION 156**

- (Exam Topic 3)

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?

```

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(config-router)#redistribute eigrp 10 subnets route-map RD

```

```

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

```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

**NEW QUESTION 160**

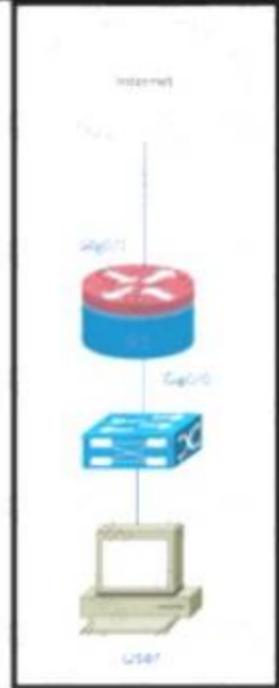
- (Exam Topic 3)

```
R1#show time-range

time-range entry: timer (active)
  periodic weekend 9:00 to 17:00
  used in: IP ACL entry
  used in: IP ACL entry

R1#show ip access-list interface gig0/0

Extended IP access list NO_Internet in
  10 deny tcp any any eq www time-range timer (active)
  20 deny tcp any any eq 443 time-range timer (active)
  30 permit ip any any
```



Refer to the exhibit. Users on a call center report that they cannot browse the internet on Saturdays during the afternoon. Which configuration resolves the issue?

- A)
 

```
interface gig0/0
ip access-group NO_Internet out
```
- B)
 

```
ip access-list extended NO_Internet
 15 permit tcp any any eq www
```
- C)
 

```
no time-range timer
```
- D)
 

```
time-range timer
no periodic weekend 9:00 to 17:00
periodic weekend 17:00 to 23:59
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

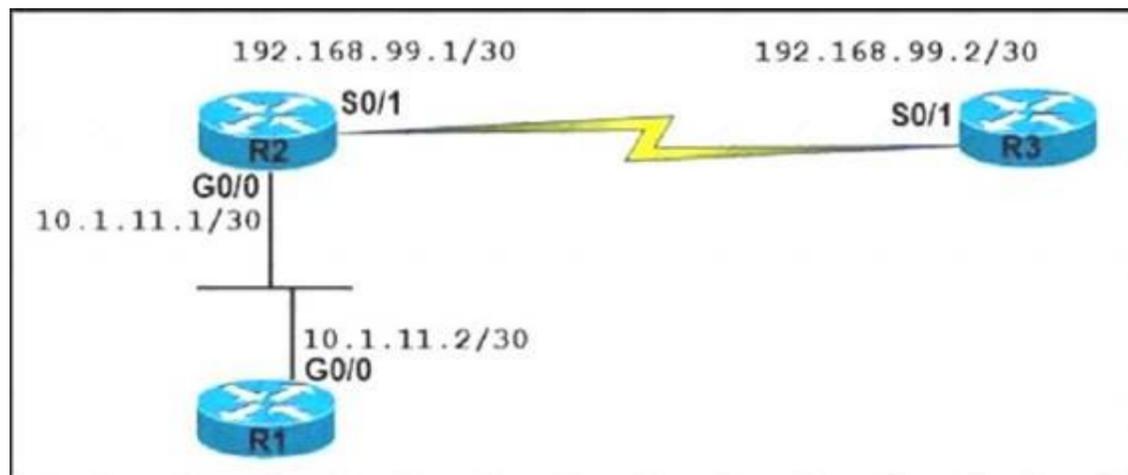
**NEW QUESTION 164**

- (Exam Topic 3)

Refer to the exhibit.

```
R2# show ip ospf neighbor
Neighbor ID Pri State Dead Time Address Interface
192.168.99.2 1 EXCHANGE/ - 00:00:36 192.168.99.1 Serial0/1
router-6#

R3# show ip ospf neighbor
Neighbor ID Pri State Dead Time Address Interface
192.168.99.1 1 EXSTART/ - 00:00:33 192.168.99.2 Serial0/1
```



An OSPF neighbor relationship between R2 and R3 is showing stuck in EXCHANGE/EXSTART state. The neighbor is established between R1 and R2. The network engineer can ping from R2 to R3 and vice versa, but the neighbor is still down. Which action resolves the issue?

- A. Restore the Layer 2/Layer 3 connectivity issue in the ISP network.
- B. Match MTU on both router interfaces or ignore MTU.
- C. Administrative "shut then no shut" both router interfaces.
- D. Enable OSPF on the interface, which is required.

**Answer: B**

**Explanation:**

After two OSPF neighboring routers establish bi-directional communication and complete DR/BDR election (on multi-access networks), the routers transition to the exstart state. In this state, the neighboring routers establish a master/slave relationship and determine the initial database descriptor (DBD) sequence number to use while exchanging DBD packets.

**Neighbors Stuck in Exstart/Exchange State**

The problem occurs most frequently when attempting to run OSPF between a Cisco router and another vendor's router. The problem occurs when the maximum transmission unit (MTU) settings for neighboring router interfaces don't match. If the router with the higher MTU sends a packet larger than the MTU set on the neighboring router, the neighboring router ignores the packet.

**NEW QUESTION 169**

- (Exam Topic 3)

```
R1#show bgp ipv6 unicast 2001:db8::1/128
BGP routing table entry for 2001:db8::1/128, version 3
Paths: (1 available, best #1, table Global-IPv6-Table)
Not advertised to any peer
Local
 2001:db8:33:33::33 (metric 128) from 2001:db8:11:11::11 (1.1.1.1)
  Origin IGP, metric 0, localpref 100, valid, internal, best
  Originator: 3.3.3.3, Cluster list: 1.1.1.1
```

Refer to the exhibit. An engineer examines the BGP update for the IPv6 prefix 2001:db8::1/128, which should have been summarized into a /64 prefix. Which sequence of actions achieves the summarization?

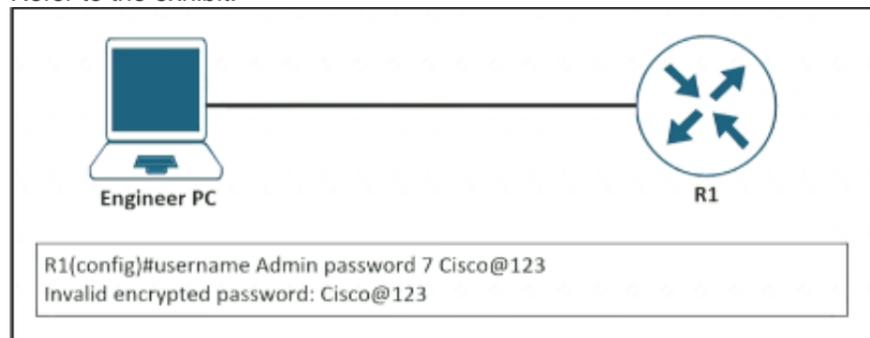
- A. R1 is a route reflector client of a RR with a router ID of 1.1.1.1, and the originator of the prefix has a router ID of 3.3.3.3. Both routers belong to different AS
- B. The prefix is not advertised to any peer and must be advertised using the network statement on R3.
- C. R1 is a route reflector with a router ID of 3.3.3.3, and the originator of the prefix is a route reflector client, which has a router ID of 3.3.3.3. Both routers belong to the same AS Configure an aggregate address on the router with ID 1.1.1.1 for the prefix
- D. R1 is a route reflector with a router ID of 1.1.1.1, and the originator of the prefix is a route reflector client, which has a router ID of 3.3.3.3. Both routers belong to the same AS Configure an aggregate address on the router with ID 1.1.1.1 for the prefix
- E. R1 is a route reflector client of a RR with a router ID of 1.1.1.1, and the originator of the prefix has a router ID of 3.3.3.3. Both routers belong to the same AS
- F. Configure an aggregate address on the router with ID 3.3.3.3 for the prefix.

**Answer: D**

**NEW QUESTION 170**

- (Exam Topic 3)

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. password encryption aes

- B. username Admin password Cisco@maedeh motamedi
- C. username Admin password 5 Cisco@maedeh motamedi
- D. username Admin secret Cisco@maedeh motamedi
- E. no service password-encryption
- F. service password-encryption

**Answer:** DF

#### NEW QUESTION 175

- (Exam Topic 3)

Refer to the exhibit.

```
ipv6 inspect udp idle-time 3600
ipv6 inspect name ipv6-firewall tcp
ipv6 inspect name ipv6-firewall udp
!
ipv6 access-list ipv6-internet
deny ipv6 any FEC0::/10
deny ipv6 any FF00::/8
permit ipv6 any FF02::/16
permit ipv6 any FF0E::/16
permit udp any any eq domain log
!
Interface gi0/1
ipv6 traffic-filter ipv6-internet in
ipv6 inspect ipv6-firewall in
ipv6 inspect ipv6-firewall out
```

A network administrator configured name resolution for IPv6 traffic to be allowed through an inbound access list. After the access list is applied to resolve the issue, name resolution still did not work. Which action does the network administrator take to resolve the name resolution problem?

- A. Remove `ipv6 inspect ipv6-firewall in` from interface `gi0/1`
- B. Add `permit udp any eq domain any log` in the access list.
- C. `inspect ipv6 inspect name ipv6-firewall udp 53` in global config.
- D. Add `permit any eq domain 53 any log` in the access list.

**Answer:** A

#### NEW QUESTION 178

- (Exam Topic 3)

Refer to the exhibit.

```
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
```

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. Configure IOS management plane protection using ACL 90 on interface E1/0
- C. Create an inbound ACL on interface E1/0 to deny SNMP from host 10.11.110.12
- D. Add a permit statement including the host 10.11.110.12 into ACL 90

**Answer:** C

#### NEW QUESTION 183

- (Exam Topic 3)

Which two technologies optimize MPLS infrastructure using bandwidth protection services when experiencing slow response? (Choose two.)

- A. IPLFA
- B. MPLS OAM

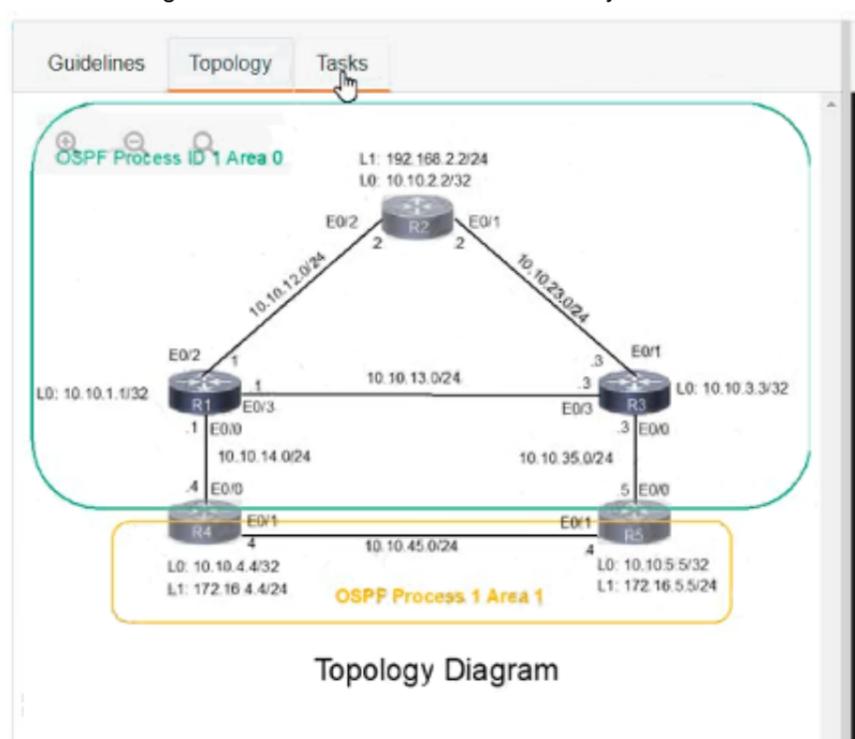
- C. VPLS
- D. SO-MPLS
- E. Fast-Rwoute

Answer: AE

**NEW QUESTION 184**

- (Exam Topic 3)

A network is configured with IP connectivity, and the routing protocol between devices started having problems right after the maintenance window to implement network changes. Troubleshoot and resolve to a fully functional network to ensure that:



Guidelines Topology **Tasks**

A network is configured with IP connectivity, and the routing protocol between devices started having problems right after the maintenance window to implement network changes. Troubleshoot and resolve to a fully functional network to ensure that:

1. Inter-area links have link authentication (not area authentication) using MD5 with the key 1 string CCNP.
2. R3 is a DR regardless of R2 status while R1 and R2 establish a DR/BDR relationship.
3. OSPF uses the default cost on all interfaces. Network reachability must follow OSPF default behavior for traffic within an area over intra-area VS inter-area links.
4. The OSPF external route generated on R4 adds link cost when traversing through the network to reach R2. A network command to advertise routes is not allowed.



R4

```
R2 R4 R5
R4>
R4>
R4>
R4>
R4>en
R4#sh run
Building configuration...

Current configuration : 1479 bytes
!
version 15.8
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R4
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
!
!
!
clock timezone EST -8 0
mmi polling-interval 60
no mmi auto-configure
no mmi pvc
--More--
```

```
R2 R4 R5
key chain CCNP
key 1
  key-string ccnp
  cryptographic-algorithm md5
!
!
!
!
!
!
ip address 172.16.4.4 255.255.255.0
!
interface Ethernet0/0
  ip address 10.10.14.4 255.255.255.0
  ip ospf authentication key-chain CCNP
  ip ospf 1 area 0
  duplex auto
!
interface Ethernet0/1
  ip address 172.16.45.4 255.255.255.0
  ip ospf 1 area 1
  duplex auto
!
interface Ethernet0/2
  no ip address
  shutdown
  duplex auto
!
interface Ethernet0/3
  no ip address
  shutdown
  duplex auto
```





```
R2#show ip ospf nei
R2#show ip ospf neighbor

Neighbor ID      Pri   State           Dead Time   Address      I
n
terface
10.10.1.1        1    FULL/BDR        00:00:38   10.10.12.1   E
thernet0/2
10.10.3.3        1    FULL/BDR        00:00:38   10.10.12.1   E
thernet0/1
R2#
```

**NEW QUESTION 186**

- (Exam Topic 3)

What is a function of the IPv6 DHCP Guard feature for DHCP messages?

- A. Only access lists are supported for matching traffic.
- B. All client messages are always switched regardless of the device role.
- C. It blocks only DHCP request messages.
- D. If the device is configured as a DHCP server, no message is switched.

**Answer: B**

**NEW QUESTION 190**

- (Exam Topic 3)

Refer to the exhibit.

```
RB#
*Sep 19 00:53:43.006: BGPNSF state: 10.10.10.3 went from nsf_not_active to
nsf_not_active
*Sep 19 00:53:43.006: BGP: 10.10.10.3 went from Established to Idle
*Sep 19 00:53:43.006: BGP: 10.10.10.3 ADJCHANGE: neighbor 10.10.10.3 Down User reset
*Sep 19 00:53:43.006: BGP: 10.10.10.3 closing
*Sep 19 00:53:43.106: BGP_Router: unhandled major event code 128, minor 0

RD#show ip bgp neighbors 10.10.10.2
BGP neighbor is 10.10.10.2, remote AS 65101, external link
  BGP version 4, remote router ID 0.0.0.0
  BGP state = Active
  Last read 00:01:35, last write 00:01:35, hold time is 180, keepalive
interval is 60 seconds
  Default minimum time between advertisement runs is 30 seconds
  Address tracking is enabled, the RIB does have a route to 10.10.10.2
  Connections established 11; dropped 11
  Last reset 00:01:36, due to Peer closed the session
  External BGP neighbor may be up to 3 hops away.
  Transport(tcp) path-mtu-discovery is enabled
  No active TCP connection
```

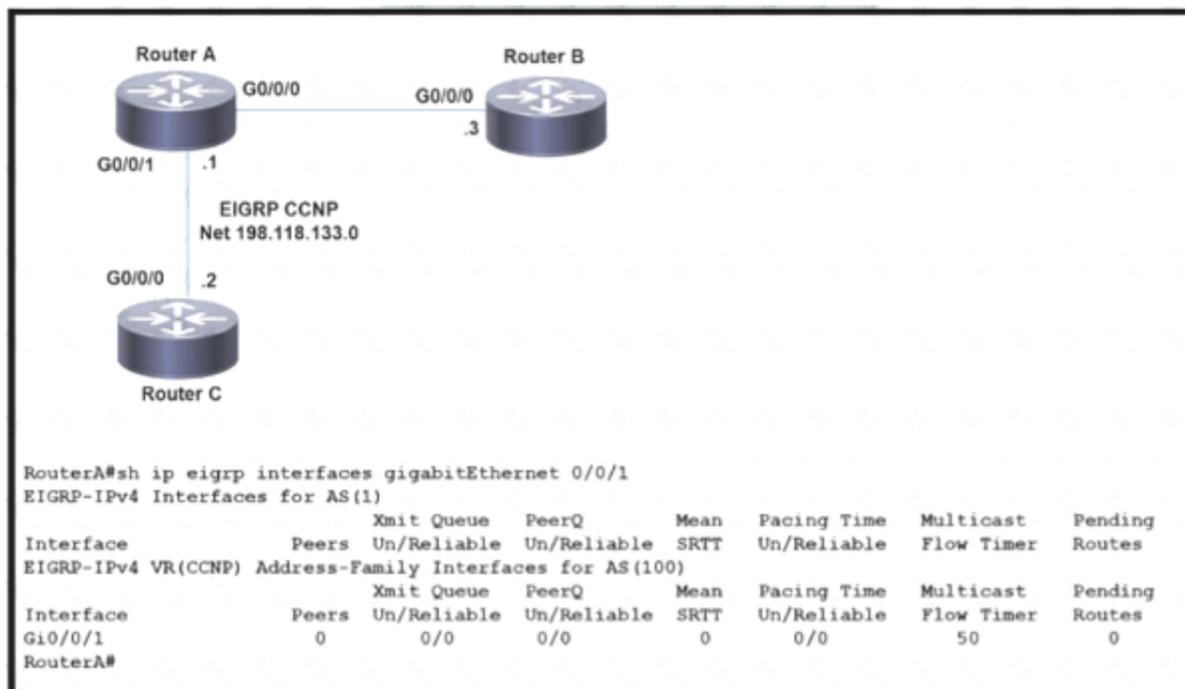
A NOC team receives a ticket that data traffic from RA to RF is not forwarded when the link between the RC-RE path goes down. All routers learn loopback IP through the IGP protocol. Which configuration resolves?

- A. RD(config)#router bgp B5201RD(config-router)# neighbor 10.10.10.2 update-source loopback 0
- B. RD(config-router)# neighbor bgp 65101RB(config-router)# neighbor 10.10.10.3 ebgp-multihop 3
- C. RB(config)# router bgp 65101RB(config)#neighbor 10.10.10.3 update-source loopback 0
- D. RD(config)# router bgp 65201RDI(config-router)# neighbor 10.10.10.2 ebgp-multihop 3

**Answer: B**

**NEW QUESTION 191**

- (Exam Topic 3)



Refer to the exhibit EIGRP adjacency between router A and router C is not working as expected Which two configurations resolve the issue? (Choose two )

A)

```

Router C
router eigrp CCNP
address-family ipv4 unicast autonomous-system 100
topology base
exit-af-topology
network 198.18.133.0
exit-address-family
    
```

B)

```

Router C
router eigrp CCNP
address-family ipv4 unicast autonomous-system 100
af-interface GigabitEthernet0/0/0
hold-time 90
exit-af-interface
topology base
exit-af-topology
exit-address-family
    
```

C)

```

Router A
router eigrp CCNP
address-family ipv4 unicast autonomous-system 100
af-interface GigabitEthernet0/0/1
hello-interval 15
topology base
exit-af-topology
network 192.18.133.0
exit-address-family
    
```

D)

```

Router A
router eigrp CCNP
address-family ipv4 unicast autonomous-system 100
topology base
exit-af-topology
network 198.18.133.0
exit-address-family
    
```

E)

```

Router A
router eigrp CCNP
address-family ipv4 unicast autonomous-system 10
af-interface GigabitEthernet0/0/1
hello-interval 15
hold-time 90
exit-af-interface
topology base
exit-af-topology
network 198.18.133.0
exit-address-family
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

E. Option E

Answer: BC

**NEW QUESTION 194**

- (Exam Topic 3)

Which mechanism must be chosen to optimize the reconvergence time for OSPF at company location 407173257 that is less CPU-intensive than reducing the hello and dead timers?

- A. BFD
- B. Dead Peer Detection keepalives
- C. SSO
- D. OSPF demand circuit

Answer: A

**NEW QUESTION 198**

- (Exam Topic 3)

```

R4#show ip flow export
Flow export v9 is enabled for main cache
Export source and destination details :
VRF ID : Default
Source(1)      10.0.0.10 (GigabitEthernet2/0)
Destination(1) 192.168.10.1 (656)
Version 9 flow records
254 flows exported in 41 udp datagrams
0 flows failed due to lack of export packet
0 export packets were sent up to process level
41 export packets were dropped due to no fib
0 export packets were dropped due to adjacency issues
0 export packets were dropped due to fragmentation failures
0 export packets were dropped due to encapsulation fixup failures

R4#show ip flow interface
GigabitEthernet2/0
ip flow ingress
    
```

Refer to the exhibit An enterprise operations team must monitor all application server traffic in the data center The team finds that traffic coming from the hub site from R3 and R6 rs monitored successfully but traffic destined to the application server is not monitored Which action resolves the issue?

A)

```

R4(config)#int gigabitEthernet 1/0
R4(config-if)#ip flow ingress
    
```

B)

```

R1(config)#int gigabitEthernet 0/0
R1(config-if)#ip flow egress
    
```

C)

```

R4(config)#int gigabitEthernet 2/0
R4(config-if)#ip flow egress
    
```

D)

```

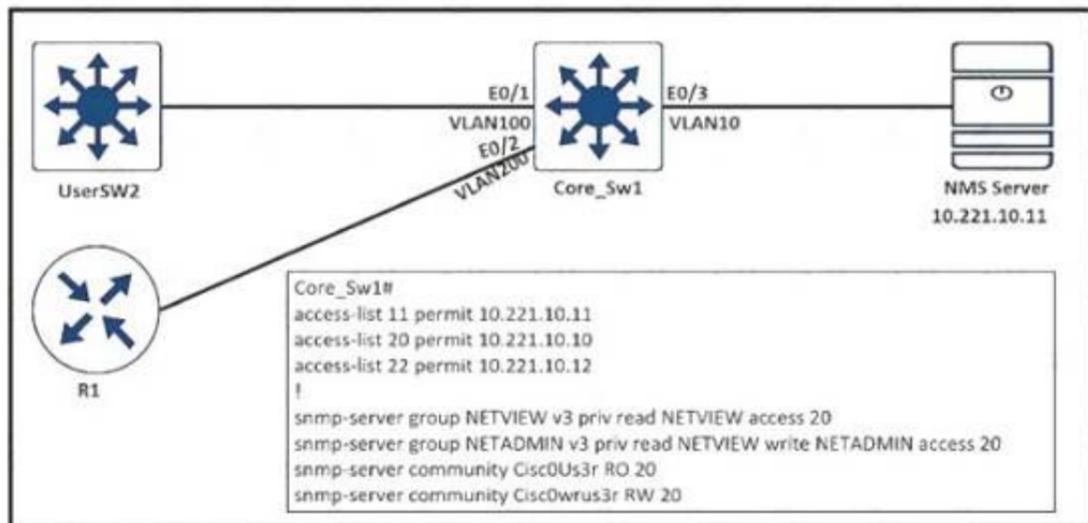
R3(config)#int gigabitEthernet 0/0
R3(config-if)#ip flow egress
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

**NEW QUESTION 202**

- (Exam Topic 3)  
 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. snmp-server group NETVIEW v2c priv read NETVIEW access 20
- B. access-list 20 permit 10.221.10.11
- C. access-list 20 permit 10.221.10.12
- D. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22

**Answer: B**

**NEW QUESTION 204**

- (Exam Topic 3)  
 What is LDP label binding?

- A. neighboring router with label
- B. source prefix with label
- C. destination prefix with label
- D. two routers with label distribution session

**Answer: C**

**Explanation:**

Text Description automatically generated with medium confidence  
 For every IGP IP prefix in its IP routing table, each LSR creates a local binding—that is, it binds a label to the IPv4 prefix. The LSR then distributes this binding to all its LDP neighbors. These received bindings become remote bindings. The neighbors then store these remote and local bindings in a special table, the label information base (LIB). Each LSR has only one local binding

**NEW QUESTION 207**

- (Exam Topic 3)  
 Refer to the exhibit.

```
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
```

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.

**Answer: D**

**NEW QUESTION 211**

- (Exam Topic 3)  
 A customer reports that traffic is not passing on an EIGRP enabled multipoint interface on a router configured as below:  
 interface Serial0/0 no ip address  
 interface Server0/0/0.9 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. Enable split horizon
- C. Disable poison reverse
- D. Disable split horizon

Answer: D

**NEW QUESTION 213**

- (Exam Topic 2)

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

Answer: B

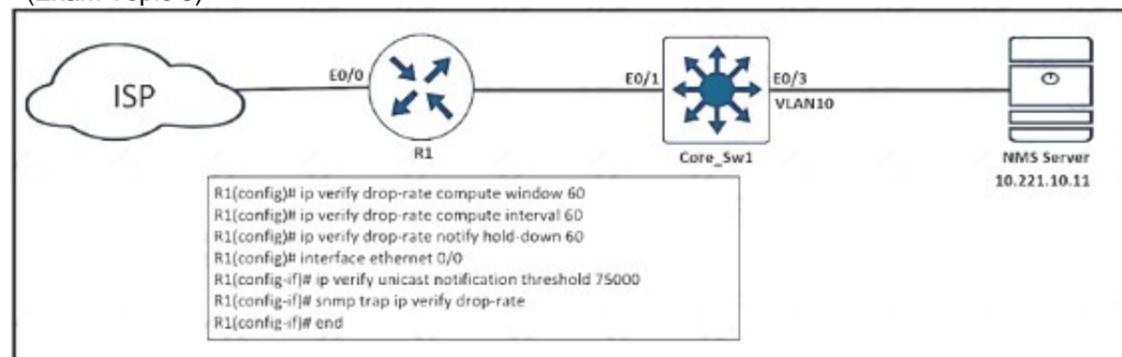
**Explanation:**

The IPv6 Router Advertisement Guard feature provides support for allowing the network administrator to block or reject unwanted or rogue router advertisement guard messages that arrive at the network device platform. Router Advertisements are used by devices to announce themselves on the link. The IPv6 Router Advertisement Guard feature analyzes these router advertisements and filters out router advertisements that are sent by unauthorized devices. Certain switch platforms can already implement some level of rogue RA filtering by the administrator configuring Access Control Lists (ACLs) that block RA ICMP messages that might be inbound on "user" ports.

Reference: <https://datatracker.ietf.org/doc/html/rfc6104>

**NEW QUESTION 214**

- (Exam Topic 3)



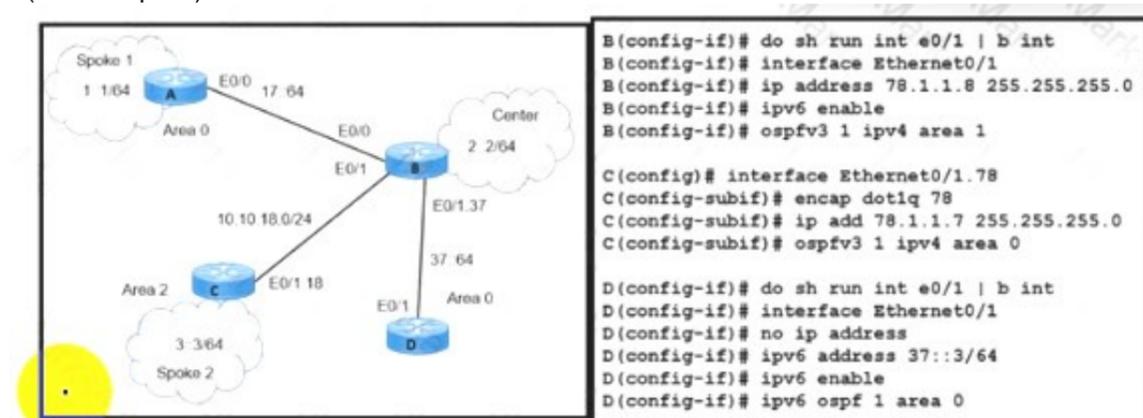
Refer to the exhibit. An engineer configured SNMP traps to record spoofed packets drop of more than 48000 a minute on the ethernet0/0 interlace. During an IP spoofing attack, the engineer noticed that no notifications have been received by the SNMP server. Which configuration resolves the issue on R1?

- A. ip verify unicast notification threshold 48000
- B. ip verify unicast notification threshold 8000
- C. ip verify unicast notification threshold 800
- D. ip verify unicast notification threshold 80

Answer: C

**NEW QUESTION 219**

- (Exam Topic 3)



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 encapsulation dot1q 78 on the router C interface.
- C. Configure IPv6 on the routers B and C interfaces
- D. Configure OSPFv2 on the routers B and C interfaces

Answer: C

**NEW QUESTION 221**

- (Exam Topic 3)

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: S420T92E35F99
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 the issue?

- A. Change the WAN ACL to permit the UDP port 69 to allow TFTP
- B. Make the permit udp any eq tftp any entry the last entry in the WAN ACL.
- C. Change the WAN ACL to permit the entire UDP destination port range
- D. Shorten the file name to the 8+3 naming convention.

Answer: B

**NEW QUESTION 223**

- (Exam Topic 3)

```
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 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
- B. There is a permit in the ACL that allows this prefix into EIGRP
- C. The ACL should be modified to deny 10.10.10.0 0.0.0.255.
- 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.
- E. There is a permit in the ACL that allows this prefix into EIGRP
- F. The ACL should be modified to deny 10.10.10.0 255.255.255.0.

Answer: B

**NEW QUESTION 225**

- (Exam Topic 3)

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 reported distance greater than the feasible 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 feasible distance greater than the reported distance

Answer: D

**Explanation:**

From the exhibit, we notice network 172.29.0.0/16 was learned via two routes:

- + From 192.168.254.2 with FD = 307200 and AD = 281600
- + From 192.168.253.2 with FD = 410200 and AD = 352300

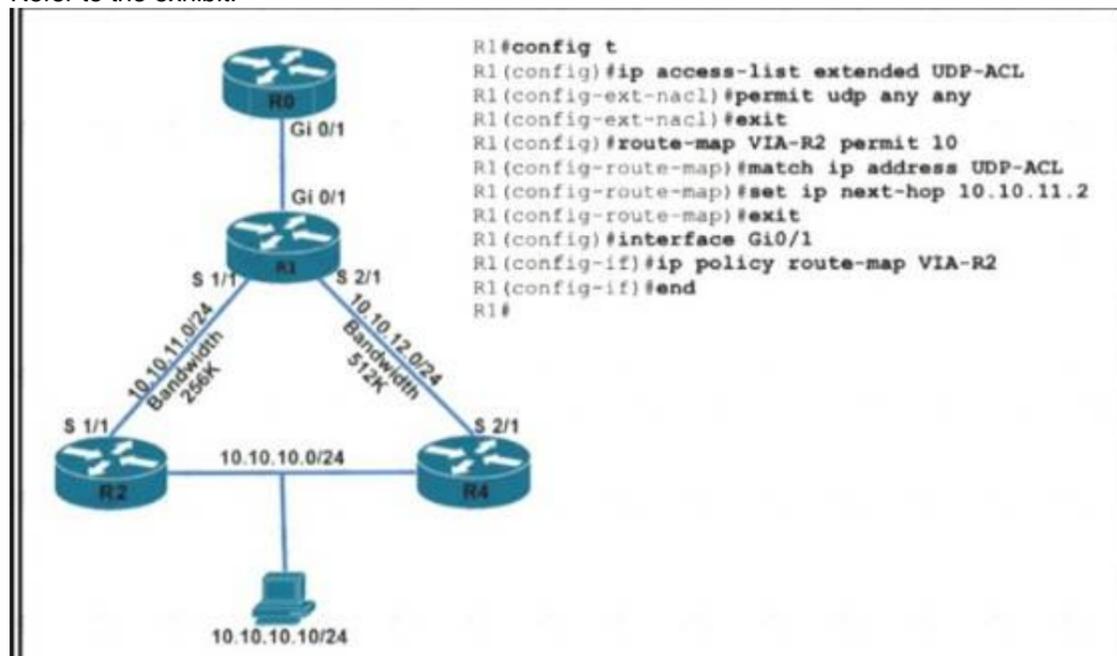
The first route is installed into the RIB as the successor route because of lower FD.

When the first route fails, router will not use the second route as it does not satisfy the feasibility condition. The feasibility condition states that, the Advertised Distance (AD, also called the reported distance) of a route must be lower than the feasible distance of the current successor route.

**NEW QUESTION 229**

- (Exam Topic 3)

Refer to the exhibit.



TCP traffic should be reaching host 10.10.10.10/24 via R2. Which action resolves the issue?

- A. TCP traffic will reach the destination via R2 without any changes
- B. Add a permit 20 statement in the route map to allow TCP traffic
- C. Allow TCP in the access list with no changes to the route map
- D. Set IP next-hop to 10.10.12.2 under the route-map permit 10 to allow TCP traffic.

Answer: C

**NEW QUESTION 230**

- (Exam Topic 3)

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?

- 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
- 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
- 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
- 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 area 0

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 231**

- (Exam Topic 3)

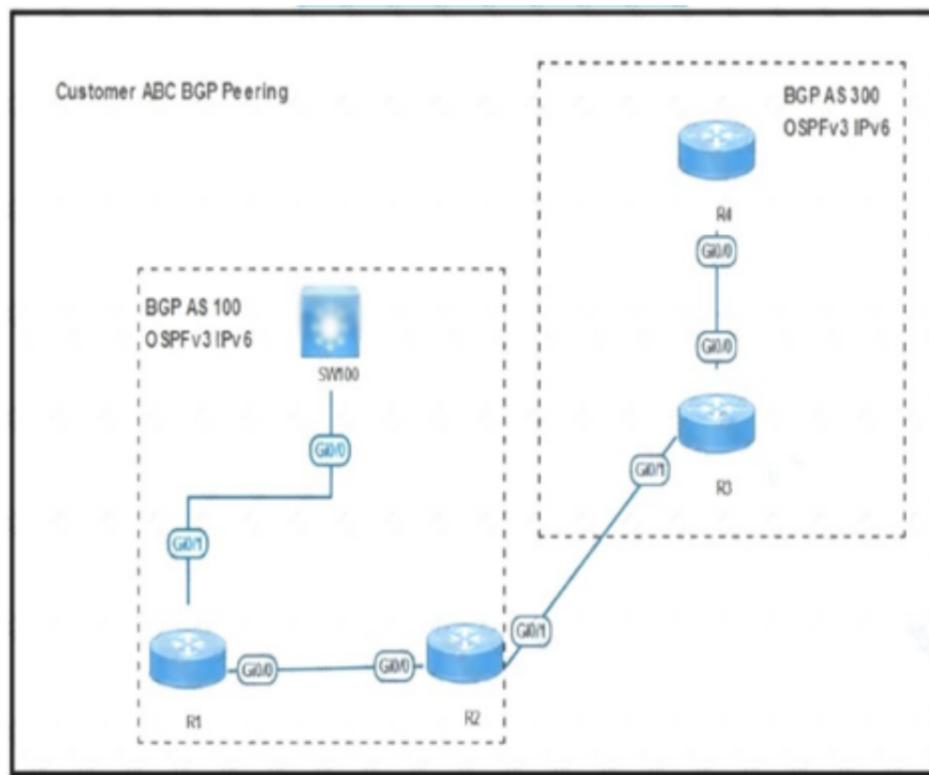
What is a characteristic of IPv6 RA Guard?

- A. RA messages are allowed from the host port to the switch
- B. It is unable to protect tunneled traffic
- C. It filters rogue RA broadcasts from connected hosts
- D. It is supported on the egress direction of the switch

Answer: C

**NEW QUESTION 232**

- (Exam Topic 3)



```

SW100#sh ip bgp ipv6 uni summ
BGP router identifier 100.0.0.1, local AS number 100
BGP table version is 1, main routing table version 1

Neighbor      V      AS MsgRcvd MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
2001:ABC:AABB:1100:1122:1111:2222:AAA1
      4      100      6      5      1      0      0 00:00:58      0

SW100#sh ip bgp ipv6 unicast
SW100#

R1#sh ip bgp ipv6 uni
BGP table version is 4, local router ID is 1.1.1.1
  Network      Next Hop      Metric LocPrf Weight Path
* i  2001::4/128  2001::4        0   100   0 300 i
*>i 2002::2/128  2001::2        0   100   0 i
R1#
R1#sh ipv6 route
O  2001::2/128 [110/1]
   via FE80::5200:C3FF:FE01:E600, GigabitEthernet0/0
B  2002::2/128 [200/0]
   via 2001::2
    
```

Refer to the exhibit SW100 cannot receive routes from R1 Which configuration resolves the issue?

- R1
 

```

router bgp 100
address-family ipv6
neighbor 2001::2 route-reflector-client
neighbor 2001:ABC:AABB:1100:1122:1111:2222:AAA2 route-reflector-client
      
```
- R2
 

```

router bgp 100
address-family ipv6
neighbor 2001::2
neighbor 2001::1 next-hop-self
      
```
- R1
 

```

router bgp 100
address-family ipv6
neighbor 2001::2 route-reflector-client
neighbor 2001:ABC:AABB:1100:1122:1111:2222:AAA2 route-reflector-client
      
```
- R2
 

```

router bgp 100
address-family ipv6
neighbor 2001::2
neighbor 2001::1 as-override
      
```

```

○ R1
router bgp 100
address-family ipv6
no synchronization

R2
router bgp 100
address-family ipv6
no synchronization
SW100
router bgp 100
address-family ipv6
no synchronization

○ R1
router bgp 100
address-family ipv6
redistribute connected

R2
router bgp 100
address-family ipv6
redistribute connected
    
```

- A. Option A
- B. Option B
- C. Option C
- D. Option C

Answer: A

**NEW QUESTION 236**

- (Exam Topic 3)

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?

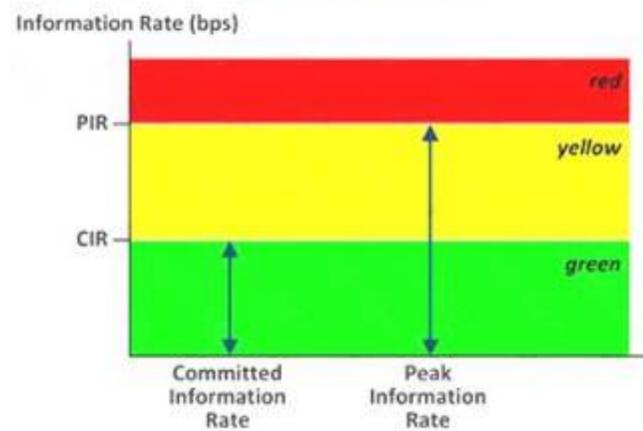
- A. Police the cir for BGP, conform-action transmit, and exceed action transmit.
- B. Shape the pir for BGP, conform-action set-prec-transmit, and exceed action set-frde-transmit.
- C. Shape the cir for BG
- D. conform-action transmit, and exceed action transmit.
- E. Police the pir for BGP, conform-action set-prec-transmit, and exceed action set-clp-transmit.

Answer: D

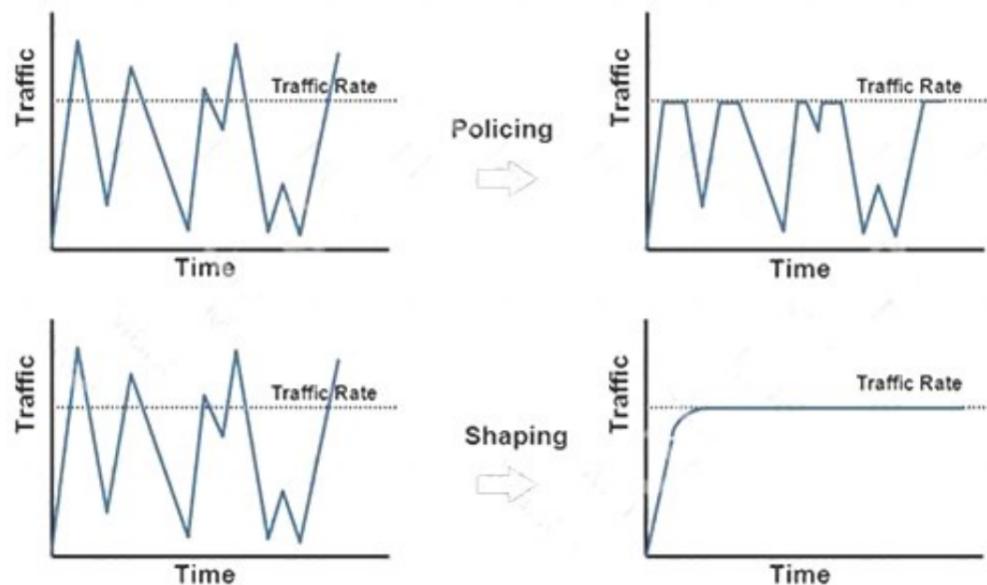
**Explanation:**

CIR (Committed Information Rate) is the minimum guaranteed traffic delivered in the network.  
 PIR (Peak Information Rate) is the top bandwidth point of allowed traffic in a non busy times without any guarantee.

**Two Rates & Three Colors**



- + Policing: is used to control the rate of traffic flowing across an interface. During a bandwidth exceed (crossed the maximum configured rate), the excess traffic is generally dropped or remarked. The result of traffic policing is an output rate that appears as a saw-tooth with crests and troughs. Traffic policing can be applied to inbound and outbound interfaces. Unlike traffic shaping, QoS policing avoids delays due to queuing. Policing is configured in bytes.
- + Shaping: retains excess packets in a queue and then schedules the excess for later transmission over increments of time. When traffic reaches the maximum configured rate, additional packets are queued instead of being dropped to proceed later. Traffic shaping is applicable only on outbound interfaces as buffering and queuing happens only on outbound interfaces. Shaping is configured in bits per second.



Therefore in this case we can only policing, not shaping as traffic shaping is applicable only on outbound interfaces as buffering and queuing happens only on outbound interfaces. Moreover, BGP traffic is not important so we can drop the excess packets without any problems. And we only policing the PIR traffic so that the route processor is not overwhelmed by BGP calculation. Note: The “set-prec-transmit” is the same as “transmit” command except it sets the IP Precedence level as well. The “set-clp-transmit” sets the ATM Cell Loss Priority (CLP) bit from 0 to 1 on the ATM cell and transmits the packet.

**NEW QUESTION 240**

- (Exam Topic 3)

```
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 Ethernet0/0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 Ethernet0/1 198.51.100.1 2 name ISP2
```

Refer to the exhibit. After recovering from a power failure. Ethernet0/1 stayed down while Ethernet0/0 returned to the up/up state The default route through ISP1 was not reinstated in the routing table until Ethernet0/1 also came up Which action resolves the issue?

- A. Reference the track object 1 in both static default routes
- B. Remove the references to the interface names from both static default routes
- C. Configure the default route through ISP1 with a higher administrative distance than 2.
- D. Add a static route to the 8.8.8.8/32 destination through the next hop 203.0.113.1

**Answer: D**

**NEW QUESTION 245**

- (Exam Topic 3)

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. Rate-limit SSH traffic to ensure dedicated bandwidth.
- B. Apply CoPP on the control plane interface.
- C. Increase the IP precedence value of SSH traffic to 6.
- D. Apply CoPP on the WAN interface inbound direction.

**Answer: B**

**Explanation:**

The problem is “SSH traffic does not match in the ACL” and “CoPP policy is applied for receiving SSH traffic from the WAN interface” so we should apply CoPP on the control plane interface instead.

**NEW QUESTION 249**

- (Exam Topic 3)

Refer to the exhibit.

```
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
```

Which configuration enables OSPF for area 0 interfaces to adjacency with a neighboring router with the same VRF?

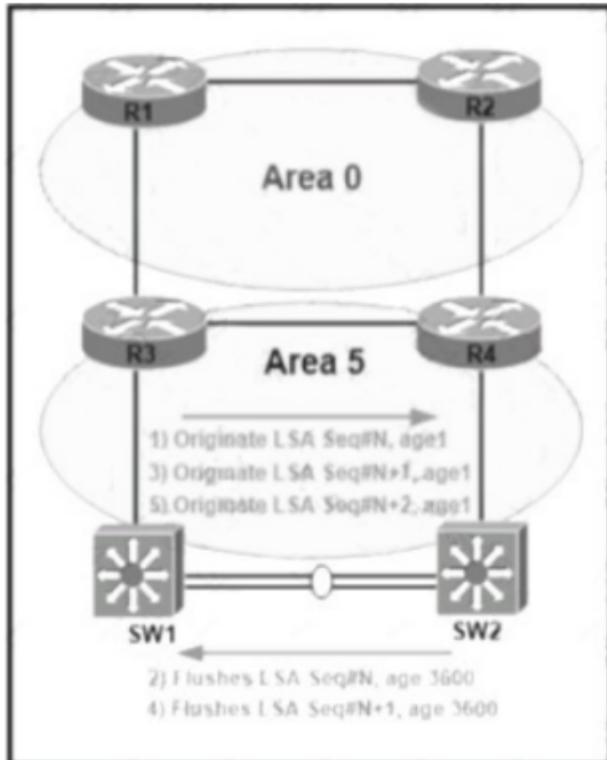
- A. router ospf 1 vrf CCNP interface Ethernet1 ip ospf 1 area 0.0.0.0 interface Ethernet2 ip ospf 1 area 0.0.0.0
- B. router ospf 1 interface Ethernet1 ip ospf 1 area 0.0.0.0 interface Ethernet2 ip ospf 1 area 0.0.0.0
- C. router ospf 1 vrf CCNP network 10.1.1.1 0.0.0.0 area 0 network 10.2.2.2 0.0.0.0 area 0
- D. router ospf 1 vrf CCNP network 10.0.0.0 0.0.255.255 area 0

Answer: C

**NEW QUESTION 252**

- (Exam Topic 3)

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

Answer: D

**NEW QUESTION 256**

- (Exam Topic 3)

An engineer received a ticket about a router that has reloaded. The monitoring system graphs show different traffic patterns between logical and physical interfaces when the router is rebooted. Which action resolves the issue?

- A. Configure the snmp ifindex persist command globally.
- B. Clear the logical interfaces with snmp ifindex clear command
- C. Configure the snmp ifindex persist command on the physical interfaces.
- D. Trigger a new snmpwalk from the monitoring system to synchronize interface OIDs

Answer: A

**NEW QUESTION 259**

- (Exam Topic 3)

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 ignore
- B. ip nhrp registration no-registration
- C. ip nhrp registration dynamic
- D. ip nhrp registration no-unique

Answer: D

**NEW QUESTION 264**

- (Exam Topic 3)

Refer to the exhibit.

```

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 enable
ipv6 nd ra suppress
ipv6 ospf 1 area 1
ipv6 dhcp server DHCPPOOL
    
```

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 dhcp server DHCPPOOL
- B. ipv6 address 2001:0:1:4::/64
- C. ipv6 nd ra suppress
- D. address prefix 2001:0:1:4::/64 lifetime infinite infinite

**Answer: C**

**NEW QUESTION 265**

- (Exam Topic 3)

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?

- 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
- 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
- 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
- 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

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
!
policy-map PM-COPP
class CLASS-SSH
no police 500000 conform-action transmit
police 500000 conform-action transmit exceed-action drop
    
```

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
!
```

```
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
```

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
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: C****NEW QUESTION 269**

- (Exam Topic 3)

Refer to the exhibit.

```
R1#sh run | s bgp
router bgp 65001
no synchronization
bgp router-id 10.100.1.50
bgp log-neighbor-changes
network 10.1.1.0 mask 255.255.255.252
network 10.1.1.12 mask 255.255.255.252
network 10.100.1.50 mask 255.255.255.255
timers bgp 20 60
neighbor R2 peer-group
neighbor R4 peer-group
neighbor 10.1.1.2 remote-as 65001
neighbor 10.1.1.2 peer-group R2
neighbor 10.1.1.14 remote-as 65001
neighbor 10.1.1.14 peer-group R4
no auto-summary
```

While troubleshooting a BGP route reflector configuration, an engineer notices that reflected routes are missing from neighboring routers. Which two BGP configurations are needed to resolve the issue? (Choose two)

- A. neighbor 10.1.1.14 route-reflector-client
- B. neighbor R2 route-reflector-client
- C. neighbor 10.1.1.2 allowas-in
- D. neighbor R4 route-reflector-client
- E. neighbor 10.1.1.2 route-reflector-client

**Answer: AE****NEW QUESTION 272**

- (Exam Topic 3)

An engineer must establish a connection between two CE routers for two customers with overlapping IP addresses. Customer\_a is connected to interfaces Gig0/0, and Customer\_b is connected to interfaces Gig0/1. Routers CE1 and CE2 are configured as follows:

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

Drag and drop the code snippets from the right onto the boxes in the configuration to establish the needed connection. Snippets may be used more than once.

```

CE1
interface Gig0/0
ip vrf forwarding 
ip address 
!
interface Gig0/1
ip vrf forwarding 
ip address 

CE2
interface Gig0/0
ip vrf forwarding 
ip address 
!
interface Gig0/1
ip vrf forwarding 
ip address
        
```

customer\_a

customer\_b

192.168.1.1 255.255.255.0

192.168.1.2 255.255.255.0

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```

CE1
interface Gig0/0
ip vrf forwarding customer_a
ip address 192.168.1.1 255.255.255.0
!
interface Gig0/1
ip vrf forwarding customer_b
ip address 192.168.1.2 255.255.255.0

CE2
interface Gig0/0
ip vrf forwarding customer_a
ip address 192.168.1.1 255.255.255.0
!
interface Gig0/1
ip vrf forwarding customer_b
ip address 192.168.1.2 255.255.255.0
        
```

customer\_a

customer\_b

192.168.1.1 255.255.255.0

192.168.1.2 255.255.255.0

**NEW QUESTION 273**

- (Exam Topic 3)

```

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?

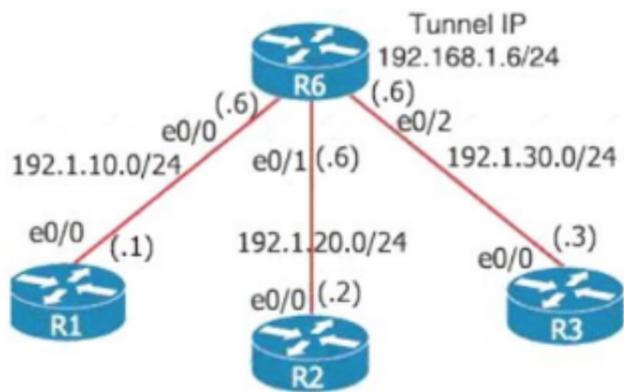
- A. Rediscover all the router interfaces through SNMP after the router is reloaded
- B. Save the router configuration to startup-config before reloading the router
- C. Configure SNMP to use static OIDs referring to individual router interfaces
- D. Configure SNMP interface index persistence on the router

Answer: D

**NEW QUESTION 275**

- (Exam Topic 3)

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 e0/1
tunnel mode gre multipoint
ip nhrp nhs 192.168.1.6
ip nhrp map 192.168.1.6 192.1.10.6
```

B)

```
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
```

C)

```
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
```

D)

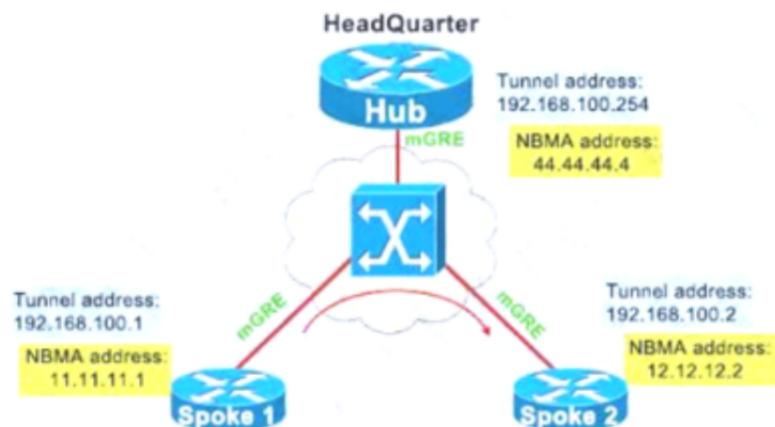
```
interface Tunnel 1
ip address 192.168.1.1 255.255.255.0
tunnel source e0/0
tunnel mode gre multipoint
ip nhrp network-id 1
ip nhrp nhs 192.168.1.6
ip nhrp map 192.168.1.6 192.1.10.6
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**Explanation:**

We have an example of how to configure DMVPN Phase II and we show the configuration here for your reference:  
 Diagram Description automatically generated



DMVPN Phase II – Dynamic Mapping  
 Text Description automatically generated

Hub	Spoke 1	Spoke 2
interface tunnel 1 ip address 192.168.100.254 255.255.255.0 tunnel source 44.44.44.4 tunnel mode gre multipoint ip nhrp network 10	interface tunnel 1 ip address 192.168.100.1 255.255.255.0 tunnel source 11.11.11.1 tunnel mode gre multipoint ip nhrp network 10 ip nhrp map 192.168.100.254 44.44.44.4 ip nhrp nhs 192.168.100.254	interface tunnel 1 ip address 192.168.100.2 255.255.255.0 tunnel source 12.12.12.2 tunnel mode gre multipoint ip nhrp network 10 ip nhrp map 192.168.100.254 44.44.44.4 ip nhrp nhs 192.168.100.254

Note: Although Phase II – Dynamic Mapping is “dynamic” but we still need to add a static entry for the hub because without that entry, the NHRP registration cannot be sent.

**NEW QUESTION 277**

- (Exam Topic 3)

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 source-interface GigabitEthernet 1/1
- B. Configure ip tacacs source-ip 192.168.100.55
- C. Configure ip tacacs-server source-ip 192.168.100.55
- D. Configure ip tacacs-server source-interface GigabitEthernet 1/1

**Answer: A**

**NEW QUESTION 281**

- (Exam Topic 3)

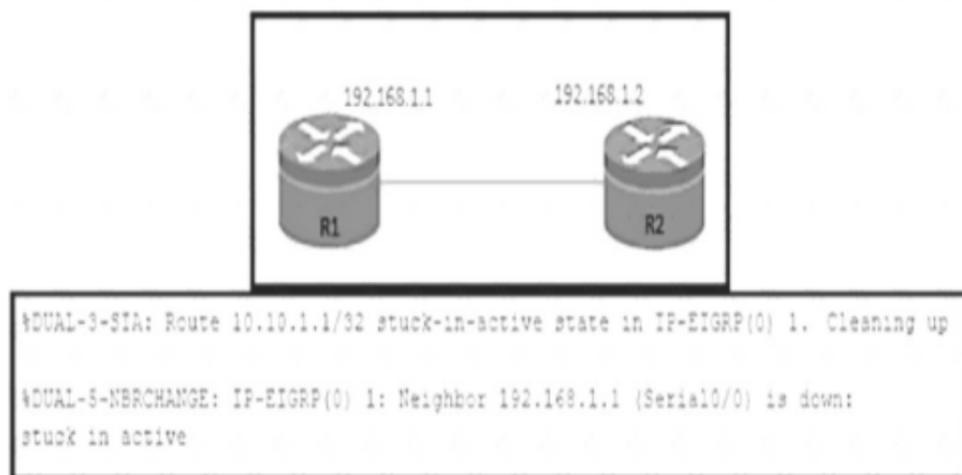
An engineer failed to run diagnostic commands on devices using Cisco DNA Center. Which action in Cisco DNA Center resolves the issue?

- A. Enable Command Runner
- B. Enable APIs
- C. Enable CDP
- D. Enable Secure Shell

**Answer: A**

**NEW QUESTION 282**

- (Exam Topic 3)



Refer to the exhibit. An engineer notices a connectivity problem between routers R1 and R2. The frequency of this problem is high during peak business hours. Which action resolves the issue?

- A. Increase the MTU on the interfaces that connect R1 and R2.
- B. Increase the available bandwidth between R1 and R2.
- C. Decrease the EIGRP keepalive and hold down timers on R1 and R2.
- D. Set static EIGRP neighborship between R1 and R2.

**Answer: B**

**NEW QUESTION 287**

- (Exam Topic 3)

Which two label distribution methods are used by routers in MPLS? (Choose two )

- A. targeted hello message
- B. LDP discovery hello message
- C. LDP session protection message
- D. downstream unsolicited
- E. downstream on demand

**Answer: DE**

**NEW QUESTION 290**

- (Exam Topic 3)

What are the two goals of micro BFD sessions? (Choose two.)

- A. The high bandwidth member link of a link aggregation group must run BFD
- B. Run the BFD session with 3x3 ms hello timer
- C. Continuity for each member link of a link aggregation group must be verified
- D. Eny member link on a link aggregation group must run BFD
- E. Each member link of a link aggregation group must run BFD.

Answer: CE

**Explanation:**

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute\\_bfd/configuration/xe-16-8/irb-xe-16-8-book/irb-micr](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_bfd/configuration/xe-16-8/irb-xe-16-8-book/irb-micr)

**NEW QUESTION 295**

- (Exam Topic 3)

Refer to the exhibits.

```

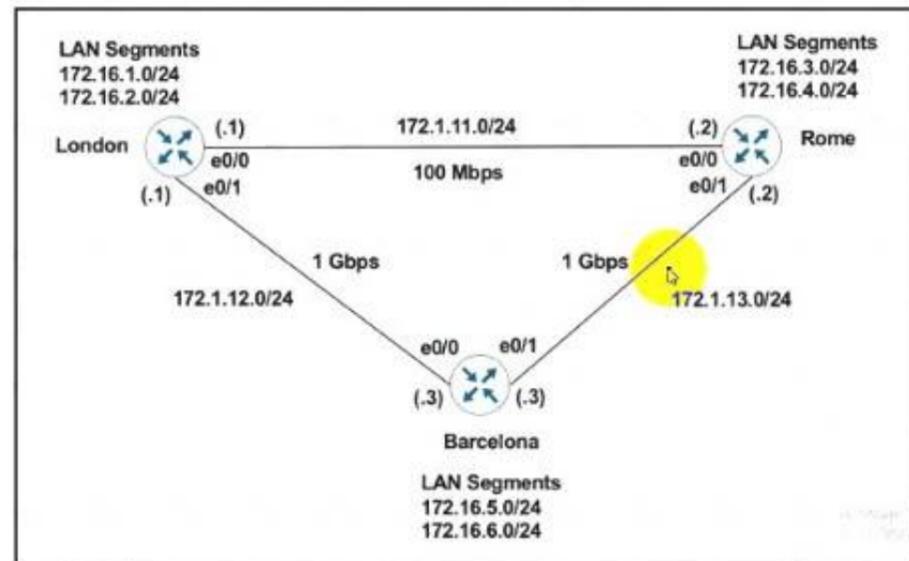
London - "show ip route" output

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

Rome - "show run | section router" output

router eigrp 111
 network 172.1.0.0
 network 172.16.0.0
 no auto-summary
    
```



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?

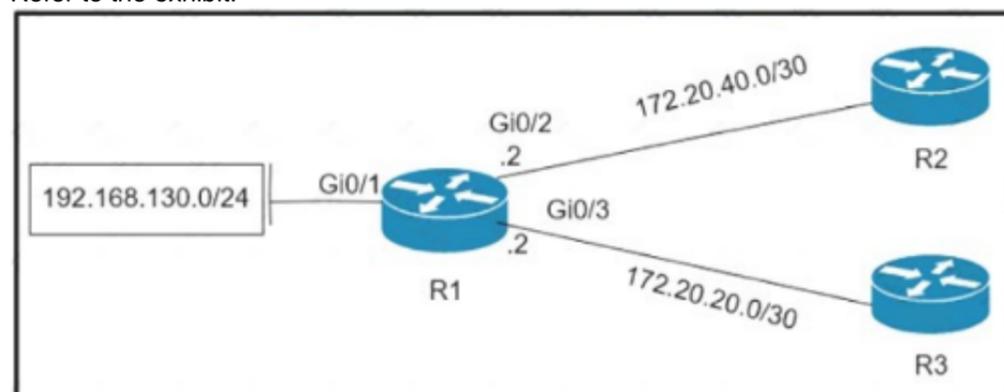
- A. Increase the bandwidth of the link between London and Barcelona
- B. Use the network statement on London to inject the 172.16.X.0/24 networks into EIGRP.
- C. Change the administrative distance of RIP to 150
- D. Use the network statement on Rome to inject the 172.16.X.0/24 networks into EIGRP

Answer: D

**NEW QUESTION 298**

- (Exam Topic 3)

Refer to the exhibit.



Which policy configuration on R1 forwards 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 172.20.20.1

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 172.20.40.1

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 172.20.20.2

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 172.20.40.2

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: B**

#### NEW QUESTION 299

- (Exam Topic 3)

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. Add transport input none
- C. Remove the IPv6 traffic filter from R1, which is blocking the Telnet.
- D. Remove the IPv6 traffic from R1, which is blocking the SSH

**Answer: C**

#### NEW QUESTION 300

- (Exam Topic 3)

```
!  
ip sla 1  
 icmp-echo 192.168.2.1 source-interface GigabitEthernet0/0/1  
 timeout 1000  
 threshold 1000  
 frequency 30  
 ip sla schedule 1 life forever start-time now  
!  
track 1 ip sla 1 reachability
```

Refer to the exhibit An engineer observes that every time the ICMP packet is lost at a polling interval, track 1 goes down, which causes unnecessary disruption and instability in the network. The engineer does not want the traffic to be rerouted if the loss of ICMP packets is negligible. If the packet loss is persistent for a longer duration, the track must go down and the traffic must be rerouted. Which action resolves the issue?

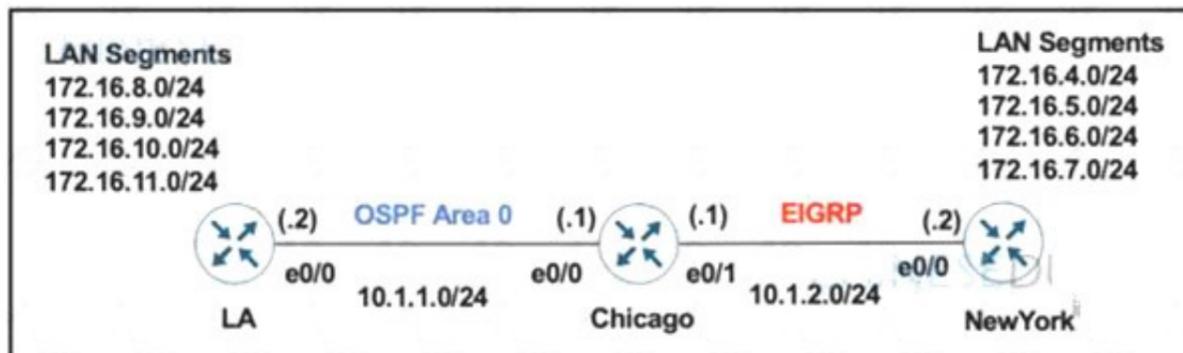
- A. Change the IP SLA schedule to run only at certain intervals.
- B. Increase the threshold value from 1000 to 1500.
- C. Increase the timeout value from 1000 to 1500
- D. Define a delay timer under track 1.

Answer: D

**NEW QUESTION 301**

- (Exam Topic 3)

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?

- interface E 0/1  
ip summary-address eigrp 100 172.16.0.0 255.255.0.0
- interface E 0/1  
ip summary-address eigrp 100 172.16.8.0 255.255.252.0
- router eigrp 100  
summary-address 172.16.8.0 255.255.252.0
- router eigrp 100  
summary-address 172.16.0.0 255.255.0.0

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

**NEW QUESTION 305**

- (Exam Topic 3)

Refer to the exhibit.

```
interface Tunnel0
 ip address 172.23.5.10 255.255.255.0
 no ip redirects
 ip mtu 1420
 ip nhrp authentication C@trts81
 ip nhrp map multicast 192.168.200.1
 ip nhrp map 172.23.5.1 192.168.200.1
 ip nhrp network-id 10
 ip nhrp holdtime 300
 ip nhrp shortcut
 ip ospf network broadcast
 ip ospf priority 0
 tunnel source 192.168.100.146
 tunnel mode gre multipoint
 tunnel key 100
```

A network engineer is adding a new spoke router into an existing DMVPN Phase 3 tunnel with a hub router to provide secure communication between sites Which additional configuration must the engineer apply to enable the tunnel to come up?

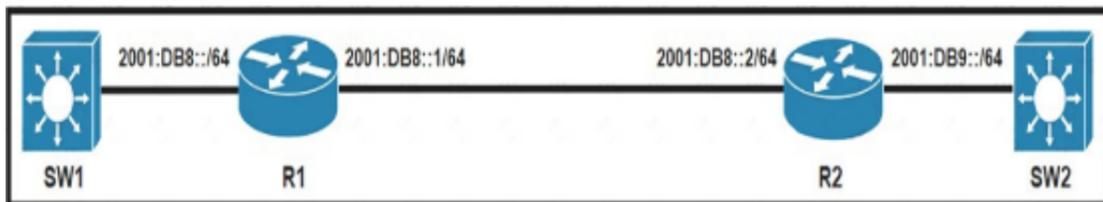
- A. ip nhrp registration no-unique
- B. ip nhrp server-only non-caching
- C. ip nhrp responder tunnel
- D. ip nhrpnhs 172.23.5.1

Answer: D

**NEW QUESTION 307**

- (Exam Topic 3)

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 65000no bgp default ipv4-unicast address-family ipv6 multicast network 2001:DB8::/64
- B. router bgp 65000no bgp default ipv4-unicast address-family ipv6 unicast network 2001:DB8::/64
- C. router bgp 64900no bgp default ipv4-unicast address-family ipv6 unicast network 2001:DB8::/64
- D. router bgp 64900no bgp default ipv4-unicast address-family ipv6 multicastneighbor 2001:DB8:7000::2 translate-update ipv6 multicast

**Answer: B**

**NEW QUESTION 310**

- (Exam Topic 3)

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 network broadcast
```
- C)

```
interface loopback0
 ip address 4.4.4.4 255.255.255.0
 ip ospf interface area 10
```
- D)

```
interface loopback0
 ip address 4.4.4.4 255.255.255.0
 ip ospf interface type network
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: A**

**Explanation:**

We tested this config in GNS3 (except the LAN interface) but R1 loopback0 was advertised normally on R2 and R2 could reach this loopback0.

```
R1#sh run | b. interface
interface Loopback0
 ip address 4.4.4.4 255.255.255.0
!
interface FastEthernet0/0
 ip address 10.0.0.1 255.255.255.0
 duplex auto
 speed auto
!
router ospf 1
 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
!
```

```
R2#sh ip route ospf
 4.0.0.0/32 is subnetted, 1 subnets
O       4.4.4.4 [110/2] via 10.0.0.1, 00:41:03, FastEthernet0/0
R2#ping 4.4.4.4

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 4.4.4.4, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 24/34/56 ms
```

Note: Although the configured loopback address is 4.4.4.4/24 but by default OSPF will advertise this route to loopback0 as 4.4.4.4/32 (most specific route to that loopback). In order to override this, we have to change the network type to point-to-point. After this OSPF will advertise the address to loopback as 4.4.4.0/24.

**NEW QUESTION 315**

- (Exam Topic 3)

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 permanent
- B. snmp ifindex permanent
- C. snmp-server ifindex persist
- D. snmp ifindex persist

**Answer: C**

**Explanation:**

The SNMP ifIndex persistence feature provides an interface index (ifIndex) value that is retained and used when the router reboots. The ifIndex value is a unique identifying number associated with a physical or logical interface. In the following example, SNMP ifIndex persistence is enabled for all interfaces:  
 router(config)# snmp-server ifindex persist

**NEW QUESTION 320**

- (Exam Topic 3)

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

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.

- A. Mastered
- B. Not Mastered

**Answer: A**

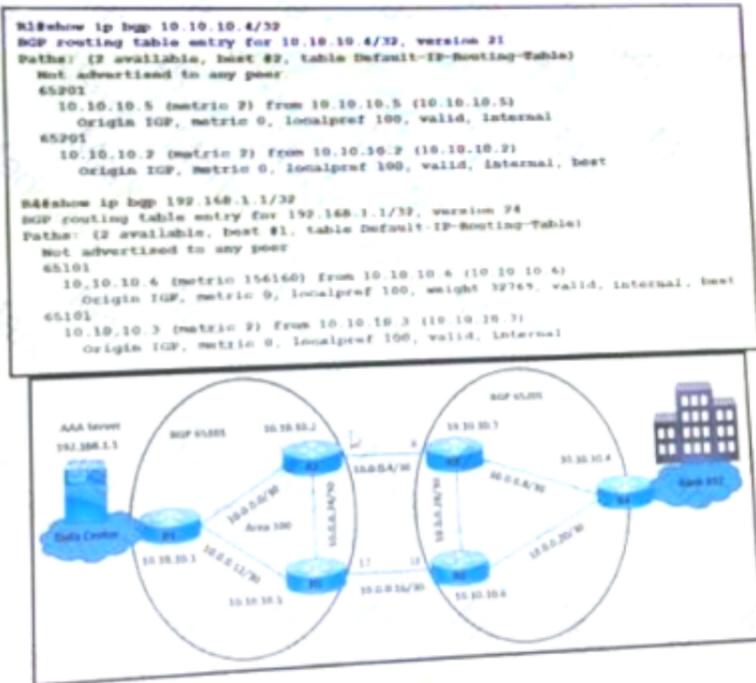
**Explanation:**

Graphical user interface, text, application, email Description automatically generated  
 Reference:  
[https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/security/configuration/guide/b\\_Ci](https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/security/configuration/guide/b_Ci)

**NEW QUESTION 322**

- (Exam Topic 3)

Refer to the exhibit.



A customer reports that user traffic of bank XYZ to the AAA server is not using the primary path via the R3-R2 link. The network team observes: No fiber is cut on links R2 and R3.

As101 and AS 201 routers established BGP peering. Which configuration resolves the issue?

A)

```
R2(config)#route-map BGP-Path permit 10
R2(config-route-map)# set metric 200
R2(config)#router bgp 65101
R2(config-router)# neighbor 10.10.10.3 route-map BGP-Path out
```

B)

```
R6(config)#router bgp 65201
R6(config-router)#no neighbor 10.10.10.5 weight 32769
```

C)

```
R4(config)#router bgp 65201
R4(config-router)#no neighbor 10.10.10.6 weight 32769
```

D)

```
R1(config)#route-map BGP-Path permit 3
R1(config-route-map)# set local-preference 200
R1(config)#router bgp 65101
R1(config-router)# neighbor 10.10.10.2 route-map BGP-Path out
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 327**

- (Exam Topic 3)

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. Show snmp user
- B. debug snmp engine-id
- C. debug snmpv3 engine-id
- D. debug snmp packet
- E. showsnmpv3 user

**Answer:** AD

**Explanation:**

There are 3 values in the SNMPv3 header that must match for the communication to take place: snmpEngineID, snmpEngineTime, snmpEngineBoots. The error received indicates a problem with the EngineID value: "authentication failure, Unknown Engine ID"

To specify the Engine ID, we can use the command "show snmp user". The following example specifies the username as abcd with Engine ID: 00000009020000000C025808:

```
Router#show snmp user abcd
User name: abcd
Engine ID: 00000009020000000C025808
storage-type: nonvolatile active access-list: 10
Rowstatus: active
Authentication Protocol: MD5
Privacy protocol: 3DES
Group name: VacmGroupName
Group name: VacmGroupName
```

The "debug snmp packet" command displays all SNMP packets that are arriving and being replied to.

**NEW QUESTION 328**

- (Exam Topic 3)

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 500kbps.

```
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
```

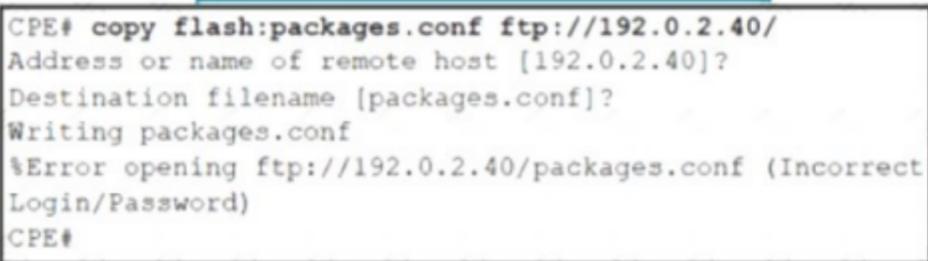
No traffic is filtering through CoPP, which is resulting in high CPU utilization, which configuration resolves the issue ?

- A. no access-list 100access-list 100 permit tcp any any eq 179 access-list 100 permit ospf any anyaccess-list 101 Permit tcp any any range 22 23!class-map CM-MGMTno match access-group 100 match access-group 101
- B. control-planeno service-policy output PM-COPP service-policy input PM-COPP
- C. No access-list 100access-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
- D. no access-list 100access-list 100 permit tcp any any eq 179 access-list 100 permit ospf any anyaccess-list 101 Permit tcp any any range 22 23!class-map CM-MGMTno match access-group 100 match access-group 101!control-planeno service-policy output PM-COPP service-policy input PM-COPP

**Answer:** D

**NEW QUESTION 333**

- (Exam Topic 3)



```
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 Me 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.)

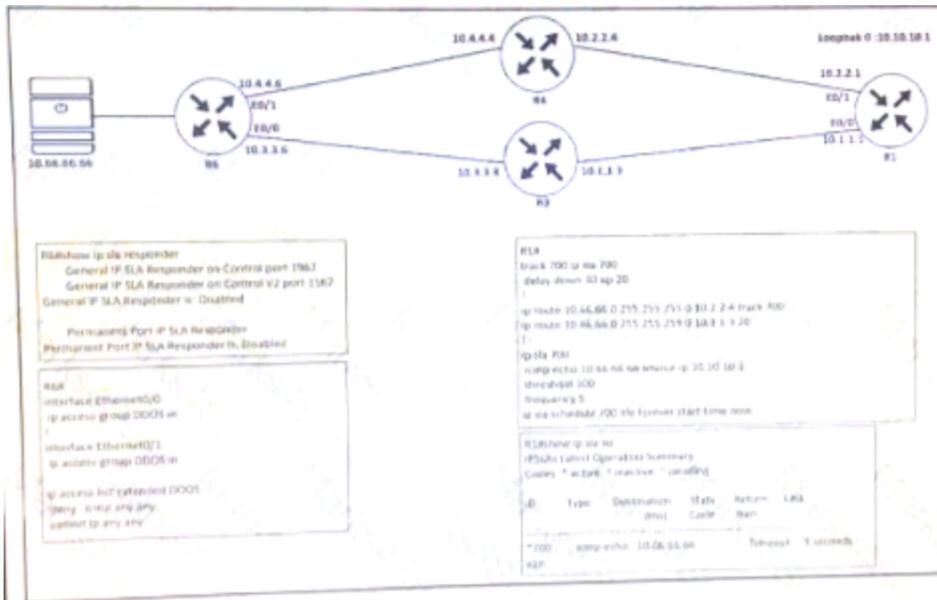
- A. Use is ftp username and ip ftp password configuration commands to specify valid FTP server credentials.
- B. Use the copy flash:packages.conf scp: command instead and enter the FTP server credentials when prompted.
- C. Enter the FTP server credentials directly In the FTP URL using the ftp://username:passwordQ192.0.2.40/ syntax .
- D. Create a user on the roter matching the username and password on the FTP server and log in before attempting the copy
- E. Use the copy flash-packages conf ftp: command instead and enter the FTP server credent-ais when prompted.

**Answer:** AC

**NEW QUESTION 336**

- (Exam Topic 3)

Refer to the exhibit.



A network administrator is trying to switch to the privileged EXEC level on R1 but failed. Which configuration resolves the issue?

- A. Enable password Cisco@123
- B. tacass server enable-password Cisco@123
- C. tacacs-server enable-password Cisco@123
- D. enable-password Cisco@123

Answer: D

**NEW QUESTION 341**

- (Exam Topic 3)

```

R1#sh run | section eigrp
router eigrp 10
network 10.10.10.0 0.0.0.255
no auto-summary
neighbor 10.10.10.2 FastEthernet0/0
neighbor 10.10.10.3 FastEthernet0/0

R1#show ip eigrp neighbors
IP-EIGRP neighbors for process 10
H   Address                Interface      Hold Uptime    SRTT    RTO    Q
Seq
                               (sec)         (ms)          Cnt
Num
1   10.10.10.2               Fa0/0         10 00:01:01    42     232    0    6
0   10.10.10.3               Fa0/0         10 00:01:03    43     244    0    6

```

Refer to the exhibit The remote branch locations have a static neighbor relationship configured to R1 only R1 has successful neighbor relationships with the remote locations of R2 and R3, but the end users cannot communicate with each other. Which configuration resolves the issue?

- R2  
interface FastEthernet0/0.10  
encapsulation dot1Q  
ip address 10.10.10.2 255.255.255.0
- R3  
interface FastEthernet0/0.10  
encapsulation dot1Q  
ip address 10.10.10.3 255.255.255.0
- R2  
interface FastEthernet0/0.10  
encapsulation dot1Q  
ip address 10.10.10.2 255.255.255.0
- R3  
interface FastEthernet0/0.10  
encapsulation dot1Q  
ip address 10.10.10.3 255.255.255.0
- R2  
interface FastEthernet0/0.10  
encapsulation dot1Q 10  
ip address 10.10.10.2 255.255.255.0
- R3  
interface FastEthernet0/0.10  
encapsulation dot1Q 10  
ip address 10.10.10.3 255.255.255.0
- R2 and R3  
interface FastEthernet0/0  
no ip split-horizon eigrp 10
- R1  
interface FastEthernet0/0  
no ip split-horizon eigrp 10

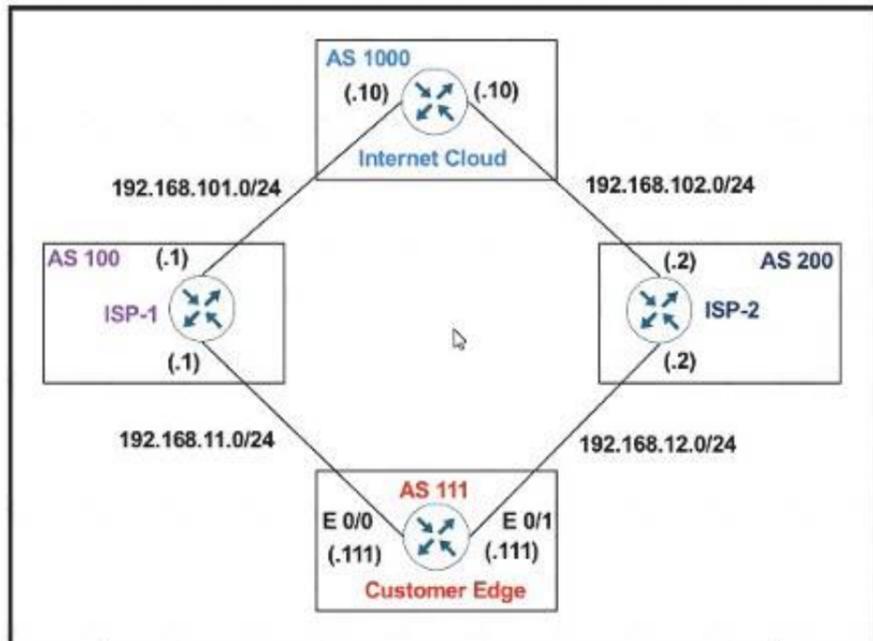
- A. Option A
- B. Option B
- C. Option C
- D. Option D

E. Option E

Answer: E

**NEW QUESTION 344**

- (Exam Topic 3)



```
ISP-1
ip as-path access-list 1 permit ^111
!
router bop 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\$

Answer: A

**NEW QUESTION 348**

- (Exam Topic 3)



Refer to the exhibit. An engineer is investigating an OSPF issue reported by the Cisco DNA Assurance Center. Which action resolves the issue?

- A. One of the neighbor links is down Bring the interface up by running shut and no shut
- B. One of the interfaces is using the wrong MTU Match interface MTU on both links
- C. An ACL entry blocking multicast on the interfaces Allow multicast through the interface ACL
- D. One of the interfaces is using the wrong authentication Match interface authentication on both links

Answer: B

**NEW QUESTION 349**

- (Exam Topic 3)

```
R1#show ip route ospf
      10.0.0.0/24 is subnetted, 7 subnets
O E1   10.4.9.0 [110/200] via 10.4.17.6, 00:06:43,
FastEthernet0/0
O IA   10.4.27.0 [110/2] via 10.4.15.5, 00:06:44,
FastEthernet0/1
O E1   10.4.49.0 [110/200] via 10.4.17.6, 00:06:43,
FastEthernet0/0
O E1   10.4.59.0 [110/200] via 10.4.17.6, 00:06:43,
FastEthernet0/0
```

Refer to the exhibit. An engineer configured two ASBRs, 10.4.17.6 and 10.4.15.5, in an OSPF network to redistribute identical routes from BGP. However, only prefixes from 10.4.17.6 are installed into the routing table on R1. Which action must the engineer take to achieve load sharing for the BGP-originated prefixes?

- A. The ASBRs are advertising the redistributed prefixes with the iBGP metric and must be modified to Type 1 on ASBR 10.4.17.6.
- B. The ASBRs are advertising the redistributed prefixes with a different admin distance and must be changed to 110 on ASBR 10.4.15.5.
- C. The admin distance of the prefixes must be adjusted to 20 on ASBR 10.4.15.5 to advertise prefixes to R1 identically from both ASBRs.
- D. The ASBRs are advertising the redistributed prefixes as Type 1 and must be modified to Type 2

Answer: D

**NEW QUESTION 351**

- (Exam Topic 3)

Refer to the exhibit.

```
CPE# show ntp associations
address      ref clock      st  when  poll reach  delay
offset disp
-10.1.255.40 .INIT.         16      64    0 0.000
0.000 15937.
* syn-peer, + selected, + candidate, - outlier, x fakesyncer,
- configured

CPE# debug ip icmp
*Feb 20 22:49:32.913: ICMP: dst (10.0.12.1) port unreachable rcv
from 10.1.255.40
*Feb 20 22:50:37.918: ICMP: dst (10.0.12.1) port unreachable rcv
from 10.1.255.40
*Feb 20 22:51:44.951: ICMP: dst (10.0.12.1) port unreachable rcv
from 10.1.255.40
```

An administrator is troubleshooting a time synchronization problem for the router time to another Cisco IOS XE-based device that has recently undergone hardening. Which action resolves the issue?

- A. Allow NTP in the ingress ACL on 10.1.225.40 by permitting UDP destined to port 123.
- B. Ensure that the CPE router has a valid route to 10.1.255.40 for NTP and rectify if not reachable.
- C. NTP service is disabled and must be enabled on 10.1.225.40.
- D. Allow NTP in the ingress ACL on 10.1.255.40 by permitting TCP destined to port 123.

Answer: C

**NEW QUESTION 356**

- (Exam Topic 3)

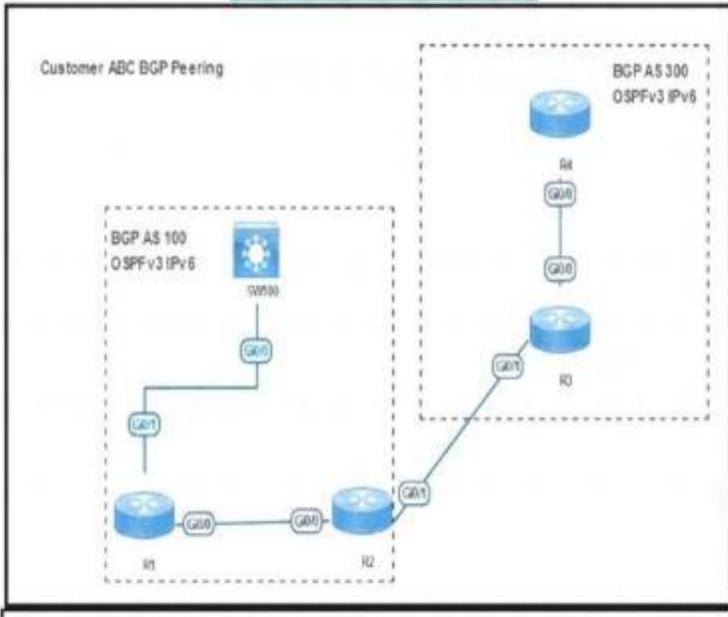
What is a MPLS PHP label operation?

- A. Downstream node signals to remove the label.
- B. It improves P router performance by not performing multiple label lookup.
- C. It uses implicit-NULL for traffic congestion from source to destination forwarding
- D. PE removes the outer label before sending to the P router.

Answer: A

**NEW QUESTION 359**

- (Exam Topic 3)



```
SW100#sh ip bgp ipv6 uni summ
BGP router identifier 100.0.0.1, local AS number 100
BGP table version is 1, main routing table version 1

Neighbor      V      AS MsgRcvd MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
2001:ABC:AABB:1100:1122:1111:2222:AAA1
4            100    6      5        1      0    0 00:00:58      0

SW100#sh ip bgp ipv6 unicast
SW100#

R1#sh ip bgp ipv6 uni
BGP table version is 4, local router ID is 1.1.1.1
Network      Next Hop    Metric LocPrf Weight Path
* i  2001::4/128  2001::4      0   100   0 300 i
*>i  2002::2/128  2001::2      0   100   0 i
R1#
R1#sh ipv6 route
O  2001::2/128 [110/1]
   via FE80::5200:C3FF:FE01:E600, GigabitEthernet0/0
B  2002::2/128 [200/0]
   via 2001::2
```

Refer to the exhibit SW100 cannot receive routes from R1 Which configuration resolves the issue?

- R1
 

```
router bgp 100
address-family ipv6
neighbor 2001::2 route-reflector-client
neighbor 2001:ABC:AABB:1100:1122:1111:2222:AAA2 route-reflector-client
```
- R2
 

```
router bgp 100
address-family ipv6
neighbor 2001::2
neighbor 2001::1 next-hop-self
```
- R1
 

```
router bgp 100
address-family ipv6
neighbor 2001::2 route-reflector-client
neighbor 2001:ABC:AABB:1100:1122:1111:2222:AAA2 route-reflector-client
```
- R2
 

```
router bgp 100
address-family ipv6
neighbor 2001::2
neighbor 2001::1 as-override
```
- R1
 

```
router bgp 100
address-family ipv6
no synchronization
```
- R2
 

```
router bgp 100
address-family ipv6
no synchronization
SW100
router bgp 100
address-family ipv6
no synchronization
```
- R1
 

```
router bgp 100
address-family ipv6
redistribute connected
```
- R2
 

```
router bgp 100
address-family ipv6
redistribute connected
```

- A. Option A
- B. Option B
- C. Option C
- D. Option C

Answer: A

**NEW QUESTION 362**

- (Exam Topic 3)

Which router translates the customer routing information into VPNv4 routes to exchange VPNv4 routes with other devices through MP-BGP?

- A. PE
- B. CE
- C. P
- D. VPNv4 RR

**Answer: A**

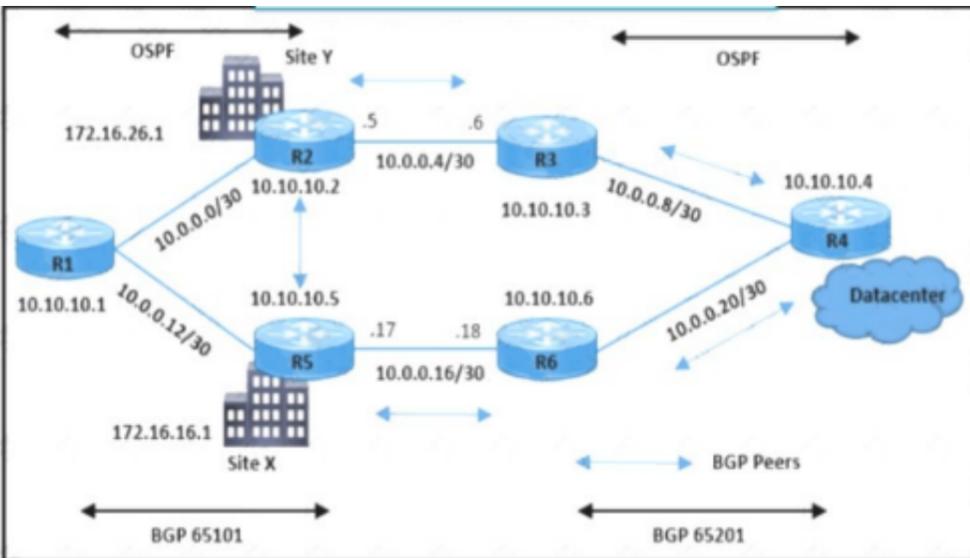
**NEW QUESTION 365**

- (Exam Topic 3)

```

R5#
*Sep 19 08:29:51.088: BGP: 10.10.10.2 open active, local address 10.0.0.14
*Sep 19 08:29:51.120: BGP: 10.10.10.2 read request no-op
*Sep 19 08:29:51.124: BGP: 10.10.10.2 open failed: Connection refused by
remote host, open active delayed 12988ms (20000ms max, 60% jitter)

R2#show ip bgp neighbors 10.10.10.5
BGP neighbor is 10.10.10.5, remote AS 65101, internal link
BGP version 4, remote router ID 0.0.0.0
BGP state = Active
Last read 00:01:18, last write 00:01:18, hold time is 15, keepalive
interval is 3 seconds
Configured hold time is 15, keepalive interval is 3 seconds
Minimum holdtime from neighbor is 0 seconds
Address tracking is enabled, the RIB does have a route to 10.10.10.5
Connections established 13; dropped 13
Last reset 00:01:18, due to User reset
Transport(top) path-mtu-discovery is enabled
No active TCP connection
    
```



Refer to the exhibit A customer reported a failure and intermittent disconnection between two office buildings site X and site Y The network team finds that site X and site Y are exchanging email application traffic with the data center network Which configuration resolves the issue between site X and site Y?

- A) RC(config)# ip prefix-list Customer seq 5 permit 192.168.30.1/32
- B) RC(config)#router bgp 65101  
RC(config-router)# neighbor 10.0.0.18 prefix-list Customer in
- C) RF(config)#no ip prefix-list Customer seq 5 deny 192.168.1.1/32
- D) RF(config)#router bgp 65201  
RF(config-router)# neighbor 10.0.0.17 prefix-list Customer out

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer: C**

**NEW QUESTION 369**

- (Exam Topic 3)

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 summary-address command on the ASBR.

- B. Configure the summary-address command on the ABR.
- C. Configure the area range command on the ABR.
- D. Configure the area range command on the ASBR.

Answer: C

**Explanation:**

For OSPF, we can only summary at the ABR with the command "area range" or at the ASBR with the command "summary-address" -> Therefore answer A and answer B are not correct.

In this question, the most likely problem is that when doing summarization, the network mask is configured wrong and summarization doesn't work because of the misconfiguration. When configuring the area range command, make sure that the summarization mask is in the form of a prefix mask rather than a wildcard mask (that is, 255.255.255.0 instead of 0.0.0.255).

Good reference: <https://www.configrouter.com/troubleshooting-route-summarization-ospf-14082/>

**NEW QUESTION 371**

- (Exam Topic 3)

Refer to the exhibit.

```
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  0x00276C
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
```

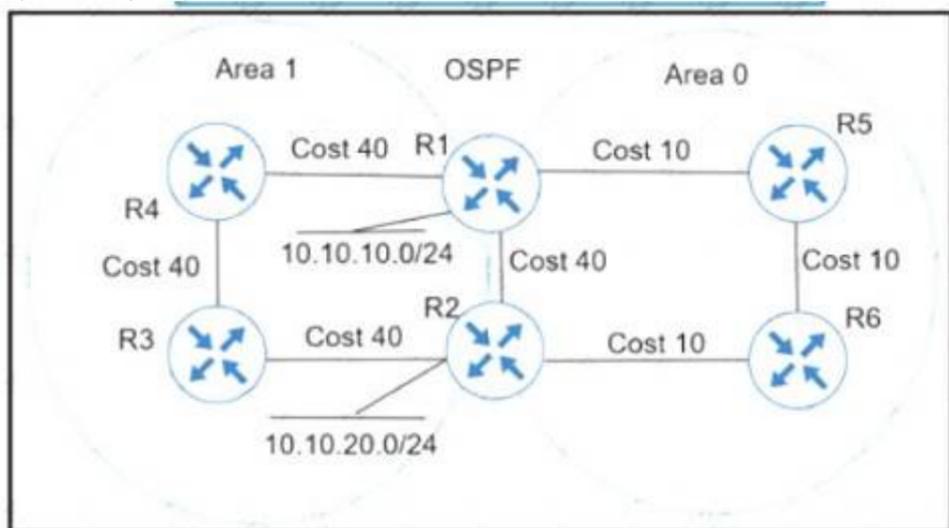
After configuring OSPF in R1, some external destinations in the network became unreachable. Which action resolves the issue?

- A. Clear the OSPF process on R1 to flush stale LSAs sent by other routers.
- B. Change the R1 router ID from 10.255.255.1 to a unique value and clear the process.
- C. Increase the SPF delay interval on R1 to synchronize routes.
- D. Disconnect the router with the OSPF router ID 0.0.0.0 from the network.

Answer: B

**NEW QUESTION 374**

- (Exam Topic 3)



Refer to the exhibit Which action ensures that 10 10 10 0/24 reaches 10 10 20 0/24 through the direct link between R1 and R2?

- A. Configure R1 and R2 LAN links as nonpassive.
- B. Configure R1 and R2 links under area 1
- C. Configure OSPF link cost to 1 between R1 and R2
- D. Configure OSPF path cost to 3 between R1 and R2

Answer: B

**NEW QUESTION 378**

- (Exam Topic 3)

An engineer configures PBR on R5 and wants to create a policy that matches traffic destined toward 10.10.10.0/24 and forward 10.1.1.1. The traffic must also have its IP precedence set to 5. All other traffic should be forward toward 10.1.1.2 and have its IP precedence set to 0. Which configuration meets the requirements?

- A. access-list 1 permit 10.10.10.0 0.0.0.255 access-list 2 permit any route-map CCNP permit 10 match ip address 1 set ip next-hop 10.1.1.1 set ip precedence 5 ! route-map CCNP permit 20 match ip address 2 set ip next-hop 10.1.1.2 set ip precedence 0 ! route-map CCNP permit 30
- B. access-list 100 permit ip any 10.10.10.0 0.0.0.255 route-map CCNP permit 10 match ip address 100 set ip next-hop 10.1.1.1 set ip precedence 0 ! route-map CCNP permit 20 set ip next-hop 10.1.1.2 set ip precedence 5 ! route-map CCNP permit 30
- C. access-list 1 permit 10.10.10.0 0.0.0.255 route-map CCNP permit 10 match ip address 1 set ip next-hop 10.1.1.1 set ip precedence 5 ! route-map CCNP permit 20 set ip next-hop 10.1.1.2 set ip precedence 0
- D. access-list 100 permit ip any 10.10.10.0 0.0.0.255 route-map CCNP permit 10 match ip address 100 set ip next-hop 10.1.1.1 set ip precedence 5 ! route-map CCNP permit 20 set ip next-hop 10.1.1.2 set ip precedence 0

Answer: D

#### NEW QUESTION 381

- (Exam Topic 3)

```
Router# show logging

Syslog logging: enabled (0 messages dropped, 0 messages rate-limited, 0 flushes, 0
overruns, xml disabled, filtering disabled)

No Active Message Discriminator.
No Inactive Message Discriminator.

  Console logging: level debugging, 8 messages logged, xml disabled,
                    filtering disabled

  Monitor logging: level debugging, 0 messages logged, xml disabled,
                    filtering disabled

  Buffer logging: level debugging, 8 messages logged, xml disabled,
                    filtering disabled

Exception Logging: size (3192 bytes)

Count and timestamp logging messages: disabled

Persistent logging: disabled
```

Refer to the exhibit. A network engineer lost remote access to the router due to a network problem. The engineer used the console to access the router and noticed continuous logs on the console terminal. Which configuration limits the number of log messages on the console to critical and higher severity level messages?

- A. term no monitor
- B. logging console 2
- C. no logging console
- D. logging console 5

Answer: D

#### NEW QUESTION 382

- (Exam Topic 3)

```

GigabitEthernet2 is up, line protocol is up
Internet Address 172.16.1.42/30, Interface ID 8, Area 1
Attached via Network Statement
Process ID 1, Router ID 172.16.100.7, Network Type BROADCAST, Cost: 1
Topology-MTID Cost Disabled Shutdown Topology Name
0 1 no no Base
Transmit Delay is 1 sec, State DR, Priority 1
Designated Router (ID) 172.16.100.7, Interface address 172.16.1.42
Backup Designated router (ID) 172.16.100.5, Interface address 172.16.1.41
Timer intervals configured, Hello 10, Dead 40, wait 40, Retransmit 5
oob-resync timeout 40
Hello due in 00:00:01

Neighbor Count is 1, Adjacent neighbor count is 1
Adjacent with neighbor 172.16.100.5 (Backup Designated Router)
Suppress hello for 0 neighbor(s)
Cryptographic authentication enabled
Sending SA: key 1, Algorithm HMAC-SHA-256 - key chain ospf
Rollover in progress, 1 neighbor(s) using the old key(s):
key id 1 algorithm MD5
CSR103#
CSR103#
CSR103#sh ip ospf nei

Neighbor ID Pri State Dead Time Address Interface
172.16.100.3 1 FULL/DR 00:00:30 172.16.1.25 GigabitEthernet3
172.16.100.5 1 FULL/BDR 00:00:16 172.16.1.41 GigabitEthernet2
CSR103#
CSR103#
*Jan 11 16:49:35.311: %SYS-6-LOGOUT: user admin has exited tty session 1(10.228.200.250)
*Jan 11 16:49:45.396: %OSPF-5-ADJCHG: Process 1, Nbr 172.16.100.5 on GigabitEthernet2 from
FULL to DOWN, Neighbor Down: Dead timer expired
    
```

Refer to the exhibit. Which configuration resolves the issue?

- A)
 

```

router ospf 1
 area 1 authentication message-digest
 int GigabitEthernet 2
 ip ospf message-digest-key 1 md5 cisco
            
```
- B)
 

```

int GigabitEthernet 2
 ip ospf message-digest-key 1 md5 cisco
 ip ospf authentication message-digest
            
```
- C)
 

```

int GigabitEthernet 2
 ip ospf key 1 cisco
 ip ospf authentication
            
```
- D)
 

```

key chain ospf
 key 1
 key-string 7 02050D480809
 cryptographic-algorithm hmac-sha-1
 interface GigabitEthernet2
 ip ospf authentication key-chain ospf
            
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 384**

- (Exam Topic 3)

Refer to the exhibit.

```

Tunnel source 199.1.1.1, destination 200.1.1.3
Tunnel protocol/transport GRE/IP
Key disabled, sequencing disabled
Checksumming of packets disabled
Tunnel TTL 255, Fast tunneling enabled
Tunnel transport MTU 1476 bytes
Tunnel transmit bandwidth 8000 (kbps)
Tunnel receive bandwidth 8000 (kbps)
    
```

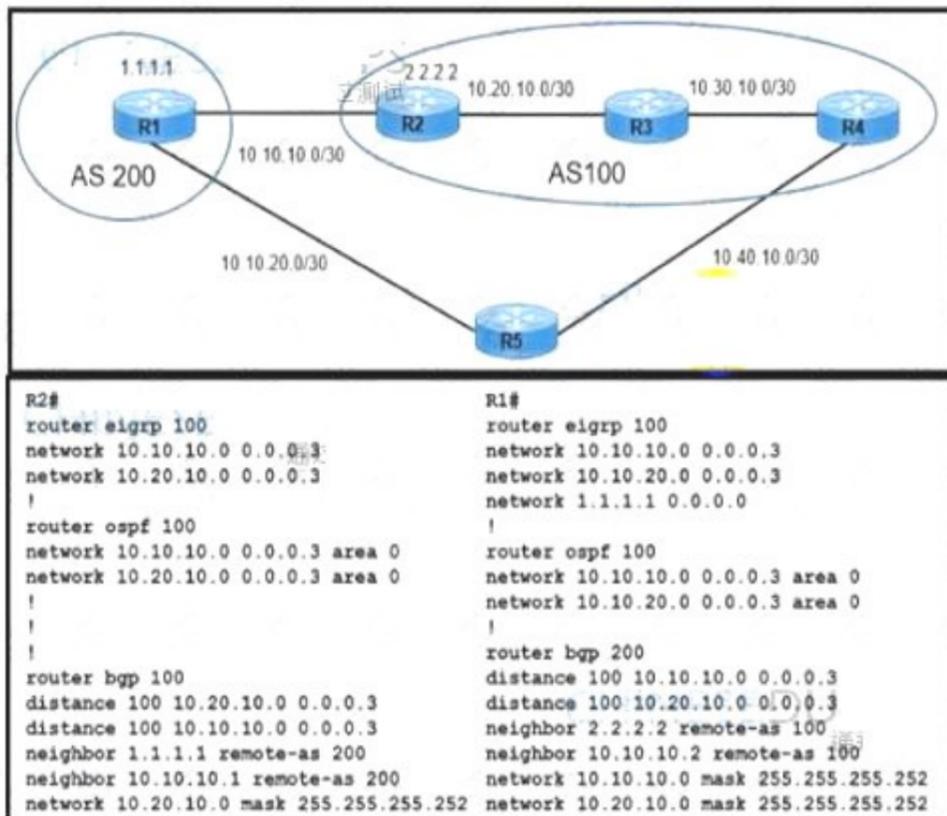
An engineer must establish a point-to-point GRE VPN between R1 and the remote site. Which configuration accomplishes the task for the remote site?

- A. Interface Tunnel1 tunnel source 199.1.1.1 tunnel destination 200.1.1.3 ip address 192.168.1.3 255.255.255.0
- B. Interface Tunnel1 tunnel source 200.1.1.3 tunnel destination 199.1.1.1 ip address 192.168.1.1 255.255.255.0
- C. Interface Tunnel1 tunnel source 200.1.1.3 tunnel destination 199.1.1.1 ip address 192.168.1.3 255.255.255.0
- D. Interface Tunnel lunnel source 199.1.1.1 tunnel destination 200.1.1.3 ip address 192.168.1.1 255.255.255.0

Answer: C

**NEW QUESTION 386**

- (Exam Topic 3)  
 Refer to the Exhibit.



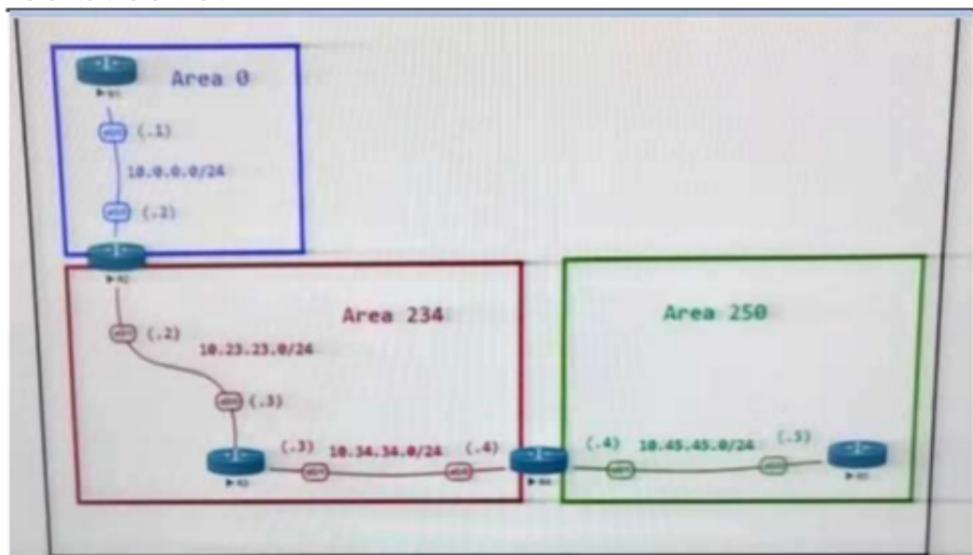
R1 and R2 use IGP protocol to route traffic between AS 100 and AS 200 despite being configured to use BGP. Which action resolves the issue and ensures the use of BGP?

- A. Configure distance to 100 under the EIGRP process of R1 and R2.
- B. Remove distance commands under BGP AS 100 and AS 200.
- C. Remove distance commands under BGP AS 100.
- D. Configure distance to 100 under the OSPF process of R1 and R2

Answer: B

**NEW QUESTION 387**

- (Exam Topic 3)  
 Refer to the exhibit.



```

ABR Configurations:
R2
router ospf 1
router-id 0.0.0.22
area 234 virtual-link 10.34.34.4
network 10.0.0.0 0.0.0.255 area 0
network 10.2.2.0 0.0.0.255 area 0
network 10.22.22.0 0.0.0.255 area 234
network 10.23.23.0 0.0.0.255 area 234

R4
router ospf 1
router-id 0.0.0.44
area 234 virtual-link 10.23.23.2
network 10.34.34.0 0.0.0.255 area 234
network 10.44.44.0 0.0.0.255 area 234
network 10.45.45.0 0.0.0.255 area 250

Virtual Link Status:
R2 -> sh ip ospf virtual-links

Virtual Link OSPF_VL0 to router 10.34.34.4 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
    
```

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. R2router ospf 1router-id 10.23.23.2
- B. R2router ospf 1no area area 234 virtual-link 10.34.34.4area 0 virtual-link 0.0.0.44
- C. R4router ospf 1no area 234 virtual-link 10.23.23.2area 234 virtual-link 0.0.0.22
- D. R2router ospf 1no area 234 virtual-link 10.34.34.4area 234 virtual-link 0.0.0.44
- E. R4router ospf 1no area area 234 virtual-link 10.23.23.2area 0 virtual-link 0.0.0.22

Answer: CD

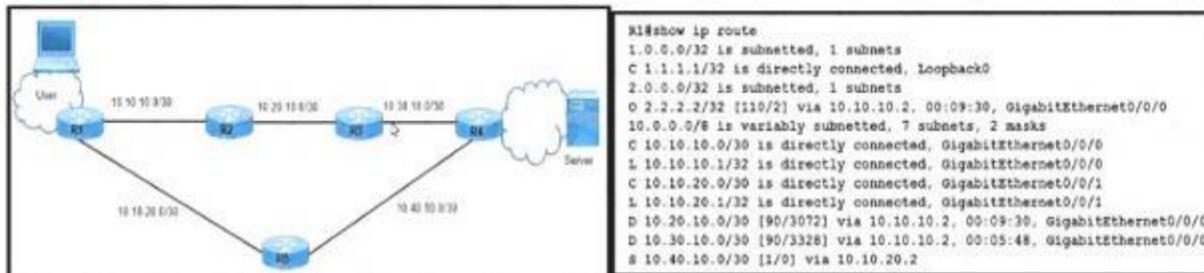
**Explanation:**

Reference: <https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13703-8.html> An important thing to remember when configuring virtual-link is we need to configure the OSPF router ID and NOT the IP address of the ABR. Therefore in this question we have to use the command "area 234 virtual-link 0.0.0.44" on R2 and "area 234 virtual-link 0.0.0.22" on R4.

**NEW QUESTION 391**

- (Exam Topic 3)

Refer to the exhibit.



Routers R1, R2, R3, and R4 use EIGRP However, traffic always prefers R1 to R5 backup links in nonfailure scenarios. Which configuration resolves the issue?

- A)
 

```

R1(config)#no ip route 10.40.10.0 255.255.255.252 10.10.20.2
R1(config)#ip route 0.0.0.0 0.0.0.0 10.10.10.2
            
```
- B)
 

```

R1(config)#int gigabitEthernet 0/0/0
R1(config-if)#bandwidth 10000000
            
```
- C)
 

```

R1(config)#no ip route 10.40.10.0 255.255.255.252 10.10.20.2
R1(config)#ip route 10.40.10.0 255.255.255.252 10.10.20.2 115
            
```
- D)
 

```

R1(config)#int gigabitEthernet 0/0/0
R1(config-if)#bandwidth 10000
            
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

**NEW QUESTION 395**

- (Exam Topic 3)

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

- A. Mastered
- B. Not Mastered

Answer: A

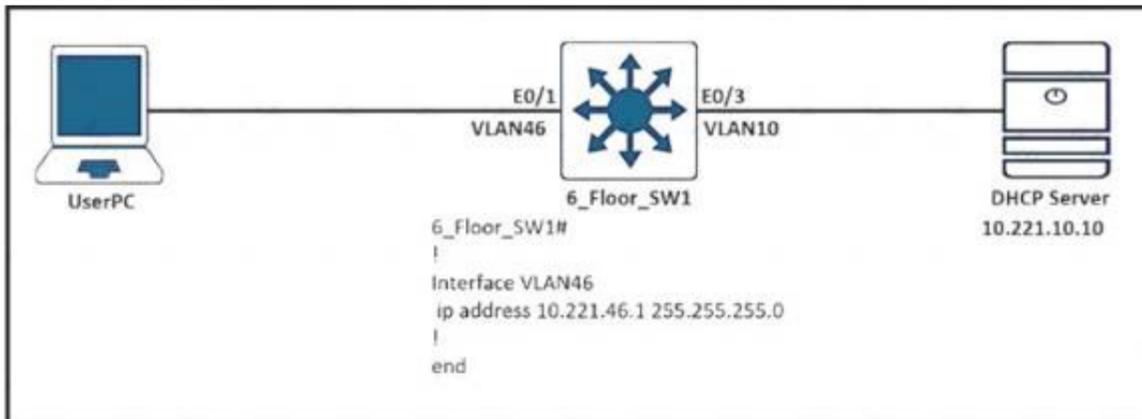
**Explanation:**

Table Description automatically generated

**NEW QUESTION 398**

- (Exam Topic 3)

Refer to the exhibit.



Users in VLAN46 cannot get the IP from the DHCP server. Assume that all the parameters are configured properly in VLAN 10 and on the DHCP server Which command on interlace VLAN46 allows users to receive IP from the DHCP server?

- A. ip dhcp-addreos 10.221.10.10
- B. ip dhcp server 10.221.10.10
- C. ip helper-addrets 10.221.10.10
- D. ip dhcp relay information trust-all

Answer: C

**NEW QUESTION 401**

- (Exam Topic 3)

What is an advantage of implementing BFD?

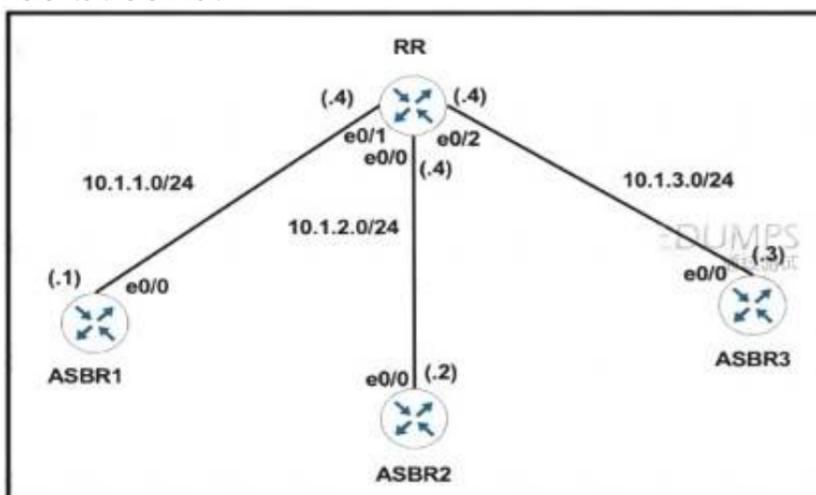
- A. BFD provides faster updates for any flapping route.
- B. BFD provides millisecond failure detection
- C. BFD is deployed without the need to run any routing protocol
- D. BFD provides better capabilities to maintain the routing table

Answer: B

**NEW QUESTION 403**

- (Exam Topic 3)

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?

- 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
- router bgp 100
  - neighbor IBGP update-source Loopback0
- router bgp 100
  - neighbor IBGP next-hop-self
- 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

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

**NEW QUESTION 405**

- (Exam Topic 3)

```
R2#show policy-map control-plane
Control Plane
Service-policy input: CoPP
Class-map: SSH (match-all)
 29 packets, 2215 bytes
 5 minute offered rate 0000 bps
 Match: access-group 100

Class-map: ANY (match-all)
 46 packets, 3878 bytes
 5 minute offered rate 0000 bps, drop rate 0000 bps
 Match: access-group 199
 drop

Class-map: class-default (match-any)
 41 packets, 5687 bytes
 5 minute offered rate 0000 bps, drop rate 0000 bps
 Match: any

R2#show access-list 100
Extended IP access list 100
 10 deny tcp any any eq 22 (14 matches)
 20 permit tcp host 192.168.12.1 any eq 22 (29 matches)
R2#show access-list 199
Extended IP access list 199
 10 permit ip any any (51 matches)
```

Refer to the exhibit. Which action limits the access to R2 from 192.168.12.1?

- A. Swap sequence 10 with sequence 20 in access-list 100.
- B. Modify sequence 20 to permit tcp host 192.168.12.1 eq 22 any to access-list 100
- C. Swap sequence 20 with sequence 10 in access-list 100
- D. Modify sequence 10 to deny tcp any eq 22 any to access-list 100.

Answer: C

**NEW QUESTION 407**

- (Exam Topic 3)

Refer to the exhibit.

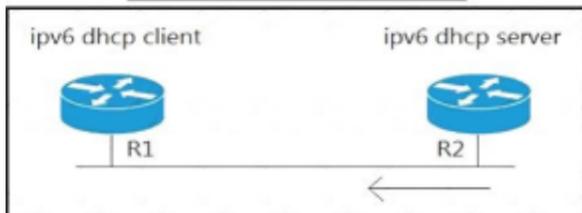
```

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
    
```



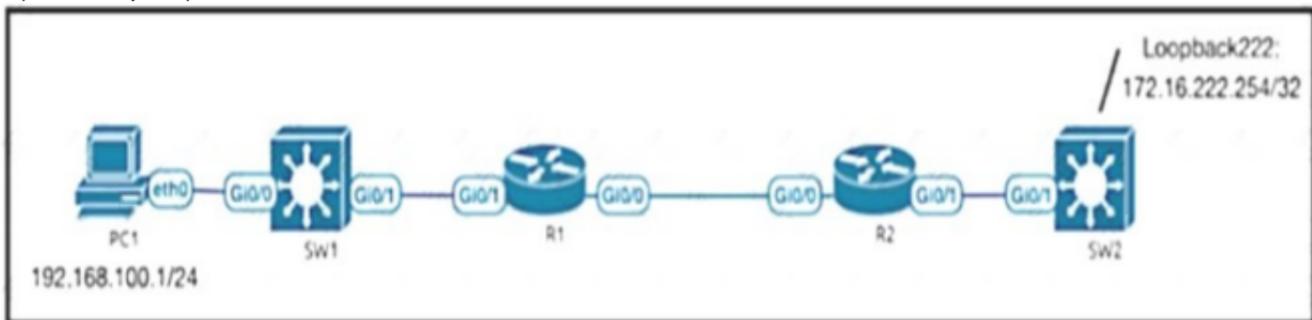
A network administrator is troubleshooting IPv6 address assignment for a DHCP client that is not getting an IPv6 address from the server. Which configuration retrieves the client IPv6 address from the DHCP server?

- 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

Answer: A

**NEW QUESTION 408**

- (Exam Topic 3)



Refer to the exhibit R2 can reach Loopback222, but R1 SW1 and PC1 cannot communicate with 172.16.222.254 R1 and R2 configurations are shown here

```

R1#show run | sec router eigrp
router eigrp VR1
!
address-family ipv4 unicast autonomous-system 1
!
topology base
exit-af-topology
network 172.16.1.1 0.0.0.0
network 192.168.100.0
network 192.168.200.0
network 192.168.255.91 0.0.0.0
exit-address-family

R2(config)#do show run | sec router eigrp
router eigrp 1
network 172.16.1.2 0.0.0.0
network 172.16.222.0 0.0.0.255
network 192.168.222.254 0.0.0.0
    
```

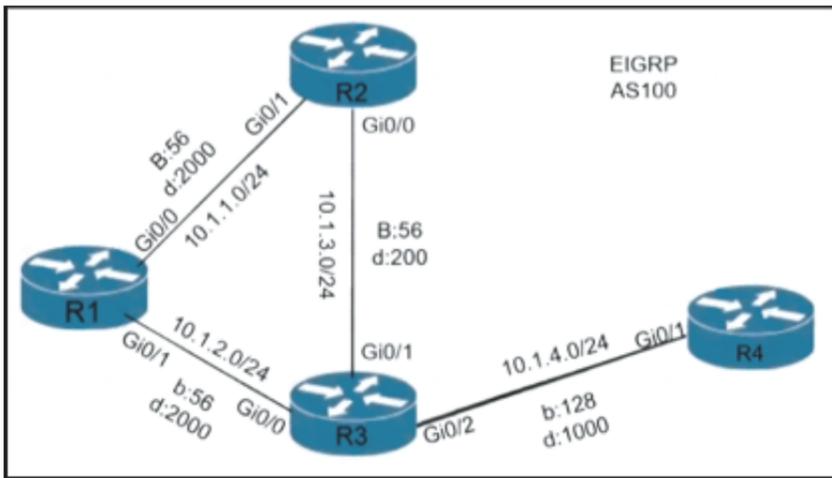
Which EIGRP configuration command resolves the issue?

- A. R2(config-router) # redistribute static
- B. R1(config-router)# network 172.16.222.254 0.0.0.0
- C. R1 (config-router)# network 172.16.222.264 255.255.255.255
- D. R1(config-router)# redistribute static

Answer: A

**NEW QUESTION 409**

- (Exam Topic 3)  
 Refer to the exhibit.



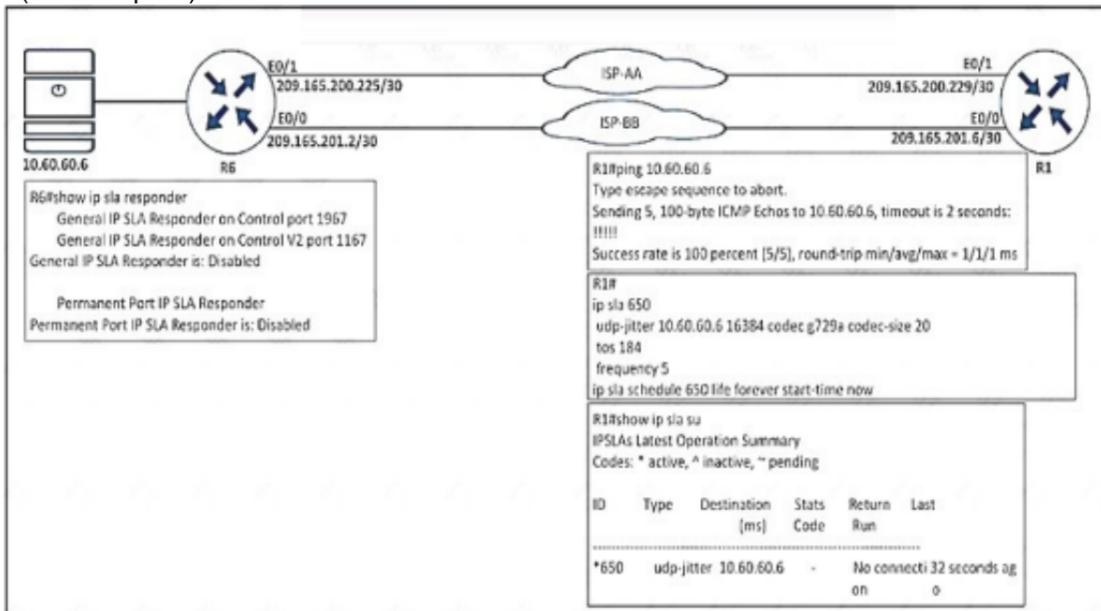
A loop occurs between R1, R2, and R3 while EIGRP is run with poison reverse enabled. Which action prevents the loop between R1, R2, and R3?

- A. Configure route tagging
- B. Enable split horizon
- C. Configure R2 as stub receive-only
- D. Configure route filtering

Answer: B

**NEW QUESTION 411**

- (Exam Topic 3)



Refer to the exhibit. Which configuration resolves the IP SLA issue from R1 to the server?

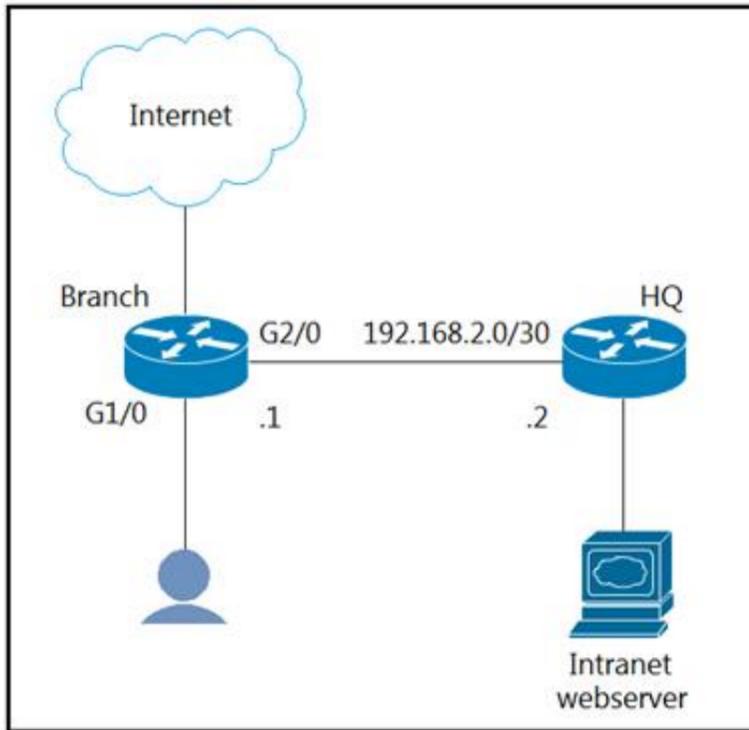
- A. R6(config)#ip sla responder
- B. R6(config)#ip sla responder udp-echo ipaddress 10.60.60.6 po 5000
- C. R6(config)#ip sla 650 R6(config-ip-sla)ff udp-jitter 10.60.60.6
- D. R6(config)#ip sla schedule 10 life forever start-time now

Answer: A

**NEW QUESTION 412**

- (Exam Topic 3)

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 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
```

B)

```
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
```

C)

```
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
```

D)

```
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
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

**Explanation:**

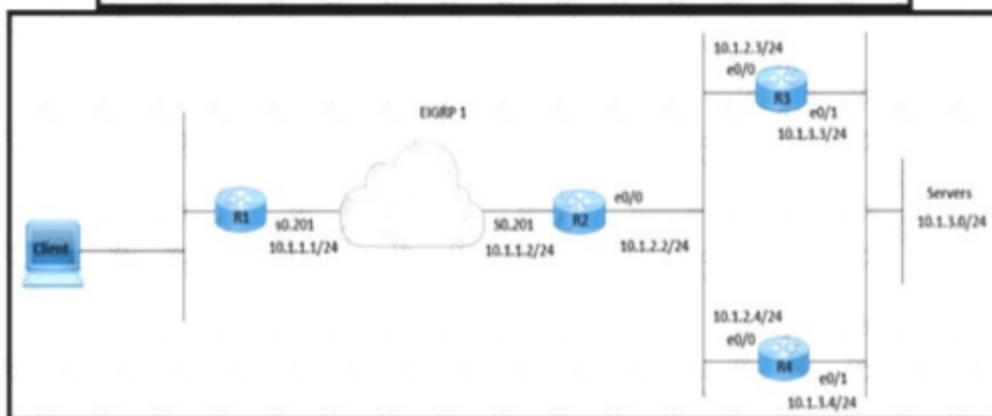
the ACL 101 matches all HTTP packets while the ACL 102 matches TCP packets destined to Intranet webserver. These packets will be sent to HQ router. If a match command refers to several objects in one command, either of them should match (the logical OR algorithm is applied). For example, in the match ip address 101 102 command, a route is permitted if it is permitted by access list 101 or access list 102.

**NEW QUESTION 417**

- (Exam Topic 3)  
 Exhibit.

```
R2# show ip eigrp topology 10.1.3.0 255.255.255.0

IP-EIGRP (AS 1): topology entry for 10.1.3.0/24
State is Passive, Query origin flag is 1, 1 Successor(s), FD is 307200
Routing Descriptor Blocks:
 10.1.2.3 (Ethernet0), from 10.1.2.3, Send flag is 0x0
   Composite metric is (307200/281600), Route is Internal
   Vector metric:
     Minimum bandwidth is 10000 Kbit
     Total delay is 2000 microseconds
     Reliability is 255/255
     Load is 1/255
     Minimum MTU is 1500
     Hop count is 1
 10.1.2.4 (Ethernet0), from 10.1.2.4, Send flag is 0x0
   Composite metric is (312320/286720), Route is Internal
   Vector metric:
     Minimum bandwidth is 10000 Kbit
     Total delay is 2200 microseconds
     Reliability is 255/255
     Load is 1/255
     Minimum MTU is 1500
     Hop count is 1
```



Refer to the exhibit. A network is configured for EIGRP equal-cost load balancing, but the traffic destined to the servers is not load balanced. Link metrics from router R2 to R3 and R4 are the same. Which delay value must be configured to resolve the issue?

- A. 208 on R3 E0/0
- B. 120 on R4 E0/1
- C. 120 on R3 E0/1
- D. 2200 on R4 E0/1

**Answer: C**

**NEW QUESTION 420**

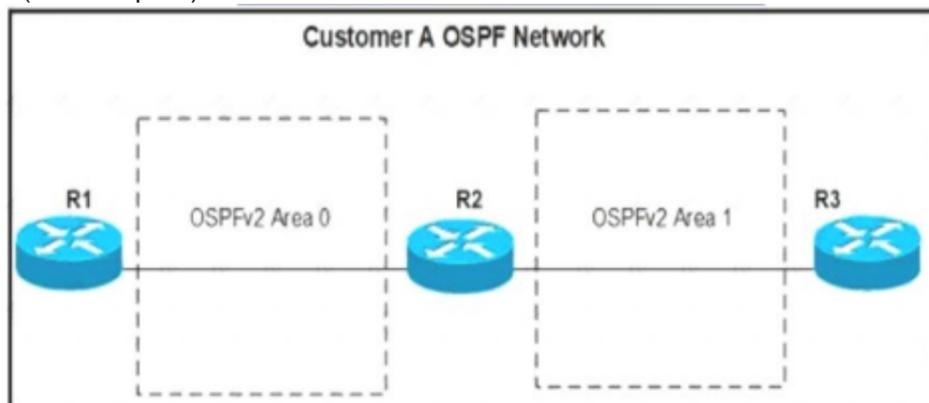
- (Exam Topic 3)  
 Which router attaches the VPN label to incoming packets from CE routing?

- A. CE router
- B. core router
- C. P router
- D. PE router

**Answer: D**

**NEW QUESTION 422**

- (Exam Topic 3)



Refer to the exhibit

An engineer must ensure that R3 sees only type 1 and 2 LSAs in area 1.  
Which command must the engineer apply on R2?

- A. Area 1 stub nssa
- B. Area 1nssa no-summary
- C. Area a stub no-summary
- D. Area 1 stub

**Answer:** C

**NEW QUESTION 426**

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