

Cisco

Exam Questions 300-410

Implementing Cisco Enterprise Advanced Routing and Services (ENARSI)



NEW QUESTION 1

- (Exam Topic 3)

Refer to the exhibit.

```
R1(config)#ip prefix-list EIGRP seq 10 deny 0.0.0.0/0 le 32
R1(config)#ip prefix-list EIGRP seq 20 permit 10.0.0.0/8
R1(config)#router eigrp 10
R1(config-router)#distribute-list prefix EIGRP in Ethernet0/0

R1#show ip route eigrp
```

A prefix list is created to filter routes inbound to an EIGRP process except for network 10 prefixes. After the prefix list is applied, no network 10 prefixes are visible in the routing table from EIGRP. Which configuration resolves the issue?

- A. ip prefix-list EIGRP seq 20 permit 10.0.0.0/8 ge 9.
- B. ip prefix-list EIGRP seq 10 permit 0.0.0.0/0 le 32
- C. ip prefix-list EIGRP seq 5 permit 10.0.0.0/8 ge 9 no ip prefix-list EIGRP seq 20 permit 10.0.0.0/8
- D. ip prefix-list EIGRP seq 20 permit 10.0.0.0/8 ge 9 ip prefix-list EIGRP seq 10 permit 0.0.0.0/0 le 32

Answer: C

NEW QUESTION 2

- (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 3

- (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 4

- (Exam Topic 3)

Refer to the exhibit.

```
R1#
router ospf 1
 redistribute rip subnets
 network 131.108.1.0 0.0.0.255 area 2
 network 131.108.2.0 0.0.0.255 area 2
 distribute-list 1 out
 !
 access-list 1 permit 132.108.4.0 0.0.0.255
```

The R1 OSPF neighbor is not receiving type 5 external LSAs for 132.108.2.0/24 and 132.108.3.0/24 networks. Which configuration command resolves the issue?

- A. access-list 1 permit 132.108.0.0 0.0.1.255
- B. access-list 1 permit 132.108.0.0 0.0.3.255
- C. access-list 1 permit 132.108.2.0 0.0.0.255
- D. access-list 1 permit 132.108.4.0 0.0.3.255

Answer: B

NEW QUESTION 5

- (Exam Topic 3)

What is a characteristic of Layer 3 MPLS VPNs?

- A. LSP signaling requires the use of unnumbered IP links for traffic engineering.
- B. Traffic engineering supports multiple IGP instances
- C. Traffic engineering capabilities provide QoS and SLAs.
- D. Authentication is performed by using digital certificates or preshared keys.

Answer: C

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_te_diffserv/configuration/15-mt/mp-te-diffserv-15-mt-bo

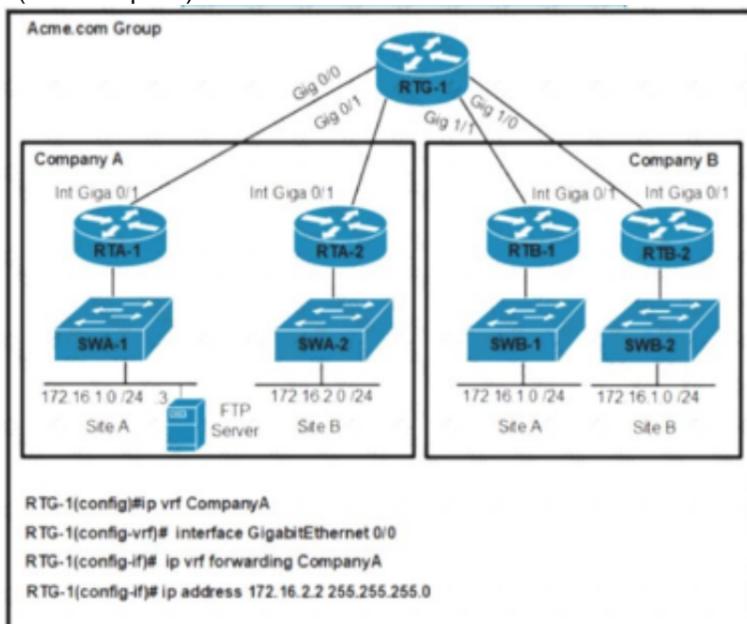
MPLS traffic engineering supports only a single IGP process/instance

The MPLS traffic engineering feature does not support routing and signaling of LSPs over unnumbered IP links.

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_te_path_setup/configuration/xs-3s/mp-te-path-setup-xe-3s-book/mp-te-enhance-xe.html

NEW QUESTION 6

- (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 7

- (Exam Topic 3)

Refer to the exhibit.

```
!
summary-address 10.1.0.0 255.255.0.0
!
```

The none area 0 routers in OSPF still receive more specific routes of 10.1.1.0.10.1.2.0.10.1.3.0 from area 1. Which action resolves the issue?

- A. Configure route summarization on OSPF-enabled interfaces.
- B. Summarize by using the summary-address 10.1.0.0 255.255.252.0 command.
- C. Summarize by using the area range command on ABRs
- D. Configure the summary-address 10.1.0.0 255.255.252.0 command under OSPF process.

Answer: C

NEW QUESTION 8

- (Exam Topic 3)

Refer to the exhibit.

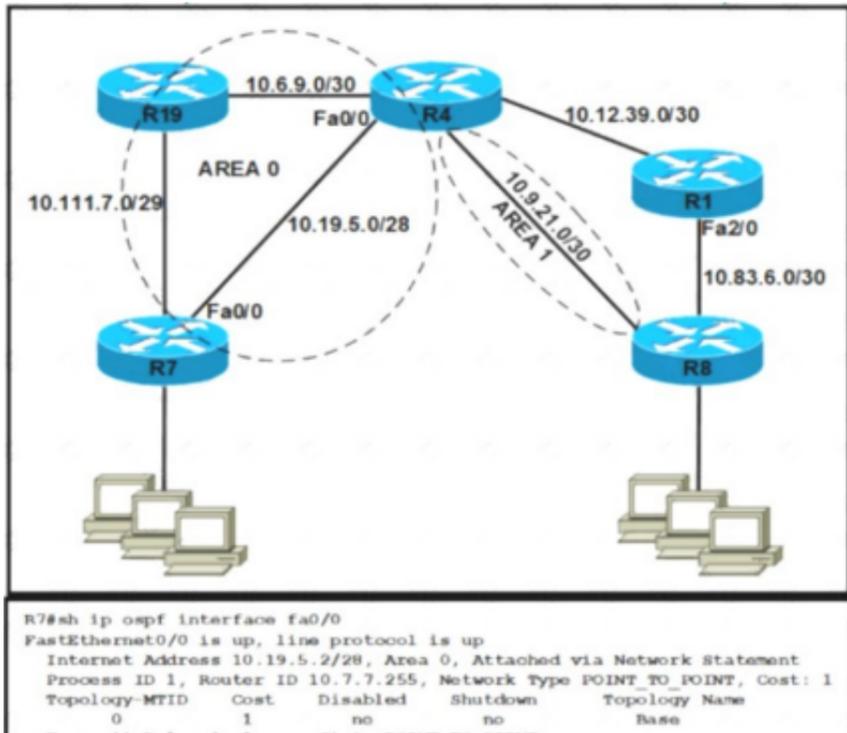
A network administrator is troubleshooting OSPF adjacency issue by going through the console logs in the router, but due to an overwhelming log message stream it is impossible to capture the problem Which two commands reduce console log messages to relevant OSPF neighbor problem details so that the issue can be resolved? (Choose two)

- A. debug condition interface
- B. debug condition ip
- C. debug condition ospf neighbor
- D. debug condition session-id ADJCHG
- E. debug condition all

Answer: AD

NEW QUESTION 9

- (Exam Topic 3)



Refer to the exhibit. Router R4 is configured correctly with default OSPF values. A network engineer configured R7 for OSPF. R7 must not be elected as a DR for the segment between R4-R7. The adjacency between R4 and R7 failed to form. Which configuration resolves the issue?

- R7(config)#interface fa0/0
R7(config-if)#ip ospf priority 255
R7(config-if)#ip ospf hello-interval 10
R7(config-if)#ip ospf dead-interval 30
R7(config-if)#ip ospf network broadcast
- R7(config)#interface fa0/0
R7(config-if)#ip ospf priority 0
R7(config-if)#ip ospf hello-interval 10
R7(config-if)#ip ospf dead-interval 30
R7(config-if)#ip ospf network non-broadcast
- R7(config)#interface fa0/0
R7(config-if)#ip ospf priority 0
R7(config-if)#ip ospf hello-interval 10
R7(config-if)#ip ospf dead-interval 40
R7(config-if)#ip ospf network broadcast
- R7(config)#interface fa0/0
R7(config-if)#ip ospf priority 255
R7(config-if)#ip ospf hello-interval 10
R7(config-if)#ip ospf dead-interval 40
R7(config-if)#ip ospf network non-broadcast

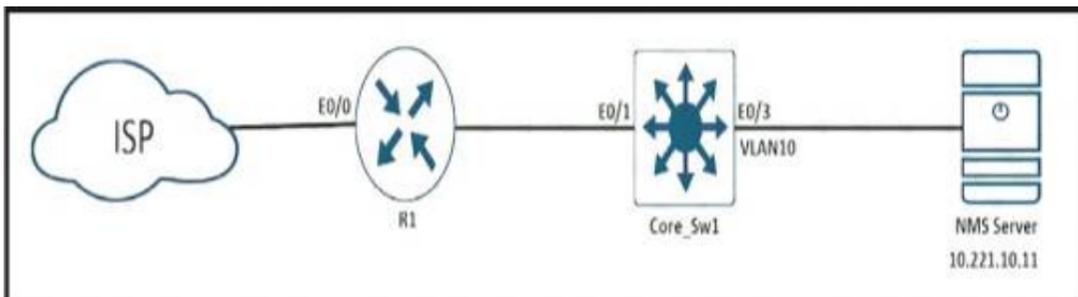
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 10

- (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?

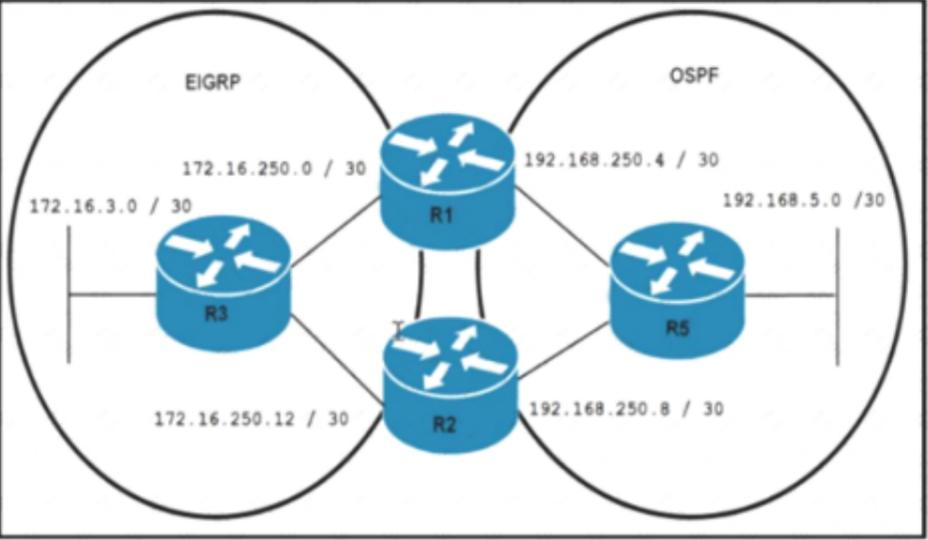
- A. no snmp trap link-status
- B. snmp trap link-status down
- C. snmp trap ip verify drop-rate
- D. ip verify drop-rate notify hold-down 60

Answer: D

NEW QUESTION 10

- (Exam Topic 3)

<pre>R1#show running-config begin router eigrp router eigrp 100 network 172.16.250.0 0.0.0.255 redistribute ospf 1 metric 1 1 1 1 1 ! router ospf 1 redistribute eigrp 100 subnets network 192.168.250.0 0.0.0.255 area 0</pre>	<pre>R5#traceroute 172.16.3.1 Type escape sequence to abort. Tracing the route to 172.16.3.1 VRP info: (vrf in name/id, vrf out name/id) 1 192.168.250.9 66 msec 192.168.250.6 6 msec 192.168.250.9 8 msec 2 172.16.250.2 33 msec 172.16.250.14 88 msec 172.16.250.2 11 msec R5#</pre>
<pre>R2#show runn begin router eigrp router eigrp 100 network 172.16.250.0 0.0.0.255 redistribute ospf 1 metric 1 1 1 1 1 ! router ospf 1 redistribute eigrp 100 subnets network 192.168.250.0 0.0.0.255 area 0 ! ip forward-protocol nd</pre>	



Refer to the exhibit. An engineer is troubleshooting a routing loop on the network to reach the 172.16.3.0/16 from the OSPF domain. Which configuration on router R1 resolves the issue?

- A)

```
router ospf 1
 redistribute eigrp 100 subnets route-map LOOPFILT
!
route-map LOOPFILT deny 10
 match ip address 15
!
route-map LOOPFILT permit 20
!
access-list 15 permit 172.16.0.0 0.0.255.255
```
- B)

```
router eigrp 100
 redistribute ospf 1 metric 1 1 1 1 1 route-map LOOPFILT
!
route-map LOOPFILT deny 10
 match ip address 15
!
route-map LOOPFILT permit 20
!
access-list 15 permit 172.16.0.0 0.0.255.255
```
- C)

```
router ospf 1
 redistribute eigrp 100 route-map LOOPFILT
!
route-map LOOPFILT deny 10
 match ip address 15
!
access-list 15 permit 172.16.0.0 0.0.255.255
```
- D)

```
router eigrp 100
 redistribute ospf 1 metric 1 1 1 1 1 route-map LOOPFILT
!
route-map LOOPFILT deny 10
 match ip address 15
!
access-list 15 permit 172.16.0.0 0.0.255.255
```

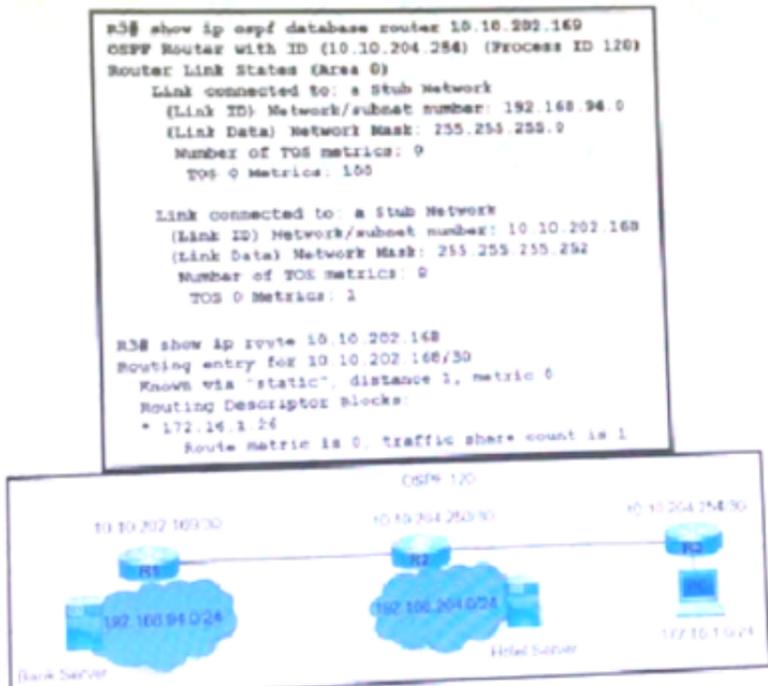
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 11

- (Exam Topic 3)

Refer to the exhibit.



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?

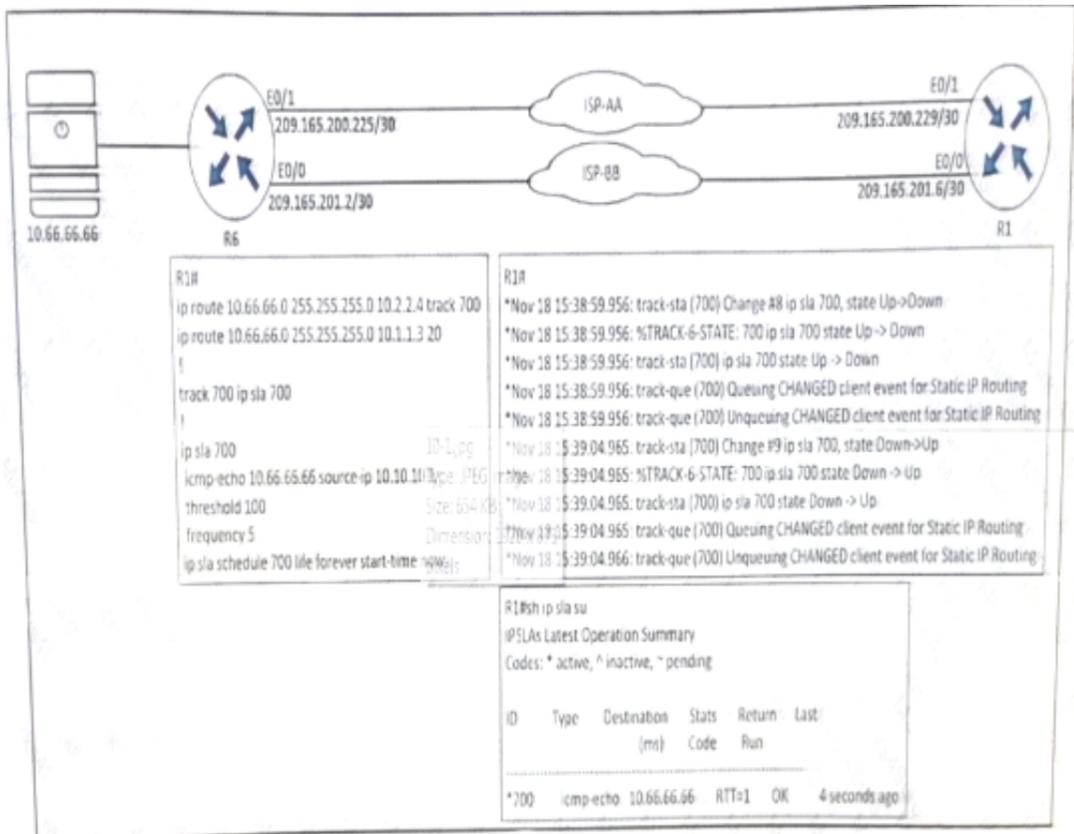
- A. Allow stub network 10.10.202.168/30 on router R3 OSPF.
- B. Decrease the AD to 5 OSPF route 192.168.94.0 on R1.
- C. Increase the AD to 200 of static route 192.168.94.0 on R3.
- D. Configure a reverse route on R1 for PC1 172.16.1.0/24.

Answer: A

NEW QUESTION 15

- (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 waning 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 19

- (Exam Topic 3)

What are the two prerequisites to enable BFD on Cisco routers? (Choose two)

- A. A supported IP routing protocol must be configured on the participating routers.
- B. OSPF Demand Circuit must run BFD on all participating routers.
- C. ICMP must be allowed on all participating routers.
- D. UDP port 1985 must be allowed on all participating routers.
- E. Cisco Express Forwarding and IP Routing must be enabled on all participating routers.

Answer: CE

NEW QUESTION 22

- (Exam Topic 3)

Refer to the exhibit.

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

An engineer is troubleshooting a TACACS problem. Which action resolves the issue?

- A. Configure a matching TACACS server IP.
- B. Configure a matching preshared key.
- C. Generate authentication from a relative source interface.
- D. Apply a configured AAA profile to the VTY.

Answer: B

Explanation:

Reference:

<https://community.cisco.com/t5/network-access-control/issues-with-tacacs-authentication/td-p/3412001> The last line shows us the reason, which is “Invalid AUTHEN packet (check keys)” so the most likely cause of this problem is key mismatch.

NEW QUESTION 27

- (Exam Topic 3)

The summary route is not shown in the RouterB routing table after this below configuration on Router_A.

```
interface ethernet 0
description location ID:S4289T9E09F39
ip address 192.168.3.1 255.255.255.0
ip summary-address eigrp 1 172.16.80.0 255.255.240.0
```

Which Router_A configuration resolves the issue by advertising the summary route to Router B?

- interface loopback 0
ip address 172.16.96.1 255.255.255.0
interface Ethernet 0
ip address 192.168.3.1 255.255.255.0
ip summary-address eigrp 1 172.16.80.0 255.255.240.0
- interface loopback 0
ip address 172.16.81.1 255.255.255.0
interface Ethernet 0
ip address 192.168.3.1 255.255.255.0
ip summary-address eigrp 1 172.16.80.0 255.255.240.0
- interface loopback 0
ip address 172.16.79.1 255.255.255.0
interface Ethernet 0
ip address 192.168.3.1 255.255.255.0
ip summary-address eigrp 1 172.16.80.0 255.255.240.0
- interface loopback 0
ip address 172.18.81.1 255.255.255.0
interface Ethernet 0
ip address 192.168.3.1 255.255.255.0
ip summary-address eigrp 1 172.16.80.0 255.255.240.0

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

Answer: B

NEW QUESTION 30

- (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)
```

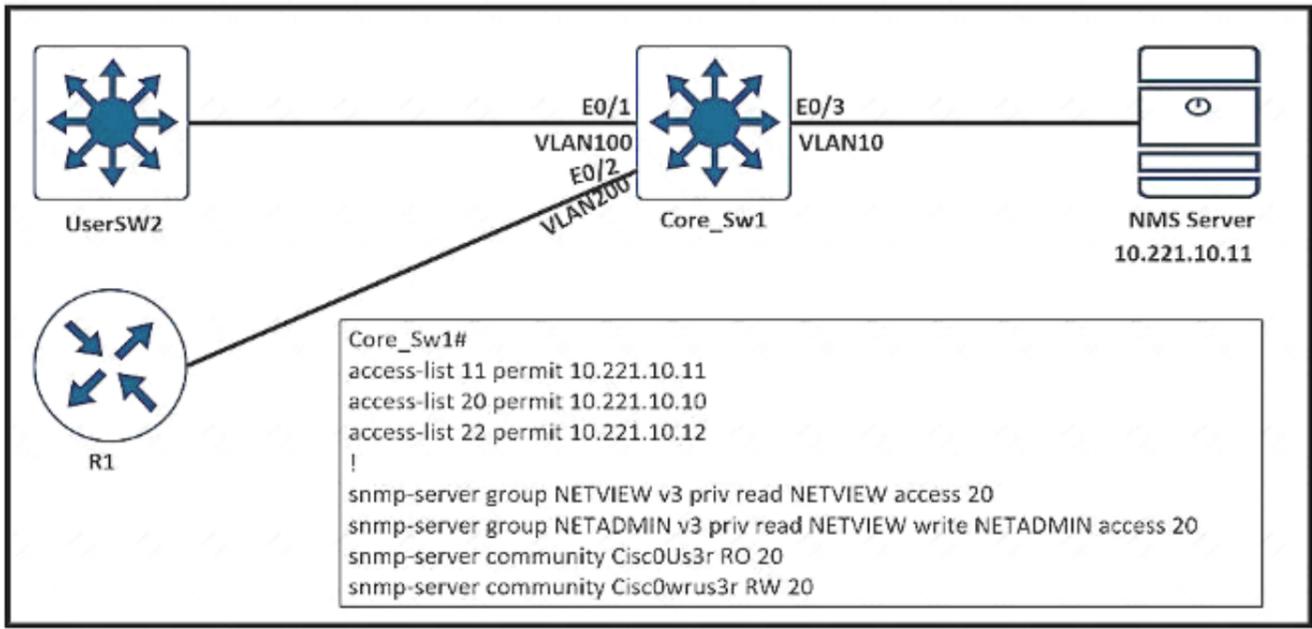
Refer to the exhibit The SNMP server with IP address 172.16.4.4 cannot access host router A Which configuration command on router A resolves the issue?

- 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 35

- (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 36

- (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

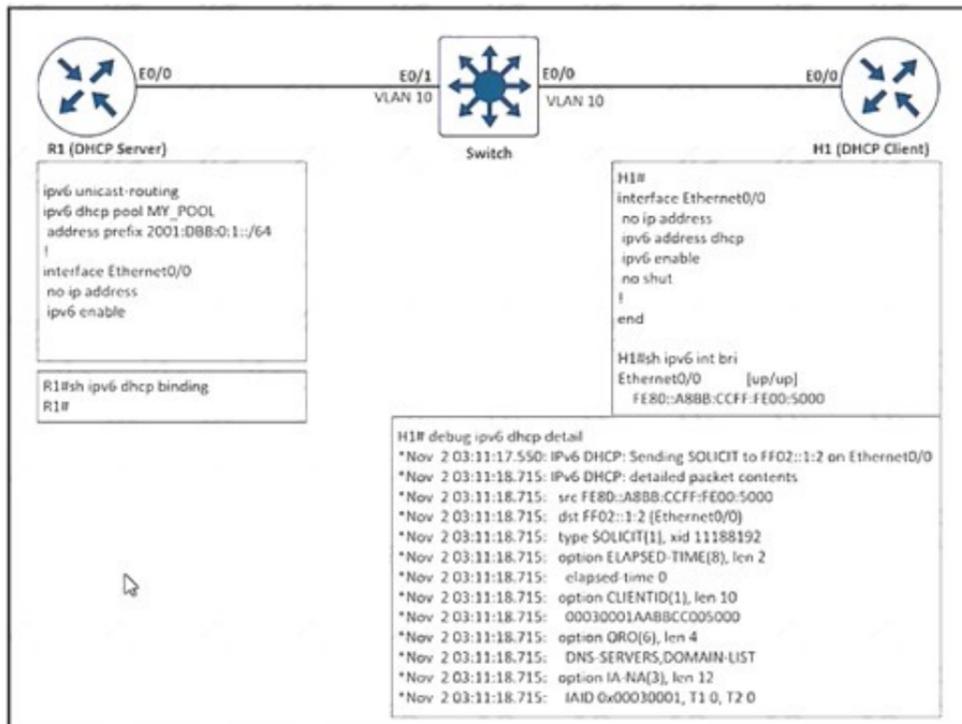
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 39

- (Exam Topic 3)

Refer to the exhibit.



After the network administrator rebuilds the IPv6 DHCP server, clients are not getting the IPv6 address lease. Which action resolves the issue?

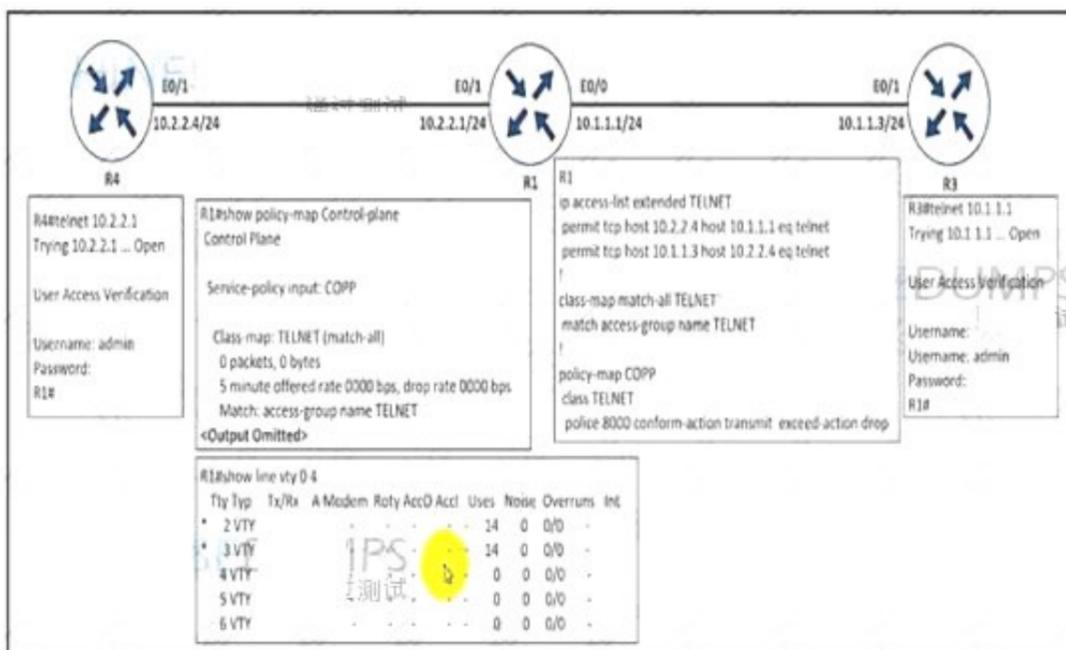
- A. Remove FE80 A8BB CCFF FE00 5000 assigned by the IPV6 DHCP server.
- B. Add Ipv6 dhcp sarver MY_POOL under the interface ethernet 0/0 on H1.
- C. Add Ipv6 dhcp server MY_POOL under the interface ethernet 0/0 on R1.
- D. Configure FF02::1:2 to discover al IPV6 OHCP cfcents

Answer: C

NEW QUESTION 44

- (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 47

- (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

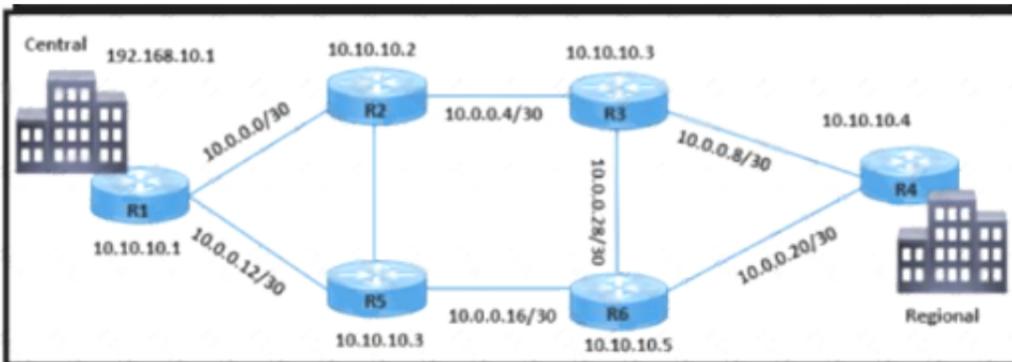
Answer: A

NEW QUESTION 49

- (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 the 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?

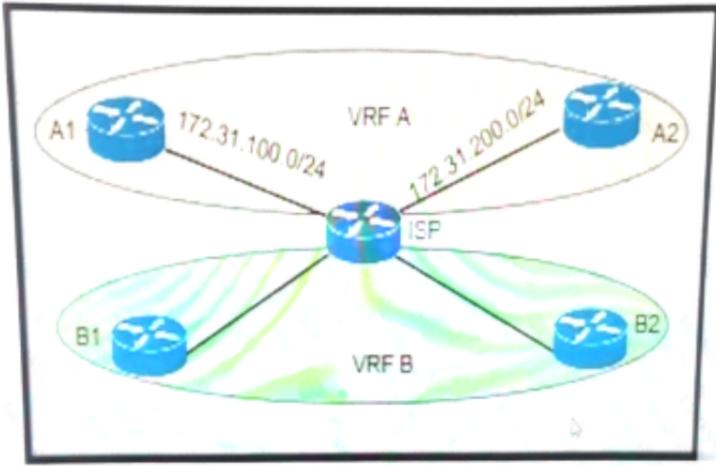
- A. R3(config)#ip route 192.168.10.1 255.255.255.255 10.10.10.2 track 20
- B. R2(config)#ip route 10.10.10.3 255.255.255.255 10.0.0.6
- C. R3(config)#track(20 ip sla 20 reachability
- D. R6(config)#ip route 10.10.10.3 255.255.255.255 10.0.0.30

Answer: A

NEW QUESTION 50

- (Exam Topic 3)

Refer to the exhibit. The ISP router is fully configured for customer A and customer B using the VRF-Lite feature. What is the minimum configuration required for customer A to communicate between routers A1 and A2?



- A. A1interface fa0/0 description To->ISPip add 172.31.100.1 255.255.255.0no shut!router ospf 100net 172.31.100.1 0.0.0.255 area 0 A2interface fa0/0 description To->ISPip add 172.31.200.1 255.255.255.0no shut!router ospf 100net 172.31.200.1 0.0.0.255 area 0
- B. A1interface fa0/0 description To->ISP ip vrf forwarding Aip add 172.31.100.1 255.255.255.0no shut!router ospf 100net 172.31.100.1 0.0.0.255 area 0 A2interface fa0/0 description To->ISP ip vrf forwarding Aip add 172.31.200.1 255.255.255.0no shut!router ospf 100net 172.31.200.1 0.0.0.255 area 0
- C. A1interface fa0/0 description To->ISPip add 172.31.200.1 255.255.255.0no shut!router ospf 100net 172.31.200.1 0.0.0.255 area 0 A2interface fa0/0 description To->ISPip add 172.31.100.1 255.255.255.0no shut!router ospf 100net 172.31.100.1 0.0.0.255 area 0
- D. A1interface fa0/0 description To->ISP ip vrf forwarding Aip add 172.31.100.1 255.255.255.0no shut!router ospf 100 vrf Anet 172.31.200.1 0.0.0.255 area 0 A2interface fa0/0 description To->ISP ip vrf forwarding Aip add 172.31.100.1 255.255.255.0no shut!router ospf 100 vrf Anet 172.31.200.1 0.0.0.255 area 0

Answer: C

Explanation:

A1 and A2 routers do not know they belong to VRF A. The two interfaces of ISP (which are connected to A1 & A2) should be configured like this (we only show the configure of one interface):

```
ISP router:
interface g0/0
description ISP->To_CustomerA ip vrf forwarding A
ip address 172.31.100.2 255.255.255.0
router ospf 100 vrf A
network 172.31.200.2 0.0.0.255 area 0
```

NEW QUESTION 51

- (Exam Topic 3)

Which protocol must be secured with MD-5 authentication across the MPLS cloud to prevent hackers from introducing bogus routers?

- A. MP-BGP
- B. LSP
- C. RSVP
- D. LDP

Answer: A

NEW QUESTION 53

- (Exam Topic 3)

Refer to the exhibit.

```

Router#show ip bgp vprn4 rd 1100:1001 10.30.116.0/23
BGP routing table entry for 1100:1001:10.30.116.0/23, version 26765275
Paths: (9 available, best #6, no table)
Advertised to update-groups:
 1  2  3
(65001 64955 65003) 65089, (Received from a RR-client)
 172.16.254.226 (metric 20645) from 172.16.224.236 (172.16.224.236)
  Origin IGP, metric 0, localpref 100, valid, confed-internal
  Extended Community: RT:1100:1001
  mpls labels in/out nolabel/362
(65008 64955 65003) 65089
 172.16.254.226 (metric 20645) from 10.131.123.71 (10.131.123.71)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community: RT:1100:1001
  mpls labels in/out nolabel/362
(65001 64955 65003) 65089
 172.16.254.226 (metric 20645) from 172.16.216.253 (172.16.216.253)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community: RT:1100:1001
  mpls labels in/out nolabel/362
(65001 64955 65003) 65089
 172.16.254.226 (metric 20645) from 172.16.216.252 (172.16.216.252)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community: RT:1100:1001
  mpls labels in/out nolabel/362
(64955 65003) 65089
 172.16.254.226 (metric 20645) from 10.77.255.57 (10.77.255.57)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community RT:1100:1001
  mpls labels in/out nolabel/362
(64955 65003) 65089
 172.16.254.226 (metric 20645) from 10.57.255.11 (10.57.255.11)
  Origin IGP, metric 0, localpref 100, valid, confed-external, best
  Extended Community RT:1100:1001
  mpls labels in/out nolabel/362

(64955 65003) 65089
 172.16.254.226 (metric 20645) from 172.16.224.253 (172.16.224.253)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community RT:1100:1001
  mpls labels in/out nolabel/362
(65003) 65089
 172.16.254.226 (metric 20645) from 172.16.254.234 (172.16.254.234)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community RT:1100:1001
  mpls labels in/out nolabel/362
65089, (Received from a RR-client)
 172.16.228.226 (metric 20645) from 172.16.228.226 (172.16.228.226)
  Origin IGP, metric 0, localpref 100, valid, confed-external
  Extended Community RT:1100:1001
  mpls labels in/out nolabel/278

```

An engineer configured BGP and wants to select the path from 10.77.255.57 as the best path instead of current best path. Which action resolves the issue?

- A. Configure AS_PATH prepend for the current best path
- B. Configure higher MED to select as the best path
- C. Configure AS_PATH prepend for the desired best path
- D. Configure lower LOCAL_PREF to select as the best path

Answer: D

Explanation:

From the output, we learn that the current best path is from 10.57.255.11 (which includes "...valid, confed-external, best") and this path is 2 ASes away (64955 65003). Although there are some paths with only 1 AS away (path from 172.16.254.234 for example) but they were not chosen the best path so AS_PATH was not used to determine the best path -> Answers A and answer C are not correct. All the paths in the output have metric of 0 and this is the lowest (best) value for this attribute. If we configure higher MED then it is less preferred over other paths -> Answer B is not correct. Only answer D is left but LOCAL_PREF attribute should be configured with higher value to be preferred so we hope "lower LOCAL_PREF" here means higher value. But this is the best answer.

NEW QUESTION 57

- (Exam Topic 3)

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

- A. The MPLS LOP router ID must match the IGP router ID.
- B. If not configured, the operational physical interface is chosen as the router ID even 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 61

- (Exam Topic 3)

Refer to the exhibit.

```
R2(config)# int tun0
*Jun 23 00:42:06.179: %LINEPROTO-5-UPDOWN: Line protocol on
Interface Tunnel0, changed state to down

R2(config-if)# ip address 192.168.12.2 255.255.255.0
R2(config-if)# tunnel source lo0
R2(config-if)# tunnel destination 10.255.255.1

*Jun 23 00:42:15.845: %LINEPROTO-5-UPDOWN: Line protocol on
Interface Tunnel0, changed state to up

R2(config-if)# router eigrp E
R2(config-router)# address-family ipv4 autonomous-system 1
R2(config-router-af)# net 192.168.12.2 0.0.0.0

*Jun 23 00:43:05.730: %DUAL-5-NBRCHANGE: EIGRP-IPv4 1: Neighbor
192.168.12.1 (Tunnel0) is up: new adjacency
* Jun 23 00:43:05.993: %ADJ-5-PARENT: Midchain parent maintenance
for IP midchain out of Tunnel0 - looped chain attempting to stack
*Jun 23 00:43:15.193: %TUN-5-RECURDOWN: Tunnel0 temporarily
disabled due to recursive routing

*Jun 23 00:43:15.193: %LINEPROTO-5-UPDOWN: Line protocol on
Interface Tunnel0, changed state to down
```

An administrator is configuring a GRE tunnel to establish an EIGRP neighbor to a remote router. The other tunnel endpoint is already configured. After applying the configuration as shown, the tunnel started flapping. Which action resolves the issue?

- A. Modify the network command to use the Tunnel0 interface netmask
- B. Advertise the Loopback0 interface from R2 across the tunnel
- C. Stop sending a route matching the tunnel destination across the tunnel
- D. Readdress the IP network on the Tunnel0 on both routers using the /31 netmask

Answer: C

Explanation:

In this question we are advertising the tunnel IP address 192.168.12.2 to the other side. When other end receives the EIGRP advertisement, it realizes it can reach the other side of the tunnel via EIGRP. In other words, it reaches the tunnel destination through the tunnel itself -> This causes "recursive routing" error.

Note: In order to avoid this error, do not advertise the tunnel destination IP address on the tunnel interface to other side.

Good recursive routing reference: <https://networklessons.com/cisco/ccie-routing-switching/gretunnel-recursive-routing-error>

NEW QUESTION 63

- (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

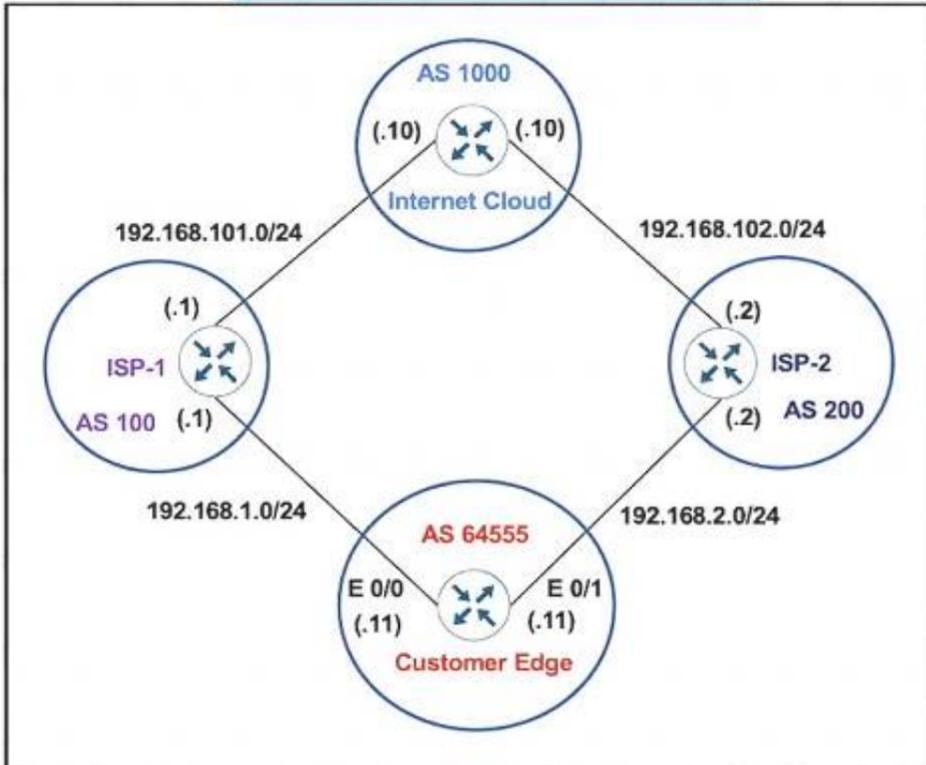
Answer: C

Explanation:

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

NEW QUESTION 68

- (Exam Topic 3)



Refer to the exhibit. The Customer Edge router wants to use AS 100 as the preferred ISP for all external routes and ISP-2 as a backup.

Customer-Edge

```
route-map SETAS
 set as-path prepend 111
!
router bgp 64555
 neighbor 192.168.1.1 remote-as 100
 neighbor 192.168.2.2 remote-as 200
 neighbor 192.168.2.2 route-map SETAS in
```

After this configuration, all the backup routes have disappeared from the BGP table on the Customer Edge router. Which set of configurations resolves the issue on the Customer Edge router?

A)

```
route-map SETAS
 set as-path prepend 111
!
router bgp 64555
 neighbor 192.168.2.2 remote-as 100
 neighbor 192.168.1.1 remote-as 200
 neighbor 192.168.1.1 route-map SETAS in
```

B)

```
route-map SETAS
 set as-path prepend 200
!
router bgp 64555
 neighbor 192.168.1.1 remote-as 100
 neighbor 192.168.2.2 remote-as 200
 neighbor 192.168.2.2 route-map SETAS in
```

C)

```
route-map SETAS
 set as-path prepend 200
!
router bgp 64555
 neighbor 192.168.1.1 remote-as 100
 neighbor 192.168.2.2 remote-as 200
 neighbor 192.168.2.2 route-map SETAS out
```

D)

```
route-map SETAS
 set as-path prepend 111
!
router bgp 64555
 neighbor 192.168.1.1 remote-as 100
 neighbor 192.168.2.2 remote-as 200
 neighbor 192.168.2.2 route-map SETAS out
```

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

Answer: C

NEW QUESTION 71

- (Exam Topic 3)

What does the MP-BGP OPEN message contain?

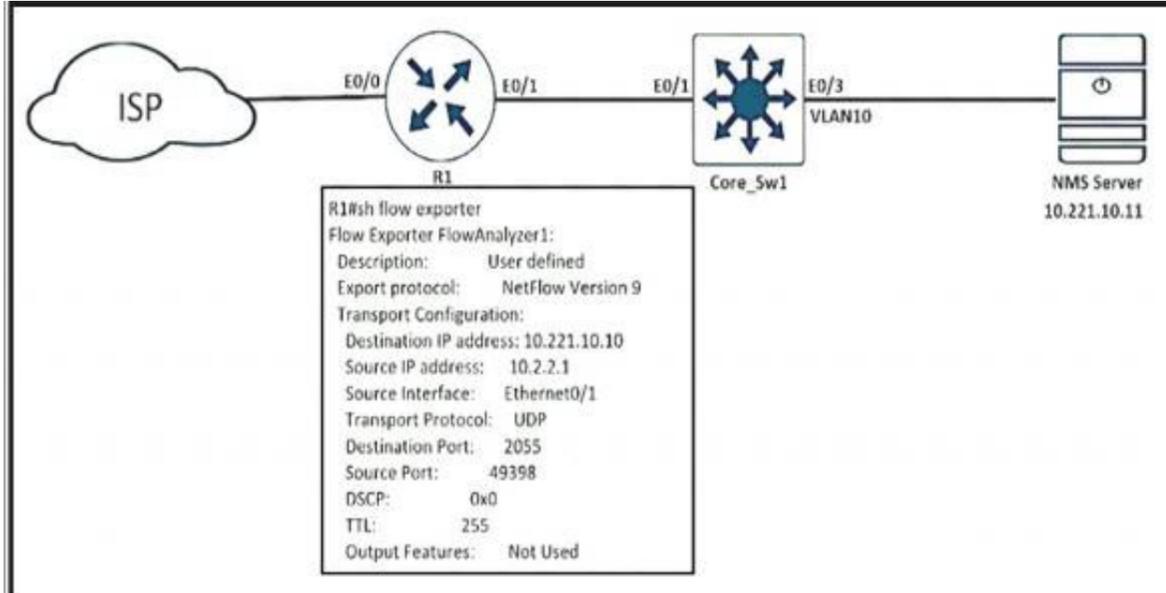
- A. MPLS labels and the IP address of the router that receives the message
- B. the version number and the AS number to which the router belongs
- C. IP routing information and the AS number to which the router belongs
- D. NLRI, path attributes, and IP addresses of the sending and receiving routers

Answer: B

NEW QUESTION 75

- (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 79

- (Exam Topic 3)

What are the two reasons for RD and VPNv4 addresses in an MPLS Layer 3 VPN? (Choose two.)

- A. RD is prepended to each prefix to make routes unique.
- B. VPN RT communities are used to identify customer unique routes.
- C. When the PE redistributes customer routes into MP-BGP, they must be unique.
- D. They are on a CE device to use for static configuration.
- E. They are used for a BGP session with the CE device.

Answer: AC

NEW QUESTION 82

- (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

NEW QUESTION 83

- (Exam Topic 3)

Refer to the exhibit.

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

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

- A. It is sent to 209.165.202.131.
- B. It is sent to 209.165.202.129.
- C. It is dropped.
- D. It is forwarded using the routing table lookup.

Answer: A

Explanation:

The set ip next-hop verify-availability command in route-map configuration mode to configure policy routing to verify the reachability of the next hop of a route map before the router performs policy routing to that next hop. In this question we see track 100 is down so the PBR will not use this next-hop, it will use the second next-hop with track 200 (up).

NEW QUESTION 86

- (Exam Topic 3)

Refer to the exhibit.

```
flow exporter EXPORTER-1
 destination 172.16.10.2
 export-protocol netflow-v9
 transport udp 90
 exit
!
flow record v4_r1
 match ipv4 tos
 match ipv4 protocol
 match ipv4 source address
 match ipv4 destination address
 match transport source-port
 match transport destination-port
 collect counter bytes long
 collect counter packets long
!
flow monitor FLOW-MONITOR-1
 record v4_r1
!
ip cef
!
interface GigabitEthernet 0/0/0
 ip address 172.16.6.2 255.255.255.0
 ip flow monitor FLOW-MONITOR-1 input
```

An engineer configured NetFlow to capture traffic information through the router, but it iOS not working as expected. Which action captures the flow information from this router to the collector?

- A. Change the interface configuration FLOW-MONITOR-1 from input to output.
- B. Configure a flow exporter under flow FLOW-MONITOR-1.
- C. Configure more than one flow exporter destination addresses.
- D. Change the flow exporter transport protocol from UDP to TCP

Answer: B

NEW QUESTION 89

- (Exam Topic 3)

```
100.0.0.0/32 is subnetted, 3 subnets
C 100.1.1.1 is directly connected, Loopback0
D 100.2.2.2 [90/156160] via 10.1.1.2, 00:00:46, FastEthernet0/0
D 100.3.3.3 [90/158720] via 10.1.1.14, 00:00:44, FastEthernet1/0
 [90/158720] via 10.1.1.2, 00:00:44, FastEthernet0/0
10.0.0.0/8 is variably subnetted, 13 subnets, 4 masks
D 10.1.1.8/30 [90/30720] via 10.1.1.14, 00:00:44, FastEthernet1/0
C 10.1.1.12/30 is directly connected, FastEthernet1/0
C 10.1.1.0/30 is directly connected, FastEthernet0/0
D 10.1.1.4/30 [90/30720] via 10.1.1.2, 00:00:45, FastEthernet0/0
C 10.100.1.40/32 is directly connected, Loopback40
D EX 10.1.1.80/29 [170/33280] via 10.1.1.14, 00:00:45, FastEthernet1/0
 [170/33280] via 10.1.1.2, 00:00:45, FastEthernet0/0
C 10.100.1.50/32 is directly connected, Loopback50
C 10.100.1.10/32 is directly connected, Loopback10
S 10.100.1.0/24 is a summary, 00:00:48, Null0
C 10.100.1.30/32 is directly connected, Loopback30
C 10.100.1.20/32 is directly connected, Loopback20
C 10.200.1.0/24 is directly connected, FastEthernet0/1
D EX 10.247.10.0/30 [170/2174976] via 10.1.1.14, 00:00:46, FastEthernet1/0
 [170/2174976] via 10.1.1.2, 00:00:46, FastEthernet0/0
```

Refer to the exhibit. R1 must advertise all loopback interfaces IP addresses to neighbors, but EIGRP neighbors receive a summary route. Which action resolves the issue?

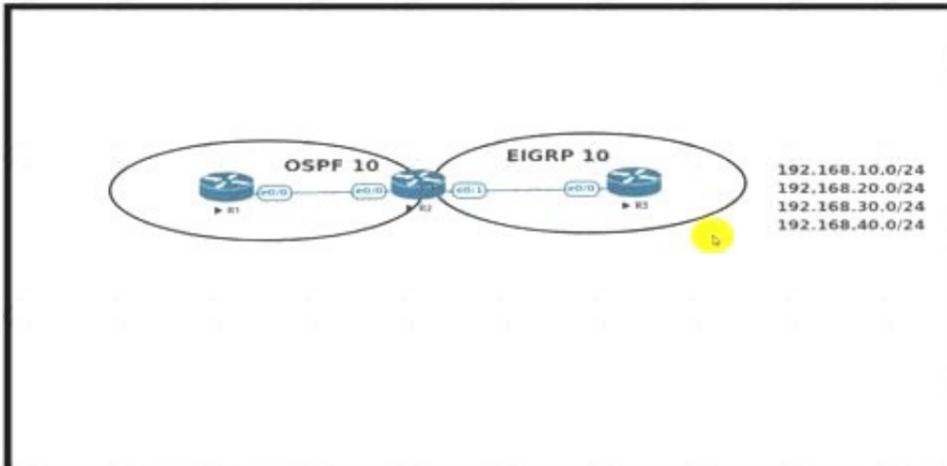
- A. Redistribute connected routes into EIGRP Enable
- B. EIGRP on loopback Interfaces.
- C. Disable auto summarization on R1.
- D. Remove the 10.100.1.0/24 static route.

Answer: D

NEW QUESTION 91

- (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

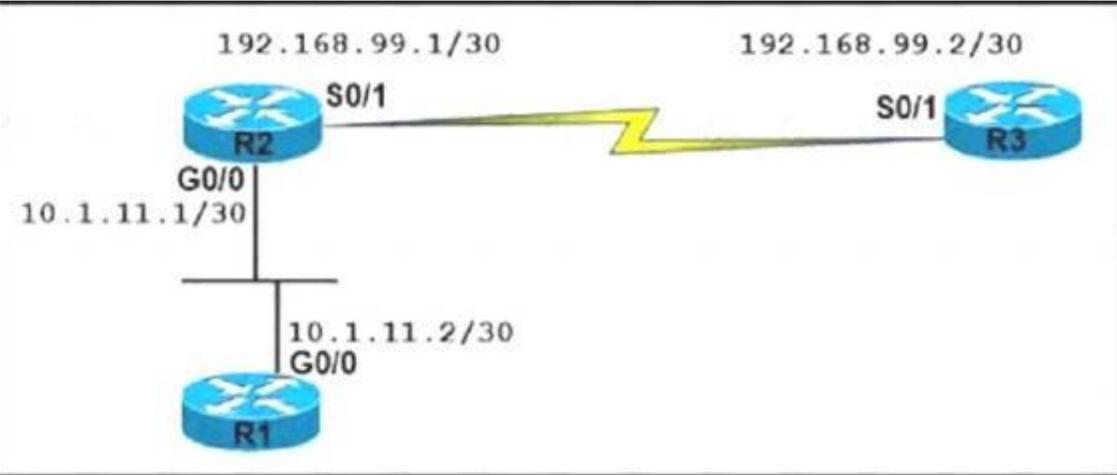
NEW QUESTION 92

- (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 95

- (Exam Topic 3)

```
interface GigabitEthernet0/0
description FTP SERVER
no ip address
ipv6 address 2001:DB8::F/33
ipv6 enable
ipv6 traffic-filter FTP-SERVER in
!
interface GigabitEthernet0/1
description FTP CLIENT
no ip address
ipv6 address 2001:DB8:8000::F/33
ipv6 enable
ipv6 traffic-filter FTP-CLIENT in

ipv6 access-list FTP-CLIENT
permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp
permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp-data

ipv6 access-list FTP-CLIENT
permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp
permit tcp host 2001:DB8:8000::1 host 2001:DB8::1 eq ftp-data
!
ipv6 access-list FTP-SERVER
permit tcp host 2001:DB8::1 host 2001:DB8:8000::1 eq ftp established
permit tcp host 2001:DB8::1 host 2001:DB8:8000::1 eq ftp-data established
```

Refer to the exhibit. When an FTP client attempts to use passive FTP to connect to the FTP server, the file transfers fail. Which action resolves the issue?

- A. Configure active FTP traffic.
- B. Modify FTP-SERVER access list to remove established at the end.
- C. Modify traffic filter FTP-SERVER in to the outbound direction.
- D. Configure to permit TCP ports higher than 1023.

Answer: D

NEW QUESTION 96

- (Exam Topic 3)

A network administrator successfully established a DMVPN tunnel with one hub and two spokes using EIGRP. One of the requirements was to enable spoke-to-spoke tunnels through the hub router using EIGRP. Which configuration command must the engineer configure to meet the requirement?

- A. no ip eigrp 1 mode multipoint
- B. no ip eigrp 1 split-horizon
- C. no ip eigrp 1 tunnel-redirect
- D. no ip eigrp 1 mode mgre

Answer: B

NEW QUESTION 99

- (Exam Topic 3)

```
enable secret 5 <password>
username cisco privilege 15 secret 5 <password>
username operator password 7 <password>
line vty 0 4
session-timeout 240
password 7 <password>
transport input telnet
```

Refer to the exhibit. The authentication is not working as desired and the user drops into user-exec mode. Which configuration resolves the issue?

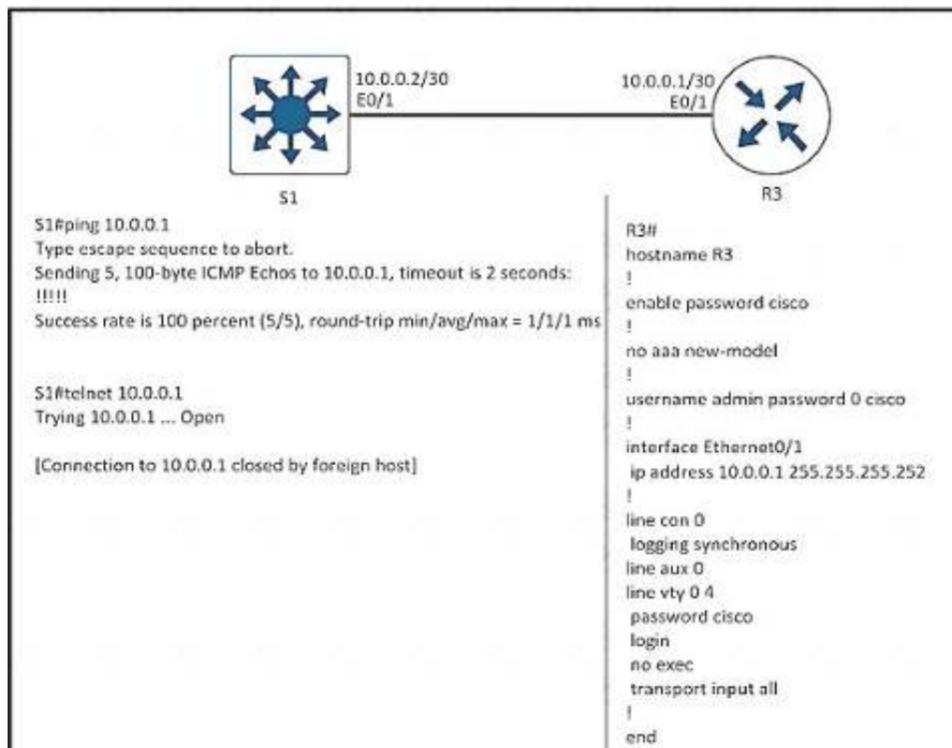
- aaa new-model**
aaa authentication login default local
aaa authorization exec default local
!
line vty 0 4
login authentication default
authorization exec default
- aaa new-model**
aaa authentication login default local
aaa authorization priv default 15
!
line vty 0 4
login authentication default
authorization exec priv15
- aaa new-model**
aaa authentication login local
aaa authorization exec local
!
line vty 0 4
login authentication local
authorization exec default
- aaa new-model**
aaa authentication common-id default local
aaa authorization exec default local
!
line vty 0 4
login authentication default
authorization exec default

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

Answer: C

NEW QUESTION 103

- (Exam Topic 3)



Refer to the exhibit. A network engineer cannot remote access R3 using Telnet from switch S1. Which action resolves the issue?

- A. Allow the inbound connection via the exec command on R3.
- B. Add the transport input telnet command on R3.
- C. Allow to use the ssh -l admin 10.0.0.1 command on the switch.
- D. Add the login admin command on the switch.

Answer: A

NEW QUESTION 108

- (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?

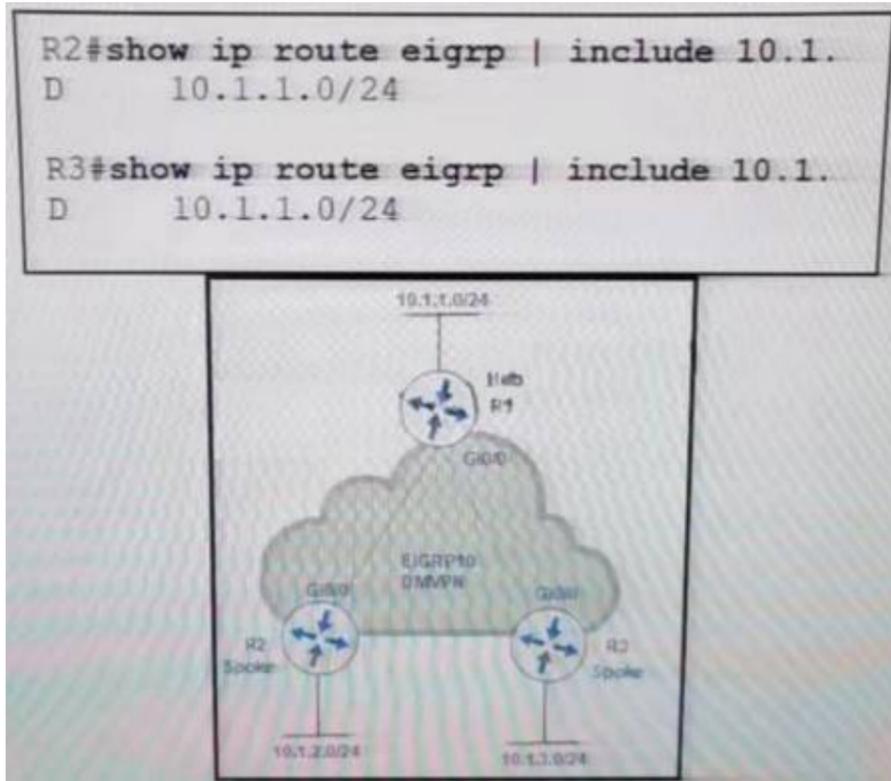
- A. Remove ipv6 inspect ipv6-firewall in from interface gi0/1
- B. Add permit udp any eq domain any log in the access list.
- C. inspect ipv6 inspect name ipv6-firewall udp 53 in global config.
- D. Add permit any eq domain 53 any log in the access list.

Answer: A

NEW QUESTION 111

- (Exam Topic 3)

Refer to the exhibit.



An engineer configures DMVPN and receives the hub location prefix of 10.1.1.0/24 on R2 and R3. The R3 prefix of 10.1.3.0/24 is not received on R2, and the R2 prefix 10.1.2.0/24 is not received on R3. Which action resolves the issue?

- A. Split horizon prevents the routes from being advertised between spoke routers; it should be disabled with the command 'no ip split-horizon eigrp 10' on the tunnel interface of R1.
- B. There is no spoke-to-spoke connection; DMVPN configuration should be modified to enable a tunnel connection between R2 and R3, and neighbor relationship confirmed by use of the 'show ip eigrp neighbor' command.
- C. Split horizon prevents the routes from being advertised between spoke routers; it should be disabled with the 'no ip split-horizon eigrp 10' command on the Gi0/0 interface of R1.
- D. There is no spoke-to-spoke connection; DMVPN configuration should be modified with a manual neighbor relationship configured between R2 and R3, and confirmed by use of the 'show ip eigrp neighbor' command.

Answer: A

Explanation:

In this topology, the Hub router will receive advertisements from R2 Spoke router on its tunnel interface. The problem here is that it also has a connection with R3 Spoke on that same tunnel interface. If we don't disable split-horizon, then the Hub will not relay routes from R2 to R3 and the other way around. That is because it received those routes on the same interface (tunnel) and therefore it cannot advertise back out that same interface (split-horizon rule). Therefore we must disable split-horizon on the Hub router to make sure the Spokes know about each other.

NEW QUESTION 115

- (Exam Topic 3)

```
R4#
interface FastEthernet1/0
ip address 10.1.1.14 255.255.255.252
ip access-group VENDOR in
ip authentication mode eigrp 100 md5
ip authentication key-chain eigrp 100 EIGRPKEY
speed 100
full-duplex
!
interface loopback 100
ip address 10.199.100.1 255.255.255.255
!
router eigrp 100
network 10.1.1.8 0.0.0.3
network 10.1.1.12 0.0.0.3
no auto-summary
eigrp router-id 100.4.4.4
neighbor 10.1.1.13 FastEthernet1/0
redistribute connected
!
router bgp 65001
no synchronization
bgp log-neighbor-changes
network 100.4.4.4 mask 255.255.255.255
neighbor 10.1.1.13 remote-as 65001
no auto-summary
!
ip access-list extended VENDOR
permit tcp 192.168.32.0 0.0.7.255 host 10.199.100.1 eq 22 time-range VENDOR_ACCESS
!
time-range VENDOR_ACCESS
periodic weekend 22:00 to 23:00
```

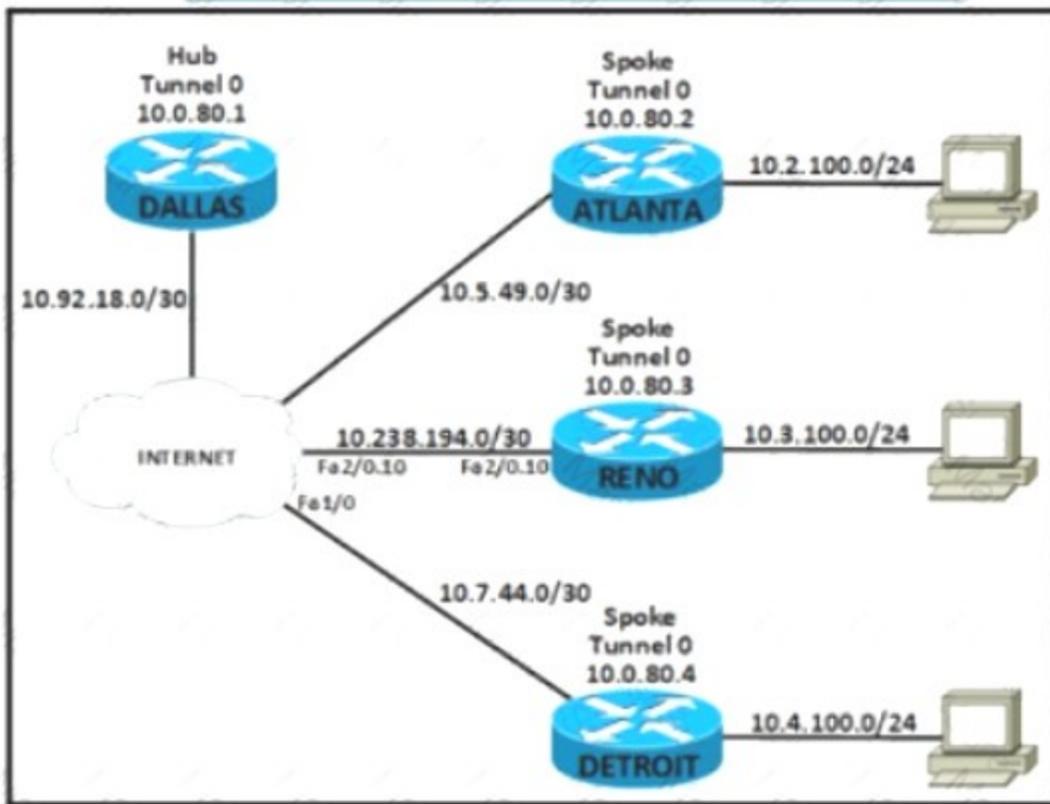
Refer to the exhibit. A network engineer received a call from the vendor for a failed attempt to remotely log in to their managed router loopback interface from 192.168.40.15. Which action must the network engineer take to resolve the issue?

- A. The IP access list VENDOR must be applied to interface loopback 100.
- B. The time-range configuration must be changed to use absolute instead of periodic.
- C. The EIGRP configuration must be updated to include a network statement for loopback 100.
- D. The source IP summarization must be updated to include the vendor source IP address.

Answer: C

NEW QUESTION 119

- (Exam Topic 3)



Refer to the exhibit An engineer must connect the Reno and Detroit spokes using DMVPN phase 2 Hub tunnel configuration is

Dallas

```
interface Tunnel0
ip address 10.0.80.1 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map multicast dynamic
ip nhrp network-id 5
tunnel source Serial0/0
tunnel mode gre multipoint
```

Which configuration accomplishes the task?

Reno

```
interface Tunnel0
ip address 10.0.80.3 255.255.255.0
ip nhrp authentication cisco321
ip nhrp map multicast 10.92.18.2
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.238.194.2
tunnel mode gre multipoint
```

Detroit

```
interface Tunnel0
ip address 10.0.80.4 255.255.255.0
ip nhrp authentication cisco321
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp map multicast 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.7.44.2
tunnel mode gre multipoint
```

Reno

```
interface Tunnel0
ip address 10.0.80.3 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map multicast 10.92.18.2
ip nhrp map 10.92.18.2 10.0.80.1
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.238.194.2
tunnel mode gre multipoint
```

Detroit

```
interface Tunnel0
ip address 10.0.80.4 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map 10.92.18.2 10.0.80.1
ip nhrp map multicast 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.7.44.2
tunnel mode gre multipoint
```

```

Reno
interface Tunnel0
ip address 10.0.80.3 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map broadcast 10.92.18.2
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.238.194.2
tunnel mode gre multipoint
  
```

```

Detroit
interface Tunnel0
ip address 10.0.80.4 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp map broadcast 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.7.44.2
tunnel mode gre multipoint
  
```

```

Reno
interface Tunnel0
ip address 10.0.80.3 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map multicast 10.92.18.2
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.238.194.2
tunnel mode gre multipoint
  
```

```

Detroit
interface Tunnel0
ip address 10.0.80.4 255.255.255.0
ip nhrp authentication cisco123
ip nhrp map 10.0.80.1 10.92.18.2
ip nhrp map multicast 10.92.18.2
ip nhrp network-id 5
ip nhrp nhs 10.0.80.1
tunnel source 10.7.44.2
tunnel mode gre multipoint
  
```

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

Answer: C

NEW QUESTION 123

- (Exam Topic 3)

What is considered the primary advantage of running BFD?

- A. reduction in time needed to detect Layer 2 switched neighbor failures
- B. reduction in time needed to detect Layer 3 routing neighbor failures
- C. reduction in CPU needed to detect Layer 2 switch neighbor failures
- D. reduction in CPU needed to detect Layer 3 routing neighbor failures

Answer: B

NEW QUESTION 126

- (Exam Topic 3)

Refer to the exhibit.

```

R2#sh ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, Serial1/0
C    172.16.0.0/16 is variably subnetted, 5 subnets, 2 masks
C    172.16.160.0/19 is directly connected, Loopback1
C    172.16.128.0/19 is directly connected, Loopback0
C    172.16.224.0/19 is directly connected, Loopback3
C    172.16.192.0/19 is directly connected, Loopback2
D    172.16.0.0/16 is a summary, 00:01:27, Null0
  
```

An engineer must configure EIGRP between R1 and R2 with no summary route. Which configuration resolves the issue?

- A)
R1(config)#router eigrp 1
R1(config-router)#no auto-summary
- B)
R2 (config)#router eigrp 1
R2 (config-router)#no auto-summary
- C)
R2 (config)#router eigrp 1
R2 (config-router)#auto-summary
- D)
R1(config)#router eigrp 1
R1(config-router)#auto-summary

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

Answer: B

NEW QUESTION 127

- (Exam Topic 3)

An engineer configured routing between multiple OSPF domains and introduced a routing loop that caused network instability. Which action resolves the problem?

- A. Set a tag using the redistribute command toward a domain and deny inbound in the other domain by a matching tag
B. Set a tag using the redistribute command toward a different domain and deny the matching tag when exiting from that domain
C. Set a tag using the network command in a domain and use the route-map command to deny the matching tag when exiting toward a different domain
D. Set a tag using the network command in a domain and use the route-map command to deny the matching tag when entering into a different domain

Answer: A

NEW QUESTION 129

- (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 134

- (Exam Topic 2)

Refer to the exhibit.

```
Router# show ip route

2.0.0.0/24 is subnetted, 1 subnets
C    2.2.2.0 is directly connected, Ethernet0/0
C    3.0.0.0/8 is directly connected, Serial1/0
O E2 200.1.1.0/24 [110/20] via 2.2.2.2, 00:16:17, Ethernet0/0
O E1 200.2.2.0/24 [110/104] via 2.2.2.2, 00:00:41, Ethernet0/0
131.108.0.0/24 is subnetted, 2 subnets
O    131.108.2.0 [110/74] via 2.2.2.2, 00:16:17, Ethernet0/0
O IA 131.108.1.0 [110/84] via 2.2.2.2, 00:16:17, Ethernet0/0

Router# show ip bgp

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

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

- A. Include the word external in the redistribute command
- B. Use a route-map command to redistribute OSPF external routes defined in an access list
- C. Include the word internal external in the redistribute command
- D. Use a route-map command to redistribute OSPF external routes defined in a prefix list.

Answer: C

Explanation:

If you configure the redistribution of OSPF into BGP without keywords, only OSPF intra-area and inter-area routes are redistributed into BGP, by default. You can use the internal keyword along with the redistribute command under router bgp to redistribute OSPF intra- and inter-area routes.

Use the external keyword along with the redistribute command under router bgp to redistribute OSPF external routes into BGP.

-> In order to redistribute all OSPF routes into BGP, we must use both internal and external keywords. The full command would be (suppose we are using OSPF 1):

redistribute ospf 1 match internal external

Note: The configuration shows match internal external 1 external 2. This is normal because OSPF automatically appends "external 1 external 2" in the configuration. In other words, keyword external = external 1 external 2. External 1 = O E1 and External 2 = O E2. Reference:

<https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/5242-bgp-ospf-redistribution.html>

NEW QUESTION 135

- (Exam Topic 3)

Refer to the exhibit.

The exhibit shows a network setup with an FTP server at 10.0.0.2/24 and a switch at 10.0.0.1. The switch has interface VLAN2 with IP 10.0.0.1. The FTP server has a terminal window showing ping results to 10.0.0.1 and a terminal window on the switch showing an error when trying to copy the IOS.bin file from the FTP server.

An engineer cannot copy the IOS.bin file from the FTP server to the switch. Which action resolves the issue?

- A. Allow file permissions to download the file from the FTP server.
- B. Add the IOS.bin file, which does not exist on FTP server.
- C. Make memory space on the switch flash or USB drive to download the file.
- D. Use the copy flash:/ ftp://cisco@10.0.0.2/IOS.bin command.

Answer: B

NEW QUESTION 137

- (Exam Topic 3)



Refer to the exhibit. The traffic from spoke to hub is dropping. The operations team observes:

- R2-R3 link is down due to the fiber cut.
- R2 and R5 receive traffic from R1 in AS 65101.
- R3 and R5 receive traffic from R4 in AS 65201.

Which configuration resolves the issue?

- A)
- ```

R6(config)#router bgp 65101
R6(config-router)#no neighbor 10.0.0.17 update-source Loopback0

```
- B)
- ```

R5(config)#router bgp 65101
R5(config-router)#no neighbor 10.0.0.18 update-source Loopback0
    
```
- C)
- ```

R6(config)#router bgp 65201
R6(config-router)#neighbor 10.10.10.5 remote-as 65101
R6(config-router)#neighbor 10.10.10.5 update-source Loopback0
R6(config-router)#neighbor 10.10.10.5 ebgp-multihop 3

```
- D)
- ```

R5(config)#router bgp 65101
R5(config-router)#neighbor 10.10.10.6 remote-as 65201
R5(config-router)#neighbor 10.10.10.6 update-source Loopback0
R5(config-router)#neighbor 10.10.10.6 ebgp-multihop 3
    
```

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

Answer: C

NEW QUESTION 139

- (Exam Topic 3)

What is a function of an end device configured with DHCPv6 guard?

- A. If it is configured as a server, only prefix assignments are permitted.
- B. If it is configured as a relay agent, only prefix assignments are permitted.
- C. If it is configured as a client, messages are switched regardless of the assigned role.
- D. If it is configured as a client, only DHCP requests are permitted.

Answer: C

Explanation:

The DHCPv6 Guard feature blocks reply and advertisement messages that come from unauthorized DHCP servers and relay agents. Packets are classified into one of the three DHCP type messages. All client messages are always switched regardless of device role. DHCP server messages are only processed further if the device role is set to server. Further processing of server messages includes DHCP server advertisements (for source validation and server preference) and DHCP server replies (for permitted prefixes). If the device is configured as a DHCP server, all the messages need to be switched, regardless of the device role configuration.

NEW QUESTION 140

- (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
```

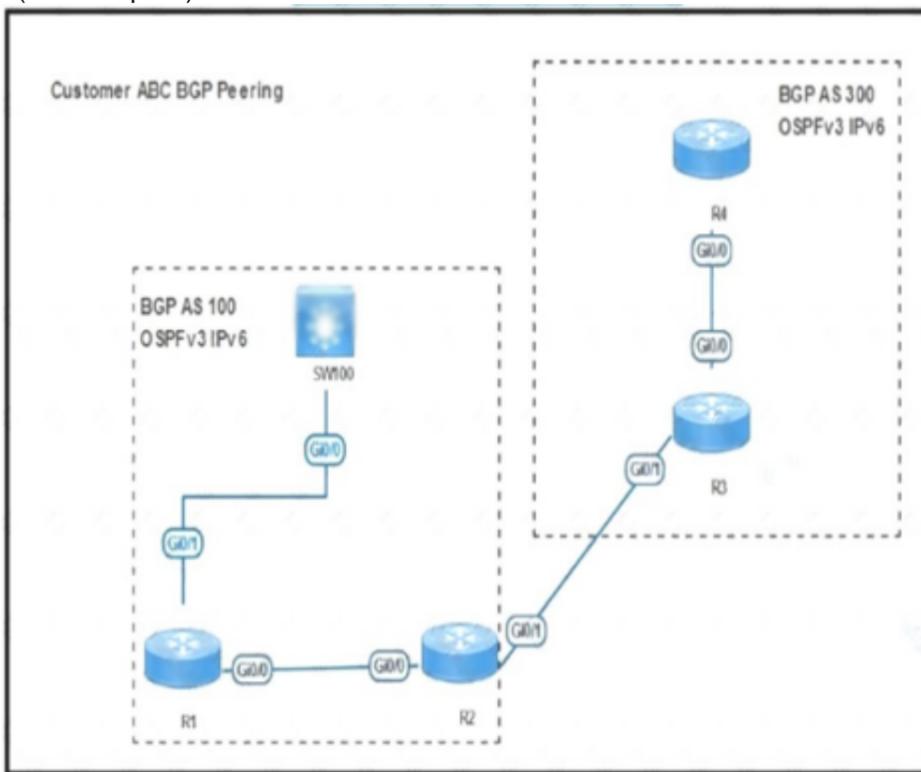
The transfer fails. Which action resolves the issue?

- 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 144

- (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 149

- (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 151

- (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 152

- (Exam Topic 3)

What is a function of BFD?

- A. peer recovery after a Layer 3 protocol adjacency failure
- B. peer recovery after a Layer 2 adjacency failure
- C. failure detection independent of routing protocols and media types
- D. failure detection dependent on routing protocols and media types

Answer: D

NEW QUESTION 157

- (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 162

- (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 163

- (Exam Topic 3)

Refer to Exhibit.

```
R1#sh ipv6 access-list GUARD
IPv6 access list GUARD
deny tcp any host 2001:DB8:A:B::10 eq telnet (6 matches) sequence 10
permit tcp host 2001:DB8:A:A::20 host 2001:DB8:A:B:10 eq telnet sequence 20
permit tcp host 2001:DB8:A:A::2 host 2001:DB8:D::1 eq www sequence 30
permit ipv6 2001:DB8:A:A::/64 any (67 matches) sequence 40
```

PC2 is directly connected to R1. A user at PC2 cannot Telnet to 2001:db8:a:b::10. The user can ping 2001:db8:a:b::10 and receive DHCP-related information from the DHCP server. Which action resolves the issue?

- A. Remove sequence 10 and put it back as sequence 25.
- B. Remove sequence 20 and put it back as sequence 45.
- C. Remove sequence 30 and put it back as sequence 5.
- D. Remove sequence 40 and put it back as sequence 15.

Answer: A

NEW QUESTION 167

- (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 172

- (Exam Topic 3)

Refer to the exhibits.

```

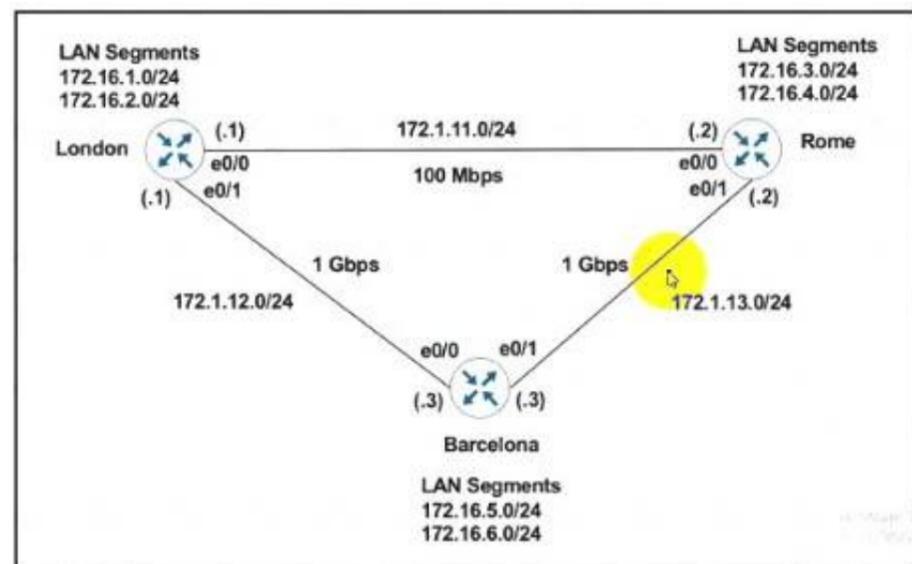
London - "show ip route" output

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 176

- (Exam Topic 3)

Which table is used to map the packets in an MPLS LSP that exit from the same interface, via the same next hop, and have the same queuing policies?

- A. RIB
- B. FEC
- C. LDP
- D. CEF

Answer: B

NEW QUESTION 177

- (Exam Topic 3)

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

- A. by RD
- B. by address family
- C. by MP-BGP
- D. byRT

Answer: A

NEW QUESTION 178

- (Exam Topic 3)

What is the function of BFD?

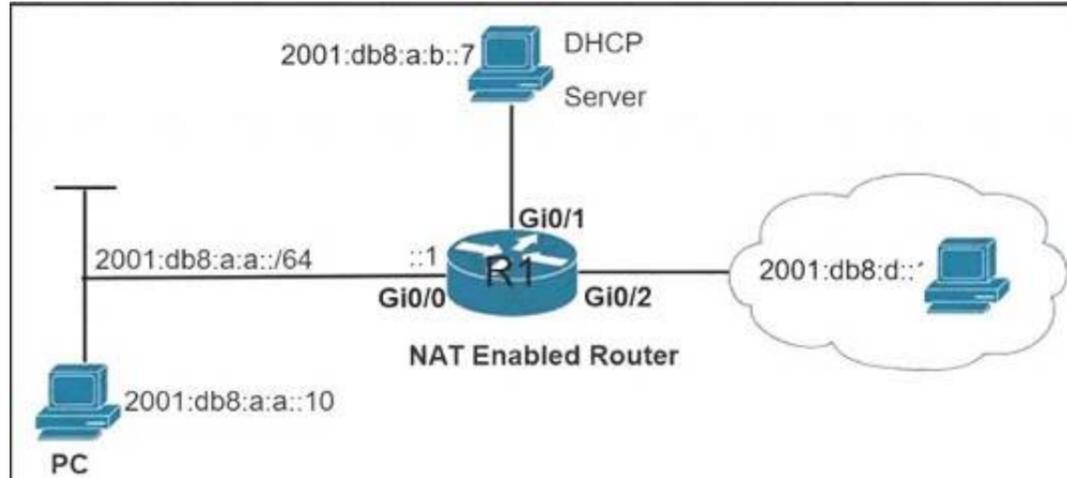
- A. It provides uniform failure detection regardless of media type.
- B. It creates high CPU utilization on hardware deployments.
- C. It negotiates to the highest version if the neighbor version differs.
- D. It provides uniform failure detection on the same media type.

Answer: A

NEW QUESTION 179

- (Exam Topic 3)

Refer to the exhibit.



```
C:PC> ping 2001:db8:a:b::7
Pinging 2001:db8:a:b::7 with 32 bytes of data:
Reply from 2001:db8:a:b::7: time=46ms
Reply from 2001:db8:a:b::7: time=40ms
Reply from 2001:db8:a:b::7: time=40ms
Reply from 2001:db8:a:b::7: time=40ms
Ping statistics for 2001:db8:a:b::7:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 40ms, Maximum = 46ms, Average = 41ms

R1# telnet 2001:db8:a:b::7
Trying 2001:DB8:A:B::7 ... Open
User Access Verification
Password:

R1# show ipv6 access-list TSHOOT
IPv6 access list TSHOOT
deny tcp any host 2001:DB8:A:B::7 eq telnet (6 matches) sequence 10
permit tcp host 2001:DB8:A:A::10 host 2001:DB8:A:B::7 eq telnet sequence 20
permit tcp host 2001:DB8:A:A::10 host 2001:DB8:D::1 eq www sequence 30
permit ipv6 2001:DB8:A:A::/64 any (67 matches) sequence 40
```

An engineer is troubleshooting a failed Telnet session from PC to the DHCP server. Which action resolves the issue?

- A. Remove sequence 30 and add it back to the IPv6 traffic filter as sequence 5.
- B. Remove sequence 20 and add it back to the IPv6 traffic filter as sequence 5.
- C. Remove sequence 10 to add the PC source IP address and add it back as sequence 10.
- D. Remove sequence 20 for sequence 40 in the access list to allow Telnet.

Answer: B

NEW QUESTION 184

- (Exam Topic 3)

Which feature minimizes DoS attacks on an IPv6 network?

- A. IPv6 Binding Security Table
- B. IPv6 Router Advertisement Guard
- C. IPv6 Prefix Guard
- D. IPv6 Destination Guard

Answer: D

Explanation:

The Destination Guard feature helps in minimizing denial-of-service (DoS) attacks. It performs address resolutions only for those addresses that are active on the link, and requires the FHS binding table to be populated with the help of the IPv6 snooping feature. The feature enables the filtering of IPv6 traffic based on the destination address, and blocks the NDP resolution for destination addresses that are not found in the binding table. By default, the policy drops traffic coming for an unknown destination.

Reference: https://www.cisco.com/c/en/us/td/docs/routers/7600/ios/15S/configuration/guide/7600_1_5_0s_book/IPv6_Security.pdf

NEW QUESTION 186

- (Exam Topic 3)

Which OS1 model is used to insert an MPLS label?

- A. between Layer 5 and Layer 6
- B. between Layer 1 and Layer 2
- C. between Layer 3 and Layer 4
- D. between Layer 2 and Layer 3

Answer: D

NEW QUESTION 187

- (Exam Topic 3)

Refer to the exhibit.

```
Dallas_Router:
interface GigabitEthernet0/0/0.364
description Guest_WiFi_10.66.46.0/23
encapsulation dot1Q 364
ip address 10.66.46.1 255.255.254.0
ip helper-address 10.192.104.212
ip helper-address 10.191.103.140
ip access-group GUEST-ACCESS in
ip access-group GUEST-ACCESS-OUT out
no ip redirects
no ip unreachable
no ip proxy-arp

ip access-list extended GUEST-ACCESS
remark Internet Access Only
permit udp any any eq bootpc
permit udp any any eq bootps
deny ip any 10.0.0.0 0.255.255.255
deny ip any 172.16.0.0 0.15.255.255
deny ip any 192.168.0.0 0.0.255.255
deny ip any 224.0.0.0 31.255.255.255
deny ip any 169.254.0.0 0.0.255.255
deny ip any 127.0.0.0 0.255.255.255
deny ip any 192.0.2.0 0.0.0.255
deny ip any host 0.0.0.0
permit ip 10.66.42.0 0.0.0.255 any
permit ip 10.66.46.0 0.0.0.255 any

ip access-list extended GUEST-ACCESS-OUT
remark Used to block inbound traffic to Guest Networks
permit udp any any eq bootps
permit udp any any eq bootpc
permit udp any any eq domain
permit udp any any
permit icmp any any
permit tcp host 10.192.103.124 eq 15871 any
permit tcp any any established
deny ip any 10.0.0.0 0.255.255.255
deny ip any 172.16.0.0 0.15.255.255
deny ip any 192.168.0.0 0.0.255.255
deny ip any 224.0.0.0 31.255.255.255
deny ip any 169.254.0.0 0.0.255.255
deny ip any 127.0.0.0 0.255.255.255
deny ip any 192.0.2.0 0.0.0.255
deny ip any host 0.0.0.0
```

After a new regional office is set up, not all guests can access the internet via guest WiFi. Clients are getting the correct IP address from guest Wi-Fi VLAN 364. which action resolves the issue ?

- A. Allow 10.66.46.0/23 in the outbound ACL
- B. Allow DNS traffic through the outbound ACL
- C. Allow DNS traffic through the inbound ACL
- D. Allow 10.66.46.0/23 in the inbound ACL

Answer: C

NEW QUESTION 192

- (Exam Topic 3)

The network administrator configured R1 for Control Plane Policing so that the inbound Telnet traffic is policed to 100 kbps. This policy must not apply to traffic coming in from 10.1.1.1/32 and 172.16.1.1/32. The administrator has configured this:

```

access-list 101 permit tcp host 10.1.1.1 any eq 23
access-list 101 permit tcp host 172.16.1.1 any eq 23
!
class-map CoPP-TELNET
match access-group 101
!
policy-map PM-CoPP
class CoPP-TELNET
police 100000 conform transmit exceed drop
!
control-plane
service-policy input PM-CoPP

```

The network administrator is not getting the desired results. Which set of configurations resolves this issue?

- A. control-planeno service-policy input PM-CoPP!interface Ethernet 0/0service-policy input PM-CoPP
- B. control-planeno service-policy input PM-CoPP service-policy input PM-CoPP
- C. no access-list 101access-list 101 deny tcp host 10,1,1.1 any eq 23access-list 101 deny tcp host 172,16.1.1 any eq 23 access-list 101 permit ip any any
- D. no access-list 101access-list 101 deny tcp host 10,1.1.1 any eq 23access-list 101 deny tcp host 172.16.1.1 any eq 23 access-list 101 permit ip any any!interface E0/0service-policy input PM-CoPP

Answer: C

Explanation:

Packets that match a deny rule are excluded from that class and cascade to the next class (if one exists) for classification. Therefore if we don't want to CoPP traffic from 10.1.1.1/32 and 172.16.1.1/32, we must "deny" them in the ACL.

NEW QUESTION 195

- (Exam Topic 3)

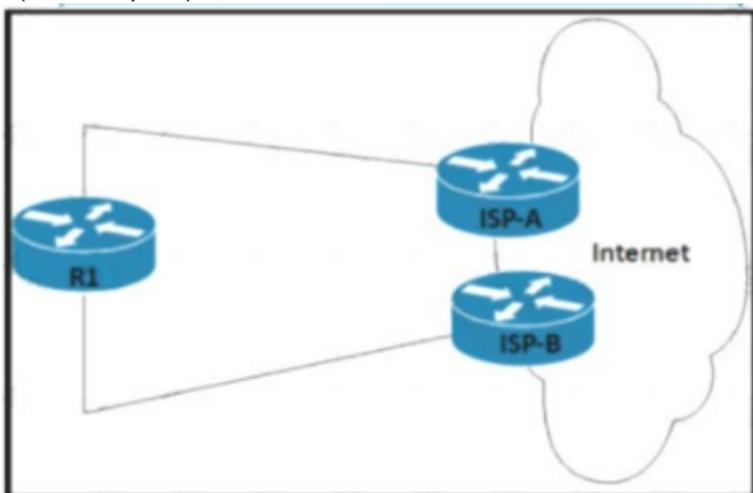
How is a preshared key "Test" for all the remote VPN routers configured In a DMVPN using GRE over IPsec set up?

- A. authentication pre-share Test address 0.0.0.0 0.0.0.0
- B. set pre-share Test address 0.0.0.0 0.0.0.0
- C. crypto Ipsec key Test address 0.0.0.0 0.0.0.0
- D. crypto isakmp key Test address 0.0.0.0 0.0.0.0

Answer: D

NEW QUESTION 196

- (Exam Topic 3)



Refer to the exhibit. Router R1 peers with two ISPs using static routes to get to the internet. The requirement is that R1 must prefer ISP-A under normal circumstances and failover to ISP-B if the connectivity to ISP-A is lost. The engineer observes that R1 is load balancing traffic across the two ISPs Which action resolves the issue by sending traffic to ISP-A only with failover to ISP-B?

- A. Configure OSPF between R1. ISP-
- B. and ISP-B for dynamic failover if any ISP link to R1 fails
- C. Configure two static routes on R1. one pointing to ISP-A and another pointing to ISP- B with 222 admin distance
- D. Change the bandwidth of the interface on R1 so that interface to ISP-A has a higher value than the interface to ISP-B
- E. Configure two static routes on R1. one pointing to ISP-B with more specific routes and another pointing to ISP-A with summary routes

Answer: D

NEW QUESTION 200

- (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 204

- (Exam Topic 3)

Refer to the exhibit.

```

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

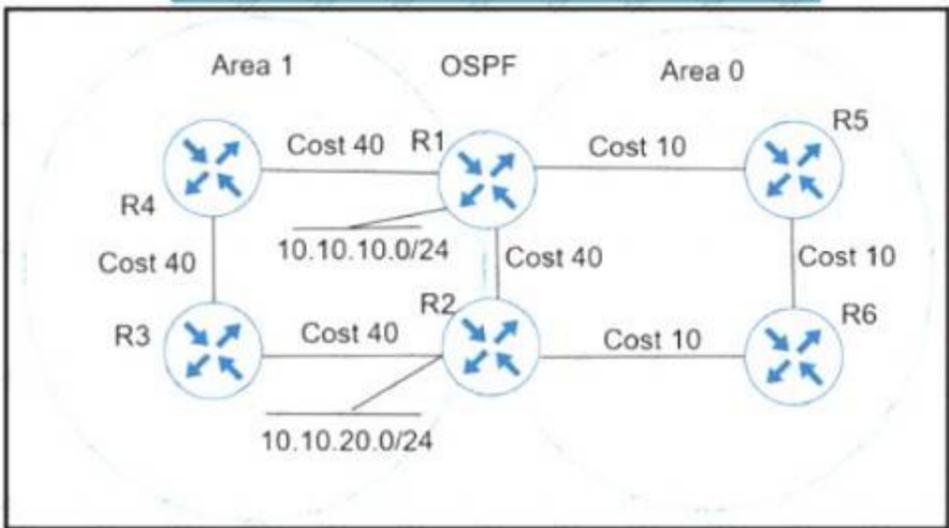
While monitoring VTY access to a router, an engineer notices that the router does not have any filter and anyone can access the router with username and password even though an ACL is configured. Which command resolves this issue?

- A. access-class INTERNET in
- B. ip access-group INTERNET in
- C. ipv6 traffic-filter INTERNET in
- D. ipv6 access-class INTERNET in

Answer: D

NEW QUESTION 205

- (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 207

- (Exam Topic 3)

```

admin@linux:~$ telnet 198.51.100.64
Trying 198.51.100.64...
Connected to 198.51.100.64.
Escape character is '^]'.

User Access Verification

Password: admin
CPE> exit
Connection closed by foreign host.
admin@linux:~$ ssh 198.51.100.64
admin@198.51.100.64's password: admin
Permission denied, please try again.
admin@198.51.100.64's password: admin
Permission denied, please try again.
admin@198.51.100.64's password: admin
Connection closed by 198.51.100.64 port 22
admin@linux:~$
    
```

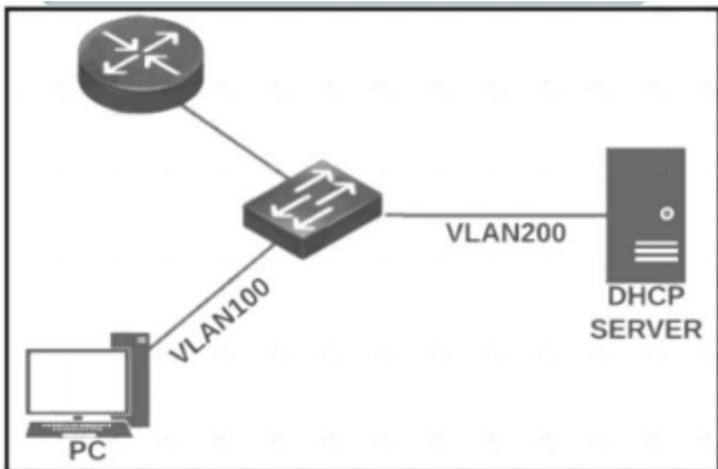
Refer to the exhibit. An administrator can log in to the device using Telnet but the attempts to log in to the same device using SSH with the same credentials fail. Which action resolves this issue?

- A. Configure SSH service on the router
- B. Configure transport input all on the VTY lines to allow SSH
- C. Configure to use the Telnet user database for SSH as well
- D. Configure the VTY lines with login local

Answer: A

NEW QUESTION 208

- (Exam Topic 3)



Refer to the exhibit. APC is configured to obtain an IP address automatically, but it receives an IP address only from the 169.254.0.0 subnet. The DHCP server logs contained no DHCPDISCOVER message from the MAC address of the PC. Which action resolves the issue?

- A. Configure an ip helper-address on the router to forward DHCP messages to the server.
- B. Configure DHCP Snooping on the switch to forward DHCP messages to the server.
- C. Configure a DHCP reservation on the server for the PC.
- D. Configure a static IP address on the PC and exclude it from the DHCP pool.

Answer: A

NEW QUESTION 212

- (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 Tunnel1 tunnel 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 215

- (Exam Topic 3)

Refer to the exhibit.

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

Which command must be configured to make VRF CCNP work?

- A. interface Loopback0 vrf forwarding CCNP
- B. interface Loopback0 ip address 10.1.1.1 255.255.255.0
- C. interface Loopback0 ip address 10.1.1.1 255.255.255.0 vrf forwarding CCNP
- D. interface Loopback0 ip address 10.1.1.1 255.255.255.0 ip vrf forwarding CCNP

Answer: B

Explanation:

From the exhibit, we learn that the command "ip address 10.1.1.1 255.255.255.0" has been issued before the command "ip vrf forwarding CCNP". But the second command removed the IP address configured in the first command so we have to retype the IP address command.

NEW QUESTION 219

- (Exam Topic 3)

Refer to the exhibit.

```
R1(config)#ipv6 prefix-list PRE-PEND-PREFIX permit 2001:db8:0:a::/64
R1(config)#route-map PRE-PEND permit 10
R1(config-route-map)#match ipv6 address prefix-list PRE-PEND-PREFIX
R1(config-route-map)#set as-path prepend 65412
R1(config)#router bgp 65412
R1(config-router)#address-family ipv6
R1(config-router-af)#neighbor 2001:db8:0:20::2 route-map PRE-PEND out
```

R1 has a route map configured, which results in a loss of partial IPv6 prefixes for the BGP neighbor, resulting in service degradation. How can the full service be restored?

- A. The neighbor requires a soft reconfiguration, and this will clear the policy without resetting the BGP TCP connection.
- B. The prefix list requires all prefixes that R1 is advertising to be added to it, and this will allow additional prefixes to be advertised.
- C. The route map requires a deny 20 statement without set conditions, and this will allow additional prefixes to be advertised.
- D. The route map requires a permit 20 statement without set conditions, and this will allow additional prefixes to be advertised.

Answer: D

NEW QUESTION 221

- (Exam Topic 3)

Refer to the exhibit.

```
access-list 1 permit 209.165.200.215
access-list 2 permit 209.165.200.216
!
interface ethernet 1
ip policy route-map Texas
!
route-map Texas permit 10
match ip address 1
set ip precedence priority
set ip next-hop 209.165.200.217
!
route-map Texas permit 20
match ip address 2
set ip next-hop 209.165.200.218
```

Packets arriving from source 209.165.200.215 must be sent with the precedence bit set to 1, and packets arriving from source 209.165.200.216 must be sent with the precedence bit set to 5. Which action resolves the issue?

- A. set ip precedence critical in route-map Texas permit 10
- B. set ip precedence critical in route-map Texas permit 20
- C. set ip precedence immediate in route-map Texas permit 10
- D. set ip precedence priority in route-map Texas permit 20

Answer: B

NEW QUESTION 224

- (Exam Topic 3)

Refer to the exhibit.

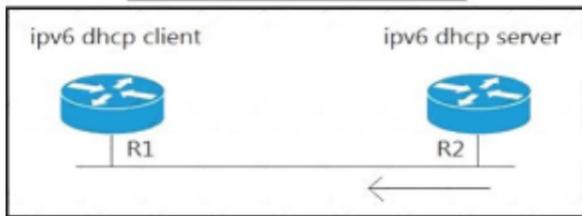
```

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
    
```



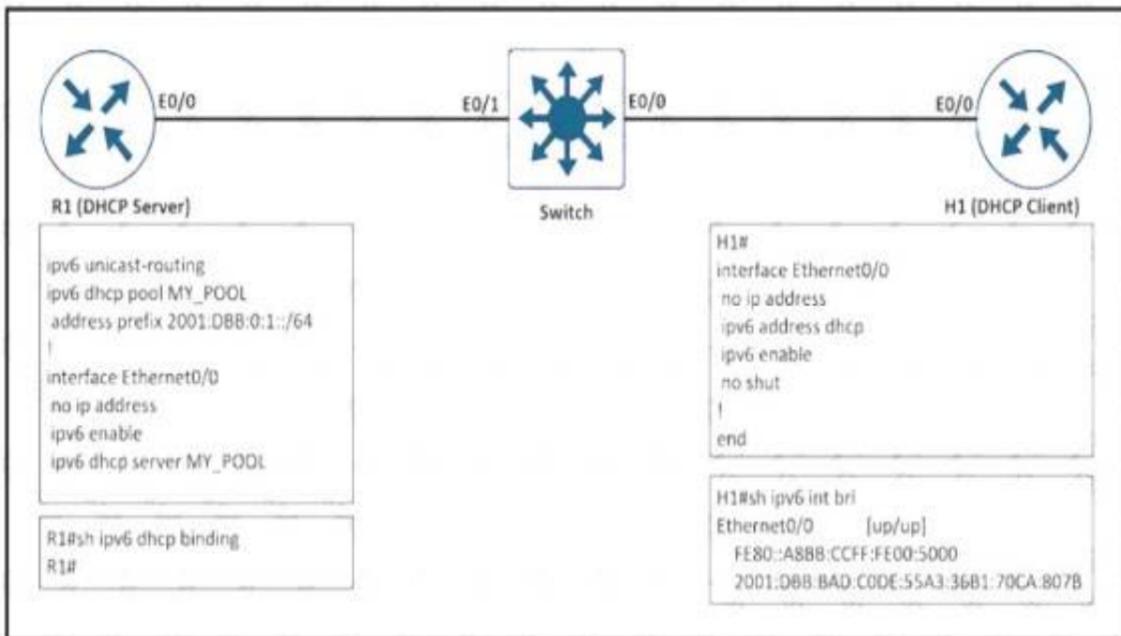
A network administrator is troubleshooting IPv6 address assignment for a DHCP client that is not getting an IPv6 address from the server. Which configuration retrieves the client IPv6 address from the DHCP server?

- 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 225

- (Exam Topic 3)



Refer to the exhibit. The client server but the show command does not show the IPv6 DHCP bindings on the server. Which action resolves the issue?

- A. Extend the DHCP lease time because R1 removed the IPv6 address earlier after the lease expired.
- B. Configure H1 as the DHCP client that manually assigns the IPv6 address on interlace e0/0..
- C. Use the 2001:DBB:BAD:CODE::/64 prefix for the DHCP pool on R1.
- D. Configure authorized DHCP servers to avoid IPv6 addresses from a rogue DHCP server.

Answer: C

NEW QUESTION 229

- (Exam Topic 3)

Refer to the exhibit.

A network engineer receives a fault ticket about traffic drops from BANK SITE to BANK Users can reach BANK SITE Y from router RA as a source. Routers RB and RD are acting as route reflectors. Which configuration resolves the issue?

- A. RC(config)#router bgp 65201RC(config-router)#neighbor 10.10.10.4 route-reflector-client
- B. RF(config)#router bgp 65201RF(config-router)#neighbor 10.10.10.6 route-reflector-client
- C. RC(config)#router bgp 65201RC(config-router)#neighbor 10.10.10.2 route-reflector-client

D. RB(config)router bgp 65201RB(config-router)#neighbor 10.10.10.3 route-reflector-client

Answer: A

NEW QUESTION 233

- (Exam Topic 3)

Refer to the exhibit.

```
R2# show ip ospf neighbor
R2#
R2# debug ip ospf hello

*Feb 22 23:46:58.699: OSPF-1 HELLO Et1/1: Rcv hello from
10.255.255.1 area 0 10.0.23.1
*Feb 22 23:46:58.703: OSPF-1 HELLO Et1/1: Mismatched hello
parameters from 10.0.23.1
*Feb 22 23:46:58.703: OSPF-1 HELLO Et1/1: Dead R 30 C 20, Hello
R 10 C 10 Mask R 255.255.255.0 C 255.255.255.0
```

The connected routers do not show up as OSPF neighbors. Which action resolves the issue?

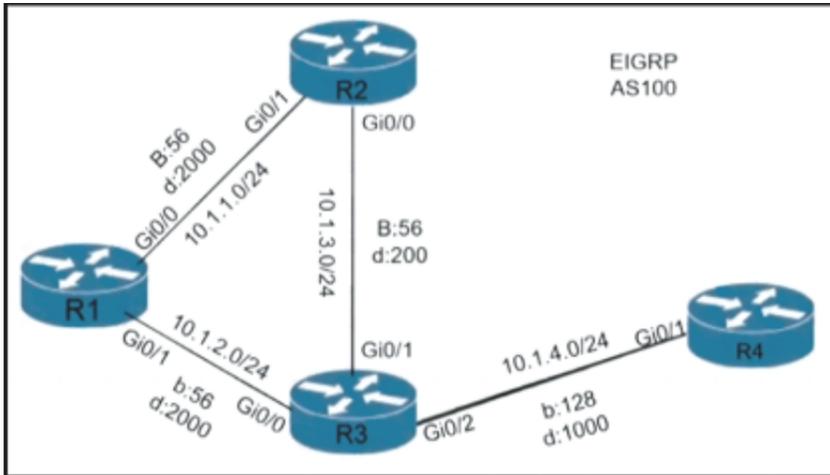
- A. Change the R1 dead timer to 20.
- B. Change the R2 dead timer to 20.
- C. Change the R2 hello timer to 20.
- D. Change the R1 hello timer to 20.

Answer: A

NEW QUESTION 238

- (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?

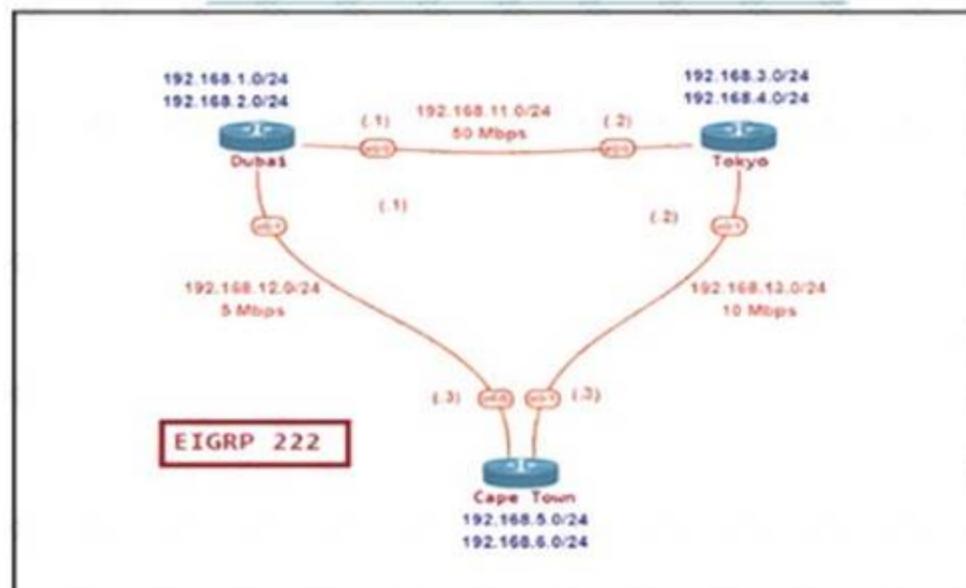
- A. Configure route tagging
- B. Enable split horizon
- C. Configure R2 as stub receive-only
- D. Configure route filtering

Answer: B

NEW QUESTION 241

- (Exam Topic 3)

Refer to the exhibit.



```

D 192.168.2.0/24 [90/409600] via 192.168.12.1, 00:09:11, Ethernet0/0
D 192.168.3.0/24 [90/409600] via 192.168.13.2, 00:17:23, Ethernet0/1
D 192.168.4.0/24 [90/409600] via 192.168.13.2, 00:17:23, Ethernet0/1
192.168.5.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.5.0/24 is directly connected, Loopback0
L 192.168.5.1/32 is directly connected, Loopback0
192.168.6.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.6.0/24 is directly connected, Loopback1
L 192.168.6.1/32 is directly connected, Loopback1
D 192.168.11.0/24 [90/307200] via 192.168.13.2, 00:17:40, Ethernet0/1
[90/307200] via 192.168.12.1, 00:17:40, Ethernet0/0
192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.12.0/24 is directly connected, Ethernet0/0
L 192.168.12.3/32 is directly connected, Ethernet0/0
192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.13.0/24 is directly connected, Ethernet0/1
L 192.168.13.3/32 is directly connected, Ethernet0/1
    
```

The network administrator must configure Cape Town to reach Dubai via Tokyo based on the speeds provided by the service provider. It was noticed that Cape Town is reaching Dubai directly and failed to meet the requirement. Which configuration fixes the issue?

A)

Dubai

```

router eigrp 100
 variance 2
    
```

B)

CapeTown

```

router eigrp 100
 variance 2
    
```

C)

CapeTown

```

interface E 0/0
 bandwidth 5000
interface E 0/1
 bandwidth 10000
    
```

D)

CapeTown

```

interface E 0/0
 bandwidth 5000
interface E 0/1
 bandwidth 10000
    
```

Dubai

```

interface E 0/0
 bandwidth 50000
interface E 0/1
 bandwidth 5000
    
```

Tokyo

```

interface E 0/0
 bandwidth 50000
interface E 0/1
 bandwidth 10000
    
```

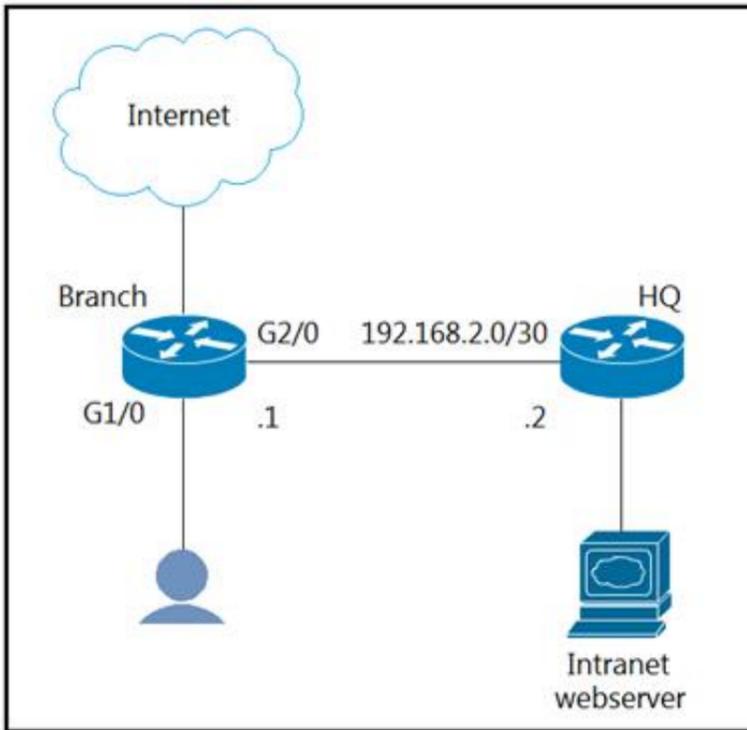
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 242

- (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:

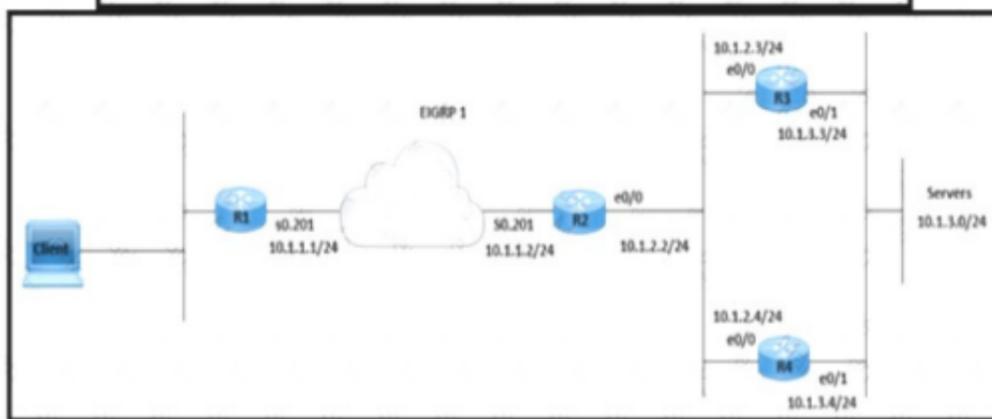
the ACL 101 matches all HTTP packets while the ACL 102 matches TCP packets destined to Intranet webserver. These packets will be sent to HQ router. If a match command refers to several objects in one command, either of them should match (the logical OR algorithm is applied). For example, in the match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

NEW QUESTION 243

- (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 248

- (Exam Topic 3)
 How does LDP operate in an MPLS network?

- A. When topology changes occur such as a router failure, LDP generates peer discovery messages that terminate the LDP session to propagate an LSP change.
- B. When an adjacent LSR receives LDP discovery message
- C. TCP two-way handshake ensures that the LDP session has unidirectional connectivity.
- D. Peer routers establish the LDP session, and the LDP neighbors maintain and terminate the session by exchanging messages
- E. LDP notification messages allow LERs to exchange label information to determine the next hops within a particular LSP.

Answer: D

NEW QUESTION 252

- (Exam Topic 3)
 Refer to the exhibit.



An engineer implemented CoPP but did not see OSPF traffic going through it. Which configuration resolves the issue?

- A. ip access-list extended OSPF permit ospf any any
- B. policy-map COPP class OSFP police 8000 conform-action transmit exceed-action transmit violate-action drop
- C. control-plane service-policy input COPP
- D. class-map match-all OSFP match access-group name OSPF

Answer: B

NEW QUESTION 255

- (Exam Topic 3)

In a DMVPN network, the Spoke1 user observed that the voice traffic is coming to Spoke2 users via the hub router. Which command is required on both spoke routers to communicate directly to one another?

- A. ip nhrp map dynamic
- B. ip nhrp shortcut
- C. ip nhrp nhs multicast
- D. ip nhrp redirect

Answer: B

NEW QUESTION 256

- (Exam Topic 3)

```
CPE# show ip route static
<output omitted>
S* 0.0.0.0/0 is directly connected, Dialer0
S 198.51.100.0/24 [1/0] via 192.168.1.1
S 203.0.113.0/24 [1/0] via 192.168.2.1

CPE# show run | section router ospf
router ospf 1
redistribute static subnets

CPE# show ip ospf database | begin Type-5
Type-5 AS External Link States

Link ID      ADV Router  Age      Seq#      Checksum Tag
198.51.100.0 192.168.0.1 14       0x80000001 0x0007D0 0
203.0.113.0  192.168.0.1 14       0x80000001 0x0009C5C 0
```

Refer to the exhibit. The default route is not advertised to the neighboring router. Which action resolves the issue?

- A. Configure the redistribute static metric 200 subnets command under OSPF.
- B. Configure OSPF on the Dialer0 interface.
- C. Configure the network 0.0.0.0 255.255.255.255 area 0 command under OSPF.
- D. Configure the default-information originate command under OSPF.

Answer: D

NEW QUESTION 259

- (Exam Topic 3)

Drag and drop the ICMPv6 neighbor discovery messages from the left onto the correct packet types on the right.

Neighbor Solicitation	ICMPv6 Type 134
Neighbor Advertisement	ICMPv6 Type 137
Router Advertisement	ICMPv6 Type 135
Redirect Message	ICMPv6 Type 133
Router Solicitation	ICMPv6 Type 136

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated with medium confidence

NEW QUESTION 260

- (Exam Topic 2)

A DMVPN single hub topology is using IPsec + mGRE with OSPF. What should be configured on the hub to ensure it will be the designated router?

- A. tunnel interface of the hub with ip nhrp ospf dr
- B. OSPF priority to 0
- C. route map to set the metrics of learned routes to 110
- D. OSPF priority greater than 1

Answer: D

Explanation:

By default, the priority is 1 on all routers so we can set the OSPF priority of the hub to a value which is greater than 1 to make sure it would become the DR.

NEW QUESTION 261

- (Exam Topic 2)

Refer to the exhibit.

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

R1 is connected with R2 via GigabitEthernet0/0, and R2 cannot ping R1. What action will fix the issue?

- A. Fix route dampening configured on the router.
- B. Replace the SFP module because it is not supported.
- C. Fix IP Event Dampening configured on the interface.
- D. Correct the IP SLA probe that failed.

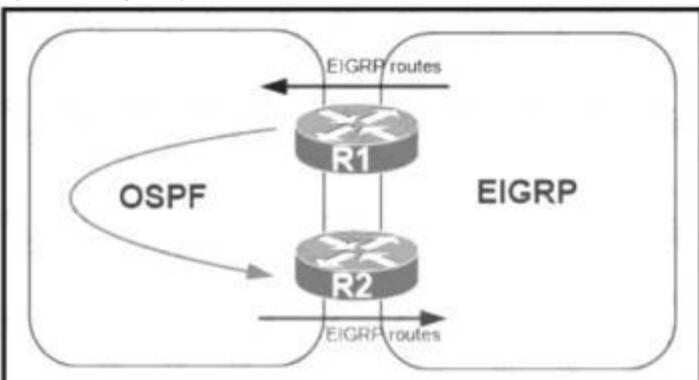
Answer: C

Explanation:

The IP Event Dampening feature introduces a configurable exponential decay mechanism to suppress the effects of excessive interface flapping events on routing protocols and routing tables in the network. This feature allows the network operator to configure a router to automatically identify and selectively dampen a local interface that is flapping.

NEW QUESTION 263

- (Exam Topic 2)



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

- A. Set a tag in the route map when redistributing EIGRP into OSPF on R1. and match the same tag on R2 to deny when redistributing OSPF into EIGRP.
- B. Set a tag in the route map when redistributing EIGRP into OSPF on R1. and match the same tag on R2 to allow when redistributing OSPF into EIGRP.
- C. Advertise summary routes of EIGRP to OSPF and deny specific EIGRP routes when redistributing into OSPF.
- D. Apply a prefix list of EIGRP network routes in OSPF domain on R1 to propagate back into the EIGRP routing domain.

Answer: A

Explanation:

When doing mutual redistribution at multiple points (between OSPF and EIGRP on R1 & R2), we may create routing loops so we should use route-map to prevent redistributed routes from redistributing again into the original domain.

In the below example, the route-map "SET-TAG" is used to prevent any routes that have been redistributed into EIGRP from redistributed again into OSPF domain by tagging these routes with tag 1:

```
R3
route-map SET-TAG permit 10
set tag 1
```

These routes are prevented from redistributed again by route-map FILTER_TAG by denying any routes with tag 1 set:

```
R4
route-map FILTER-TAG deny 10
match tag 1
```

NEW QUESTION 268

- (Exam Topic 2)

An engineer configured SNMP notifications sent to the management server using authentication and encrypting data with DES. An error in the response PDU is received as "UNKNOWNUSERNAME. WRONGDIGEST". Which action resolves the issue?

- A. Configure the correct authentication password using SNMPv3 authPriv .
- B. Configure the correct authentication password using SNMPv3 authNoPriv.
- C. Configure correct authentication and privacy passwords using SNMPv3 authNoPriv.
- D. Configure correct authentication and privacy passwords using SNMPv3 authPriv.

Answer: D

Explanation:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/snmp/configuration/xs-3se/3850/snmp-xe-3se-3850-book/nm>

NEW QUESTION 272

- (Exam Topic 2)

Refer to the exhibit.

```
R1
ip prefix-list ccnp1 seq 5 permit 10.1.48.0/24 le 24
ip prefix-list ccnp2 seq 5 permit 10.1.80.0/24 le 32
ip prefix-list ccnp3 seq 5 permit 10.1.64.0/24 le 24

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

An engineer wanted to set a tag of 30 to route 10.1.80.65/32 but it failed How is the issue fixed?

- A. Modify route-map ospf-to-eigrp permit 30 and match prefix-list ccnp2.
- B. Modify route-map ospf-to-eigrp permit 10 and match prefix-list ccnp2.
- C. Modify prefix-list ccnp3 to add 10.1.64.0/20 le 24
- D. Modify prefix-list ccnp3 to add 10.1.64.0/20 ge 32

Answer: B

NEW QUESTION 275

- (Exam Topic 2)

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

implicit null label	provides ways of improving load balancing by eliminating the need for DPI at transit LSRs
explicit null label	LSR receives an MPLS header with the label set to 3
inbound label binding filtering	packet is encapsulated in MPLS with the option of copying the IP precedence to EXP bits
entropy label	controls the amount of memory used to store LDP label bindings advertised by other devices

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Diagram Description automatically generated

The MPLS LDP Inbound Label Binding Filtering feature can be used to control the amount of memory used to store Label Distribution Protocol (LDP) label bindings advertised by other devices. For example, in a simple Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) environment, the VPN provider edge (PE) devices might require label switched paths (LSPs) only to their peer PE devices (that is, they do not need LSPs to core devices). Inbound label binding filtering enables a PE device to accept labels only from other PE devices.

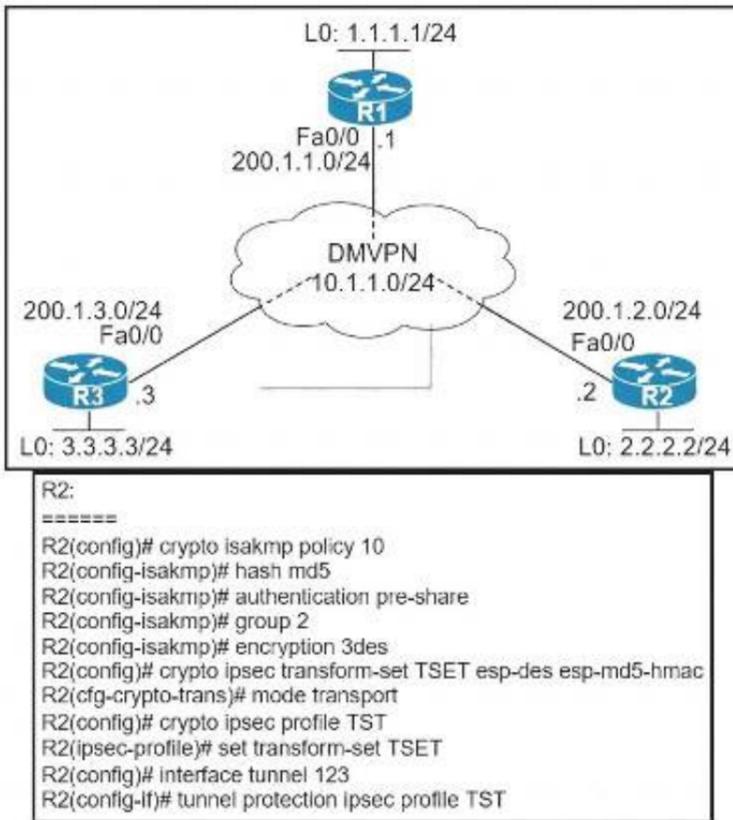
Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_ldp/configuration/15-sy/mp-ldp-15-sy-boo k/mp-ldp-inbound-filtr.html

NEW QUESTION 277

- (Exam Topic 2)

Refer to the exhibits.



When DMVPN is configured, which configuration allows spoke-to-spoke communication using loopback as a tunnel source?

- A. Configure crypto isakmp key cisco address 0.0.0.0 on the hub.
- B. Configure crypto isakmp key Cisco address 200.1.0.0 255.255.0.0 on the hub.
- C. Configure crypto isakmp key cisco address 200.1.0.0 255.255.0.0 on the spokes.
- D. Configure crypto isakmp key cisco address 0.0.0.0 on the spokes.

Answer: D

Explanation:

https://www.cisco.com/en/US/technologies/tk583/tk372/technologies_white_paper0900aecd802b8f3c.html

NEW QUESTION 281

- (Exam Topic 2)

An engineer configured a Cisco router to send reliable and encrypted notifications for any events to the management server. It was noticed that the notification messages are reliable but not encrypted. Which action resolves the issue?

- A. Configure all devices for SNMPv3 informs with priv.
- B. Configure all devices for SNMPv3 informs with auth.
- C. Configure all devices for SNMPv3 traps with auth.
- D. Configure all devices for SNMPv3 traps with priv.

Answer: A

Explanation:

SNMP notifications can be sent as traps or inform requests. Traps are unreliable because the receiver does not send acknowledgments when this device receives traps. "Send reliable and encrypted notifications for any events" so it is SNMP notifications. For encryption we need to configure "priv".

NEW QUESTION 286

- (Exam Topic 2)

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

- A. The label edge router swaps labels on the received packets.
- B. Labels are imposed in packets after the Layer 3 header.
- C. LDP uses TCP for reliable delivery of information.
- D. An MPLS label is a short identifier that identifies a forwarding equivalence class.
- E. A maximum of two labels can be imposed on an MPLS packet.

Answer: CD

Explanation:

Reference:

<https://www.cisco.com/c/en/us/support/docs/multiprotocol-label-switching-mpls/mpls/4649-mpls-faq-4649.html>

NEW QUESTION 290

- (Exam Topic 2)

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 294

- (Exam Topic 2)

An engineer must configure a Cisco router to initiate secure connections from the router to other devices in the network but kept failing. Which two actions resolve the issue? (Choose two.)

- A. Configure a source port for the SSH connection to initiate
- B. Configure a TACACS+ server and enable it
- C. Configure transport input ssh command on the console
- D. Configure a domain name
- E. Configure a crypto key to be generated

Answer: DE

Explanation:

Follow these guidelines when configuring the switch as an SSH server or SSH client:

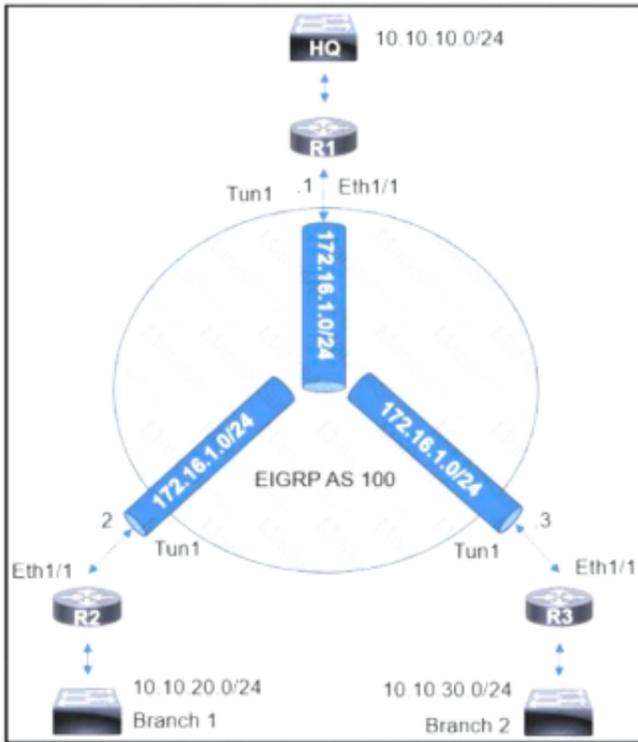
+ An RSA key pair generated by a SSHv1 server can be used by an SSHv2 server, and the reverse.+ If the SSH server is running on a stack master and the stack master fails, the new stack master uses the RSA key pair generated by the previous stack master

+ If you get CLI error messages after entering the crypto key generate rsa global configuration command, an RSA key pair has not been generated. Reconfigure thehostname and domain, and then enter the crypto key generate rsa command.+ When generating the RSA key pair, the message No host name specified might appear. If it does, you must configure a hostname by using the hostname globalconfiguration command.+ When generating the RSA key pair, the message No domain specified might appear. If it does, you must configure an IP domain name by using the ip domain-nameglobal configuration command.+ When configuring the local authentication and authorization authentication method, make sure that AAA is disabled on the console.

Reference:https://www.cisco.com/en/US/docs/switches/lan/catalyst3850/software/release/3.2_0_se/multibook/co

NEW QUESTION 296

- (Exam Topic 2)



An engineer sets up a DMVPN connection to connect branch 1 and branch 2 to HQ. Branch 1 and branch 2 cannot communicate with each other. Which change must be made to resolve this issue?

- R1(config)#int eth1/1
R1(config-if)#no ip split-horizon eigrp 100
- R2(config)#router eigrp 100
R2(config-router)#neighbor 172.16.1.3
- R3(config)#router eigrp 100
R3(config-router)#neighbor 172.16.1.2
- R1(config)#int tunnel 1
R1(config-if)#no ip split-horizon eigrp 100

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

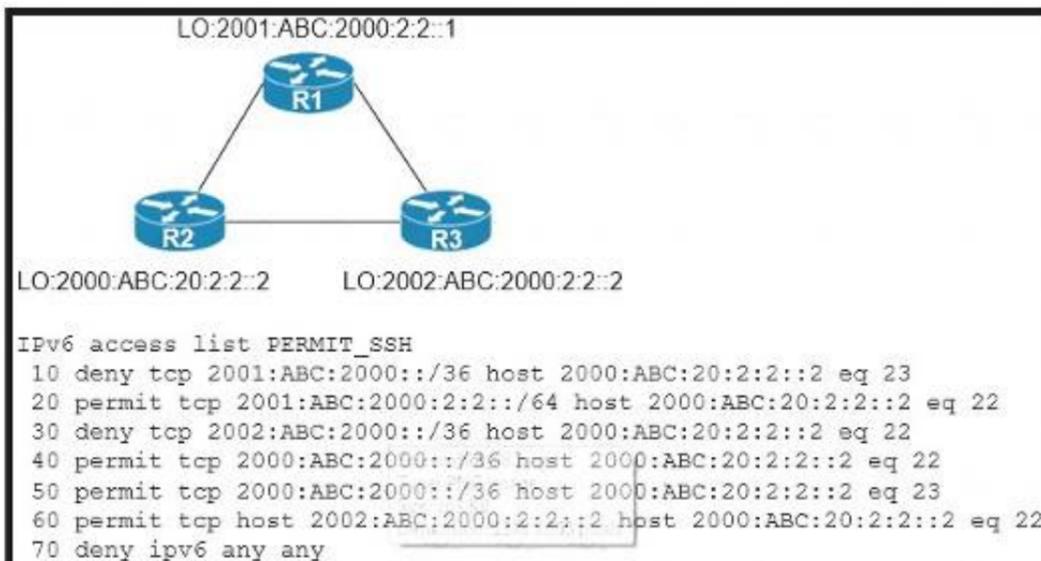
Answer: D

Explanation:

R1(config)#int tunnel 1
R1(config-if) no ip split-horizon eigrp 100

NEW QUESTION 301

- (Exam Topic 2)
Refer to the exhibit.



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

- A. Modify line 10 of the access list to permit instead of deny.
- B. Remove line 60 from the access list.
- C. Modify line 30 of the access list to permit instead of deny.
- D. Remove line 70 from the access list.

Answer: C

NEW QUESTION 305

- (Exam Topic 2)

An engineer is troubleshooting on the console session of a router and turns on multiple debug commands. The console screen is filled with scrolling debug messages that none of the commands can be verified if entered correctly or display any output. Which action allows the engineer to see entered console commands while still continuing the analysis of the debug messages?

- A. Configure the logging synchronous command
- B. Configure the no logging console debugging command globally
- C. Configure the logging synchronous level all command
- D. Configure the term no mon command globally

Answer: A

Explanation:

Let's see how the "logging synchronous" command affect the typing command:

Without this command, a message may pop up and you may not know what you typed if that message is too long. When trying to erase (backspace) your command, you realize you are erasing the message instead.

```
NVbos2811-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
NVbos2811-1(config)#^Z
NVbos2811-1#sh
Jan 18 16:38:02: %SYS-5-CONFIG_I: Configured from console by admin on vty0 (10.0.1.111)
```

With this command enabled, when a message pops up you will be put to a new line with your typing command which is very

```
NVbos2811-1(config)#line con 0
NVbos2811-1(config-line)#logging synch
NVbos2811-1(config-line)#line vty 0 4
NVbos2811-1(config-line)#logging synchr
NVbos2811-1(config-line)#logging synchronous
NVbos2811-1(config-line)#^Z
NVbos2811-1#sh ip
Jan 18 16:39:33: %SYS-5-CONFIG_I: Configured from console by admin
NVbos2811-1#sh ip
```

NEW QUESTION 310

- (Exam Topic 2)

Refer to the exhibit.

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

Neighbor      V  AS  MsgRcvd  MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
AB01:2011:7:100::3  4 6502    0         0        1     0     0  never  Idle

R1#debug ip bgp all
* Nov 8 17:22:11.223: BGP: AB01:2011:7:100::3 active went from Idle to Active
* Nov 8 17:22:11.223: BGP: AB01:2011:7:100::3 open active, local address AB01:2011:7:100::1
* Nov 8 17:22:11.224: BGP: AB01:2011:7:100::3 open failed: Connection refused by remote host
* Nov 8 17:22:11.224: BGP: AB01:2011:7:100::3 Active open failed - tcb is not available, open active delayed 11264 ms (35000ms max, 60% jitter)
* Nov 8 17:22:11.224: BGP: ses global AB01:2011:7:100::3 (0xC3F49FF0:0) act Reset (Active open failed)
* Nov 8 17:22:11.232: BGP: AB01:2011:7:100::3 active went from Active to Idle
* Nov 8 17:22:11.232: BGP: nrb global AB01:2011:7:100::3 Active open failed - open timer running

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

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

- A. R3router bgp 6502 address-family ipv6neighbor AB01:2011:7:100::1 activate
- B. R1router bgp 6501 address-family ipv6neighbor AB01:2011:7:100::3 activate
- C. R3router bgp 6502neighbor AB01:2011:7:100::1 ebgp-multihop 255
- D. R1router bgp 6501 neighborAB01:2011:7:100::3ebgp-multihop255

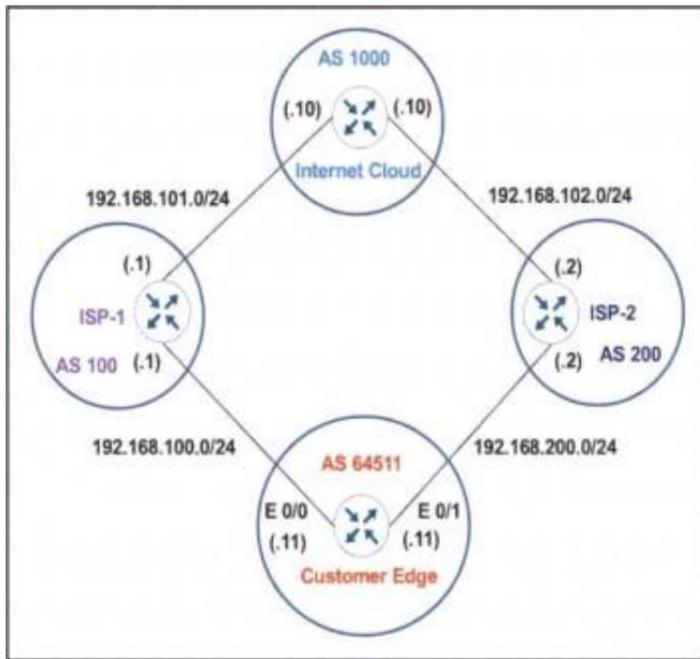
Answer: A

Explanation:

From the output, we learned that R1 was trying to establish BGP neighbor relationship with R3 but failed. Both of them were using physical interface to establish neighbor relationship so we don't need the "... ebgp-multihop" command here. The only reasonable answer is R3 has not been configured to activate BGP neighbor relationship with R1.

NEW QUESTION 313

- (Exam Topic 2)



Refer to the exhibit. The network administrator has configured the Customer Edge router (AS 64511) to send only summarized routes toward ISP-1 (AS 100) and ISP-2 (AS 200).

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

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

- A. router bgp 64511 aggregate-address 172.16.20.0 255.255.252.0 summary-only
- B. router bgp 64511 neighbor 192.168.100.1 summary-only neighbor 192.168.200.2 summary-only
- C. interface E 0/0 ip bgp suppress-map BLOCK_SPECIFIC ! interface E 0/1 ip bgp suppress-map BLOCK_SPECIFIC ! ip prefix-list PL_BLOCK_SPECIFIC permit 172.16.20.0/22 ge 24 ! route-map BLOCK_SPECIFIC permit 10 match ip address prefix-list PL_BLOCK_SPECIFIC
- D. ip prefix-list PL_BLOCK_SPECIFIC deny 172.16.20.0/22 ge 22 ip prefix-list PL_BLOCK_SPECIFIC permit 172.16.20.0/22 ! route-map BLOCK_SPECIFIC permit 10 match ip address prefix-list PL_BLOCK_SPECIFIC ! router bgp 64511 aggregate-address 172.16.20.0 255.255.252.0 suppress-map BLOCK_SPECIFIC

Answer: A

Explanation:

When the aggregate-address command is used within BGP routing, the aggregated address is advertised, along with the more specific routes. The exception to this rule is through the use of the summary-only command. The “summary-only” keyword suppresses the more specific routes and announces only the summarized route.

NEW QUESTION 316

- (Exam Topic 2)

Refer to Exhibit.

```
HQ_R2 group
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.2 track 1
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.6 5
|
BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 172.16.35.6
BRANCH(config-ip-sla)# timeout 200
BRANCH(config-ip-sla)# frequency 5
|
BRANCH(config)# ip sla schedule 1 life forever start-time now
|
BRANCH(config)# track 1 ip sla 1 reachability
```

Traffic from the branch network should route through HQ R1 unless the path is unavailable. An engineer tests this functionality by shutting down interface on the BRANCH router toward HQ_R1 router but 192.168.20.0/24 is no longer reachable from the branch router. Which set of configurations resolves the issue?

- A. HQ_R1(config)# ip sla responder HQ_R1(config)# ip sla responder icmp-echo 172.16.35.2
- B. BRANCH(config)# ip sla 1 BRANCH(config-ip-sla)# icmp-echo 172.16.35.1
- C. HQ_R2(config)# ip sla responder HQ_R2(config)# ip sla responder icmp-echo 172.16.35.5
- D. BRANCH(config)# ip sla 1 BRANCH(config-ip-sla)# icmp-echo 172.16.35.2

Answer: D

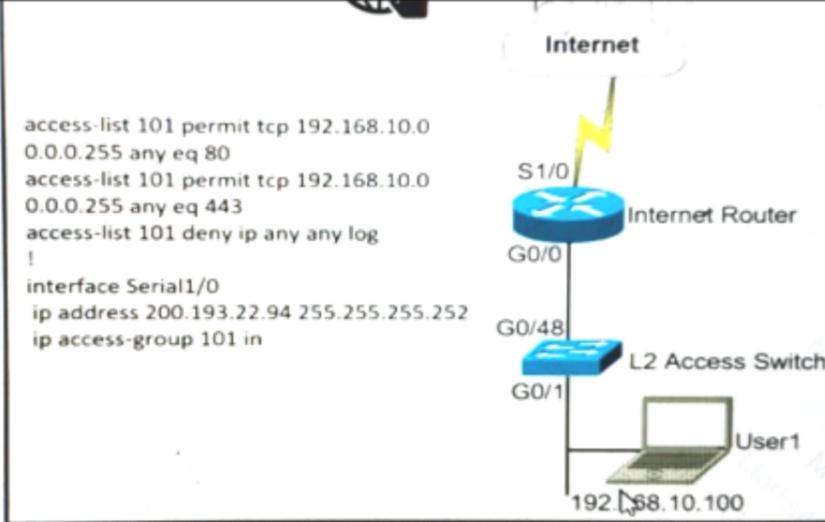
Explanation:

In the configuration above, the engineer has made a mistake as he was tracking 172.16.35.6 (the backup path) instead of tracking the main path (172.16.35.2). Therefore, when he shut down the main path, the track 1 was still up so traffic still went through the main path -> it failed. To fix this issue, we just need to correct the tracking interface of the main path.

NEW QUESTION 319

- (Exam Topic 2)

A network administrator is tasked to permit http and https traffic only toward the internet from the User1 laptop to adhere to company's security policy. The administrator can still ping to www.cisco.com Which interface should the access list 101 be applied to resolve this issue?



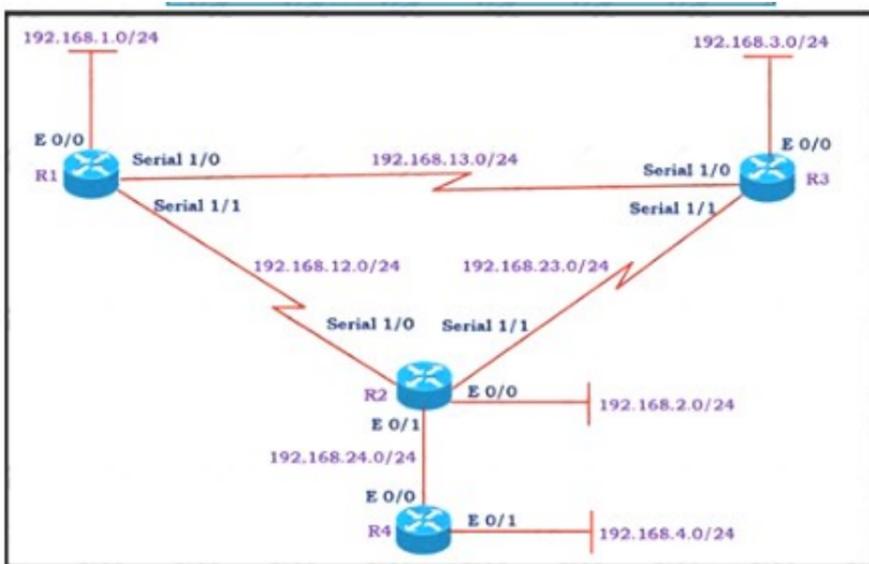
- A. Interface G0/48 in the incoming direction
- B. Interface G0/0 in the outgoing direction.
- C. Interface S1/0 in the outgoing direction.
- D. Interface G0/0 in the incoming direction.

Answer: D

NEW QUESTION 323

- (Exam Topic 2)

Refer to the exhibit.



```

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

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

- A. Change the Administrative Distance of EIGRP to 5.
- B. Add a static route on R1 using the next hop of R3.
- C. Remove the static route on R1.
- D. Redistribute the R1 route to EIGRP

Answer: C

NEW QUESTION 324

- (Exam Topic 2)

Refer to the exhibit.

```

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

The neighbor relationship is not coming up Which two configurations bring the adjacency up? (Choose two)

- A. NYrouter ospf 1area 0 authentication message-digest
- B. LAinterface E 0/0ip ospf message-digest-key 1 md5 Cisco123
- C. NYinterface E 0/0no ip ospf message-digest-key 1 md5 Cisco123 ip ospf authentication-key Cisco123
- D. LAinterface E 0/0ip ospf authentication-key Cisco123
- E. LArouter ospf 1area 0 authentication message-digest

Answer: BE

Explanation:

The configuration on NY router is good for OSPF authentication. So we must enable OSPF authentication on LA router with the following commands:

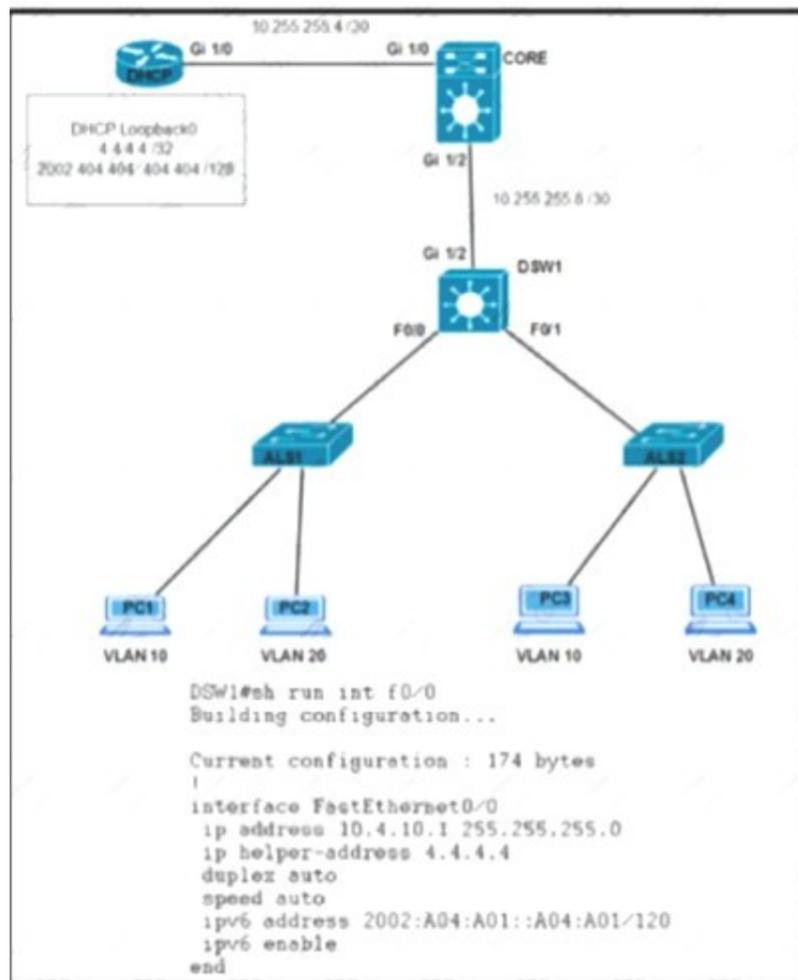
```

router ospf 1
area 0 authentication message-digest interface E0/0
ip ospf message-digest-key 1 md5 Cisco123
    
```

NEW QUESTION 325

- (Exam Topic 2)

Clients on ALS2 receive IPv4 and IPv6 addresses but clients on ALS1 receive only IPv4 addresses and not IPv6 addresses. Which action on DSW1 allows clients on ALS1 to receive IPv6 addresses?



- A) Configure DSW1(config-if)#ipv6 helper address 2002:404:404::404:404
- B) Configure DSW1(dhcp-config)#default-router 2002:A04:A01::A04:A01
- C) Configure DSW1(config)#ipv6 route 2002:404:404:404:404/128 FastEthernet1/0
- D) Configure DSW1(config-if)#ipv6 dhcp relay destination 2002:404:404::404:404 GigabitEthernet1/2

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

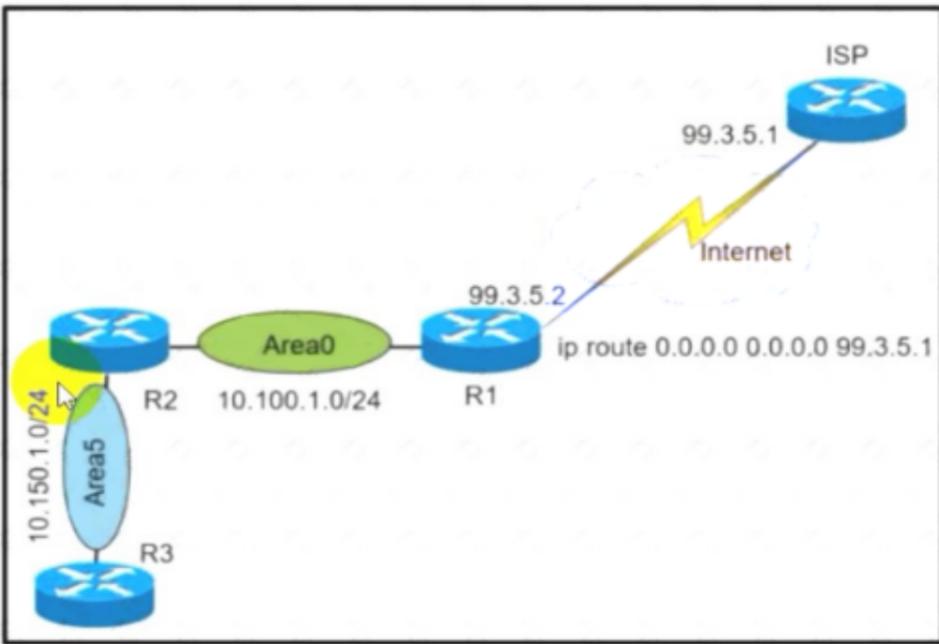
Answer: B

Explanation:

<https://community.cisco.com/t5/networking-documents/stateful-dhcpv6-relay-configuration-example/ta-p/31493>

NEW QUESTION 329

- (Exam Topic 2)



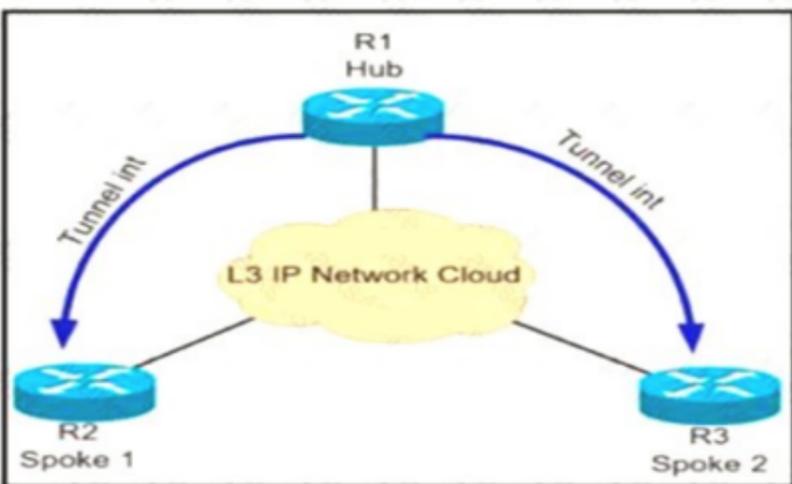
Refer to the exhibit. A network administrator redistributed the default static route into OSPF toward all internal routers to reach to Internet. Which set of commands restores reachability to the Internet by internal routers?

- A. router ospf 1 default-information originate
- B. router ospf 1 network 0.0.0.0 0.0.0.0 area 0
- C. router ospf 1 redistribute connected 0.0.0.0
- D. router ospf 1 redistribute static subnets

Answer: A

NEW QUESTION 330

- (Exam Topic 2)
 Refer to Exhibit.



A network administrator has successfully configured DMVPN topology between a hub and two spoke routers. Which two configuration commands should establish direct communications between spoke 1 and spoke 2 without going through the hub? (Choose two).

- A. At the hub router, configure the ip nhrp shortcut command.
- B. At the spoke routers, configure the ip nhrp spoke-tunnel command.
- C. At the hub router, configure ip nhrp redirect the command
- D. At the spoke routers, configure the ip nhrp shortcut command.
- E. At the hub router, configure the ip nhrp spoke-tunnel command

Answer: CD

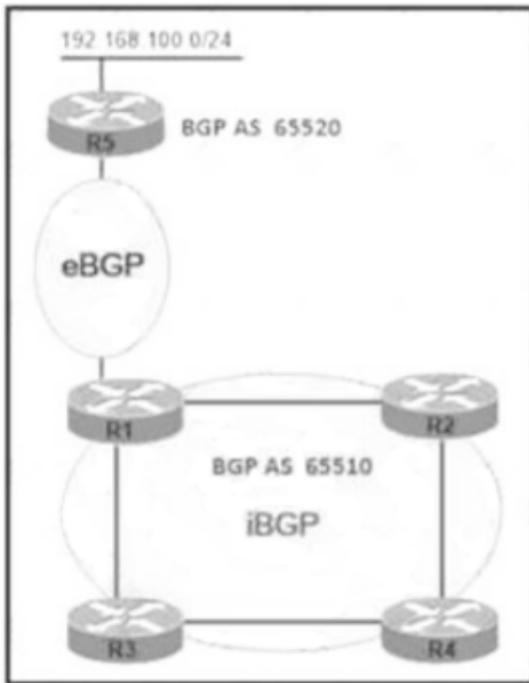
Explanation:

To configure Spoke to Spoke communication we can configure DMVPN Phase II or Phase III. But in Phase II, the first few packets would go through Hub. In order to totally ignore the hub, we have to use DMVPN Phase III:

DMVPN Phase III is same as Phase 2 but removes some restrictions and complexities of Phase 2. Also allows greater variety of DMVPN network designs we use:
 + ip nhrp redirect in hub: tells the initiator spoke to look for a better path to the destination spoke than through the Hub. Upon receiving the NHRP redirect message the spokes communicate with each other over the hub and they have their NHRP replies for the NHRP Resolution Requests that they sent out.
 + ip nhrp shortcut in spokes: overwrite the CEF table on the spoke. It basically overrides the next-hop value for a remote spoke network from the default initial hub tunnel IP address to the NHRP resolved remote spoke tunnel IP address)

NEW QUESTION 332

- (Exam Topic 2)
 Refer to the exhibit.



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

- A. Configure R4 as a route reflector server and configure R1 as a route reflector client
- B. Configure R1 as a route reflector server and configure R2 and R3 as route reflector clients
- C. Configure R4 as a route reflector server and configure R2 and R3 as route reflector clients.
- D. Configure R1 as a route reflector server and configure R4 as a route reflector client

Answer: D

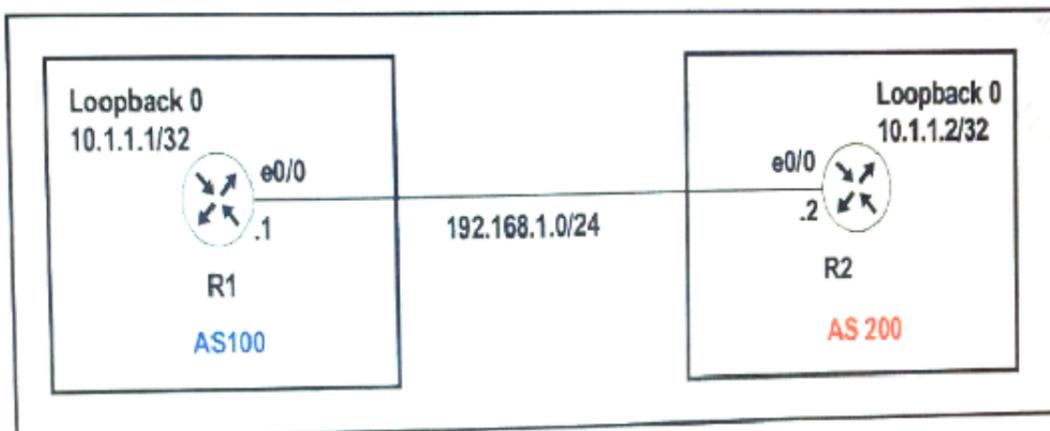
Explanation:

A route received from one iBGP peer will NOT be advertised to another iBGP peer. Therefore R4 could not receive advertisement for network 192.168.100.0/24. We can overcome this BGP limitation by configuring R1 as a route reflector server and R4 as a route reflector client so that R1 sends advertisements for R4.

NEW QUESTION 337

- (Exam Topic 2)

Refer to the exhibit.



The R1 and R2 configurations are:
R1

```
router bgp 100
neighbor 10.1.1.2 remote-as 200
```

R2

```
router bgp 200
neighbor 10.1.1.1 remote-as 100
```

The neighbor is not coming up. Which two sets of configurations bring the neighbors up? (Choose two.)

- A. R2ip route 10.1.1.1 255.255.255.255 192.168.1.1router bgp 200neighbor 10.1.1.1 ttl-security hops 1neighbor 10.1.1.1 update-source loopback 0
- B. R2ip route 10.1.1.1 255.255.255.255 192.168.1.1router bgp 200neighbor 10.1.1.1 disable-connected-checkneighbor 10.1.1.1 update-source loopback 0
- C. R2ip route 10.1.1.2 255.255.255.255 192.168.1.2router bgp 100neighbor 10.1.1.2 ttl-security hops 1 neighbor 10.1.1.2 update-source loopback 0
- D. R1ip route 10.1.1.2 255.255.255.255 192.168.1.2router bgp 100neighbor 10.1.1.1 ttl-security hops 1neighbor 10.1.1.2 update-source loopback 0
- E. R1ip route 10.1.1.2 255.255.255.255 192.168.1.2router bgp 100neighbor 10.1.1.2 disable-connected-check neighbor 10.1.1.2 update-source Loopback0

Answer: BE

Explanation:

The neighbor disable-connected-check command is used to disable the connection verification process for eBGP peering sessions that are reachable by a single hop but are configured on a loopback interface or otherwise configured with a non-directly connected IP address.

Disable-connected-check enables a directly connected eBGP neighbor to peer using a loopback address without adjusting the default TTL of 1. In disable connected check the router does not decrease the TTL of an IP packet that is destined to itself so it only counts or considers as one hop between the two loopbacks of the routers.

NEW QUESTION 341

- (Exam Topic 2)

An engineer configured policy-based routing for a destination IP address that does not exist in the routing table. How is the packet treated through the policy for configuring the set ip default next-hop command?

- A. Packets are not forwarded to the specific next hop.
- B. Packets are forwarded based on the routing table.
- C. Packets are forwarded based on a static route.
- D. Packets are forwarded to the specific next hop.

Answer: D

Explanation:

The set ip default next-hop command verifies the existence of the destination IP address in the routing table, and...+ if the destination IP address exists, the command does not policy route the packet, but forwards the packet based on the routing table.+ if the destination IP address does not exist, the command policy routes the packet by sending it to the specified next hop.

Reference: <https://www.cisco.com/c/en/us/support/docs/ip/ip-routed-protocols/47121-pbr-cmds-ce.html>

NEW QUESTION 344

- (Exam Topic 2)

Refer to the exhibit.

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

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

- Boston Router**
 router ospf 1
 auto-cost reference-bandwidth 1000
- SanFrancisco Router**
 router ospf 1
 auto-cost reference-bandwidth 1000
- All Routers**
 router ospf 1
 auto-cost reference-bandwidth 100
- All Routers**
 router ospf 1
 auto-cost reference-bandwidth 1000

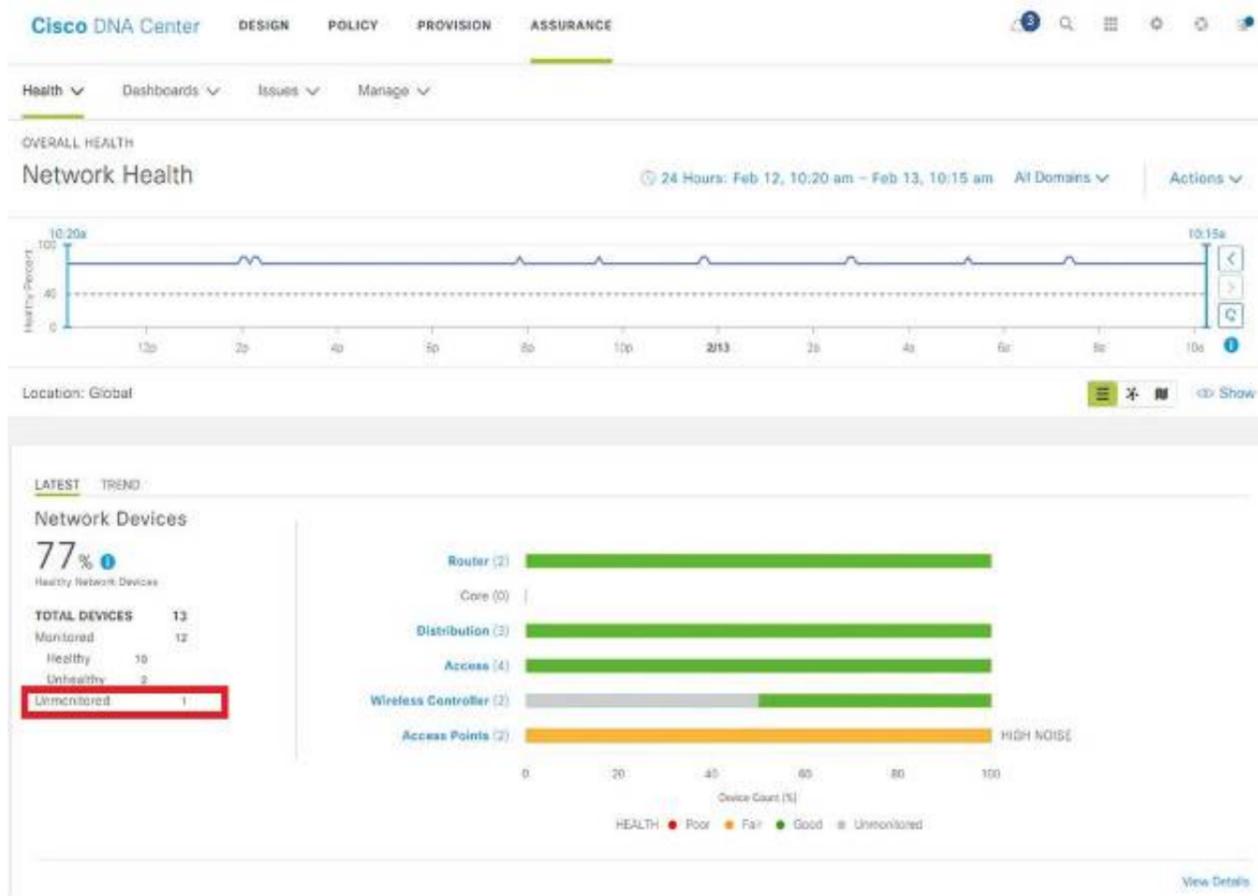
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 347

- (Exam Topic 2)

Refer to Exhibit.



A network administrator added one router in the Cisco DNA Center and checked its discovery and health from the Network Health Dashboard. The network administrator observed that the router is still showing up as unmonitored. What must be configured on the router to mount it in the Cisco DNA Center?

- A. Configure router with NetFlow data
- B. Configure router with the telemetry data
- C. Configure router with routing to reach Cisco DNA Center
- D. Configure router with SNMPv2c or SNMPv3 traps

Answer: B

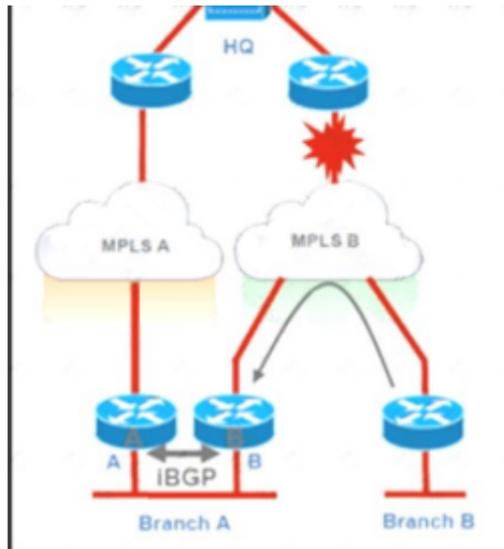
Explanation:

Unmonitored: Unmonitored devices are devices for which Assurance did not receive any telemetry data during the specified time range.

NEW QUESTION 348

- (Exam Topic 2)

Refer to the exhibit.



Troubleshoot and ensure that branch B only ever uses the MPLS B network to reach HQ. Which action achieves this requirement?

- A. Introduce an AS path filter on branch A routers so that only local prefixes are advertised into BGP
- B. increase the local preference for all HQ prefixes received at branch B from the MPLS B network to be higher than the local preferences used on the MPLS A network
- C. Introduce AS path prepending on the branch A MPLS B network connection so that any HQ advertisements from branch A toward the MPLS B network are prepended three times
- D. Modify the weight of all HQ prefixes received at branch B from the MPLS B network to be higher than the weights used on the MPLS A network

Answer: A

Explanation:

If we modify the weight, increase local preference or use AS path prepending then we can only make MPLS B prefer over MPLS A. But when MPLS B is down then MPLS A will be used which does not meet the requirement of this question. Only with AS path filtering we can deny prefixes from certain AS and make sure branch B never uses MPLS A to reach HQ.

NEW QUESTION 349

- (Exam Topic 1)

An engineer configured a company's multiple area OSPF head office router and Site A cisco routers with VRF lite. Each site router is connected to a PE router of

an MPLS backbone.

```

Head Office & Site A
ip cef
ip vrf abc
rd 101:101
!
interface FastEthernet0/0
ip vrf forwarding abc
ip address 172.16.16.X 255.255.255.252
!
router ospf 1 vrf abc
log-adjacency-changes
network 172.16.16.0 0.0.0.255 area 1
    
```

After finishing both site router configurations, none of the LSA 3,4 5, and 7 are installed at Site A router. Which configuration resolves this issue?

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

Answer: C

NEW QUESTION 350

- (Exam Topic 1)

Which statement about IPv6 RA Guard is true?

- A. It does not offer protection in environments where IPv6 traffic is tunneled.
- B. It cannot be configured on a switch port interface in the ingress direction.
- C. Packets that are dropped by IPv6 RA Guard cannot be spanned.
- D. It is not supported in hardware when TCAM is programmed.

Answer: A

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6_fhsec/configuration/xs-3s/ip6f-xe-3s-book/ip6-ra-guard The IPv6 RA Guard feature does not offer protection in environments where IPv6 traffic is tunneled.

Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6_fhsec/configuration/xs-16/ip6f-xe-16-book/ip6-ra-guar

NEW QUESTION 354

- (Exam Topic 1)

An engineer is trying to copy an IOS file from one router to another router by using TFTP. Which two actions are needed to allow the file to copy? (Choose two.)

- A. Copy the file to the destination router with the copy tftp: flash: command
- B. Enable the TFTP server on the source router with the tftp-server flash: <filename> command
- C. TFTP is not supported in recent IOS versions, so an alternative method must be used
- D. Configure a user on the source router with the username tftp password tftp command
- E. Configure the TFTP authentication on the source router with the tftp-server authentication local command

Answer: AB

NEW QUESTION 358

- (Exam Topic 1)

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

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

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

(Reference: http://www.cisco.com/en/US/tech/tk365/technologies_tech_note09186a0080093f0e.shtml) Reference:

<https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13685-13.html>

Down

This is the first OSPF neighbor state. It means that no information (hellos) has been received from this neighbor, but hello packets can still be sent to the neighbor in this state.

During the fully adjacent neighbor state, if a router doesn't receive hello packet from a neighbor within the Router Dead Interval time (RouterDeadInterval = 4*HelloInterval by default) or if the manually configured neighbor is being removed from the configuration, then the neighbor state changes from Full to Down.

Attempt

This state is only valid for manually configured neighbors in an NBMA environment. In Attempt state, the router sends unicast hello packets every poll interval to the neighbor, from which hellos have not been received within the dead interval.

Init

This state specifies that the router has received a hello packet from its neighbor, but the receiving router's ID was not included in the hello packet. When a router receives a hello packet from a neighbor, it should list the sender's router ID in its hello packet as an acknowledgment that it received a valid hello packet.

2-Way

This state designates that bi-directional communication has been established between two routers.

Bi-directional means that each router has seen the other's hello packet. This state is attained when the router receiving the hello packet sees its own Router ID within the received hello packet's neighbor field. At this state, a router decides whether to become adjacent with this neighbor. On broadcast media and non-broadcast multiaccess networks, a router becomes full only with the designated router (DR) and the backup designated router (BDR); it stays in the 2-way state with all other neighbors. On Point-to-point and Point-to-multipoint networks, a router becomes full with all connected routers.

At the end of this stage, the DR and BDR for broadcast and non-broadcast multiaccess networks are elected. For more information on the DR election process, refer to DR Election.

Note: Receiving a Database Descriptor (DBD) packet from a neighbor in the init state will also cause a transition to 2-way state.

Exstart

Once the DR and BDR are elected, the actual process of exchanging link state information can start between the routers and their DR and BDR. (ie. Shared or NBMA networks).

In this state, the routers and their DR and BDR establish a master-slave relationship and choose the initial sequence number for adjacency formation. The router with the higher router ID becomes the master and starts the exchange, and as such, is the only router that can increment the sequence number. Note that one would logically conclude that the DR/BDR with the highest router ID will become the master during this process of master-slave relation. Remember that the DR/BDR election might be purely by virtue of a higher priority configured on the router instead of highest router ID. Thus, it is possible that a DR plays the role of slave. And also note that master/slave election is on a per-neighbor basis.

Exchange

In the exchange state, OSPF routers exchange database descriptor (DBD) packets. Database descriptors contain link-state advertisement (LSA) headers only and describe the contents of the entire link-state database. Each DBD packet has a sequence number which can be incremented only by master which is explicitly acknowledged by slave. Routers also send link-state request packets and link-state update packets (which contain the entire LSA) in this state. The contents of the DBD received are compared to the information contained in the routers link-state database to check if new or more current link-state information is available with the neighbor.

Loading

In this state, the actual exchange of link state information occurs. Based on the information provided by the DBDs, routers send link-state request packets. The neighbor then provides the requested link-state information in link-state update packets. During the adjacency, if a router receives an outdated or missing LSA, it requests that LSA by sending a link-state request packet. All link-state update packets are acknowledged.

Full

In this state, routers are fully adjacent with each other. All the router and network LSAs are exchanged and the routers' databases are fully synchronized.

Full is the normal state for an OSPF router. If a router is stuck in another state, it is an indication that there are problems in forming adjacencies. The only exception to this is the 2-way state, which is normal in a broadcast network. Routers achieve the FULL state with their DR and BDR in NBMA/broadcast media and FULL state with every neighbor in the remaining media such as point-to-point and point-to-multipoint.

Note: The DR and BDR that achieve FULL state with every router on the segment will display

FULL/DROTHER when you enter the show ip ospf neighbor

command on either a DR or BDR. This simply

means that the neighbor is not a DR or BDR, but since the router on which the command was entered is either a DR or BDR, this shows the neighbor as FULL/DROTHER.

Reference: <https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13685-13.html> Reference:

http://www.cisco.com/en/US/tech/tk365/technologies_tech_note09186a0080093f0e.shtml) Reference: <https://www.cisco.com/c/en/us/support/docs/ip/open-shortest-path-first-ospf/13685-13.html>

NEW QUESTION 361

- (Exam Topic 1)

Refer to the exhibit.

```

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

Why is user authentication being rejected?

- A. The TACACS+ server expects "user", but the NT client sends "domain/user".
- B. The TACACS+ server refuses the user because the user is set up for CHAP.
- C. The TACACS+ server is down, and the user is in the local database.
- D. The TACACS+ server is down, and the user is not in the local database.

Answer: D

Explanation:

Reference:

<https://www.cisco.com/c/en/us/support/docs/security-vpn/terminal-access-controller-accesscontrol-system-tacac>

NEW QUESTION 366

- (Exam Topic 1)

Users were moved from the local DHCP server to the remote corporate DHCP server. After the move, none of the users were able to use the network. Which two issues will prevent this setup from working properly? (Choose two)

- A. Auto-QoS is blocking DHCP traffic.
- B. The DHCP server IP address configuration is missing locally
- C. 802.1X is blocking DHCP traffic
- D. The broadcast domain is too large for proper DHCP propagation
- E. The route to the new DHCP server is missing

Answer: BE

NEW QUESTION 370

- (Exam Topic 1)

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

- Standard pings to all router interfaces, including loopbacks, are successful.
- Data traffic is unaffected.
- SNMP connectivity is intermittent.
- SSH is either slow or disconnects frequently.

Which command must be configured first to troubleshoot this issue?

- A. show policy-map control-plane
- B. show policy-map
- C. show interface | inc drop
- D. show ip route

Answer: A

NEW QUESTION 371

- (Exam Topic 1)

Refer to the exhibit.

```

R1(config)# ip route 0.0.0.0 0.0.0.0 1.1.1.1
R1(config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2 10
R1(config)# ip sla 1
R1(config)# icmp-echo 1.1.1.1 source-interface FastEthernet0/0
R1(config)# ip sla schedule 1 life forever start-time now

R1(config)# track 1 ip sla 1 reachability
```

An IP SLA is configured to use the backup default route when the primary is down, but it is not working as desired. Which command fixes the issue?

- A. R1(config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2 10 track 1
- B. R1(config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2
- C. R1(config)# ip sla track 1
- D. R1(config)# ip route 0.0.0.0 0.0.0.0 1.1.1.1 track 1

Answer: D

Explanation:

Reference:

Note: By default Static Router AD value-1 hence ip route 0.0.0.0. 0.0.0.0. 1.1.1.1 track 1 means AD-1 which must be less than of back up route AD.

Define the backup route to use when the tracked object is unavailable. !--- The administrative distance of the backup route must be greater than !--- the administrative distance of the tracked route.!--- If the primary gateway is unreachable, that route is removed!--- and the backup route is installed in the routing table!--- instead of the tracked route.

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

<https://www.cisco.com/c/en/us/support/docs/security/asa-5500-x-series-next-generation-firewalls/118962-config>

NEW QUESTION 372

- (Exam Topic 1)

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

- A. Route distinguishers allow multiple instances of a routing table to coexist within the edge router.
- B. Route distinguishers are used for label bindings.
- C. Route distinguishers make a unique VPNv4 address across the MPLS network.
- D. Route distinguishers define which prefixes are imported and exported on the edge router.

Answer: C

NEW QUESTION 377

- (Exam Topic 1)

Refer to the exhibit.

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

An engineer is trying to connect to a device with SSH but cannot connect. The engineer connects by using the console and finds the displayed output when troubleshooting. Which command must be used in configuration mode to enable SSH on the device?

- A. no ip ssh disable
- B. ip ssh enable
- C. ip ssh version 2
- D. crypto key generate rsa

Answer: D

NEW QUESTION 378

- (Exam Topic 1)

Drag and drop the SNMP attributes in Cisco IOS devices from the left onto the correct SNMPv2c or SNMPV3 categories on the right.

community string	SNMPv2c
username and password	
authentication	
no encryption	SNMPv3
privileged	
read-only	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application Description automatically generated

NEW QUESTION 379

- (Exam Topic 1)

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

- A)


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


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


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


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

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

D. Option D

Answer: D

Explanation:

By default BGP advertises all prefixes to external BGP neighbors. This means that if you are multi-homed (connected to two or more ISPs) then you might become a transit AS. For example, ISP 2 in AS 200 can send traffic to your router in AS 100 to reach ISP 3 in AS 300 because you advertised prefixes in ISP 3 to ISP 2. This is what will be seen in the BGP routing table of ISP1:

```
ISP1#show ip bgp
--output omitted--
Network          Next Hop          Metric LocPrf Weight Path
....
*> 3.3.3.0/24    192.168.12.1          0 100 300 i
```

NEW QUESTION 383

- (Exam Topic 1)

Which statement about MPLS LDP router ID is true?

- A. If not configured, the operational physical interface is chosen as the router ID even if a loopback is configured.
- B. The loopback with the highest IP address is selected as the router ID.
- C. The MPLS LDP router ID must match the IGP router ID.
- D. The force keyword changes the router ID to the specified address without causing any impact.

Answer: B

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_ldp/configuration/12-4m/mp-ldp-12-4mbook.pdf

NEW QUESTION 388

- (Exam Topic 1)

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

PE	device that forwards traffic based on labels
P	path that the labeled packet takes
CE	device that is unaware of MPLS labeling
LSP	device that removes and adds the MPLS labeling

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

PE	P
P	LSP
CE	CE
LSP	PE

NEW QUESTION 393

- (Exam Topic 1)

Refer to the exhibit.

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

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

Which statement about R1 is true?

- A. OSPF redistributes RIP routes only if they have a tag of one.
- B. RIP learned routes are distributed to OSPF with a tag value of one.
- C. R1 adds one to the metric for RIP learned routes before redistributing to OSPF.
- D. RIP routes are redistributed to OSPF without any changes.

Answer: B

NEW QUESTION 396

- (Exam Topic 1)

Which two protocols can cause TCP starvation? (Choose two)

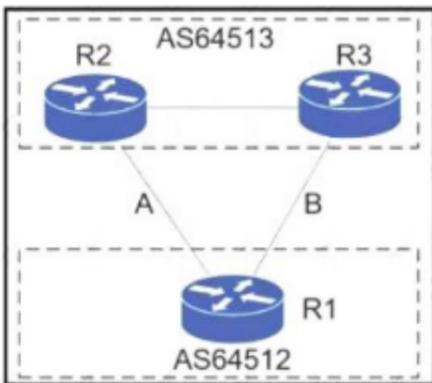
- A. TFTP
- B. SNMP
- C. SMTP
- D. HTTPS
- E. FTP

Answer: AB

NEW QUESTION 399

- (Exam Topic 1)

Refer to the exhibit.



A network engineer for AS64512 must remove the inbound and outbound traffic from link A during maintenance without closing the BGP session so that there a backup link over link A toward the ASN. Which BGP configuration on R1 accomplishes this goal?

A)

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

B)

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

C)

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

D)

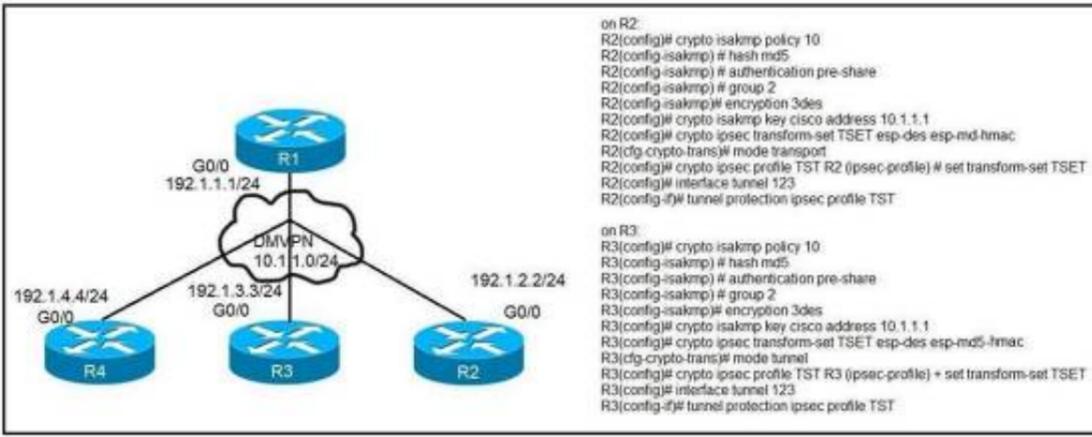
```
route-map link-a-in permit 10
 set weight 200
route-map link-a-out permit 10
route-map link-b-in permit 10
 set weight 100
route-map link-b-out permit 10
 set as-path prepend 64512
```

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

Answer: C

NEW QUESTION 400

- (Exam Topic 1)
 Refer to the exhibit.



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

- A. Configure the crypto isakmp key cisco address 192.1.1.1 on R2 and R3
- B. Configure the crypto isakmp key cisco address 0.0.0.0 on R2 and R3.
- C. Change the mode from mode tunnel to mode transport on R3
- D. Change the mode from mode transport to mode tunnel on R2.
- E. Remove the crypto isakmp key cisco address 10.1.1.1 on R2 and R3

Answer: AD

Explanation:

*When using DMVPN with IPsec, it is unnecessary to use tunnel mode. Because DMVPN uses GRE which means that a new IP header is already added by GRE. The GRE encapsulation happens on the tunnel interface before the encryption process takes place.

NEW QUESTION 402

- (Exam Topic 1)
 Refer to the exhibit.

```

aaa new-model

aaa authentication login default none

aaa authentication login telnet local

!

username cisco password 0 ocsic

!

line vty 0

 password LetMeIn

 login authentication telnet

 transport input telnet

line vty 1

 password LetMeIn

 transport input telnet
    
```

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

no password	vty 0 <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;">username</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">password</div>
ocsic	
no username	vty 1 <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;">username</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">password</div>
LetMeIn	
cisco	
LetMeIn	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

```
vty 0:
+ cisco
+ 0csic vty 1:
+ no username
+ no password
```

The command "aaa authentication login default none" means no authentication is required when access to the device via Console/VTY/AUX so if one interface does not specify another login authentication method (via the "login authentication ..." command), it will allow to access without requiring username or password. In this case VTY 1 does not specify another authentication login method so it will use the default method (which is "none" in this case).

NEW QUESTION 403

- (Exam Topic 1)

Refer to the exhibit.

```
BRANCH-RTR#
router eigrp 100
network 10.4.31.0 0.0.0.7
network 10.100.100.1 0.0.0.0
distribute-list route-map FILTER-IN in FastEthernet0/0
eigrp router-id 10.100.100.1
!
ip prefix-list 102 seq 10 permit 10.1.1.100/32
!
route-map FILTER-IN deny 10
match ip address prefix-list 102
!
```

A junior engineer updated a branch router configuration. Immediately after the change, the engineer receives calls from the help desk that branch personnel cannot reach any network destinations. Which configuration restores service and continues to block 10.1.1.100/32?

- A. route-map FILTER-IN deny 5
- B. ip prefix-list 102 seq 15 permit 0.0.0.0/32 le 32
- C. ip prefix-list 102 seq 5 permit 0.0.0.0/32 le 32
- D. route-map FILTER-IN permit 20

Answer: D

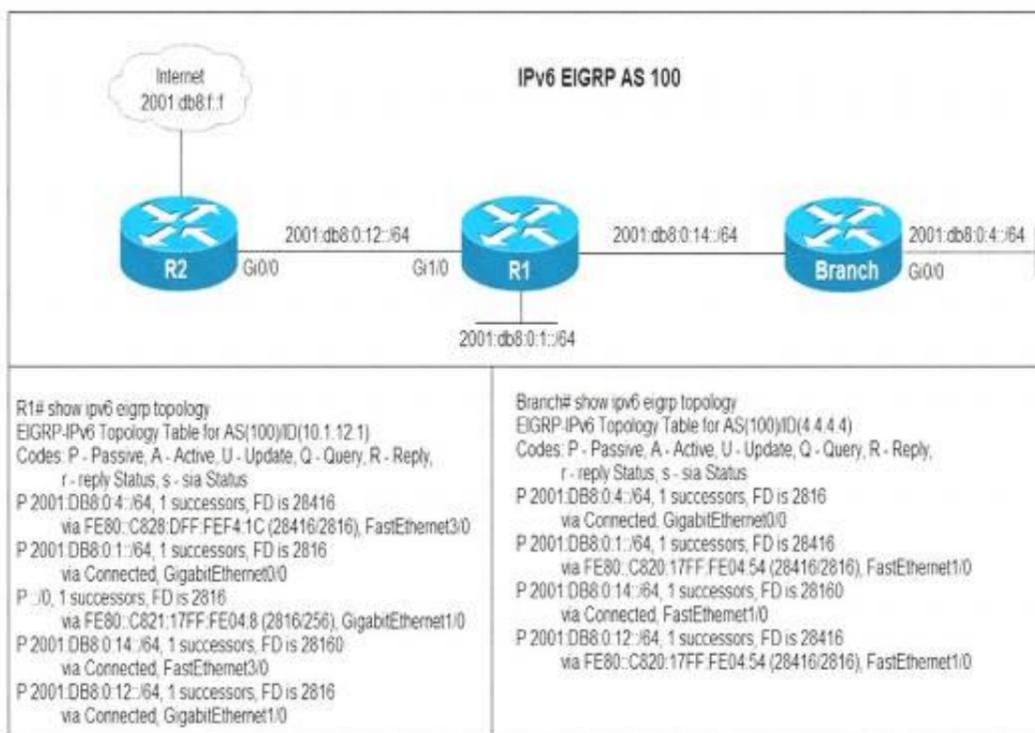
Explanation:

By using "deny" keyword in a route-map, we can filter out the prefix specified in the prefix-list. But there is an implicit "deny all" statement in the prefix-list so we must permit other prefixes with "permit" keyword in the route-map.

NEW QUESTION 404

- (Exam Topic 1)

Refer to the exhibit.



Users in the branch network of 2001:db8:0:4::/64 report that they cannot access the Internet. Which command is issued in IPv6 router EIGRP 100 configuration mode to solve this issue?

- A. Issue the eigrp stub command on R1
- B. Issue the no neighbor stub command on R2.
- C. Issue the eigrp command on R2.
- D. Issue the no eigrp stub command on R1.

Answer: D

NEW QUESTION 405

- (Exam Topic 1)

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Customer (C) device	Provider (P) device
CE device	PE device
PE device	Customer (C) device
Provider (P) device	CE device

NEW QUESTION 408

- (Exam Topic 1)

Refer to the exhibit.

```

Router Configuration:

ip vrf customer_a
 rd 1:1
 route-target export 1:1
 route-target import 1:1
 !
 !
interface FastEthernet0.1
 encapsulation dot1Q 2
 ip vrf forwarding customer_a
 ip address 192.168.4.1 255.255.255.0
 !
router ospf 1
 log-adjacency-changes
 !
router ospf 2 vrf customer_a
 log-adjacency-changes
 network 192.168.4.0 0.0.0.255 area 0
 !
end
    
```

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

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

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

Answer: D

Explanation:

From the exhibit, we learned:

+ VRF customer_a was exported with Route target (RT) of 1:1 so at the remote site it must be imported with the same RT 1:1.

+ VRF customer_a was imported with Route target (RT) of 1:1 so at the remote site it must be exported with the same RT 1:1.

Therefore at the remote site we must configure the command "route-target both 1:1" (which is equivalent to two commands "route-target import 1:1" & "route-target export 1:1").

NEW QUESTION 412

- (Exam Topic 1)

Refer to the exhibit.

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

<output omitted>

Gateway of last resort is not set

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

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

- A. Dynamic routing protocols always have priority over static routes.
- B. The metric of the OSPF route is lower than the metric of the static route.
- C. The configured AD for the static route is higher than the AD of OSPF.
- D. The syntax of the static route is not valid, so the route is not considered.

Answer: C

Explanation:

The AD of static route is manually configured to 130 which is higher than the AD of OSPF router which is 110.

NEW QUESTION 416

- (Exam Topic 1)

Refer to the exhibit.

```

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

```

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

- A. Use an extended access list instead of a standard access list.
- B. Change sequence 10 in the route-map command from permit to deny.
- C. Use a prefix list instead of an access list in the route map.
- D. Add this statement to the route map: route-map RM-OSPF-DL deny 20.

Answer: B

NEW QUESTION 420

- (Exam Topic 1)

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

- A. nonbroadcast multiaccess
- B. packet switching
- C. policy-based routing
- D. forwarding information base

Answer: C

NEW QUESTION 425

- (Exam Topic 1)

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

- A. show ip vrf
- B. show ip route vrf
- C. show run vrf
- D. show ip protocols vrf

Answer: B

Explanation:

Reference:

<https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/50sg/configuration/guide/Wrapper-46SG>

NEW QUESTION 429

- (Exam Topic 1)

What is an advantage of using BFD?

- A. It detects local link failure at layer 1 and updates routing table.
- B. It detects local link failure at layer 2 and updates routing protocols.
- C. It has sub-second failure detection for layer 1 and layer 3 problems.
- D. It has sub-second failure detection for layer 1 and layer 2 problems.

Answer: D

NEW QUESTION 434

- (Exam Topic 1)

During the maintenance window an administrator accidentally deleted the Telnet-related configuration that permits a Telnet connection from the inside network (Eth0/0) to the outside of the networking between Friday – Sunday night hours only. Which configuration resolves the issue?

A)

```
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip access-group 101 in
!
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255
eq telnet time-range changewindow
!
time-range changewindow
periodic Friday Saturday Sunday 22:00 to 05:00
```

B)

```
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip access-group 101 in
!
access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255
eq telnet time-range changewindow
!
time-range changewindow
periodic 22:00 to 05:00
```

C)

```
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip access-group 101 in
!
access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255
eq telnet time-range changewindow
!
time-range changewindow
periodic Friday Saturday Sunday 22:00 to 05:00
```

D)

```
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip access-group 101 in
!
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255
eq telnet time-range changewindow
!
time-range changewindow
```

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

Answer: C

NEW QUESTION 438

- (Exam Topic 1)

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

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

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

- A. R1 sees 192.168.130.0/24 as two AS hops away instead of one AS hop away.
- B. R1 does not accept any routes other than 192.168.130.0/24
- C. R1 does not forward traffic that is destined for 192.168.30.0/24
- D. Network 192.168.130.0/24 is not allowed in the R1 table

Answer: A

NEW QUESTION 443

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