



Cisco

Exam Questions 300-410

Implementing Cisco Enterprise Advanced Routing and Services (ENARSI)

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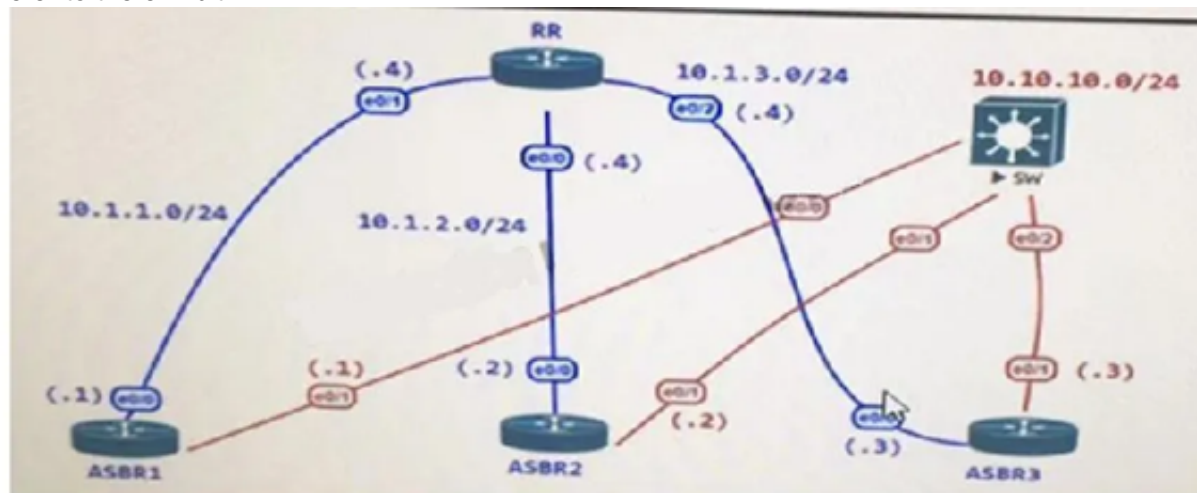
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NEW QUESTION 1

- (Exam Topic 3)

Refer to the exhibit.



```
RR
router bgp 100
 neighbor 10.1.1.1 remote-as 100
 neighbor 10.1.2.2 remote-as 100
 neighbor 10.1.3.3 remote-as 100

ASBR2
router bgp 100
 neighbor 10.1.1.4 remote-as 100

ASBR3
router bgp 100
 neighbor 10.1.2.4 remote-as 100

ASBR4
router bgp 100
 neighbor 10.1.3.4 remote-as 100
```

The administrator configured the network device for end-to-end reachability, but the ASBRs are not propagating routes to each other. Which set of configuration resolves this issue?

- A. router bgp 100 neighbor 10.1.1.1 route-reflector-client neighbor 10.1.2.2 route-reflector-client neighbor 10.1.3.3 route-reflector-client
- B. router bgp 100 neighbor 10.1.1.1 next-hop-self neighbor 10.1.2.2 next-hop-self neighbor 10.1.3.3 next-hop-self
- C. router bgp 100 neighbor 10.1.1.1 update-source Loopback0 neighbor 10.1.2.2 update-source Loopback0 neighbor 10.1.3.3 update-source Loopback0
- D. router bgp 100 neighbor 10.1.1.1 ebgp-multihop neighbor 10.1.2.2 ebgp-multihop neighbor 10.1.3.3 ebgp-multihop

Answer: A

NEW QUESTION 2

- (Exam Topic 3)

Refer to the exhibit.

```
*Sep 26 19:50:43.504: SNMP: Packet received via UDP from
192.168.1.2 on GigabitEthernet0/1
SrParseV3SnmpMessage: No matching Engine ID.
```

```
SrParseV3SnmpMessage: Failed.
SrDoSnmp: authentication failure, Unknown Engine ID
```

```
*Sep 26 19:50:43.504: SNMP: Report, reqid 29548, errstat 0,
erridx 0
```

```
internet.6.3.15.1.1.4.0 = 3
```

```
*Sep 26 19:50:43.508: SNMP: Packet sent via UDP to 192.168.1.2
process_mgmt_req_int: UDP packet being de-queued
```

Which two commands provide the administrator with the information needed to resolve the issue? (Choose two.)

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

Answer: AE

NEW QUESTION 3

- (Exam Topic 3)

Drag and drop the descriptions from the left onto the corresponding MPLS components on the right.

FEC	routers in the core of the provider network known as P routers
LSP	all traffic to be forwarded using the same path and same label
LER	routers that connect to the customer routers known as PE routers
LSR	used for exchanging label mapping information between MPLS enabled routers
LDP	path along which the traffic flows across an MPLS network

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

NEW QUESTION 4

- (Exam Topic 3)

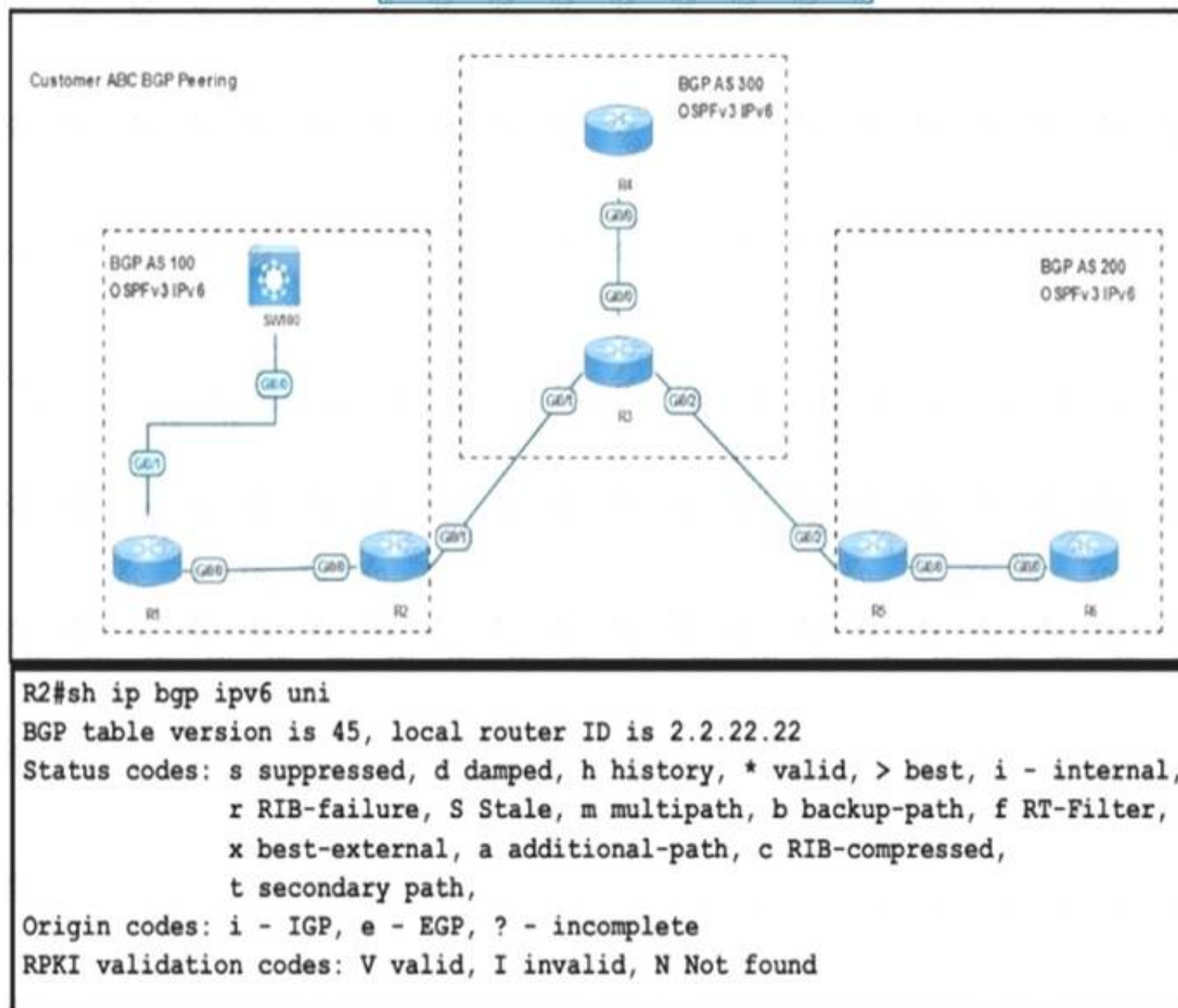
What is a characteristic of IPv6 RA Guard?

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

Answer: C

NEW QUESTION 5

- (Exam Topic 3)



```
t secondary
Origin codes: i - IGP, e - EGP, ? - incomplete
RPKI validation codes: V valid, I invalid, N Not found

  Network          Next Hop           Metric LocPrf Weight Path
*>  2001::5/128      2001::5              0           0 300 200 i
*>  2001::4/128      2001::4              0           0 300 i
*>  2002::2/128      ::                  0          32768 i

R2#sh run | section bgp
router bgp 100
  address-family ipv6
neighbor 2001::4 route-map Filter in

ip as-path access-list 1 permit _300_[0-9]

route-map Filter permit 10
match as-path 1
```

Refer to the exhibit R2 has been receiving routes from R4 that originated outside AS300 A network engineer configured an AS-Path ACL to avoid adding these routes to the R2 BGP table but the routes are still present in the R2 routing table Which action resolves the issue?

- A. Replace as-path access-list 1 with the ip as-path access-list 1 permit A300\$ command
- B. Replace as-path access-list 1 with the ip as-path access-list 1 permit ..300." command
- C. Replace as-path access-list 1 with the ip as-path access-list 1 permit A300_ command.
- D. Replace as-path access-list 1 with the ip as-path access-list 1 permit A300." command

Answer: B

NEW QUESTION 6

- (Exam Topic 3)

An engineer configured a router with this configuration

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

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

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

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

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

Answer: B

NEW QUESTION 7

- (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 8

- (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 9

- (Exam Topic 3)

Refer to the exhibit.

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

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

- A. line con 0aaa authorization console authorization exec!line vty 0 4 transport input ssh
- B. line con 0aaa authorization console!line vty 0 4 authorization exec
- C. line con 0aaa authorization console priv15!line vty 0 4 authorization exec
- D. line con 0aaa authorization console authorization priv15!line vty 0 4 transport input ssh

Answer: A

NEW QUESTION 10

- (Exam Topic 3)

What is the purpose of an OSPF sham-link?

- A. to allow intra-area routing when OSPF is used as the PE-CE connection protocol in an MPLS VPN network
- B. to correct OSPF backdoor routing when OSPF is used as the PE-CE connection protocol in an MPLS VPN network
- C. to correct OSPF backdoor routing when OSPF is used as the PE-PE connection protocol in an MPLS VPN network
- D. to allow inter-area routing when OSPF is used as the PE-CE connection protocol in a MPLS VPN network

Answer: C

NEW QUESTION 10

- (Exam Topic 3)

Refer to the exhibit.

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

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 14

- (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 17

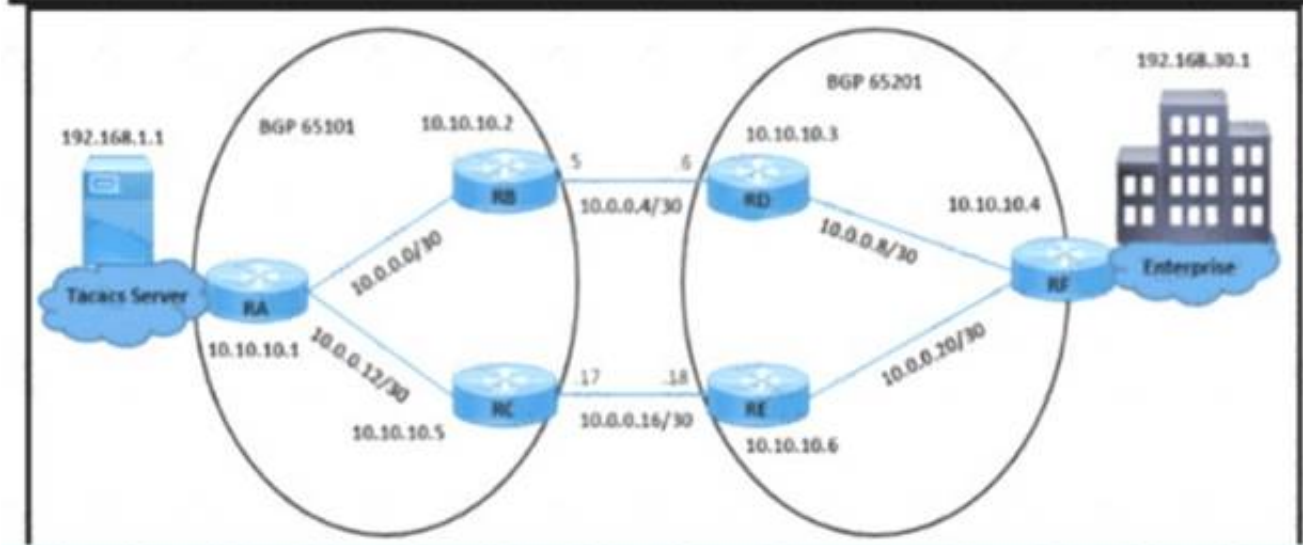
- (Exam Topic 3)

```

RF#traceroute 192.168.1.1
 1 10.0.0.9 40 msec 28 msec 24 msec
 2 * * *
 3 * * *

RE#show ip prefix-list detail
Prefix-list with the last deletion/insertion: Customer
ip prefix-list Customer:
  count: 2, range entries: 1, sequences: 5 - 10, refcount: 3
  seq 5 deny 192.168.1.1/32 (hit count: 5, refcount: 1)
  seq 10 permit 0.0.0.0/0 le 32 (hit count: 26, refcount: 1)

RC#show ip prefix-list detail
Prefix-list with the last deletion/insertion: Customer
ip prefix-list Customer:
  count: 1, range entries: 1, sequences: 10 - 10, refcount: 4
  seq 10 permit 0.0.0.0/0 le 32 (hit count: 7, refcount: 1)
  
```



Refer to the exhibit The enterprise users fail to authenticate with the TACACS server when a direct fiber link fails between RB and RD The NOC team observes

- > Users connected on AS65201 fail to authenticate with TACACS server 192 168 1 1
- > Users connected on AS65101 successfully authenticate with TACACS server 192 168 1 1
- > All AS65101 and AS65201 users are configured to authenticate with the TACACS server

Which configuration resolves the issue?

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

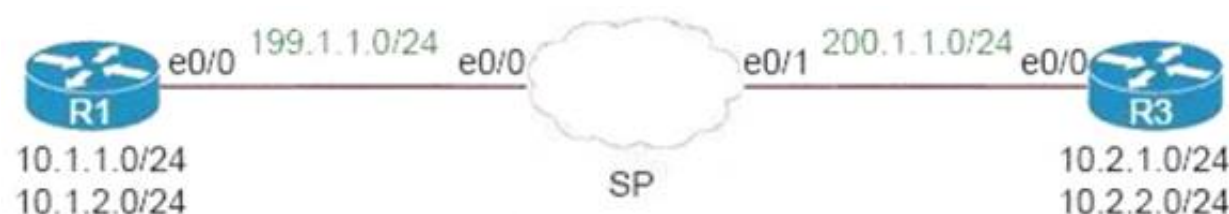
- A. Option A
 B. Option B
 C. Option C
 D. Option D

Answer: C

NEW QUESTION 20

- (Exam Topic 3)

Refer to the exhibit.



An engineer must configure a LAN-to-LAN IPsec VPN between R1 and the remote router. Which IPsec Phase 1 configuration must the engineer use for the local router?

- A. crypto isakmp policy 5 authentication pre-share encryption 3deshash sha group 2!crypto isakmp key cisco123 address 200.1.1.3

- B. crypto isakmp policy 5 authentication pre-share encryption 3deshash md5 group 2!crypto isakmp key cisco123 address 200.1.1.3
 C. crypto isakmp policy 5 authentication pre-share encryption 3deshash md5 group 2!crypto isakmp key cisco123 address 199.1.1.1
 D. crypto isakmp policy 5 authentication pre-share encryption 3deshash md5 group 2!crypto isakmp key cisco123! address 199.1.1.1

Answer: A

Explanation:

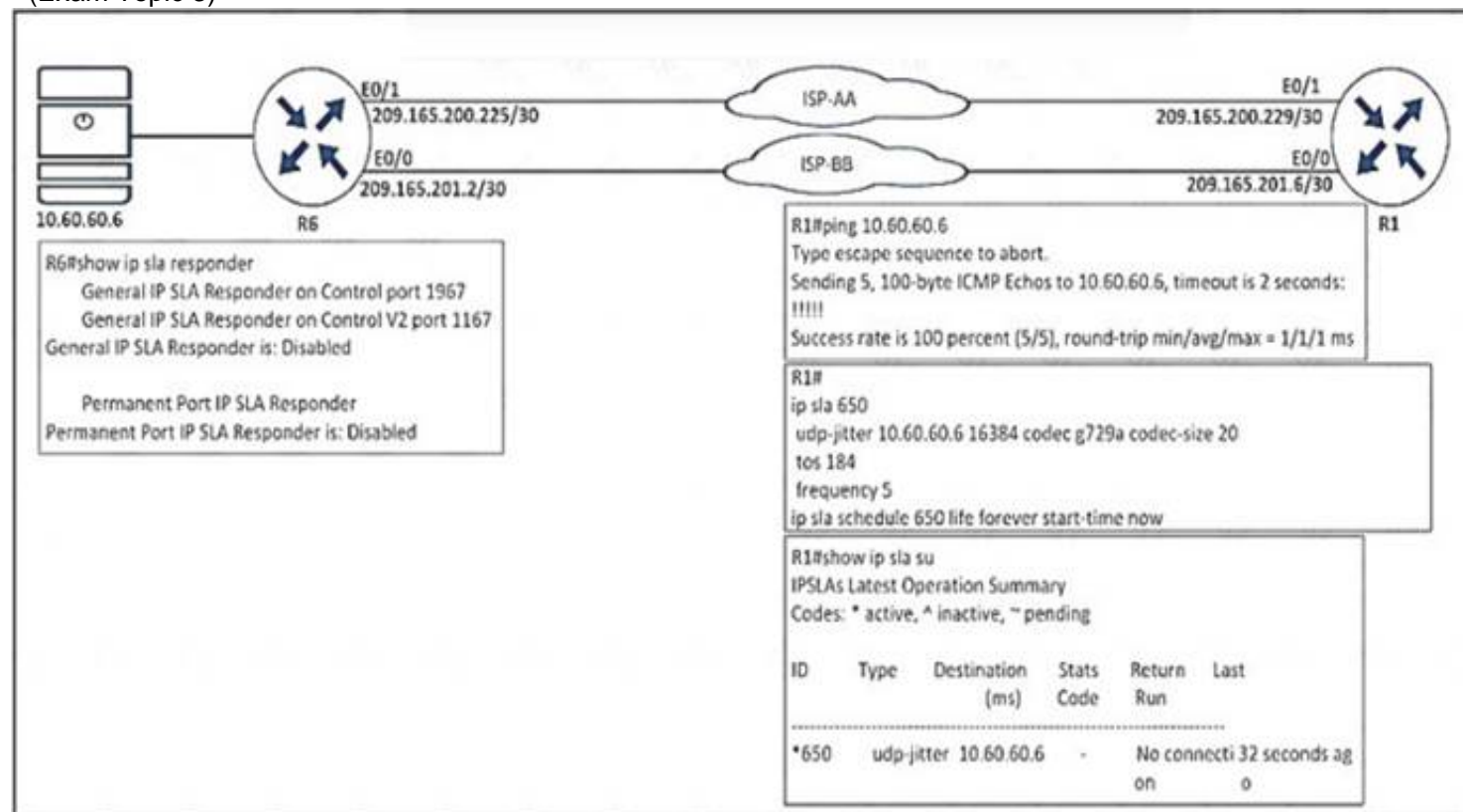
In the "crypto isakmp key ... address" command, the address must be of the IP address of the other end (which is 200.1.1.3 in this case) so Option A and Option B are correct. The difference between these two options are in the hash SHA or MD5 method but both of them can be used although SHA is better than MD5 so we choose Option A the best answer.

Note: Cisco no longer recommends using 3DES, MD5 and DH groups 1, 2 and 5.

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_conn_imgmt/configuration/xr-16-5/sec-ipsec-management-xr-16-5-book/sec-ipsec-usability-enhance.html

NEW QUESTION 21

- (Exam Topic 3)



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

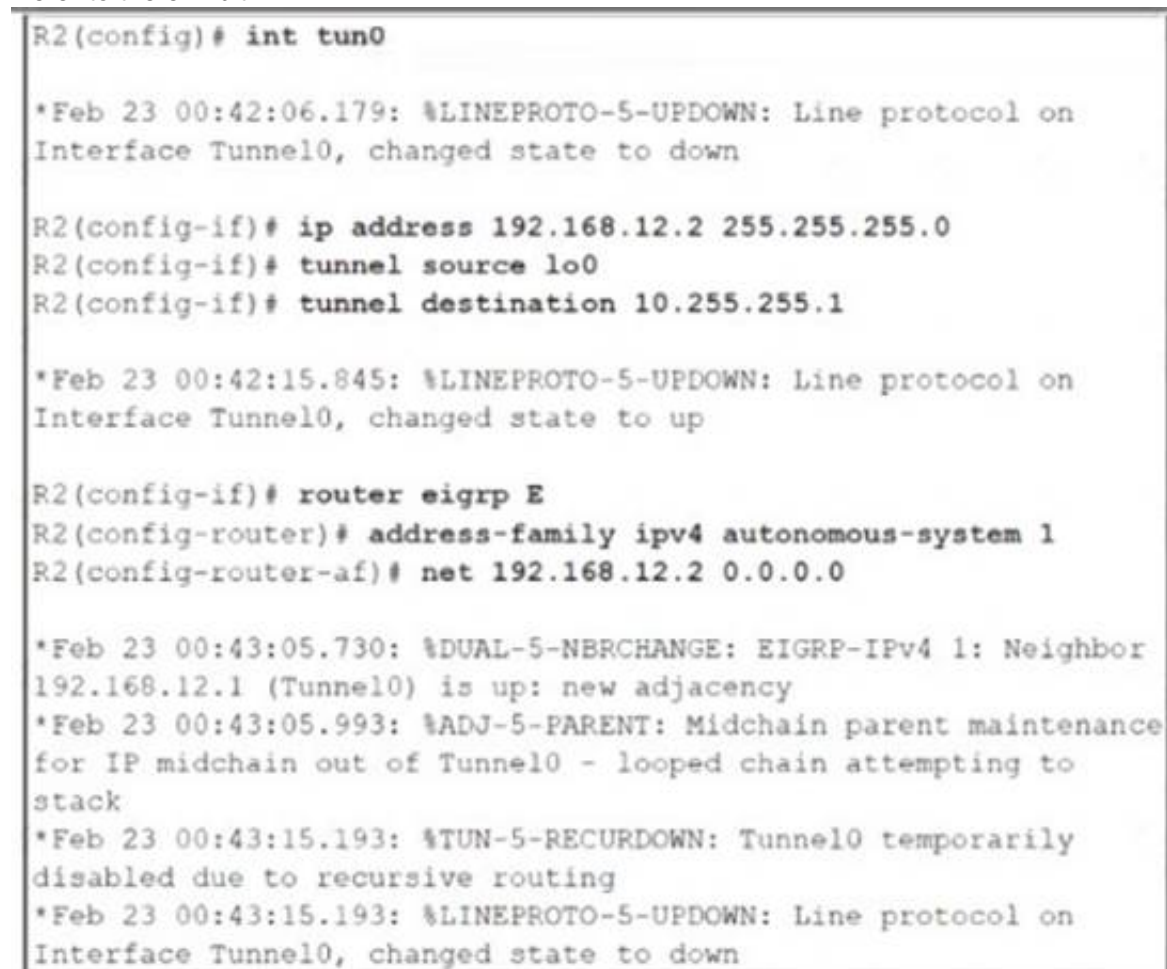
- A. R6(config)#ip sla responder
 B. R6(config)#ip sla responder udp-echo ipaddress 10.60.60.6 po 5000
 C. R6(config)#ip sla 650 R6(config-ip-sla)ff udp-jitter 10.60.60.6
 D. R6(config)#ip sla schedule 10 life forever start-time now

Answer: A

NEW QUESTION 23

- (Exam Topic 3)

Refer to the exhibit.



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

Answer: A

NEW QUESTION 25

- (Exam Topic 3)

Refer to the exhibit.

```
R1# show ip ospf database self-originate
      OSPF Router with ID (10.255.255.1) (Process ID 1)

      Router Link States (Area 0)

Link ID      ADV Router   Age         Seq#         Checksum
Link count
10.255.255.1  10.255.255.1  4           0x800003BD  0x001AD9
3

      Summary Net Link States (Area 0)

Link ID      ADV Router   Age         Seq#         Checksum
10.0.34.0    10.255.255.1  3604        0x80000380  0x00276C
10.255.255.4  10.255.255.1  3604        0x80000380  0x00762B

      Type-5 AS External Link States

Link ID      ADV Router   Age         Seq#         Checksum
Tag
0.0.0.0      10.255.255.1  3604        0x800001D0  0x001CBC
0

*Feb 22 22:50:39.523: %OSPF-4-FLOOD_WAR: Process 1 flushes LSA
ID 0.0.0.0 type-5 adv-rtr 10.255.255.1 in area 0
```

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

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

Answer: B

NEW QUESTION 30

- (Exam Topic 3)

```
CPE# copy flash:packages.conf ftp://192.0.2.40/
Address or name of remote host [192.0.2.40]?
Destination filename [packages.conf]?
Writing packages.conf
%Error opening ftp://192.0.2.40/packages.conf (Incorrect
Login/Password)
CPE#
```

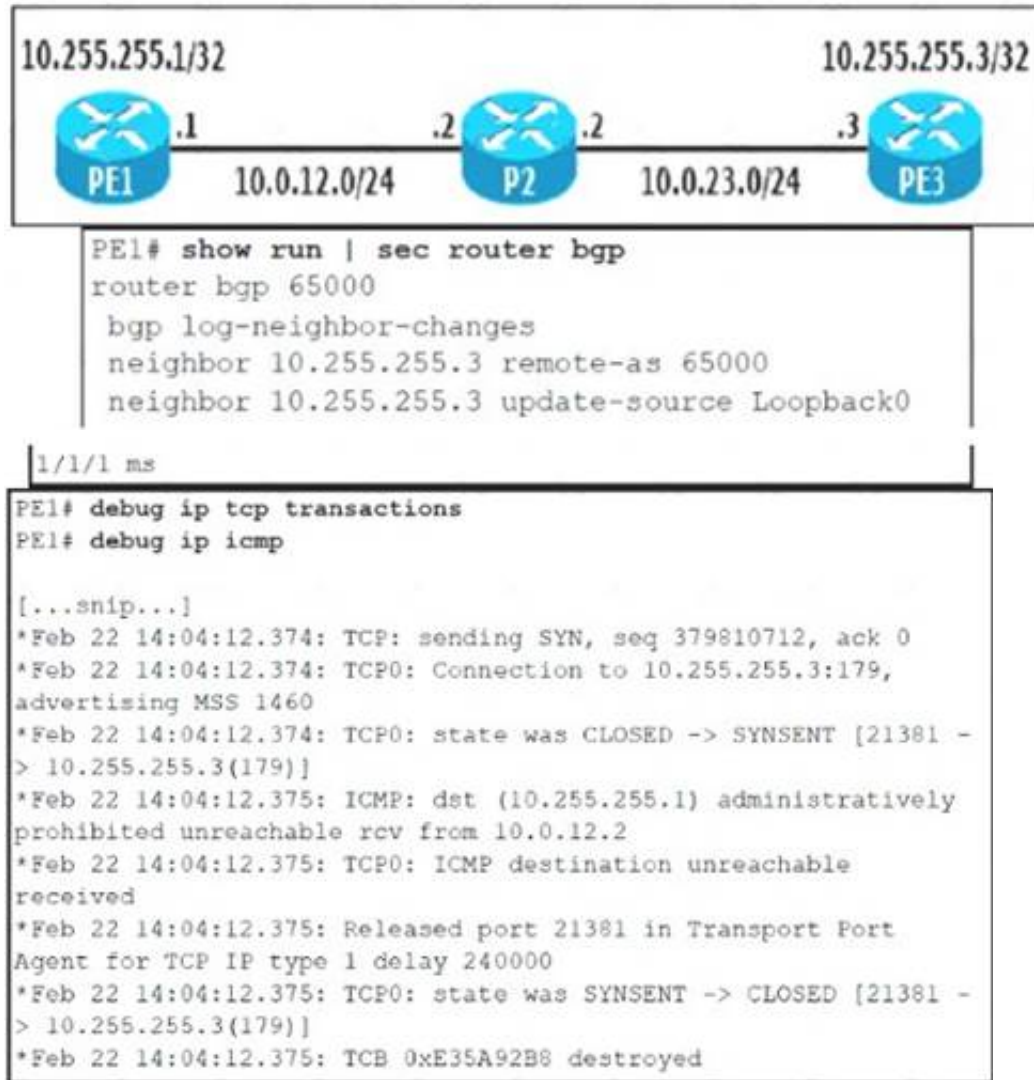
Refer to the exhibit. An administrator must upload the packages.conf file to an FTP server. However, the FTP server rejected anonymous service and required users to authenticate. What are the two ways to resolve the issue? (Choose two.)

- A. Use the ftp username and ip ftp password configuration commands to specify valid FTP server credentials.
- B. Use the copy flash:packages.conf scp: command instead and enter the FTP server credentials when prompted.
- C. Enter the FTP server credentials directly in the FTP URL using the ftp://username:password@192.0.2.40/ syntax.
- D. Create a user on the router matching the username and password on the FTP server and log in before attempting the copy.
- E. Use the copy flash-packages.conf ftp: command instead and enter the FTP server credentials when prompted.

Answer: AC

NEW QUESTION 32

- (Exam Topic 3)



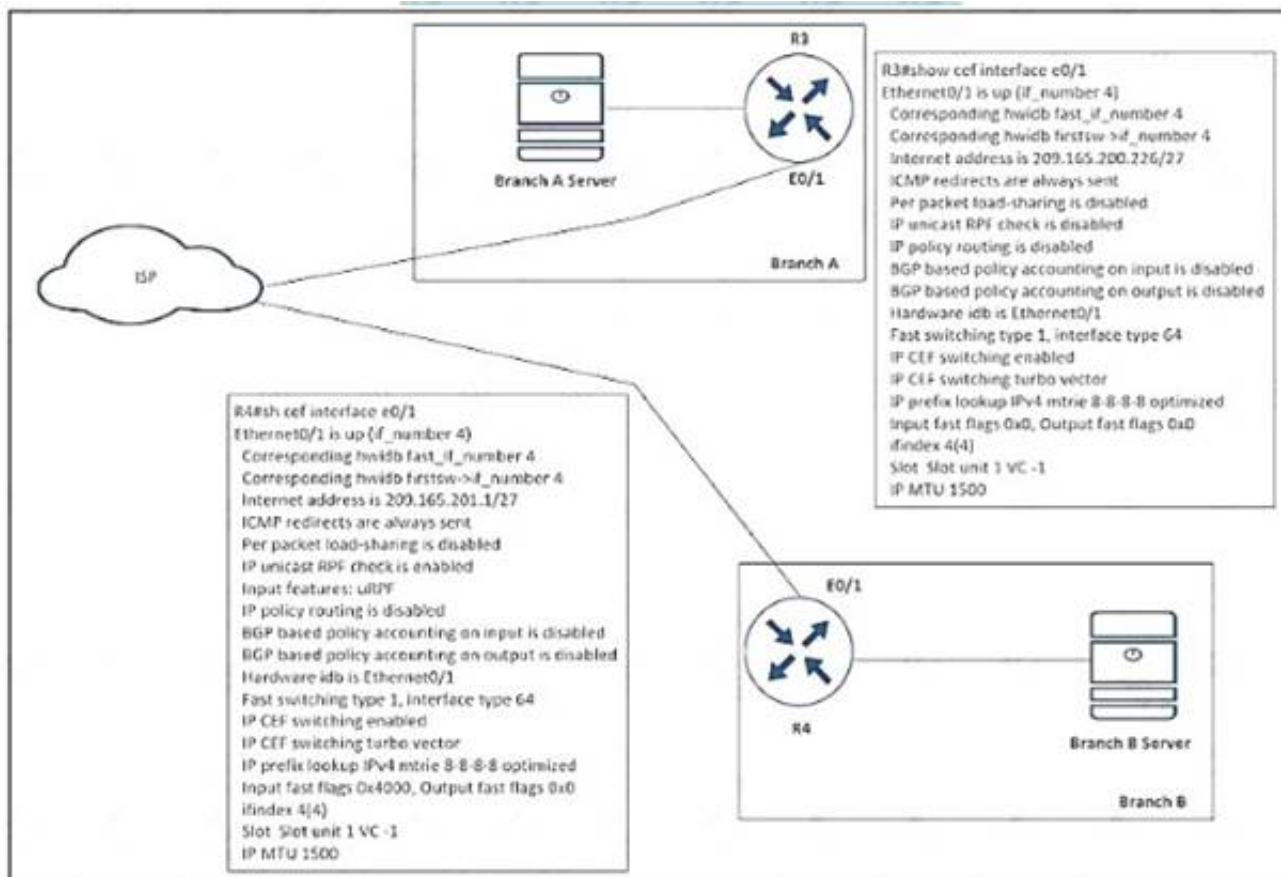
Refer to the exhibit. The administrator is troubleshooting a BGP peering between PE1 and PE3 that is unable to establish Which action resolves the issue?

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

Answer: C

NEW QUESTION 35

- (Exam Topic 3)



Refer to the exhibit.

A shoe retail company implemented the uRPF solution for an antispoofing attack. A network engineer received the call that the branch A server is under an IP spoofing attack. Which configuration must be implemented to resolve the attack?

A)

```
R4
Interface ethernet0/1
ip unicast RPF check reachable-via any allow-default allow-self-ping
```

B)

R4
interface ethernet0/1
ip verify unicast source reachable-via any allow-default allow-self-ping

C)

R3
interface ethernet0/1
ip verify unicast source reachable-via any allow-default allow-self-ping

D)

R3
interface ethernet0/1
ip unicast RPF check reachable-via any allow-default allow-self-ping

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

Answer: C

NEW QUESTION 39

- (Exam Topic 3)

<pre> R1: interface Loopback1 no ip address ipv6 address 100A:0:100C::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Loopback4 no ip address ipv6 address 400A:0:400C::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Serial1/0 no ip address ipv6 address AB01:2011:7:100::/64 eui-64 ipv6 enable ipv6 ospf network point-to-point ipv6 ospf 10 area 0 ipv6 traffic-filter DENY_TELNET_Lo4 in serial restart-delay 0 clock rate 64000 ! ipv6 router ospf 10 router-id 1.1.1.1 log-adjacency-changes ! ipv6 access-list DENY_TELNET_Lo4 sequence 20 deny tcp host 100:ABC:2011:7 host 400A:0:400C::1 eq telnet permit ipv6 any any end </pre>	<pre> R2: interface Loopback0 no ip address ipv6 address 1001:ABC:2011:7::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Serial1/0 no ip address ipv6 address AB01:2011:7:100::/64 eui-64 ipv6 enable ipv6 ospf network point-to-point ipv6 ospf 10 area 0 serial restart-delay 0 ! ipv6 router ospf 10 router-id 2.2.2.2 log-adjacency-changes ! end </pre>
---	--

<pre> R1: interface Loopback1 no ip address ipv6 address 100A:0:100C::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Loopback4 no ip address ipv6 address 400A:0:400C::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Serial1/0 no ip address ipv6 address AB01:2011:7:100::/64 eui-64 ipv6 enable ipv6 ospf network point-to-point ipv6 ospf 10 area 0 ipv6 traffic-filter DENY_TELNET_Lo4 in serial restart-delay 0 clock rate 64000 ! ipv6 router ospf 10 router-id 1.1.1.1 log-adjacency-changes ! ipv6 access-list DENY_TELNET_Lo4 sequence 20 deny tcp host 100:ABC:2011:7 host 400A:0:400C::1 eq telnet permit ipv6 any any end </pre>	<pre> R2: interface Loopback0 no ip address ipv6 address 1001:ABC:2011:7::1/64 ipv6 enable ipv6 ospf 10 area 0 ! interface Serial1/0 no ip address ipv6 address AB01:2011:7:100::/64 eui-64 ipv6 enable ipv6 ospf network point-to-point ipv6 ospf 10 area 0 serial restart-delay 0 ! ipv6 router ospf 10 router-id 2.2.2.2 log-adjacency-changes ! end </pre>
---	--

Refer to the exhibit. An engineer implemented an access list on R1 to allow anyone to Telnet except R2 Loopback0 to R1 Loopback4 How must sequence 20 be

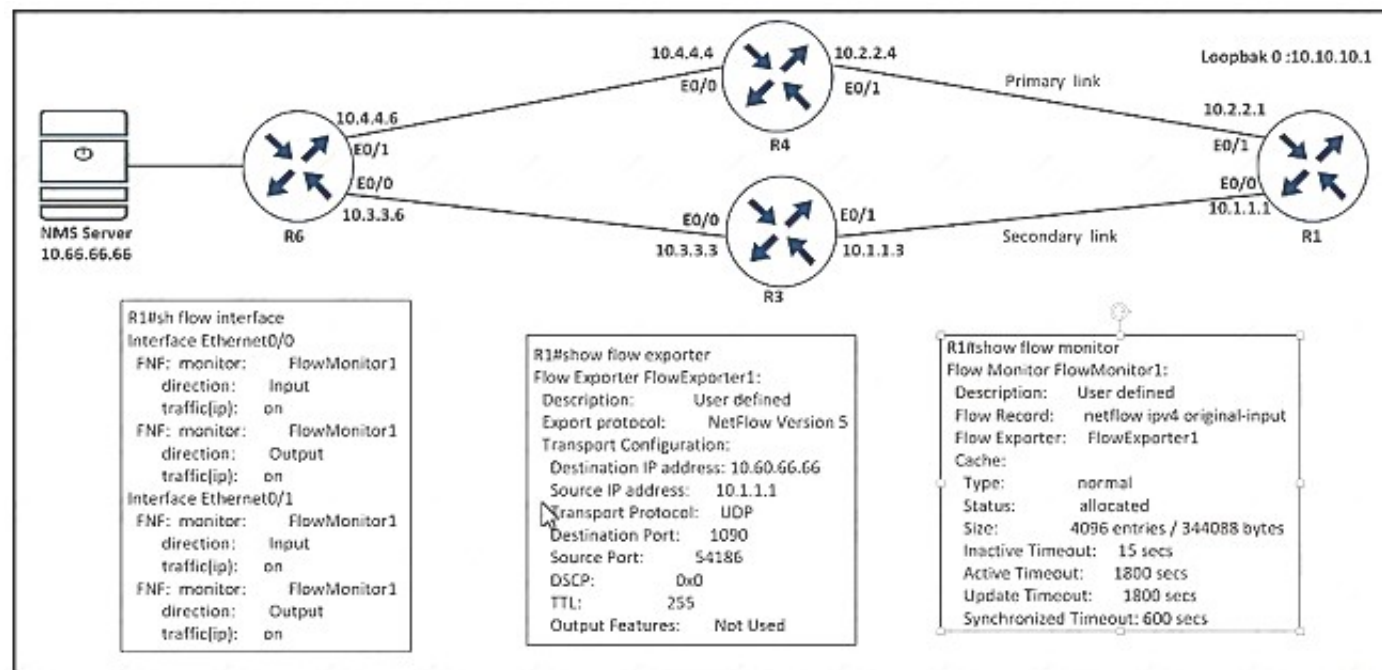
replaced on the R1 access list to resolve the issue?

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

Answer: C

NEW QUESTION 43

- (Exam Topic 3)



Refer to the exhibit. An engineer configured NetFlow on R1, but the flows do not reach the NMS server from R1. Which configuration resolves this Issue?

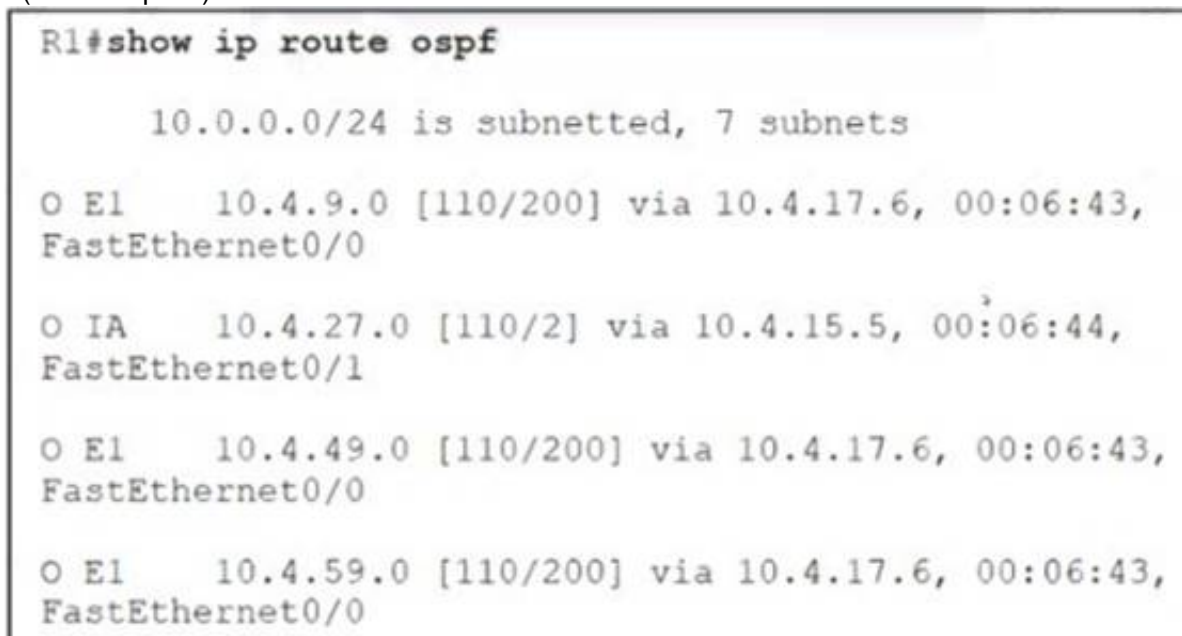
- ☒ R1(config)#flow monitor FlowMonitor1
 R1(config-flow-monitor)#destination 10.66.66.66
- ☐ R1(config)#flow exporter FlowExporter1
 R1(config-flow-exporter)#destination 10.66.66.66
- ☐ R1(config)#interface Ethernet0/0
 R1(config-if)#ip flow monitor Flowmonitor1 input
 R1(config-if)#ip flow monitor Flowmonitor1 output
- ☐ R1(config)#interface Ethernet0/1
 R1(config-if)#ip flow monitor Flowmonitor1 input
 R1(config-if)#ip flow monitor Flowmonitor1 output

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

Answer: B

NEW QUESTION 47

- (Exam Topic 3)



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

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

Answer: D

NEW QUESTION 49

- (Exam Topic 3)

```
*Sep 3 23:18:21.264: EIGRP: Neighbor (10.1.2.192) not yet found
*Sep 3 23:19:18.675: Going down: Peer 10.1.2.1 total=2 stub 0, iadb-stub=0 iid-all=0
*Sep 3 23:19:18.675: EIGRP: Handle deallocation failure [1]
*Sep 3 23:19:18.675: EIGRP: Neighbor 10.1.2.1 went down on Tunnel1.
*Sep 3 23:19:22.943: EIGRP: New peer 10.1.2.1.
*Sep 3 23:19:22.943: %DUAL-5-NBRCHANGE: EIGRP-IPv4 3111: Neighbor 10.1.2.1 (Tunnel1) is up: new adjacency
```

Refer to the exhibit. Which configuration command establishes an EIGRP neighbor adjacency between the hub and spoke?

- A. connected 10.1.2.192 command on spoke router
- B. network 10.1.2.192 command on spoke router
- C. eigrp-peer 10.1.2.192 command on the hub router
- D. neighbor 10.1.2.192 command on hub router

Answer: D

NEW QUESTION 50

- (Exam Topic 3)

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

- A. requires IPv6 snooping on Layer 2 access or trunk ports
- B. used in service provider deployments to protect DDoS attacks
- C. requires the user to configure a static binding
- D. requires that validate prefix be enabled
- E. recovers missing binding table entries

Answer: DE

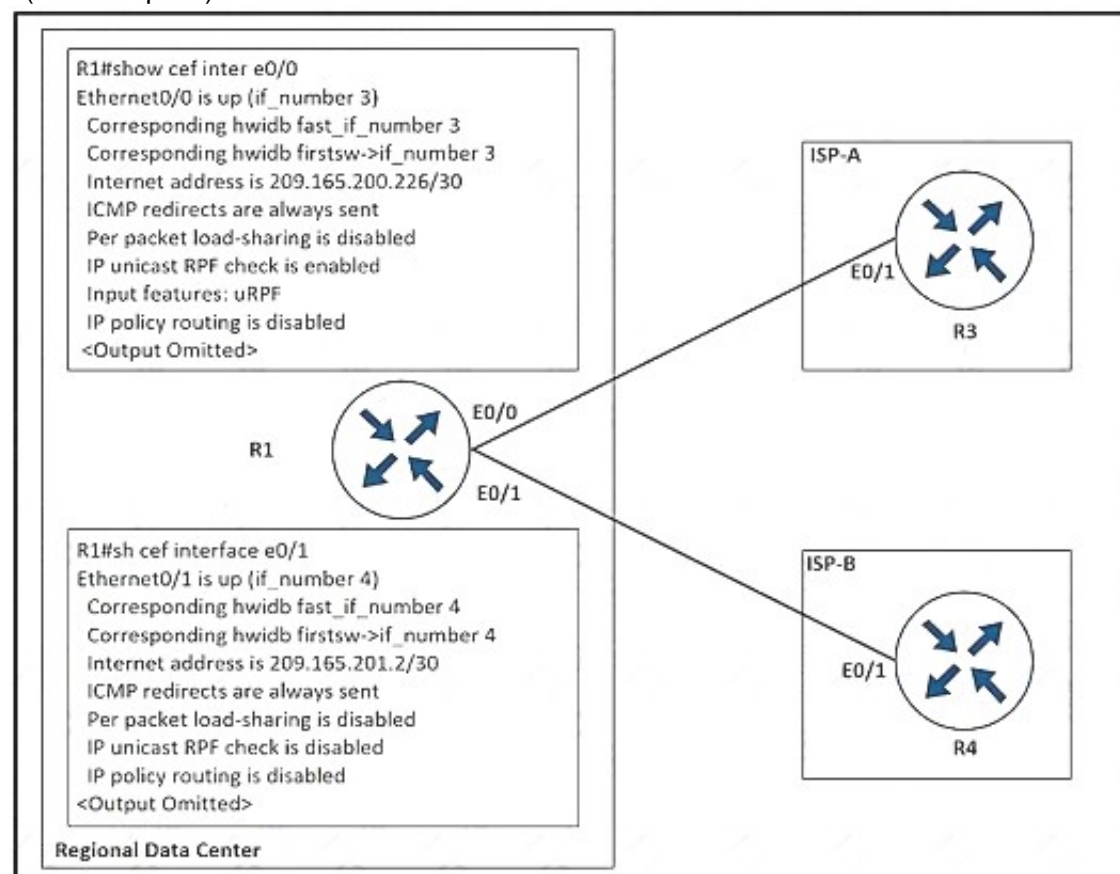
Explanation:

IPv6 Source Guard uses the IPv6 First-Hop Security Binding Table to drop traffic from unknown sources or bogus IPv6 addresses not in the binding table. The switch also tries to recover from lost address information, querying DHCPv6 server or using IPv6 neighbor discovery to verify the source IPv6 address after dropping the offending packet(s).

Reference: <https://blog.ip-space.net/2013/07/first-hop-ipv6-security-features-in.html>

NEW QUESTION 55

- (Exam Topic 3)



Refer to the exhibit. The company implemented uRPF to address an antispoofing attack. A network engineer received a call from the IT security department that the regional data center is under an IP attack. Which configuration must be implemented on R1 to resolve this issue?

- ☐ interface ethernet0/0
ip verify unicast reverse-path
- ☐ interface ethernet0/1
ip verify unicast reverse-path
- ☒ interface ethernet0/1
ip unicast RPF check reachable-via any allow-default allow-self-ping
- ☐ interface ethernet0/0
ip unicast RPF check reachable-via any allow-default allow-self-ping

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

D. Option D

Answer: B

NEW QUESTION 58

- (Exam Topic 3)

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

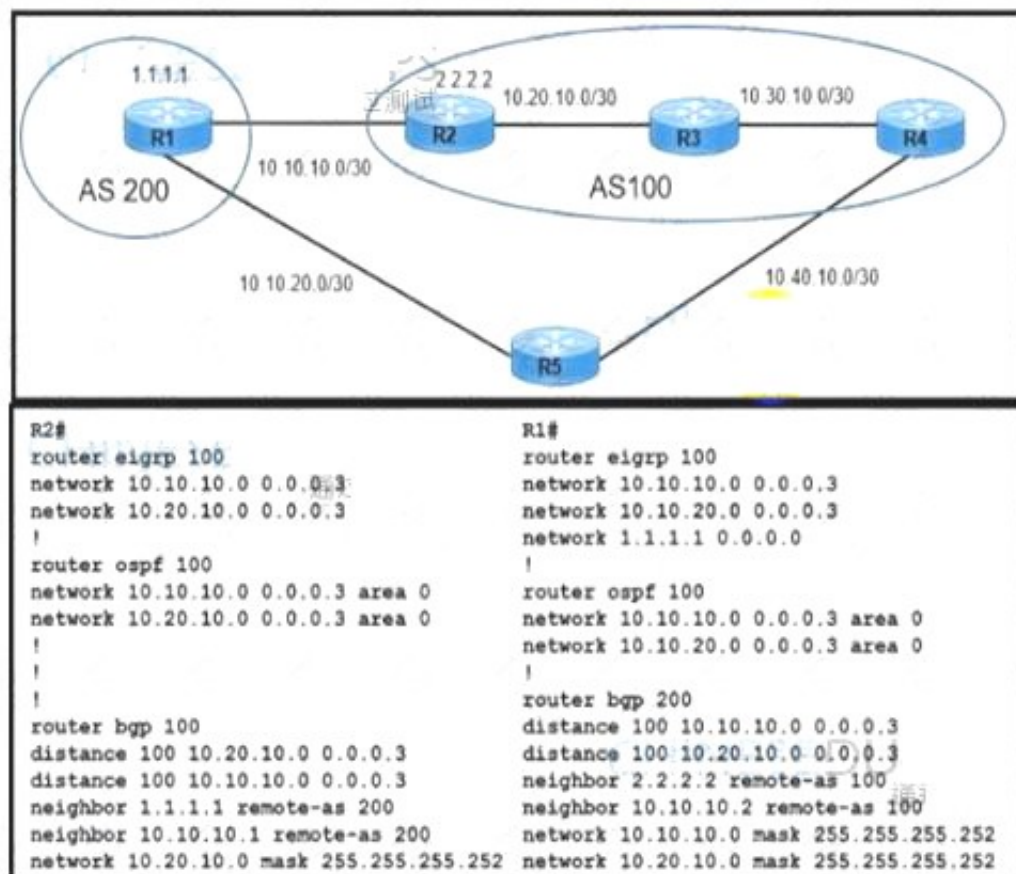
- A. with the higher IP address
- B. with the larger number of LDP TCP neighbors
- C. with the lowest IP address
- D. with one interface in the MPLS backbone

Answer: A

NEW QUESTION 60

- (Exam Topic 3)

Refer to the Exhibit.



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

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

Answer: B

NEW QUESTION 62

- (Exam Topic 3)



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

A)

```

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

B)

```

router eigrp 100
network 209.165.200.224 0.0.0.7
  
```

C)

```

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

D)

```

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

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

NEW QUESTION 67

- (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 68

- (Exam Topic 3)

Which method provides failure detection in BFD?

- A. short duration, high overhead
- B. short duration, low overhead
- C. long duration, high overhead
- D. long duration, low overhead

Answer: B

NEW QUESTION 71

- (Exam Topic 3)

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

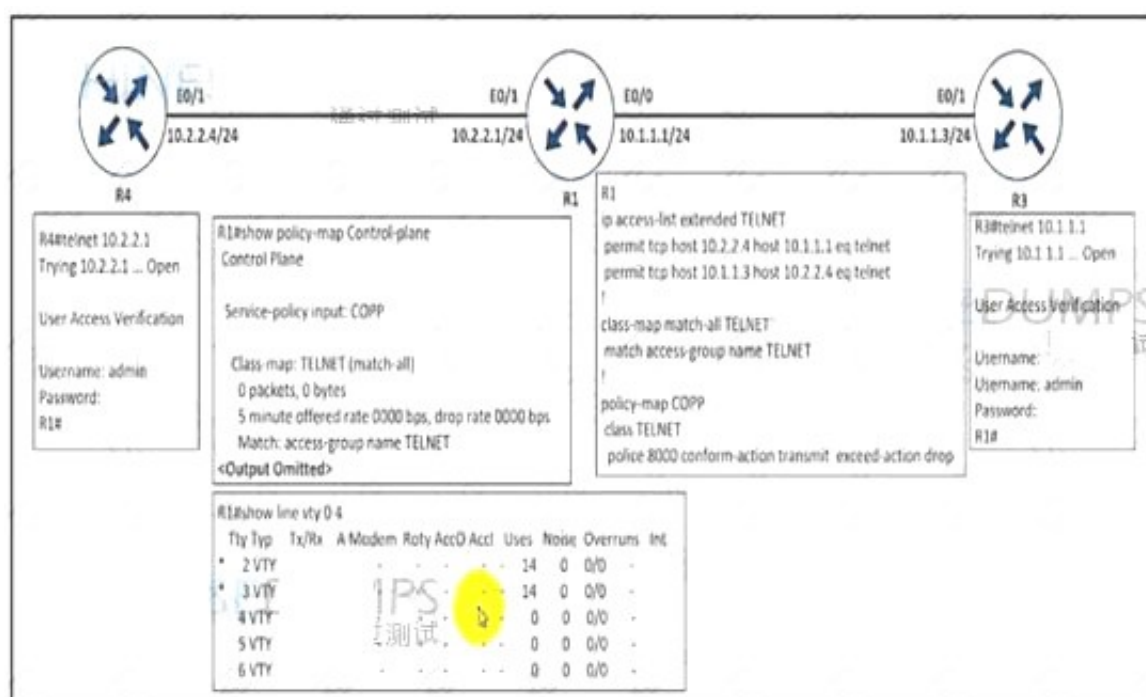
- A. RA Throttling
- B. Source or Destination Guard
- C. ND Multicast Suppression
- D. IPv6 Snooping

Answer: D

NEW QUESTION 76

- (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 80

- (Exam Topic 3)

Refer to the exhibit.

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

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

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

Answer: C

NEW QUESTION 81

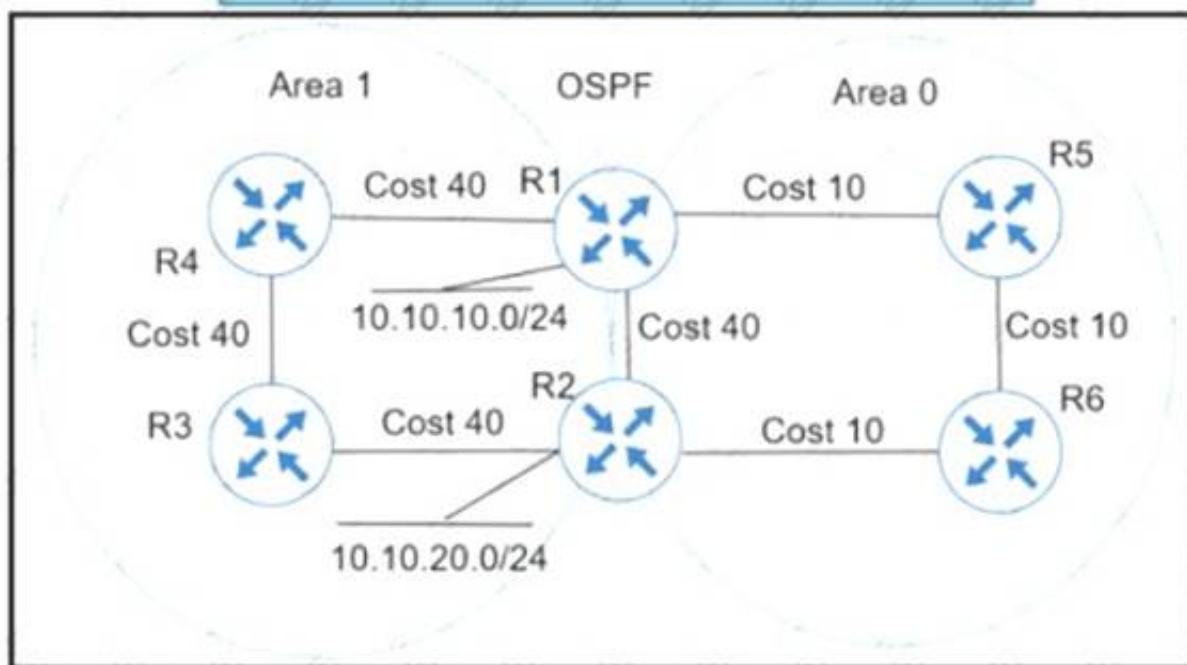
- (Exam Topic 3)

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

Answer: B

NEW QUESTION 84

- (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?

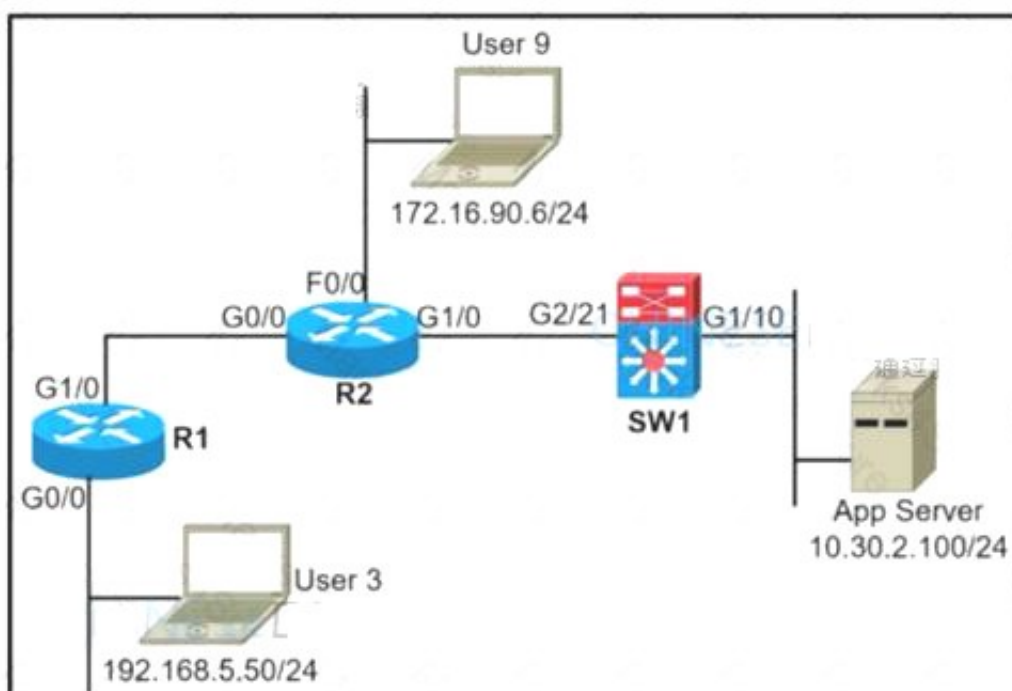
- A. Configure R1 and R2 LAN links as nonpassive.
- B. Configure R1 and R2 links under area 1
- C. Configure OSPF link cost to 1 between R1 and R2
- D. Configure OSPF path cost to 3 between R1 and R2

Answer: B

NEW QUESTION 88

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: D

NEW QUESTION 90

- (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/ip6f-xe-3s-book/ip6-src-guar

NEW QUESTION 92

- (Exam Topic 3)

A network administrator performed a Compact Flash Memory upgrade on a Cisco Catalyst 6509 Switch. Everything is functioning normally except SNMP, which was configured to monitor the bandwidth of key interfaces but the interface indexes are changed. Which global configuration resolves the issue?

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

Answer: C

Explanation:

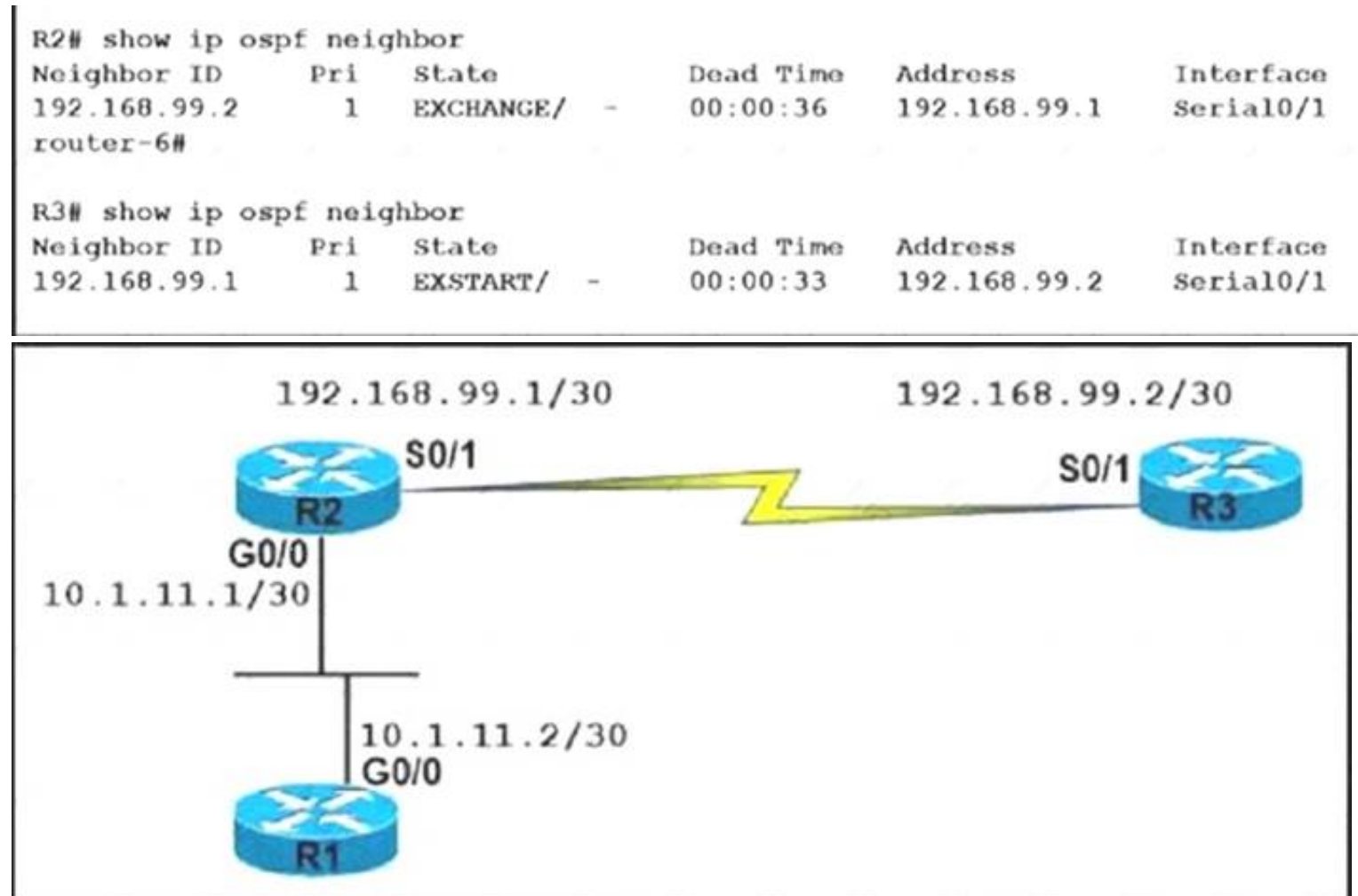
The SNMP ifIndex persistence feature provides an interface index (ifIndex) value that is retained and used when the router reboots. The ifIndex value is a unique identifying number associated with a physical or logical interface. In the following example, SNMP ifIndex persistence is enabled for all interfaces:

router(config)# snmp-server ifindex persist

NEW QUESTION 97

- (Exam Topic 3)

Refer to the exhibit.



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.

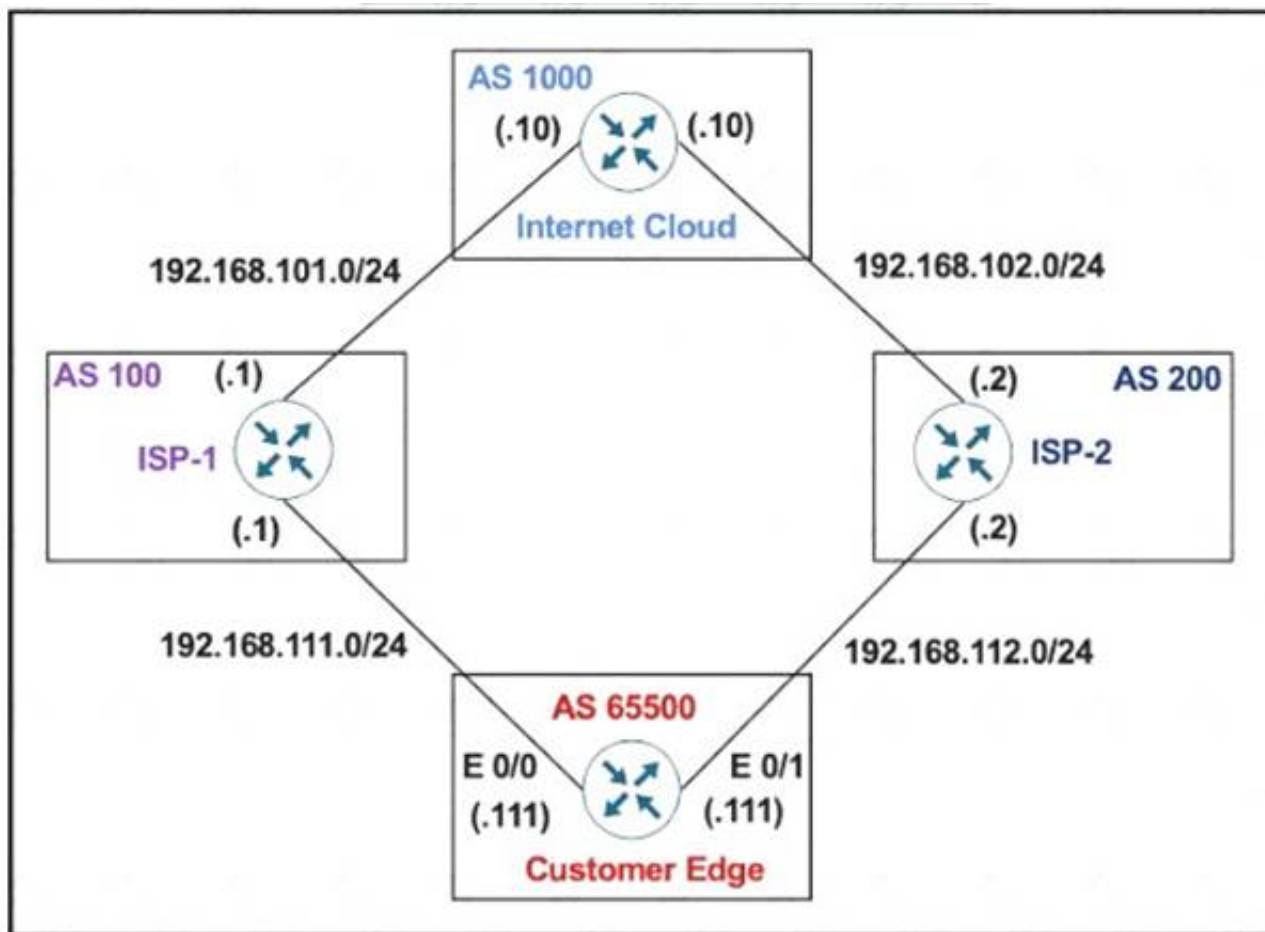
Neighbors Stuck in Exstart/Exchange State

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 102

- (Exam Topic 3)

Refer to the exhibit.



The Customer Edge router (AS 65500) wants to use AS 100 as the preferred ISP for all external routes.

```
Customer Edge
route-map SETLP
set local-preference 111
!
router bgp 65500
neighbor 192.168.111.1 remote-as 100
neighbor 192.168.111.1 route-map SETLP out
neighbor 192.168.112.2 remote-as 200
```

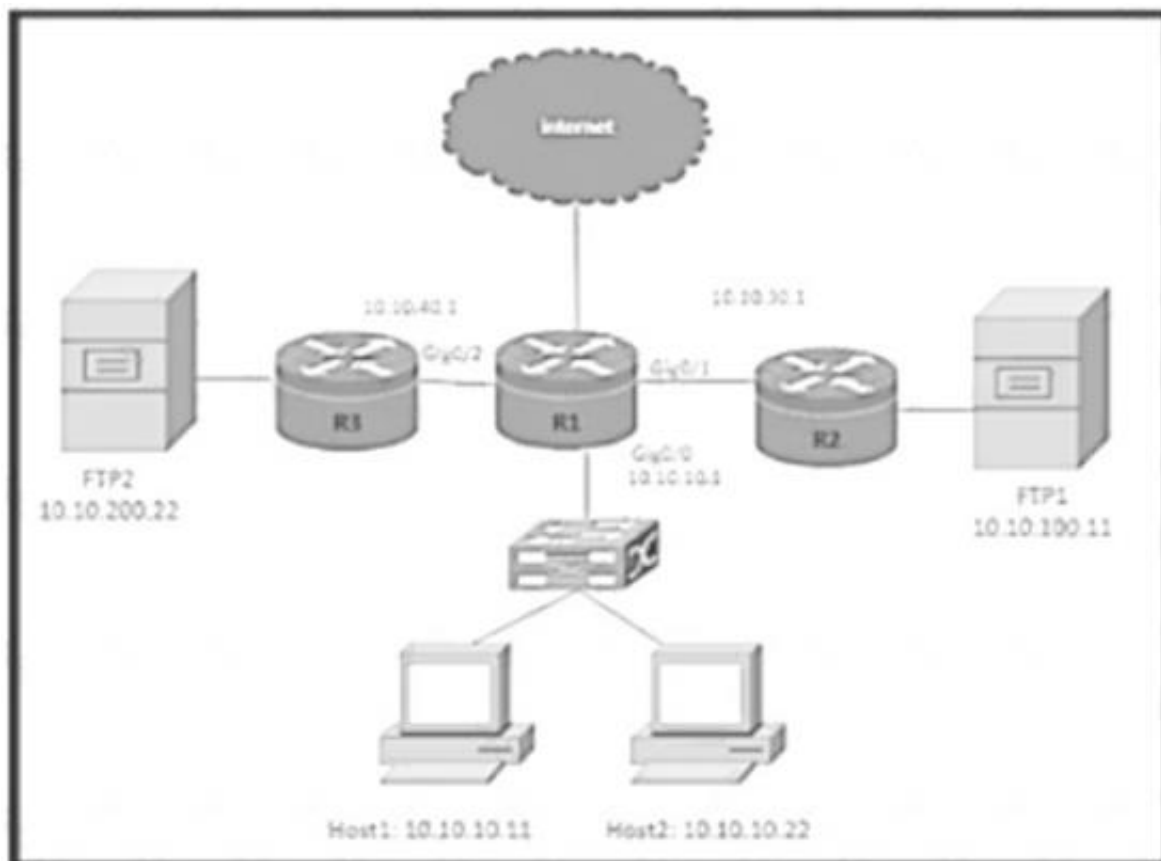
This configuration failed to send routes to AS 100 as the preferred path. Which set of configuration resolves the issue?

- ☐ route-map SETLP
 - set local-preference 111
 - !
 - router bgp 65500
 - neighbor 192.168.111.1 remote-as 100
 - neighbor 192.168.111.1 route-map SETLP out
 - neighbor 192.168.112.2 remote-as 200
- ☐ route-map SETLP
 - set local-preference 111
 - !
 - router bgp 65500
 - neighbor 192.168.111.1 remote-as 100
 - neighbor 192.168.111.1 route-map SETLP in
- ☐ route-map SETPP
 - set as-path prepend 111 111
 - !
 - router bgp 65500
 - neighbor 192.168.111.1 remote-as 100
 - neighbor 192.168.111.1 route-map SETPP out
- ☒ route-map SETPP
 - set as-path prepend 100 100
 - !
 - router bgp 65500
 - neighbor 192.168.111.1 remote-as 100
 - neighbor 192.168.111.1 route-map SETPP in

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

Answer: B

NEW QUESTION 104
 - (Exam Topic 3)



Refer to the exhibit. The R1 routing table has the prefixes for the FTP1 and FTP2 file servers. A network engineer must configure the R1 with these requirements:

- Host1 must use the FTP1 fileserver.
- Host2 must use the FTP2 fileserver.

Which configuration meets the requirement on R1?

A)

```
ip access-list extended FTP1_R1
 permit ip host 10.10.10.11 host 10.10.100.11
ip access-list extended FTP2_R1
 permit ip host 10.10.10.22 host 10.10.200.22
!
route-map PBR_FTP permit 10
 match ip address FTP1_R1
 set ip next-hop 10.10.40.1
route-map PBR_FTP permit 20
 match ip address FTP2_R1
 set ip next-hop 10.10.30.1
!
ip local policy route-map PBR_FTP
```

B)

```
ip access-list extended FTP1_R1
 permit ip host 10.10.10.11 host 10.10.100.11
ip access-list extended FTP2_R1
 permit ip host 10.10.10.22 host 10.10.200.22
!
route-map PBR_FTP permit 10
 match ip address FTP1_R1
 set ip next-hop 10.10.30.1
!
route-map PBR_FTP permit 20
 match ip address FTP2_R1
 set ip next-hop 10.10.40.1
!
ip local policy route-map PBR_FTP
```

C)

```
ip access-list extended FTP1_R1
 permit ip host 10.10.10.11 host 10.10.100.11
ip access-list extended FTP2_R1
 permit ip host 10.10.10.22 host 10.10.200.22
!
route-map PBR_FTP permit 10
 match ip address FTP1_R1
 set ip next-hop 10.10.30.1
!
route-map PBR_FTP permit 20
 match ip address FTP2_R1
 set ip next-hop 10.10.40.1
!
interface GigabitEthernet 0/0
 ip policy route-map PBR_FTP
```

D)

```
ip access-list extended FTP1_R1
 permit ip host 10.10.10.11 any
ip access-list extended FTP2_R1
 permit ip host 10.10.10.22 any
route-map PBR_FTP permit 10
 match ip address FTP1_R1
 set ip next-hop 10.10.30.1
!
route-map PBR_FTP permit 20
 match ip address FTP2_R1
 set ip next-hop 10.10.40.1
!
interface GigabitEthernet 0/0
 ip policy route-map PBR_FTP
```

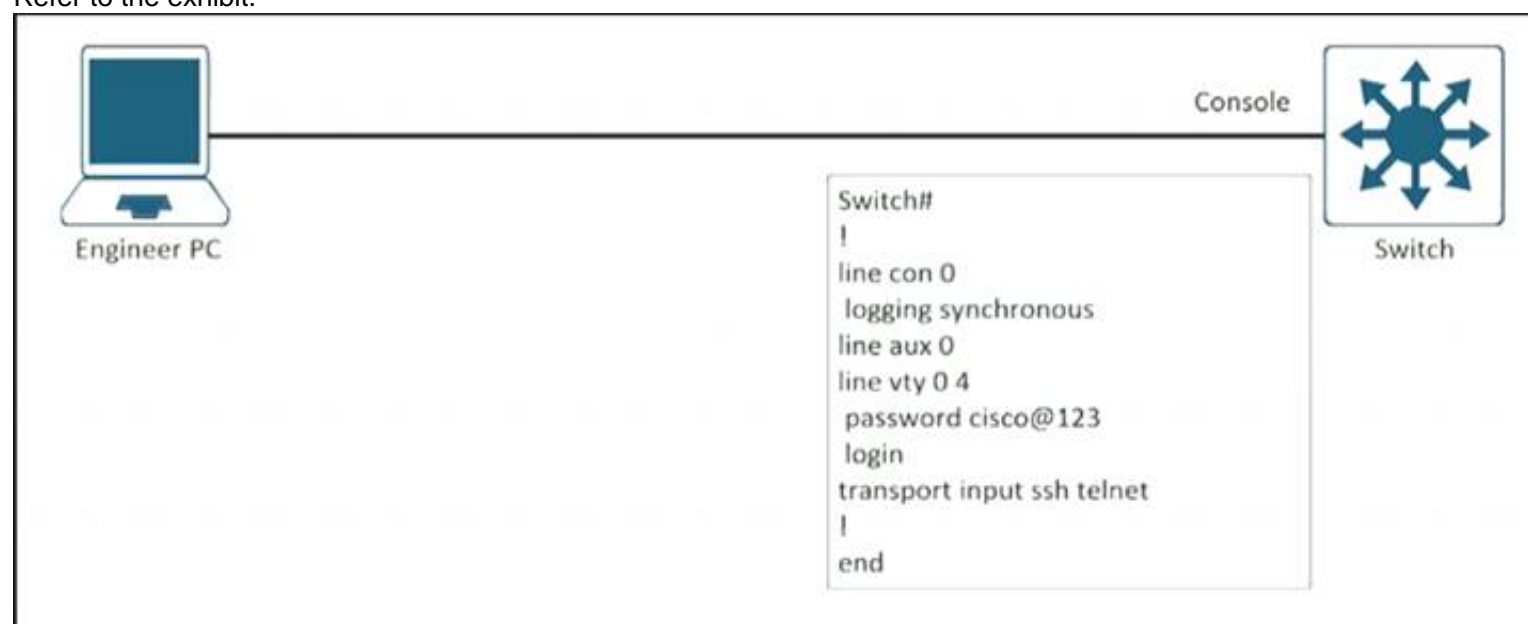
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 106

- (Exam Topic 3)

Refer to the exhibit.



An engineer must block access to the console ports for all corporate remote Cisco devices based on the recent corporate security policy but the security team still can connect through the console port. Which configuration on the console port resolves the issue?

- A. transport input telnet
- B. login and password
- C. no exec
- D. exec 0.0

Answer: C

Explanation:

“no exec” will disable access to a line. It is used if we want to allow only outgoing session (and disable incoming session) so this command will block all console port access.

There is no “exec 0 0” command. We can only find the “exec prompt” command in IOS Version 15.4(2)T4.


```
Router(config-line)#exec ?
prompt EXEC prompt
<cr>

Router(config-line)#exec pro
Router(config-line)#exec prompt ?
timestamp Print timestamps for show commands

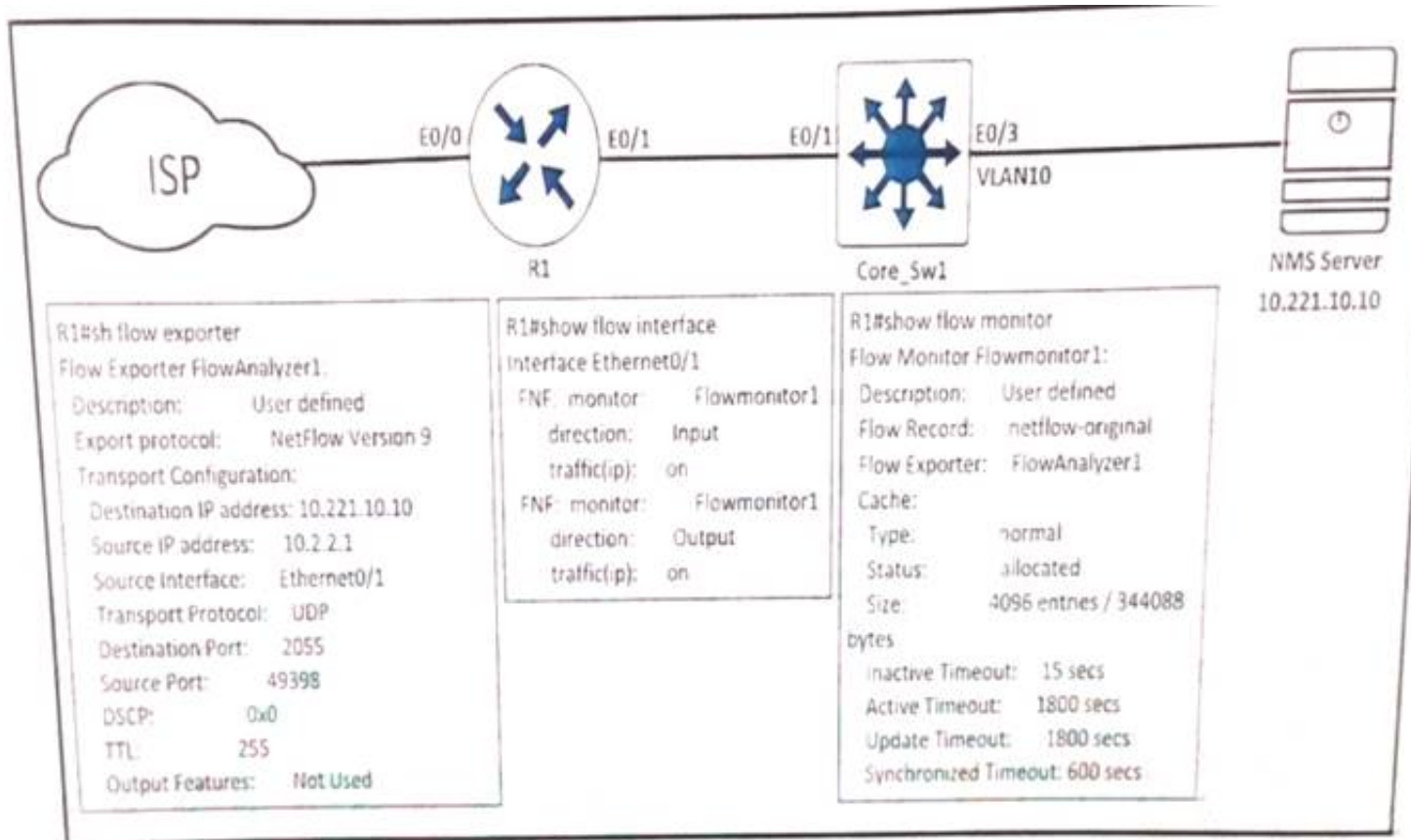
Router(config-line)#exec prompt
```

The most similar command is "exec-timeout 0 0" command, which is used to prevent Telnet/SSH sessions from timing out.

NEW QUESTION 110

- (Exam Topic 3)

Refer to the exhibit.



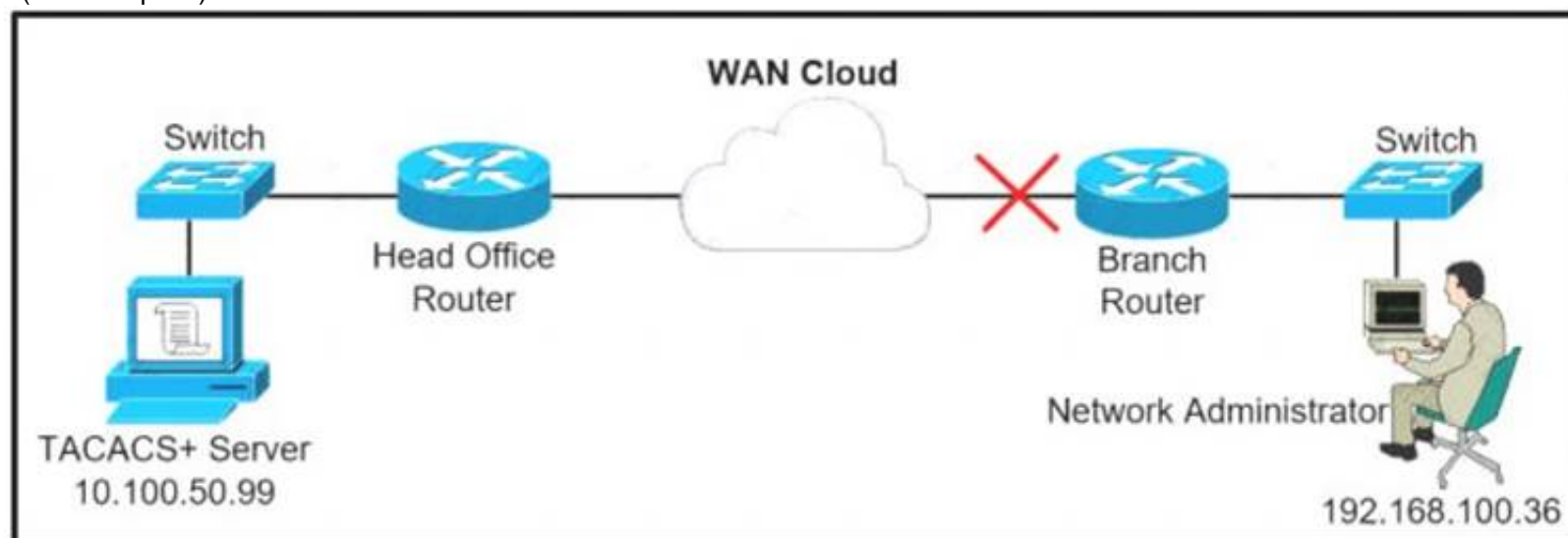
An engineer configured NetFlow on R1, but the NMS server cannot see the flow from ethernet 0/0 of R1. Which configuration resolves the issue?

- A. flow monitor Flowmonitor1 source Ethernet0/0
- B. interface Ethernet0/1 ip flow monitor Flowmonitor1 input ip flow monitor Flowmonitor1 output
- C. interface Ethernet0/0 ip flow monitor Flowmonitor1 input ip flow monitor Flowmonitor1 output
- D. flow exporter FlowAnalyzer1 source Ethernet0/0

Answer: C

NEW QUESTION 113

- (Exam Topic 3)



A network administrator is trying to access a branch router using TACACS+ username and password credentials, but the administrator cannot log in to the router because the WAN connectivity is down. The branch router has following AAA configuration:

```
aaa new-model
aaa authorization commands 15 default group tacacs+
aaa accounting commands 1 default stop-only group tacacs+
aaa accounting commands 15 default stop-only group tacacs+
tacacs-server host 10.100.50.99
tacacs-server key C!$co123
```

Which command will resolve this problem when WAN connectivity is down?

- A. aaa authentication login default group tacacs+ local

- B. aaa authentication login default group tacacs+ enable
- C. aaa authentication login default group tacacs+ console
- D. aaa authentication login console group tacacs+ enable

Answer: A

Explanation:

With the “aaa authentication login default group tacacs+ local ” command configured, when logging in, the password supplied will be attempted to be verified by the TACACS+ server before access is granted. If the server is unavailable/unreachable, then the switch will fall back to using the local authentication database.

NEW QUESTION 117

- (Exam Topic 3)

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

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

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

CE1

interface Gig0/0

ip vrf forwarding

ip address

!

interface Gig0/1

ip vrf forwarding

ip address

CE2

interface Gig0/0

ip vrf forwarding

ip address

!

interface Gig0/1

ip vrf forwarding

ip address

customer_a

customer_b

192.168.1.1 255.255.255.0

192.168.1.2 255.255.255.0

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

CE1

interface Gig0/0

ip vrf forwarding

ip address

!

interface Gig0/1

ip vrf forwarding

ip address

CE2

interface Gig0/0

ip vrf forwarding

ip address

!

interface Gig0/1

ip vrf forwarding

ip address

customer_a

customer_b

192.168.1.1 255.255.255.0

192.168.1.2 255.255.255.0

NEW QUESTION 121

- (Exam Topic 3)

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

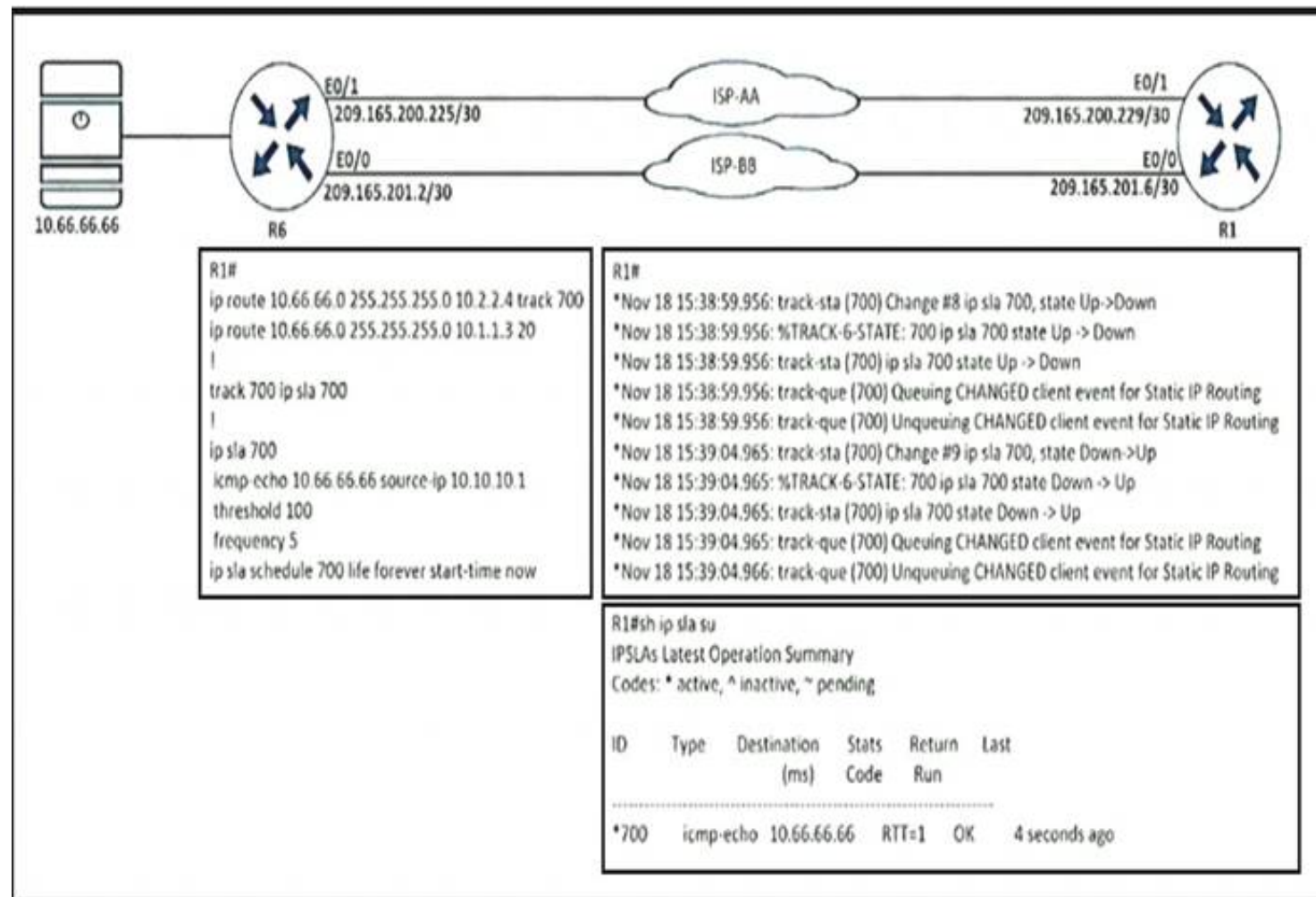
- A. Only access lists are supported for matching traffic.
- B. All client messages are always switched regardless of the device role.
- C. It blocks only DHCP request messages.
- D. If the device is configured as a DHCP server, no message is switched.

Answer: B

NEW QUESTION 126

- (Exam Topic 3)

Refer to the exhibit.



R1 is configured with IP SLA to check the availability of the server behind R6 but it kept failing. Which configuration resolves the issue?

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

Answer: C

NEW QUESTION 130

- (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 133

- (Exam Topic 3)

Refer to the exhibit.


```

ip vrf 1
ip vrf 2
!
int GigabitEthernet0/0
no shut
!
int GigabitEthernet0/0.1
encapsulation dot1Q 1
ip vrf forwarding 1
ip address 10.1.1.1 255.255.255.0
!
int GigabitEthernet0/0.2
encapsulation dot1Q 2
ip vrf forwarding 2
ip address 10.2.2.1 255.255.255.0

```

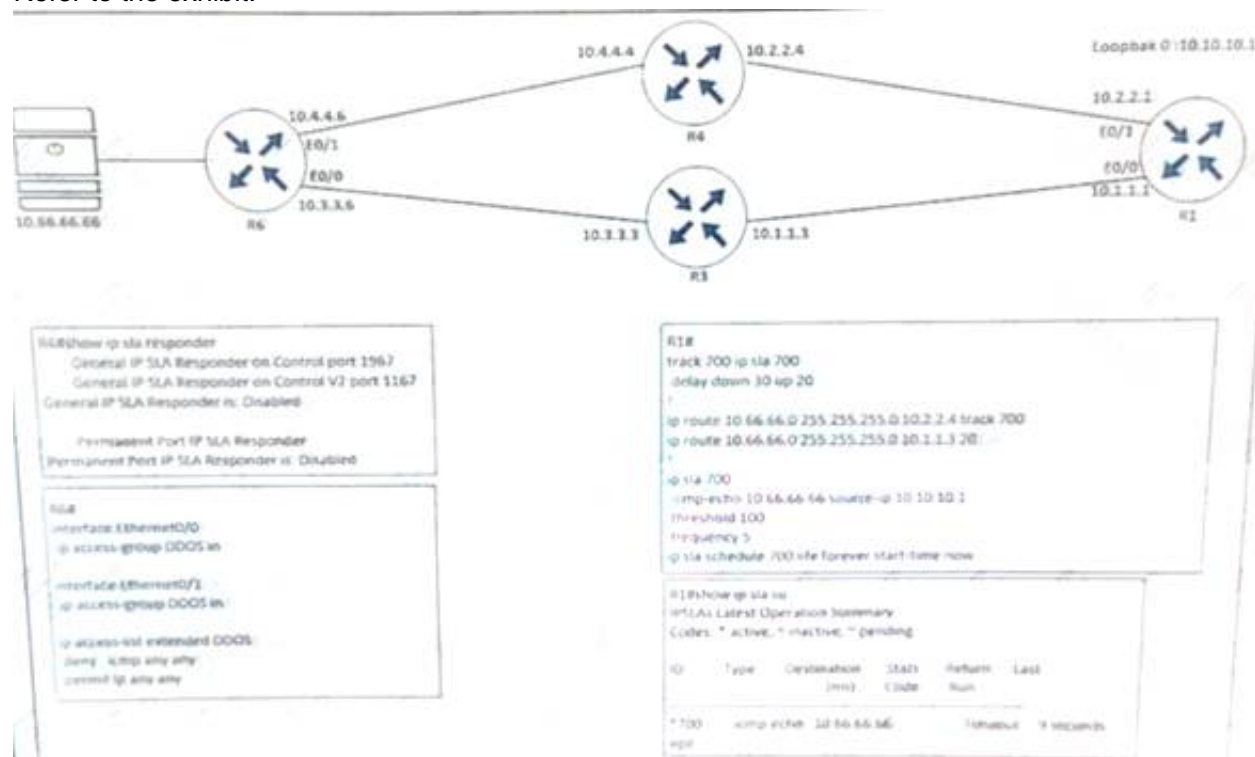
- A. Option
- B. Option
- C. Option
- D. Option

Answer: B

NEW QUESTION 142

- (Exam Topic 3)

Refer to the exhibit.



R1 is configured with IP SLA to check the availability of the server behind R6 but it kept failing. Which configuration resolves the issue?

- A. R6(config)# ip sla responder
- B. R6(config)# ip sla responder udp-echo ip address 10.10.10.1 port 5000
- C. R6(config)# ip access-list extended DDOSR6(config ext-nac)# 5 permit icmp host 10.66.66.66 host 10.10.10.1
- D. R6(config)# ip access-list extended DDOSR6(config ext-nac)# 5 permit icmp host 10.10.10.1 host 10.66.66.66

Answer: D

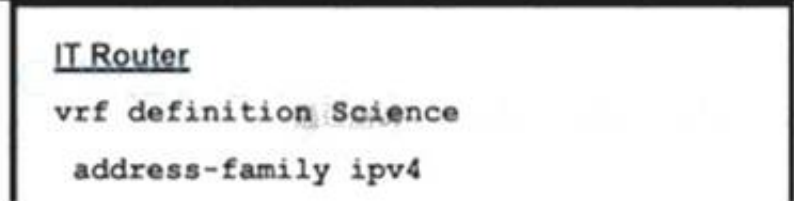
Explanation:

In this IP SLA tracking, we don't need a IP SLA Responder so the command "ip sla responder" on R6 is not necessary.

We also notice that the ACL is blocking ICMP packets on both interfaces E0/0 & E0/1 of R6 so we need to allow ICMP from source 10.10.10.1 to destination 10.66.66.66.

NEW QUESTION 147

- (Exam Topic 3)



```

!
Interface E 0/2
  Vrf forwarding Science
  Ip address 192.168.1.1 255.255.255.0
  No shut
!
Interface E 0/3
  Vrf forwarding Science

```

```
!  
Interface E 0/3  
Vrf forwarding Science  
Ip address 192.168.2.1 255.255.255.0  
No shut
```

```
router eigrp 111
address-family ipv4 vrf Science autonomous-system 1
network 192.168.1.0
network 192.168.2.0

router eigrp 111
address-family ipv4 vrf Science
network 192.168.1.0
network 192.168.2.0

router eigrp 111
network 192.168.1.0
network 192.168.2.0

router eigrp 1
address-family ipv4 vrf Science autonomous-system 111
network 192.168.1.0
network 192.168.2.0
```

- Answer: D**

- (Exam Topic 3)

- 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 156

- (Exam Topic 3)

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

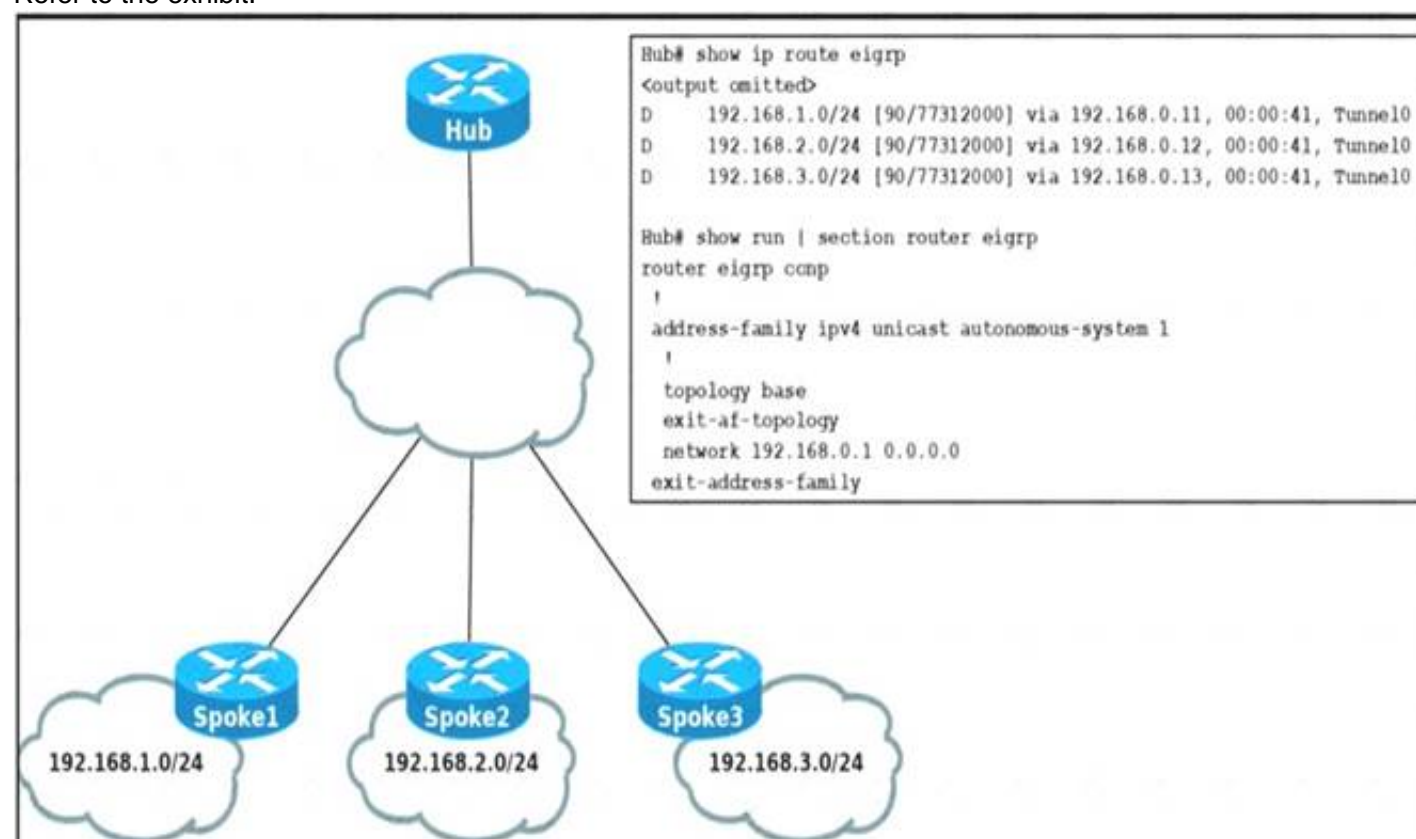
- A. 16-byte Route Distinguisher
- B. 8-byte Route Target
- C. 16-byte Route Target
- D. 8-byte Route Distinguisher

Answer: D

NEW QUESTION 159

- (Exam Topic 3)

Refer to the exhibit.



Spoke routers do not learn about each other's routes in the DMVPN Phase2 network. Which action resolves the issue?

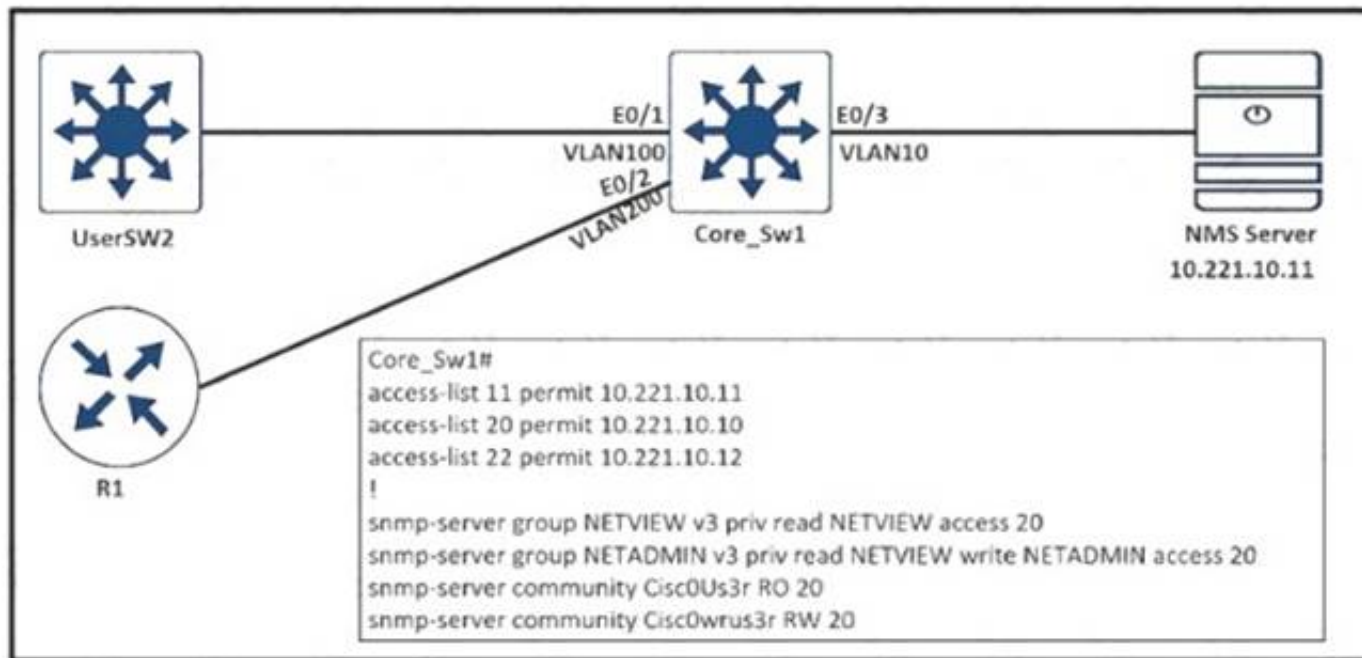
- A. Remove default route from spoke routers to establish a spoke-to-spoke tunnel.
- B. Configure a static route in each spoke to establish a spoke-to-spoke tunnel.
- C. Rectify incorrect wildcard mask configured on the hub router network command.
- D. Disable EIGRP split horizon on the Tunnel0 interface of the hub router.

Answer: D

NEW QUESTION 160

- (Exam Topic 3)

Refer to the exhibit.



An engineer configured SNMP communities on the Core_SW1, but the SNMP server cannot obtain information from Core_SW1. Which configuration resolves this issue?

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

Answer: B

NEW QUESTION 161

- (Exam Topic 3)

Refer to the exhibit.

```

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

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

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

Answer: AE

NEW QUESTION 164

- (Exam Topic 3)

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

```

interface GigabitEthernet2
description Migration ID: B410A60D0806G06
vrf forwarding RED
ip address 10.0.0.0 255.255.255.254
negotiation auto
    
```

Which configuration completes the change?

- A. interface GigabitEthernet2 no ip addressvrf forwarding BLUE

- B. interface GigabitEthernet2 no vrf forwarding RED vrf forwarding BLUEip address 10.0.0.0 255.255.255.254
- C. interface GigabitEthernet2 no vrf forwarding RED vrf forwarding BLUE
- D. interface GigabitEthernet2 no ip addressip address 10.0.0.0 255.255.255.254vrf forwarding BLUE

Answer: B

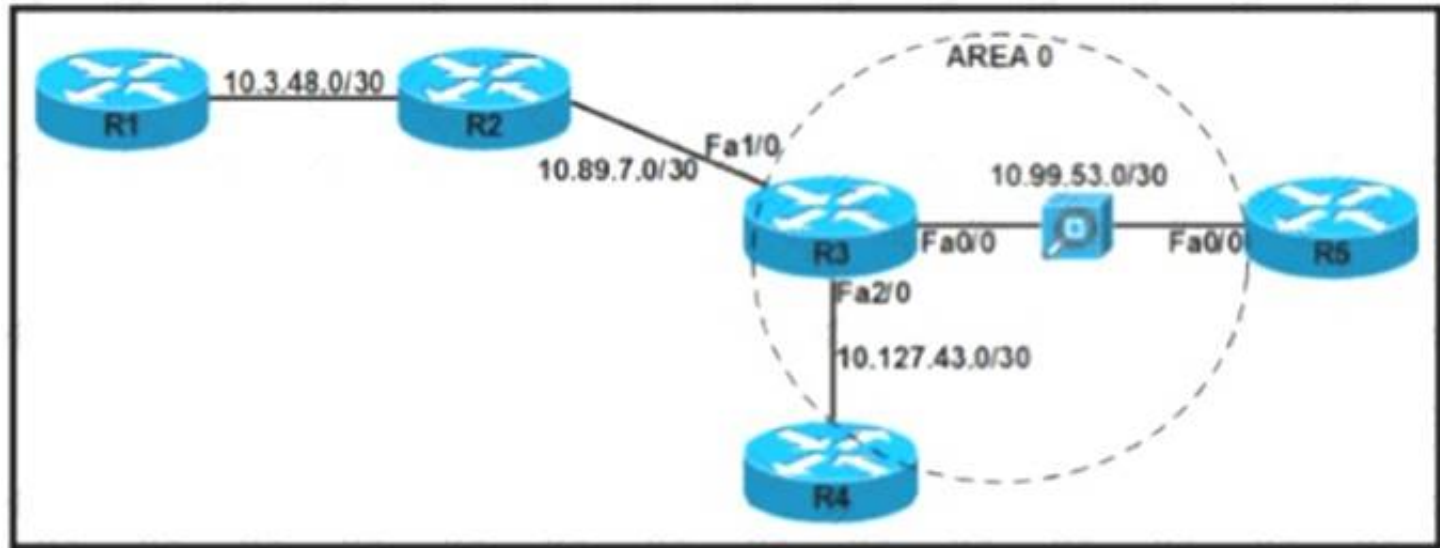
Explanation:

When assigning an interface to a VRF, the IP address will be removed so we have to reassign the IP address to that interface.

NEW QUESTION 165

- (Exam Topic 3)

Refer to the exhibit.



The security department recently installed a monitoring device between routers R3 and R5, which a loss of network connectivity for users connected to R5. Troubleshooting revealed that the monitoring device cannot forward multicast packets. The team already updated R5 with the correct configuration. Which configuration must be implemented on R3 to resolve the problem by ensuring R3 as the DR for the R3-R5 segment?

A)

```
interface FastEthernet0/0
ip address 10.99.53.1 255.255.255.252
ip access-group 122 in
ip ospf network point-to-point
ip ospf priority 100
!
router ospf 10
router-id 10.10.3.255
network 10.99.53.0 0.0.0.3 area 0
neighbor 10.99.53.2
!
access-list 122 permit 89 host 10.99.53.2 host 10.99.53.1
access-list 122 deny 89 any any
```

B)

```
interface FastEthernet0/0
ip address 10.99.53.1 255.255.255.252
ip access-group 122 in
ip ospf network non-broadcast
ip ospf priority 0
!
router ospf 10
router-id 10.10.3.255
network 10.99.53.0 0.0.0.3 area 0
neighbor 10.99.53.2
!
access-list 122 permit 89 host 10.99.53.2 host 10.99.53.1
access-list 122 deny 89 any any
access-list 122 permit tcp any any
access-list 122 permit udp any any
access-list 122 permit icmp any any
```

C)

```
interface FastEthernet0/0
ip address 10.99.53.1 255.255.255.252
ip access-group 122 in
ip ospf network non-broadcast
ip ospf priority 100
!
router ospf 10
router-id 10.10.3.255
network 10.99.53.0 0.0.0.3 area 0
neighbor 10.99.53.2
access-list 122 permit 89 host 10.99.53.2 host 10.99.53.1
access-list 122 deny 89 any any
access-list 122 permit tcp any any
access-list 122 permit udp any any
access-list 122 permit icmp any any
```

D)

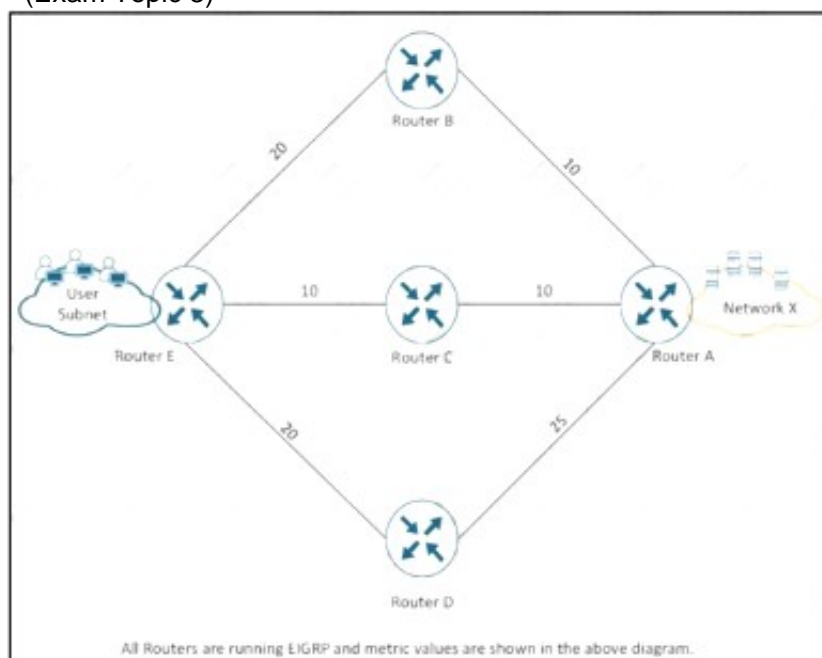
```
interface FastEthernet0/0
ip address 10.99.53.1 255.255.255.252
ip access-group 122 in
ip ospf network point-to-point
ip ospf priority 100
!
router ospf 10
router-id 10.10.3.255
network 10.99.53.0 0.0.0.3 area 0
neighbor 10.99.53.2
!
access-list 122 permit 89 host 10.99.53.2 host 10.99.53.1
access-list 122 deny 89 any any
```

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

Answer: C

NEW QUESTION 170

- (Exam Topic 3)



Refer to the exhibit. The IT manager received reports from users about slow application through network x. which action resolves the issue?

- A. Use the variance 2 command to enable load balancing.
- B. Increase the bandwidth from the service provider.
- C. Move the servers into the users subnet.
- D. Upgrade the IOS on router E.

Answer: A

NEW QUESTION 174

- (Exam Topic 3)

Refer to the exhibit.

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

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

- A. Configure reported distance greater than the feasible distance
- B. Configure feasible distance greater than the successor's feasible distance.
- C. Configure reported distance greater than the successor's feasible distance.
- D. Configure feasible distance greater than the reported distance

Answer: D

Explanation:

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

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

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

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

NEW QUESTION 178

- (Exam Topic 3)

An engineer creates a default static route on a router with a hop of 10.1.1.1. On inspection, the engineer finds the router has two VRFs, Red and Blue. The next hop is valid for both VRFs and exists in each assigned VRF. Which configuration achieves connectivity?

A)

```
ip route vrf BLUE 0.0.0.0 255.255.255.255 10.1.1.1
ip route vrf RED 0.0.0.0 255.255.255.255 10.1.1.1
```

B)

```
ip route vrf Red 0.0.0.0 0.0.0.0 10.1.1.1
ip route vrf Blue 0.0.0.0 0.0.0.0 10.1.1.1
```

C)

```
ip route 0.0.0.0 0.0.0.0 10.1.1.1
```

D)

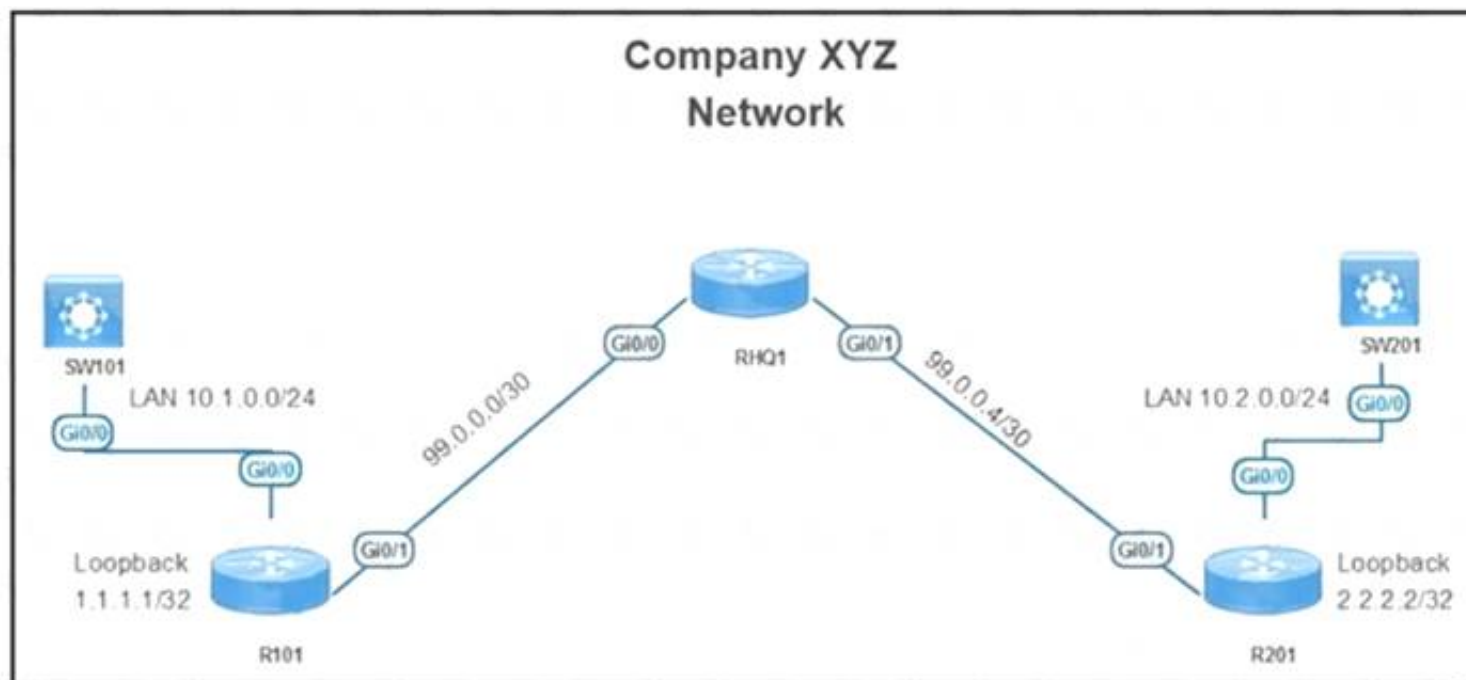
```
ip route vrf Red 0.0.0.0 255.255.255.255 10.1.1.1
ip route vrf Blue 0.0.0.0 255.255.255.255 10.1.1.1
```

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

Answer: A

NEW QUESTION 180

- (Exam Topic 3)



```
R101#sh run | section sla
ip sla 1
  tcp-connect 2.2.2.2 3000 source-ip 1.1.1.1
  threshold 1000
  timeout 1000
```

```
ip sla 2
  icmp-jitter 2.2.2.2 source-ip 1.1.1.1 num-packets 100 interval 10
  threshold 1000
  timeout 1000
  frequency 10
ip sla schedule 2 life forever start-time now
```

```
R101#sh ip sla summary
```

IPSLAs Latest Operation Summary

Codes: * active, ^ inactive, ~ pending

ID	Type	Destination	Stats (ms)	Return Code	Last Run
*1	tcp-connect	2.2.2.2	-	No connection	33 seconds ago
*2	icmp-jitter	2.2.2.2	RTT=4	OK	3 seconds ago

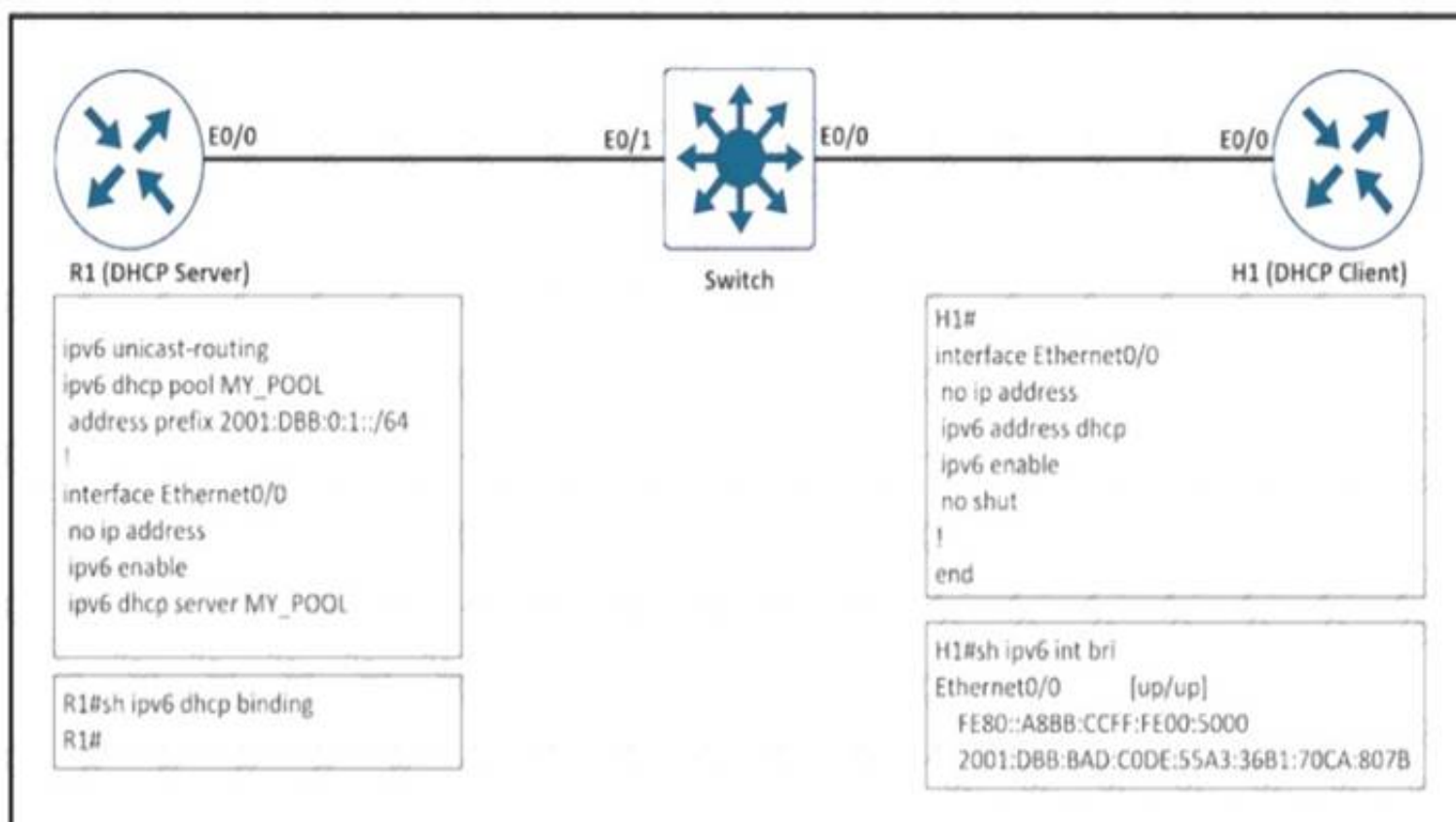
Refer to the exhibit While troubleshooting an issue on the network, an engineer notices that a TCP Connect operation failed on port 3000 between R101 and R201. Which command must be configured on R201 to respond to the R101 IP SLA configurations with a control connection on UDP port 1967?

- A. ip sla responder udp-echo ipaddress 1.1.1.1 port 1967
- B. ip sla responder tcp-connect ipaddress 1.1.1.1 port 3000
- C. ip sla responder tcp-connect ipaddress 2.2.2.2 port 3001
- D. ip sla responder

Answer: A

NEW QUESTION 181

- (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?

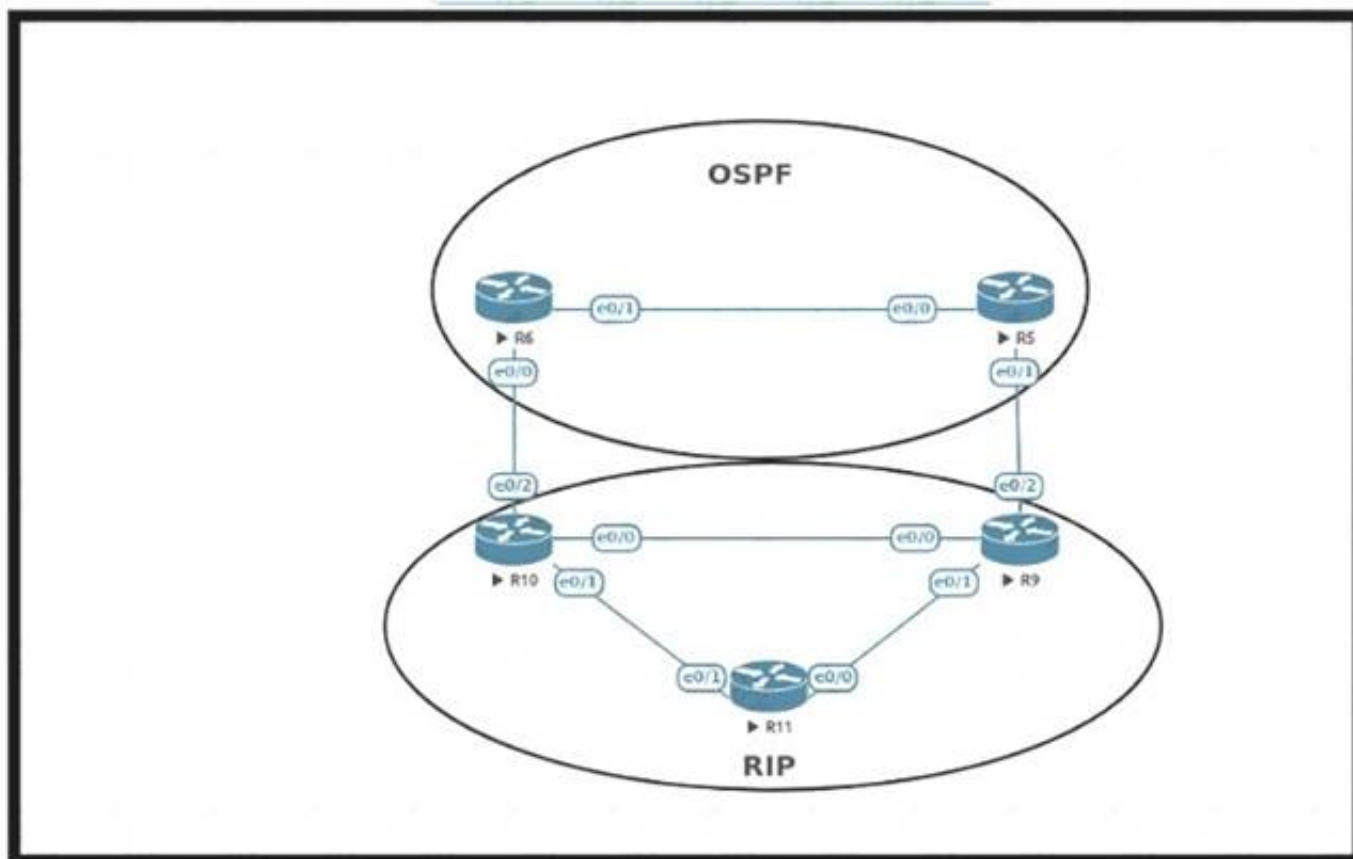
- A. Extend the DHCP lease time because R1 removed the IPv6 address earlier after the lease expired.
- B. Configure H1 as the DHCP client that manually assigns the IPv6 address on interlace e0/0..
- C. Use the 2001:DBB:BAD:C0DE::/64 prefix for the DHCP pool on R1.
- D. Configure authorized DHCP servers to avoid IPv6 addresses from a rogue DHCP server.

Answer: C

NEW QUESTION 183

- (Exam Topic 3)

Refer to the exhibit.



An engineer must configure OSPF with R9 and R10 and configure redistribution between OSPF and RIP causing a routing loop Which configuration on R9 and R10 meets this objective?

A)

```
router ospf 1
 redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
 match tag 20
route-map deny_tag20 permit 20
!
router ospf 1
 distribute-list route-map deny_tag20 in
```

B)

```
router ospf 1
 redistribute rip subnets tag 20
!
route-map deny_tag20 permit 10
 match tag 20
route-map deny_tag20 permit 20
!
router ospf 1
 distribute-list route-map deny_tag20 in
```

C)

```
router ospf 1
 redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
 match tag 20
route-map deny_tag20 deny 20
!
router ospf 1
 distribute-list route-map deny_tag20 in
```

D)

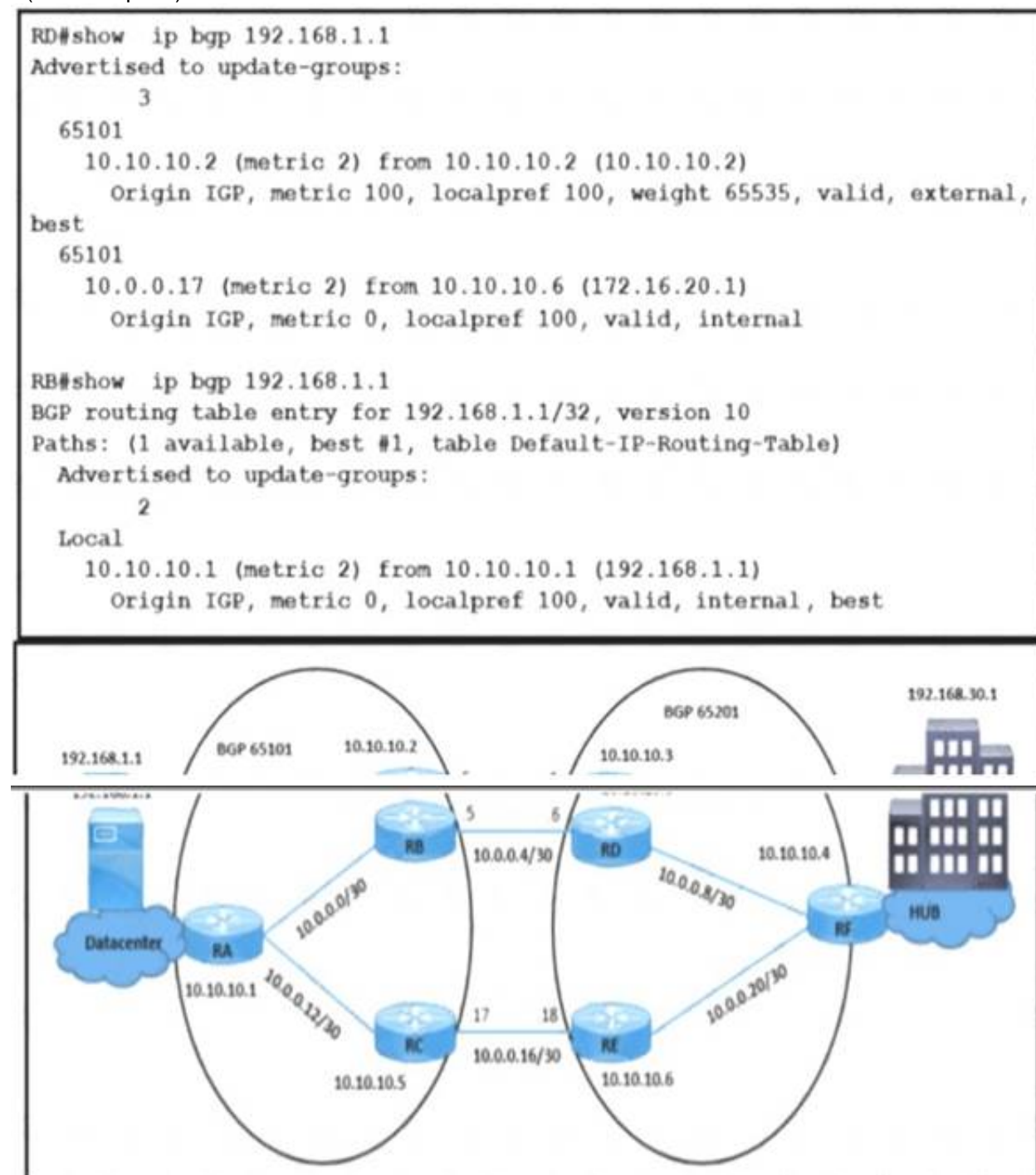
```
router ospf 1
 redistribute rip subnets tag 20
!
route-map deny_tag20 deny 10
 match tag 20
route-map deny_tag20 permit 20
!
router rip 1
 distribute-list route-map deny_tag20 in
```

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

Answer: A

NEW QUESTION 184

- (Exam Topic 3)



Refer to the exhibit. A customer finds that traffic from the application server (192.168.1.1) to the HUB site passes through a congested path that causes random packet drops. The NOC team influences the BGP path with MED on RB, but RD still sees that traffic coming from RA is not taking an alternate route. Which configuration resolves the issue?

- A)


```
RD(config)#router bgp 65201
RD(config-router)#no neighbor 10.10.10.2 weight 65535
```
- B)


```
RB(config)#router bgp 65101
RB(config-router)#no neighbor 10.10.10.3 route-map HIGH-LP out
```
- C)


```
RB(config)#router bgp 65101
RB(config-router)#neighbor 10.10.10.3 weight 50
```
- D)

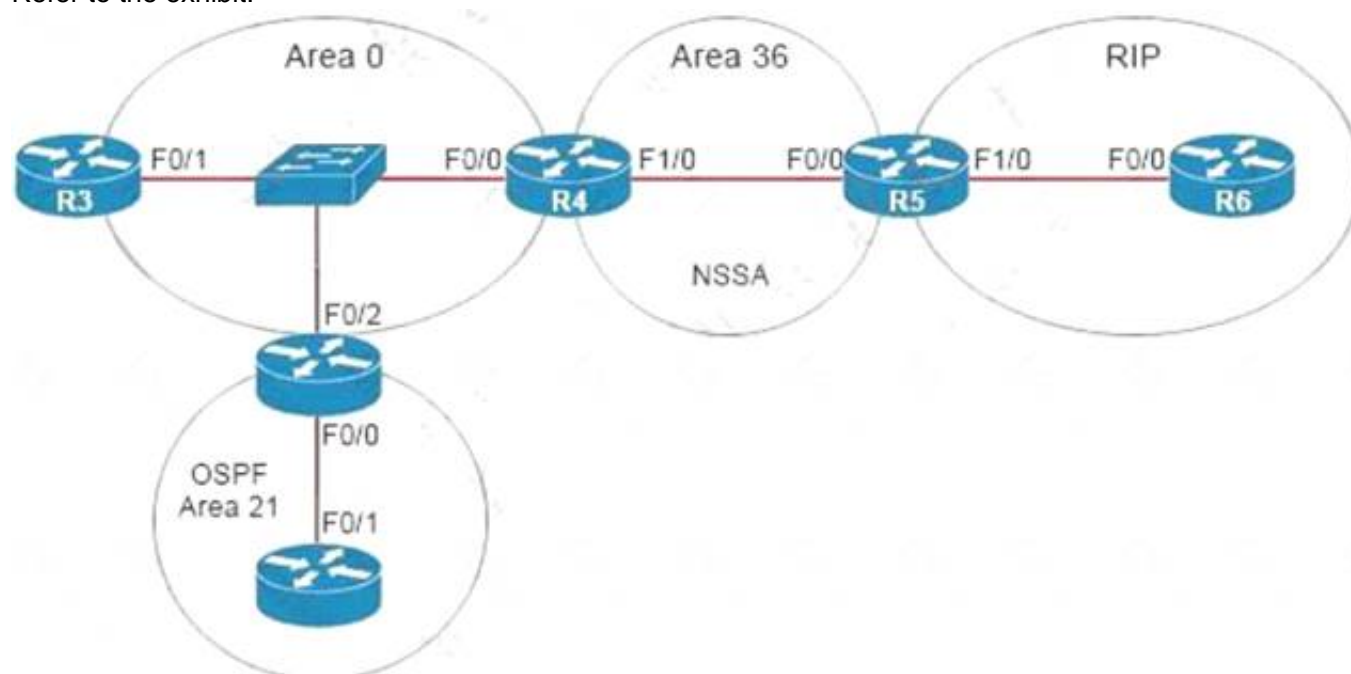

```
RC(config)#router bgp 65101
RC(config-router)#neighbor 10.10.10.6 route-map HIGH-LP out
```

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

Answer: D

NEW QUESTION 188

- (Exam Topic 3)
Refer to the exhibit.



```
R5# show ip ospf 1 | begin Area 36
Area 36
Number of interfaces in this area is 2
It is a NSSA area
Area has no authentication
SPF algorithm last executed 00:32:46.376 ago
SFF algorithm executed 13 times
Area ranges are
172.16.0.0/16 Passive Advertise
```

The network engineer configured the summarization of the RIP routes into the OSPF domain on R5 but still sees four different 172.16.0.0/24 networks on R4. Which action resolves the issue?

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

Answer: A

Explanation:

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

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

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

NEW QUESTION 191

- (Exam Topic 3)

A network administrator added a new spoke site with dynamic IP on the DMVPN network. Which configuration command passes traffic on the DMVPN tunnel from the spoke router?

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

Answer: D

NEW QUESTION 195

- (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 197

- (Exam Topic 3)

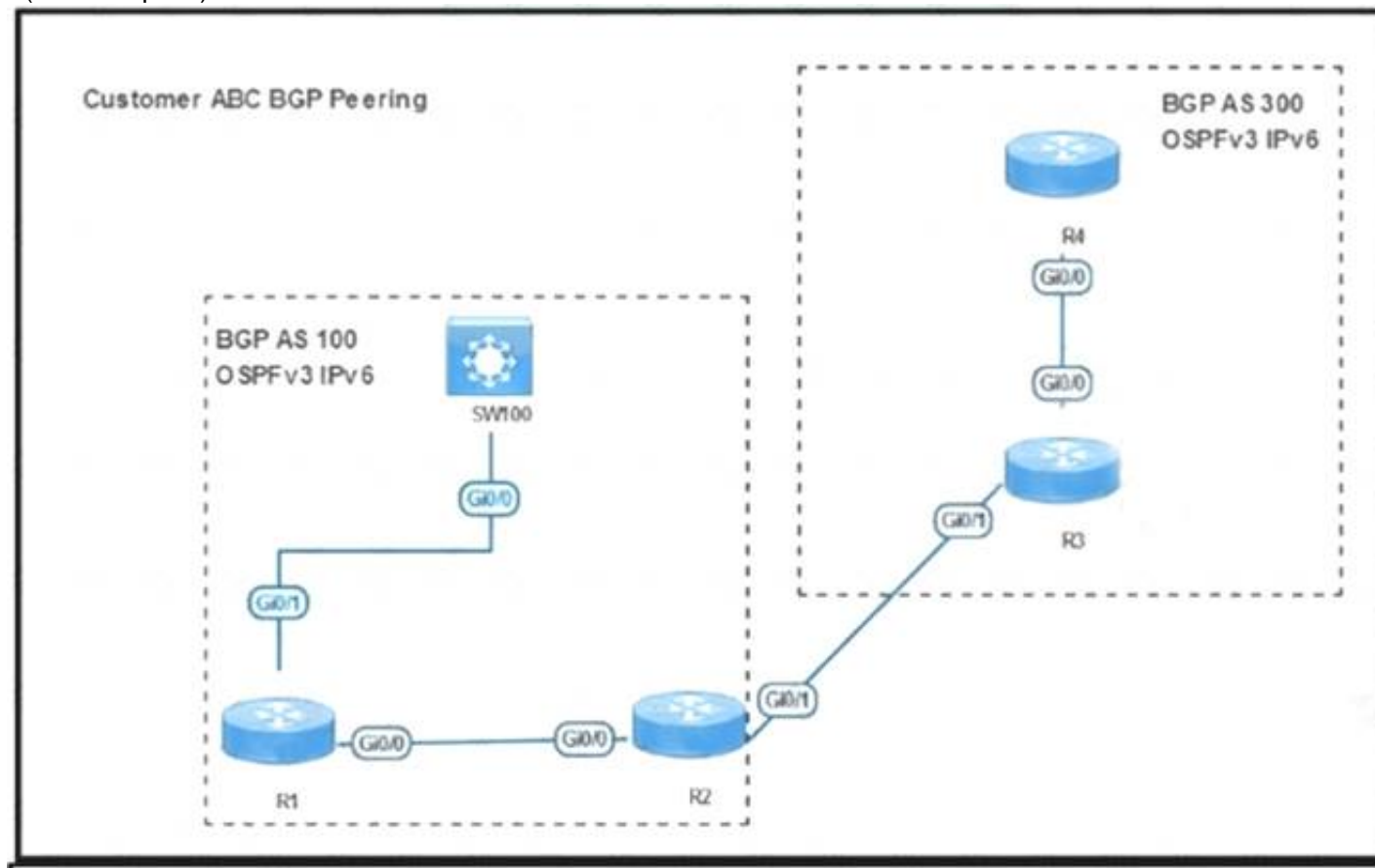
Refer to the exhibit. An engineer is trying to log in to R1 via R3 loopback address. Which action resolves the issue?

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

Answer: C

NEW QUESTION 198

- (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 201

- (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 206

- (Exam Topic 3)

Refer to the exhibit.

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

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

- A. Interface Tunnel1 tunnel source 199.1.1.1 tunnel destination 200.1.1.3 ip address 192.168.1.3 255.255.255.0
- B. Interface Tunnel1 tunnel source 200.1.1.3 tunnel destination 199.1.1.1 ip address 192.168.1.1 255.255.255.0
- C. Interface Tunnel1 tunnel source 200.1.1.3 tunnel destination 199.1.1.1 ip address 192.168.1.3 255.255.255.0
- D. Interface Tunnel 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 209

- (Exam Topic 3)

What is a MPLS PHP label operation?

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

Answer: A

NEW QUESTION 212

- (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 214

- (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 217

- (Exam Topic 3)

Refer to the exhibit.

```
R2#show ip route
```

```
Gateway of last resort is not set
```

```
10.0.0.0/8 is variably subnetted, 12 subnets, 3 masks
C    10.1.3.0/30 is directly connected, FastEthernet0/1
C    10.1.2.0/30 is directly connected, FastEthernet0/0
C    10.1.1.0/30 is directly connected, FastEthernet1/0
O E2 10.19.0.0/24 [110/20] via 10.1.3.2, 00:02:04, FastEthernet0/1
D    10.55.13.0/24 (90/409600) via 10.1.2.2, 00:01:00, FastEthernet0/0
D    10.37.100.0/24 (90/409600) via 10.1.2.2, 00:01:00, FastEthernet0/0
C    10.100.10.0/29 is directly connected, FastEthernet2/0.10
D    10.55.72.0/24 (90/409600) via 10.1.2.2, 00:01:01, FastEthernet0/0
C    10.100.20.0/29 is directly connected, FastEthernet2/0.20
O E2 10.144.1.0/24 [110/20] via 10.1.3.2, 00:12:51, FastEthernet0/1
D    10.55.144.0/24 (90/409600) via 10.1.2.2, 00:01:01, FastEthernet0/0
O E2 10.123.187.0/24 [110/20] via 10.1.3.2, 00:12:51, FastEthernet0/1
```

```
R2#sh ip eigrp topology
```

```
IP-EIGRP Topology Table for AS(100)/ID(10.100.20.2)
```

```
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
r - reply Status, s - via Status
```

```
P 10.1.3.0/30, 1 successors, FD is 281600 via Connected, FastEthernet0/1
P 10.1.2.0/30, 1 successors, FD is 281600 via Connected, FastEthernet0/0
P 10.1.1.0/30, 1 successors, FD is 281600 via Connected, FastEthernet1/0
P 10.55.13.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256), FastEthernet0/0
P 10.37.100.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256), FastEthernet0/0
P 10.55.72.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256), FastEthernet0/0
P 10.55.144.0/24, 1 successors, FD is 409600 via 10.1.2.2 (409600/128256), FastEthernet0/0
P 10.123.187.0/24, 0 successors, FD is inaccessible via 10.1.2.2 (409600/128256), FastEthernet0/0
```

Router R2 should be learning the route for 10.123.187.0/24 via EIGRP. Which action resolves the issue without introducing more issues?

- A. Use distribute-list to modify the route as an internal EIGRP route
- B. Redistribute the route in EIGRP with metric, delay, and reliability
- C. Use distribute-list to filter the external router in OSPF
- D. Remove route redistribution in R2 for this route in OSPF

Answer: C

NEW QUESTION 222

- (Exam Topic 3)

Which feature is used by LDP in the forwarding path within the MPLS cloud?

- A. IP forwarding
- B. TTL
- C. TDP
- D. LSP

Answer: D

NEW QUESTION 223

- (Exam Topic 3)

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

```
172.16.16.0/20
172.16.3.0/24
172.16.4.0/24
192.168.1.0/24
192.168.2.0/24
172.16.0.0/16
```

The network administrator on R1 must improve convergence by blocking all subnets of 172.16.0.0/16 major network with a mask lower than 23 from coming in, Which set of configurations accomplishes the task on R1?

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

Answer: A

Explanation:

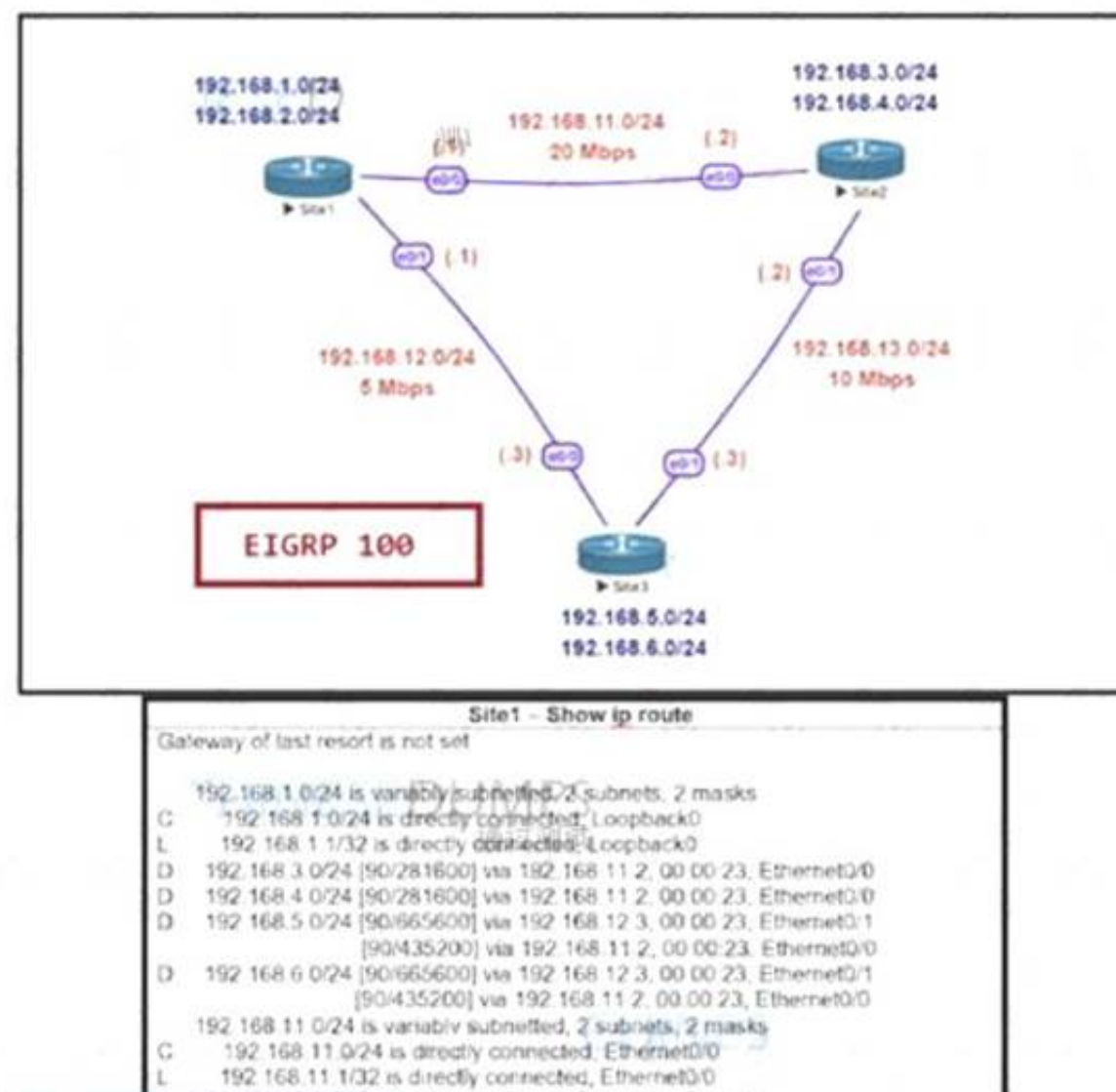
"Blocking all subnets of 172.16.0.0/16 major network with a mask lower than 23 from coming in" would block 172.16.16.0/20.

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

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

NEW QUESTION 227

- (Exam Topic 3)



Refer to the exhibit. Site1 must perform unequal cost load balancing toward the segments behind Site2 and Site3. Some of the routes are getting load balanced but others are not. Which configuration allows Site1 to load balance toward all the LAN segments of the remote routers?

- ☐ Site2
- router eigrp 100
variance 3
- ☐ Site2
- router eigrp 100
variance 2
- ☐ Site3
- router eigrp 100
variance 2
- ☐ Site1
- router eigrp 100
variance 3

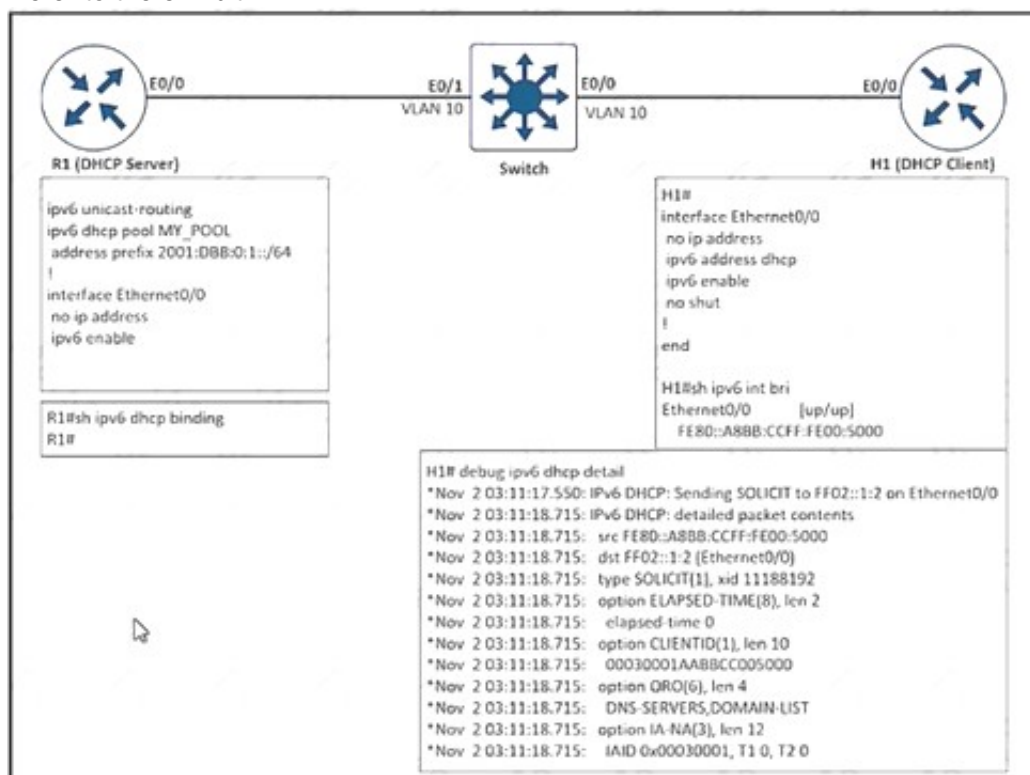
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

NEW QUESTION 229

- (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 server 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 all IPv6 DHCP clients

Answer: C

NEW QUESTION 232

- (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 236

- (Exam Topic 3)

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

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

Which action resolves this issue?

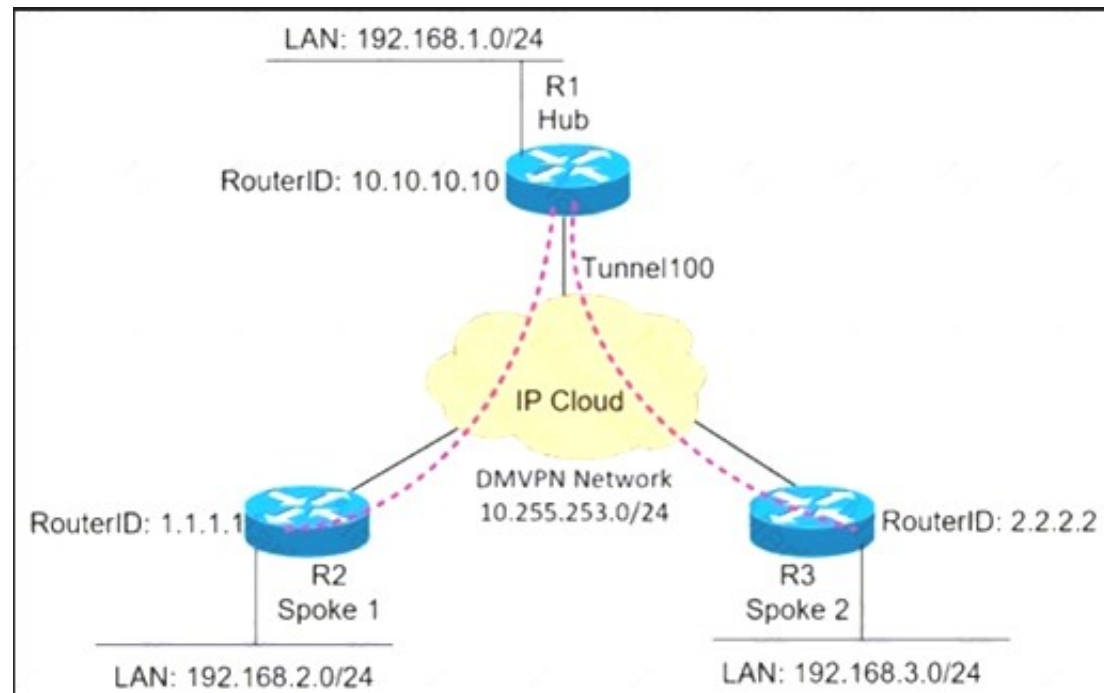
- A. Increase the session timeout
- B. Change the stopbits to 10.
- C. Configure the transport input SSH
- D. initialize the SSH key

Answer: D

NEW QUESTION 237

- (Exam Topic 3)

Refer to the exhibit.



```
*Mar 1 17:19:04.051: %OSPF-5-ADJCHG: Process 100, Nbr 1.1.1.1 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:06.375: %OSPF-5-ADJCHG: Process 100, Nbr 1.1.1.1 on Tunnel100 from FULL to DOWN, Neighbor Down: Adjacency forced to reset
*Mar 1 17:19:06.627: %OSPF-5-ADJCHG: Process 100, Nbr 2.2.2.2 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:10.123: %OSPF-5-ADJCHG: Process 100, Nbr 2.2.2.2 on Tunnel100 from FULL to DOWN, Neighbor Down: Adjacency forced to reset
*Mar 1 17:19:14.499: %OSPF-5-ADJCHG: Process 100, Nbr 10.10.10.10 on Tunnel100 from LOADING to FULL, Loading Done
*Mar 1 17:19:19.139: %OSPF-5-ADJCHG: Process 100, Nbr 10.10.10.10 on Tunnel100 from EXSTART to DOWN, Neighbor Down: Interface down or detached
*Mar 1 17:01:51.975: %OSPF-4-NONEIGHBOR: Received database description from unknown neighbor 192.168.1.1
*Mar 1 17:01:57.783: OSPF: Rcv LS UPD from 192.168.1.1 on Tunnel100 length 88 LSA count 1
*Mar 1 17:01:57.155: OSPF: Send UPD to 10.255.253.1 on Tunnel100 length 100 LSA count 2
```

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

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

Answer: A

NEW QUESTION 240

- (Exam Topic 3)


```
Router#show ip bgp vpnv4 rd 1100:1001 10.30.116.0/23
BGP routing table entry for 1100:1001:10.30.116.0/23, version 26765275
Paths: (9 available, best #6, no table)
Advertised to update-groups:
 1      2      3
(65001 64955 65003) 65089, (Received from a RR-client)
172.16.254.226 (metric 20645) from 172.16.224.236 (172.16.224.236)
Origin IGP, metric 0, localpref 100, valid, confed-internal
Extended Community: RT: 1100:1001
mpls labels in/out no-label/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 no-label/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 no-label/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 no-label/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 no-label/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 no-label/362
```

```
(64955 65003) 65089
172.16.254.226 (metric 20645) from 172.16.224.253 (172.16.224.253)
Origin IGP, metric 0, localpref 100, valid, confed-internal
Extended Community: RT: 1100:1001
mpls labels in/out no-label/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 no-label/362
65089, (Received from a RR-client)
172.16.228.226 (metric 20645) from 172.16.228.226 (172.16.228.226)
Origin IGP, metric 0, localpref 100, valid, confed-internal
Extended Community: RT: 1100:1001
mpls labels in/out no-label/278
```

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

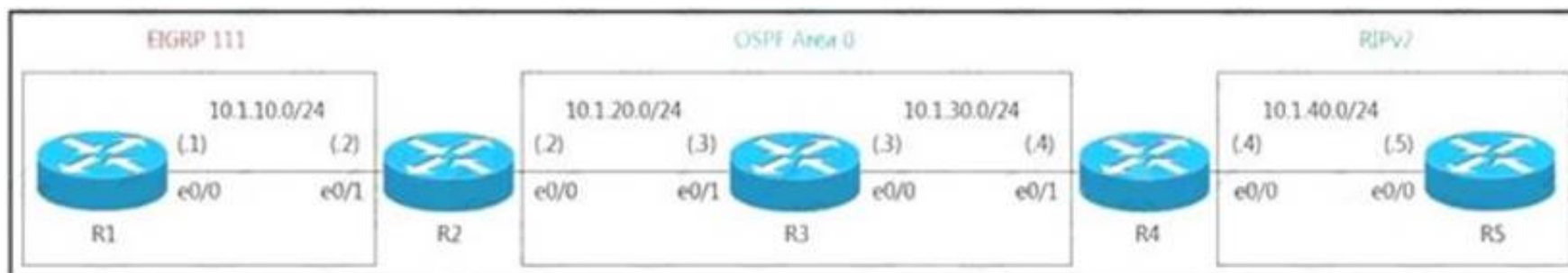
- A. Configure AS_PATH prepend for the desired best path
- B. Configure higher MED to select as the best path.
- C. Configure lower LOCAL_PREF to select as the best path.
- D. Configure AS_PATH prepend for the current best path

Answer: D

NEW QUESTION 243

- (Exam Topic 3)

Refer to the exhibit.



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

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

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

- A. R4route-map O2R deny 10 match tag 111route-map O2R permit 20!router ripredistribute ospf 1 route-map O2R metric 1
- B. R2route-map E20 deny 20 R4route-map O2R deny 10 match tag 111!router ripredistribute ospf 1 route-map O2R metric 1
- C. R4route-map O2R permit 10 match tag 111route-map O2R deny 20!router ripredistribute ospf 1 route-map O2R metric 1
- D. R4route-map O2R deny 10 match tag 111!router ripredistribute ospf 1 route-map O2R metric 1

Answer: A

Explanation:

In this question, routes from EIGRP domain are redistributed into OSPF (with tag 111) then RIPv2 but without any filtering so R5 learns all routes from both EIGRP and OSPF domain. If we only want R5 to learn routes from OSPF domain then we must filter out routes with tag 111 and permit other routes. The line "route-map O2R permit 20" is important to allow other routes because of the implicit deny all at the end of each route-map.

NEW QUESTION 244

- (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 245

- (Exam Topic 3)

Refer to the exhibit.

```
interface GigabitEthernet2
  no ip address
  ip helper-address 192.168.255.3
  no shutdown
!
interface GigabitEthernet2.10
  encapsulation dot1Q 210
  ip address 192.168.210.1 255.255.255.0
  ip ospf 1 area 0
  no shutdown
```

With the partial configuration of a router-on-a-stick. Clients in VLAN 10 on Gi2 cannot obtain IP configuration from the central DHCP server is reachable by a successful ping from the route. Which action resolves the issue?

- A. Configure the ip/ip/dhcp pool f and network 192.168..210.0.255.255/0 commands.
- B. Configure the ip header-address 192-168.265.3 command on the Gi2 10 subinterface.
- C. Configure a valid IP address on the Gi2 interface so that DHCP requests can be forwarded.
- D. Configure the Ip dhcp excluded-address 192.168.255.3 command on the Gi1.10 subinterface.

Answer: B

NEW QUESTION 248

- (Exam Topic 3)

```
R1# configure terminal
R1(config)# hostname CPE1
CPE1(config)# ip domain-name example.com
CPE1(config)# crypto key generate rsa
The name for the keys will be: CPE1.example.com
Choose the size of the key modulus in the range of 360 to 4096
for your
  General Purpose Keys. Choosing a key modulus greater than 512
may take
  a few minutes.

How many bits in the modulus [512]: 2048
% Generating 2048 bit RSA keys, keys will be non-exportable...
[OK] (elapsed time was 2 seconds)

CPE1(config)# service password-encryption
CPE1(config)# username csadmin secret Secur3p4s$w0rd
CPE1(config)# line vty 0 4
CPE1(config-line)# transport input telnet ssh
CPE1(config-line)# login local
CPE1(config-line)# end
CPE1# copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
CPE1# ssh 10.0.0.1
% No user specified nor available for SSH client
```

Refer to the exhibit. An administrator must harden a router, but the administrator failed to test the SSH access successfully to the router. Which action resolves the issue?

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

Answer: B

NEW QUESTION 253

- (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 257

- (Exam Topic 3)

Refer to the exhibit.

```
ipv6 dhcp pool DHCPPOOL
address prefix 2001:0:1:4::/64 lifetime infinite infinite
```

```
interface FastEthernet0/0
ip address 10.0.0.1 255.255.255.240
duplex auto
speed auto
ipv6 address 2001:0:1:4::1/64
ipv6 enable
ipv6 nd ra suppress
ipv6 ospf 1 area 1
ipv6 dhcp server DHCPPOOL
```

Reachability between servers in a network deployed with DHCPv6 is unstable. Which command must be removed from the configuration to make DHCPv6 function?

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

Answer: C

NEW QUESTION 261

- (Exam Topic 3)

Refer to the exhibit.

```
ip sla 1
 icmp-echo 8.8.8.8
 threshold 1000
 timeout 2000
 frequency 5
ip sla schedule 1 life forever start-time now
!
track 1 ip sla 1
!
ip route 0.0.0.0 0.0.0.0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 198.51.100.1 2 name ISP2
```

The administrator noticed that the connection was flapping between the two ISPs instead of switching to ISP2 when the ISP1 failed. Which action resolves the issue?

- A. Include a valid source-interface keyword in the icmp-echo statement.
- B. Reference the track object 1 on the default route through ISP2 instead of ISP1.
- C. Modify the static routes to refer both to the next hop and the outgoing interface.
- D. Modify the threshold to match the administrative distance of the ISP2 route.

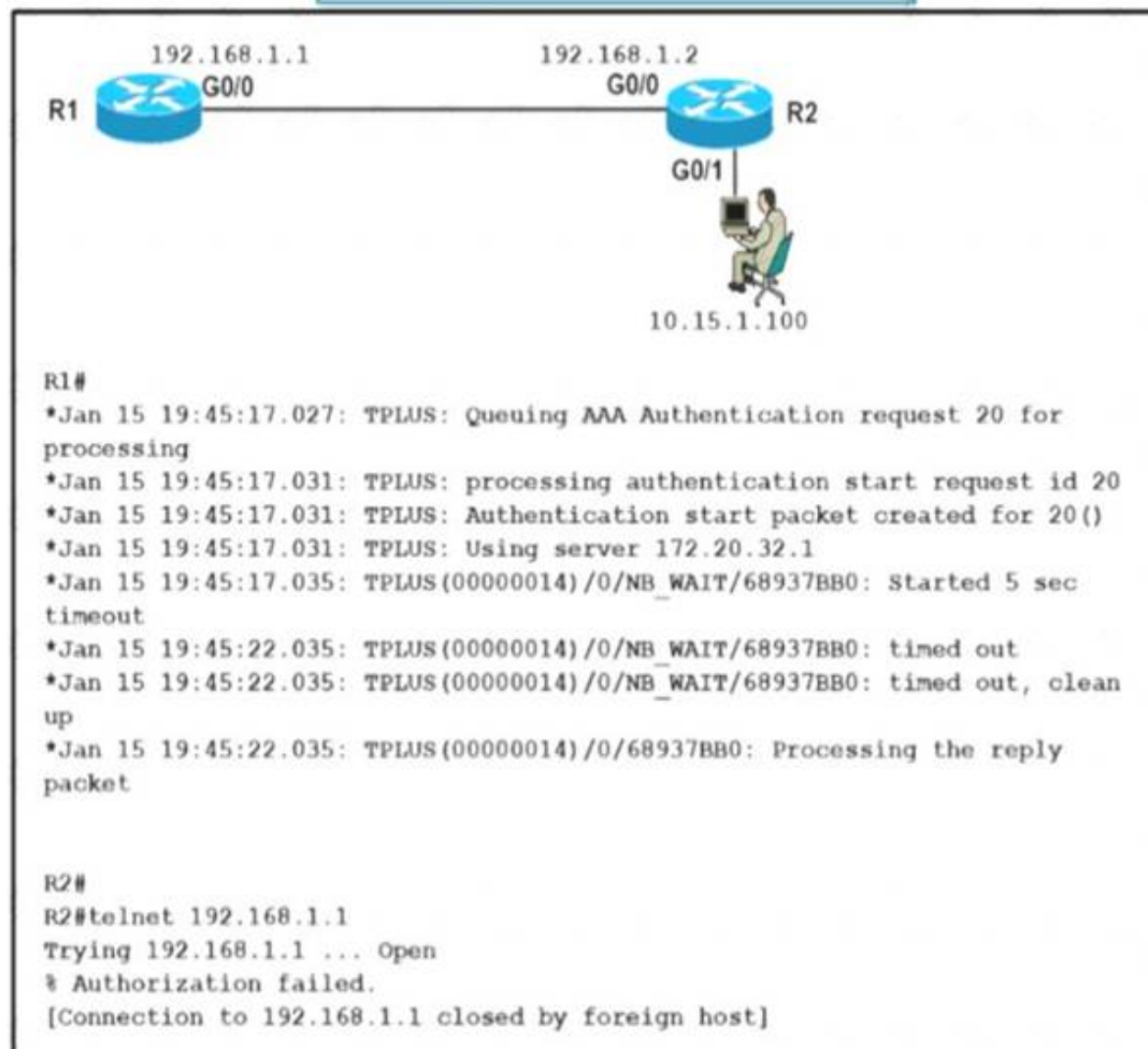
Answer: A

Explanation:

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

NEW QUESTION 265

- (Exam Topic 3)



Refer to the exhibit A network engineer is troubleshooting an AAA authentication issue for R1 from R2 When an engineer tries to open a telnet connection to R1 it opens the connection but shows a %Authorization failed error message on the terminal and closes the connection silently Which action resolves the issue?

- A. Resolve tacacs+ server host IP authentication miss configuration on the R1 router
- B. Resolve tacacs+ server reachability from the R1 router.
- C. Configure the tacacs+ server host IP on the R1 router
- D. Configure authorization commands in the tacacs* server for the R1 router.

Answer: D

NEW QUESTION 266

- (Exam Topic 3)

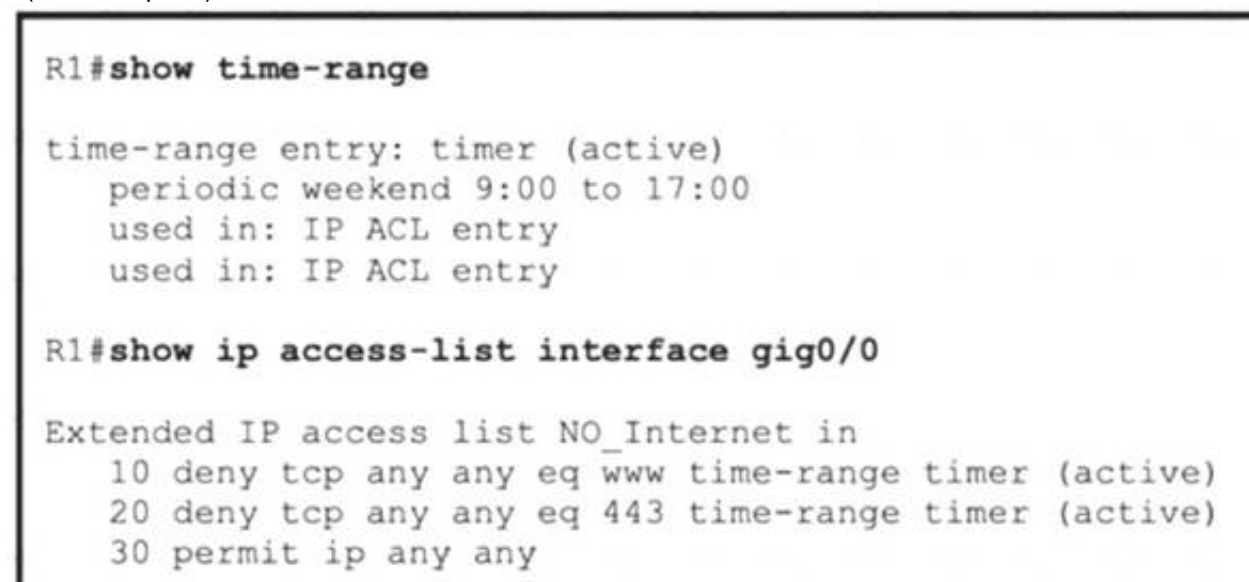
How does LDP operate in an MPLS network?

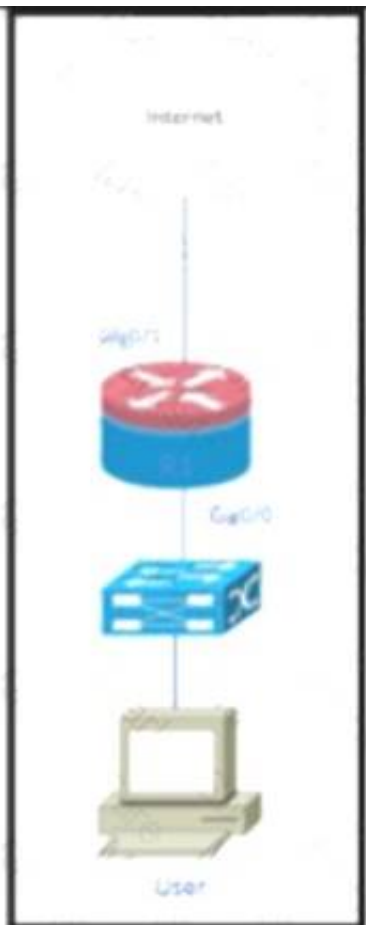
- A. When topology changes occur such as a router failure, LDP generates peer discovery messages that terminate the LDP session to propagate an LSP change.
- B. When an adjacent LSR receives LDP discovery message
- C. TCP two-way handshake ensures that the LDP session has unidirectional connectivity.
- 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 269

- (Exam Topic 3)





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

A)

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

B)

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

C)

```
no time-range timer
```

D)

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

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

NEW QUESTION 273

- (Exam Topic 3)

The network administrator configured the router for Control Plane Policing so that inbound SSH traffic is policed to 500 kbps This policy must apply to traffic coming in from 10.10.10.0/24 and 192.168.10.0/24 networks

```
access-list 100 permit ip 10.10.10.0 0.0.0.255 any
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 23
!
class-map CLASS-SSH
match access-group 100
!
policy-map PM-COPP
class CLASS-SSH
police 500000 conform-action transmit
!
Interface E0/0
service-policy input PM-COPP
!
Interface E0/1
service-policy input PM-COPP
```

The Control Plane Policing is not applied to SSH traffic and SSH is open to use any bandwidth available. Which configuration resolves this issue?

- ☐ no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
policy-map PM-COPP
class CLASS-SSH
no police 500000 conform-action transmit
police 500000 conform-action transmit exceed-action drop
- ☐ interface E0/0
no service-policy input PM-COPP
!
interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP
- ☐ no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
Interface E0/0
no service-policy input PM-COPP
!
Interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP
- ☐ no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22

A)

```
no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
policy-map PM-COPP
class CLASS-SSH
no police 500000 conform-action transmit
police 500000 conform-action transmit exceed-action drop
```

B)

```
interface E0/0
no service-policy input PM-COPP
!
interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP
```

C)

```
no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
!
Interface E0/0
no service-policy input PM-COPP
!
Interface E0/1
no service-policy input PM-COPP
!
control-plane
service-policy input PM-COPP
```

D)

```
no access-list 100
access-list 100 permit tcp 10.10.10.0 0.0.0.255 any eq 22
access-list 100 permit tcp 192.168.10.0 0.0.0.255 any eq 22
```

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

Answer: C

NEW QUESTION 276

- (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

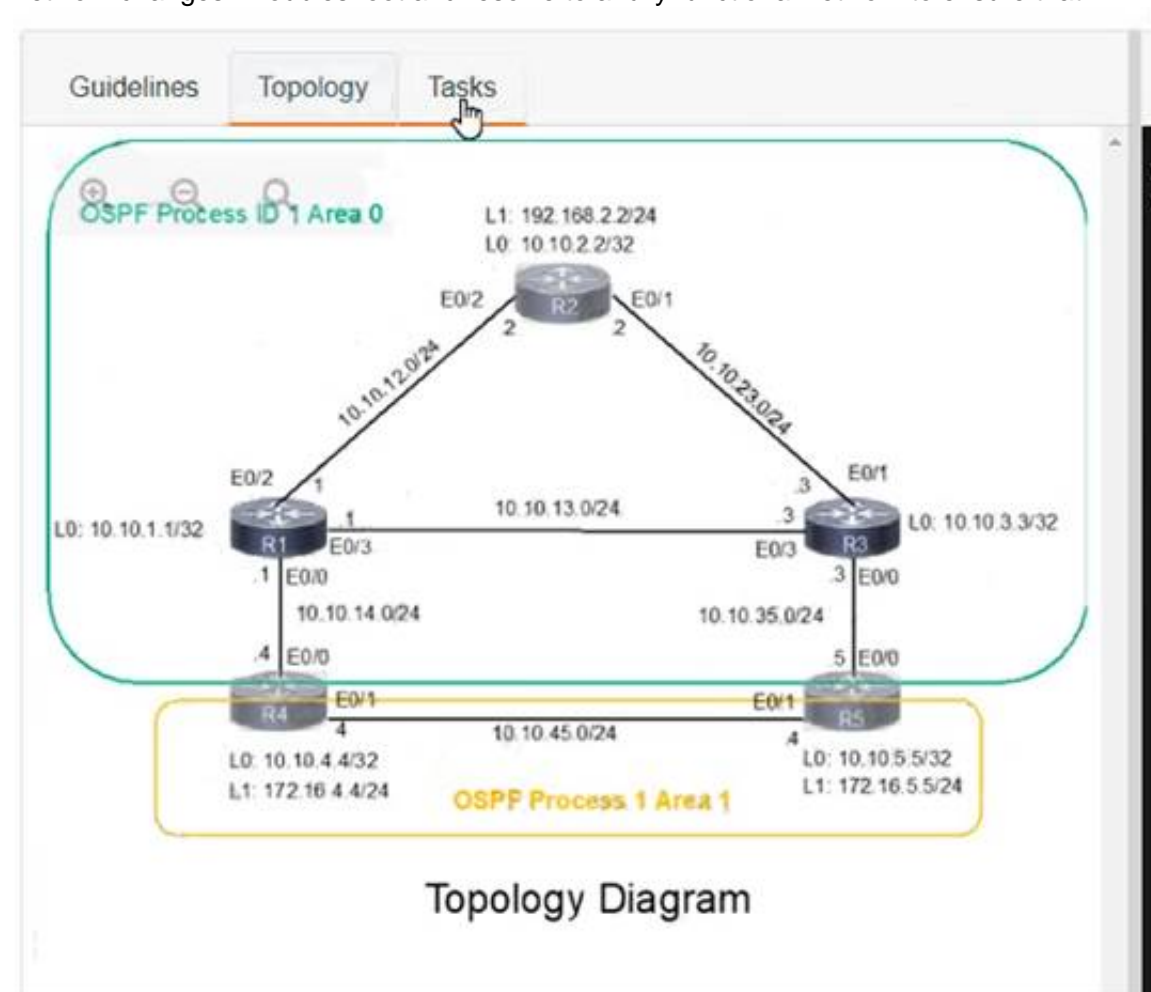
D. RB(config)router bgp 65201RB(config-router)#neighbor 10.10.10.3 route-reflector-client

Answer: A

NEW QUESTION 281

- (Exam Topic 3)

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



Guidelines Topology **Tasks**

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

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

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

Current configuration : 1279 bytes
!
version 15.8
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R2
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
!
!
!
clock timezone PST -8 0
mmi polling-interval 60
no mmi auto-configure
```

```
R2  R4  R5
interface Loopback0
 ip address 10.10.2.2 255.255.255.255
 ip ospf 1 area 0
!
interface Loopback1
 ip address 192.168.2.2 255.255.255.0
 ip ospf 1 area 0
!
interface Ethernet0/0
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/1
 ip address 10.10.23.2 255.255.255.0
 ip ospf 1 area 0
 duplex auto
!
interface Ethernet0/2
 ip address 10.10.12.2 255.255.255.0
 ip ospf 1 area 0
 duplex auto
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
router ospf 1
 passive-interface default
 no passive-interface Ethernet0/1
 no passive-interface Ethernet0/2
```

R4

Activate V
Go to Setting

Activate
Go to Sett

Activate Wi-Fi
Go to Settings

Your Partner of IT Exam

```
R2 R4 R5
!
!
!
!
!
!
!
!
I
!
!
!
!
no ip domain lookup
ip cef
no ipv6 cef
!
multilink bundle-name authenticated
!
!
!
key chain CCNP
  key 1
    key-string CCNP
    cryptographic-algorithm md5
!
!
!
!
```

```
R2    R4    R5
!
router ospf 1
 redistribute connected subnets route-map to-ospf
 passive-interface default
 no passive-interface Ethernet0/0
 no passive-interface Ethernet0/1
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
ipv6 ioam timestamp
!
route-map to-ospf permit 10
 match interface Loopback1
!
!
!
control-plane
!
!
!
!
!
!
!
!
!
line con 0
 logging synchronous
line aux 0
```

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

R4

Int range et0/0 – 1

Ip ospf authentication message-digest

```
ip ospf message-digest-key 1 md5 CCNP
```

Router ospf 1

Redistribute connected subnets route-map to-ospf metric-type 1 Copy run start

R5

Int range et0/0 – 1

Ip ospf authentication message-digest

Ip ospf message-digest-key 1 md5 CCNP Interface eth 0/1

Ip ospf cost 10 Copy run start VERIFICATION:Graphical user interface, text, application Description automatically generated

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

Neighbor ID      Pri   State           Dead Time   Address      Interface
10.10.1.1         1    FULL/BDR        00:00:38    10.10.12.1   Ethernet0/2
10.10.3.3         1    FULL/BDR        00:00:30    10.10.23.3   Ethernet0/1
```

NEW QUESTION 282

- (Exam Topic 3)

What is an MPLS LDP targeted session?

- A. session between neighbors that are connected no more than one hop away
- B. LDP session established between LSRs by exchanging TCP hello packets
- C. label distribution session between non-directly connected neighbors
- D. LDP session established by exchanging multicast hello packets

Answer: C

NEW QUESTION 286

- (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
```

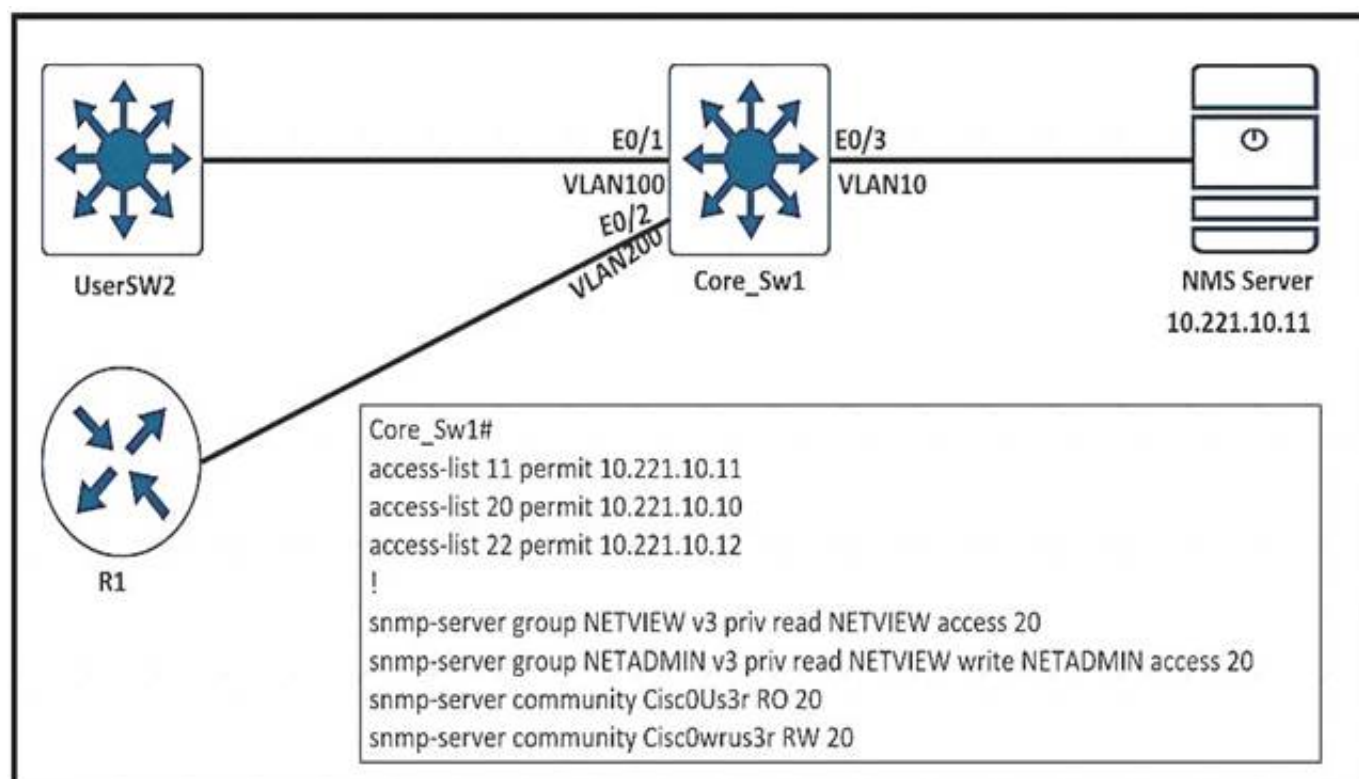
A network administrator configured name resolution for IPv6 traffic to be allowed through an inbound access list. After the access list is applied to resolve the issue, name resolution still did not work. Which action does the network administrator take to resolve the name resolution problem?

- 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 287

- (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 292

- (Exam Topic 3)

Refer to the exhibit.

```

CPE(config)# lin c 0
CPE(config-line)# no exec
CPE(config-line)# end
CPE#
*Jan 31 23:07:22.655: %SYS-5-CONFIG_I: Configured from console
by console
CPE# wr
Building configuration...
[OK]
CPE# exit

CPE con0 is now available

Press RETURN to get started.

! Console stopped responding at this moment !
    
```

An administrator is attempting to disable the automatic logout after a period of inactivity. After logging out the console stopped responding to all keyword inputs. Remote access through SSH still work resolves the issue?

- A. Configure the exec command on line con 0.
- B. Configure the absolute-timeout command on line con 0.
- C. Configure the default exec-timeout command on line con 0.
- D. Configure the no exec-timeout command on line con 0.

Answer: D

NEW QUESTION 294

- (Exam Topic 3)

IPv6 is enabled in the infrastructure to support customers with an IPv6 network over WAN and to connect the head office to branch offices in the local network. One of the customers is already running IPv6 and wants to enable IPv6 over the DMVPN network infrastructure between the headend and branch sites. Which configuration command must be applied to establish an mGRE IPv6 tunnel neighborship?

- A. tunnel protection mode ipv6
- B. ipv6 unicast-routing
- C. ipv6 nhrp holdtime 30
- D. tunnel mode gre multipoint ipv6

Answer: D

Explanation:

The command "tunnel mode gre multipoint ipv" sets the encapsulation mode of the tunnel to mGRE IPv6.

NEW QUESTION 296

- (Exam Topic 3)

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

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

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

Answer: D

NEW QUESTION 297

- (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 298

- (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	0x009C5C 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 303

- (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
  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

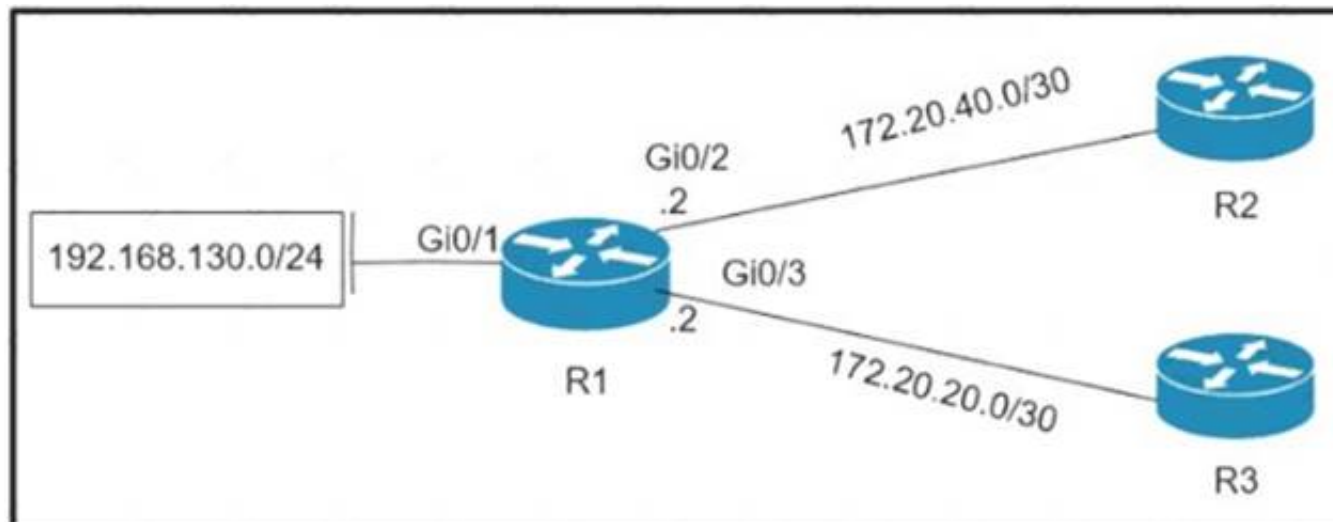
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 306

- (Exam Topic 3)

Refer to the exhibit.



Which policy configuration on R1 forwards any traffic that is sourced from the 192 168 130 0'24 network to R2?

A)

```

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

```

B)

```

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

```

C)

```

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

```

D)

```

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

```


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

Answer: B

NEW QUESTION 310

- (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 315

- (Exam Topic 2)

Filtered

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
```

Desired

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down
2 *Mar 1 18:46:11: %SYS-5-CONFIG_I: Configured from console by vty2
```

Refer to the exhibits. An engineer filtered messages based on severity to minimize log messages. After applying the filter, the engineer noticed that it filtered required messages as well. Which action must the engineer take to resolve the issue?

- A. Configure syslog level 2.
- B. Configure syslog level 3.
- C. Configure syslog level 4.
- D. Configure syslog level 5.

Answer: D

NEW QUESTION 319

- (Exam Topic 3)

A customer is running an mGRE DMVPN tunnel over WAN infrastructure between hub and spoke sites. The existing configuration allows NHRP to add spoke routers automatically to the multicast NHRP mappings. The customer is migrated the network from IPv4 to the IPv6 addressing scheme for those spokes' routers that support IPv6 and can run DMVPN tunnel over the IPv6 network. Which configuration must be applied to support IPv4 and IPv6 DMVPN tunnel on spoke routers?

- A. Tunnel mode ipv6ip 6to4
- B. Tunnel mode ipv6ip isatap
- C. Tunnel mode ipv6ip auto-tunnel
- D. Tunnel mode ipv6ip 6rd

Answer: C

NEW QUESTION 320

- (Exam Topic 2)


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

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

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

- A. Change the direction of the distribute-list command from out to in.
- B. Remove the line with the sequence number 5 from the prefix list.
- C. Remove the prefix keyword from the distribute-list command.
- D. Remove the line with the sequence number 10 from the prefix list.

Answer: B

NEW QUESTION 325

- (Exam Topic 2)

Refer to the exhibit.

```
router# show running-config
Building configuration
|
<output omitted ----->
|
hostname R1
|
ip domain-name cisco.com
|
crypto key generate rsa modulus 2048
|
username admin privilege 15 secret cisco123
|
access-list 1 permit 10.1.1.0 0.0.0.255
access-list 1 deny any log
|
line vty 0 15
 access-class 1 in
 login local
|
<output omitted ----->
|
end
```

A user cannot SSH to the router. What action must be taken to resolve this issue?

- A. Configure transport input ssh
- B. Configure transport output ssh
- C. Configure ip ssh version 2
- D. Configure ip ssh source-interface loopback0

Answer: A

Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960x/software/15-0_2_EX/security/configuration_

NEW QUESTION 327

- (Exam Topic 2)

Refer to the exhibit.

```
R1#show policy-map control-plane
Control Plane

Service-policy output: CoPP

Class-map: SNMP-Out (match-all)
 124 packets, 3693 bytes
 5 minute offered rate 0000 bps, drop rate 0000 bps
Match: access-group name SNMP
police:
  cir 8000 bps, bc 1500 bytes
  conformed 0 packets, 0 bytes; actions:
    transmit
  exceeded 0 packets, 0 bytes; actions:
    drop
  conformed 0000 bps, exceeded 0000 bps

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

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

- A. Modify the CoPP policy to increase the configured exceeded limit for SNMP.
- B. Modify the access list to include snmptrap.
- C. Modify the CoPP policy to increase the configured CIR limit for SNMP.
- D. Modify the access list to add a second line to allow udp any any eq snmp

Answer: D

NEW QUESTION 331

- (Exam Topic 2)

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

label edge router	allows an LSR to remove the label before forwarding the packet
label switch router	accepts unlabeled packets and imposes labels
forwarding equivalence class	group of packets that are forwarded in the same manner
penultimate hop popping	receives labeled packets and swaps labels

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

A label edge router (LER, also known as edge LSR) is a router that operates at the edge of an MPLS network and acts as the entry and exit points for the network. LERs push an MPLS label onto an incoming packet and pop it off an outgoing packet.

A forwarding equivalence class (FEC) is a term

NEW QUESTION 334

- (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

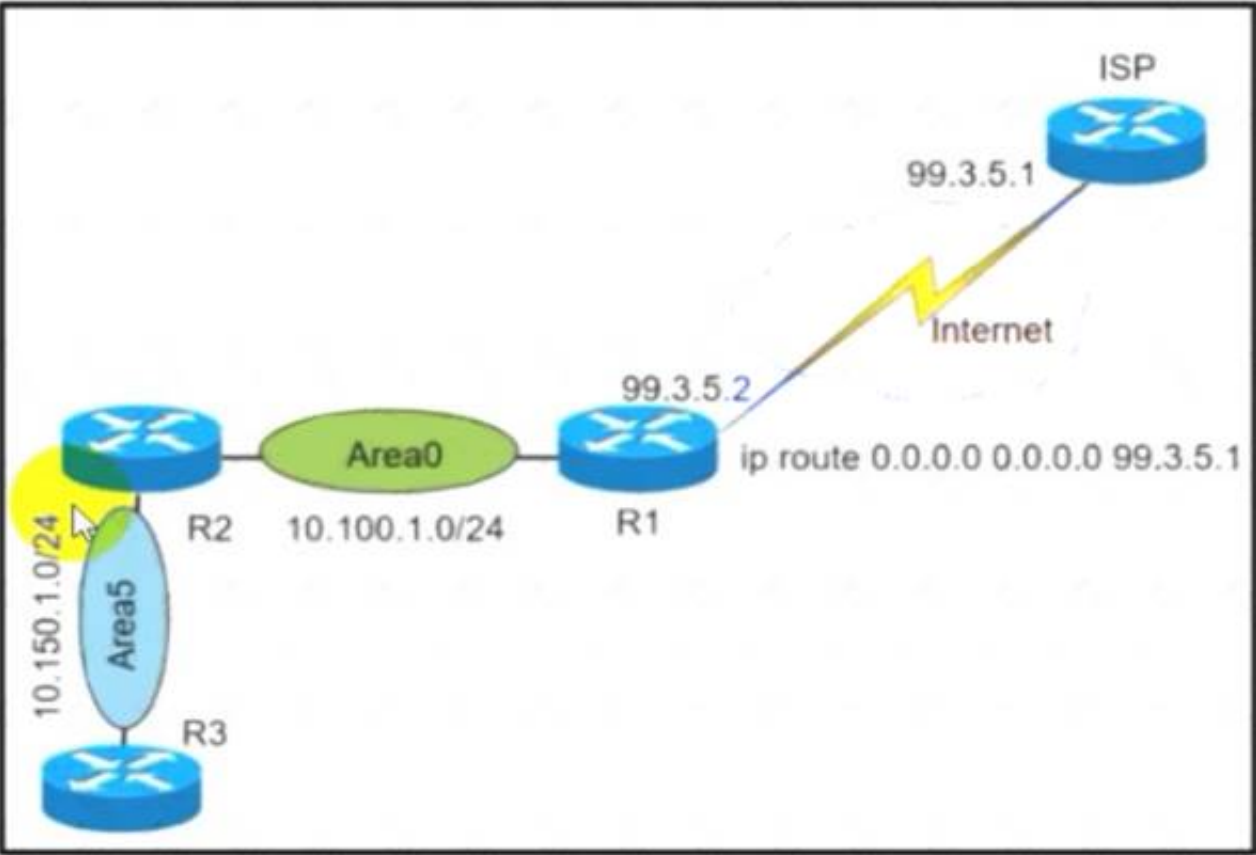
- A. Mastered
- B. Not Mastered

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-book/mp-ldp-inbound-filtr.html

NEW QUESTION 338
- (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 1default-information originate
- B. router ospf 1network 0.0.0.0 0.0.0.0 area 0
- C. router ospf 1redistribute connected 0.0.0.0
- D. router ospf 1redistribute static subnets

Answer: A

NEW QUESTION 339
- (Exam Topic 2)
Refer to the exhibit.


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

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

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

- A. MASS-RTR(config-archive-log-cfg)#password encryption aes
- B. MASS-RTR(config)#aaa authentication arap
- C. MASS-RTR(config)#service password-encryption
- D. MASS-RTR(config-archive-log-cfg)#hidekeys

Answer: D

Explanation:

Step 7 hidekeys

Example:

Device(config-archive-log-config)# hidekeys

(Optional) Suppresses the display of password information in configuration log files.

Note

Enabling the **hidekeys** command increases security by preventing password information from being displayed in configuration log files.

NEW QUESTION 344

- (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 349

- (Exam Topic 2)

Refer to Exhibit.

HQ_R2 g0/0

```
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 responderHQ_R1(config)# ip sla responder icmp-echo 172.16.35.2
- B. BRANCH(config)# ip sla 1BRANCH(config-ip-sla)# icmp-echo 172.16.35.1
- C. HQ_R2(config)# ip sla responderHQ_R2(config)# ip sla responder icmp-echo 172.16.35.5
- D. BRANCH(config)# ip sla 1BRANCH(config-ip-sla)# icmp-echo 172.16.35.2

Answer: D

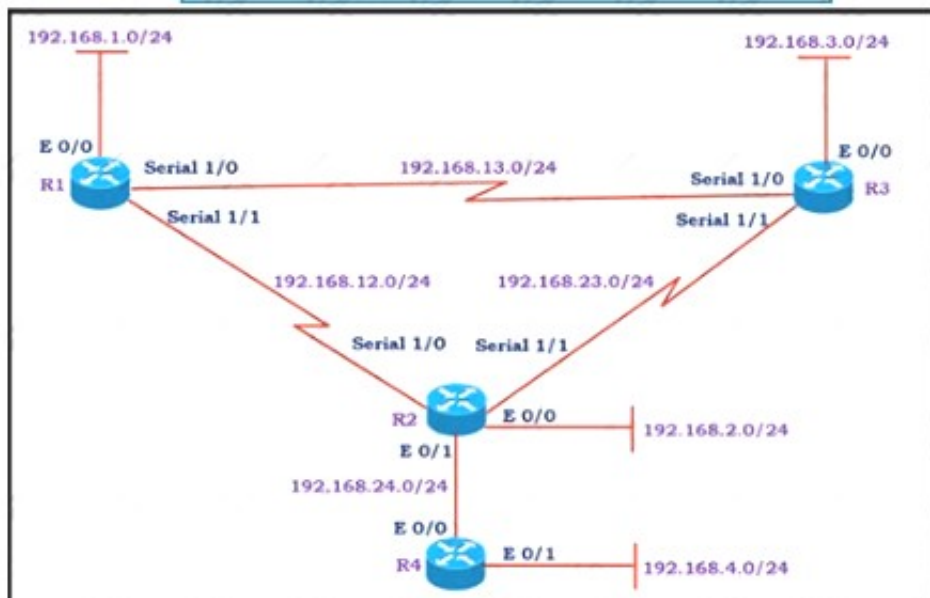
Explanation:

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 352

- (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 354

- (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 358

- (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 363

- (Exam Topic 2)


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

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

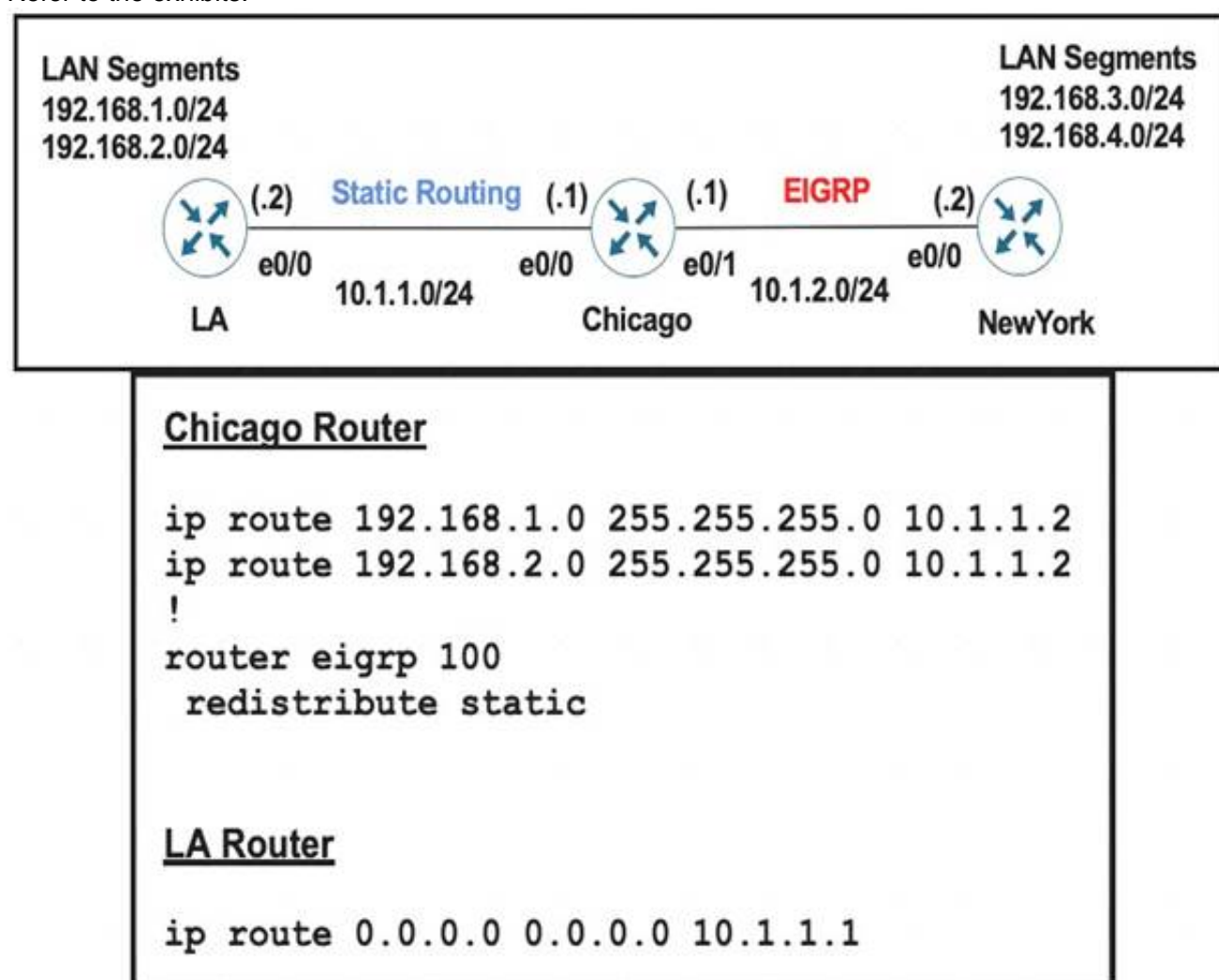
- A. ipv6 access-list inbound permit tcp any any syn deny ipv6 any any log!interface gi0/0ipv6 traffic-filter inbound out
- B. ipv6 access-list inbound permit tcp any any syn deny ipv6 any any log!interface gi0/0ipv6 traffic-filter inbound in
- C. ipv6 access-list inbound permit tcp any any establisheddeny ipv6 any any log!interface gi0/0ipv6 traffic-filter inbound in
- D. ipv6 access-list inbound permit tcp any any established deny ipv6 any any log!interface gi0/0ipv6 traffic-filter inbound out

Answer: C

NEW QUESTION 365

- (Exam Topic 2)

Refer to the exhibits.



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

A)

Chicago Router

```
router eigrp 100
 redistribute static metric 10 10 10 10 10
```

B)

Chicago Router

```
router eigrp 100
 redistribute connected
```

C)

Chicago Router

```
ip route 192.168.3.0 255.255.255.0 10.1.2.2
ip route 192.168.4.0 255.255.255.0 10.1.2.2
```

D)

LA Router

```
ip route 192.168.3.0 255.255.255.0 10.1.1.1
ip route 192.168.4.0 255.255.255.0 10.1.1.1
```

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

Answer: B

NEW QUESTION 369

- (Exam Topic 2)

Refer to the exhibit.

Configuration Output:

```
aaa new-model
!
aaa authentication login default local
aaa authentication login VTY_AUTH local
aaa authorization exec default none
aaa authorization exec VTY_AUTH local
aaa accounting exec default start-stop group radius
!

password 7 K0AyUubDrfOgO4s
authorization exec VTY_AUTH
login authentication VTY_AUTH
!
```

Debug Output:

```
AAA/AUTHEN/LOGIN (000004B6): Pick method list 'default'
AAA/AUTHOR (0x4B6): Pick method list 'VTY_AUTH'
AAA/AUTHOR/EXEC(000004B6): Authorization FAILED
```

Which action resolves the failed authentication attempt to the router?

- A. Configure aaa authorization login command on line vty 0 4
- B. Configure aaa authorization login command on line console 0
- C. Configure aaa authorization console global command
- D. Configure aaa authorization console command on line vty 0 4

Answer: C

Explanation:

In the debug output, we see that the Authorization (not Authentication) failed so we need to correct the authorization. In order to enable authorization, we must use the global command “aaa authorization console” first.

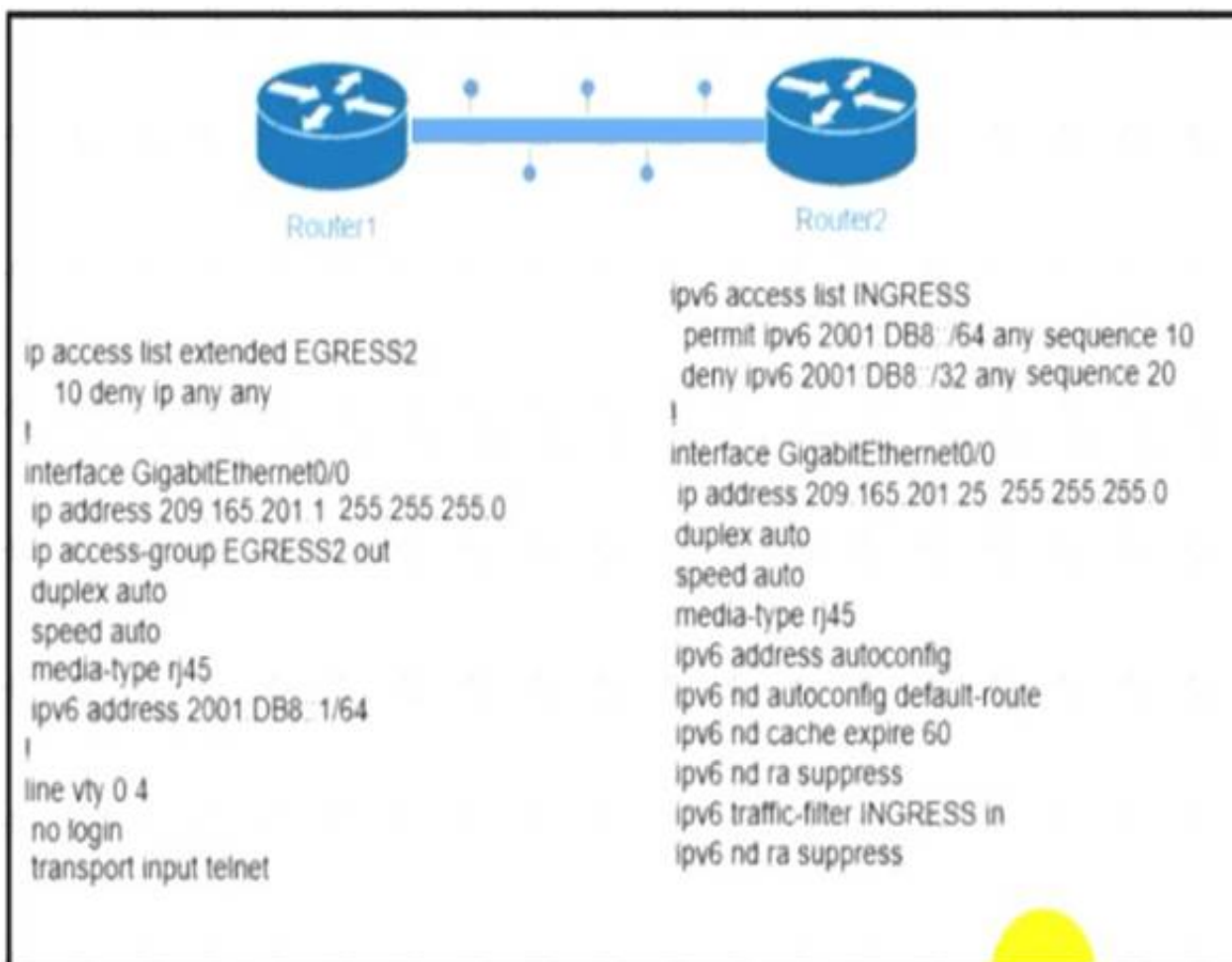
Reference:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/security/a1/sec-a1-cr-book/sec-cr-a1.html>

NEW QUESTION 370

- (Exam Topic 2)

Refer to the exhibit.



The engineer configured and connected Router2 to Router1. The link came up but could not establish a Telnet connection to Router1 IPv6 address of 2001:DB8::1. Which configuration allows Router2 to establish a Telnet connection to Router1?

- A. ipv6 unicast-routing
- B. permit ICMPv6 on access list INGRESS for Router2 to obtain IPv6 address
- C. permit ip any any on access list EGRESS2 on Router1
- D. IPv6 address on GigabitEthernet0/0

Answer: D

Explanation:

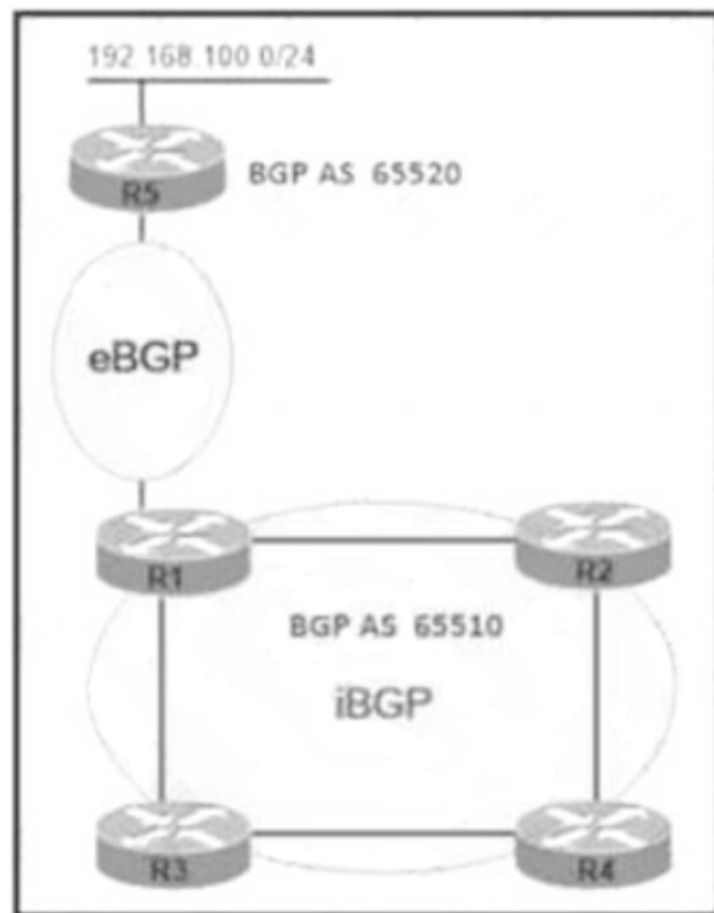
```

-----R1-----
interface Ethernet0/0
ip address 209.165.201.1 255.255.255.0
ip access-group EGRESS2 out ipv6 address 2001:DB8::1/64 end
-----R2-----
interface Ethernet0/0
ip address 209.165.201.25 255.255.255.0
ipv6 address 2001:DB8::2/64 ipv6 address autoconfig
ipv6 nd autoconfig default-route ipv6 nd cache expire 60
ipv6 nd ra suppress
ipv6 traffic-filter INGRESS in end
IOU_Router2#telnet 2001:DB8::1 Trying 2001:DB8::1 ... Open IOU_Router1>
-----
  
```

NEW QUESTION 371

- (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

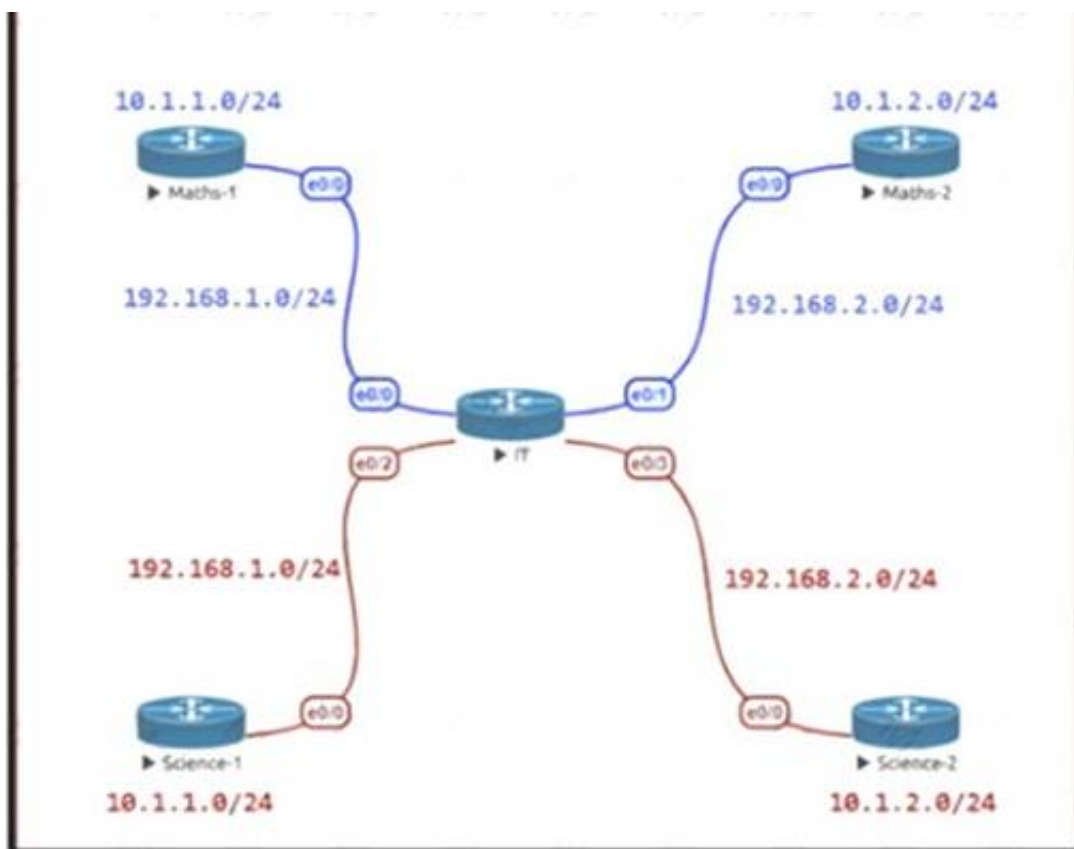
Explanation:

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 374

- (Exam Topic 2)

Refer to the exhibit.



The Math and Science departments connect through the corporate. IT router but users in the Math department must not be able to reach the Science department and vice versa Which configuration accomplishes this task?

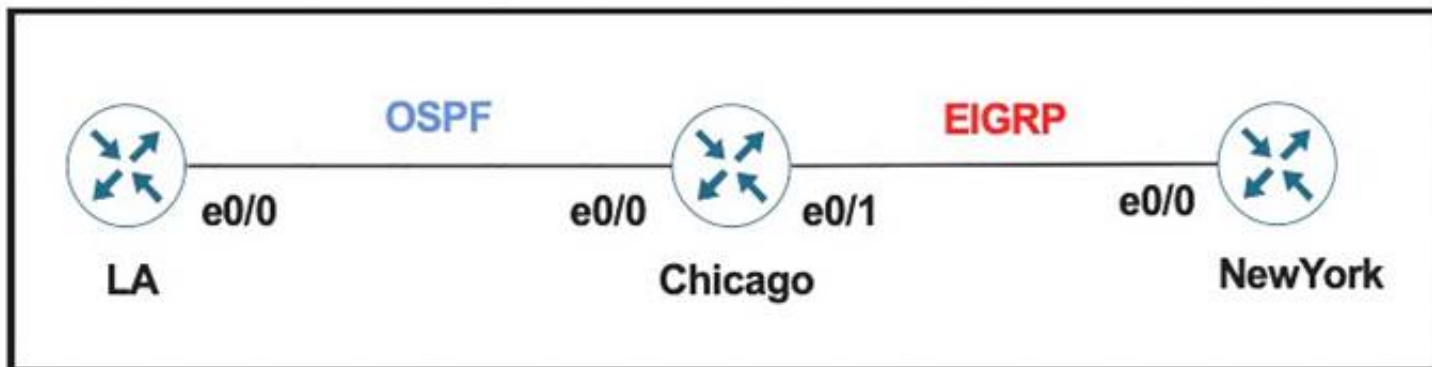
- A. vrf definition Science interface E 0/2 ip address 192.168.1.1 255.255.255.0 no shutdown interface E 0/3 ip address 192.168.2.1 255.255.255.0 no shutdown
- B. vrf definition Science address-family ipv4 ! interface E 0/2 ip address 192.168.1.1 255.255.255.0 vrf forwarding Science no shutdown interface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

Answer: D

NEW QUESTION 375

- (Exam Topic 2)

Refer to the exhibit.



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

```
router ospf 1
 redistribute eigrp 100
router eigrp 100
 redistribute ospf 1
```

After the configuration, the LA router receives all the NewYork routes, but NewYork router does not receive any LA routes. Which set of configurations fixes the problem on the Chicago router?

- A)
router ospf 1
redistribute eigrp 100 metric 20
- B)
router eigrp 100
redistribute ospf 1 metric 10 10 10 10 10
- C)
router eigrp 100
redistribute ospf 1 subnets
- D)
router ospf 1
redistribute eigrp 100 subnets

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

Answer: B

Explanation:

“LA router receives all the NewYork routes but it does not receive any LA routes” because when redistributing into EIGRP, we must configure the default metric.

NEW QUESTION 380

- (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)
```

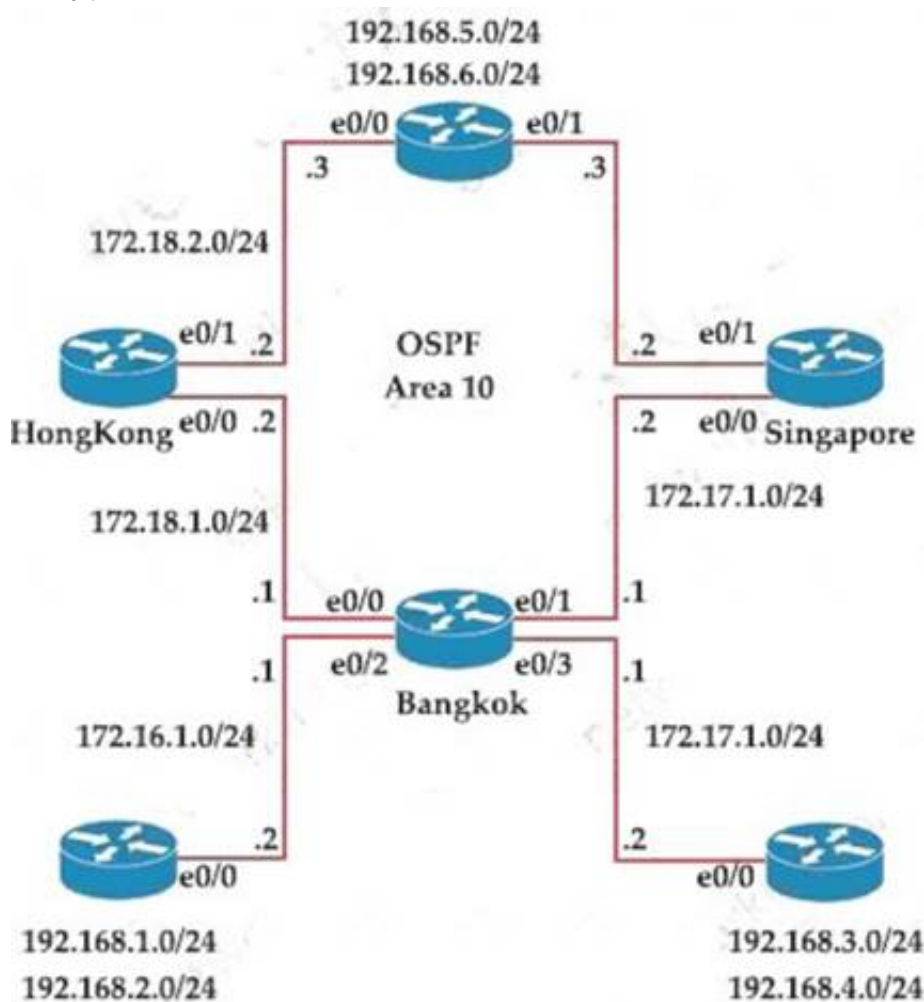
With this command enabled, when a message pops up you will be put to a new line with your typing command which is very

```
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 382

- (Exam Topic 2)

Exhibit:



Bangkok is using ECMP to reach to the 192.168.5.0/24 network. The administrator must configure Bangkok in such a way that Telnet traffic from 192.168.3.0/24 and 192.168.4.0/24 networks uses the HongKong router as the preferred router. Which set of configurations accomplishes this task?

- A. access-list 101 permit tcp 192.168.3.0 0.0.0.255 192.168.5.0 0.0.0.255access-list 101 permit tcp 192.168.4.0 0.0.0.255 192.168.5.0 0.0.0.255!route-map PBR1 permit 10 match ip address 101set ip next-hop 172.18.1.2 interface Ethernet0/3ip policy route-map PBR1
- B. access-list 101 permit tcp 192.168.3.0 0.0.0.255 192.168.5.0 0.0.0.255 eq 23access-list 101 permit tcp 192.168.4.0 0.0.0.255 192.168.5.0 0.0.0.255 eq 23!route-map PBR1 permit 10 match ip address 101set ip next-hop 172.18.1.2 interface Ethernet0/1ip policy route-map PBR1
- C. access-list 101 permit tcp 192.168.3.0 0.0.0.255 192.168.5.0 0.0.0.255 eq 23access-list 101 permit tcp 192.168.4.0 0.0.0.255 192.168.5.0 0.0.0.255 eq 23!route-

```
map PBR1 permit 10 match ip address 101set ip next-hop 172.18.1.2!interface Ethernet0/3ip policy route-map PBR1
D. access-list 101 permit tcp 192.168.3.0 0.0.0.255 192.168.5.0 0.0.0.255access-list 101 permit tcp 192.168.4.0 0.0.0.255 192.168.5.0 0.0.0.255!route-map PBR1
permit 10match ip address 101set ip next-hop 172.18.1.2!interface Ethernet0/1ip policy route-map PBR1
```

Answer: C

Explanation:

We need to use Policy Based Routing (PBR) here on Bangkok router to match the traffic from 192.168.3.0/24 & 192.168.4.0/24 and “set ip next-hop” to HongKong router(172.18.1.2 in this case).

Note: Please notice that we have to apply the PBR on incoming interface e0/3 to receive traffic from 192.168.3.0/24 and 192.168.4.0/24.

NEW QUESTION 385

- (Exam Topic 2)

What are two characteristics of VRF instance? (Choose two.)

- A. All VRFs share customers routing and CEF tables .
- B. An interface must be associated to one VRF.
- C. Each VRF has a different set of routing and CEF tables
- D. It is defined by the VPN membership of a customer site attached to a P device.
- E. A customer site can be associated to different VRFs

Answer: BC

Explanation:

Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipswitch_cef/configuration/xs-3s/isw-cef-xe-3s-book/isw-cef

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_l3_vpns/configuration/15-s/mp-l3-vpns-15-s-book/mp-b

NEW QUESTION 388

- (Exam Topic 2)

Which feature drops packets if the source address is not found in the snooping table?

- A. IPv6 Source Guard
- B. IPv6 Destination Guard
- C. IPv6 Prefix Guard
- D. Binding Table Recovery

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-snoopin

NEW QUESTION 392

- (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 395

- (Exam Topic 2)

When configuring Control Plane Policing on a router to protect it from malicious traffic, an engineer observes that the configured routing protocols start flapping on that device. Which action in the Control Plane Policy prevents this problem in a production environment while achieving the security objective?

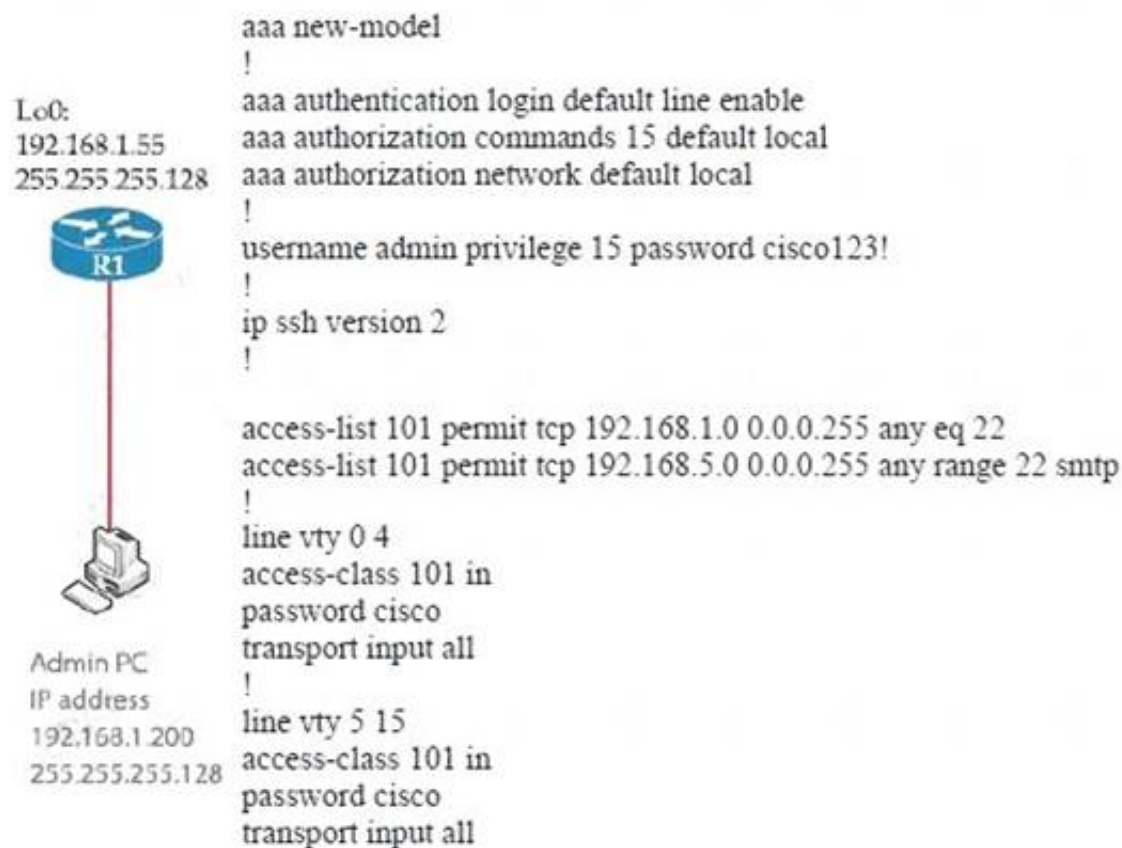
- A. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the output direction
- B. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the input direction
- C. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy m the input direction
- D. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy m the output direction

Answer: B

NEW QUESTION 398

- (Exam Topic 2)

Refer to the exhibit.



The administrator successfully logs into R1 but cannot access privileged mode commands. What should be configured to resolve the issue?

- A. aaa authorization reverse-access
- B. secret cisco123! at the end of the username command instead of password cisco123!
- C. matching password on vty lines as cisco123!
- D. enable secret or enable password commands to enter into privileged mode

Answer: D

NEW QUESTION 402

- (Exam Topic 2)

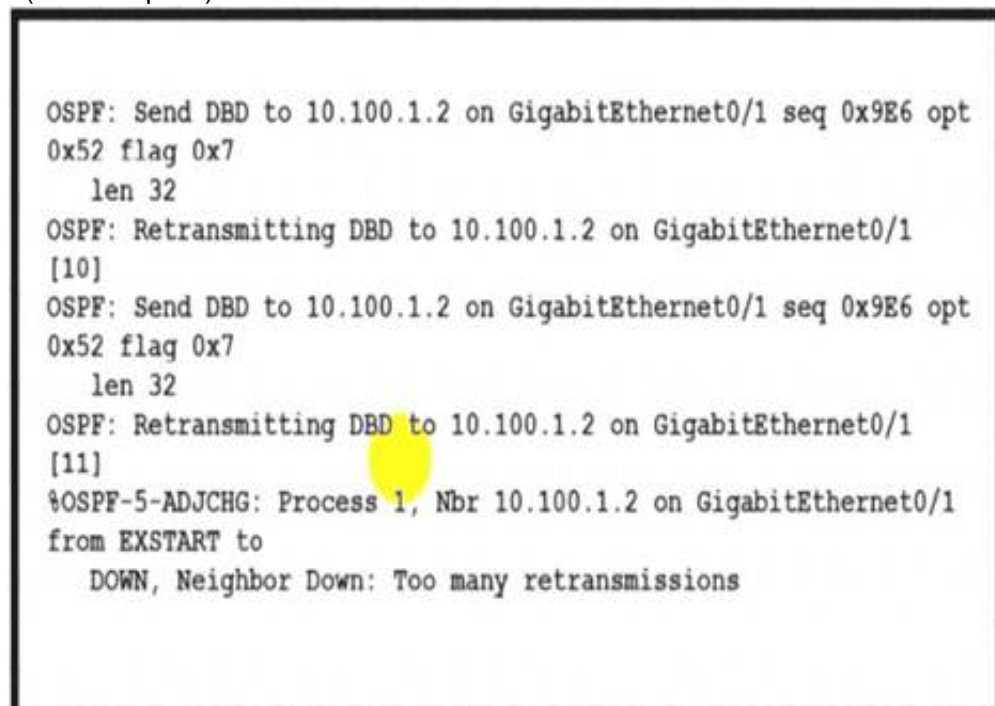
What statement about route distinguishes in an MPLS network is true?

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

Answer: A

NEW QUESTION 403

- (Exam Topic 2)



Refer to the exhibit. The OSPF neighbor relationship is not coming up What must be configured to restore OSPF neighbor adjacency?

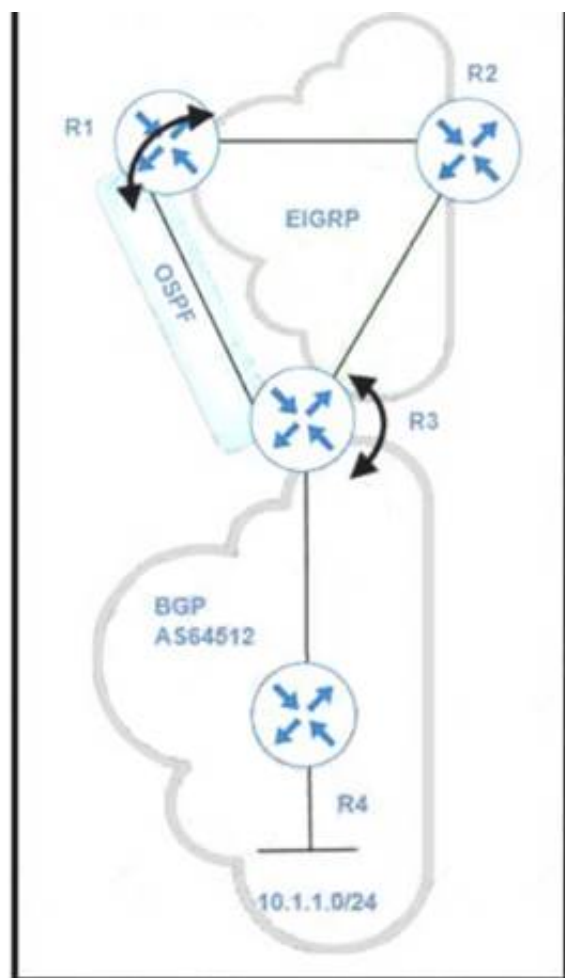
- A. OSPF on the remote router
- B. matching hello timers
- C. use router ID
- D. matching MTU values

Answer: D

NEW QUESTION 405

- (Exam Topic 2)

Refer to the exhibit.



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

- A. Tag the 10.1.1.0/24 prefix and deny the prefix from being redistributed into OSPF on R1.
- B. Repeat the test from R4 using ICMP ping on the local 10.1.1.0/24 prefix, and fix any Layer 2 errors on the host or switch side of the subne
- C. ^
- D. Place an OSPF distribute-list outbound on R3 to block the 10.1.1.0/24 prefix from being advertised back to R3.
- E. Reduce frequent OSPF SPF calculations on R3 that cause a high CPU and packet loss on traffic traversing R3.

Answer: A

Explanation:

After redistribution, R3 learns about network 10.1.1.0/24 via two paths:

+ Internal BGP (IBGP): advertised from R4 with AD of 200 (and metric of 0)

+ OSPF: advertised from R1 with AD of 110 (O E2) (and metric of 20)

Therefore R3 will choose the path with the lower AD via OSPF

But this is a looped path which is received from R3 -> R2 -> R1 -> R3. So when the advertised route from R4 is expired, the looped path is also expired soon and R3 will reinstall the main path from R4. This is the cause of intermittent connectivity.

We can solve this problem by denying the 10.1.1.0/24 prefix from being redistributed into OSPF on R1. So R3 will not learn this prefix from R1.

Or another solution is to place an OSPF distribute-list inbound on R3 to block the 10.1.1.0/24 prefix from being advertised back to R3.

NEW QUESTION 406

- (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:

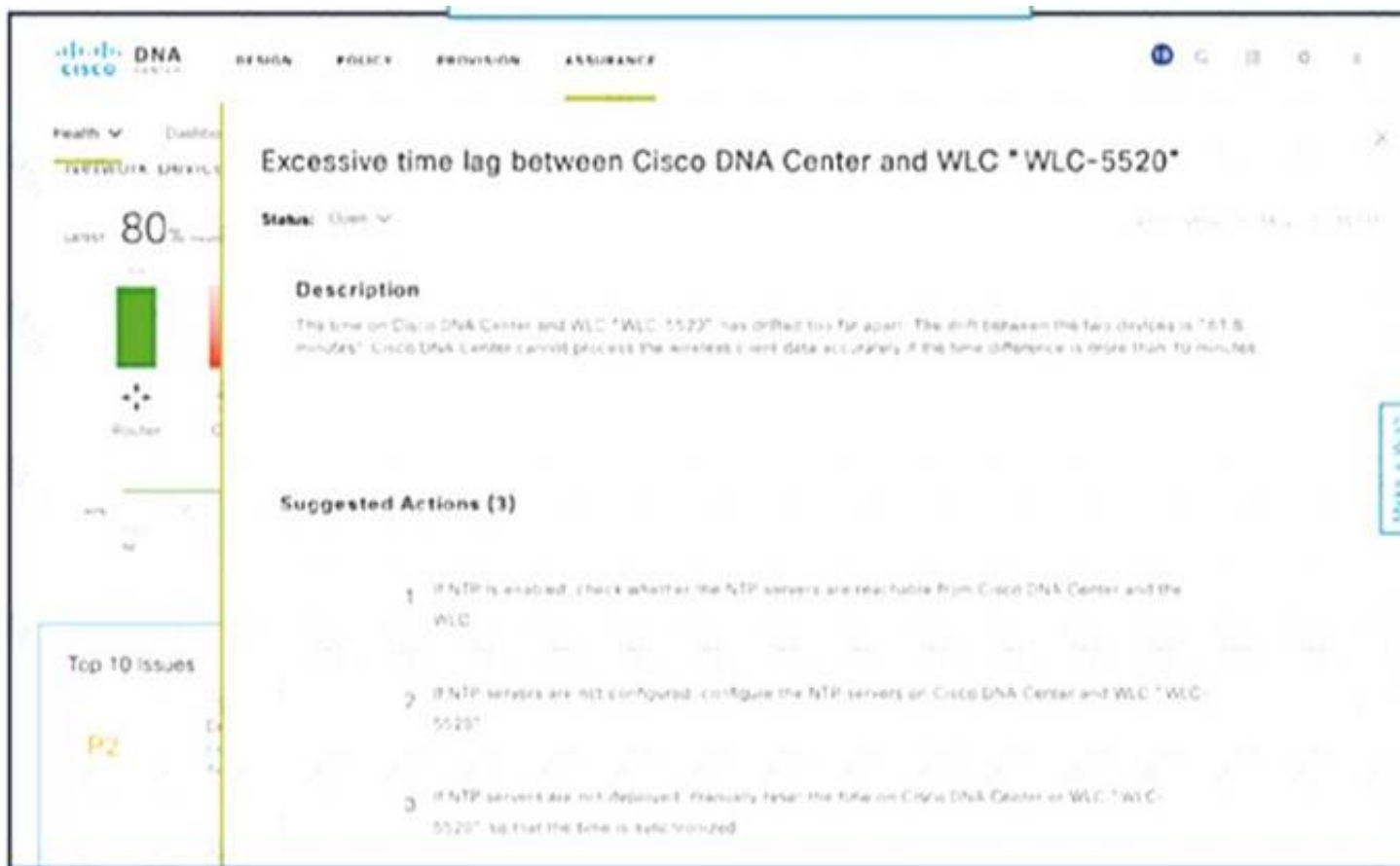
The set ip default next-hop command verifies the existence of the destination IP address in the routing table, and...+ if the destination IP address exists, the command does not policy route the packet, but forwards the packet based on the routing table.+ if the destination IP address does not exist, 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 408

- (Exam Topic 2)

Exhibit:



NTP is configured across the network infrastructure and Cisco DNA Center. An NTP issue was reported on the Cisco DNA Center at 17:15. Which action resolves the issue?

- A. Check and resolve reachability between the WLC and the NTP server
- B. Reset the NTP server to resolve any synchronization issues for all devices
- C. Check and resolve reachability between Cisco DNA Center and the NTP server
- D. Check and configure NTP on the WLC and synchronize with Cisco DNA Center

Answer: D

Explanation:

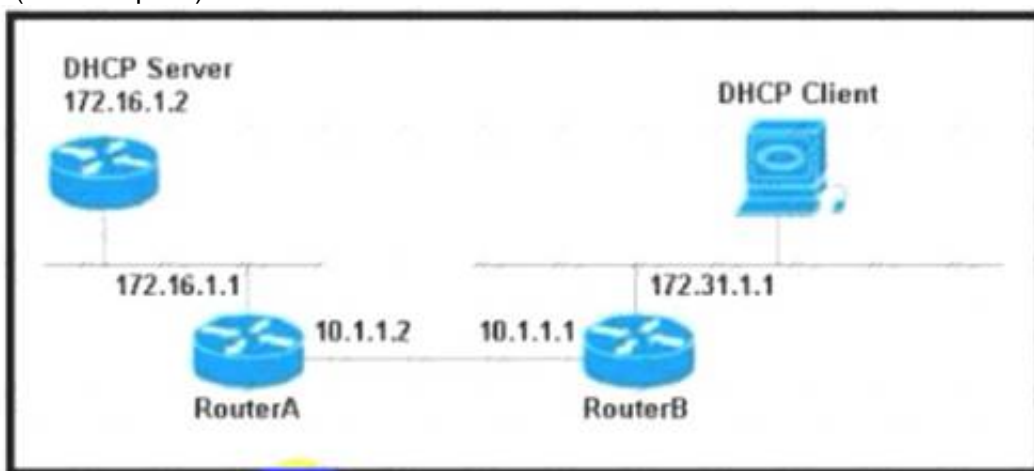
Excessive time lag between Cisco DNA Center and device: The time difference between Cisco DNA Center and the device IP Address has drifted too far apart. CiscoDNA Center cannot process the device data accurately if the time difference is more than 3 minutes.

Reference:

<https://www.cisco.com/c/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-c>

NEW QUESTION 409

- (Exam Topic 2)



Refer to the exhibit. The DHCP client is unable to receive an IP address from the DHCP server RouterB is configured as follows:

Interface fastethernet 0/0

description Client DHCP ID 394482431 Ip address 172 31 11 255 255.255 0

!

ip route 172.16.1.0 255 255 255.0 10.1.1.2

Which command is required on the fastethernet 0/0 interface of RouterB to resolve this issue?

- A. RouterB(config-if)#ip helper-address 172.31.1.1
- B. RouterB(config-if)#ip helper-address 255.255 255 255
- C. RouterB(config-if)#ip helper-address 172.16.1.1
- D. RouterB(config-if)#ip helper-address 172.16.1.2

Answer: D

NEW QUESTION 410

- (Exam Topic 2)

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


```
route-map PBR, deny, sequence 5
  Match clauses:
    ip address (access-list): NON-CISCO
  Set clauses:
  Policy routing matches: 0 packets, 0 bytes
route-map PBR, permit, sequence 10
  Match clauses:
  Set clauses:
    ip next-hop 192.168.1.5
  Policy routing matches: 388213827 packets, 222009685077 bytes
```

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

- A. Packets are not evaluated by sequence 10.
- B. Packets are evaluated by sequence 10.
- C. Packets are forwarded to the default gateway.
- D. Packets are forwarded using normal route lookup.
- E. Packets are dropped by the access list.

Answer: BC

Explanation:

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

NEW QUESTION 411

- (Exam Topic 2)

Which IGPs are supported by the MPLS LDP autoconfiguration feature?

- A. RIPv2 and OSPF
- B. OSPF and EIGRP
- C. OSPF and ISIS
- D. ISIS and RIPv2

Answer: C

Explanation:

The **MPLS LDP Autoconfiguration** feature enables you to globally enable Label Distribution Protocol (LDP) on every interface associated with an Interior Gateway Protocol (IGP) instance. This feature is supported on Open Shortest Path First (**OSPF**) and Intermediate System-to-Intermediate System (**IS-IS**) IGPs. It provides

NEW QUESTION 416

- (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 the hostname 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 global configuration 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-name global 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 417

- (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

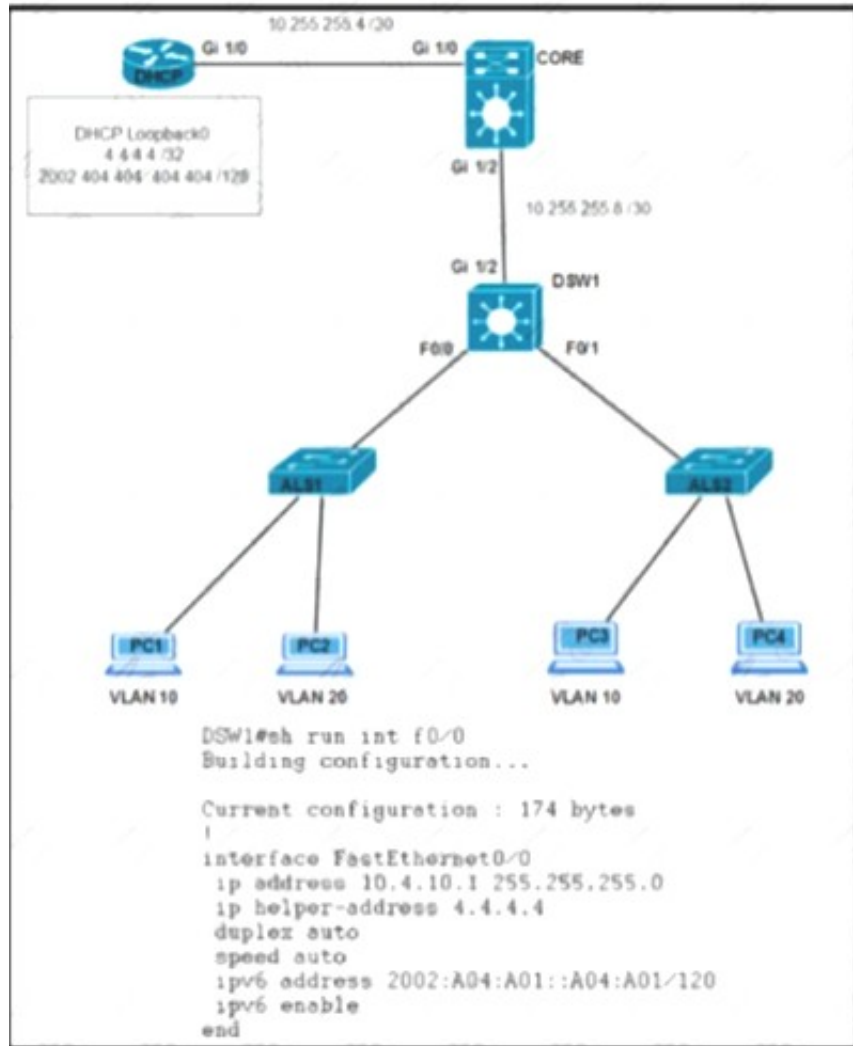
Explanation:

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 419

- (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
- E. Option A
- F. Option B
- G. Option C
- H. Option B

Answer: B

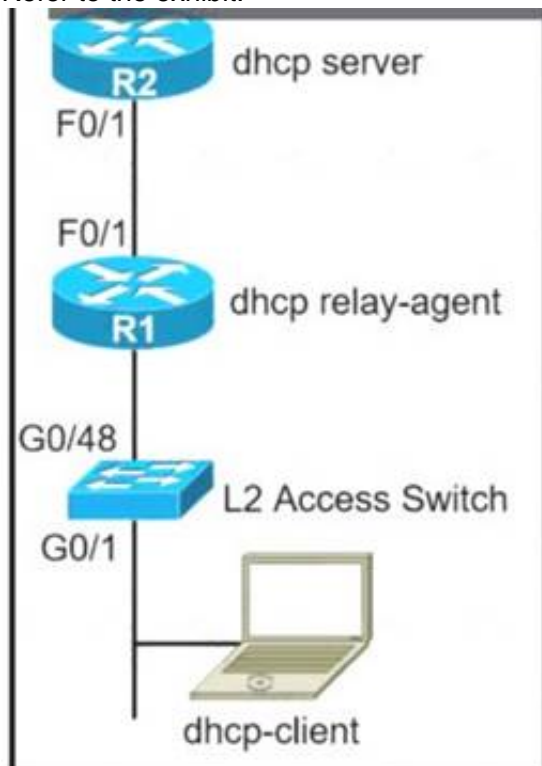
Explanation:

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

NEW QUESTION 422

- (Exam Topic 2)

Refer to the exhibit.



The network administrator can see the DHCP discovery packet in R1. but R2 is not replying to the DHCP request. The R1 related interface is configured with the DHCP helper address. If the PC is directly connected to the FaO/1 interface on R2, the DHCP server assigns as IP address from the DHCP pool to the PC. Which

two commands resolve this issue? (Choose two.)

- A. service dhcp-relay command on R1
- B. ip dhcp option 82 command on R2
- C. service dhcp command on R1
- D. ip dhcp relay information enable command on R1
- E. ip dhcp relay information trust-all command on R2

Answer: CE

Explanation:

* 1. R1 received DHCP packet and its interface was configured with the DHCP helper address. But we are not sure if R1 forward DHCP packet to R2 or not. 2. If we connect PC directly to R2 then this problem will not appear -> DHCP Server function was configured on R2.

From these facts, the most likely problem is related to Option 82. Maybe R2 ignored DHCP request packets because it was receiving these packets with the giaddr field set to 0.0.0.0.

By default Cisco IOS devices reject packets with zero "giaddr" and by default Cisco Catalyst switches use "giaddr" of zero when configured for DHCP snooping!

Reference: <https://blog.ine.com/2009/07/22/understanding-dhcp-option-82>

If we can run the "debug ip dhcp server packet" on R2, we may see these messages:

*Feb 22 23:54:57.759: IP: s=0.0.0.0 (FastEthernet0/1), d=255.255.255.255, len 34 4, input feature, MCI Check(64), rtype 0, forus FALSE, sendself FALSE, mtu 0, fw dchk FALSE *Feb 22 23:54:57.759: IP: s=0.0.0.0 (FastEthernet0/1), d=255.255.255.255, len 34 4, rcvd 2 *Feb 22 23:54:57.759: IP: s=0.0.0.0 (FastEthernet0/1), d=255.255.255.255, len 34 4, stop process pak for forus packet

*Feb 22 23:54:57.759: DHCPDP: inconsistent relay information. *Feb 22 23:54:57.759: DHCPDP: relay information option exists, but giaddr is zero

We are receiving the DHCP packet from R1, source 0.0.0.0, and destination 255.255.255.255 broadcast, but if you notice from the debug output, R2, our DHCP Server, is complaining that the relay information is inconsistent. Option 82, Information Option, is contained in the packet but the GIADDR is zero. The GIADDR stands for Gateway IP Address, which is the IP Address of the relaying agent. The Option 82, Information Option, would then contain the receiving port and hostname of the Relaying Agent by default.

R2 sees the Option 82 information, signalling that the DHCP packet might have been relayed, BUT there is no relaying IP Address. This is the behavior of DHCP Snooping when enabling it on a switch, and since the switchport does not contain an IP Address, since it's Layer 2, no GIADDR will be added.

Instead, just the Option 82 Information is added and this is the problem we have, but there are options:

* 1. You could trust all on R2 the DHCP Server, which will cause the server to not be so suspicious: – ip dhcp relay information trust-all – ip dhcp relay information trusted 2. Disable the addition of Option 82 information on SW: – no ip dhcp snooping information option 3. Trust the port that is receiving the DHCP Discover: – ip dhcp snooping trust

Any of these options will fix our predicament. Reference: <https://evilttl.com/wiki/DHCP-Snooping>

But in the answer choices, we only have 1 correct answer which is the command "ip dhcp relay information trust-all". We checked if we need any "service dhcp..." command on both IOS version 12.4 and 15.1:

Therefore we only have the "service dhcp" command, we don't have any "service dhcp-relay" command available. But the description of the "service dhcp" command says that it enables both DHCP server and relay agent so this is the best answer left.

NEW QUESTION 423

- (Exam Topic 2)

What does IPv6 Source Guard utilize to determine if IPv6 source addresses should be forwarded?

- A. ACE
- B. ACLS
- C. DHCP
- D. Binding Table

Answer: D

Explanation:

IPv6 source guard is an interface feature between the populated binding table and data traffic filtering. This feature enables the device to deny traffic when it is originated from an address that is not stored in the binding table. IPv6 source guard does not inspect ND or DHCP packets; rather, it works

NEW QUESTION 428

- (Exam Topic 2)

Which Ipv6 first-hop security feature helps to minimize denial of service attacks?

- A. IPv6 Router Advertisement Guard
- B. IPv6 Destination Guard
- C. DHCPv6 Guard
- D. IPv6 MAC address filtering

Answer: B

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_15_0s_book/IPv6_Secur

NEW QUESTION 433

- (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 434

- (Exam Topic 2)

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

- A. LDP and BGP can be used for Pseudowire signaling.
- B. It is used for transparent point-to-multipoint connectivity between Ethernet links/sites.
- C. BGP is used for signaling customer VPNv4 routes between PE nodes.
- D. A packet with node segment ID is forwarded along with shortest path to destination.
- E. Customer traffic is encapsulated in a VPN label when it is forwarded in MPLS network.

Answer: CE

Explanation:

MPLS Layer-3 VPNs provide IP connectivity among CE sites* MPLS VPNs enable full-mesh, hub-and-spoke, and hybrid IP connectivity* CE sites connect to the MPLS network via IP peering across PE-CE links* MPLS Layer-3 VPNs are implemented via VRFs on PE edge nodes* VRFs providing customer routing and forwarding segmentation* BGP used for signaling customer VPN (VPNv4) routes between PE nodes* To ensure traffic separation, customer traffic is encapsulated in an additional VPN label when forwarded in MPLS network* Key applications are layer-3 business VPN services, enterprise network segmentation, and segmented layer-3 Data Center access

Reference: <https://www.ciscolive.com/c/dam/r/ciscolive/us/docs/2018/pdf/BRKMPL-1100.pdf>

NEW QUESTION 436

- (Exam Topic 2)

A customer reports to the support desk that they cannot print from their PC to the local printer id:401987778. Which tool must be used to diagnose the issue using Cisco DNA Center Assurance?

- A. application trace
- B. path trace
- C. ACL trace
- D. device trace

Answer: B

NEW QUESTION 437

- (Exam Topic 2)

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

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

- A. Modify the flow transport command transport udp 2055 to move under flow monitor profile.
- B. Modify the interlace command to Ip flow monitor FLOW-MONITOR-1 Input.
- C. Modify the udp port under flow exporter profile to Ip transport udp 4739.
- D. Modify the flow record command record v4_r1 to move under flow exporter profile.

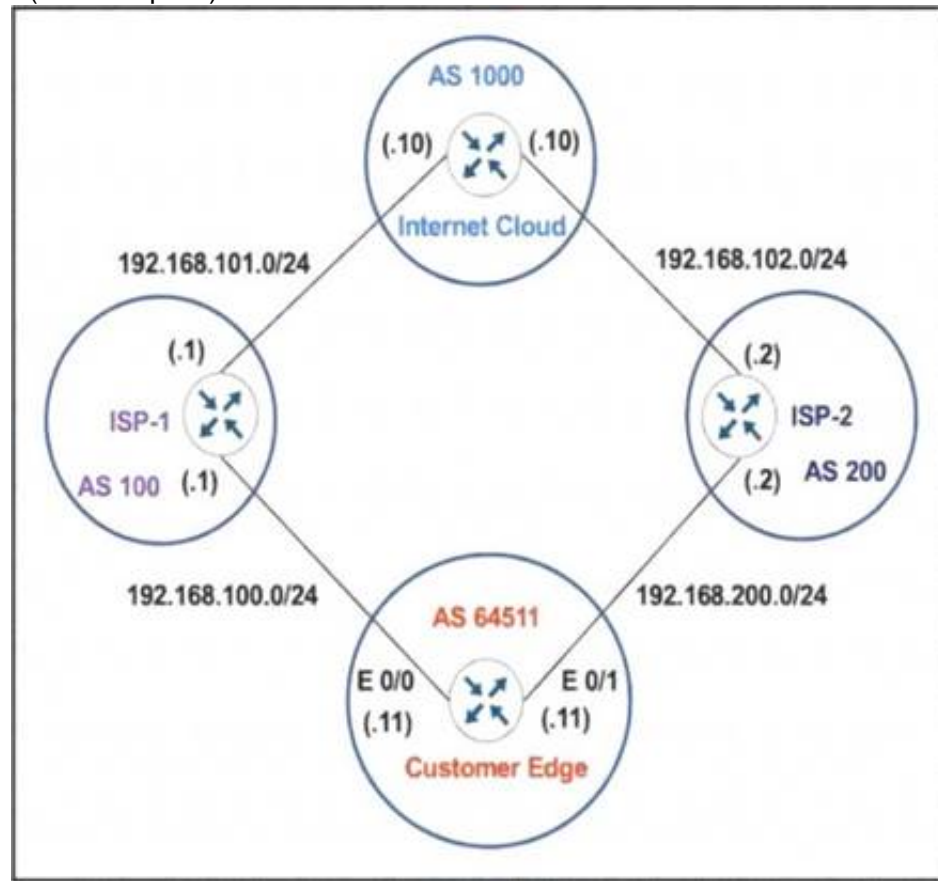
Answer: B

Explanation:

From the exhibit we see there are two flow monitors: the first one “FLOW-MONITOR-1” has been configured correctly but the second one “v4_r1” was left empty and interface E0/0.1 is using it. So the remote server does not receive any NetFlow data.

NEW QUESTION 440

- (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 BLOCKSPECIFIC

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 441

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