

Cisco

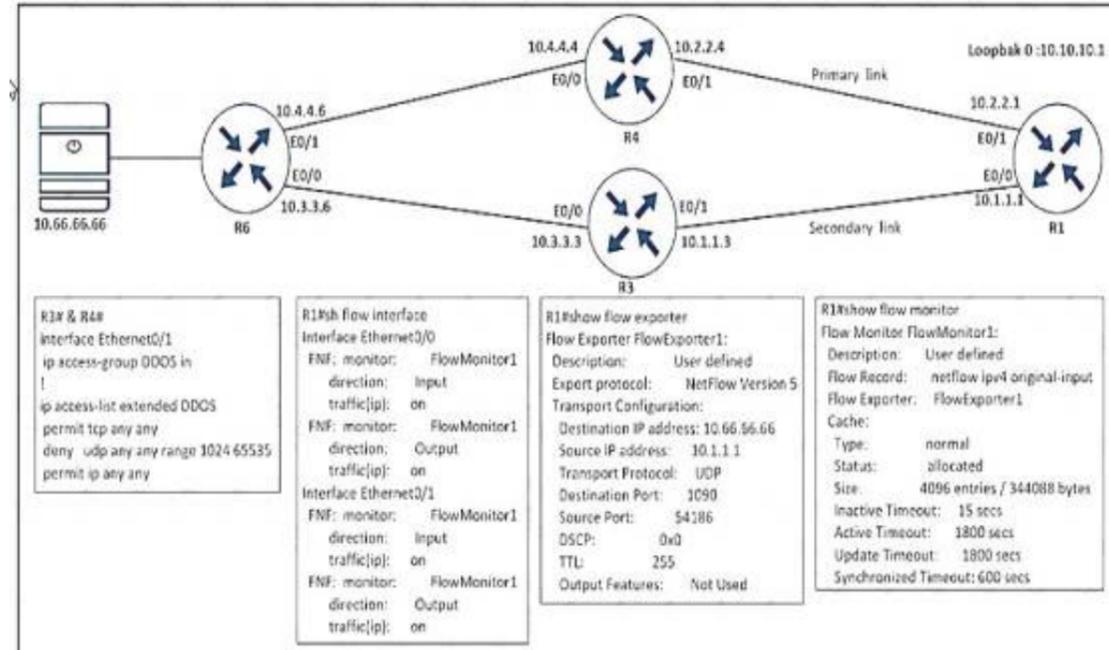
Exam Questions 300-410

Implementing Cisco Enterprise Advanced Routing and Services (ENARSI)



NEW QUESTION 1

- (Exam Topic 3)



Refer to the exhibit An engineer configured NetFlow but cannot receive the flows from R1 Which two configurations resolve the issue? (Choose two)

- A)


```

R1(config)#flow exporter FlowExporter1
R1(config-flow-exporter)#destination 10.66.60.66
            
```
- B)


```

R4(config)#ip access-list extended DDOS
R4(config-ext-nacl)#5 permit udp any host 10.66.66.66 eq 1090
            
```
- C)


```

R3(config)#flow exporter FlowExporter1
R3(config-flow-exporter)#destination 10.66.66.66
            
```
- D)


```

R3(config)#ip access-list extended DDOS
R3(config-ext-nacl)#5 permit udp any host 10.66.66.66 eq 1090
            
```
- E)


```

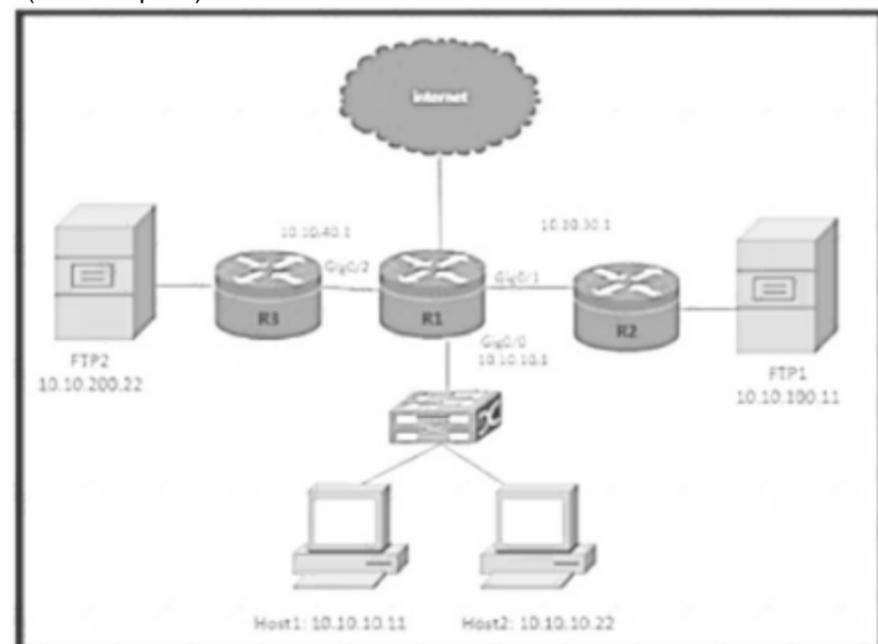
R4(config)#flow exporter FlowExporter1
R4(config-flow-exporter)#destination 10.66.66.66
            
```

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

Answer: BE

NEW QUESTION 2

- (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 3

- (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-I.html>

NEW QUESTION 4

- (Exam Topic 3)

An engineer configured VRF-Lite on a router for VRF blue and VRF red. OSPF must be enabled on each VRF to peer to a directly connected router in each VRF. Which configuration forms OSPF neighbors over the network 10.10.10.0/28 for VRF blue and 192.168.0.0/30 for VRF red?

- router ospf 1 vrf blue
network 10.10.10.0 0.0.0.15 area 0
router ospf 2 vrf red
network 192.168.0.0 0.0.0.3 area 0
- router ospf 1 vrf blue
network 10.10.10.0 0.0.0.240 area 0
router ospf 2 vrf red
network 192.168.0.0 0.0.0.252 area 0
- router ospf 1 vrf blue
network 10.10.10.0 0.0.0.252 area 0
router ospf 2 vrf red
network 192.168.0.0 0.0.0.240 area 0
- router ospf 1 vrf blue
network 10.10.10.0 0.0.0.3 area 0
router ospf 2 vrf red
network 192.168.0.0 0.0.0.15 area 0

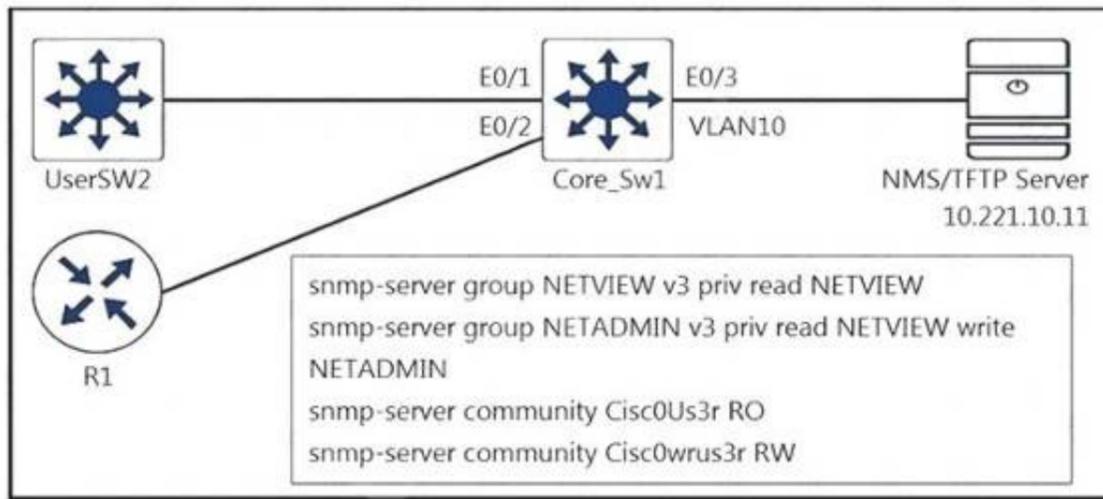
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

NEW QUESTION 5

- (Exam Topic 3)

Refer to the exhibit.



A junior engineer configured SNMP to network devices. Malicious users have uploaded different configurations to the network devices using SNMP and TFTP servers.

Which configuration prevents changes from unauthorized NMS and TFTP servers?

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

Answer: A

NEW QUESTION 6

- (Exam Topic 3)

An engineer notices that R1 does not hold enough log messages to identify the root cause during troubleshooting Which command resolves this issue?

- A. #logging buffered 4096 critical
- B. (config)#logging buffered 16000 informational
- C. #logging buffered 16000 critical
- D. (config)#logging buffered 4096 informational

Answer: B

NEW QUESTION 7

- (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 8

- (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

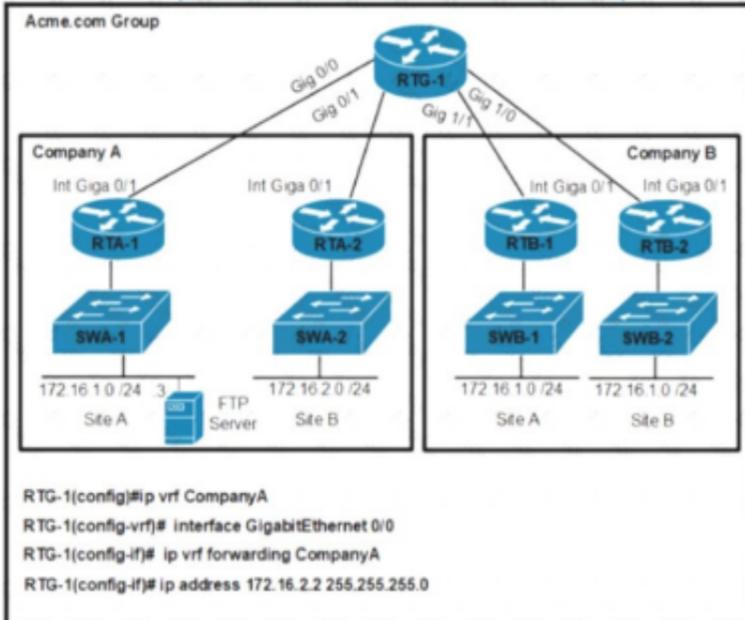
MPLS traffic engineering supports only a single IGP process/instance

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 9

- (Exam Topic 3)



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

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

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

Answer: D

NEW QUESTION 10

- (Exam Topic 3)

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

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

Answer: C

NEW QUESTION 10

- (Exam Topic 3)

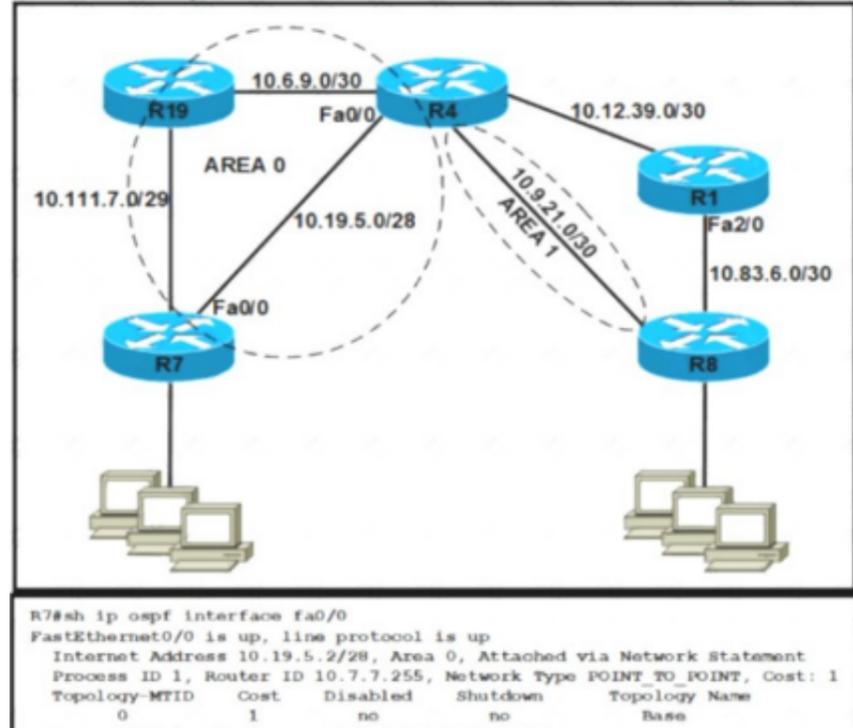
Which IPv6 first hop security feature controls the traffic necessary for proper discovery of neighbor device operation and performance?

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

Answer: D

NEW QUESTION 12

- (Exam Topic 3)



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

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

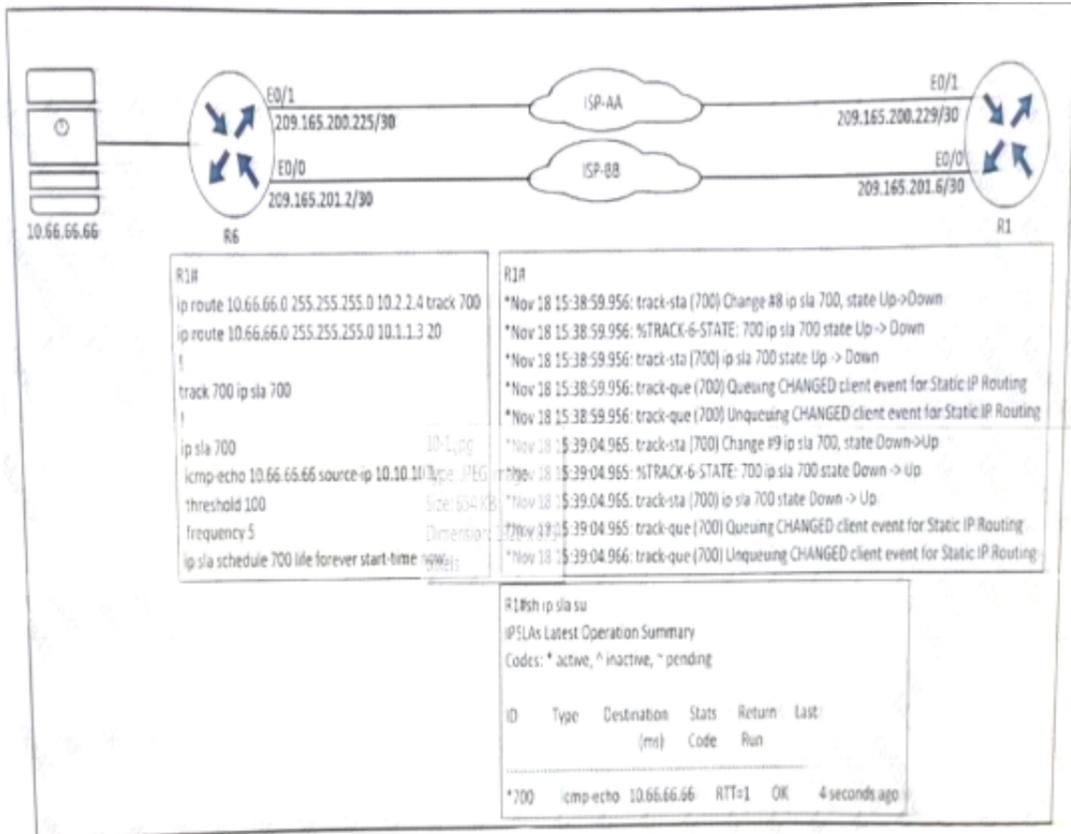
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 15

- (Exam Topic 3)

Refer to the exhibit.



An engineer configured IP SLA on R1 to avoid the ISP link flapping problem. but it is not working as designed IP SLA should wait 30 seconds before switching traffic to a secondary connection and then revert to the primary link after waning 20 seconds, when the primary link is available and stabilized. Which configuration resolves the issue?

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

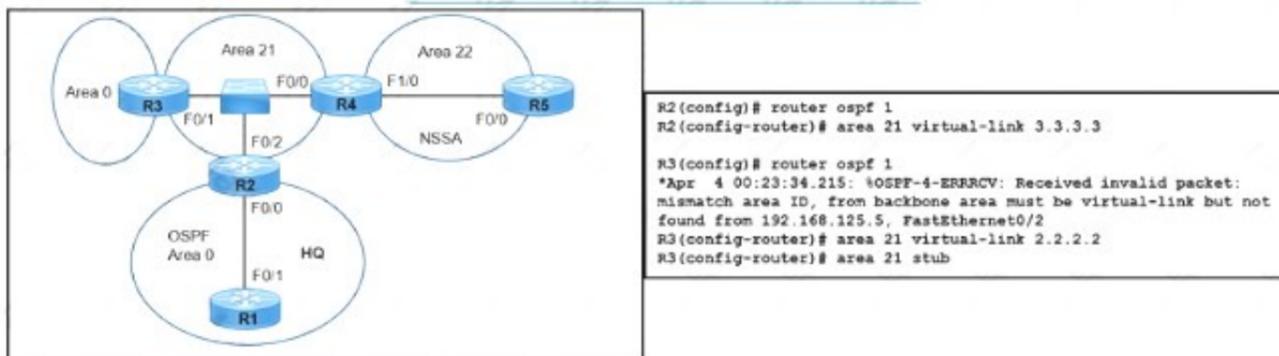
Answer: C

Explanation:

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

NEW QUESTION 19

- (Exam Topic 3)



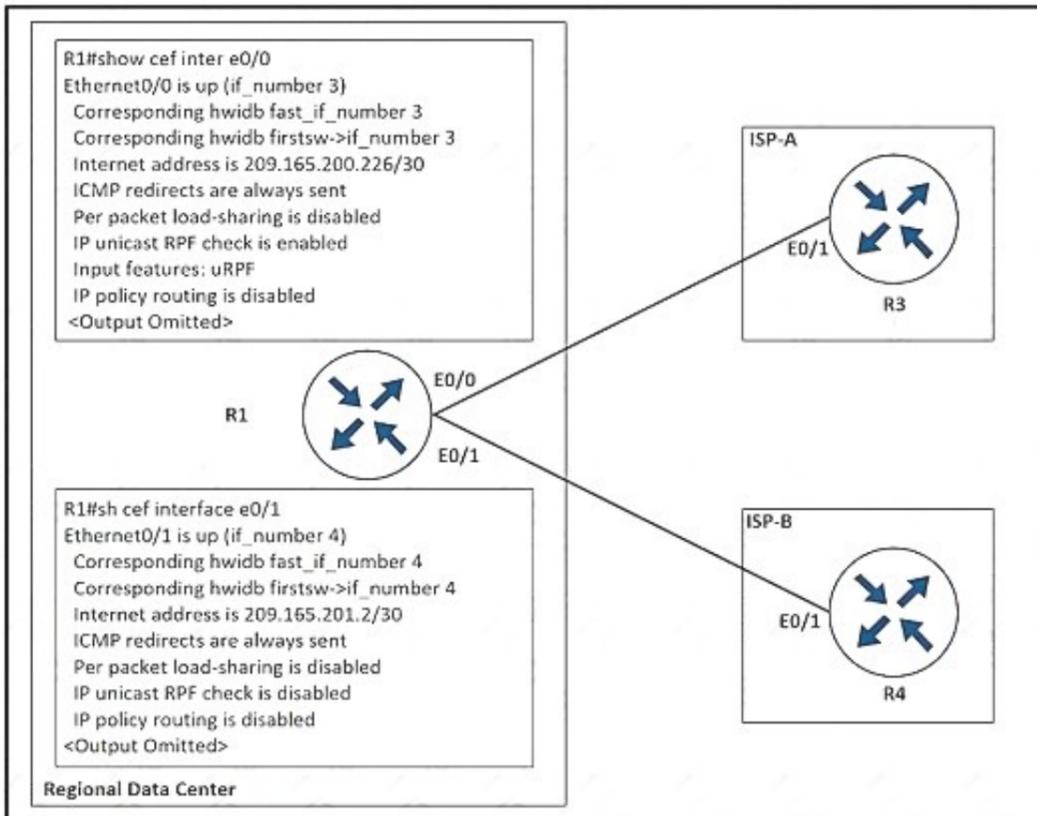
Refer to the exhibit. A network engineer is troubleshooting a failed link between R2 and R3 No traffic loss is reported from router R5 to HQ Which command fixes the separated backbone?

- A. R2(config-router)#no area 21 stub
- B. R2(config_router)#area 21 virtual-link 192.168.125.5
- C. R3(config-router)#area 21 virtual-link 192.168.125.5
- D. R3(config-router)#no area 21 stub

Answer: D

NEW QUESTION 22

- (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 26

- (Exam Topic 3)

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

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

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

Refer to the exhibit The SNMP server with IP address 172.16 4 4 cannot access host router A Which configuration command on router A resolves the issue?

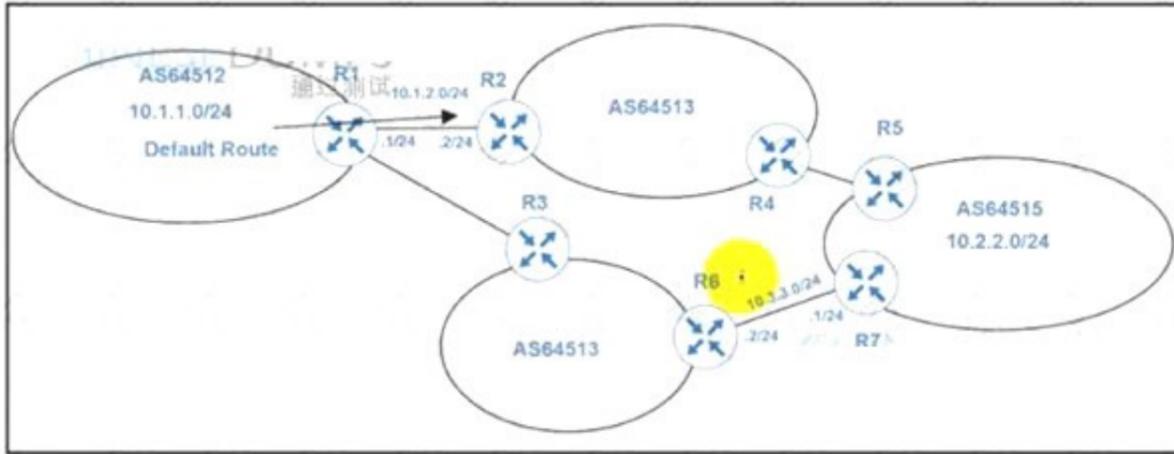
- A. snmp-server community ccnp
- B. access-list 4 permit 172.16.4.0 0.0.0.3
- C. access-list 4 permit host 172.16.4.4
- D. snmp-server host 172.16.4.4 ccnp

Answer: D

NEW QUESTION 27

- (Exam Topic 3)

Refer to the exhibit.



An engineer must configure PBR on R1 to reach to 10.2.2.0/24 via R3 AS64513 as the primary path and a backup route through default route via R2 AS64513. All BGP routes are in the routing table of R1, but a static default route overrides BGP routes. Which PBR configuration achieves the objective?

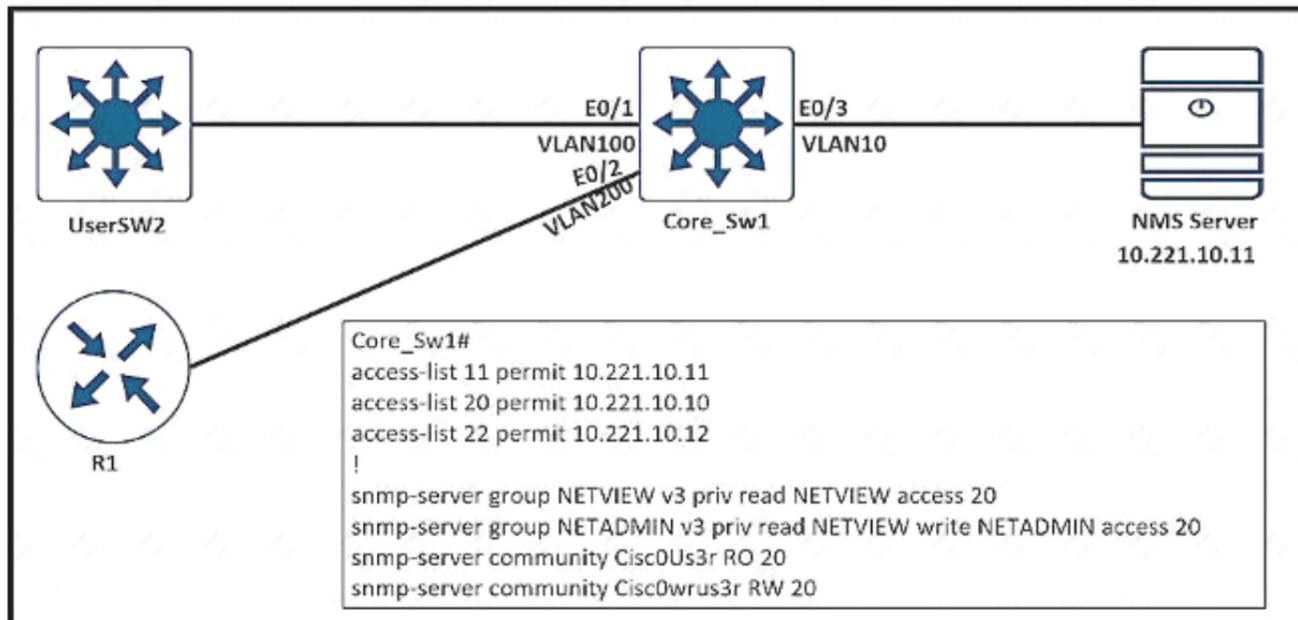
- access-list 100 permit ip 10.1.1.0 0.0.0.255 10.2.2.0 0.0.0.255
 route-map PBR permit 10
 match ip address 100
 set ip next-hop 10.3.3.1
- access-list 100 permit ip 10.1.1.0 0.0.0.255 10.2.2.0 0.0.0.255
 route-map PBR permit 10
 match ip address 100
 set ip next-hop recursive 10.3.3.1
- access-list 100 permit ip 10.1.1.0 255.255.255.0 10.2.2.0 255.255.255.0
 route-map PBR permit 10
 match ip address 100
 set ip next-hop recursive 10.3.3.1
- access-list 100 permit ip 10.1.1.0 255.255.255.0 10.2.2.0 255.255.255.0
 route-map PBR permit 10
 match ip address 100
 set ip next-hop 10.3.3.1

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

Answer: B

NEW QUESTION 30

- (Exam Topic 3)

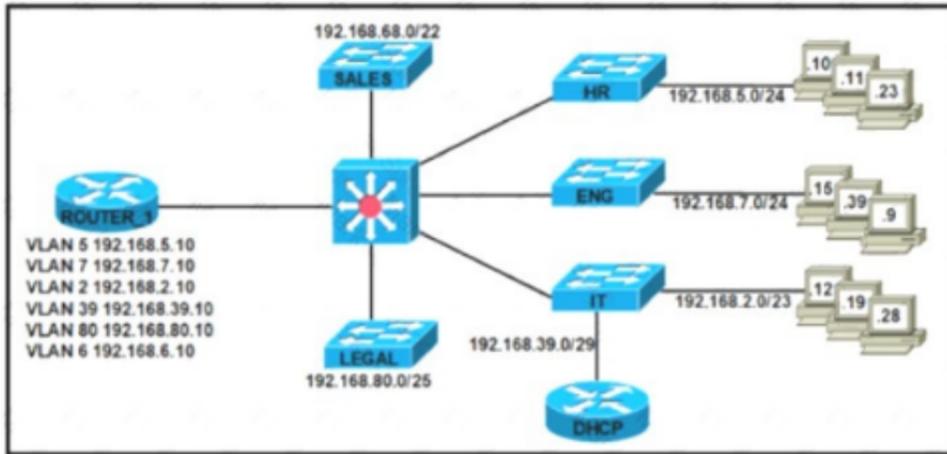


- A. access-list 20 permit 10.221.10.12
- B. snmp-server group NETVIEW v2c priv read NETVIEW access 20
- C. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22
- D. access-list 20 permit 10.221.10.11

Answer: D

NEW QUESTION 35

- (Exam Topic 3)



Refer to the exhibit After an engineer configured a new Cisco router as a DHCP server, users reported two primary issues:

- > Devices in the HR subnet have intermittent connectivity problems.
- > Workstations in the LEGAL subnet cannot obtain IP addresses.

Which configurations must the engineer apply to ROUTER_1 to restore connectivity for the affected devices?

- ```
interface GigabitEthernet0/0.5
 encapsulation dot1Q 5
 ip address 192.168.5.10 255.255.255.0
 ip helper-address 192.168.39.100
!
interface GigabitEthernet0/0.80
 encapsulation dot1Q 80
 ip address 192.168.80.10 255.255.255.128
 ip helper-address 192.168.39.100
!
ip dhcp excluded-address 192.168.5.1 192.168.5.10
ip dhcp excluded-address 192.168.80.1 192.168.80.10
!
ip dhcp pool LEGAL
 network 192.168.80.0 255.255.255.128
 default-router 192.168.80.10

ip dhcp pool HR
 network 192.168.5.0 255.255.255.0
 default-router 192.168.5.10
```
- ```
interface GigabitEthernet0/0.5
 encapsulation dot1Q 5
 ip address 192.168.5.10 255.255.255.0
 ip helper-address 192.168.39.100
!
interface GigabitEthernet0/0.80
 encapsulation dot1Q 80
 ip address 192.168.80.10 255.255.255.128
 ip helper-address 192.168.39.100
!
ip dhcp excluded-address 192.168.80.1 192.168.80.10
!
ip dhcp pool LEGAL
 network 192.168.80.0 255.255.255.128
 default-router 192.168.80.10
!
ip dhcp pool HR
 network 192.168.5.0 255.255.255.0
 default-router 192.168.5.10
```

```

○ interface GigabitEthernet0/0.5
  encapsulation dot1Q 5
  ip address 192.168.5.10 255.255.255.0
  ip helper-address 192.168.93.100
  !
interface GigabitEthernet0/0.80
  encapsulation dot1Q 80
  ip address 192.168.80.10 255.255.255.128
  ip helper-address 192.168.39.100
  !
ip dhcp excluded-address 192.168.5.1 192.168.5.1
ip dhcp excluded-address 192.168.80.1 192.168.80.10
  !
ip dhcp pool LEGAL
  network 192.168.80.0 255.255.255.128
  default-router 192.168.80.10
  !
ip dhcp pool HR
  network 192.168.5.0 255.255.255.0
  default-router 192.168.5.10
  !
○ interface GigabitEthernet0/0.5
  encapsulation dot1Q 5
  ip address 192.168.5.10 255.255.255.0
  ip helper-address 192.168.39.100
  !
interface GigabitEthernet0/0.80
  encapsulation dot1Q 80
  ip address 192.168.80.10 255.255.255.128
  ip helper-address 192.168.39.100
  !
ip dhcp excluded-address 192.168.5.1 192.168.5.5
ip dhcp excluded-address 192.168.80.1 192.168.80.110
  !
ip dhcp pool LEGAL
  network 192.168.80.0 255.255.255.128
  default-router 192.168.80.10
  !
ip dhcp pool HR
  network 192.168.5.0 255.255.255.0
  default-router 192.168.5.10
  !

```

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

Answer: A

NEW QUESTION 38

- (Exam Topic 3)

configuration on the hub router meets this requirement?

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

Answer: A

NEW QUESTION 43

- (Exam Topic 3)

```

R1:
interface Loopback1
no ip address
ipv6 address 100A:0:100C::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Loopback4
no ip address
ipv6 address 400A:0:400C::1/64
ipv6 enable
ipv6 ospf 10 area 0
!
interface Serial1/0
no ip address
ipv6 address AB01:2011:7:100::/64 eui-64
ipv6 enable
ipv6 ospf network point-to-point
ipv6 ospf 10 area 0
ipv6 traffic-filter DENY_TELNET_Lo4 in
serial restart-delay 0
clock rate 64000
!
ipv6 router ospf 10
router-id 1.1.1.1
log-adjacency-changes
!
ipv6 access-list DENY_TELNET_LO4
sequence 20 deny tcp host 100:ABC:2011:7 host 400A:0:400C::1 eq telnet permit ipv6 any any
end

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

```

```

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

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

ipv6 access-list DENY_TELNET_Lo4
sequence 20 deny tcp host 100:ABC:2011:7 host 400A:0:400C::1 eq telnet permit ipv6 any any
end
    
```

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

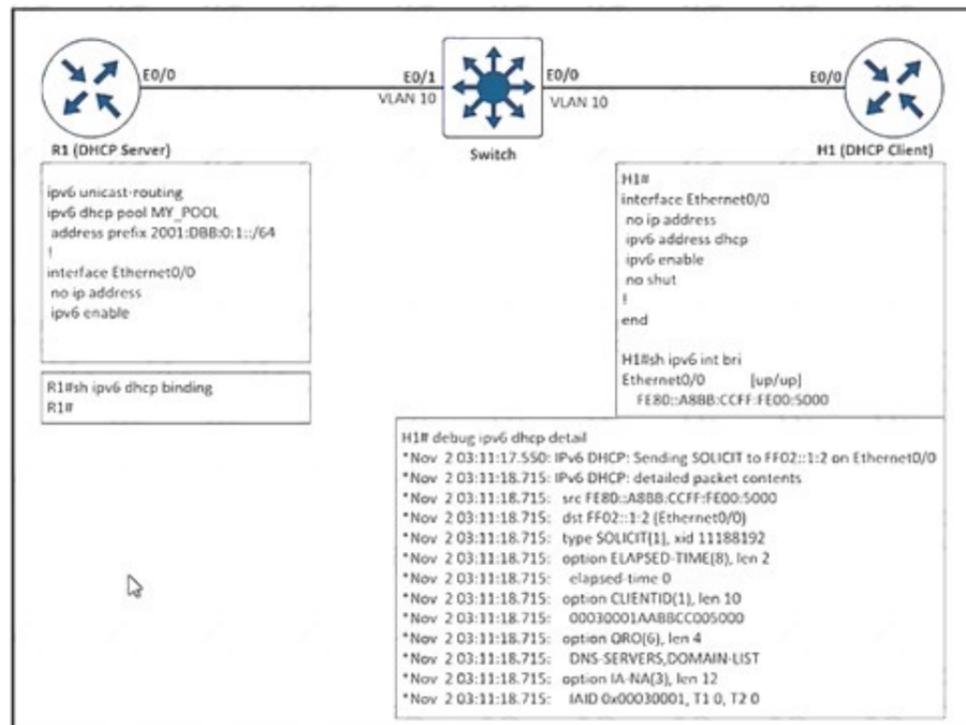
- A. sequence 20 permit tcp host 1001 ABC:2011:7:: 1 host 400A:0:400C::1 eq telnet
- B. sequence 20 deny tcp host 400A:0:400C::1 host 1001 :ABC:2011:7::1 eq telnet
- C. sequence 20 deny tcp host 1001:ABC:2011:7::1 host 400A:0:400C::1 eq telnet
- D. sequence 20 permit tcp host 400A:0:400C::1 host 1001ABC:2011:7::1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

Answer: C

NEW QUESTION 44

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: C

NEW QUESTION 47

- (Exam Topic 3)

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

Comment

Guidelines Topology Tasks

Topology Diagram

```

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

Guidelines Topology Tasks

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

1. VRF "cu-red" has interfaces on routers R1 and R2. Both routers are preconfigured with IP addressing, VRFs, and BGP. Do not use the BGP network statement for advertisement.
2. VRF "cu-green" has interfaces on routers R1 and R2.
3. BGP on router R1 populates VRF routes between router R1 and R2.
4. BGP on router R2 populates VRF routes between router R1 and R2.
5. LAN to LAN is reachable between SW1 and SW3 for VRF "cu-red" and between SW2 and SW4 for VRF "cu-green". All switches are preconfigured.

```

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

R1

```

R1 R2 SW1 SW2 SW3 SW4
R1>
R1>
R1>
R1>
R1>en
R1#sh run
Building configuration...

Current configuration : 1353 bytes
!
version 15.8
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname R1
!
boot-start-marker
boot-end-marker
!
!
no aaa new-model
!
    
```



```

R1  R2  SW1  SW2  SW3  SW4
interface Ethernet0/2.200
 encapsulation dot1Q 200
 ip address 10.10.20.2 255.255.255.252
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
router bgp 65000
 bgp log-neighbor-changes
 no bgp default ipv4-unicast
!
 ip forward-protocol nd
!
!
 no ip http server
 no ip http secure-server
!
 ipv6 ioam timestamp
!
!
!
 control-plane
!
!
!

```

```

R1  R2  SW1  SW2  SW3  SW4
interface Ethernet0/2.200
 encapsulation dot1Q 200
 ip address 10.10.20.2 255.255.255.252
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
router bgp 65000
 bgp log-neighbor-changes
 no bgp default ipv4-unicast
!
 ip forward-protocol nd
!
!
 no ip http server
 no ip http secure-server
!
 ipv6 ioam timestamp
!
!
!
 control-plane
!
!
!

```

SW1

```

R1  R2  SW1  SW2  SW3  SW4
SW1>en
SW1#sh run
Building configuration...

Current configuration : 942 bytes
!
! Last configuration change at 04:43:09 PST Sat May 7 20
22
!
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service compress-config
!
hostname SW1
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
clock timezone PST -8 0
!
!
!

```



```

!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
On R2:
interface Ethernet0/0
ip vrf forwarding cu-red
ip address 192.168.2.254 255.255.255.0
Check reachability to SW3: R2#ping vrf cu-red 192.168.2.1 Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!
> Use vrf cu-green for SW2 & SW4:
On R1:
interface Ethernet0/1
ip vrf forwarding cu-green
ip address 192.168.20.254 255.255.255.0
Test reachability to SW2: R1#ping vrf cu-green 192.168.20.1 Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.22.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
On R2:
interface Ethernet0/1
ip vrf forwarding cu-green
ip address 192.168.22.254 255.255.255.0
Test reachability to SW4: R2#ping vrf cu-green 192.168.22.1 Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.20.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
> On R1:
interface Ethernet0/2.100 mpls ip
!
interface Ethernet0/2.200 mpls ip
!
Configure BGP:
router bgp 65000
neighbor 10.10.10.2 remote-as 65000
neighbor 10.10.20.2 remote-as 65000
!
address-family vpnv4 neighbor 10.10.10.2 activate
neighbor 10.10.20.2 activate exit-address-family
!
address-family ipv4 vrf cu-green redistribute connected
exit-address-family
!
address-family ipv4 vrf cu-red redistribute connected
exit-address-family
!
R1(config)#ip vrf cu-red
R1(config-vrf)#route-target both 65000:100
!
R1(config)#ip vrf cu-green
R1(config-vrf)#route-target both 65000:200
> On R2:
interface Ethernet0/2.100
mpls ip
!
interface Ethernet0/2.200 mpls ip
!
router bgp 65000
neighbor 10.10.10.1 remote-as 65000
neighbor 10.10.20.1 remote-as 65000
!
address-family vpnv4 neighbor 10.10.10.1 activate
neighbor 10.10.20.1 activate exit-address-family
!
address-family ipv4 vrf cu-green redistribute connected
exit-address-family
!
address-family ipv4 vrf cu-red redistribute connected
exit-address-family
R2(config)#ip vrf cu-red
R2(config-vrf)#route-target both 65000:100
!
R2(config)#ip vrf cu-green
R2(config-vrf)#route-target both 65000:200
> Verification:
From SW1 to SW3: SW1#ping 192.168.1.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
But can't Reach SW2 or SW4 in VRF cu-green: SW1#ping 192.168.22.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.22.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)

```

```
SW1#ping 192.168.20.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.20.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
Same Test for SW2: From SW2 to SW4: SW2#ping 192.168.20.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.20.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms
But can't Reach SW3 or SW1 in VRF cu-red: SW2#ping 192.168.1.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
SW2#ping 192.168.2.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.2.1, timeout is 2 seconds: U.U.U
Success rate is 0 percent (0/5)
Both R1 & R2 has separate tables for VRFs cu-red and cu-green.
```

NEW QUESTION 52

- (Exam Topic 3)

The network administrator configured CoPP so that all HTTP and HTTPS traffic from the administrator device located at 172.16.1.99 toward the router CPU is limited to 500 kbps. Any traffic that exceeds this limit must be dropped.

```
access-list 100 permit ip host 172.16.1.99 any
```

```
!
```

```
class-map CM-ADMIN match access-group 100
```

```
!
```

```
policy-map PM-COPP class CM-ADMIN
```

```
police 500000 conform-action transmit
```

```
!
```

```
interface E0/0
```

```
service-policy input PM-COPP
```

CoPP failed to capture the desired traffic and the CPU load is getting higher. Which two configurations resolve the issue? (Choose two.)

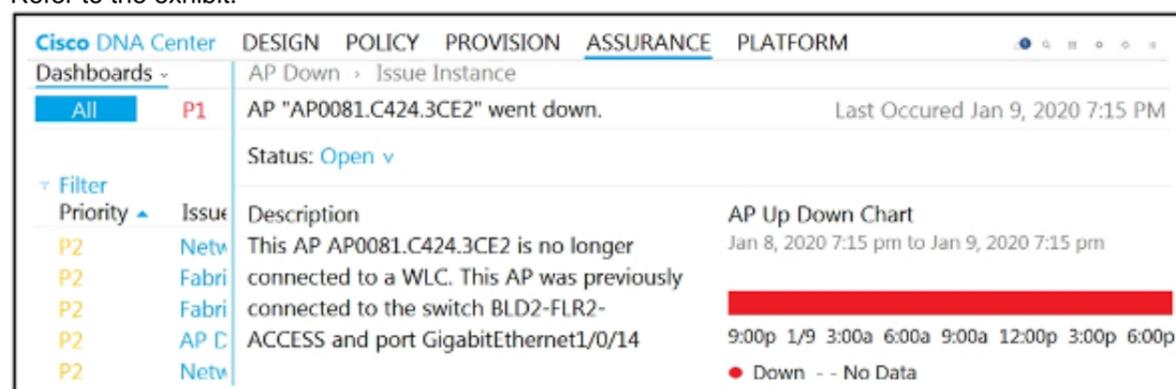
- A. interface E0/0no service-policy input PM-COPP!control-planeservice-policy input PM-COPP
- B. policy-map PM-COPP class CM-ADMINno police 500000 conform-action transmit police 500 conform-action transmit!control-planeservice-policy input PM-COPP
- C. no access-list 100access-list 100 permit tcp host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

Answer: A

NEW QUESTION 57

- (Exam Topic 3)

Refer to the exhibit.



The AP status from Cisco DNA Center Assurance Dashboard shows some physical connectivity issues from access switch interface G1/0/14. Which command generates the diagnostic data to resolve the physical connectivity issues?

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

Answer: A

Explanation:

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

To start the TDR test, perform this task:

Step 1 (Starts the TDR test): test cable-diagnostics tdr {interface {interface-number}}

Step 2 (Displays the TDR test counter information): show cable-diagnostics tdr {interface interface-number}

[https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9600/software/release/16-](https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9600/software/release/16-11/configuration_guide/int_hw/b_1611_int_and_hw_9600_cg/checking_port_status_and_connectivity.pdf)

[11/configuration_guide/int_hw/b_1611_int_and_hw_9600_cg/checking_port_status_and_connectivity.pdf](https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9600/software/release/16-11/configuration_guide/int_hw/b_1611_int_and_hw_9600_cg/checking_port_status_and_connectivity.pdf)

Text, table Description automatically generated

TDR test started on interface Gi1/0/14
 A TDR test can take a few seconds to run on an interface
 Use 'show cable-diagnostics tdr' to read the TDR results.

Wait 10 seconds and then issue the command to show the cable diagnostics result:

```
TDR test last run on: December 05 16:50:53
Interface Speed Local pair Pair length Remote pair Pair status
Gi1/0/14 1000M Pair A 19 +/- 10 meters Pair B Normal
          Pair B 19 +/- 10 meters Pair A Normal
          Pair C 19 +/- 10 meters Pair D Normal
          Pair D 19 +/- 10 meters Pair C Normal
```

Notice that the results are "Normal" in the above example. Other results can be:
 + Open: Open circuit. This means that one (or more) pair has "no pin contact".
 + Short: Short circuit.
 + Impedance Mismatched: Bad cable.]

NEW QUESTION 58

- (Exam Topic 3)

The network administrator configured the router for Control Plane Policing to limit OSPF traffic to be policed to 1 Mbps. Any traffic that exceeds this limit must also be allowed at this point for traffic analysis. The router configuration is:

```
access-list 100 permit ospf any any
!
class-map CM-OSPF match access-group 100
!
policy-map PM-COPP class CM-OSPF
police 1000000 conform-action transmit
!
control-plane
service-policy output PM-COPP
```

The Control Plane Policing failed to monitor and police OSPF traffic. Which configuration resolves this issue?

- no access-list 100
 access-list 100 permit tcp any any eq 179
 access-list 100 permit ospf any any
 access-list 101 permit tcp any any range 22 23
 !
 !
 class-map CM-MGMT
 no match access-group 100
 match access-group 101
 !
 control-plane
 no service-policy output PM-COPP
 service-policy input PM-COPP
- No access-list 100
 access-list 100 permit tcp any any eq 179
 access-list 100 permit tcp any any range eq 22
 access-list 100 permit tcp any any range eq 23
 access-list 100 permit ospf any any
- control-plane
 no service-policy output PM-COPP
 service-policy input PM-COPP
- no access-list 100
 access-list 100 permit tcp any any eq 179
 access-list 100 permit ospf any any
 access-list 101 permit tcp any any range 22 23
 !
 !
 class-map CM-MGMT
 no match access-group 100
 match access-group 101

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

Answer: A

NEW QUESTION 60

- (Exam Topic 3)

```

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

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

```

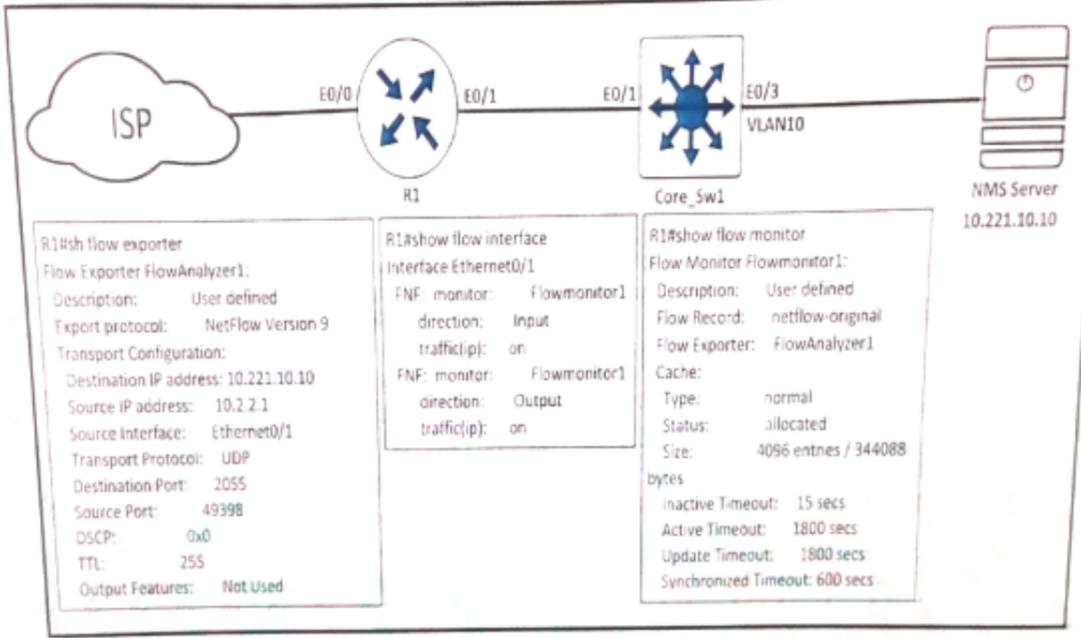
Refer to the exhibit A network engineer notices that the configured track option is down Which configuration resolves the issue*?

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

Answer: A

NEW QUESTION 65

- (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?

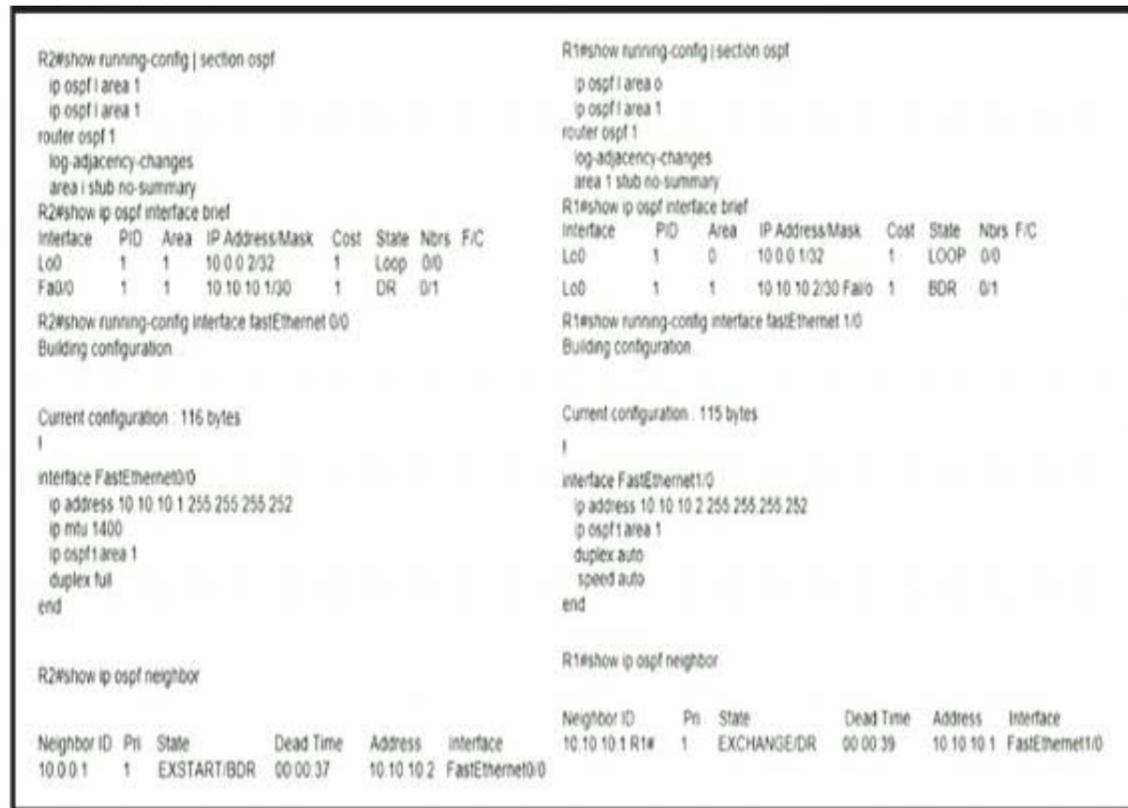
- A. flow monitor Flowmonitor1 source Ethernet0/0
- B. interface Ethernet0/1 ip flow monitor Flowmonitor1 input ip flow monitor Flowmonitor1 output
- C. interface Ethernet0/0 ip flow monitor Flowmonitor1 input ip flow monitor Flowmonitor1 output
- D. flow exporter FlowAnalyzer1 source Ethernet0/0

Answer: C

NEW QUESTION 70

- (Exam Topic 3)

Refer to the exhibit.



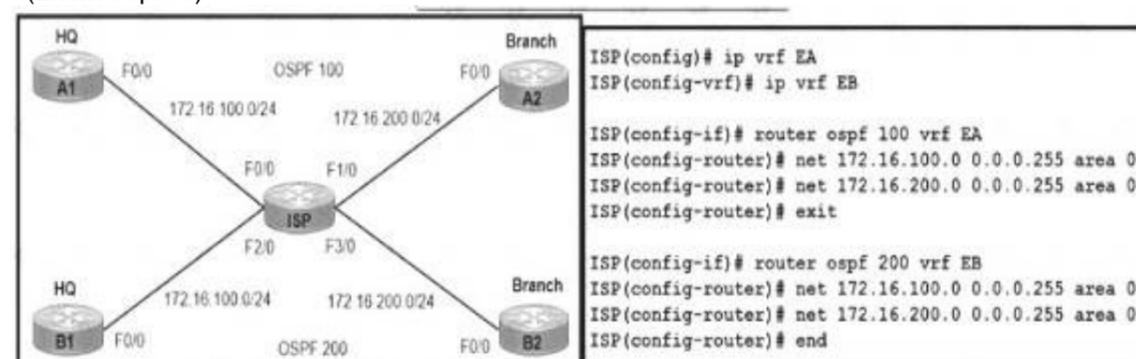
Which action restores OSPF adjacency between R1 and R2?

- A. Change the IP MTU of R1 Fa1/0 to 1300
- B. Change the IP MTU of R2 Fa0/0 to 1300
- C. Change the IP MTU of R1 Fa1/0 to 1500
- D. Change the IP MTU of R2 Fa0/0 to 1500

Answer: D

NEW QUESTION 71

- (Exam Topic 3)



Refer to the exhibit. A network engineer is provisioning end-to-end traffic service for two different enterprise networks with these requirements

- > The OSPF process must differ between customers on HQ and Branch office routers, and adjacencies should come up instantly.
- > The enterprise networks are connected with overlapping networks between HO and a branch office Which configuration meets the requirements for a customer site?

A)

```
ISP(config)#int f3/0
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA2_Branch
ISP(config-if)#ip address 172.16.200.2 255.255.255.0
ISP(config-if)#no shut
```

B)

```
ISP(config)#int f2/0
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA1_HQ
ISP(config-if)#ip address 172.16.100.2 255.255.255.0
ISP(config-if)#no shut
```

C)

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

D)

```
ISP(config-if)#int f1/0
ISP(config-if)#ip vrf forwarding EA
ISP(config-if)#description TO->EA2_Branch
ISP(config-if)#ip add 172.16.200.2 255.255.255.0
ISP(config-if)#no shut
```

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

Answer: A

NEW QUESTION 73

- (Exam Topic 3)

Refer to the exhibit.

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

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

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

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

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

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

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

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

Answer: C

Explanation:

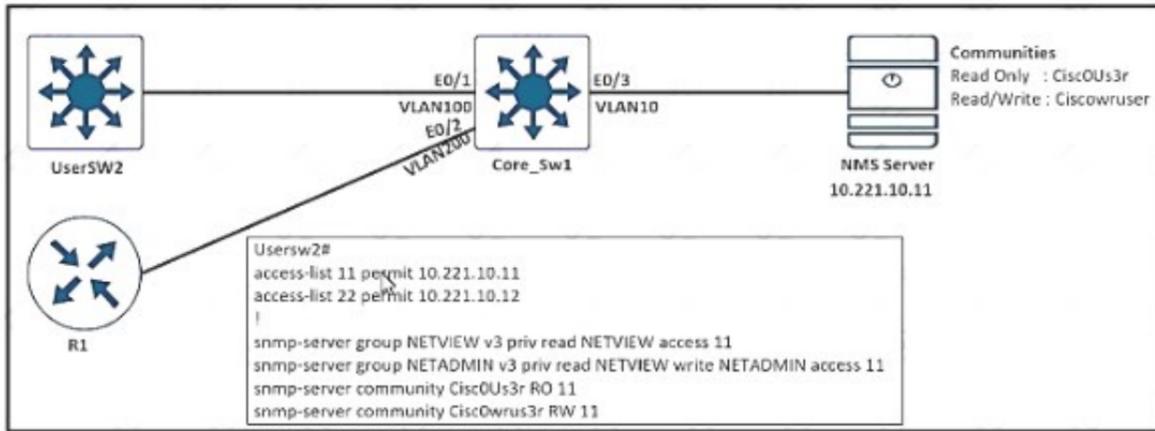
In this question we are advertising the tunnel IP address 192.168.12.2 to the other side. When other end receives the EIGRP advertisement, it realizes it can reach the other side of the tunnel via EIGRP. In other words, it reaches the tunnel destination through the tunnel itself -> This causes "recursive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

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

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

NEW QUESTION 78

- (Exam Topic 3)



Refer to the exhibit. An engineer configured SNMP Communities on UserSW2 switch, but the SNMP server cannot upload modified configurations to the switch. Which configuration resolves this issue?

- A. snmp-server community Ciscowru3r RW 11
- B. snmp-server group NETADMIN v3 priv read NETVIEW write NETADMIN access 22
- C. snmp-server community CiscoUs3r RW 11
- D. snmp-server group NETVIEW v2c priv read NETVIEW access 11

Answer: A

NEW QUESTION 82

- (Exam Topic 3)

What does the MP-BGP OPEN message contain?

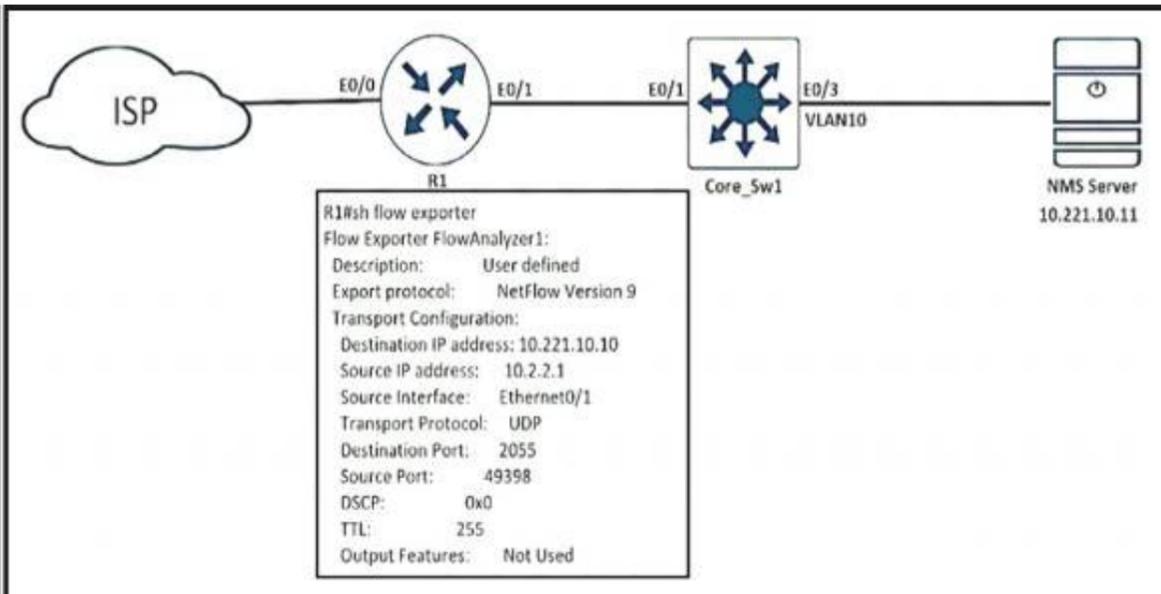
- A. MPLS labels and the IP address of the router that receives the message
- B. the version number and the AS number to which the router belongs
- C. IP routing information and the AS number to which the router belongs
- D. NLRI, path attributes, and IP addresses of the sending and receiving routers

Answer: B

NEW QUESTION 86

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: B

Explanation:

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

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

NEW QUESTION 91

- (Exam Topic 3)

A customer requested a GRE tunnel through the provider network between two customer sites using loopback to hide internal networks. Which configuration on R2 establishes the tunnel with R1?

- A. R2(config)# interface Tunnel 1R2(config-if)# ip address 172.20.1.2 255.255.255.0 R2(config-if)# ip mtu 1400R2(config-if)# ip tcp adjust-mss 1360 R2(config-if)# tunnel source 192.168.20.1 R2(config-if)# tunnel destination 192.168.10.1
- B. R2(config)# interface Tunnel 1R2(config-if)# ip address 172.20.1.2 255.255.255.0 R2(config-if)# ip mtu 1400R2(config-if)# ip tcp adjust-mss 1360 R2(config-if)# tunnel source 10.10.2.2R2(config-if)# tunnel destination 10.10.1.1
- C. R2(config)# interface Tunnel 1R2(config-if)# ip address 172.20.1.2 255.255.255.0 R2(config-if)# ip mtu 1500R2(config-if)# ip tcp adjust-mss 1360 R2(config-if)# tunnel source 192.168.20.1 R2(config-if)# tunnel destination 10.10.1.1
- D. R2(config)# interface Tunnel 1R2(config-if)# ip address 172.20.1.2 255.255.255.0 R2(config-if)# ip mtu 1500R2(config-if)# ip tcp adjust-mss 1360 R2(config-if)# tunnel source 10.10.2.2 R2(config-if)# tunnel destination 10.10.1.1

Answer: D

NEW QUESTION 95

- (Exam Topic 3)

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

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

Answer: AC

NEW QUESTION 98

- (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 name ISP2 track 1
```

An administrator configures a router to stop using a particular default route if the DNS server 8.8.8.8 is not reachable through that route. However, this configuration did not work as desired and the default route still works even if the DNS server 8.8.8.8 is unreachable. Which two configuration changes resolve the issue? (Choose two.)

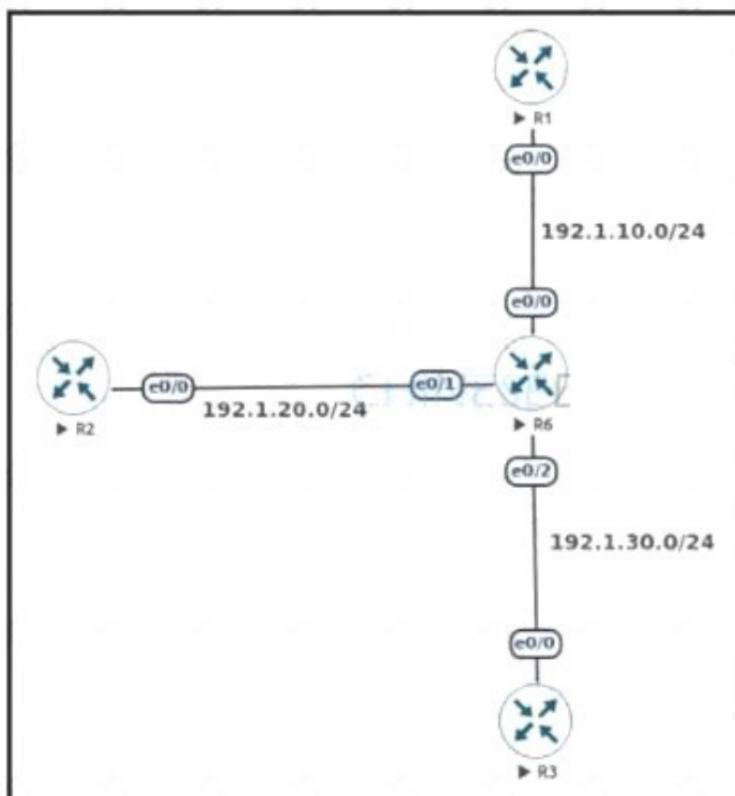
- A. Configure two static routes for the 8.8.8.8/32 destination to match the IP SLA probe for each ISP.
- B. Associate every IP SLA probe with the proper WAN address of the router.
- C. Reference the proper exit interfaces along with the next hops in both static default routes.
- D. Use a separate track object to reference the existing IP SLA 1 probe for every static route.
- E. Use a separate IP SLA probe and track object for every static route

Answer: AE

NEW QUESTION 100

- (Exam Topic 3)

Refer to the exhibit.



An engineer must configure DMVPN Phase 3 hub-and-spoke topology to enable a spoke-to-spoke tunnel. Which NHRP configuration meets the requirement on R6?

- Interface Tunnel1
 ip address 192.168.1.1 255.255.255.0
 tunnel source e 0/0
 tunnel mode gre multipoint
 ip nhrp network-id 1
- interface Tunnel1
 ip nhrp authentication Cisco123
 ip nhrp map multicast dynamic
 ip nhrp network-id 1
 ip nhrp holdtime 300
 ip nhrp redirect
- interface Tunnel1
 ip nhrp authentication Cisco123
 ip nhrp map multicast dynamic
 ip nhrp network-id 1
 ip nhrp holdtime 300
 ip nhrp shortcut
- Interface Tunnel 1
 ip address 192.168.1.1 255.255.255.0
 tunnel source e 0/1
 tunnel mode gre multipoint
 ip nhrp network-id 1
 ip nhrp map 192.168.1.2 192.1.20.2

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

Answer: B

NEW QUESTION 103

- (Exam Topic 3)

```

router eigrp 1
 variance 2

R1#show ip eigrp topology 172.16.100.5 255.255.255.255
IP-EIGRP (AS 1): Topology entry for 172.16.100.5/32
  State is Passive, Query origin flag is 1, 1 Successor(s), FD is 409600
  Routing Descriptor Blocks:
  10.4.1.5 (Ethernet1/0), from 10.4.1.5, Send flag is 0x0
    Composite metric is (409600/128256), Route is Internal
    Vector metric:
      Minimum bandwidth is 10000 Kbit
      Total delay is 6000 microseconds
      Reliability is 255/255
      Load is 1/255
      Minimum MTU is 1500
      Hop count is 1
  10.3.1.6 (Serial2/0), from 10.3.1.6, Send flag is 0x0
    Composite metric is (435200/409600), Route is Internal
    Vector metric:
      Minimum bandwidth is 10000 Kbit
      Total delay is 7000 microseconds
      Reliability is 255/255
      Load is 1/255
      Minimum MTU is 1500
      Hop count is 1
  10.3.1.6 (Serial2/0), from 10.3.1.6, Send flag is 0x0
    Composite metric is (435200/409600), Route is Internal
    Vector metric:
      Minimum bandwidth is 10000 Kbit
      Total delay is 7000 microseconds
      Reliability is 255/255
      Load is 1/255
      Minimum MTU is 1500
      Hop count is 2
  
```

Refer to the exhibit. A network engineer troubleshooting a packet drop problem for the host 172.16.100.5 notices that only one link is used and installed on the routing table, which saturates the bandwidth. Which action must the engineer take to resolve the high bandwidth utilization problem and share the traffic toward this host between the two available links?

- A. Set the eigrp variance equal to 4 to install a second route with a metric not larger than 4 times of the best metric.
- B. Change the EIGRP delay metric to meet the feasibility condition.
- C. Set the eigrp variance equal to 3 to install a second route with a metric not larger than 3 times of the best metric.
- D. Disable the eigrp split horizon loop protection mechanism.

Answer: B

NEW QUESTION 107

- (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.

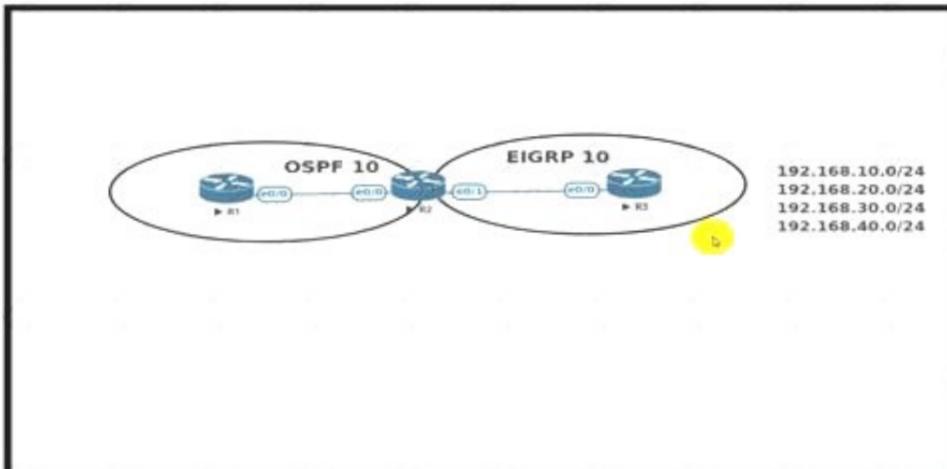
The first prefix-list “ip prefix-list PL-1 deny 172.16.0.0/16 le 23” means “all networks that fall within the 172.16.0.0/16 range AND that have a subnet mask of /23 or less” are denied.

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

NEW QUESTION 109

- (Exam Topic 3)

Refer to the exhibit.



An engineer must redistribute networks 192.168.10.0/24 and 192.168.20.0/24 into OSPF from EIGRP. where the metric must be added when traversing through multiple hops to start an external route of 20 The engineer notices that the external metric is fixed and does not add at each hop. Which configuration resolves the issue?

```
R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255
R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255
|
R2(config)#route-map RD permit 10
R2(config-route-map)#match ip address 10
R2(config-route-map)#set metric 20
R2(config-route-map)#set metric-type type-2
|
R2(config)#router ospf 10
R2(config-router)#redistribute eigrp 10 subnets route-map RD
R2(config-router)#
R2(config)#access-list 10 permit 192.168.10.0 0.0.0.255
R2(config)#access-list 10 permit 192.168.20.0 0.0.0.255
|
R2(config)#route-map RD permit 10
R2(config-route-map)#match ip address 10
R2(config-route-map)#set metric 20
R2(config-route-map)#set metric-type type-1
|
R2(config)#router ospf 10
R2(config-router)#redistribute eigrp 10 subnets route-map RD
```

```

R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255
R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255
|
R1(config)#route-map RD permit 10
R1(config-route-map)#match ip address 10
R1(config-route-map)#set metric 20
R1(config-route-map)#set metric-type type-1
|
R1(config)#router ospf 10
R1(config-router)#redistribute eigrp 10 subnets route-map RD

R1(config)#access-list 10 permit 192.168.10.0 0.0.0.255
R1(config)#access-list 10 permit 192.168.20.0 0.0.0.255
|
R1(config)#route-map RD permit 10
R1(config-route-map)#match ip address 10
R1(config-route-map)#set metric 20
R1(config-route-map)#set metric-type type-2
|
R1(config)#router ospf 10
R1(config-router)#redistribute eigrp 10 subnets route-map RD
    
```

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

Answer: B

NEW QUESTION 112

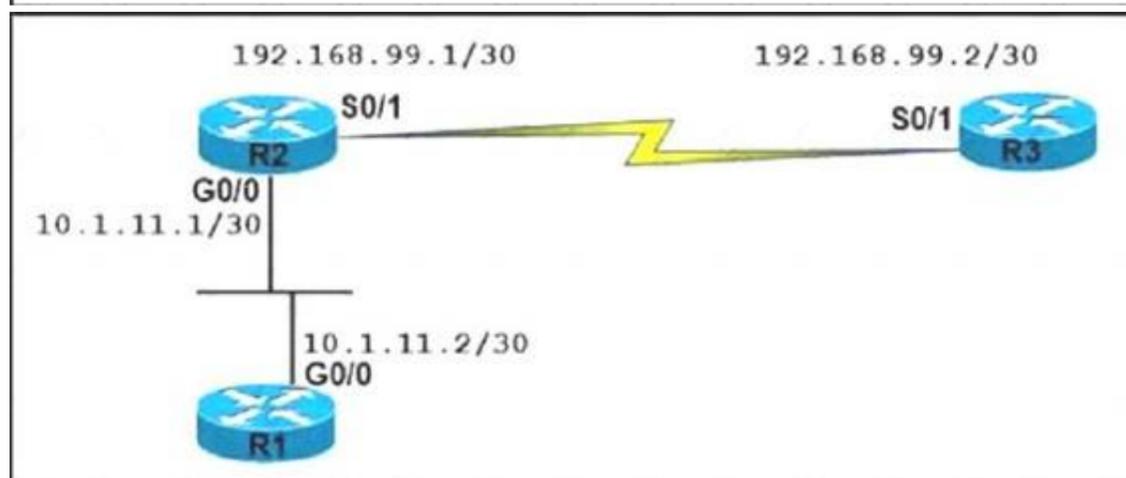
- (Exam Topic 3)

Refer to the exhibit.

```

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

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



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

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

Answer: B

Explanation:

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

Neighbors Stuck in Exstart/Exchange State

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

NEW QUESTION 115

- (Exam Topic 3)

```

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

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

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

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

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

Answer: D

NEW QUESTION 116

- (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

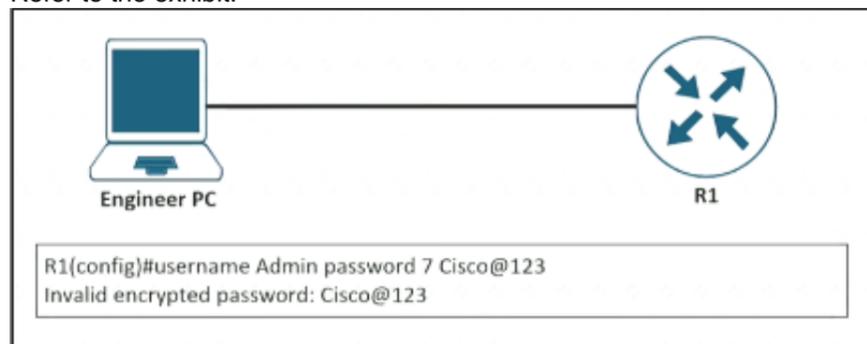
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 119

- (Exam Topic 3)

Refer to the exhibit.



An engineer is trying to add an encrypted user password that should not be visible in the router configuration. Which two configuration commands resolve the issue? (Choose two)

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

Answer: DF

NEW QUESTION 124

- (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 129

- (Exam Topic 3)

Refer to the exhibit.

```
snmp-server community Public RO 90
snmp-server community Private RW 90
R1#show access-list 90
Standard IP access list 90
 permit 10.11.110.11
 permit 10.11.111.12
```

Nov 6 06:45:11: %SNMP-3-AUTHFAIL: Authentication failure for SNMP req from host 10.11.110.12

Nov 6 06:45:12: %SNMP-3-AUTHFAIL: Authentication failure for SNMP req from host 10.11.110.12

A network administrator notices these console messages from host 10.11.110.12 originating from interface E1/0. The administrator considers this an unauthorized attempt to access SNMP on R1. Which action prevents the attempts to reach R1 E1/0?

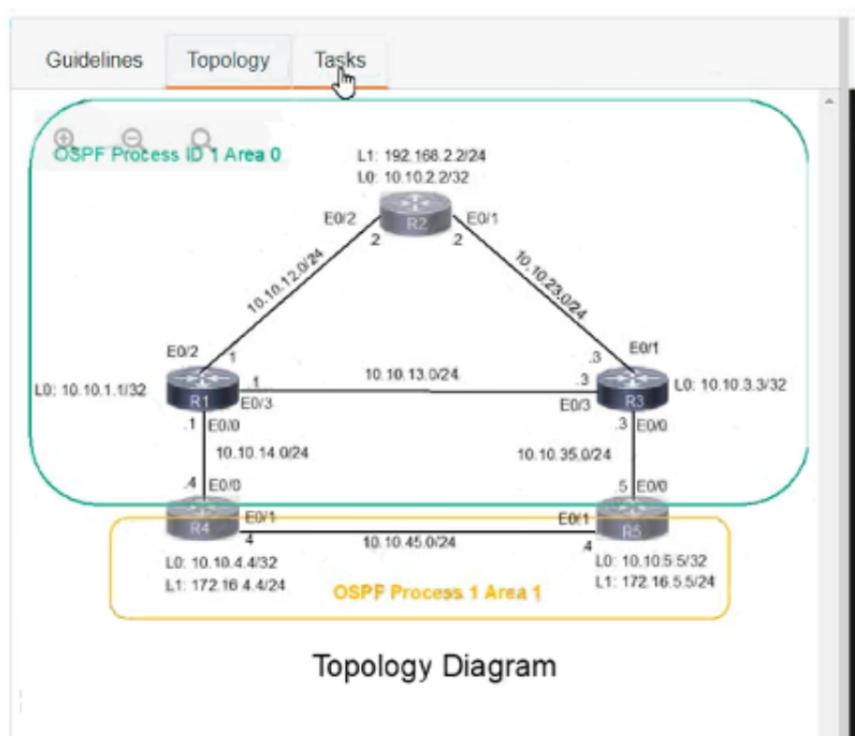
- A. Configure IOS control plane protection using ACL 90 on interface E1/0
- B. Configure IOS management plane protection using ACL 90 on interface E1/0
- C. Create an inbound ACL on interface E1/0 to deny SNMP from host 10.11.110.12
- D. Add a permit statement including the host 10.11.110.12 into ACL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

Answer: C

NEW QUESTION 130

- (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
```



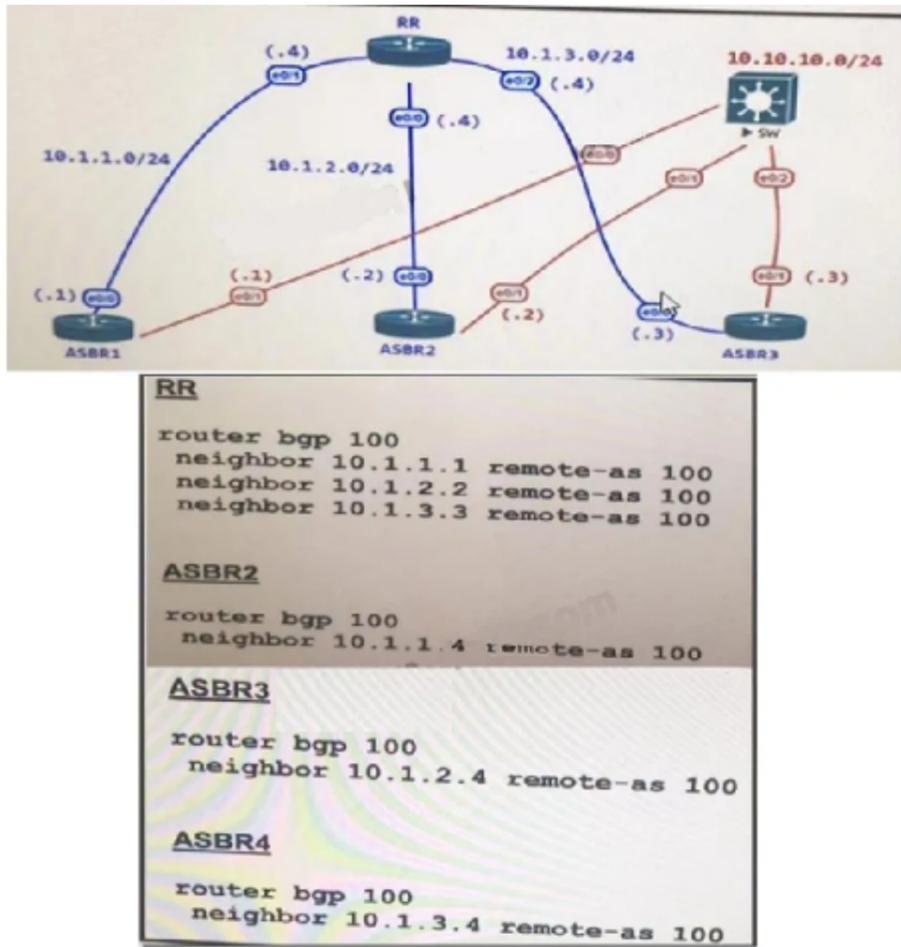
```
R2#show ip ospf nei
R2#show ip ospf neighbor

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        00:00:38   10.10.12.1   Ethernet0/1
R2#
```

NEW QUESTION 132

- (Exam Topic 3)

Refer to the exhibit.



The administrator configured the network device for end-to-end reachability, but the ASBRs are not propagation 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 134

- (Exam Topic 3)

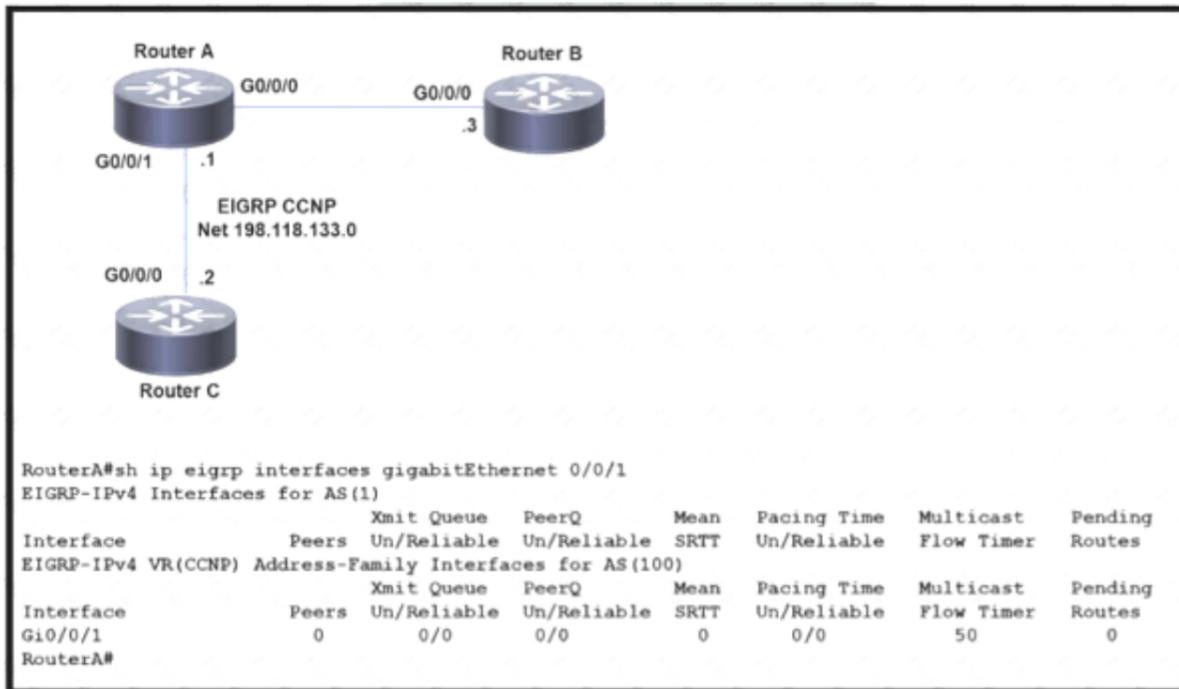
What is a function of the IPv6 DHCP Guard feature for DHCP messages?

- 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 136

- (Exam Topic 3)



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

```

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

B)

```

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

C)

```

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

D)

```

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

E)

```

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

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

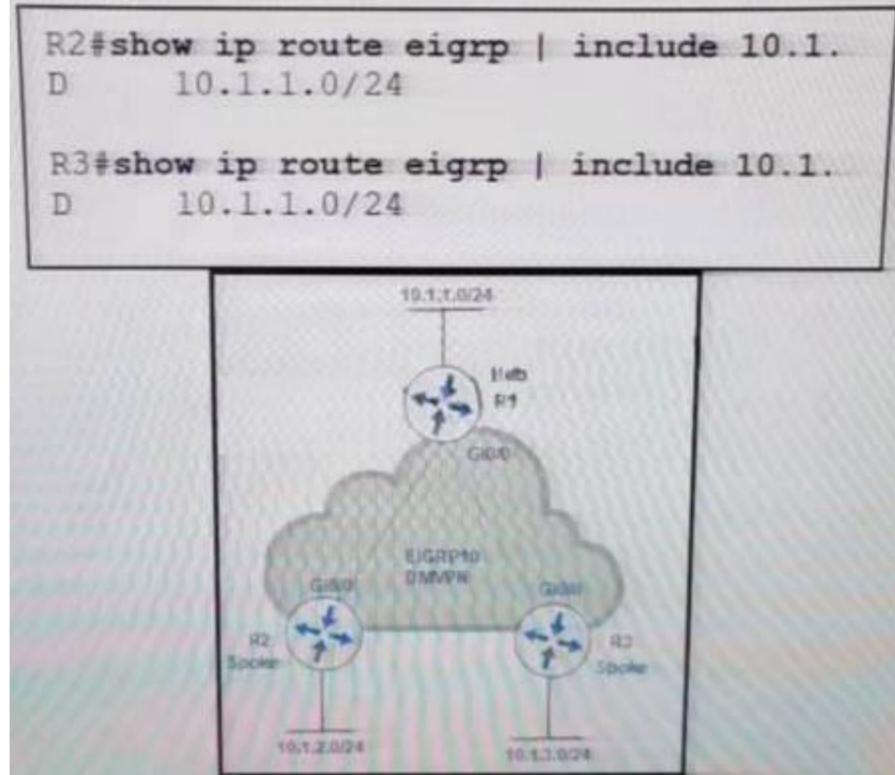
E. Option E

Answer: BC

NEW QUESTION 137

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: A

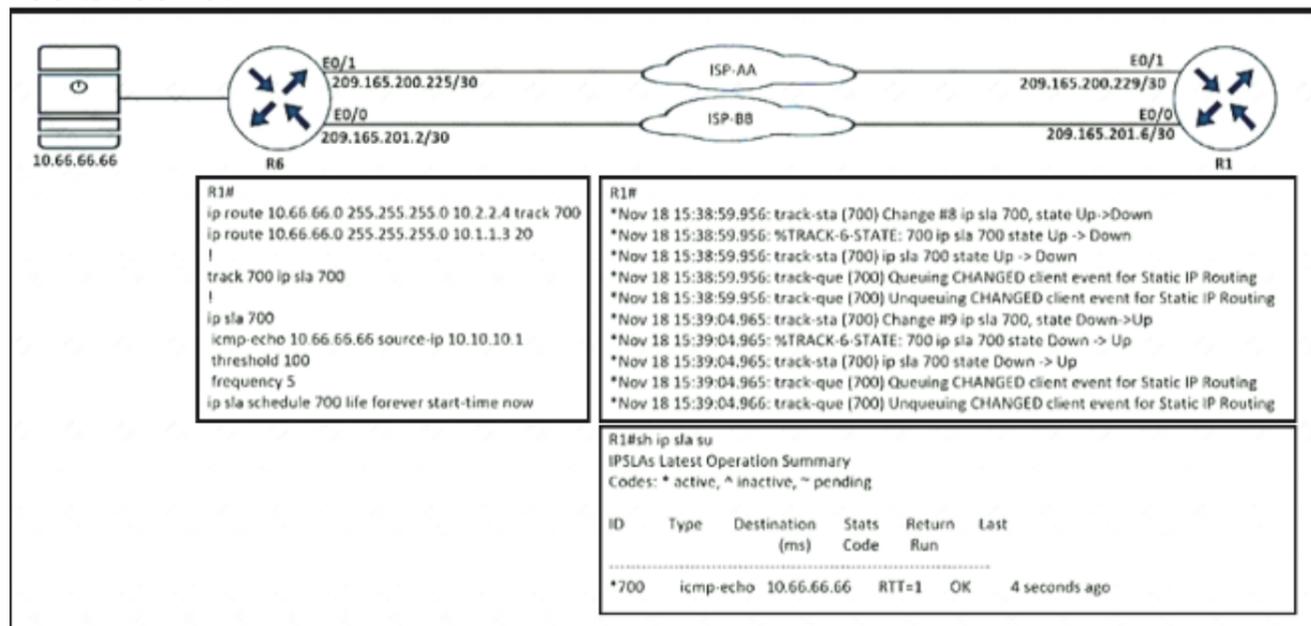
Explanation:

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

NEW QUESTION 140

- (Exam Topic 3)

Refer to the exhibit.



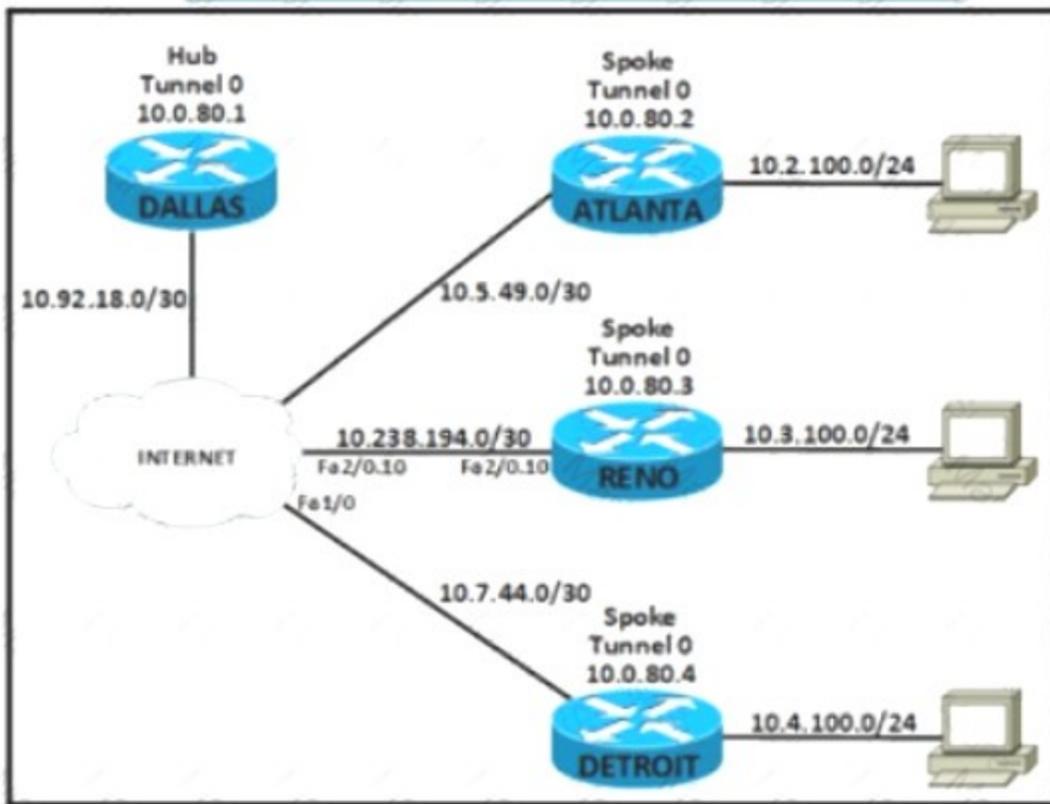
R1 is configured with IP SLA to check the availability of the server behind R6 but it kept failing. Which configuration resolves the issue?

- A. `R1(config)# ip sla 700`
`R1(config-track)# delay down 30 up 20`
- B. `R1(config)# ip sla 700`
`R1(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 143

- (Exam Topic 3)



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

Dallas

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

Which configuration accomplishes the task?

Reno

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

Detroit

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

Reno

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

Detroit

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

```

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

```

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

```

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

```

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

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

Answer: C

NEW QUESTION 144

- (Exam Topic 3)

```

R1#show ip bgp 10.0.0.0/8
BGP routing table entry for 10.0.0.0/8, version 0
Paths: (1 available, no best path)
Not advertised to any peer
Refresh Epoch 1
100
192.168.10.20 (inaccessible) from 192.168.20.20 (192.168.20.20)
Origin incomplete, metric 0, localpref 100, valid, internal rx
pathid: 0, tx pathid: 0
  
```

Refer to the exhibit. An engineer is troubleshooting a prefix advertisement issue from R3, which is not directly connected to R1. Which configuration resolves the issue?

- A)


```

R1(config)#router bgp 64512
R1(config-router)#neighbor 192.168.10.20 next-hop-self
      
```
- B)


```

R1(config)#router bgp 64512
R1(config-router)#neighbor 192.168.20.20 next-hop-self
      
```
- C)


```

R2(config)#router bgp 64512
R2(config-router)#neighbor 192.168.20.10 next-hop-self
      
```
- D)

```
R2(config)#router bgp 64512
R2(config-router)#neighbor 192.168.10.20 next-hop-self
```

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

Answer: A

NEW QUESTION 145

- (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 150

- (Exam Topic 3)

What is considered the primary advantage of running BFD?

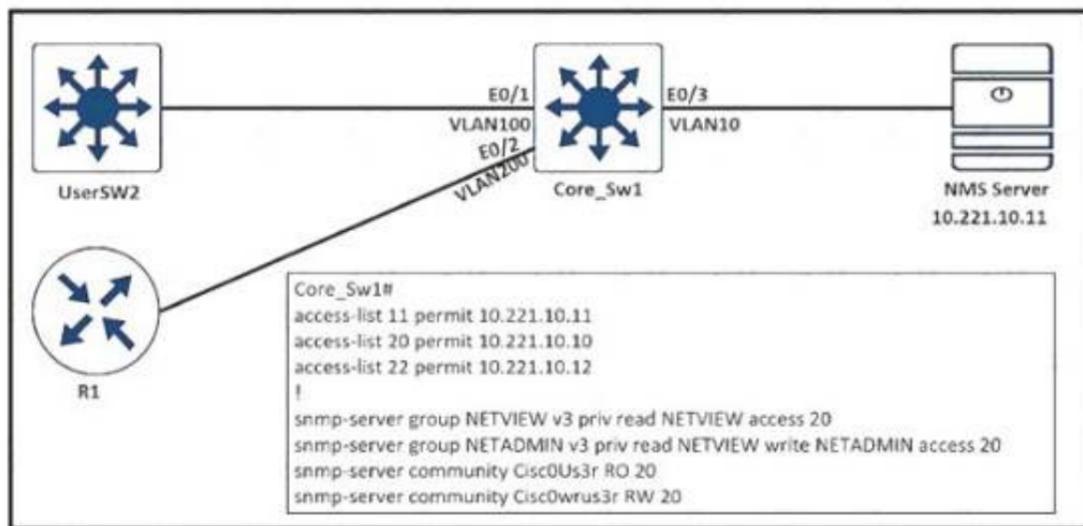
- A. reduction in time needed to detect Layer 2 switched neighbor failures
- B. reduction in time needed to detect Layer 3 routing neighbor failures
- C. reduction in CPU needed to detect Layer 2 switch neighbor failures
- D. reduction in CPU needed to detect Layer 3 routing neighbor failures

Answer: B

NEW QUESTION 152

- (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 156

- (Exam Topic 3)

What is LDP label binding?

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

Answer: C

Explanation:

Text Description automatically generated with medium confidence

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

NEW QUESTION 160

- (Exam Topic 3)

Refer to the exhibit.

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

An engineer configures the router 10.1.100.10 for EIGRP autosummarization so that R1 should receive the summary route of 10.0.0.0/8. However, R1 receives more specific /24 routes.

Which action resolves this issue?

- A. Router R1 should configure ip summary address eigrp (AS number) 10.0.0.0 255.0.0.0 for the R1 Fast Ethernet 0/0 connected interface.
- B. Router R1 should configure ip route 10.0.0.0 255.0.0.0 null 0 for the routes that are received on R1.
- C. Router 10.1.100.10 should configure ip route 10.0.0.0 255.0.0.0 null 0 for the routes that are summarized toward R1.
- D. Router 10.1.100.10 should configure ip summary address eigrp (AS number) 10.0.0.0 255.0.0.0 for the R1 Fast Ethernet 0/0 connected interface.

Answer: D

NEW QUESTION 162

- (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

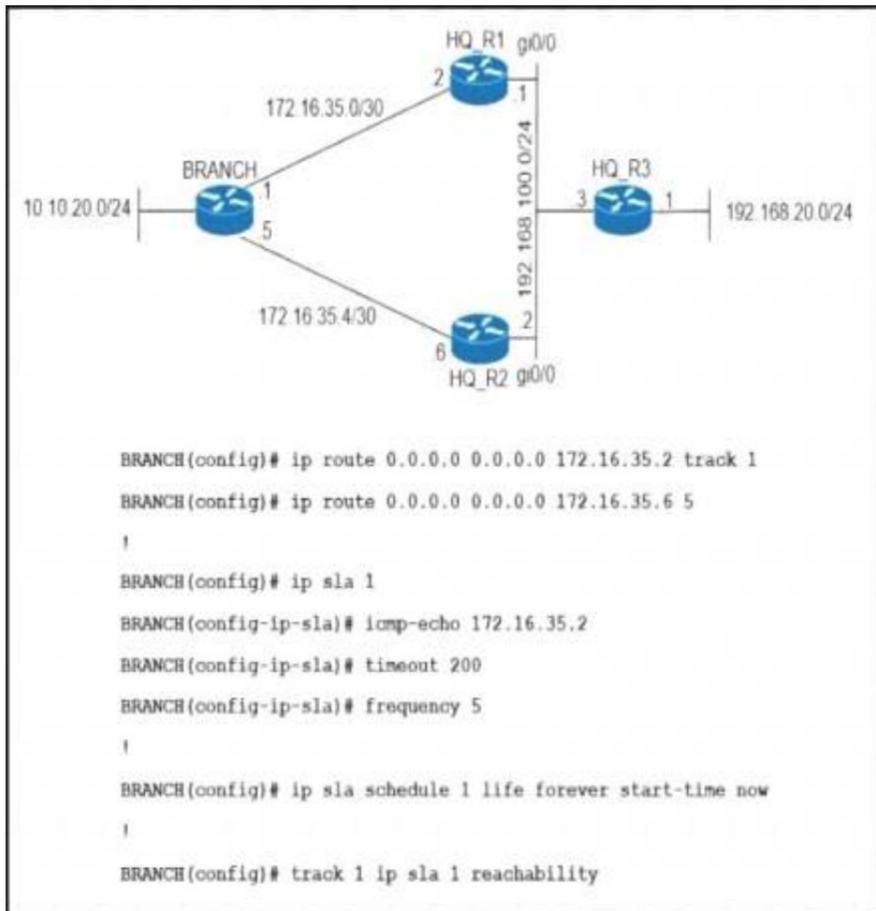
Explanation:

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 165

- (Exam Topic 2)



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

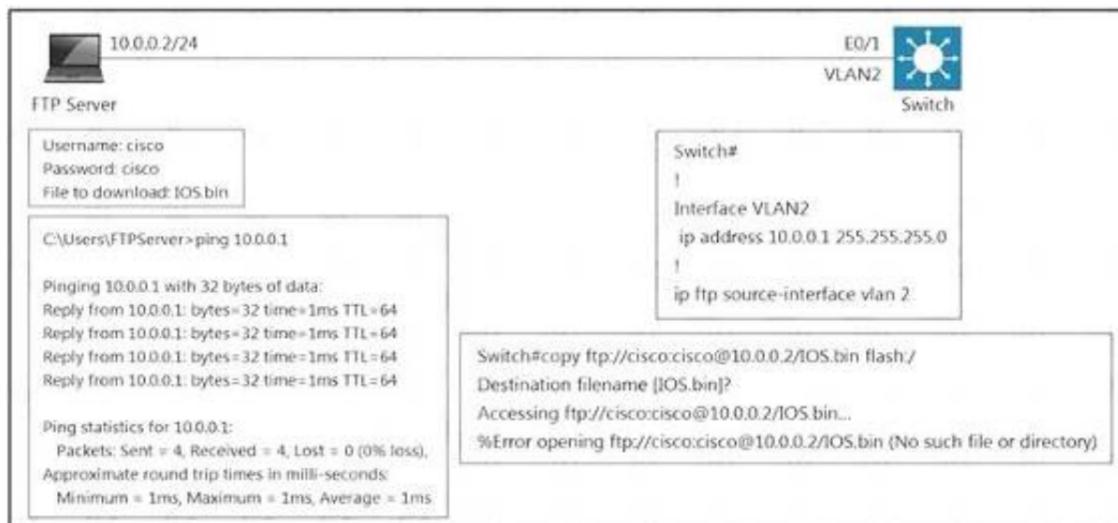
- A. HQ_R3(config)# ip sla responderHQ_R3(config)# ip sla responder icmp-echo 172.16.35.1
- B. BRANCH(config)# ip sla 1BRANCH(config-ip-sla)# icmp-echo 192.168.100.2
- C. HQ_R3(config)# ip sla responderHQ_R3(config)# ip sla responder icmp-echo 172.16.35.5
- D. BRANCH(config)# ip sla 1BRANCH(config-ip-sla)# icmp-echo 192.168.100.1

Answer: D

NEW QUESTION 168

- (Exam Topic 3)

Refer to the exhibit.



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

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

Answer: B

NEW QUESTION 169

- (Exam Topic 3)

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

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

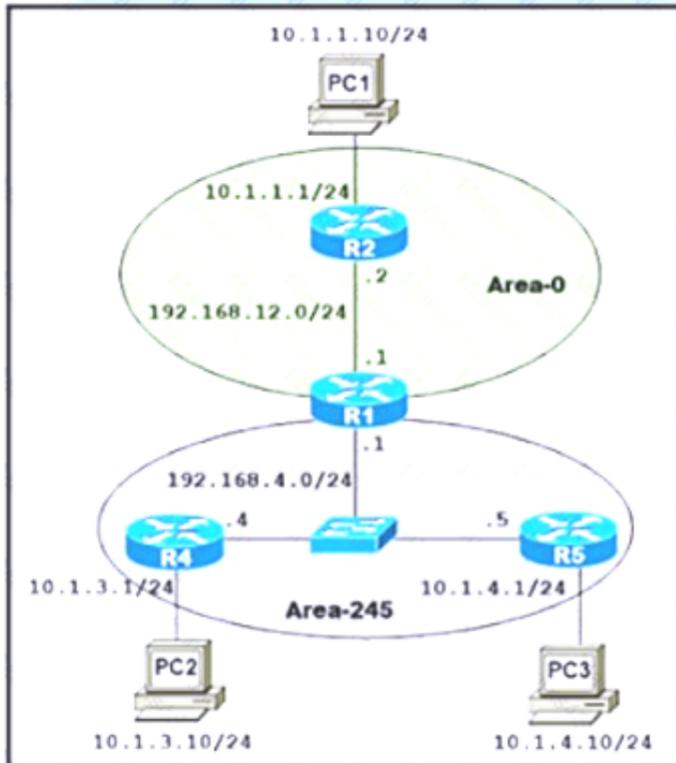
Answer: C

Explanation:

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

NEW QUESTION 174

- (Exam Topic 3)



Refer to the exhibit A network administrator is troubleshooting to reduce the routing table of R4 and R5 to learn only the default route to communicate from Inter-Area and Intra-Area networks Which configuration resolves the issue?

- A)
 - R-1#default area 245
 - R-4#default area 245 default-cost
 - R-5#default area 245 default-cost
 - R-1#area 245 stub no-summary
- B)
 - R-1#area 245 stub no-summary
 - R-4#area 245 stub
 - R-5#area 245 stub
- C)
 - R-1#default area 245 default-cost
 - R-4#default area 245
 - R-5#default area 245
- D)
 - R-1#area 245 stub
 - R-4#area 245 stub no-summary
 - R-5#area 245 stub no-summary

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

Answer: D

NEW QUESTION 178

- (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 179

- (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 180

- (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 185

- (Exam Topic 3)

Which two components are required for MPLS Layer 3 VPN configuration? (Choose two)

- A. Use pseudowire for Layer 2 routes
- B. Use MP-BGP for customer routes
- C. Use OSPF between PE and CE
- D. Use a unique RD per customer VRF
- E. Use LDP for customer routes

Answer: CD

NEW QUESTION 189

- (Exam Topic 3)

```
ip sla 1
icmp-echo 8.8.8.8
threshold 1000
timeout 2000
frequency 5
ip sla schedule 1 life forever start-time now
!
track 1 ip sla 1
!
ip route 0.0.0.0 0.0.0.0 Ethernet0/0 203.0.113.1 name ISP1 track 1
ip route 0.0.0.0 0.0.0.0 Ethernet0/1 198.51.100.1 2 name ISP2
```

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

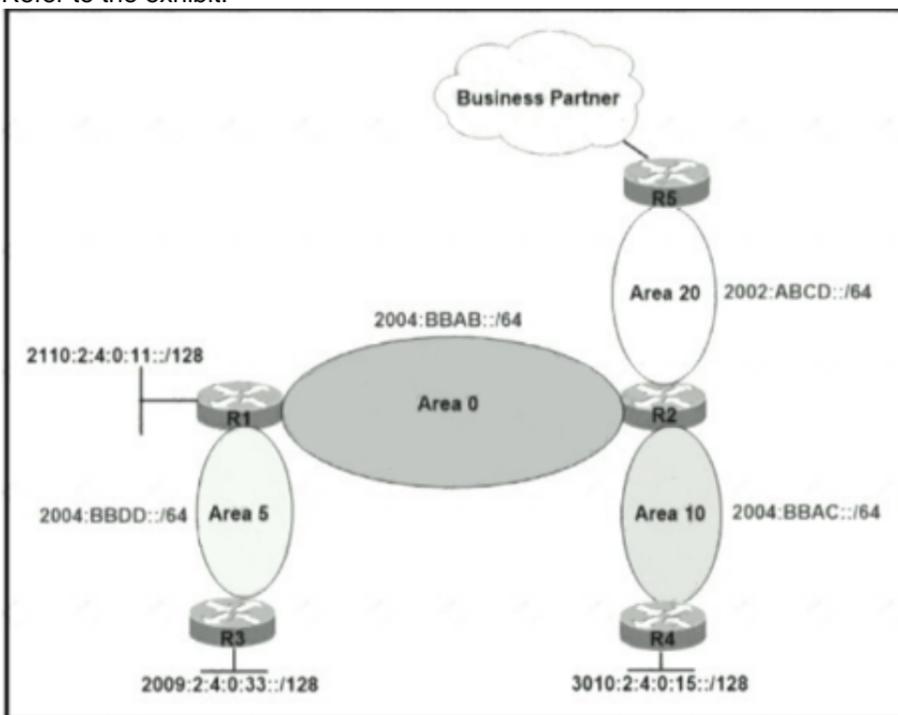
- A. Reference the track object 1 in both static default routes
- B. Remove the references to the interface names from both static default routes
- C. Configure the default route through ISP1 with a higher administrative distance than 2.
- D. Add a static route to the 8.8.8.8/32 destination through the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

Answer: D

NEW QUESTION 190

- (Exam Topic 3)

Refer to the exhibit.



```
R2#sh ipv6 route ospf
O 2002:ABCD::/64 [110/1]
  via FastEthernet0/1, directly connected
O 2004:BBAB::/64 [110/1]
  via FastEthernet0/0, directly connected
O 2004:BBAC::/64 [110/1]
  via FastEthernet1/0, directly connected
O 3010:2:4:0:15::/128 [110/1]
  via FE80::C804:1DFF:FE20:8, FastEthernet0/0
```

A network engineer applied a filter for LSA traffic on OSPFv3 interarea routes on the area 5 ABR to protect advertising the internal routes of area 5 to the business partner network. All other areas should receive the area 5 internal routes. After the respective route filtering configuration is applied on the ABR, area 5 routes are not visible on any of the areas. How must the filter list be applied on the ABR to resolve this issue?

- A. in the "in" direction for area 5 on router R1
- B. in the "out" direction for area 5 on router R1
- C. in the "in" direction for area 20 on router R2
- D. in the "out" direction for area 20 on router R2

Answer: D

NEW QUESTION 192

- (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 193

- (Exam Topic 3)

A network administrator is troubleshooting a failed AAA login issue on a Cisco Catalyst c3560 switch. When the network administrator tries to log in with SSH using TACACS+ username and password credentials, the switch is no longer authenticating and is failing back to the local account. Which action resolves this issue?

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

Answer: A

NEW QUESTION 196

- (Exam Topic 3)

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

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

Answer: DE

NEW QUESTION 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 201

- (Exam Topic 3)

A network administrator must optimize the segment size of the TCP packet on the DMVPN IPsec protected tunnel interface, which carries application traffic from the head office to a designated branch. The TCP segment size must not overwhelm the MTU of the outbound link. Which configuration must be applied to the router to improve the application performance?

- interface tunnel30
ip mtu 1400
ip tcp packet-size 1360
!
crypto ipsec fragmentation after-encryption
- interface tunnel30
ip mtu 1400
ip tcp payload-size 1360
!
crypto ipsec fragmentation before-encryption
- interface tunnel30
ip mtu 1400
ip tcp adjust-mss 1360
!
crypto ipsec fragmentation after-encryption
- interface tunnel30
ip mtu 1400
ip tcp max-segment 1360
!
crypto ipsec fragmentation before-encryption

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

Answer: C

NEW QUESTION 205

- (Exam Topic 3)

```

Lo0: 192.168.1.55      aaa new-model
    255.255.255.128  !
                    aaa authentication login default line enable
                    aaa authorization commands 15 default local
                    !
                    !
                    username admin privilege 15 password cisco123!
                    !
                    ip ssh version 2
                    !
                    access-list 101 permit tcp 192.168.1.0 0.0.0.255 any eq 22
                    access-list 101 permit tcp 192.168.5.0 0.0.0.255 any range 22 smtp
                    !
                    line vty 0 4
                    access-class 101 in
                    password cisco
                    transport input all
                    login local
    
```

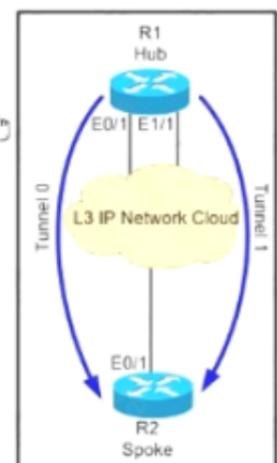
Refer to the exhibit. An engineer configured user login based on authentication database on the router, but no one can log into the router. Which configuration resolves the issue?

- A. aaa authentication login default enable
- B. aaa authorization network default local
- C. aaa authentication login default local
- D. aaa authorization exec default local

Answer: C

NEW QUESTION 209

- (Exam Topic 3)



Refer to the exhibit. The hub and spoke are connected via two DMVPN tunnel interfaces. The NHRP is configured and the tunnels are detected on the hub and the spoke. Which configuration command adds an IPsec profile on both tunnel interfaces to encrypt traffic?

- A. tunnel protection ipsec profile DMVPN multipoint

- B. tunnel protection ipsec profile DMVPN tunnel1
- C. tunnel protection ipsec profile DMVPN shared
- D. tunnel protection ipsec profile DMVPN unique

Answer: C

NEW QUESTION 212

- (Exam Topic 3)

Which feature minimizes DoS attacks on an IPv6 network?

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

Answer: D

Explanation:

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

Reference: https://www.cisco.com/c/en/us/td/docs/routers/7600/ios/15S/configuration/guide/7600_15_0s_book/IPv6_Security.pdf

NEW QUESTION 213

- (Exam Topic 3)

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

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, email Description automatically generated

Reference:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus9000/sw/7-x/security/configuration/guide/b_Ci

NEW QUESTION 215

- (Exam Topic 3)

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

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

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

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

Answer: C

Explanation:

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

NEW QUESTION 219

- (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 223

- (Exam Topic 3)

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

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

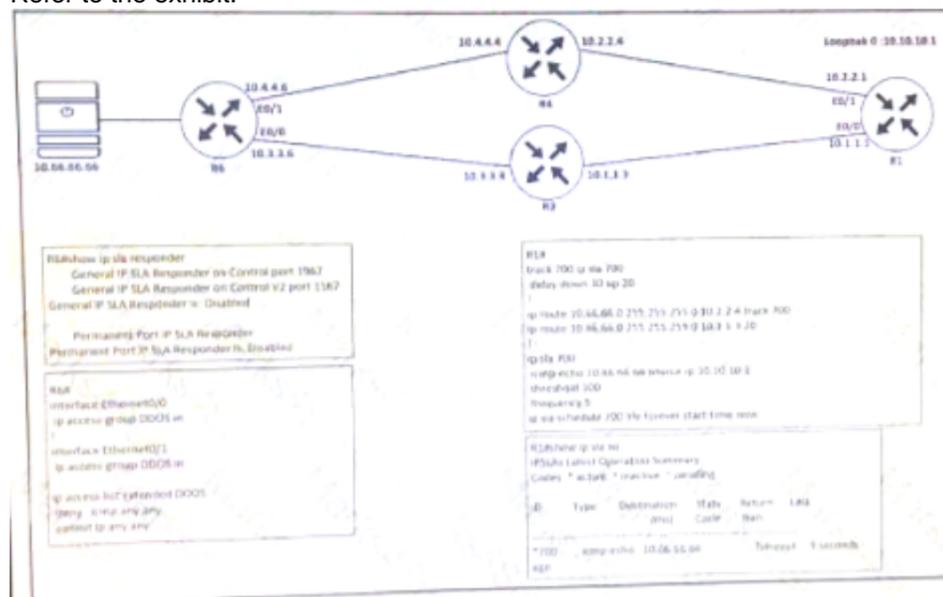
- A. Use is ftp username and ip ftp password configuration commands to specify valid FTP server credentials.
- B. Use the copy flash:packages.conf scp: command instead and enter the FTP server credentials when prompted.
- C. Enter the FTP server credentials directly In the FTP URL using the ftp://username:password@192.0.2.40/ 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 credent-ais when prompted.

Answer: AC

NEW QUESTION 228

- (Exam Topic 3)

Refer to the exhibit.



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

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

- C. tacacs-server enable-password Cisco@123
- D. enable-password Cisco@123

Answer: D

NEW QUESTION 231

- (Exam Topic 3)

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

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

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

- R2


```
interface FastEthernet0/0.10
encapsulation dot1Q
ip address 10.10.10.2 255.255.255.0
```
- R3


```
interface FastEthernet0/0.10
encapsulation dot1Q
ip address 10.10.10.3 255.255.255.0
```
- R2


```
interface FastEthernet0/0.10
encapsulation dot1Q
ip address 10.10.10.2 255.255.255.0
```
- R3


```
interface FastEthernet0/0.10
encapsulation dot1Q
ip address 10.10.10.3 255.255.255.0
```
- R2


```
interface FastEthernet0/0.10
encapsulation dot1Q 10
ip address 10.10.10.2 255.255.255.0
```
- R3


```
interface FastEthernet0/0.10
encapsulation dot1Q 10
ip address 10.10.10.3 255.255.255.0
```
- R2 and R3


```
interface FastEthernet0/0
no ip split-horizon eigrp 10
```
- R1


```
interface FastEthernet0/0
no ip split-horizon eigrp 10
```

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

Answer: E

NEW QUESTION 235

- (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 DHP 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 239

- (Exam Topic 3)



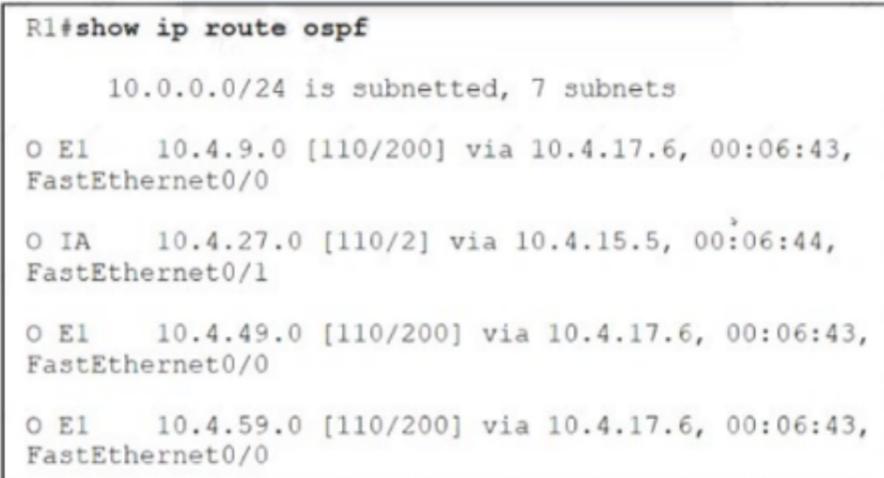
Refer to the exhibit. An engineer is investigating an OSPF issue reported by the Cisco DNA Assurance Center. Which action resolves the issue?

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

Answer: B

NEW QUESTION 242

- (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 BGP. However, only prefixes from 10.4.17.6 are installed into the routing table on R1. Which action must the engineer take to achieve load sharing for the BGP-originated prefixes?

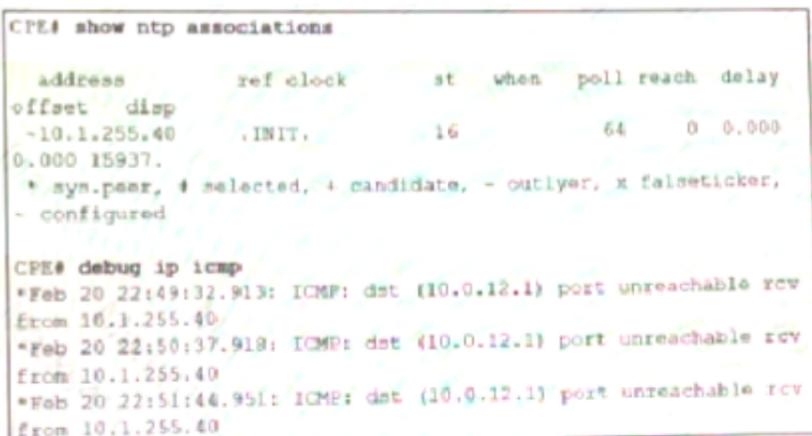
- A. The ASBRs are advertising the redistributed prefixes with the iBGP metric and must be modified to Type 1 on ASBR 10.4.17.6.
- B. The ASBRs are advertising the redistributed prefixes with a different admin distance and must be changed to 110 on ASBR 10.4.15.5.
- C. The admin distance of the prefixes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

Answer: D

NEW QUESTION 243

- (Exam Topic 3)

Refer to the exhibit.



An administrator is troubleshooting a time synchronization problem for the router time to another Cisco IOS XE-based device that has recently undergone

hardening. Which action resolves the issue?

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

Answer: C

NEW QUESTION 246

- (Exam Topic 3)

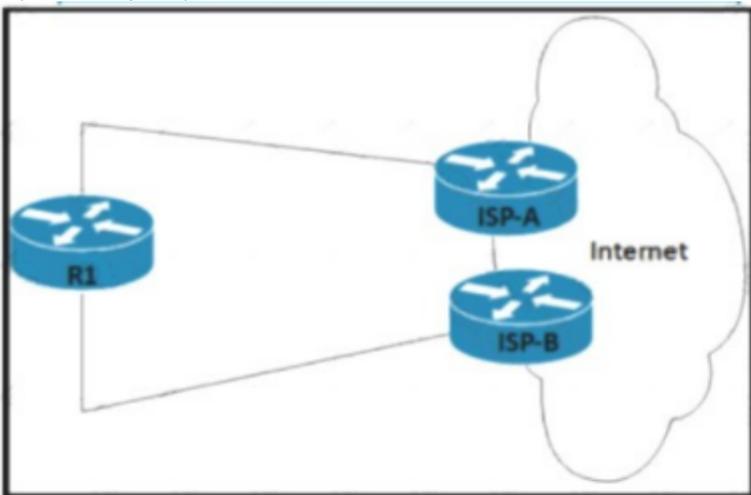
What is a MPLS PHP label operation?

- 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 247

- (Exam Topic 3)



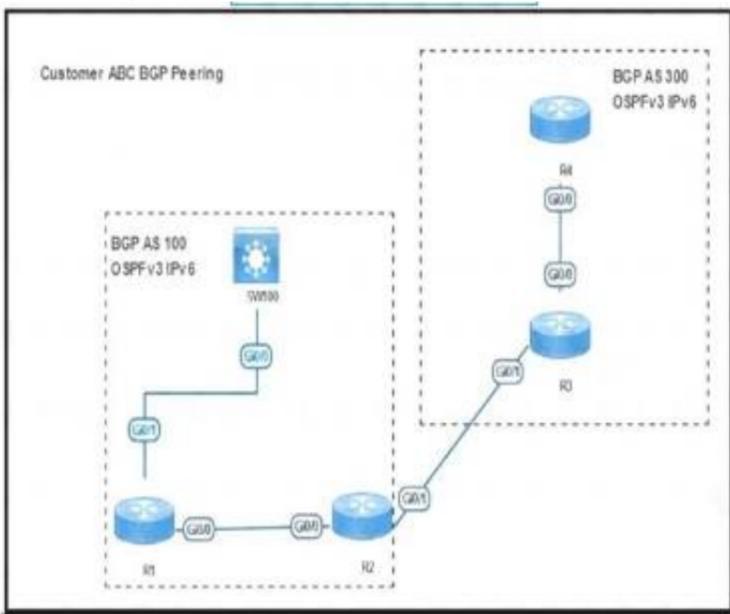
Refer to the exhibit. Router R1 peers with two ISPs using static routes to get to the internet. The requirement is that R1 must prefer ISP-A under normal circumstances and failover to ISP-B if the connectivity to ISP-A is lost. The engineer observes that R1 is load balancing traffic across the two ISPs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

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

Answer: D

NEW QUESTION 249

- (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

```

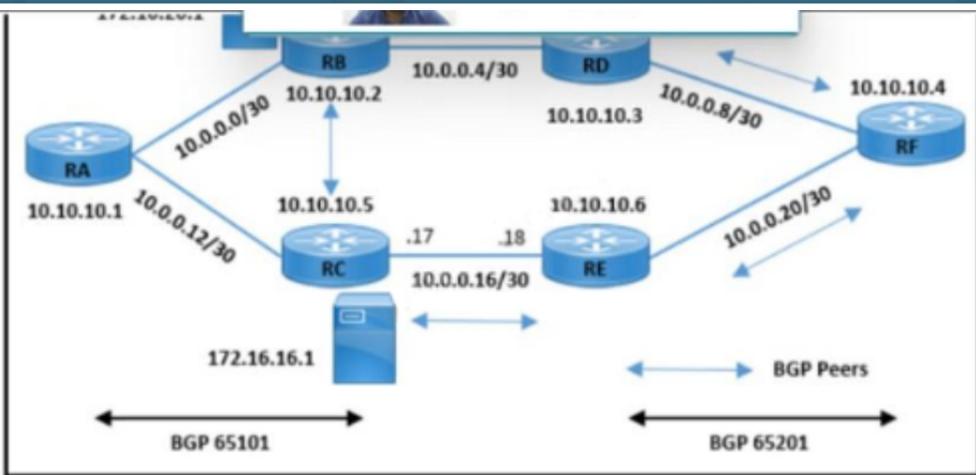
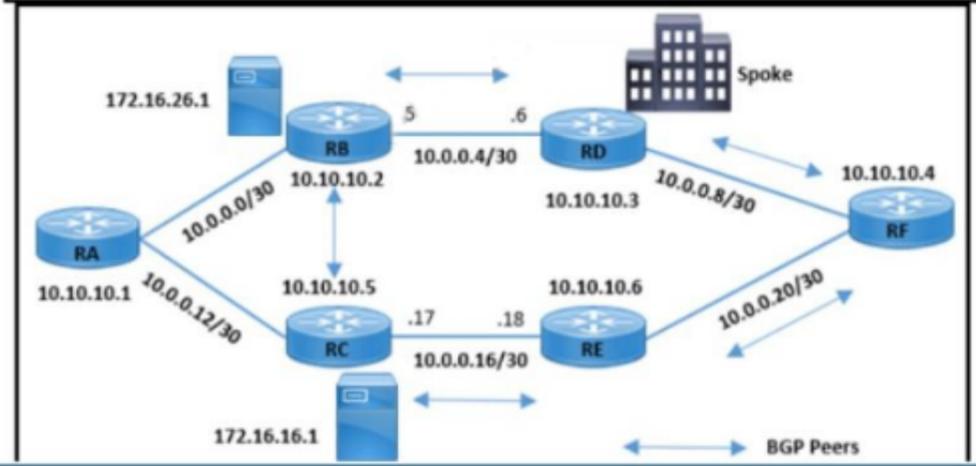
- A. Option A
- B. Option B
- C. Option C
- D. Option C

Answer: A

NEW QUESTION 251
 - (Exam Topic 3)

```
RB#show ip bgp 172.16.16.1
BGP routing table entry for 172.16.16.1/32, version 11
Paths: (1 available, no best path)
Not advertised to any peer
Local
 10.10.10.5 (metric 3) from 10.10.10.5 (172.16.16.1)
  Origin IGP, metric 0, localpref 100, valid, internal, not synchronized

RD#traceroute 172.16.16.1
Tracing the route to 172.16.16.1
 1 10.0.0.10 [MPLS: Label 29 Exp 0] 64 msec 56 msec 60 msec
 2 10.0.0.21 60 msec 56 msec 72 msec
 3 * * *
```



Refer to the exhibit A customer reported an issue with a fiber link failure between RC and RE Users connected through the spoke location face disconnection and packet drops with the primary email server (172.16.16.1) but have no issues with the backup email server (172.16.26.1). All the router loopback IPs are advertised through the OSPF protocol. Which configuration resolves the issue?

- RB(config)#router bgp 65101
RB(config-router)#no synchronization
- RC(config)#router bgp 65101
RC(config-router)#neighbor 10.10.10.2 next-hop-self
- RB(config)#router bgp 65101
RB(config-router)#neighbor 10.10.10.5 next-hop-self
- RC(config)#router bgp 65101
RC(config-router)#no synchronization

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

Answer: B

NEW QUESTION 252

- (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 256

- (Exam Topic 3)

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

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

Answer: C

Explanation:

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

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

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

NEW QUESTION 258

- (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  0x001C8C
0
*Feb 22 22:50:39.523: %OSPF-4-FLOOD_WARN: 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 260

- (Exam Topic 3)

```
Router# show logging

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

No Active Message Discriminator.
No Inactive Message Discriminator.

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

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

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

Exception Logging: size (3192 bytes)

Count and timestamp logging messages: disabled

Persistent logging: disabled
```

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

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

Answer: D

NEW QUESTION 262

- (Exam Topic 3)

Refer to the exhibit.

```
R1(config)#ip access-list standard EIGRP-FILTER
R1(config-std-nacl)#permit 10.10.10.0 0.0.0.255
R1(config)#router eigrp 10
R1(config-router)#distribute-list route-map EIGRP in
!
R1(config)#route-map EIGRP permit 10
R1(config-route-map)#match ip address EIGRP-FILTER
!
R1#show ip route eigrp
D      10.10.10.0/24
```

An engineer must filter incoming EIGRP updates to allow only a set of specific prefixes. The distribute list is tested, and it filters out all routes except network 10.10.10.0/24. How should the engineer temporarily allow all prefixes to be learned by the routers again without adjusting the existing access list?

- A. A permit 20 statement should be added before completing the ACL with the required prefixes, and then the permit 20 statement can be removed.
- B. A permit any statement should be added before completing the ACL with the required prefixes and then the permit any statement can be removed.
- C. A continue statement should be added within the permit 10 statement before completing the ACL with the required prefixes, and then the continue statement can be removed.
- D. An extended access list must be used instead of a standard access list to accomplish the task

Answer: C

NEW QUESTION 267

- (Exam Topic 3)

Which control plane process allows the MPLS forwarding state to recover when a secondary RP takes over from a failed primary RP?

- A. MP-BGP uses control plane services for label prefix bindings in the MPLS forwarding table
- B. LSP uses NSF to recover from disruption *i control plane service
- C. FEC uses a control plane service to distribute information between primary and secondary processors
- D. LDP uses SSO to recover from disruption in control plane service

Answer: C

NEW QUESTION 271

- (Exam Topic 3)

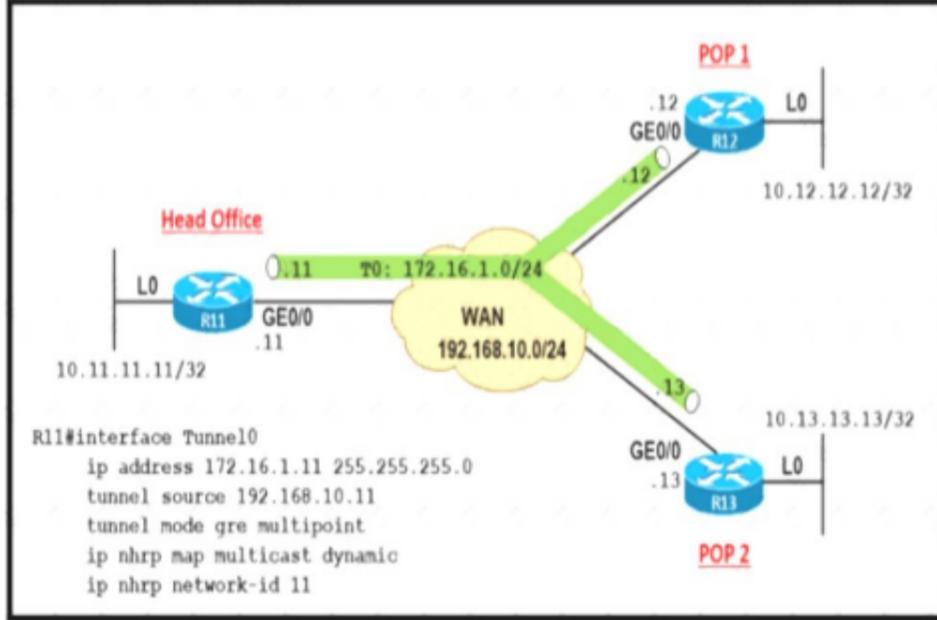
Which method provides failure detection in BFD?

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

Answer: B

NEW QUESTION 274

- (Exam Topic 3)



Refer to the exhibit A company builds WAN infrastructure between the head office and POPs using DMVPN hub-and-spoke topology to provide end-to-end communication All POPs must maintain point-to-point connectivity with the head office Which configuration meets the requirement at routers R12 and R13?

- R12#
interface Tunnel0
 ip nhrp map multicast 192.168.10.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 12
 ip nhrp nhs 172.16.1.11

- R13#
interface Tunnel0
 ip nhrp map multicast 192.168.10.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 13
 ip nhrp nhs 172.16.1.11

- R12#
interface Tunnel0
 ip nhrp map multicast 172.16.1.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 12
 ip nhrp nhs 192.168.10.11

- R13#
interface Tunnel0
 ip nhrp map multicast 172.16.1.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 13
 ip nhrp nhs 192.168.10.11

- Configure routers R12 and R13 as:
interface Tunnel0
 ip nhrp map multicast 172.16.1.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 11
 ip nhrp nhs 192.168.10.11

- Configure routers R12 and R13 as:
interface Tunnel0
 ip nhrp map multicast 192.168.10.11
 ip nhrp map 172.16.1.11 192.168.10.11
 ip nhrp network-id 11
 ip nhrp nhs 172.16.1.11

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

Answer: D

NEW QUESTION 279

- (Exam Topic 3)

Refer to the exhibit.

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

Which command must be configured to make VRF CCNP work?

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

Answer: B

Explanation:

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

NEW QUESTION 280

- (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

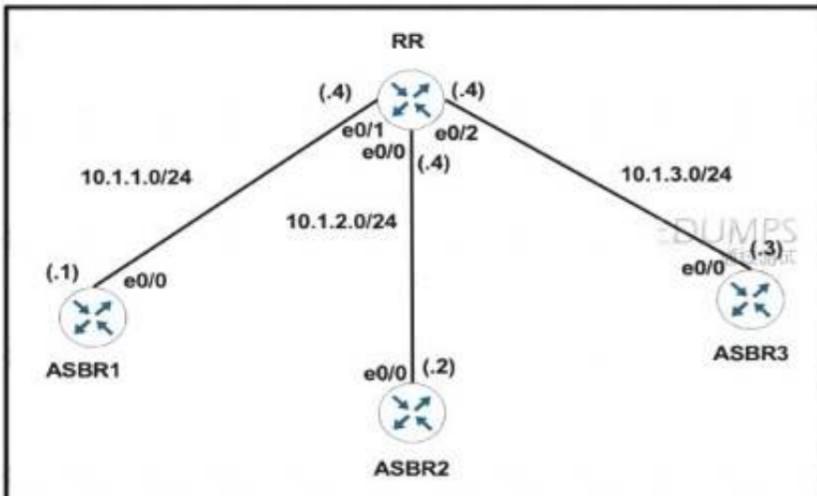
Explanation:

Table Description automatically generated

NEW QUESTION 284

- (Exam Topic 3)

Refer to the exhibit.



RR Configuration:

```
router bgp 100
neighbor IBGP peer-group
neighbor IBGP route-reflector-client
neighbor 10.1.1.1 remote-as 100
neighbor 10.1.2.2 remote-as 100
neighbor 10.1.3.3 remote-as 100
```

The network administrator configured the network to establish connectivity between all devices and notices that the ASBRs do not have routes for each other. Which set of configurations resolves this issue?

- router bgp 100
 - neighbor 10.1.1.1 next-hop-self
 - neighbor 10.1.2.2 next-hop-self
 - neighbor 10.1.3.3 next-hop-self
- router bgp 100
 - neighbor IBGP update-source Loopback0
- router bgp 100
 - neighbor IBGP next-hop-self
- router bgp 100
 - neighbor 10.1.1.1 peer-group IBGP
 - neighbor 10.1.2.2 peer-group IBGP
 - neighbor 10.1.3.3 peer-group IBGP

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

Answer: D

NEW QUESTION 287

- (Exam Topic 3)

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

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

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

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

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

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

Answer: C

NEW QUESTION 290

- (Exam Topic 3)

Refer to the exhibit.

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

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

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

Answer: B

NEW QUESTION 295

- (Exam Topic 3)

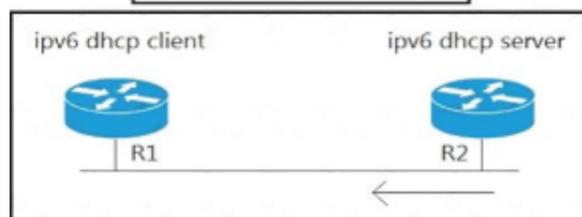
Refer to the exhibit.

```
ipv6 dhcp server:

ipv6 unicast-routing
!
int e0/1
ipv6 enable
ipv6 add 2001:11::1/64
ipv6 nd other-config-flag
no shut
ipv6 dhcp server IPv6Pool
!
ipv6 dhcp pool IPv6Pool
dns-server 2002:555::1
domain-name my.net

ipv6 dhcp client:

interface Ethernet0/1
no ip address
ipv6 address dhcp
ipv6 enable
no shut
```



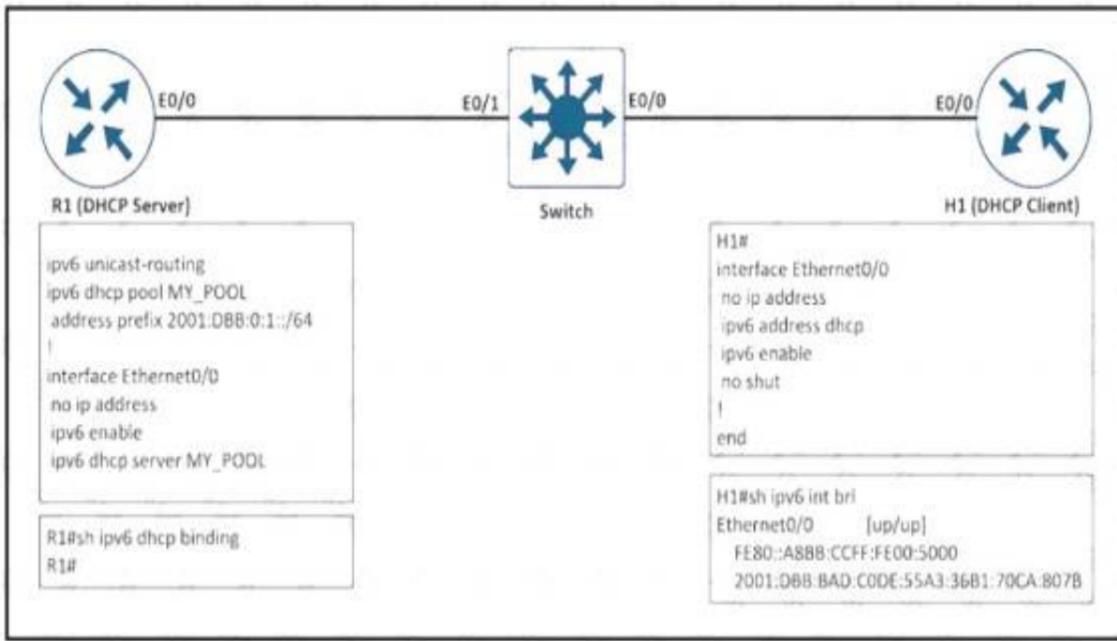
A network administrator is troubleshooting IPv6 address assignment for a DHCP client that is not getting an IPv6 address from the server. Which configuration retrieves the client IPv6 address from the DHCP server?

- A. ipv6 address autoconfig command on the interface
- B. ipv6 dhcp server automatic command on DHCP server
- C. ipv6 dhcp relay-agent command on the interface
- D. service dhcp command on DHCP server

Answer: A

NEW QUESTION 296

- (Exam Topic 3)



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

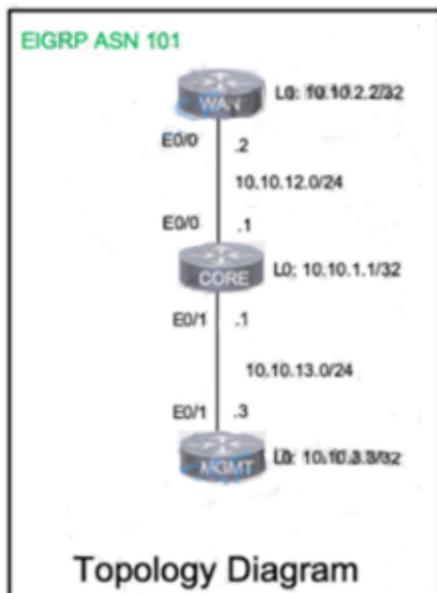
- A. Extend the DHCP lease time because R1 removed the IPv6 address earlier after the lease expired.
- B. Configure H1 as the DHCP client that manually assigns the IPv6 address on interlace e0/0..
- C. Use the 2001:DBB:BAD:CODE::/64 prefix for the DHCP pool on R1.
- D. Configure authorized DHCP servers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

Answer: C

NEW QUESTION 301

- (Exam Topic 3)

A network is configured with CoPP to protect the CORE router route processor for stability and DDoS protection. As a company policy, a class named class-default is preconfigured and must not be modified or deleted. Troubleshoot CoPP to resolve the issues introduced during the maintenance window to ensure that:



Guidelines | Topology | **Tasks**

A network is configured with CoPP to protect the CORE router route processor for stability and DDoS protection. As a company policy, a class named class-default is preconfigured and must not be modified or deleted. Troubleshoot CoPP to resolve the issues introduced during the maintenance window to ensure that:

1. Dynamic routing policies are under CoPP-CRITICAL and are allowed only from the 10.10.x.x range.
2. Telnet, SSH, and ping are under CoPP-IMPORTANT and are allowed strictly to/from 10.10.x.x to the CORE router (Hint: you can verify using Loopback1).
3. All devices ping (UDP) any CORE router interface successfully to/from the 10.10.x.x range and do not allow any other IP address. NORMAL (Hint: Traceroute port range 33434 33464).

WAN

```
!
!
interface Loopback0
 ip address 10.10.2.2 255.255.255.255
!
interface Loopback1
 ip address 172.16.2.2 255.255.255.0
!
```

WAN CORE MGMT

```
interface Loopback0
 ip address 10.10.2.2 255.255.255.255
!
interface Loopback1
 ip address 172.16.2.2 255.255.255.0
!
interface Ethernet0/0
 ip address 10.10.12.2 255.255.255.0
 duplex auto
!
interface Ethernet0/1
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/2
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
router eigrp 101
 network 10.10.0.0 0.0.255.255
 network 172.16.2.0 0.0.0.255
 eigrp router-id 10.10.2.2
```

```
!
!
router eigrp 101
 network 10.10.0.0 0.0.255.255
 network 172.16.2.0 0.0.0.255
 eigrp router-id 10.10.2.2
!
```

CORE

```
!
class-map match-all CoPP-CRITICAL
 match access-group 120
class-map match-all CoPP-NORMAL
 match access-group 122
class-map match-all CoPP-IMPORTANT
 match access-group 121
!
policy-map CoPP
 class CoPP-CRITICAL
  police 1000000 50000 50000 conform-action transmit exceed-
-action drop
 class CoPP-IMPORTANT
  police 100000 20000 20000 conform-action transmit exceed-
action drop
 class CoPP-NORMAL
  police 64000 6400 64000 conform-action transmit exceed-ac
tion drop
 class class-default
  police 8000 1500 1500 conform-action drop exceed-action d
rop
!
```

```
!
!
interface Loopback0
 ip address 10.10.2.2 255.255.255.255
!
interface Ethernet0/0
 ip address 10.10.12.1 255.255.255.0
 duplex auto
!
interface Ethernet0/1
 ip address 10.10.13.1 255.255.255.0
 duplex auto
!
```

```
interface Ethernet0/1
 ip address 10.10.13.1 255.255.255.0
 duplex auto
!
interface Ethernet0/2
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
!
router eigrp 101
 network 10.10.0.0 0.0.255.255
 eigrp router-id 10.10.1.1
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
ipv6 ioam timestamp
```

```
!
!
access-list 120 remark *** ACL for CoPP-Critical ***
access-list 121 remark *** ACL for CoPP-IMPORTANT
access-list 122 remark *** ACL for CoPP-NORMAL
!
control-plane
 service-policy input CoPP
!
!
```

MGMT

WAN CORE **MGMT**

```
interface Loopback0
 ip address 10.10.3.3 255.255.255.255
!
interface Loopback1
 ip address 172.16.3.3 255.255.255.0
!
interface Ethernet0/0
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/1
 ip address 10.10.13.3 255.255.255.0
 duplex auto
!
interface Ethernet0/2
 no ip address
 shutdown
 duplex auto
!
interface Ethernet0/3
 no ip address
 shutdown
 duplex auto
!
!
router eigrp 101
 network 10.10.0.0 0.0.255.255
 network 172.16.3.0 0.0.0.255
 eigrp router-id 10.10.3.3
```

WAN CORE **MGMT**

```
no ip address
 shutdown
 duplex auto
!
!
router eigrp 101
 network 10.10.0.0 0.0.255.255
 network 172.16.3.0 0.0.0.255
 eigrp router-id 10.10.3.3
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
ipv6 ioam timestamp
!
!
control-plane
!
!
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

CORE
 policy-mao CoPP
 class CoPP-CRITICAL
 police 1000000 50000 50000 conform-action transmit exceed-action transmit
 Text Description automatically generated with medium confidence

```

access-list 120 remark *** ACL for CoPP-Critical ***
access-list 120 permit ip 10.10.0.0 0.0.255.255 any
access-list 120 permit tcp any any
access-list 120 permit ip any 10.10.0.0 0.0.255.255
access-list 121 permit icmp 10.10.0.0 0.0.255.255 any
access-list 121 permit tcp 10.10.0.0 0.0.255.255 any eq 22
access-list 121 permit tcp 10.10.0.0 0.0.255.255 any eq telnet
!
access-list 122 remark *** ACL for CoPP-NORMAL ***
access-list 122 permit udp 10.10.0.0 0.0.255.255 any
access-list 122 permit udp any 10.10.0.0 0.0.255.255
access-list 122 permit udp any 10.10.0.0 0.0.255.255 range 33434 33464
access-list 122 permit udp 10.10.0.0 0.0.255.255 any range 33434 33464
!
control-plane
service-policy input CoPP
!
!
!
    
```

CORE# Copy run start TESTING: CORE
 Graphical user interface Description automatically generated with medium confidence

```

CORE#sh ip eigrp neighbors
EIGRP-IPv4 Neighbors for AS(101)
H   Address          Interface         Hold   Uptime
me  SRTT    RTO   Q   Seq
   (ms)          Cnt Num
0   10.10.13.3        Et0/1            11    00:00
3:15  5    100  0   35
1   10.10.12.2        Et0/0            11    00:00
3:24  7    100  0   33
CORE#copy run star
    
```

MGMT
 Graphical user interface, text Description automatically generated

```

MGMT#telnet 10.10.13.1
Trying 10.10.13.1 ...
% Connection refused by remote host

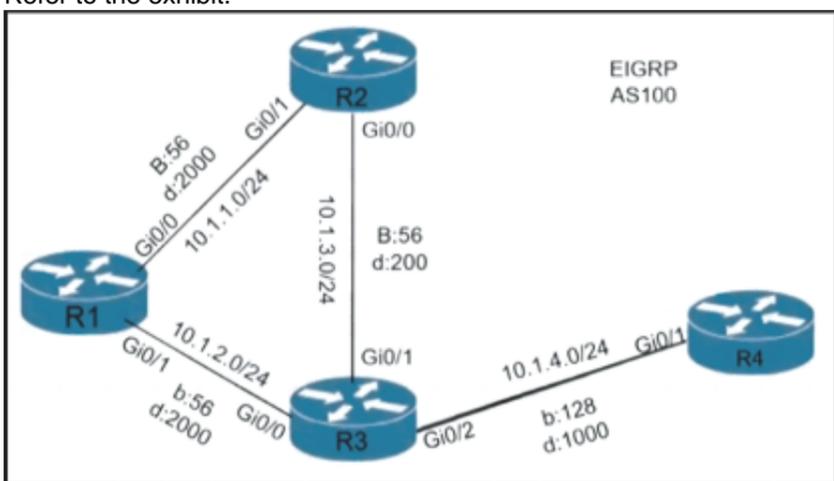
MGMT#telnet 10.10.13.1
Trying 10.10.13.1 ... Open

Password required, but none set

[Connection to 10.10.13.1 closed by foreign host]
MGMT#
    
```

NEW QUESTION 306

- (Exam Topic 3)
 Refer to the exhibit.



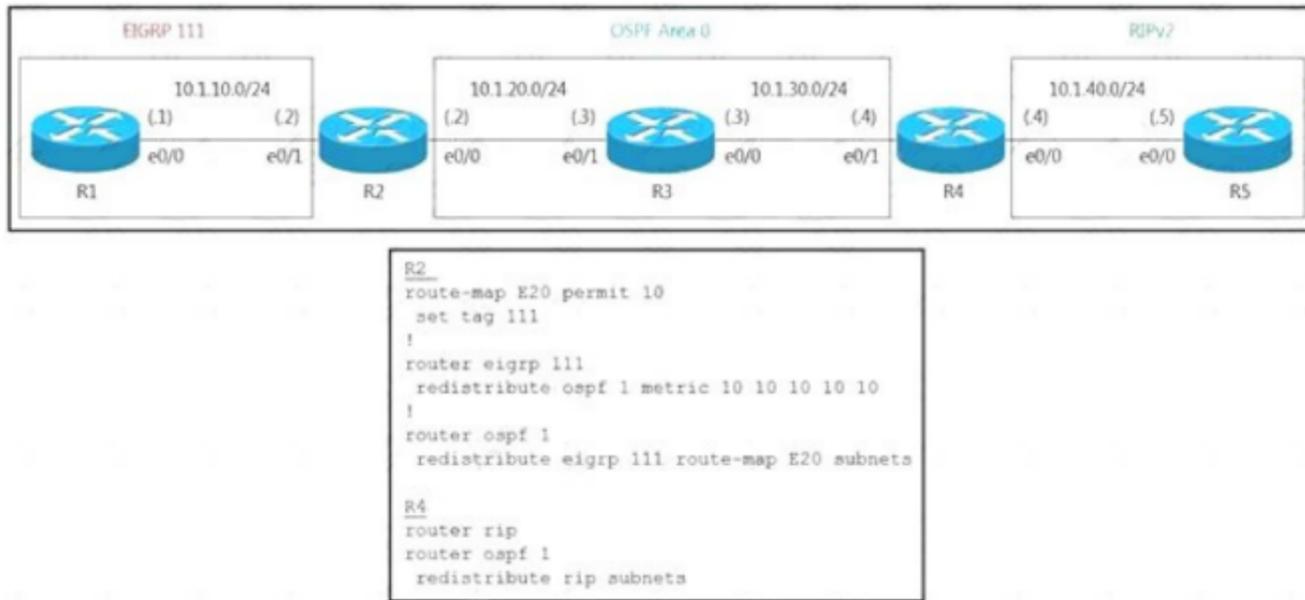
A loop occurs between R1, R2, and R3 while EIGRP is run with poison reverse enabled. Which action prevents the loop between R1, R2, and R3?

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

Answer: B

NEW QUESTION 311

- (Exam Topic 3)
 Refer to the exhibit.



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

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

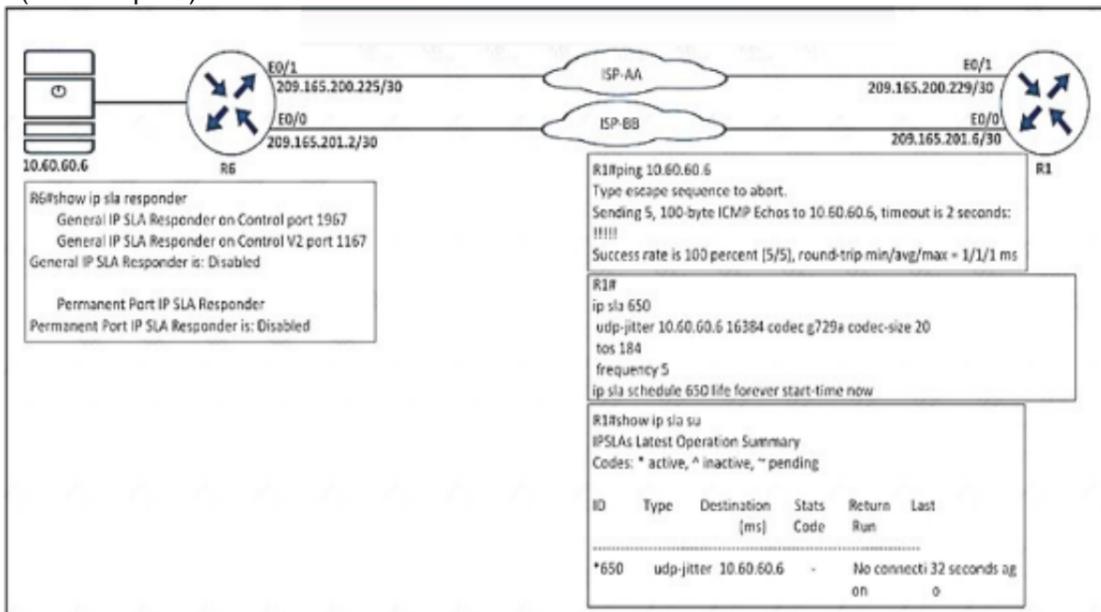
Answer: A

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 314

- (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

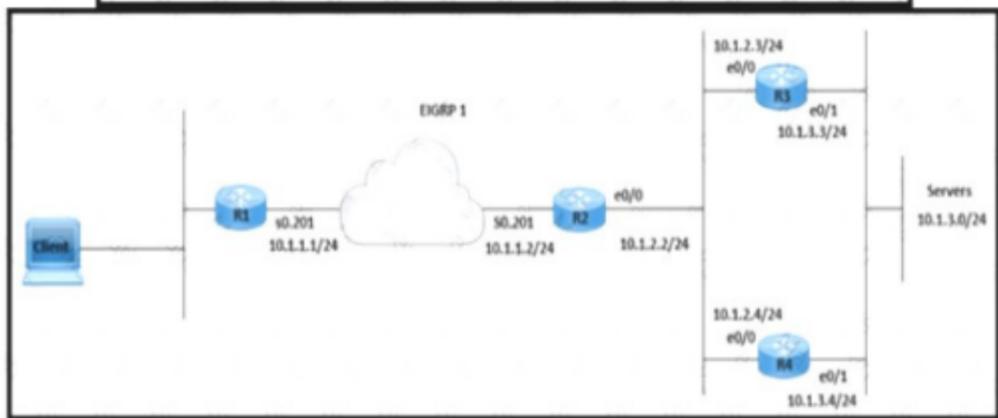
NEW QUESTION 315

- (Exam Topic 3)

Exhibit.

```
R2# show ip eigrp topology 10.1.3.0 255.255.255.0

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



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

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

Answer: C

NEW QUESTION 317

- (Exam Topic 3)

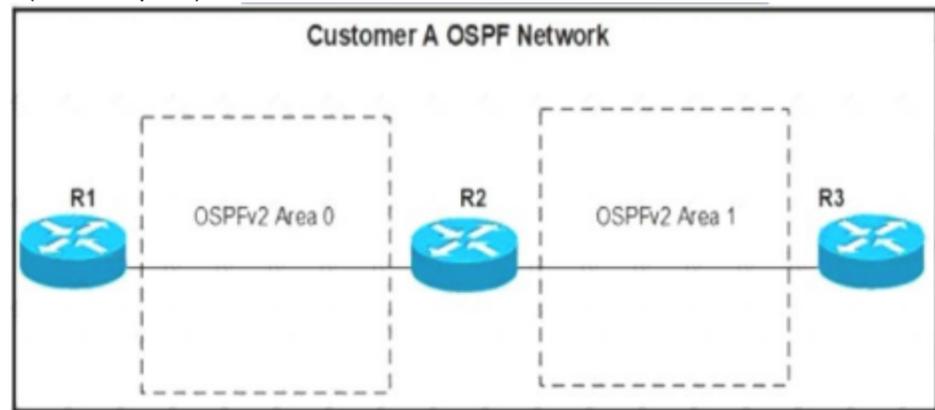
How does LDP operate in an MPLS network?

- 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 318

- (Exam Topic 3)



Refer to the exhibit

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

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

Answer: C

NEW QUESTION 322

- (Exam Topic 3)

Refer to the exhibit.

```
RtrA#show ip eigrp topology all-links
IP-EIGRP Topology Table for AS(1)/ID(10.1.6.1)
... snip ...
P 10.200.1.0/24, 1 successors, FD is 21026560
via 10.1.1.2 (21026560/20514560), Serial1/0
via 10.1.2.2 (46740736/20514560), Serial1/1
via 10.1.3.2 (46740736/46228736), Serial1/2
```

Which action makes 10.1.3.2 the feasible successor to reach 10.200.1.0/24 for location S42T447E33F95?

- A. Increase path bandwidth lower than 1011.2 and lower than 1012.2 between RtrA and the destination
- B. Increase path bandwidth higher than 10.1.2.2 and lower than 101.1.2 between RtrA and the destination.
- C. Increase path bandwidth higher than 1011.2 and lower than 1012.2 between RtrA and the destination
- D. Increase path bandwidth higher than 10.1.2.2 and higher than 10.1.1.2 between RtrA and the destination

Answer: A

NEW QUESTION 327

- (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 328

- (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 resolve 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 333

- (Exam Topic 3)

A network engineer must configure a DMVPN network so that a spoke establishes a direct path to another spoke if the two must send traffic to each other. A spoke must send traffic directly to the hub if required Which configuration meets this requirement?

- At the hub router:

```
interface tunnel10
ip nhrp nhs multicast dynamic
ip nhrp nhs shortcut
tunnel mode gre multipoint
```

On the spokes router:

```
interface tunnel10
ip nhrp nhs multicast dynamic
ip nhrp nhs redirect
tunnel mode gre multipoint
```
- At the hub router:

```
interface tunnel10
ip nhrp map multicast dynamic
ip nhrp redirect
tunnel mode gre multipoint
```

On the spokes router:

```
interface tunnel10
ip nhrp map multicast dynamic
ip nhrp shortcut
tunnel mode gre multipoint
```
- At the hub router:

```
interface tunnel10
ip nhrp nhs dynamic multipoint
ip nhrp nhs shortcut
tunnel mode gre multicast
```

On the spokes router:

```
interface tunnel10
ip nhrp nhs multicast dynamic
ip nhrp nhs redirect
tunnel mode gre multicast
```

```
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
```

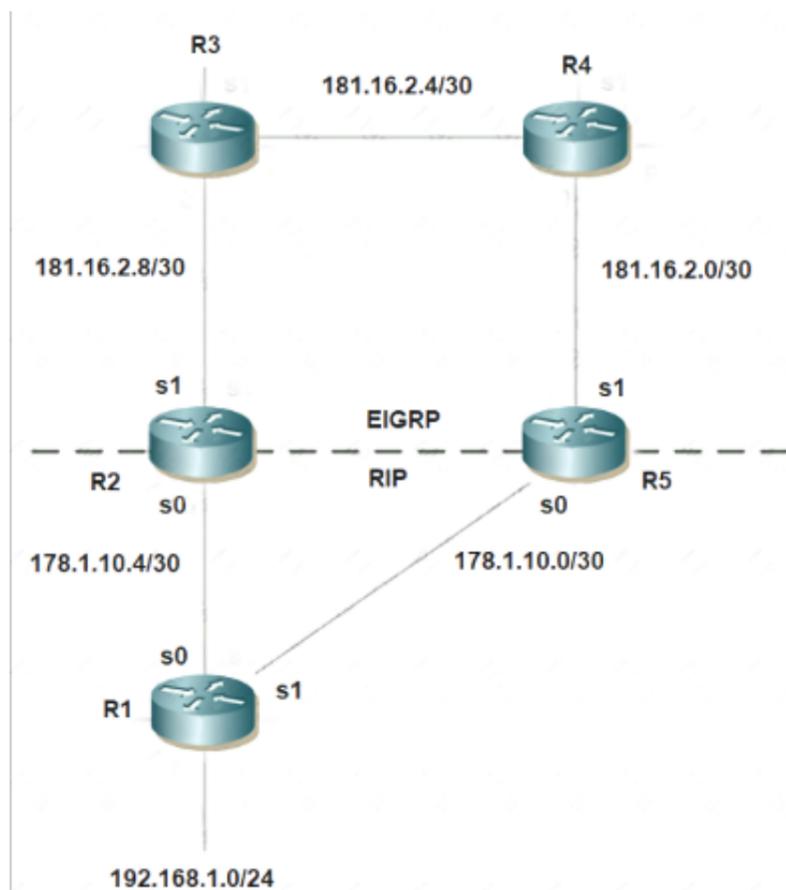
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 335

- (Exam Topic 3)

Refer to the exhibit.



Mutual redistribution is enabled between RIP and EIGRP on R2 and R5. Which configuration resolves the routing loop for the 192.168.1.0/24 network?

- A. R2:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit anyR5:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit any
- B. R2:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit anyR5:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit any
- C. R2:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s0!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit anyR5:router eigrp 10network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1!router ripnetwork 178.1.0.0redistribute eigrp 10 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit any
- D. R2:router eigrp 7network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1!router ripnetwork 178.1.0.0redistribute eigrp 7 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit anyR5:router eigrp 7network 181.16.0.0redistribute rip metric 1 1 1 1 1 distribute-list 1 in s1!router ripnetwork 178.1.0.0redistribute eigrp 7 metric 2!access-list 1 deny 192.168.1.0 access-list 1 permit any

Answer: D

Explanation:

<https://www.cisco.com/c/en/us/support/docs/ip/enhanced-interior-gateway-routing-protocol-eigrp/8606-redist.ht>

NEW QUESTION 336

- (Exam Topic 2)

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

- A. It is defined in RFC 3038 and 3039.
- B. It requires MPLS Traffic Engineering.
- C. It advertises labels per Forwarding Equivalence Class.
- D. It must use Resource Reservation Protocol.
- E. It uses Forwarding Equivalence Class

Answer: CE

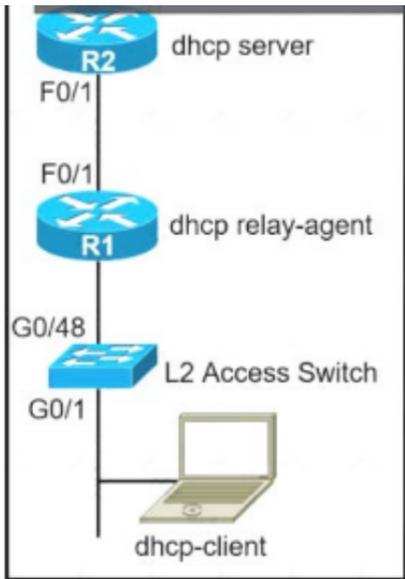
Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/5_x/nx-os/mpls/configuration/guide/mpls_cg/mp

NEW QUESTION 340

- (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 343

- (Exam Topic 2)

Refer to the exhibit.

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

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

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

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

Answer: C

Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3750/software/release/122_55_se/configuration/guid

NEW QUESTION 348

- (Exam Topic 2)

An engineer needs dynamic routing between two routers and is unable to establish OSPF adjacency. The output of the show ip ospf neighbor command shows that the neighbor state is EXSTART/EXCHANGE. Which action should be taken to resolve this issue?

- A. match the passwords
- B. match the hello timers
- C. match the MTUs
- D. match the network types

Answer: C

Explanation:

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. When

NEW QUESTION 351

- (Exam Topic 2)

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

- A. Desired Min TX Interval
- B. Detect Mult
- C. Required Min RX Interval
- D. Required Min Echo RX Interval

Answer: C

Explanation:

Required Min RX Interval: This is the minimum interval, in microseconds, between received BFD Control packets that this system is capable of supporting.

Reference: https://www.cisco.com/en/US/technologies/tk648/tk365/tk480/technologies_white_paper0900aecd80244005.ht

NEW QUESTION 353

- (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 357

- (Exam Topic 2)

Refer to the exhibit.

```
login block-for 15 attempts 10 within 120
login on-failure log
login on-success log
archive
log config
logging enable
logging size 300
notify syslog
```

```
snmp-server enable traps syslog
snmp-server host 172.16.17.1 public syslog
```

The administrator can see the traps for the failed login attempts, but cannot see the traps of successful login attempts. What command is needed to resolve the issue?

- A. Configure logging history 2
- B. Configure logging history 3
- C. Configure logging history 4
- D. Configure logging history 5

Answer: D

Explanation:

By default, the maximum severity sent as a syslog trap is warning. That is why you see syslog traps for login failures. Since a login success is severity 5 (notifications), those syslog messages will not be converted to traps. To fix this, configure:

logging history 5

Syslog levels are listed below

Level	Keyword	Description
0	emergencies	System is unusable
1	alerts	Immediate action is needed
2	critical	Critical conditions exist
3	errors	Error conditions exist
4	warnings	Warning conditions exist
5	notification	Normal, but significant, conditions exist
6	informational	Informational messages
7	debugging	Debugging messages

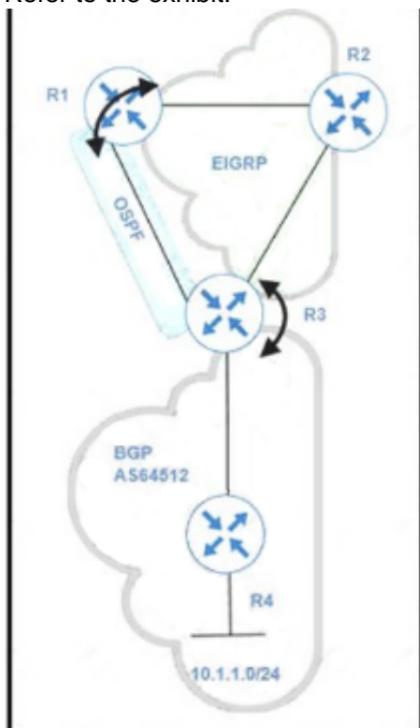
Note:

The syntax of login block is:

login block-for seconds attempts tries within seconds

NEW QUESTION 362

- (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 366

- (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:

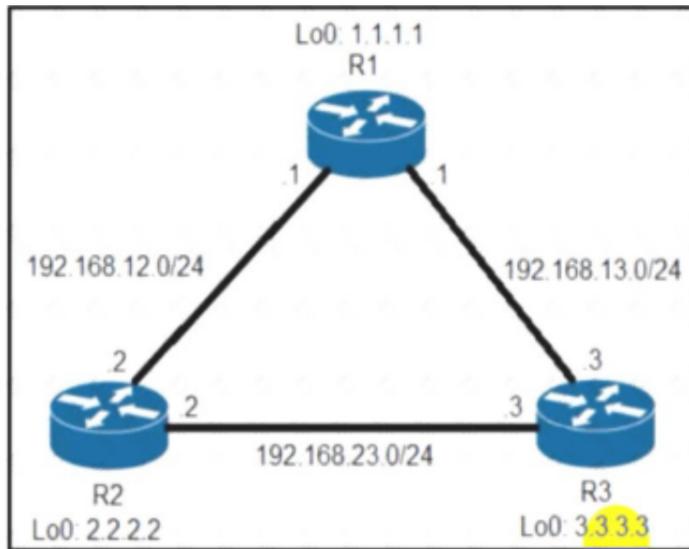
Reference:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipswitch_cef/configuration/xe-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 367

- (Exam Topic 2)



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

R2#show ip eigrp topology 192.168.13.0/24
EIGRP-IPv4 Topology Entry for AS(1)/ID(2.2.2.2) for 192.168.13.0/24
State is Passive, Query origin flag is 1, 1 Successor(s), FD is 1075200
Descriptor Blocks
192.168.23.3 (FastEthernet0/1), from 192.168.23.3, Send flag is 0x0
  Composite metric is (1075200/281600), route is Internal
  Vector metric:
    Minimum bandwidth is 2500 Kbit
    Total delay is 2000 microseconds
    Reliability is 255/255
    Load is 255/255
    Minimum MTU is 1500
    Hop count is 1
    Originating router is 3.3.3.3
192.168.12.1 (FastEthernet0/0), from 192.168.12.1, Send flag is 0x0
  Composite metric is (2611200/281600), route is Internal
  Vector metric:
    Minimum bandwidth is 1000 Kbit
    Total delay is 2000 microseconds
    Reliability is 255/255
    Load is 1/255
    Minimum MTU is 1500
    Hop count is 1
    Originating router is 1.1.1.1

R2#show ip route 192.168.13.0
Routing entry for 192.168.13.0/24
  Known via "eigrp 1", distance 90, metric 1075200, type internal
  Redistributing via eigrp 1
  Last update from 192.168.23.3 on FastEthernet0/1, 00:00:57 ago
  Routing Descriptor Blocks
  * 192.168.23.3, from 192.168.23.3, 00:00:57 ago, via FastEthernet0/1
    Route metric is 1075200, traffic share count is 1
    Total delay is 2000 microseconds, minimum bandwidth is 2500 Kbit
    Reliability 255/255, minimum MTU 1500 bytes
    Loading 255/255, Hops 1
```

Refer to the exhibit. R2 has two paths to reach 192.168.13.0/24. but traffic is sent only through R3. Which action allows traffic to use both paths?

- A. Configure the bandwidth 2000 command under interface FastEthernet0/0 on R2.
- B. Configure the variance 4 command under the EIGRP process on R2.
- C. Configure the delay 1 command under interface FastEthernet0/0 on R2.
- D. Configure the variance 2 command under the EIGRP process on R2

Answer: B

Explanation:

From the output of the "show ip eigrp topology ..." command, we notice network 192.168.13.0/24 was learned via two routes:+ From 192.168.23.3 (R3) with FD = 1075200 and AD = 281600+ From 192.168.12.1 (R1) with FD = 2611200 and AD = 281600

From the output of the "show ip route ..." command, we learned that the best (and chosen) path is via 192.168.23.3 (R3).

To use both paths (called unequal cost load balancing) with EIGRP, the second path via R1 must satisfy the feasibility condition. The feasibility condition states that, theAdvertised Distance (AD) of a route must be lower than the feasible distance of the current successor route.

In this case, the second path satisfies the feasible condition as its AD (281600) is smaller than the FD (1075200) of the best path. Therefore we can configure loadbalancing with "variance" command.

In other words, EIGRP will install all paths with metric < variance * best_metric into the local routing table, provided that it meets the feasibility condition to preventrouting loop. Therefore we can calculate the variance

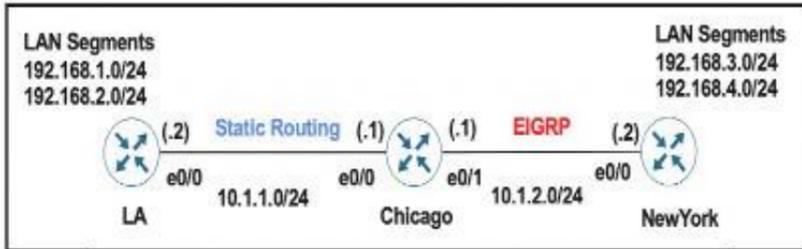
$$> \text{metric} / \text{best_metric} = 2611200 / 1075200 = 2.4.$$

So with a variance greater than 2 (and must be an integer), we can load balance traffic to network 192.168.13.0/24.

NEW QUESTION 368

- (Exam Topic 2)

Refer to the exhibits.



```

Chicago Router

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

LA Router

ip route 0.0.0.0 0.0.0.0 10.1.1.1
    
```

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?

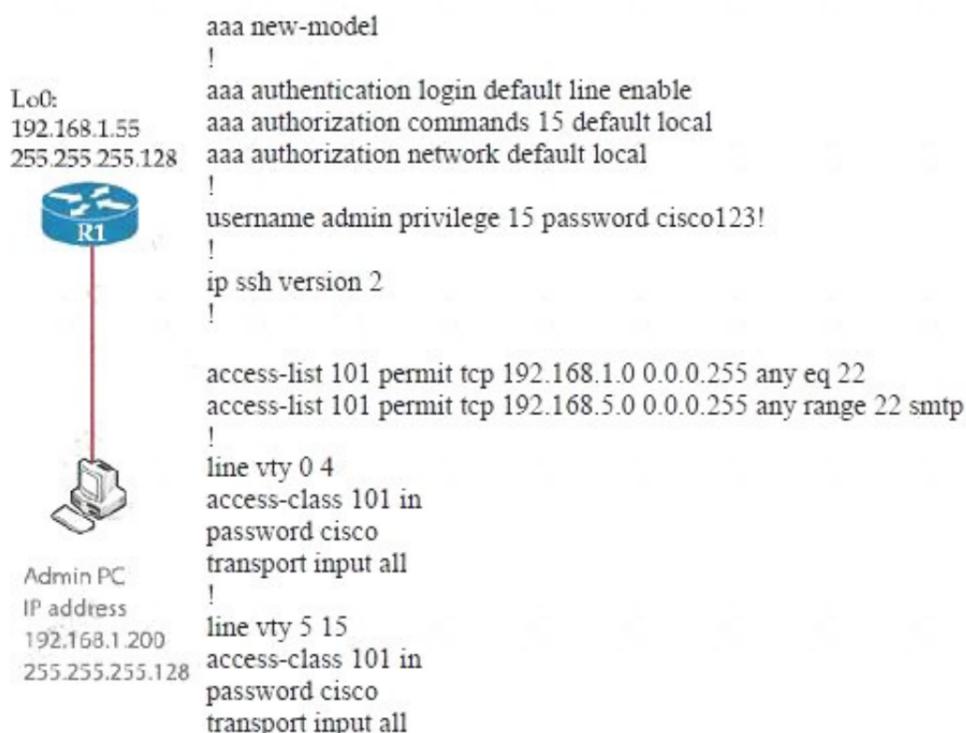
- A) **Chicago Router**
 router eigrp 100
 redistribute static metric 10 10 10 10 10
- B) **Chicago Router**
 router eigrp 100
 redistribute connected
- C) **Chicago Router**
 ip route 192.168.3.0 255.255.255.0 10.1.2.2
 ip route 192.168.4.0 255.255.255.0 10.1.2.2
- D) **LA Router**
 ip route 192.168.3.0 255.255.255.0 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 371

- (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?

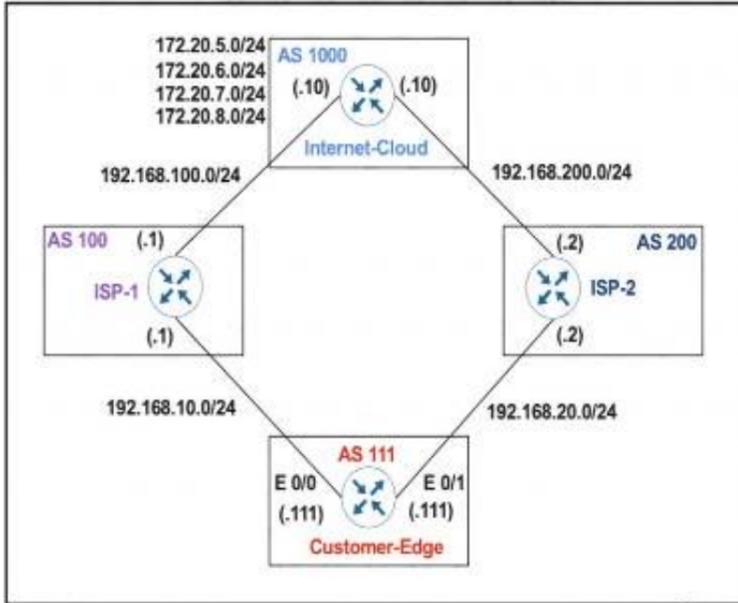
- A. aaa authorization reverse-access
- B. secret cisco123! at the end of the username command instead of password cisco123!
- C. matching password on vty lines as cisco123!
- D. enable secret or enable password commands to enter into privileged mode

Answer: D

NEW QUESTION 374

- (Exam Topic 2)

Refer to Exhibit:



```

Customer-Edge

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

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

- A. route-mmap SETLP permit 10 match ip address prefix-list PLIST1 set local-preference 99route-map SETLP permit 20
- B. route-map SETLP permit 10match ip address prefix-list PLIST1 set local-preference 110route-map SETLP permit 20
- C. router bgp 111no neighbor 192.168.10.1 route-map SETLP in neighbor 192.168.10.1 route-map SETLP out
- D. router bap 111no neighbor 192.168.10.1 route-map SETLP in neighbor 192.168.20.2 route-map SE TLP in

Answer: A

Explanation:

There is an implicit deny all at the end of any route-map so all other traffic that does not match 172.20.5.0/24 would be dropped. Therefore we have to add a permitsequence at the end of the route-map to allow other traffic.

The default value of Local Preference is 100 and higher value is preferred so we have to set the local preference of AS100 lower than that of AS200.

NEW QUESTION 375

- (Exam Topic 2)

```

Configuration output:
clock timezone PST -8
clock summer-time PDT recurring
service timestamps debug datetime
service timestamps log datetime
logging buffered 16000 debugging
ntp clock-period 17179272
ntp server 161.181.92.152

Debug output:
router#show clock
14:12:26.312 PDT Thu Apr 27 2019
router#config t
Enter configuration commands, one per line. End with CNTL/Z.
router(config)#exit

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

Refer to the exhibit. A network administrator configured NTP on a Cisco router to get synchronized time for system and logs from a unified time source. The configuration did not work as desired. Which service must be enabled to resolve the issue?

- A. Enter the service timestamps log datetime localtime global command.
- B. Enter the service timestamps log datetime synchronize global command.
- C. Enter the service timestamps log datetime console global command.
- D. Enter the service timestamps log datetime clock-period global command.

Answer: A

Explanation:

If a router is configured to get the time from a Network Time Protocol (NTP) server, the times in the router's log entries may be different from the time on the systemclock if the [localtime] option is not in the service timestamps log command. To solve this issue, add the [localtime] option to the service timestamps log command. The times should now be synchronized between the system clock and the log message timestamps.

Reference:

<https://community.cisco.com/t5/networking-documents/router-log-timestamp-entries-are-different-from-the-syst>

NEW QUESTION 379

- (Exam Topic 2)

Refer to the exhibit.

```

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

The network administrator configured redistribution on an ASBR to reach to all WAN networks but failed. Which action resolves the issue?

- A. The route map must have the keyword prefix-list to evaluate the prefix list entries.
- B. The OSPF process must have a metric when redistributing prefixes from EIGRP.
- C. The route map EIGRP->OSPF must have the 10.0.106.0/24 entry to exist in one of the three prefix lists to pass.
- D. EIGRP must redistribute the 10.0.106.0/24 route instead of using the network statement.

Answer: A

Explanation:

In order to use a prefix-list in a route-map, we must use the keyword "prefix-list" in the "match" statement. For example:

match ip address prefix-list WAN_PREFIXES

Without this keyword, the router will try to find an access-list with the same name instead.

NEW QUESTION 384

- (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/xr-3s/ip6f-xr-3s-book/ip6-snoopin

NEW QUESTION 389

- (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 392

- (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 395

- (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 397

- (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

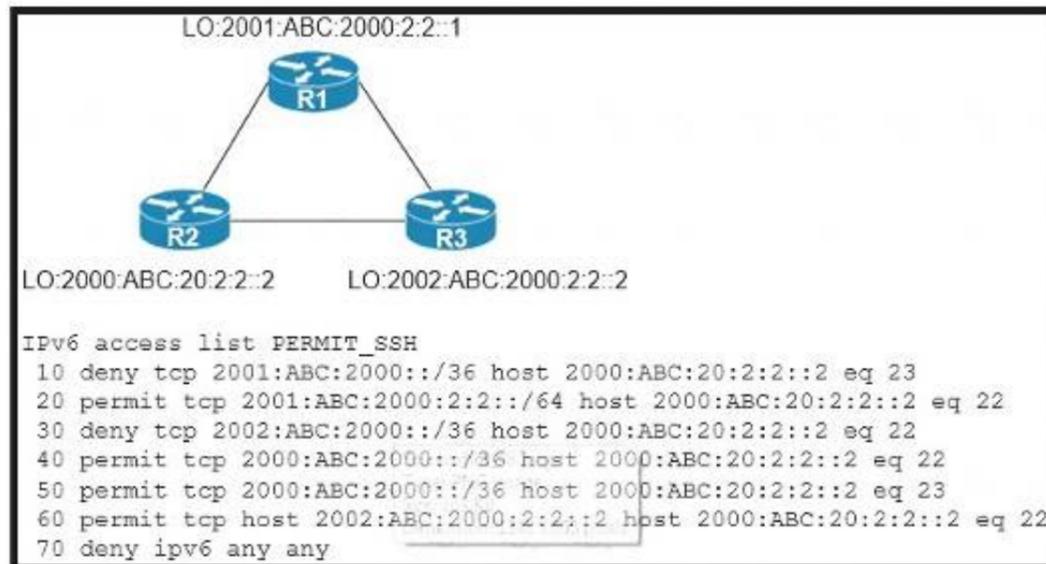
Explanation:

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 399

- (Exam Topic 2)

Refer to the exhibit.



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

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

Answer: C

NEW QUESTION 404

- (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 408

- (Exam Topic 2)

Refer to the exhibit.

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

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

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

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

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

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

Answer: A

Explanation:

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

NEW QUESTION 410

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